

CALENDAR FOR WATER YEAR 1978

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Water Resources Data for Indiana

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-78

WATER YEAR 1978

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

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

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1979

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.

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-79/058	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data for Indiana, Water Year 1978		5. Report Date September 1979	6.
7. Author(s)		8. Performing Organization Rept. No. USGS-WDR-IN-78-1	
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 1819 North Meridian Street Indianapolis, Indiana 46202		10. Project/Task/Work Unit No.	11. Contract(C) or Grant(G) No. (C) (G)
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 1819 North Meridian Street Indianapolis, Indiana 46202		13. Type of Report & Period Covered Annual - Oct. 1, 1977, to Sept. 30, 1978	
15. Supplementary Notes Prepared in cooperation with the State of Indiana and with other agencies.		14.	
16. Abstract (Limit: 200 words) Water resources data for the 1978 water year for Indiana consists of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs, and water levels in wells. This report contains discharge records for 194 gaging stations, stage and contents for 13 lakes and reservoirs, water quality for 49 gaging stations, and water levels for 59 observation wells. Also included are 124 crest-stage partial-record stations and 49 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Indiana.			
17. Document Analysis a. Descriptors *Indiana, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Water levels, Water analyses. b. Identifiers/Open-Ended Terms Sampling sites c. COSATI Field/Group			
18. Availability Statement No restriction on distribution. This report may be purchased from: National Technical Information Service Springfield, VA 22161		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 399
		20. Security Class (This Page) UNCLASSIFIED	22. Price

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INTRODUCTION

Water resources data for the 1978 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-78-1." 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 streamflow 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 of units (SI) on inside of back cover.

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

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

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

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

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded 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 \pm 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 (ft³/s/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 (ft³/s/mi², cfsm) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft³/s, 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 or 0.02832 cubic meters per second.

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

Mean discharge (MEAN) 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 (ft³/s)".

Dissolved.--That material in a representative water sample which passes through a 0.45 μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distant hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Micrograms per liter ($\mu\text{g/L}$, 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.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

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 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).

Suspended-sediment discharge (tons per day) 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.

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)

Range of concentration in 1000 mg/L	Di- vide by						
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-508	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 REVISED RECORD 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.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

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 time 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 station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from 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."

Previously published streamflow 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 "REVISED RECORDS" 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 are affected by the revision, the 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 type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page ____.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of 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 given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-state 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 on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

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.

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 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/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.

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.

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.

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.)

Water analysis

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.

Water 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.

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).

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.

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.

HYDROLOGIC CONDITIONS

The water year started with all indications of a wet and dramatic year, but by late summer it had turned out to be a rather normal year. There were three occurrences of significant hydrological events--heavy autumn rains at the beginning of October, a two and one-half month winter build up of snow cover, and heavy, violent thunderstorms during the summer.

During the evening of September 30, and the early morning of October 1, 1977, heavy thunderstorms released two to four inches of precipitation throughout central Indiana. Local flooding on smaller streams caused damage to residential and business areas in many small towns. Light rains continued generally throughout the state on a weekly basis into December. Precipitation turned to snow in early December and built up a ground cover of six inches by mid-month. A sudden warming period melted the snow and annual peaks occurred on some streams in the southeastern portion of the State.

Winter conditions again set in by the end of December and remained near normal throughout most of January. Extreme low temperatures and light precipitation followed the blizzard on January 25-27, 1978. Snow accumulation of sixteen to twenty inches increased by early March to between thirty and forty inches with water equivalent between 2.5 and 3.0 inches. Light rain and warm temperatures melted this snow in mid March and most streams in the State rose to their annual peaks. Additional precipitation in the Fort Wayne area on March 21 raised already swollen streams to peak stages just slightly below the record stages of 1913.

Hydrologic conditions in April and May were normal throughout the state with some scattered storms producing high water until mid May. An early drying out period began in mid May and lasted until late June. Most precipitation during this period occurred in the northwest corner of the State.

Heavy summer thunderstorms began on the evening of June 25 in central Indiana when a storm dumped over six inches of rain from north of Lafayette southeastward to Shelbyville. Tornado and flood damages were heaviest in the Indianapolis area. Isolated heavy thunderstorms continued to roll across Indiana into late August and caused flood damage to small areas. The water year ended on a quiet note with light rainfall and warm temperatures during September.

Although climatological conditions existed all year for a potentially high water year, streamflow throughout most of the State was near normal.

HYDROLOGIC CONDITIONS

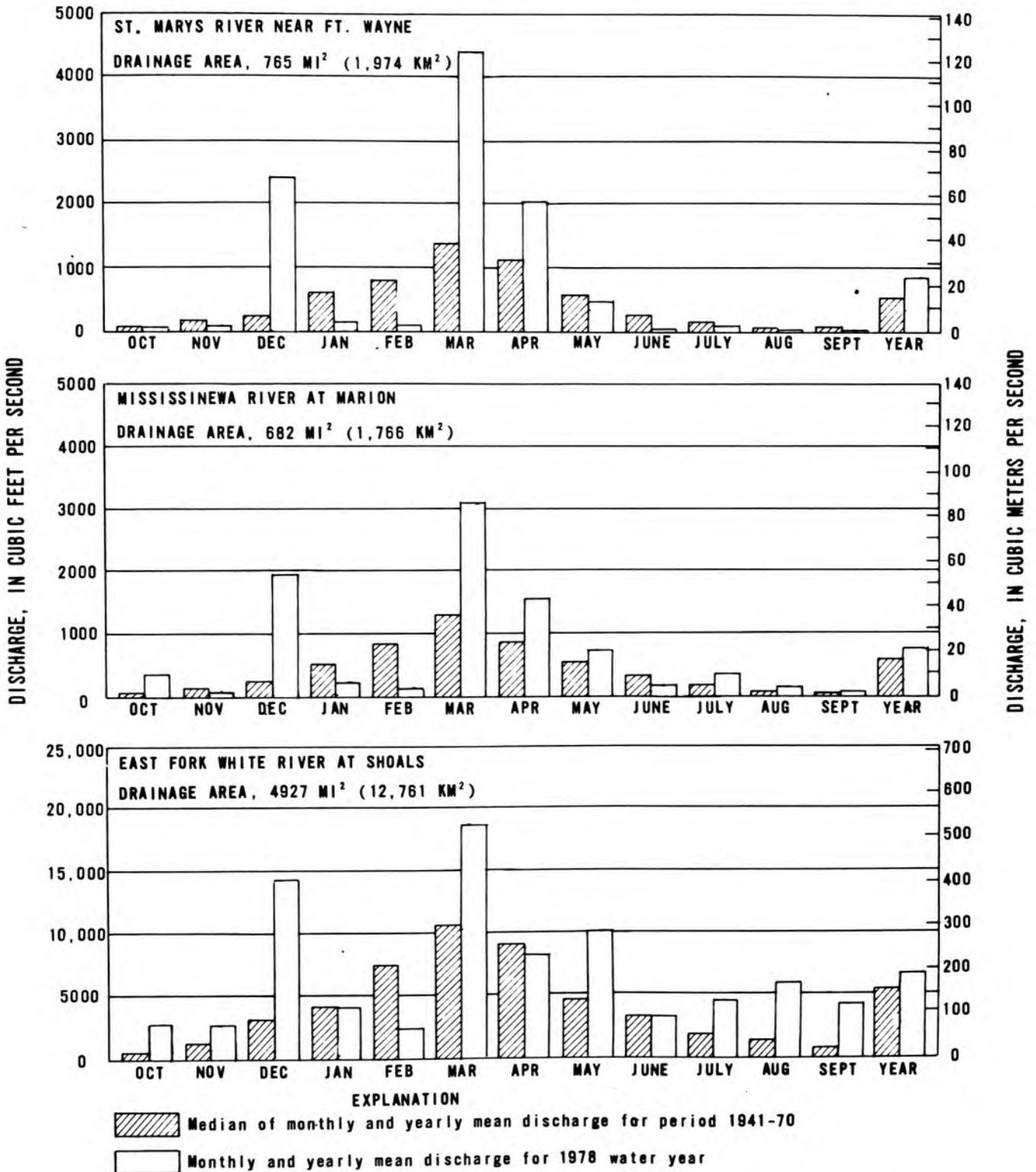


Figure 1.-- Comparison of discharge at three long-term representative gaging stations during 1978 water year with median discharge for period 1941-70.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-one manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Picket Street, Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

- 1-D1. Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 p.
- 2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. Application of borehole geophysics to water-resources investigations, by W. W. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. General procedure for gaging streams, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 pages. Not currently available.

- 3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. Introduction to ground-water hydraulics-a programmed text for self-instruction, by D. S. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. Methods for collection and analysis of water samples for dissolved minerals and gases, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4.* Methods for collection and analysis of aquatic biological and microbiological samples, by K. V. Slack, R. C. Averett, P. E. Greeson, and P. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages.
- 5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

*This publication is available ONLY from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. They are in looseleaf format and are subscription items. Additional supplements will be issued to subscribers at no extra cost. Checks should be made payable to Superintendent of Documents. Requester should emphasize to Superintendent of Documents that this is a subscription item.

GREAT MIAMI RIVER BASIN

03274650 WHITENATER RIVER NEAR ECONOMY, IN

LOCATION.--Lat 40°00'05", long 85°06'56", in NW¼NE¼ 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, and period of no gage-height record, Jan. 27 to April 3, which are poor.

AVERAGE DISCHARGE.--8 years, 10.6 ft³/s (0.300 m³/s), 13.84 in/yr (352 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, 8.14 ft (2.481 m) Aug. 28, 1978; minimum daily discharge, 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	0500	329	9.32	6.31	1.923	Mar. 21	unknown	370	10.5	unknown	
Dec. 18	0200	291	8.24	6.05	1.844	Aug. 28	0400	*676	19.1	*8.14	2.481
Mar. 14	unknown	570	16.1	unknown							

Minimum daily discharge, 1.1 ft³/s (0.31 m³/s) Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	2.1	53	6.3	4.8	2.8	12	10	6.3	4.2	1.7	32
2	15	2.0	21	5.4	4.6	2.8	11	9.1	6.0	10	1.8	23
3	5.3	2.1	11	5.0	4.4	2.8	10	8.3	5.3	9.1	1.9	18
4	3.7	2.1	9.4	4.8	4.2	2.8	9.9	8.3	5.0	5.0	1.8	13
5	3.3	2.1	12	4.9	4.0	2.7	9.9	8.0	4.7	4.0	1.7	7.9
6	2.7	2.1	16	4.9	3.8	2.6	55	7.3	4.4	3.6	1.7	4.4
7	2.4	5.1	12	19	3.7	2.7	52	7.3	6.3	3.4	1.7	3.6
8	4.8	4.4	7.0	27	3.6	2.7	22	7.6	5.3	3.1	1.7	3.1
9	4.6	3.4	7.6	12	3.5	2.8	15	8.3	4.4	2.7	1.8	2.7
10	4.0	4.8	5.8	9.2	3.4	3.0	12	7.3	4.0	2.5	1.9	2.4
11	3.5	4.0	5.0	8.0	3.4	3.6	14	6.6	3.8	2.3	2.0	2.2
12	3.0	3.1	5.9	7.0	3.3	5.5	12	7.0	5.7	2.3	2.1	2.1
13	2.6	2.7	29	6.2	3.2	15	9.9	80	6.6	2.5	1.8	2.0
14	2.4	2.6	266	5.8	3.2	230	8.3	55	4.2	2.3	1.7	1.9
15	2.3	2.6	139	5.5	3.1	130	7.6	40	3.8	2.1	1.7	1.8
16	2.2	4.5	95	5.3	3.0	100	7.3	28	3.6	2.1	4.3	2.7
17	2.2	8.5	79	5.0	3.0	70	7.0	19	3.4	1.9	2.7	2.3
18	2.3	5.4	166	4.4	2.9	56	15	14	3.1	1.7	2.0	1.8
19	2.4	4.1	72	4.3	2.9	60	24	12	3.4	1.7	1.9	1.6
20	2.2	3.7	48	4.3	2.9	70	51	13	3.1	1.7	1.7	1.5
21	2.1	5.3	35	4.2	2.8	150	21	13	2.9	1.6	1.6	1.8
22	2.1	5.2	26	4.1	2.8	70	15	11	2.7	1.6	1.6	1.6
23	2.0	4.6	21	4.1	2.8	50	18	36	2.7	1.9	1.6	1.5
24	2.1	3.8	18	4.1	2.7	40	28	71	2.7	2.3	1.6	1.4
25	2.1	3.6	21	5.0	2.7	60	106	31	3.6	2.7	1.7	1.4
26	2.4	3.2	12	5.0	2.7	45	58	19	5.3	1.9	2.1	1.3
27	2.4	2.9	9.0	4.0	2.7	30	26	12	3.6	1.7	6.9	1.2
28	2.2	2.8	7.9	4.0	2.7	26	18	10	2.9	1.7	210	1.1
29	2.1	2.5	7.1	4.5	---	20	14	8.7	2.7	1.7	70	1.1
30	2.1	5.0	6.6	5.0	---	16	12	8.0	2.5	1.7	51	1.1
31	2.1	---	6.2	5.0	---	14	---	6.6	---	1.7	57	---
TOTAL	150.6	110.3	1229.5	203.3	92.8	1288.8	680.9	582.4	124.0	88.7	444.7	143.5
MEAN	4.86	3.68	39.7	6.56	3.31	41.6	22.7	18.8	4.13	2.86	14.3	4.78
MAX	56	8.5	266	27	4.8	230	106	80	6.6	10	210	32
MIN	2.0	2.0	5.0	4.0	2.7	2.6	7.0	6.6	2.5	1.6	1.6	1.1
CFSM	.47	.35	3.82	.63	.32	4.00	2.18	1.81	.40	.28	1.38	.46
IN.	.54	.39	4.40	.73	.33	4.61	2.44	2.08	.44	.32	1.59	.51
CAL YR 1977	TOTAL	2628.02	MEAN	7.20	MAX	266	MIN	.28	CFSM	.69	IN	9.40
WTR YR 1978	TOTAL	5139.50	MEAN	14.1	MAX	266	MIN	1.1	CFSM	1.36	IN	18.38

03274750 WHITEMATER RIVER NEAR HAGERSTOWN, IN

LOCATION.--Lat 39°52'25", long 85°09'47", in NE1/4 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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft (289.560 m) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

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

AVERAGE DISCHARGE.--8 years, 65.8 ft³/s (1.863 m³/s), 15.22 in/yr (387 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	1100	1290	36.5	7.99	2.435	Mar. 21	1300	1020	28.9	7.44	2.268
Dec. 14	0900	*1740	49.3	*9.92	3.024	May 24	0200	1020	28.9	7.43	2.265
Dec. 18	0800	1090	30.9	7.67	2.338	June 25	1100	1160	32.9	7.89	2.405
Mar. 14	1400	1470	41.6	8.96	2.731	Aug. 28	1400	1280	36.2	8.30	2.530

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Nov. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	542	13	238	57	35	24	89	77	57	51	27	94
2	117	12	105	50	35	24	77	72	56	65	68	72
3	56	12	89	49	35	24	76	67	52	56	62	62
4	36	12	74	48	35	24	74	69	51	47	34	55
5	28	11	90	47	34	23	70	66	50	43	30	48
6	25	11	107	45	34	24	209	58	47	41	28	43
7	21	25	69	70	33	24	246	56	71	43	28	40
8	48	21	60	140	32	25	120	59	59	45	27	37
9	62	19	65	89	31	25	97	67	51	37	26	34
10	37	23	60	60	30	26	87	56	46	37	28	32
11	30	20	56	50	30	28	100	52	43	35	27	32
12	25	18	64	45	29	37	84	54	51	33	39	30
13	22	15	119	43	29	95	72	362	51	46	27	30
14	21	16	1520	40	29	1180	64	230	44	37	33	30
15	19	16	613	38	29	696	61	166	42	33	30	29
16	17	43	374	36	28	510	56	134	41	32	67	41
17	17	52	329	35	28	382	56	105	40	31	38	33
18	17	36	729	34	28	267	109	88	53	30	34	29
19	17	28	303	33	27	290	144	76	51	29	30	27
20	16	28	210	31	27	330	237	87	41	28	28	26
21	15	43	167	31	27	740	122	89	66	27	26	25
22	14	39	140	30	26	342	95	72	41	27	26	25
23	13	33	124	29	26	257	111	228	39	38	24	24
24	14	28	112	31	26	203	134	446	37	41	24	23
25	15	25	120	39	25	257	553	148	297	51	23	23
26	17	23	89	39	25	255	246	109	143	37	29	22
27	14	22	77	24	25	174	136	89	65	32	61	22
28	14	21	68	32	25	149	111	77	52	30	796	21
29	13	21	64	30	---	132	95	71	47	28	174	21
30	13	48	62	33	---	111	86	66	43	28	181	24
31	13	---	58	34	---	98	---	62	---	28	182	---
TOTAL	1328	734	6355	1392	823	6776	3817	3458	1827	1166	2257	1054
MEAN	42.8	24.5	205	44.9	29.4	219	127	112	60.9	37.6	72.8	35.1
MAX	542	52	1520	140	35	1180	553	446	297	65	796	94
MIN	13	11	56	24	25	23	56	52	37	27	23	21
CFSM	.73	.42	3.49	.77	.50	3.73	2.16	1.91	1.04	.64	1.24	.60
IN.	.84	.47	4.03	.88	.52	4.29	2.42	2.19	1.16	.74	1.43	.67
CAL YR 1977	TOTAL	16587.6	MEAN	45.4	MAX	1520	MIN	5.3	CFSM	.77	IN	10.51
WTR YR 1978	TOTAL	30987.0	MEAN	84.9	MAX	1520	MIN	11	CFSM	1.45	IN	19.64

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT							JUL				
04...	0920	36	41	4.0	--	12.5	06...	0730	42	88	10
11...	1620	29	56	4.4	--	--	13...	0730	46	115	14
18...	0730	17	41	1.9	--	--	27...	0730	31	49	4.1
26...	0730	23	13	.82	--	--	27...	1245	32	33	2.8
NOV							AUG				
01...	0730	91	13	3.2	--	--	03...	0730	25	82	5.6
08...	1550	21	18	1.0	--	--	10...	0730	25	58	3.9
09...	0730	19	37	1.9	--	--	31...	0730	27	56	4.1
14...	0730	39	40	4.2	--	--	31...	1130	194	59	30
22...	0730	20	3	.17	--	--	SEP				
29...	0730	20	4	.22	--	5.0	09...	0730	27	52	3.8
DEC							14...	0730	27	44	3.2
14...	0945	1810	296	1450	--	--	21...	0730	103	38	11
14...	1125	1790	237	1150	100	--					
15...	0430	440	84	100	--	7.0					
29...	1530	182	62	30	--	--					
JAN											
23...	1200	27	28	2.0	--	--					
FEB											
27...	1320	26	16	1.1	--	--					
MAR											
01...	1930	13	60	2.1	--	--					
09...	1930	14	45	1.7	--	--					
15...	0730	751	148	300	--	--					
22...	0730	560	102	154	--	--					
29...	1440	130	33	11	--	12.0					
APR											
01...	0730	93	80	20	--	--					
21...	0730	126	68	23	--	--					
MAY											
04...	0730	64	44	7.6	--	--					
10...	0730	56	46	7.0	--	--					
19...	0730	79	80	17	--	--					
26...	0930	112	72	21	--	--					
JUN											
01...	0930	59	80	12	--	--					
08...	0730	64	68	11	--	--					
22...	0930	43	67	7.7	--	--					
23...	1240	38	32	3.2	--	19.0					
24...	0930	1010	390	1060	--	--					

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 down-stream 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 9.52 ft³/s (0.270 m³/s), 14.11 in/yr (358 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)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Oct. 1	0700	476	13.5	5.38	1.640	July 7	2200	222	6.29	4.31	1.314
Dec. 14	0500	412	11.7	5.13	1.564	Aug. 3	Unknown	830	23.5	6.48	1.975
Mar. 13	2200	435	12.3	5.22	1.591	Aug. 28	2000	*838	23.7	*6.50	1.981
June 25	Unknown	571	16.2	5.71	1.740	Aug. 30	1500	367	10.4	4.95	1.509

Minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	1.8	32	7.4	4.7	2.8	9.4	9.4	5.3	25	4.0	12
2	20	1.8	9.6	7.0	4.6	2.8	8.6	8.6	5.0	17	17	8.3
3	15	1.8	11	6.6	4.3	2.8	8.0	8.0	4.7	8.3	141	6.0
4	12	1.5	9.6	6.4	4.2	2.8	7.5	9.0	4.4	6.0	14	5.3
5	9.6	1.5	30	6.2	4.1	2.9	7.3	12	4.1	4.5	7.9	5.0
6	16	1.4	12	6.0	3.9	3.0	31	10	3.9	4.0	6.7	4.7
7	11	8.7	9.0	31	4.0	3.2	21	8.6	5.0	26	6.0	4.2
8	20	6.0	9.0	15	4.0	3.6	16	10	4.4	18	4.7	3.8
9	17	5.3	12	8.9	4.0	7.1	13	9.0	3.8	5.7	4.2	3.3
10	8.0	9.6	9.0	6.2	3.9	8.7	10	7.9	3.6	4.7	4.2	3.0
11	5.5	7.1	8.0	5.5	3.8	8.7	15	6.7	3.4	4.0	4.0	2.8
12	4.5	4.7	7.0	5.2	3.8	15	12	7.9	4.0	3.8	5.7	3.0
13	3.8	3.6	50	5.0	3.8	116	10	44	3.6	6.0	4.2	3.0
14	3.4	2.8	196	4.9	3.7	198	8.8	32	3.3	4.5	3.3	3.1
15	3.0	2.4	45	4.8	3.7	68	8.0	22	3.3	3.8	3.3	2.8
16	2.7	8.3	26	4.7	3.6	57	7.3	17	3.1	3.6	3.3	3.3
17	2.4	8.7	24	4.6	3.7	36	6.6	13	3.0	3.1	3.0	3.0
18	2.2	6.0	76	4.5	3.6	33	49	11	11	3.1	3.0	2.6
19	2.1	4.7	28	4.4	3.4	49	26	9.5	12	3.0	3.3	2.4
20	2.0	5.3	22	4.5	3.2	51	21	16	4.5	2.8	3.0	2.2
21	1.9	11	19	4.4	3.2	70	19	13	14	2.8	2.4	2.2
22	1.8	8.7	16	4.3	3.2	32	18	10	4.7	2.8	2.2	2.1
23	1.7	6.7	15	4.7	3.2	31	31	38	4.0	3.8	2.1	1.9
24	1.6	5.3	14	4.4	3.1	26	25	30	3.6	8.3	2.2	1.9
25	2.4	4.5	17	15	3.0	53	80	18	86	4.2	2.2	1.8
26	9.1	3.8	15	27	2.9	31	33	13	27	3.3	2.1	1.8
27	5.7	3.3	12	10	2.8	22	21	10	9.1	3.1	2.1	1.8
28	3.8	3.1	10	6.0	2.8	18	15	8.7	5.7	2.8	173	1.6
29	2.8	2.8	8.4	4.9	---	15	12	7.4	4.7	2.8	28	1.6
30	2.4	14	8.0	4.7	---	13	10	6.6	4.0	23	103	1.9
31	1.9	---	7.6	4.8	---	11	---	5.8	---	5.3	31	---
TOTAL	296.3	156.2	767.2	239.0	102.2	993.4	559.5	432.1	258.2	219.1	596.1	102.4
MEAN	9.56	5.21	24.7	7.71	3.65	32.0	18.7	13.9	8.61	7.07	19.2	3.41
MAX	101	14	196	31	4.7	198	80	44	86	26	173	12
MIN	1.6	1.4	7.0	4.3	2.8	2.8	6.6	5.8	3.0	2.8	2.1	1.6
CFSM	1.04	.57	2.70	.84	.40	3.49	2.04	1.52	.94	.77	2.10	.37
IN.	1.20	.63	3.12	.97	.42	4.03	2.27	1.75	1.05	.89	2.42	.42
CAL YR 1977	TOTAL	3287.63	MEAN	9.01	MAX	196	MIN	.35	CFSM	.98	IN	13.35
WTR YR 1978	TOTAL	4721.70	MEAN	12.9	MAX	198	MIN	1.4	CFSM	1.41	IN	19.17

GREAT MIAMI RIVER BASIN

03275000 WHITWATER RIVER NEAR ALPINE, IN

LOCATION.--Lat 39°34'23", long 85°09'27", in SW¼SE¼ sec.14, T.13 N., R.12 E., Fayette County, Hydrologic Unit 05080003, 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 54.3 (87.4 km).

DRAINAGE AREA.--529 mi² (1,370 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1936, published as West 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(P). WSP 1908: 1937(M), 1944, 1949(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.19 ft (228.658 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 9, 1928, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--50 years, 538 ft³/s (15.24 m³/s), 13.81 in/yr (351 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s (1,050 m³/s) Jan. 14, 1937, gage height, 16.61 ft (5.063 m) (corrected); minimum daily, 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 15	0600	11600 328	13.10 3.993	Mar. 15	0700	*12100 343	*13.30 4.054
Dec. 18	1700	6550 186	10.45 3.185				

Minimum daily discharge, 83 ft³/s (2.35 m³/s) Nov. 6.

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 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1820	127	1140	529	325	214	860	714	480	933	208	839
2	1670	127	1300	485	318	214	746	658	458	695	249	569
3	600	125	708	453	310	211	664	611	443	565	2210	464
4	403	115	623	433	300	214	658	611	418	471	528	389
5	296	88	752	423	280	207	634	611	403	409	375	335
6	234	83	919	413	262	203	689	557	389	370	313	301
7	200	88	629	575	268	211	1680	529	443	367	255	277
8	222	172	522	1290	270	214	1130	529	523	568	256	258
9	461	183	550	839	270	218	866	529	438	389	237	240
10	421	173	469	520	268	230	759	458	394	339	255	226
11	350	215	428	440	264	248	739	437	367	312	255	218
12	291	190	378	400	264	381	720	444	361	292	255	212
13	251	161	797	387	255	825	652	1330	383	315	255	209
14	218	146	7980	382	251	8220	575	1760	340	331	247	210
15	203	140	9480	370	251	10600	540	1480	330	286	230	206
16	189	158	4010	360	238	6530	512	1200	310	268	259	216
17	173	303	3110	349	242	4840	485	947	296	255	291	237
18	159	280	5560	340	238	3190	707	778	496	245	273	209
19	153	229	3630	330	230	2860	1460	675	759	236	251	196
20	147	205	1990	322	222	3340	1630	624	464	229	222	189
21	142	241	1390	320	222	5040	1230	656	689	221	207	185
22	134	298	1100	310	230	4340	884	585	438	210	200	184
23	127	263	970	300	222	2200	939	870	351	215	193	175
24	126	237	933	325	218	2380	1320	4000	335	281	186	170
25	134	216	1020	320	218	2310	2780	2060	1720	257	179	169
26	149	204	846	350	214	3110	4010	1020	1180	253	176	166
27	146	193	733	300	214	2030	1800	772	640	225	193	163
28	143	183	634	310	211	1530	1150	701	540	208	1330	159
29	136	172	611	330	---	1330	921	617	458	195	1600	120
30	129	221	581	340	---	1090	798	563	413	417	1390	121
31	128	---	546	340	---	945	---	518	---	252	1900	---
TOTAL	9965	5536	54339	13185	7075	69475	32538	27844	15259	10609	14978	7612
MEAN	321	185	1753	425	253	2241	1085	898	509	342	483	254
MAX	1820	303	9480	1290	325	10600	4010	4000	1720	933	2210	839
MIN	126	83	378	300	211	203	485	437	296	195	176	120
CFSM	.61	.35	3.31	.80	.48	4.24	2.05	1.70	.96	.65	.91	.48
IN.	.70	.39	3.82	.93	.50	4.89	2.29	1.96	1.07	.75	1.05	.54
CAL YR 1977	TOTAL	141995	MEAN	389	MAX	9480	MIN	47	CFSM	.74	IN	9.99
WTR YR 1978	TOTAL	268415	MEAN	735	MAX	10600	MIN	83	CFSM	1.39	IN	18.88

03275500 EAST FORK WHITWATER 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, Hydrological 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 September 1978 (discontinued).

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

GAGE.--Water-stage recorder. Datum of gage is 854.01 ft (260.302 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 27, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good. 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.--29 years, 115 ft³/s (3.257 m³/s), 12.91 in/yr (328 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	0900	*4700	133	*8.27	2.521	Mar. 14	1500	4510	128	8.10	2.469
Dec. 18	0900	2500	70.8	5.38	1.640	May 24	0200	4230	120	7.78	2.371

Minimum daily discharge, 19 ft³/s (0.54 m³/s) Oct. 24, Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	23	629	82	64	41	150	122	93	48	22	99
2	97	22	315	78	61	37	130	107	87	63	31	62
3	44	22	188	75	60	41	130	100	81	71	149	47
4	29	22	159	77	58	41	125	107	75	60	87	40
5	25	22	188	67	55	43	115	102	71	48	52	33
6	26	21	185	66	51	47	170	92	66	40	40	28
7	21	51	126	126	54	43	342	88	103	43	34	26
8	76	65	117	421	54	41	201	90	93	55	30	24
9	133	50	139	193	54	45	156	98	74	46	27	25
10	82	52	134	121	54	55	135	84	65	41	32	24
11	52	46	126	102	53	67	140	77	61	33	33	23
12	38	38	114	94	52	115	125	83	74	28	39	23
13	32	31	247	85	51	369	107	310	65	53	29	22
14	28	28	3420	80	50	3660	104	409	56	41	25	27
15	27	29	1230	75	49	2020	90	403	52	33	24	23
16	27	64	571	72	48	1110	84	260	51	30	50	67
17	23	96	435	70	47	780	81	203	47	26	52	31
18	23	70	1710	67	46	457	174	164	70	25	38	26
19	23	52	597	65	45	479	420	135	207	24	29	24
20	22	51	346	64	44	598	420	126	115	23	26	23
21	21	81	241	62	44	1200	262	144	100	22	23	30
22	21	77	180	61	43	638	182	116	65	21	22	31
23	20	63	151	60	43	479	208	441	57	33	21	25
24	19	54	158	63	42	410	328	2200	50	44	20	22
25	29	48	248	67	42	436	743	525	51	31	20	20
26	34	43	149	70	41	787	686	298	84	28	20	20
27	29	38	120	60	41	404	294	200	56	25	20	20
28	30	37	109	63	41	286	201	160	50	23	129	19
29	28	32	96	66	---	236	153	131	44	21	96	19
30	25	86	88	68	---	192	142	117	38	31	165	29
31	24	---	82	70	---	167	---	105	---	25	220	---
TOTAL	1340	1414	12598	2790	1387	15324	6598	7597	2201	1135	1605	932
MEAN	43.2	47.1	406	90.0	49.5	494	220	245	73.4	36.6	51.8	31.1
MAX	232	96	3420	421	64	3660	743	2200	207	71	220	99
MIN	19	21	82	60	41	37	81	77	38	21	20	19
CFSM	.36	.39	3.36	.74	.41	4.08	1.82	2.03	.61	.30	.43	.26
IN.	.41	.43	3.87	.86	.43	4.71	2.03	2.34	.68	.35	.49	.29
CAL YR 1977	TOTAL	29718.7	MEAN	81.4	MAX	3420	MIN	5.1	CFSM	.67	IN	9.14
WTR YR 1978	TOTAL	54921.0	MEAN	150	MAX	3660	MIN	19	CFSM	1.24	IN	16.88

GREAT MIAMI RIVER BASIN

03275600 EAST FORK WHITEWATER RIVER AT ABINGTON, IN

LOCATION.--Lat 39°43'57", long 84°57'35", in NE¼SW¼ sec.2, T.12 N., R.2 W., First principal meridian, Wayne County, Hydrologic Unit 05080003, at downstream side of center pier of bridge on county road at Abington, 3 miles (5 km) downstream from Elkhorn Creek, 8 miles (13 km) southwest of Richmond, and at mile 26.7 (43.0 km).

DRAINAGE AREA.--200 mi² (518 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2108: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 791.00 ft (241.097 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--13 years, 221 ft³/s (6.259 m³/s), 15.01 in/yr (381 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 (*):

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)
Dec. 14	1200	*8030 227	*12.59 3.837	Mar. 14	1600	7990 226	12.56 3.828
Dec. 18	1100	3930 111	9.39 2.862	May 24	0500	5500 156	10.75 3.277

Minimum daily discharge, 33 ft³/s (0.93 m³/s) Oct. 24.

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.

EXTREMES FOR PERIOD OF RECORD.--

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	46	1060	227	109	71	742	222	195	156	60	225
2	173	43	481	203	105	65	296	192	181	170	86	140
3	96	42	292	184	104	69	290	180	167	159	350	104
4	68	43	244	173	102	67	282	189	150	120	168	88
5	56	44	358	181	97	72	260	184	144	95	102	75
6	59	40	322	190	90	78	353	154	131	82	81	64
7	48	80	210	355	93	74	572	145	210	78	74	58
8	108	98	193	788	94	72	406	154	183	116	66	54
9	212	83	223	461	94	70	336	158	147	83	59	52
10	138	93	185	250	93	100	296	136	123	74	77	49
11	95	82	183	200	92	185	310	120	111	63	62	47
12	78	73	183	170	90	349	272	128	151	56	75	48
13	66	61	375	150	88	771	238	687	132	116	60	48
14	59	59	6350	139	86	6770	207	793	106	82	55	55
15	55	57	2220	129	84	3580	195	740	96	62	55	51
16	53	96	1030	122	83	1800	181	540	93	55	88	139
17	48	138	791	120	80	1260	176	415	87	50	90	82
18	44	114	2790	115	79	816	284	333	153	45	93	61
19	45	88	1110	112	77	868	608	270	389	42	60	53
20	43	85	724	109	76	999	627	240	210	41	54	48
21	41	134	557	107	75	1890	466	260	222	39	48	53
22	39	134	450	103	74	1100	355	210	135	36	42	58
23	36	114	360	100	73	859	407	503	109	55	41	48
24	33	96	411	106	71	771	577	3070	96	95	40	42
25	38	86	611	113	70	822	959	820	215	63	40	40
26	88	78	401	120	70	1220	1100	539	428	52	56	39
27	63	67	335	101	70	741	552	403	156	47	49	38
28	61	70	280	104	70	571	389	336	116	42	262	36
29	55	61	260	112	---	491	310	281	100	38	177	36
30	47	170	245	118	---	415	272	251	85	83	441	54
31	46	---	231	120	---	376	---	222	---	71	483	---
TOTAL	2752	2475	23465	5582	2389	27392	11918	12875	4821	2366	3494	1985
MEAN	88.8	82.5	757	180	85.3	884	397	415	161	76.3	113	66.2
MAX	661	170	6350	788	109	6770	1100	3070	428	170	483	225
MIN	33	40	183	100	70	65	176	120	85	36	40	36
CFSM	.44	.41	3.79	.90	.43	4.42	1.99	2.08	.81	.38	.57	.33
IN.	.51	.46	4.36	1.04	.44	5.09	2.22	2.39	.90	.44	.65	.37

CAL YR 1977 TOTAL 59608 MEAN 163 MAX 6350 MIN 16 CFSM .82 IN 11.09
WTR YR 1978 TOTAL 101514 MEAN 278 MAX 6770 MIN 33 CFSM 1.39 IN 18.88

03275990 BROOKVILLE LAKE AT BROOKVILLE, IN

LOCATION.--Lat 39°26'27", long 85°00'10", in NE¼SE¼ sec.17, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, 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) National Geodetic Vertical Datum of 1929 (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 hm³), elevation, 713 ft (217.3 m). Seasonal pool capacity is 184,000 acre-ft (227 hm³), elevation, 748 ft (228.0 m). Capacity at uncontrolled spillway is 359,600 acre-ft (443 hm³), 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, 202,390 acre-ft (250 hm³) Mar. 22, 1978, elevation, 751.39 ft (229.024 m); minimum, 127,370 acre-ft (157 hm³) Feb. 3, 1976, elevation, 735.93 ft (224.311 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 202,390 acre-ft (250 hm³) Mar. 22, elevation, 751.39 ft (229.024 m); minimum, 144,940 acre-ft (179 hm³) Jan. 22, 23, elevation, 740.00 ft (225.552 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	747.27	180,200	
Oct. 31.....	744.36	165,500	-14,700
Nov. 30.....	740.20	145,850	-19,650
Dec. 31.....	740.36	146,580	+730
CAL YR 1977.....			+1,270
Jan. 31.....	741.45	151,590	+5,010
Feb. 28.....	740.17	145,720	-5,870
Mar. 31.....	745.06	168,950	+23,230
Apr. 30.....	748.63	187,350	+18,400
May 31.....	748.08	184,430	-2,920
June 30.....	748.23	185,220	+800
July 31.....	748.40	186,130	+900
Aug. 31.....	749.36	191,260	+5,130
Sept. 30.....	747.28	180,250	-11,010
WTR YR 1978.....			+50

GREAT MIAMI RIVER BASIN

03276000 EAST FORK WHITEWATER RIVER AT BROOKVILLE, IN

LOCATION.--Lat 39°26'02", long 85°00'12", in NE¼NE¼ 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) National Geodetic Vertical Datum of 1929. 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, Jan. 10 to Mar. 16, which is poor. Flow regulated by Brookville Lake since January 1974 (see sta 03275990).

AVERAGE DISCHARGE.--24 years, 376 ft³/s (10.65 m³/s), 13.44 in/yr (341 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, 4.70 ft³/s (0.13 m³/s) Nov. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,640 ft³/s (131 m³/s) Dec. 21, 22, gage height, 7.14 ft (2.176 m); minimum daily, 4.70 ft³/s (0.13 m³/s) Nov. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	1030	1060	470	660	120	361	841	245	616	171	1430
2	180	446	1020	470	660	120	361	928	245	609	232	1820
3	221	1020	1000	464	660	140	221	470	249	594	350	1790
4	302	1000	983	345	660	160	209	422	249	426	1370	1090
5	302	992	1000	206	660	160	428	428	174	180	1700	253
6	307	1010	974	206	660	160	428	233	134	183	1160	180
7	313	700	616	280	660	160	428	120	137	183	366	144
8	318	428	280	1210	660	160	253	229	139	183	183	105
9	307	446	623	1410	660	160	102	285	139	135	92	103
10	302	446	783	1020	660	160	105	285	139	96	52	103
11	307	428	482	370	660	160	107	285	139	96	52	95
12	318	410	296	1010	490	160	107	393	285	68	52	67
13	313	405	324	266	390	160	107	766	476	54	52	57
14	313	45	195	266	240	160	109	1380	296	55	58	80
15	313	4.7	1540	280	240	160	78	2570	189	55	61	92
16	307	6.5	2430	410	240	160	64	2120	168	55	61	103
17	307	98	2430	520	240	160	64	884	157	55	60	171
18	434	361	2450	520	240	163	67	692	157	54	60	202
19	488	428	2450	520	240	166	65	482	410	54	22	199
20	488	416	3520	520	150	163	64	482	494	54	7.7	199
21	470	416	4380	370	120	1320	63	482	1280	54	7.7	199
22	458	399	4610	275	120	2930	63	377	1140	54	20	199
23	446	393	3100	108	120	4020	65	388	271	54	44	199
24	434	440	2330	61	120	4360	64	1390	125	186	44	199
25	546	470	2330	60	120	4290	177	2620	147	464	63	195
26	965	464	992	60	120	4200	1320	2290	139	324	76	195
27	1040	458	202	60	120	4110	1680	1320	901	139	76	195
28	1020	816	249	60	120	4040	1000	867	1160	72	183	195
29	1030	1050	302	60	---	3420	84	482	1160	53	241	195
30	1040	1070	307	60	---	2900	84	440	867	54	476	195
31	858	---	434	225	---	850	---	318	---	139	560	---
TOTAL	14792	16096.2	43692	12162	10690	39552	8328	25269	11811	5398	7952.4	10249
MEAN	477	537	1409	392	382	1276	278	815	394	174	257	342
MAX	1040	1070	4610	1410	660	4360	1680	2620	1280	616	1700	1820
MIN	180	4.7	195	60	120	120	63	120	125	53	7.7	57
CFSM	1.26	1.41	3.71	1.03	1.01	3.36	.73	2.15	1.04	.46	.68	.90
IN.	1.45	1.58	4.28	1.19	1.05	3.87	.82	2.47	1.16	.53	.78	1.00
CAL YR 1977	TOTAL	122368.2	MEAN	335	MAX	4610	MIN	4.7	CFSM	.88	IN	11.98
WTR YR 1978	TOTAL	205991.6	MEAN	564	MAX	4610	MIN	4.7	CFSM	1.48	IN	20.17

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

LOCATION.--Lat 39°24'24", long 85°00'46", in NE¼NW¼ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, 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 29.3 (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 1305.

REVISED RECORDS.--WSP 1335: 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 595.71 ft (181.572 m) National Geodetic Vertical Datum of 1929. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft (0.457 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 03275990).

AVERAGE DISCHARGE.--57 years (1915-17, 1923 to current year), 1,256 ft³/s (35.57 m³/s), 13.94 in/yr (354 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 (8.467 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, 21,200 ft³/s (600 m³/s) Mar. 14; gage height, 13.52 ft (4.121 m); minimum daily, 276 ft³/s (7.82 m³/s) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9890	1210	4470	1290	1170	440	1980	2040	931	1820	638	2620
2	2920	907	2980	1210	1160	428	1820	1900	884	2040	884	2450
3	1560	1200	2460	1150	1090	475	1270	1390	865	1830	3230	2230
4	1180	1180	2180	959	1050	481	1240	1370	820	1140	2340	1440
5	950	1170	3830	821	900	462	1460	1400	714	811	2150	799
6	838	1170	2930	840	940	471	1440	1000	663	741	1120	671
7	767	894	1900	1470	930	497	2290	865	663	697	758	585
8	1050	666	1510	3690	920	507	1900	990	820	980	583	492
9	1180	761	2280	2820	910	525	1370	1140	732	723	447	460
10	1120	776	1860	1900	910	675	1180	1020	663	590	392	435
11	931	777	1410	1180	900	923	1160	950	614	552	386	403
12	829	767	1220	1000	940	1790	1120	1080	741	475	412	364
13	758	716	2300	900	681	3350	990	4130	950	483	405	343
14	734	444	14200	825	618	18400	893	4610	732	513	373	361
15	670	277	11500	760	590	14700	811	4810	630	454	379	374
16	640	316	7080	860	587	9020	758	4010	575	419	349	384
17	620	832	5200	970	579	6330	732	2670	552	392	419	494
18	701	969	8450	930	570	4110	990	2210	567	373	419	523
19	757	938	7000	890	552	3910	1880	1780	1660	355	506	497
20	742	866	5380	850	479	4160	1910	1620	1350	349	399	466
21	716	1760	5300	800	456	7030	1820	1790	2330	337	308	445
22	691	1250	5060	700	445	7760	1370	1380	1610	325	303	436
23	670	1080	3870	580	437	6760	1880	2200	784	426	297	424
24	655	1020	3090	517	438	6530	2360	5320	622	1160	287	416
25	853	987	3400	978	440	6800	3760	4930	1660	980	276	412
26	1360	927	2030	1930	433	7210	6010	3660	3300	671	284	405
27	1330	886	1340	1100	426	6190	3980	2660	2160	529	290	403
28	1270	1100	1190	980	437	5570	2520	2020	1990	386	1100	408
29	1240	1380	1220	900	---	4780	1600	1530	1790	349	2260	405
30	1240	2690	1170	820	---	4110	1390	1320	1240	893	2490	411
31	1140	---	1240	994	---	2600	---	1070	---	784	3770	---
TOTAL	40002	29916	119050	35614	19988	136994	53884	68865	33612	22577	28254	20556
MEAN	1290	997	3840	1149	714	4419	1796	2221	1120	728	911	685
MAX	9890	2690	14200	3690	1170	18400	6010	5320	3300	2040	3770	2620
MIN	620	277	1170	517	426	428	732	865	552	325	276	343
CFSM	1.05	.82	3.14	.94	.58	3.61	1.47	1.82	.92	.60	.74	.56
IN.	1.22	.91	3.62	1.08	.61	4.16	1.64	2.09	1.02	.69	.86	.62

CAL YR 1977 TOTAL 377803 MEAN 1035 MAX 14200 MIN 72 CFSM .85 IN 11.48
WTR YR 1978 TOTAL 609312 MEAN 1669 MAX 18400 MIN 276 CFSM 1.36 IN 18.52

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, 95 micromhos Nov. 25, 1978.
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, 590 micromhos June 11; minimum, 95 micromhos Nov. 25.
WATER TEMPERATURE: Maximum, 24.5°C July 23; minimum, 0.5 °C Dec. 29-Jan. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TEMPER- ATURE (DEG C)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	SURFACE AREA (SQ MI)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	OXYGEN, DIS- SOLVED (MG/L)	PH (UNITS)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	ALKA- LITY (MG/L AS CACO3)
OCT 03...	16.5	--	1224	4280	45	--	545	9.0	7.5	10	160
NOV 06...	12.5	--	1224	1220	25	--	490	20.6	7.9	5.0	210
DEC 17...	10.0	--	1224	2100	30	--	475	10.7	8.0	3.7	190
JAN 07...	3.5	--	1224	990	25	--	515	16.5	8.3	1.9	200
FEB 19...	2.5	--	1224	648	20	--	--	--	7.3	16	160
MAR 12...	2.0	--	1224	1730	60	--	465	--	8.2	1.8	150
APR 16...	17.0	--	1224	902	8	--	525	12.0	7.8	7.1	230
MAY 17...	13.0	--	1224	2610	--	--	520	10.6	8.5	--	--
JUN 17...	22.5	--	1224	669	--	5.0	550	12.2	8.6	--	220
JUL 21...	25.0	80010	1224	475	--	2.0	--	10.3	8.2	--	250
AUG 08...	22.5	80010	1224	697	--	10	565	10.2	8.3	--	220

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT 03...	200	0	3.9	--	--	1.1	2.8	.16	--	--	--
NOV 06...	250	0	--	--	.34	--	.48	.03	--	8.3	4.0
DEC 17...	230	0	--	--	.05	--	2.8	.11	--	--	--
JAN 07...	240	0	--	--	.35	--	2.0	.04	--	--	--
FEB 19...	200	0	2.6	.19	.06	.25	2.3	.05	.04	2.5	--
MAR 12...	180	0	1.8	.00	.30	.03	1.8	.16	.06	--	--
APR 16...	280	0	3.0	.30	.07	.37	2.6	.04	.02	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	--	--
JUN 17...	--	--	2.8	.39	.04	.43	2.4	.03	.01	--	--
JUL 21...	--	--	2.2	.00	.19	.17	2.0	.00	.01	--	--
AUG 08...	--	--	2.4	.09	.01	.10	2.3	.08	.04	3.1	--

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, SUS-PENDED RECOVERABLE (UG/L AS PB)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, SUS-PENDED RECOVERABLE (UG/L AS AG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, SUS-PENDED RECOVERABLE (UG/L AS ZN)
OCT 03...	--	--	--	--	--	--	--	--	--	--	--
NOV 06...	0	6	6	0	670	670	0	0	0	10	10
DEC 17...	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	--	--	--	--	--	--	--	--	--
FEB 19...	1	4	5	10	20	10	16	1	17	10	90
AUG 08...	3	7	10	50	80	30	0	--	--	0	30

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SELENIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELENIUM, TOTAL (UG/L AS SE)	COLIFORM, TOTAL, IMMEDIATE (COLS. PER 100 ML)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	SOLIDS, RESIDUE AT 180 DEG. C DISELVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISELVED (MG/L)
OCT 03...	--	--	--	--	--	K16100	K5650	--	252	238
NOV 06...	20	0	0	0	5700	1120	157	57000	285	277
DEC 17...	--	--	--	--	K51500	1100	4750	--	290	275
JAN 07...	--	--	--	--	11900	929	647	--	321	286
FEB 19...	100	0	0	0	1100	K57	K100	--	323	283
MAR 12...	--	--	--	--	22000	1550	K8800	3700	285	235
APR 16...	--	--	--	--	2400	K114	K64	--	361	317
MAY 17...	--	--	--	--	14400	226	K64	990	--	--
JUN 17...	--	--	--	--	14000	1040	293	2600	349	307
JUL 21...	--	--	--	--	K47000	K3450	426	11000	313	324
AUG 08...	30	0	0	0	30500	2550	229	--	362	308

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, DIS-SOLVED (TONS AC-FT)	NITROGEN, TOTAL (MG/L AS NO3)	MERCURY, DIS-SOLVED (UG/L AS HG)	MERCURY, SUS-PENDED RECOVERABLE (UG/L AS HG)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	POTASSIUM 40 TOTAL (PCI/L)	SEDIMENT, SUS-PENDED (MG/L)	SEDIMENT, DISCHARGE, SUS-PENDED (T/DAY)
OCT 03...	2910	.34	17	--	--	--	595.71	--	202	2330
NOV 06...	939	.39	--	<.5	.0	<.5	595.71	--	9	30
DEC 17...	1640	.39	--	--	--	--	595.71	--	110	624
JAN 07...	858	.44	--	--	--	--	595.71	--	42	112
FEB 19...	565	.44	11	<.5	.0	<.5	595.71	--	--	--
MAR 12...	1330	.39	8.1	--	--	--	595.71	--	23	107
APR 16...	879	.49	13	--	--	--	595.71	--	105	256
MAY 17...	--	--	--	--	--	--	595.71	--	--	--
JUN 17...	630	.47	13	--	--	--	595.71	1.7	22	39
JUL 21...	401	.43	9.6	--	--	--	595.71	1.8	29	37
AUG 08...	681	.49	11	<.5	.0	<.5	595.71	1.9	49	92

GREAT MIAMI RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 03...	200	40	52	18	5.4	.2	5	4.0	17	34	.2
NOV 06...	220	19	52	23	12	.3	10	3.4	21	40	.2
DEC 17...	240	52	60	22	8.4	.2	7	3.2	19	44	.2
JAN 07...	240	44	62	21	12	.3	10	2.4	20	44	.2
FEB 19...	300	130	76	26	9.2	.2	6	2.3	20	45	.1
MAR 12...	220	74	59	18	11	.3	10	2.9	13	37	.1
APR 16...	310	75	76	28	8.2	.2	5	2.0	16	46	.1
MAY 17...	--	--	--	--	--	--	--	--	--	--	--
JUN 17...	280	62	70	26	8.8	.2	6	2.3	18	48	.2
JUL 21...	290	38	69	28	9.2	.2	6	2.4	20	43	.1
AUG 08...	300	76	74	27	7.7	.2	5	2.6	17	41	.1

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 03...	8.8	--	--	--	--	--	--	--	--	--	--
NOV 06...	1.3	0	1	1	0	0	0	0	1	1	0
DEC 17...	5.1	--	--	--	--	--	--	--	--	--	--
JAN 07...	6.5	--	--	--	--	--	--	--	--	--	--
FEB 19...	5.6	0	1	1	100	--	--	1	0	0	1
MAR 12...	5.3	--	--	--	--	--	--	--	--	--	--
APR 16...	2.9	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	--	--
JUN 17...	1.9	--	--	--	--	--	--	--	--	--	--
JUL 21...	2.2	--	--	--	--	--	--	--	--	--	--
AUG 08...	5.7	1	0	1	Q100	0	100	1	0	1	2

DATE	CHRO- MIUM, SUS- PENDED RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 03...	--	--	--	--	--	--	--	--	--	--	--
NOV 06...	<10	<10	0	0	0	0	7	7	--	160	10
DEC 17...	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	--	--	--	--	--	--	--	--	--	--	--
FEB 19...	<9	<10	0	0	0	1	6	7	--	190	40
AUG 08...	38	40	3	0	3	0	5	5	970	1000	30

03276500 WHITEMATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	480	180	270	180	525	505	510	440	480	470	420
2	360	490	165	330	215	490	505	475	450	400	505	460
3	435	490	155	475	255	485	470	475	460	435	300	490
4	445	490	180	430	245	525	530	410	465	445	420	500
5	505	490	130	465	310	550	520	455	510	425	440	525
6	505	490	140	510	290	475	505	455	540	475	470	560
7	535	185	265	510	245	500	490	460	570	445	490	545
8	525	180	130	220	315	540	485	405	520	515	525	560
9	490	185	140	225	235	525	470	510	560	470	390	565
10	460	290	200	250	270	515	565	460	545	510	445	560
11	460	230	205	215	325	425	565	520	590	515	515	550
12	510	240	210	170	200	430	525	490	555	545	470	545
13	515	200	190	190	320	420	560	355	485	555	575	560
14	505	210	190	245	245	270	525	440	535	555	450	555
15	500	225	160	175	260	270	525	465	560	555	430	560
16	535	210	195	155	235	315	540	485	565	530	490	550
17	535	170	180	185	235	340	510	475	555	525	495	530
18	525	225	170	155	240	385	440	490	490	525	475	515
19	510	245	195	165	200	465	385	505	435	530	475	500
20	515	200	145	185	395	430	420	530	365	495	355	510
21	505	235	280	170	420	430	460	500	445	495	415	510
22	510	200	245	245	450	425	405	510	455	485	515	500
23	510	210	180	170	465	475	425	530	475	500	495	520
24	495	265	205	205	480	500	340	425	530	350	520	515
25	465	95	200	140	455	510	190	320	470	400	475	515
26	515	130	220	120	420	515	360	365	420	445	545	520
27	490	155	240	150	405	520	405	420	450	500	505	505
28	480	165	250	170	450	500	420	365	475	520	410	510
29	470	225	250	180	---	480	470	420	480	505	345	490
30	480	145	270	150	---	500	480	430	465	520	400	495
31	490	---	420	205	---	510	---	440	---	365	350	---
MEAN	486	258	203	240	313	460	473	455	495	484	457	521
MAX	535	490	420	510	480	550	565	530	590	555	575	565
MIN	290	95	130	120	180	270	340	320	365	350	300	420

WTR YR 1978 MEAN 404 MAX 590 MIN 95

GREAT MIAMI RIVER BASIN

03276500 WHITWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	12.5	7.5	4.5	.5	3.5	9.5	12.0	18.5	17.0	21.0	19.0
2	18.0	12.5	7.0	2.5	1.5	3.0	9.0	11.0	19.0	19.0	22.0	18.0
3	16.0	13.5	6.5	2.0	1.5	3.5	9.5	12.0	17.5	18.5	22.0	17.5
4	16.5	13.5	7.5	2.0	1.5	3.0	12.5	12.5	17.5	17.0	21.5	21.0
5	16.5	13.5	6.0	2.0	2.0	3.0	10.0	11.5	22.0	20.5	21.5	21.5
6	17.0	14.5	4.0	4.0	1.5	4.0	10.5	11.0	22.5	20.0	23.5	20.5
7	16.0	13.5	3.0	4.5	1.0	4.0	11.0	12.0	21.5	21.0	21.0	21.0
8	15.5	15.5	3.0	3.5	1.0	3.0	11.0	12.5	20.5	22.0	20.0	21.5
9	15.0	15.5	1.5	1.0	1.0	4.0	12.0	13.5	19.0	21.5	21.5	22.0
10	13.5	13.0	5.5	1.5	2.0	6.0	13.5	13.0	18.0	23.0	21.5	22.5
11	14.0	11.0	2.0	1.5	1.5	3.0	14.0	14.0	19.0	20.5	22.0	22.5
12	13.0	10.5	3.0	1.0	1.0	3.0	12.5	14.0	20.0	21.0	22.0	22.5
13	13.0	9.5	6.0	1.0	2.5	2.0	12.5	14.5	17.0	21.0	21.0	23.5
14	13.0	9.5	4.5	1.5	2.0	1.0	11.5	12.0	18.0	22.0	22.0	22.5
15	13.0	8.0	3.0	1.5	2.5	1.0	12.0	10.5	17.5	22.0	22.5	21.5
16	13.0	10.0	4.5	1.5	2.5	2.0	11.0	11.0	18.5	21.0	23.0	21.0
17	13.0	10.0	6.0	1.5	2.5	2.5	10.5	12.5	20.0	21.5	22.5	22.0
18	13.0	10.0	6.5	2.5	2.5	3.0	12.0	13.5	21.0	21.5	23.0	23.0
19	13.0	9.5	6.0	1.5	1.5	4.0	12.0	13.5	20.0	21.5	24.0	22.0
20	13.0	10.0	6.0	2.0	1.5	4.5	10.0	16.5	20.0	23.0	21.5	23.0
21	13.0	9.0	5.0	1.5	1.5	7.0	9.0	16.5	20.0	24.0	21.0	23.5
22	13.5	9.5	4.5	1.0	2.0	7.0	8.0	16.0	16.0	23.5	20.5	21.0
23	14.5	8.5	4.5	1.0	2.5	6.0	10.0	16.0	19.0	24.5	21.0	19.5
24	15.0	9.0	4.5	1.0	3.0	4.5	10.0	15.0	19.5	22.5	22.5	19.5
25	15.0	9.0	4.5	3.0	4.0	4.0	11.0	14.5	20.0	21.0	23.5	19.5
26	13.0	7.0	4.0	3.5	3.5	4.0	9.5	14.0	20.5	21.0	22.5	18.0
27	13.5	6.0	3.5	2.5	4.0	4.0	9.5	15.0	19.0	22.5	22.5	17.5
28	14.0	7.0	3.5	1.5	3.5	4.0	11.0	14.5	18.0	22.5	22.5	19.0
29	13.5	7.5	3.5	.5	---	5.5	13.0	18.5	16.0	22.5	22.0	18.0
30	13.0	7.5	4.0	.5	---	5.5	13.0	16.5	15.5	22.5	22.0	18.0
31	13.0	---	4.0	.5	---	9.0	---	19.5	---	21.5	19.0	---
MEAN	14.5	10.5	4.5	2.0	2.0	4.0	11.0	14.0	19.0	21.5	22.0	20.5
MAX	18.0	15.5	7.5	4.5	4.0	9.0	14.0	19.5	22.5	24.5	24.0	23.5
MIN	13.0	6.0	1.5	.5	.5	1.0	8.0	10.5	15.5	17.0	14.0	17.5
WTR YR 1978	MEAN	12.0	MAX	24.5	MIN	.5						

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--17 years, 40.0 ft³/s (1.133 m³/s), 14.26 in/yr (362 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 14	0200	2910	82.4	7.12	2.170
July 24	1015	*3250	92.0	*7.44	2.268

Minimum daily discharge, 0.46 ft³/s (0.013 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	5.4	500	9.0	7.2	8.0	19	27	8.8	161	32	74
2	17	5.0	85	8.4	7.4	7.8	16	22	8.0	138	18	35
3	5.9	4.6	77	7.6	7.0	7.4	14	19	7.3	28	96	21
4	4.2	4.4	61	7.0	9.0	7.4	14	42	8.3	16	49	14
5	2.0	4.3	447	8.3	8.0	7.2	14	55	7.1	11	19	11
6	1.8	5.2	132	11	7.4	9.0	18	38	6.2	9.2	14	8.0
7	1.4	5.6	56	256	7.2	16	14	31	23	7.7	10	6.9
8	10	5.2	40	584	7.2	19	14	237	184	32	7.4	5.7
9	13	6.4	127	60	7.4	17	12	484	42	10	5.9	5.2
10	7.3	18	64	37	8.0	46	9.7	96	14	7.4	5.5	3.8
11	4.9	10	38	24	8.6	179	21	61	8.1	5.5	5.2	3.0
12	3.8	6.9	30	17	10	449	13	51	14	5.0	5.2	2.9
13	3.1	5.4	133	14	9.4	646	9.7	374	21	5.7	4.8	2.9
14	2.5	4.8	1300	13	8.6	1810	8.9	229	7.7	6.6	3.8	2.7
15	2.3	4.5	186	11	7.8	344	8.3	118	5.1	4.4	3.2	2.5
16	2.5	35	74	11	8.6	229	8.3	58	4.3	3.4	2.9	3.0
17	2.5	75	55	12	8.6	115	8.0	39	3.7	2.4	1.8	2.5
18	2.7	23	398	12	7.8	91	33	32	138	1.9	519	2.2
19	3.1	13	88	11	7.6	108	48	22	352	1.6	35	2.2
20	3.1	14	60	12	8.0	76	21	17	48	1.4	16	1.9
21	3.1	241	41	12	8.5	143	28	13	22	1.3	9.6	1.4
22	2.9	53	29	11	8.5	77	24	12	16	1.2	5.7	1.1
23	2.9	33	24	11	8.0	46	77	48	12	1.2	4.8	.94
24	2.9	23	21	16	8.8	42	88	72	8.8	984	4.4	.80
25	5.1	17	36	250	10	171	53	35	8.2	84	3.2	.71
26	34	14	10	28	10	58	44	22	429	38	2.9	.58
27	14	10	9.0	13	9.0	57	34	19	47	19	3.0	.58
28	8.6	11	8.4	7.0	8.4	36	28	9.9	31	10	2.9	.48
29	6.7	9.9	8.1	6.5	---	28	26	7.7	20	6.6	8.3	.46
30	6.0	374	7.8	6.6	---	24	33	6.3	26	187	448	.71
31	5.3	---	7.5	6.8	---	21	---	5.1	---	85	429	---
TOTAL	224.6	1041.6	4152.8	1493.2	232.0	4894.8	758.9	2302.0	1530.6	1875.5	1775.5	218.16
MEAN	7.25	34.7	134	48.2	8.29	158	25.3	74.3	51.0	60.5	57.3	7.27
MAX	40	374	1300	584	10	1810	88	484	429	984	519	74
MIN	1.4	4.3	7.5	6.5	7.0	7.2	8.0	5.1	3.7	1.2	1.8	.46
CFSM	.19	.91	3.52	1.27	.22	4.15	.66	1.95	1.34	1.59	1.50	.19
IN.	.22	1.02	4.05	1.46	.23	4.78	.74	2.25	1.49	1.83	1.73	.21
CAL YR 1977	TOTAL	14216.25	MEAN	38.9	MAX	1300	MIN	.00	CFSM	1.02	IN	13.88
WTR YR 1978	TOTAL	20499.66	MEAN	56.2	MAX	1810	MIN	.46	CFSM	1.48	IN	20.01

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 1977 TO SEPTEMBER 1978

DATE	TEMPER- ATURE (DEG C)	AGENCY ANA- LYZING SAMPLE (CODE NUMRER)	SURFACE AREA (SQ MI)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	OXYGEN, DIS- SOLVED (MG/L)	PH (UNITS)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	ALKA- LINITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 03...	17.0	--	38	4.5	410	8.9	7.3	11	110	140	0	.29
NOV 06...	17.0	--	38	6.5	600	17.9	8.1	3.3	210	260	0	.01
DEC 17...	10.0	--	38	44	440	10.8	8.2	1.9	160	190	0	1.9
JAN 07...	.0	--	38	21	480	18.8	8.4	1.1	150	180	0	1.0
FEB 21...	.0	--	38	8.4	375	--	7.2	18	150	180	0	--
MAR 10...	.5	--	38	38	560	14.2	8.3	1.7	170	210	0	1.4
APR 20...	12.0	--	38	--	495	10.6	8.7	.7	180	220	0	.34
MAY 17...	--	--	38	--	--	--	--	--	--	--	--	--
JUN 14...	--	--	38	--	--	--	--	--	--	--	--	--
JUN 17...	--	--	38	3.3	--	--	--	--	--	--	--	--
JUL 21...	29.5	80010	38	.83	--	8.8	8.3	--	160	--	--	.07
AUG 07...	--	--	38	1.0	--	--	--	--	--	--	--	--
AUG 07...	23.5	80010	38	10	450	9.0	8.5	--	170	--	--	.32
SEP 24...	22.5	80010	38	.36	495	9.9	7.3	--	200	--	--	1.6

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS S04)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 03...	.14	140	30	45	7.8	8.3	.3	11	7.2	16	34	.2
NOV 06...	.06	260	49	82	14	20	.5	14	6.0	26	71	.2
DEC 17...	.10	220	64	70	11	9.0	.3	8	3.3	14	53	.2
JAN 07...	.12	170	23	52	10	16	.5	17	3.0	19	63	.1
FEB 21...	.06	310	160	91	20	16	.4	10	2.2	22	86	.1
MAR 10...	.10	250	73	75	14	16	.4	12	2.7	23	70	.2
APR 20...	.07	240	57	72	14	10	.3	8	2.6	12	66	.1
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 14...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	.04	220	56	65	13	14	.4	12	3.5	19	56	.2
AUG 07...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	.09	210	42	65	12	9.5	.3	9	3.5	14	45	.1
SEP 24...	.06	270	74	85	15	9.1	.2	7	2.2	11	56	.1

HOGAN CREEK BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SILICA, DIS- SOLVED (MG/L AS SI02)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	POTAS- SIUM 40 TOTAL (PCI/L)	SEDI- MENT, SUS- PENDEd (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEd (T/DAY)
OCT 03...	7.0	11000	243	532	199	195	2.42	.27	571.00	--	--	--
NOV 06...	1.1	K550	K107	279	369	348	6.48	.50	571.00	--	--	--
DEC 17...	7.7	27500	432	668	278	262	33.0	.38	571.00	--	--	--
JAN 07...	6.1	12900	336	474	220	258	12.5	.30	571.00	--	--	--
FEB 21...	6.5	K450	K9500	K14	329	333	7.46	.45	571.00	--	--	--
MAR 10...	6.5	1100	K43	550	330	311	33.9	.45	571.00	--	--	--
APR 20...	1.8	8290	1950	K43	300	287	--	.41	571.00	--	--	--
MAY 17...	--	7860	K79	K57	--	--	--	--	571.00	--	--	--
JUN 14...	--	--	--	--	--	--	--	--	571.00	--	--	--
JUN 17...	--	19500	K100	279	--	--	--	--	571.00	--	18	.16
JUL 21...	3.7	--	2800	284	279	271	.63	.38	571.00	2.6	11	.02
AUG 07...	--	--	--	--	--	--	--	--	571.00	--	25	.06
AUG 07...	6.6	16700	164	K86	286	258	7.72	.39	571.00	--	--	--
SEP 24...	8.1	4260	K26	286	329	307	.32	.45	571.00	2.8	94	.09

INDIAN-KENTUCK CREEK BASIN

47

03291780 INDIAN-KENTUCK CREEK NEAR CANAAN, IN

LOCATION.--Lat 38°52'41", long 85°15'26", in SW¼NW¼ sec.13, 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).

WATER-DISCHARGE RECORDS

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

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

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

AVERAGE DISCHARGE.--9 years, 29.7 ft³/s (0.841 m³/s), 14.67 in/yr (373 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) 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)	
Nov. 21	0700	1010	28.6	6.34	1.932	July 24	1345	1380	39.1	6.97	2.124
Dec. 14	0400	1280	36.2	6.81	2.076	July 30	2315	1510	42.8	7.17	2.185
Mar. 14	0400	*1710	48.4	*7.47	2.277	Aug. 18	0315	1300	36.8	6.85	2.088

Minimum daily discharge, 0.21 ft³/s (0.006 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	3.6	326	16	7.6	9.2	19	16	4.2	14	23	50
2	11	3.1	94	15	7.6	8.8	16	14	3.6	13	35	25
3	3.9	2.9	71	14	7.6	8.6	15	13	3.4	8.4	85	12
4	2.9	2.9	57	13	11	8.4	15	28	2.9	2.5	22	7.0
5	2.1	2.7	377	14	10	8.2	13	33	2.7	1.4	13	6.0
6	2.3	2.5	109	19	9.6	11	13	23	2.5	1.0	33	5.2
7	2.1	4.5	72	103	9.3	17	13	20	3.4	.77	28	4.5
8	41	4.5	60	377	9.4	21	11	192	14	8.4	13	3.5
9	25	7.2	118	60	10	19	9.7	227	4.5	2.3	7.8	3.2
10	15	40	74	35	11	71	9.0	60	2.9	1.4	5.2	2.5
11	9.7	18	64	25	12	173	16	38	2.0	1.4	4.2	2.3
12	6.6	11	56	20	12	359	14	40	7.2	.84	3.9	2.2
13	4.8	7.2	243	17	11	410	11	250	11	2.7	3.4	2.2
14	3.6	6.1	669	15	10	888	7.8	171	2.9	3.9	2.9	3.9
15	3.4	5.7	145	14	9.0	262	7.8	94	2.0	1.5	2.3	2.5
16	3.4	98	80	14	9.4	156	7.2	59	1.5	1.1	2.0	1.8
17	2.9	127	57	16	9.4	93	6.6	43	1.2	.77	1.5	1.7
18	2.7	39	184	15	9.2	60	18	33	1.3	.49	255	1.3
19	2.5	24	76	14	8.8	62	19	26	9.0	.35	23	.92
20	2.3	41	58	15	9.0	52	17	21	3.4	.24	13	.84
21	2.1	374	36	14	9.4	74	15	18	2.1	6.6	7.2	.64
22	2.0	86	29	13	9.6	49	13	15	1.4	3.9	4.8	.49
23	1.8	56	26	13	9.4	36	49	21	1.0	1.2	3.4	.44
24	1.7	36	24	16	9.6	29	45	22	.77	265	2.8	.35
25	2.9	28	21	150	11	42	31	15	.70	32	2.5	.31
26	40	23	20	13	11	42	25	13	95	13	2.2	.27
27	19	20	18	8.5	10	33	20	9.7	7.2	5.7	2.7	.27
28	13	18	17	7.4	9.7	27	18	8.4	3.4	4.2	2.3	.24
29	6.6	16	15	7.0	---	24	16	7.2	2.1	2.7	7.0	.21
30	4.8	420	14	7.0	---	21	20	6.1	1.4	173	250	11
31	4.2	---	14	7.2	---	20	---	5.2	---	158	200	---
TOTAL	272.3	1527.9	3224	1087.1	272.6	3094.2	510.1	1541.6	200.67	731.76	1061.1	152.78
MEAN	8.78	50.9	104	35.1	9.74	99.8	17.0	49.7	6.69	23.6	34.2	5.09
MAX	41	420	669	377	12	888	49	250	95	265	255	50
MIN	1.7	2.5	14	7.0	7.6	8.2	6.6	5.2	.70	.24	1.5	.21
CFSM	.32	1.85	3.78	1.28	.35	3.63	.62	1.81	.24	.86	1.24	.19
IN.	.37	2.07	4.36	1.47	.37	4.19	.69	2.09	.27	.99	1.44	.21
CAL YR 1977	TOTAL	13009.21	MEAN	35.6	MAX	715	MIN	.12	CFSM	1.30	IN	17.60
WTR YR 1978	TOTAL	13676.11	MEAN	37.5	MAX	888	MIN	.21	CFSM	1.36	IN	18.50

INDIAN-KENTUCK CREEK BASIN

03291780 INDIAN-KENTUCK CREEK NEAR CANAAN, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
NOV					
08...	0950	7.1	13	.25	--
16...	1315	58	226	35	--
DEC					
01...	1455	213	32	18	8.0
21...	1200	39	46	4.8	--
JUN					
09...	0840	4.3	146	1.7	19.0
JUL					
11...	1400	1.4	42	.16	--
SEP					
13...	1400	2.2	20	.12	--

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) southeast 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) National Geodetic Vertical Datum of 1929 (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.--24 years, 217 ft³/s (6.145 m³/s), 15.59 in/yr (396 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 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)
Dec. 1	1300	3020 85.5	16.20 4.938	Mar. 15	0500	*5360 152	*21.28 6.486
Dec. 5	2200	3400 96.3	17.21 5.246	July 31	Unknown	4000 113	Unknown
Dec. 14	2100	3520 99.7	17.53 5.343	Aug. 3	Unknown	3000 85	Unknown
Jan. 8	2300	3250 92.0	16.82 5.127	Aug. 18	2300	4250 120	19.09 5.819

Minimum daily discharge, 11 ft³/s (0.312 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1480	64	2740	104	186	140	183	166	40	17	952	941
2	634	60	899	94	172	140	161	140	36	36	290	314
3	170	57	465	66	145	130	143	121	33	63	2430	208
4	106	57	484	62	129	120	123	332	30	52	712	149
5	74	49	2270	61	126	100	114	394	26	24	280	108
6	61	39	1770	73	107	110	108	214	23	17	221	84
7	56	454	504	87	90	170	95	173	30	14	842	69
8	213	403	370	1800	86	300	84	944	48	12	258	59
9	273	203	1180	1810	79	603	84	1190	72	13	172	51
10	138	172	488	449	74	788	106	534	39	36	100	44
11	98	121	303	288	71	1410	124	319	25	149	73	40
12	75	91	240	231	68	2240	95	347	104	58	69	35
13	62	75	264	196	64	2470	82	1820	146	55	94	71
14	53	72	2740	169	62	4290	71	1040	50	70	62	103
15	53	66	1820	143	61	4840	71	644	31	301	49	78
16	45	538	625	114	60	1610	63	466	24	278	39	46
17	40	1120	468	100	60	803	61	355	20	118	33	37
18	36	415	1250	95	60	530	340	275	25	54	2460	31
19	30	225	636	90	60	461	598	218	772	32	2820	26
20	29	244	440	85	60	410	336	178	196	30	349	23
21	30	1620	314	80	60	388	223	152	160	25	175	22
22	27	934	236	78	60	410	178	123	79	16	117	22
23	23	403	206	77	60	296	223	142	51	14	85	18
24	21	279	186	84	62	262	488	622	38	644	68	17
25	25	213	206	447	70	672	540	370	30	904	57	15
26	175	169	145	1490	90	596	438	188	37	239	66	14
27	120	142	127	812	110	456	294	117	39	102	103	13
28	74	135	90	545	130	349	223	85	24	64	203	12
29	68	203	95	390	---	277	184	67	20	42	123	11
30	74	1040	91	281	---	223	184	57	18	484	676	22
31	70	---	90	233	---	206	---	47	---	3180	1960	---
TOTAL	4433	9663	21742	10634	2462	25802	6217	11840	2266	7143	15946	2683
MEAN	143	322	701	343	87.9	832	207	382	75.5	230	514	89.4
MAX	1480	1620	2740	1810	186	4840	688	1820	772	3180	2820	941
MIN	21	39	90	61	60	100	61	47	18	12	33	11
CFSM	.76	1.70	3.71	1.82	.47	4.40	1.10	2.02	.40	1.22	2.72	.47
IN.	.87	1.90	4.28	2.09	.48	5.08	1.22	2.33	.45	1.41	3.14	.53

CAL YR 1977 TOTAL 74720.9 MEAN 205 MAX 3300 MIN 4.5 CFSM 1.09 IN 14.71
WTR YR 1978 TOTAL 120831.0 MEAN 331 MAX 4840 MIN 11 CFSM 1.75 IN 23.78

BUCK CREEK BASIN

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good.

AVERAGE DISCHARGE.--9 years, 81.0 ft³/s (2.294 m³/s), 16.87 in/yr (428 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	1400	2110	59.8	7.61	2.320	Dec. 14	0900	1110	31.4	5.92	1.804
Nov. 21	1100	1530	43.3	6.72	2.048	Jan. 8	1700	1010	28.6	5.71	1.740
Dec. 1	0600	1290	36.5	6.27	1.911	Mar. 14	0400	*4540	129	*10.21	3.112
Dec. 5	1000	2740	77.6	8.41	2.563	May 13	0500	3180	90.1	8.91	2.716

Minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Sept. 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452	21	752	33	50	43	69	67	28	6.5	21	26
2	220	19	257	30	45	42	61	58	26	6.2	13	16
3	89	18	170	27	40	38	56	55	24	20	65	12
4	58	17	121	25	37	36	52	97	22	10	19	9.1
5	43	15	1040	24	35	33	48	92	20	7.0	12	7.5
6	35	18	328	26	33	34	45	67	18	6.0	16	6.2
7	27	162	202	30	31	73	42	61	17	5.6	18	5.6
8	103	171	162	554	29	218	40	192	16	5.3	11	4.9
9	99	109	364	328	28	227	38	343	26	5.0	8.8	4.5
10	66	80	199	150	27	309	39	183	20	6.0	7.6	3.8
11	50	62	148	100	26	486	67	129	15	5.3	8.6	3.5
12	38	54	117	80	25	744	66	147	25	4.4	29	4.2
13	31	37	108	70	25	649	55	1220	59	7.2	26	5.9
14	25	34	595	60	24	1590	46	511	30	8.8	12	7.0
15	24	32	278	50	24	330	39	256	20	9.7	9.2	7.0
16	20	191	195	40	23	233	40	235	15	12	7.5	5.1
17	17	225	153	35	23	203	39	193	12	6.4	6.5	4.3
18	17	131	237	30	22	162	147	151	60	4.8	6.2	3.6
19	14	86	185	28	21	142	148	122	125	3.9	9.4	3.0
20	13	97	145	26	20	117	179	107	59	3.6	5.7	2.7
21	12	623	114	25	20	112	135	94	40	3.4	4.3	2.5
22	11	266	95	24	20	99	96	80	45	3.0	3.7	2.2
23	9.9	166	82	23	20	92	91	79	30	4.2	3.5	1.8
24	8.3	110	77	30	23	83	164	85	21	48	3.2	1.9
25	16	87	70	309	25	173	190	72	16	37	2.9	1.8
26	82	70	53	408	32	153	144	61	13	13	2.6	1.8
27	55	56	47	150	38	127	107	50	10	9.8	3.3	1.8
28	37	54	43	110	43	106	84	45	9.0	6.9	6.0	1.9
29	31	53	41	90	---	92	71	40	8.8	5.4	7.0	1.6
30	27	385	37	70	---	79	79	35	7.0	21	74	3.1
31	32	---	33	60	---	73	---	31	---	76	46	---
TOTAL	1762.2	3449	6448	3045	809	6898	2477	4998	836.8	371.4	470.0	162.3
MEAN	56.8	115	208	98.2	28.9	223	82.6	161	27.9	12.0	15.2	5.41
MAX	452	623	1040	554	50	1590	190	1220	125	76	74	26
MIN	8.3	15	33	23	20	33	38	31	7.0	3.0	2.6	1.6
CFSM	.87	1.76	3.19	1.51	.44	3.42	1.27	2.47	.43	.18	.23	.08
IN.	1.01	1.97	3.68	1.74	.46	3.94	1.41	2.85	.48	.21	.27	.09
CAL YR 1977	TOTAL	23537.0	MEAN	64.5	MAX	1300	MIN	2.0	CFSM	.99	IN	13.43
WTR YR 1978	TOTAL	31726.7	MEAN	86.9	MAX	1590	MIN	1.6	CFSM	1.33	IN	18.10

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for period of no gage-height record, Jan. 10 to Mar. 6, which is poor.

AVERAGE DISCHARGE.--10 years, 24.1 ft³/s (0.682 m³/s), 20.33 in/yr (516 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 1,500 ft³/s (42.5 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)
Oct. 1	Unknown	*4570 129	*8.60 2.621	May 13	0145	1500 42.5	5.90 1.798
Dec. 5	0445	2040 57.8	6.25 1.905	July 25	0515	1750 49.6	6.18 1.884
Mar. 14	0215	2760 78.2	7.11 2.167	Aug. 27	1930	1500 42.5	5.89 1.795

Minimum daily discharge, 0.61 ft³/s (0.017 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	895	6.6	323	9.0	20	13	23	19	4.9	2.7	8.4	31
2	59	6.2	65	8.6	18	12	21	16	4.1	2.8	51	17
3	25	5.9	43	8.4	17	11	18	14	3.8	18	105	12
4	15	5.9	33	8.2	16	10	17	45	3.6	3.6	39	8.6
5	11	5.5	518	7.8	15	9.4	15	33	3.4	2.5	17	7.2
6	9.8	5.9	76	8.0	14	9.8	15	25	3.2	1.8	146	6.0
7	8.4	123	42	8.8	14	48	13	24	7.9	1.6	51	5.0
8	59	65	47	271	13	57	12	106	11	1.2	25	4.4
9	32	36	101	90	13	59	12	66	9.8	3.6	18	3.9
10	20	25	42	39	12	96	12	41	4.4	4.9	12	3.4
11	15	18	30	28	11	153	20	30	3.3	4.1	8.5	3.0
12	12	14	24	24	10	264	13	54	97	1.7	19	2.7
13	8.8	12	103	21	9.6	291	11	303	26	11	11	3.1
14	7.9	10	406	19	9.4	828	9.2	97	16	3.4	7.5	3.8
15	7.0	9.5	77	17	9.2	121	8.2	66	11	57	5.5	3.2
16	6.6	167	47	15	9.0	84	8.8	48	9.6	13	4.3	2.4
17	5.9	106	39	14	8.7	62	9.8	37	8.4	5.1	3.6	2.1
18	5.5	45	95	13	8.5	49	81	30	39	2.9	39	1.8
19	4.8	29	47	12	8.3	43	69	23	40	2.1	10	1.7
20	4.8	45	35	11	8.2	38	52	19	26	1.6	5.3	1.6
21	4.5	282	27	10	8.2	40	37	15	49	1.3	3.3	1.4
22	4.2	68	22	9.6	8.2	36	28	12	25	1.0	2.5	1.4
23	4.2	41	20	11	8.2	31	42	32	14	1.1	2.0	1.1
24	3.9	29	18	14	8.3	28	72	66	11	23	1.7	.98
25	12	24	16	210	9.0	84	64	31	8.3	151	1.2	.90
26	21	18	14	90	10	57	46	20	7.3	14	1.0	.79
27	12	17	13	54	12	47	34	15	5.8	7.0	78	.72
28	9.8	15	12	36	14	39	27	12	4.3	4.8	24	.67
29	8.8	28	11	28	---	33	23	9.6	3.8	3.3	17	.61
30	7.9	243	10	25	---	29	23	7.5	3.0	44	134	2.0
31	7.1	---	9.4	22	---	26	---	6.0	---	34	96	---
TOTAL	1307.9	1505.5	2365.4	1142.4	321.8	2708.2	836.0	1322.1	463.9	429.1	946.8	134.47
MEAN	42.2	50.2	76.3	36.9	11.5	87.4	27.9	42.6	15.5	13.8	30.5	4.48
MAX	895	282	518	271	20	828	81	303	97	151	146	31
MIN	3.9	5.5	9.4	7.8	8.2	9.4	8.2	6.0	3.0	1.0	1.0	.61
CFSM	2.62	3.12	4.74	2.29	.71	5.43	1.73	2.65	.96	.86	1.89	.28
IN.	3.02	3.48	5.47	2.64	.74	6.26	1.93	3.05	1.07	.99	2.19	.31
CAL YR 1977	TOTAL	9831.20	MEAN	26.9	MAX	895	MIN	.35	CFSM	1.67	IN	22.71
WTR YR 1978	TOTAL	13483.57	MEAN	36.9	MAX	895	MIN	.61	CFSM	2.29	IN	31.15

INDIAN CREEK BASIN

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) National Geodetic Vertical Datum of 1929. 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 fair.

AVERAGE DISCHARGE.--35 years, 170 ft³/s (4.814 m³/s), 17.90 in/yr (455 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Oct. 1	2400	*7970	226	*16.68	5.084
Mar. 14	1400	7280	206	16.14	4.919

Minimum daily discharge, 10 ft³/s (0.283 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3780	44	2090	81	133	111	140	149	46	19	351	495
2	1960	42	647	76	119	104	122	120	41	19	252	266
3	363	39	409	56	98	98	110	104	39	112	629	173
4	230	37	310	58	89	93	98	181	36	53	557	110
5	179	36	2240	58	88	89	92	217	33	25	375	80
6	143	35	836	61	71	99	86	150	31	19	582	60
7	108	223	474	62	62	149	82	127	29	16	891	48
8	319	376	382	948	78	269	74	363	42	14	450	40
9	392	232	876	944	81	390	70	456	64	13	392	34
10	287	169	462	379	77	492	82	300	38	16	225	30
11	193	123	329	220	73	895	107	212	27	58	100	28
12	149	98	271	160	72	1560	119	232	123	29	122	27
13	117	81	282	130	70	1610	92	1210	322	32	201	27
14	92	71	2340	110	70	5440	78	807	68	70	114	68
15	80	64	825	94	72	1420	71	553	43	108	74	54
16	70	666	517	86	72	764	68	401	33	193	52	42
17	62	1030	390	80	71	508	77	310	27	66	38	33
18	56	453	511	76	77	371	358	237	98	40	124	26
19	52	282	409	72	66	312	693	185	743	26	133	22
20	47	240	329	70	64	261	517	152	177	20	54	20
21	43	1590	261	68	62	249	358	128	406	16	37	18
22	40	736	214	66	58	240	252	105	223	14	28	17
23	38	429	187	74	60	197	232	99	107	14	24	16
24	36	284	171	78	62	173	492	261	74	359	21	15
25	34	214	163	314	69	401	537	169	58	982	19	14
26	128	169	140	1680	87	395	429	116	48	271	16	13
27	104	138	120	1060	87	314	312	92	40	154	24	12
28	72	125	100	327	111	252	235	77	32	80	294	11
29	58	128	92	240	---	210	189	68	25	62	327	10
30	52	590	84	197	---	175	177	60	22	195	785	15
31	47	---	82	162	---	156	---	53	---	1070	1010	---
TOTAL	9331	8744	16543	8087	2199	17797	6349	7694	3095	4165	8301	1824
MEAN	301	291	534	261	78.5	574	212	248	103	134	268	60.8
MAX	3780	1590	2340	1680	133	5440	693	1210	743	1070	1010	495
MIN	34	35	82	56	58	89	68	53	22	13	16	10
CFSM	2.33	2.26	4.14	2.02	.61	4.45	1.64	1.92	.80	1.04	2.08	.47
IN.	2.69	2.52	4.77	2.33	.63	5.13	1.83	2.22	.89	1.20	2.39	.53

CAL YR 1977 TOTAL 75342.7 MEAN 206 MAX 3780 MIN 5.0 CFSM 1.60 IN 21.73
WTR YR 1978 TOTAL 94129.0 MEAN 258 MAX 5440 MIN 10 CFSM 2.00 IN 27.14

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--8 years, 23.7 ft³/s (0.671 m³/s), 16.94 in/yr (430 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 1	0900	1020 28.9	6.92 2.109	May 13	0215	648 18.4	5.78 1.762
Nov. 21	0500	1050 29.7	7.01 2.137	June 18	2200	1100 31.2	7.13 2.173
Dec. 14	0100	700 19.8	5.94 1.811	July 2	2400	664 18.8	5.83 1.777
Mar. 14	0430	*2310 65.4	*9.61 2.929	July 15	0900	876 24.8	6.49 1.978
May 8	0930	1160 32.9	7.28 2.219	July 30	2215	2300 65.1	9.60 2.926

Minimum daily discharge, 0.48 ft³/s (0.014 m³/s) Sept. 29.

DISCHARGE IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	3.8	136	8.6	18	11	21	19	7.0	1.6	46	47
2	32	3.4	64	7.3	16	12	18	16	6.0	7.5	30	29
3	18	3.2	48	6.9	15	12	16	14	5.5	38	85	20
4	13	3.0	56	6.5	14	11	15	25	5.5	3.2	30	15
5	9.7	2.6	406	6.0	13	10	13	19	4.7	2.3	19	12
6	9.1	2.5	102	5.9	13	11	13	15	4.7	1.9	14	9.2
7	7.0	21	59	16	12	12	11	15	5.5	1.6	15	7.2
8	40	16	54	82	11	15	10	268	4.7	1.5	8.0	6.4
9	28	14	72	51	10	25	9.8	146	3.8	15	7.0	4.7
10	20	12	44	40	9.8	38	10	72	3.2	27	7.0	3.8
11	16	8.5	34	30	9.6	100	13	48	2.8	7.0	4.7	3.4
12	12	6.5	30	25	9.2	250	9.8	57	2.6	3.0	17	2.9
13	9.7	5.1	112	19	9.3	291	8.3	199	2.6	44	7.0	2.8
14	8.5	4.4	424	15	9.4	1010	7.4	104	2.3	8.0	5.1	15
15	7.5	4.4	119	13	8.4	228	6.9	82	2.3	119	4.1	6.8
16	6.5	77	72	11	7.5	140	6.2	61	2.3	21	2.8	3.7
17	5.5	119	51	10	7.7	91	6.6	47	2.1	9.7	2.3	3.0
18	5.1	47	43	9.0	7.2	64	23	37	106	6.0	5.1	2.4
19	4.4	30	34	8.5	7.0	61	19	28	44	4.4	6.0	1.9
20	3.5	34	29	8.0	6.8	52	17	24	14	3.0	7.0	1.7
21	3.0	281	24	7.6	6.6	57	15	19	8.5	2.3	6.0	1.4
22	2.6	72	20	7.2	6.4	44	13	16	6.0	2.0	5.5	1.0
23	2.3	46	18	7.0	6.3	36	28	16	4.4	1.9	5.1	.87
24	2.1	33	17	9.0	6.2	30	57	64	3.5	49	5.1	.87
25	2.6	26	13	75	7.3	55	48	26	3.0	11	8.0	.77
26	11	19	13	70	8.0	49	49	19	3.2	4.7	6.0	.69
27	7.5	16	12	50	8.0	42	37	16	2.5	3.0	5.5	.61
28	5.5	13	11	35	10	35	30	14	2.0	2.5	46	.51
29	4.7	12	10	30	---	29	25	12	1.9	2.0	19	.48
30	4.4	136	9.0	25	---	26	23	10	1.7	360	101	3.0
31	4.1	---	8.2	20	---	24	---	8.5	---	128	104	---
TOTAL	515.3	1071.4	2144.2	714.5	272.7	2871	579.0	1516.5	268.3	891.1	633.3	208.10
MEAN	16.6	35.7	69.2	23.0	9.74	92.6	19.3	48.9	8.94	28.7	20.4	6.94
MAX	210	281	424	82	18	1010	57	268	106	360	104	47
MIN	2.1	2.5	8.2	5.9	6.2	10	6.2	8.5	1.7	1.5	2.3	.48
CFSM	.87	1.88	3.64	1.21	.51	4.87	1.02	2.57	.47	1.51	1.07	.37
IN.	1.01	2.10	4.20	1.40	.53	5.62	1.13	2.97	.53	1.74	1.24	.41
CAL YR 1977 TOTAL	9341.86			MEAN 25.6	MAX 424	MIN .55	CFSM 1.35	IN 18.29				
WTR YR 1978 TOTAL	11685.40			MEAN 32.0	MAX 1010	MIN .48	CFSM 1.68	IN 22.88				

BLUE RIVER BASIN

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, on 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 321 ft³/s (9.091 m³/s), 15.40 in/yr (391 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) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Nov. 21	1800	7000	198	17.25	5.258	Mar. 14	1800	*11300	320	*22.10	6.736
Dec. 1	1100	3010	85.2	10.83	3.301	May 8	2000	3020	85.5	10.85	3.307
Dec. 5	1800	7260	206	17.57	5.355	July 31	1100	7250	205	17.55	5.349
Dec. 14	1400	6640	188	16.78	5.115						

Minimum daily discharge, 30 ft³/s (0.85 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	56	2580	133	250	171	333	305	126	43	874	882
2	674	53	1210	127	220	166	291	249	112	42	508	460
3	339	51	820	93	200	160	255	218	101	110	1420	302
4	236	47	765	99	180	150	234	277	93	92	689	213
5	184	44	4330	90	170	142	217	423	85	48	429	157
6	149	43	1970	93	160	160	202	301	81	38	281	122
7	108	136	1000	98	155	198	194	252	85	36	251	101
8	302	324	800	1360	150	296	170	1210	91	35	196	85
9	431	233	1300	1000	140	490	159	1510	76	34	150	74
10	284	184	1000	600	135	684	163	823	67	88	118	64
11	215	141	700	450	130	1290	174	566	61	529	136	58
12	167	113	500	350	128	2680	181	561	113	110	209	56
13	132	95	520	300	130	3030	153	1790	307	224	292	57
14	108	85	5050	250	136	9600	136	1550	91	318	131	231
15	98	80	2020	200	117	5130	124	1110	68	347	98	264
16	89	434	1160	170	114	2090	118	837	59	440	79	113
17	79	1780	862	150	110	1460	118	652	54	176	67	78
18	71	799	733	135	109	1020	252	517	65	107	103	64
19	65	477	584	125	104	875	492	417	1210	77	156	57
20	57	444	497	120	100	782	450	355	336	61	73	50
21	51	4370	398	115	100	745	359	305	203	52	60	48
22	46	1790	330	110	97	725	287	254	143	46	55	44
23	42	935	288	100	100	597	270	260	107	44	52	40
24	37	636	264	120	97	514	718	772	87	381	50	37
25	40	478	265	516	102	666	759	583	75	667	49	35
26	92	378	204	1560	120	742	769	367	67	248	74	34
27	121	306	190	800	123	633	599	281	63	129	73	32
28	88	268	159	600	158	542	464	232	55	84	90	31
29	74	235	154	450	---	474	383	199	48	63	376	30
30	64	961	138	350	---	404	356	167	44	1150	619	40
31	59	---	133	290	---	362	---	144	---	4890	1700	---
TOTAL	5622	15976	30924	10954	3835	36978	9380	17487	4173	10709	9458	3859
MEAN	181	533	998	353	137	1193	313	564	139	345	305	129
MAX	1120	4370	5050	1560	250	9600	769	1790	1210	4890	1700	882
MIN	37	43	133	90	97	142	118	144	44	34	49	30
CFSM	.64	1.88	3.53	1.25	.48	4.22	1.11	1.99	.49	1.22	1.08	.46
IN.	.74	2.10	4.06	1.44	.50	4.86	1.23	2.30	.55	1.41	1.24	.51

CAL YR 1977 TOTAL 136822 MEAN 375 MAX 5050 MIN 10 CFSM 1.33 IN 17.99
WTR YR 1978 TOTAL 159355 MEAN 437 MAX 9600 MIN 30 CFSM 1.54 IN 20.95

03303000 BLUE RIVER NEAR WHITE CLOUD, IN

LOCATION.--Lat 38°14'15", long 86°13'42", in NW¼SE¼ 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) National Geodetic Vertical Datum of 1929 (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.--48 years, 620 ft³/s (17.56 m³/s), 17.69 in/yr (449 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 22	0600	7840 222	11.25 3.429	Dec. 15	0300	8230 233	11.51 3.508
Dec. 6	0600	8000 227	11.36 3.463	Mar. 15	1100	*15100 428	*15.85 4.831

Minimum daily discharge, 82 ft³/s (2.32 m³/s) July 10.

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 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2260	239	3890	416	720	439	682	704	323	128	3220	2150
2	2410	233	2880	407	640	450	628	605	300	173	997	985
3	970	226	1700	385	592	461	568	533	277	152	1700	655
4	604	219	1330	344	533	460	527	571	255	164	1610	501
5	473	211	3910	342	501	424	494	747	235	215	847	411
6	405	209	5770	336	487	393	472	693	217	132	608	351
7	355	296	2240	345	440	482	447	577	217	105	538	308
8	578	498	1580	1200	412	730	425	693	227	94	603	279
9	869	616	2280	2780	412	1020	401	2480	237	87	456	254
10	706	504	1930	1420	393	1240	397	1660	221	82	366	228
11	544	438	1350	957	382	2080	413	1090	199	242	327	206
12	456	385	1090	824	367	3730	441	935	186	422	355	189
13	395	343	1020	730	368	5250	418	2450	316	229	464	180
14	351	317	5130	657	379	11100	379	3370	370	424	416	204
15	319	301	5770	581	373	13400	354	2300	234	382	309	350
16	298	881	2530	521	355	4520	343	1730	200	582	264	369
17	278	3020	1810	487	347	2930	351	1350	176	441	232	241
18	262	2080	1470	467	348	2040	621	1100	238	279	201	195
19	268	1200	1280	449	343	1610	992	906	1680	194	241	168
20	231	1000	1090	429	329	1410	1340	774	1080	150	298	152
21	216	3990	947	404	327	1270	1070	677	538	123	215	141
22	200	5490	823	387	336	1270	824	589	392	106	169	129
23	187	2060	732	333	317	1100	711	536	319	99	147	118
24	175	1430	679	379	316	962	1100	637	272	250	133	112
25	172	1100	645	1150	319	1010	1640	1160	243	1200	123	106
26	222	909	608	2750	346	1300	1450	732	222	791	119	101
27	264	757	529	1980	385	1160	1310	563	203	400	141	97
28	318	663	500	1410	404	1030	1030	482	180	281	390	92
29	276	607	452	1120	---	912	860	429	159	221	526	88
30	268	996	449	910	---	808	767	391	141	217	866	91
31	250	---	425	803	---	730	---	354	---	5190	2420	---
TOTAL	15580	31218	56839	25703	11471	65721	21455	31818	9857	13555	19301	9451
MEAN	503	1041	1834	829	410	2120	715	1026	329	437	623	315
MAX	2410	5490	5770	2780	720	13400	1640	3370	1680	5190	3220	2150
MIN	172	209	425	333	316	393	343	354	141	82	119	88
CFSM	1.06	2.19	3.85	1.74	.86	4.45	1.50	2.16	.69	.92	1.31	.66
IN.	1.22	2.44	4.44	2.01	.90	5.14	1.68	2.49	.77	1.06	1.51	.74

CAL YR 1977 TOTAL 270862 MEAN 742 MAX 5770 MIN 34 CFSM 1.56 IN 21.17
WTR YR 1978 TOTAL 311969 MEAN 855 MAX 13400 MIN 82 CFSM 1.80 IN 24.38

ANDERSON RIVER BASIN

03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN

LOCATION.--Lat 38°08'19", long 86°43'16", in SW¼NE¼ 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.--39.8 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Forest Service and Soil Conservation Service control structures beginning June 1967.

AVERAGE DISCHARGE.--17 years, 54.7 ft³/s (1.549 m³/s), 18.66 in/yr (474 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, 1,120 ft³/s (31.7 m³/s) Mar. 14, gage height, 15.04 ft (4.584 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Aug. 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	16	248	23	25	39	42	59	12	2.6	23	59
2	323	15	168	22	32	37	38	45	10	3.0	14	26
3	268	14	114	18	30	34	33	37	10	2.7	35	17
4	112	13	77	17	28	32	33	68	8.6	2.3	20	12
5	57	13	367	18	26	29	33	78	7.6	2.1	12	8.5
6	41	12	331	21	24	27	32	58	6.9	1.9	30	6.5
7	33	17	225	22	23	45	29	51	9.9	1.7	91	5.3
8	175	28	144	143	21	70	27	61	11	1.6	15	4.7
9	135	26	323	119	20	120	27	64	8.3	1.5	8.3	4.2
10	83	22	206	82	19	207	34	47	6.9	1.4	5.8	3.8
11	58	18	117	47	18	287	127	36	5.9	1.5	4.7	3.6
12	43	16	81	35	23	394	112	66	6.1	1.6	5.5	3.4
13	34	14	135	31	29	395	74	323	6.7	9.4	5.4	4.3
14	29	13	502	29	44	714	53	335	4.5	11	4.0	14
15	25	12	388	27	43	438	41	247	3.5	15	3.4	10
16	23	194	349	25	40	419	36	157	3.4	10	3.0	6.4
17	20	346	249	24	37	399	38	111	3.6	6.0	2.6	5.2
18	18	242	142	23	31	356	161	76	21	4.1	2.3	4.3
19	16	111	108	22	27	231	195	55	75	3.2	2.1	3.6
20	15	103	82	21	24	89	204	42	14	2.5	1.7	3.4
21	13	363	64	20	22	87	154	34	11	2.3	1.5	3.1
22	12	306	54	19	21	96	107	28	7.5	2.0	1.4	2.8
23	11	172	43	18	20	77	94	27	5.9	1.6	1.3	2.5
24	11	96	37	18	22	64	164	275	5.3	4.6	1.3	2.3
25	21	66	31	150	24	105	170	132	4.6	9.9	1.4	2.2
26	46	49	28	150	27	106	136	55	4.1	7.8	1.7	2.0
27	33	43	25	90	31	93	97	33	3.5	5.5	1.6	1.7
28	27	38	23	70	36	77	70	25	3.3	4.0	9.3	1.6
29	23	46	21	56	---	64	55	20	3.0	3.0	21	1.5
30	19	140	20	47	---	54	64	17	2.7	34	91	2.5
31	18	---	23	41	---	47	---	14	---	54	216	---
TOTAL	1974	2564	4725	1448	767	5232	2480	2676	285.8	213.8	636.3	227.4
MEAN	63.7	85.5	152	46.7	27.4	169	82.7	86.3	9.53	6.90	20.5	7.58
MAX	323	363	502	150	44	714	204	335	75	54	216	59
MIN	11	12	20	17	18	27	27	14	2.7	1.4	1.3	1.5
CFSM	1.60	2.15	3.82	1.17	.69	4.25	2.08	2.17	.24	.17	.52	.19
IN.	1.84	2.40	4.42	1.35	.72	4.89	2.32	2.50	.27	.20	.59	.21
CAL YR 1977	TOTAL	22911.02	MEAN 62.8	MAX 551	MIN .70	CFSM 1.58	IN 21.41					
WTR YR 1978	TOTAL	23229.30	MEAN 63.6	MAX 714	MIN 1.3	CFSM 1.60	IN 21.71					

ANDERSON RIVER BASIN

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03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: March 1964 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
DEC 13...	1400	82	14	3.1
MAR 16...	1800	418	72	81

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair, except those for period of no gage-height record, Dec. 19 to Mar. 7, which are poor.

AVERAGE DISCHARGE.--9 years, 11.7 ft³/s (0.331 m³/s), 20.21 in/yr (513 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. 14	0145	*570 16.1	*8.90 2.713

Minimum daily discharge, no flow Sept. 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	1.8	38	2.6	2.8	4.3	5.7	4.7	1.1	.30	.82	3.2
2	29	1.6	18	2.2	2.6	4.0	4.7	3.6	1.0	1.3	3.9	1.0
3	14	1.5	12	2.0	2.4	3.7	4.2	3.3	.98	.42	21	.56
4	8.4	1.5	9.4	1.9	2.3	3.4	4.2	13	.78	.27	1.5	.39
5	5.5	1.5	128	2.0	2.2	3.0	3.8	7.9	.64	.20	.82	.30
6	4.5	1.6	23	2.2	2.1	2.8	4.0	5.0	.60	.15	.64	.24
7	3.9	2.4	17	2.6	2.1	5.0	3.2	5.3	.87	.13	.60	.19
8	52	4.2	47	23	2.0	48	2.8	6.6	1.1	.11	.42	.17
9	18	3.8	54	8.0	1.9	30	3.6	5.5	.49	.08	.36	.15
10	10	2.7	20	3.5	1.8	47	5.3	3.7	.33	.07	.33	.14
11	7.1	1.9	10	2.9	1.9	58	40	3.1	.24	.06	.30	.13
12	4.7	1.5	8.0	2.7	2.2	95	15	8.6	.20	.05	3.2	.11
13	3.5	1.3	49	2.6	4.6	86	8.9	33	.27	20	.46	.12
14	2.9	1.5	123	2.4	8.0	161	5.9	23	.11	.88	.20	8.7
15	2.5	1.4	27	2.3	7.0	25	4.9	14	.07	31	.08	.87
16	2.2	96	19	2.3	6.4	18	4.6	11	.06	2.7	.05	.33
17	1.9	54	15	2.3	4.3	14	4.7	7.5	.05	1.0	.04	.30
18	1.8	17	13	2.2	3.5	11	58	5.4	1.6	.64	.03	.20
19	1.3	10	9.0	2.1	3.1	9.8	23	4.2	2.5	.46	.02	1.0
20	1.1	12	7.0	2.0	2.8	8.4	18	3.6	.92	.36	.02	.42
21	1.2	121	5.8	2.0	2.6	14	12	2.9	.64	.27	.02	.20
22	2.2	22	5.0	1.9	2.4	12	8.9	2.5	.56	.22	.01	.11
23	1.1	15	4.2	2.6	2.3	9.2	10	3.5	.46	.15	.01	.06
24	.87	9.8	3.7	4.0	2.6	7.5	21	28	.36	.27	.01	.04
25	5.6	8.0	3.4	12	2.8	18	16	11	.33	3.9	1.5	.03
26	8.4	4.9	2.8	6.0	3.2	14	12	5.2	.30	.49	.82	.02
27	4.6	5.2	2.5	4.7	3.7	13	8.2	3.4	.24	.30	.87	.01
28	3.3	4.1	2.2	4.1	4.0	10	6.3	2.6	.22	.22	.36	.01
29	2.5	11	2.0	3.5	---	8.1	5.5	2.0	.22	.15	.27	.00
30	2.2	45	2.1	3.2	---	6.7	6.4	1.7	.20	15	21	13
31	1.9	---	2.3	2.9	---	6.2	---	1.4	---	5.9	25	---
TOTAL	290.17	465.2	682.4	120.7	89.6	756.1	330.8	236.2	17.44	87.05	84.66	32.00
MEAN	9.36	15.5	22.0	3.89	3.20	24.4	11.0	7.62	.58	2.81	2.73	1.07
MAX	82	121	128	23	8.0	161	58	33	2.5	31	25	13
MIN	.87	1.3	2.0	1.9	1.8	2.8	2.8	1.4	.05	.05	.01	.00
CFSM	1.19	1.97	2.80	.50	.41	3.10	1.40	.97	.07	.36	.35	.14
IN.	1.37	2.20	3.23	.57	.42	3.58	1.57	1.12	.08	.41	.40	.15
CAL YR 1977	TOTAL	4811.88	MEAN	13.2	MAX	500	MIN	.00	CFSM	1.68	IN	22.77
WTR YR 1978	TOTAL	3192.32	MEAN	8.75	MAX	161	MIN	.00	CFSM	1.11	IN	15.11

03322100 PIGEON CREEK AT EVANSVILLE, IN

LOCATION.--Lat 38°00'14", long 87°32'19", in NE¼NW¼ 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) National Geodetic Vertical Datum of 1929. 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 fair except those for periods of no gage-height record, Nov. 30 to Jan. 3, May 5 to June 11, and periods of backwater from the Ohio River, which are poor.

AVERAGE DISCHARGE.--18 years, 328 ft³/s (9.289 m³/s), 13.79 in/yr (350 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 daily discharge, 5,370 ft³/s (152 m³/s) Mar. 14; maximum gage height, 20.00 ft (6.096 m) Mar. 18 (backwater from Ohio River); minimum daily discharge (unaffected by backwater), 6.2 ft³/s (0.18 m³/s), Aug. 18; minimum daily discharge (affected by backwater), no flow Apr. 30 to May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	798	60	1180	72	120	307	452	.00	56	524	52	90
2	1260	56	1240	78	110	365	385	199	51	787	39	50
3	1100	54	727	67	100	365	383	217	45	221	72	39
4	1160	60	559	67	96	318	369	182	45	107	178	28
5	645	60	1130	65	92	262	344	377	40	67	89	21
6	305	61	1270	66	90	217	184	264	40	44	53	18
7	216	61	1080	72	84	454	125	168	35	32	35	14
8	721	61	976	115	82	1170	119	176	31	25	26	11
9	811	69	813	137	80	1320	113	330	31	20	19	9.6
10	508	76	696	138	78	1490	160	225	26	20	15	9.0
11	296	67	716	160	76	1970	627	117	26	17	12	9.6
12	198	54	394	150	77	2930	682	175	26	15	10	11
13	143	47	665	130	112	3670	351	840	22	27	10	10
14	112	43	2500	110	168	5370	210	1260	21	38	11	338
15	97	41	2260	96	243	4140	151	1210	21	568	9.6	591
16	86	298	2370	90	285	3800	132	1320	21	772	7.2	363
17	81	944	2660	84	264	3420	113	716	20	856	6.7	151
18	73	887	2450	76	223	2620	715	335	22	448	6.2	84
19	69	497	1380	75	194	1790	910	225	289	182	7.2	59
20	61	334	459	75	159	1030	873	219	451	103	7.2	43
21	54	2360	350	71	135	1020	480	165	212	71	7.2	34
22	51	1900	260	69	127	948	287	124	113	53	7.2	26
23	52	1470	210	64	118	936	217	497	71	43	7.2	23
24	50	721	170	71	113	1090	321	1400	51	83	7.2	17
25	59	387	135	176	129	1950	392	1290	43	239	7.2	12
26	146	266	110	260	170	1450	433	400	33	141	8.4	13
27	195	200	92	220	229	1670	344	195	26	81	10	31
28	130	170	78	190	270	1860	227	114	21	55	30	22
29	92	163	76	170	---	1180	172	98	19	41	66	14
30	75	1070	70	140	---	364	---	88	17	31	93	25
31	67	---	66	130	---	525	---	69	---	52	100	---
TOTAL	9711	12537	27142	3484	4024	50001	10271.00	12995.00	1925	5763	1008.5	2166.2
MEAN	313	418	876	112	144	1613	342	419	64.2	186	32.5	72.2
MAX	1260	2360	2660	260	285	5370	910	1400	451	856	178	591
MIN	50	41	66	64	76	217	.00	.00	17	15	6.2	9.0
CFSM	.97	1.29	2.71	.35	.45	4.99	1.06	1.30	.20	.58	.10	.22
IN.	1.12	1.44	3.13	.40	.46	5.76	1.18	1.50	.22	.66	.12	.25

CAL YR 1977 TOTAL 140178.90 MEAN 384 MAX 3430 MIN .00 CFSM 1.19 IN 16.14
WTR YR 1978 TOTAL 141027.70 MEAN 386 MAX 5370 MIN .00 CFSM 1.20 IN 16.24

WABASH RIVER BASIN

03322500 WABASH RIVER NEAR NEW CORYDON, IN

LOCATION.--Lat. 40°33'50", long 84°48'10", in NE¼SE¼ 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).

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) National Geodetic Vertical Datum of 1929. Prior to June 24, 1953, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--27 years, 195 ft³/s (5.522 m³/s), 10.11 in/yr (257 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 16	0600	4300 122	*18.08 5.511	Mar. 21	2200	*4480 127	18.05 5.502
Dec. 18	2100	4240 120	18.03 5.496	Apr. 7	0300	3210 90.9	16.92 5.157
Mar. 16	1900	4190 119	17.92 5.462				

Minimum daily discharge, 3.9 ft³/s (0.110 m³/s) Sept. 28.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: July 1969 to June 1973.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	8.0	339	84	170	24	546	340	97	28	14	11
2	303	8.3	305	61	168	23	434	325	91	248	14	9.7
3	119	7.9	134	55	165	23	485	313	88	1320	16	8.9
4	47	8.5	90	166	160	23	506	309	82	440	14	8.0
5	28	8.2	51	313	158	23	537	300	72	170	13	7.3
6	22	8.5	35	250	152	22	1550	172	71	109	12	6.5
7	17	12	31	200	148	22	2790	146	73	86	12	6.0
8	19	27	28	170	145	22	1320	151	76	74	13	5.8
9	221	18	26	140	140	22	732	170	69	64	11	5.7
10	119	20	25	125	60	22	546	132	64	58	18	5.5
11	56	30	24	94	30	25	480	136	61	52	20	5.4
12	33	17	23	78	29	45	440	126	60	50	12	5.3
13	23	13	23	93	28	87	377	398	85	46	11	5.2
14	18	10	1340	120	28	898	340	481	65	44	9.9	5.0
15	15	9.2	3610	155	28	3410	324	473	60	41	9.9	6.0
16	14	11	3830	180	27	4000	313	307	56	39	9.6	8.0
17	12	23	2630	195	27	3920	306	258	51	35	9.4	7.5
18	11	24	3460	200	27	2950	320	218	46	34	9.1	6.7
19	11	17	3200	200	26	1730	440	167	44	32	9.0	5.9
20	11	13	1960	200	26	1950	1030	147	44	29	9.2	5.1
21	11	12	913	198	26	3410	1010	149	41	25	8.6	4.5
22	9.6	14	603	194	25	3370	710	134	36	24	7.8	4.4
23	9.5	14	326	190	25	2430	532	134	36	21	7.8	4.3
24	9.0	13	205	188	25	1530	706	826	34	19	7.8	4.2
25	8.0	12	180	178	25	896	1410	438	31	21	7.8	4.2
26	8.5	11	160	160	24	1690	1180	229	30	19	10	4.1
27	10	9.4	158	140	24	1750	646	170	28	18	18	4.0
28	10	10	263	160	24	1160	455	145	25	17	34	3.9
29	9.8	8.8	360	170	---	963	390	129	24	16	20	4.1
30	10	9.8	382	172	---	698	362	116	23	15	15	4.2
31	9.7	---	210	172	---	547	---	104	---	15	12	---
TOTAL	1336.1	407.6	24924	5001	1940	37685	21217	7643	1663	3209	394.9	176.4
MEAN	43.1	13.6	804	161	69.3	1216	707	247	55.4	104	12.7	5.88
MAX	303	30	3830	313	170	4000	2790	826	97	1320	34	11
MIN	8.0	7.9	23	55	24	22	306	104	23	15	7.8	3.9
CFSM	.17	.05	3.07	.62	.27	4.64	2.70	.94	.21	.40	.05	.02
IN.	.19	.06	3.54	.71	.28	5.35	3.01	1.09	.24	.46	.06	.03

CAL YR 1977 TOTAL 45086.0 MEAN 124 MAX 3830 MIN 3.2 CFSM .47 IN 6.40
WTR YR 1978 TOTAL 105597.0 MEAN 289 MAX 4000 MIN 3.9 CFSM 1.10 IN 14.99

03322900 WABASH RIVER AT LINN GROVE, IN

LOCATION.--Lat 40°39'22", long 85°01'58", in SE¼SE¼ 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--14 years, 367 ft³/s (10.39 m³/s), 11.00 in/yr (279 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft³/s (271 m³/s) Mar. 17, 1978, gage height, 13.87 ft (4.228 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 19	1400	5220	148	12.33	3.758	Mar. 28	0500	2840	80.4	10.12	3.084
Mar. 17	1800	*9560	271	*13.87	4.228	Apr. 8	0300	4460	126	11.79	3.594
Mar. 22	1600	5920	168	12.70	3.871	Apr. 27	0400	1910	54.1	8.70	2.652

Minimum daily discharge, 7.5 ft³/s (0.22 m³/s) Sept. 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	335	174	178	35	1180	458	164	27	18	65
2	295	16	781	145	174	35	986	419	160	72	19	45
3	407	14	482	115	172	34	810	390	152	1060	19	28
4	187	13	257	90	170	34	801	373	113	1510	21	22
5	87	13	120	164	168	33	844	376	104	1240	20	18
6	51	13	90	230	165	33	1470	315	90	496	18	15
7	34	18	80	225	162	33	3130	196	98	278	20	13
8	31	32	72	210	160	32	4200	180	104	233	22	12
9	45	66	67	195	156	32	2890	236	105	166	20	12
10	321	63	62	190	154	31	1810	254	94	121	58	11
11	185	52	57	185	85	31	1110	196	84	96	86	11
12	97	66	54	175	43	65	768	178	82	93	61	11
13	61	53	150	170	43	200	606	573	83	87	33	11
14	42	37	1250	180	42	1110	500	1160	108	81	23	10
15	31	28	1930	185	42	2540	445	1180	84	73	22	17
16	25	33	2860	195	41	5170	419	920	74	91	20	19
17	22	62	4760	200	40	8400	396	558	67	105	17	19
18	20	94	4920	200	40	8050	419	432	61	63	19	16
19	18	78	5140	200	39	6400	752	320	55	51	19	12
20	16	56	3910	200	39	4850	1340	252	50	45	19	10
21	16	44	2450	200	38	4770	1600	238	50	41	17	9.3
22	16	40	1790	200	38	5710	1420	228	48	37	14	9.7
23	16	40	995	195	38	5350	1270	208	42	34	13	8.9
24	13	41	532	190	37	4470	1060	435	42	31	11	8.9
25	13	38	440	185	37	3250	1400	853	42	27	11	8.6
26	13	35	350	170	36	2410	1730	614	42	29	12	8.6
27	12	28	312	150	36	2550	1810	323	41	27	12	8.6
28	12	29	306	170	35	2790	1270	246	35	23	166	7.8
29	13	27	345	180	---	2410	688	215	30	22	289	7.5
30	15	31	329	180	---	1940	518	196	28	20	115	7.8
31	15	---	278	180	---	1510	---	176	---	19	70	---
TOTAL	2145	1176	35504	5628	2408	74308	37842	12698	2332	6298	1284	462.7
MEAN	69.2	39.2	1145	182	86.0	2397	1261	410	77.7	203	41.4	15.4
MAX	407	94	5140	230	178	8400	4200	1180	164	1510	289	65
MIN	12	13	54	90	35	31	396	176	28	19	11	7.5
CFSM	.15	.09	2.53	.40	.19	5.29	2.78	.91	.17	.45	.09	.03
IN.	.18	.10	2.92	.46	.20	6.10	3.11	1.04	.19	.52	.11	.04

CAL YR 1977 TOTAL 83294.6 MEAN 228 MAX 5140 MIN 5.5 CFSM .50 IN 6.84
WTR YR 1978 TOTAL 182085.7 MEAN 499 MAX 8400 MIN 7.5 CFSM 1.10 IN 14.95

WABASH RIVER BASIN

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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM	TEMPER- ATURE (DEG C)
NOV 03...	0930	13	100	3.6	--	15.0
DEC 20...	1030	4010	189	2050	58	1.0
JAN 18...	1715	190	13	6.6	--	.0
FEB 22...	1330	38	9	.93	--	.0
MAR 22...	1400	5550	118	1770	--	5.0
JUN 09...	1300	116	94	29	--	20.0
AUG 17...	1245	16	122	5.5	--	25.0
17...	1325	13	114	4.1	--	--
SEP 29...	1410	6.9	52	.97	--	--

03323450 HUNTINGTON LAKE NEAR HUNTINGTON, IN

LOCATION (revised).--Lat 40°50'45", long 85°28'07", in SW¼SW¼ sec.25, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, in operating pylon of dam of reservoir on Wabash River at 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) National Geodetic Vertical Datum of 1929 (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, dam tenders records, and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 115,900 acre-ft (142.9 hm³) Mar. 25, 1978, elevation, 792.46 ft (241.542 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, 115,900 acre-ft (142.9 hm³) Mar. 25, elevation, 792.46 ft (241.542 m); minimum, 2,380 acre-ft (2.93 hm³) Oct. 5, elevation, 733.05 ft (223.434 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	738.22	4,760	
Oct. 31.....	737.27	4,260	-500
Nov. 30.....	737.48	4,360	+100
Dec. 31.....	740.96	6,350	+1,990
CAL YR 1977.....			+2,150
Jan. 31.....	737.60	4,430	-1,920
Feb. 28.....	737.33	4,290	-140
Mar. 31.....	785.92	84,890	+80,600
Apr. 30.....	753.22	16,610	-68,280
May 31.....	749.42	12,860	-3,750
June 30.....	749.11	12,580	-280
July 31.....	749.21	12,670	+90
Aug. 31.....	749.55	12,980	+310
Sept. 30.....	745.35	9,420	-3,560
WTR YR 1978.....			+4,660

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) National Geodetic Vertical Datum of 1929 (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.--27 years, 607 ft³/s (17.19 m³/s), 11.43 in/yr (290 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 CURRENT YEAR.--Maximum daily discharge, 5,750 ft³/s (163 m³/s) Mar. 31; minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Nov. 16, 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: October 1963 to June 1977.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	51	143	892	249	81	5660	1270	161	63	27	137
2	478	54	472	591	274	80	5530	820	199	63	27	136
3	48	54	526	317	353	56	5400	793	181	554	27	106
4	62	54	531	240	373	44	5250	565	183	823	27	43
5	53	54	368	161	372	45	5090	259	146	1240	27	27
6	35	54	244	123	371	45	3800	212	126	1450	27	27
7	30	54	283	285	370	59	4270	218	127	959	27	27
8	30	55	362	445	289	81	5370	222	178	329	27	37
9	33	101	221	484	249	80	5310	219	222	385	27	43
10	117	124	122	646	331	66	5480	219	229	327	27	43
11	186	202	123	398	370	44	4960	308	163	172	28	43
12	324	162	282	311	249	59	4140	397	126	83	113	43
13	202	123	283	166	231	110	2270	397	126	84	27	43
14	123	73	617	123	378	286	1110	418	126	80	60	43
15	123	22	1100	168	410	199	990	662	126	76	76	375
16	123	9.0	532	323	289	653	645	790	126	76	76	667
17	70	85	218	316	145	1180	566	803	126	86	76	369
18	44	123	228	281	70	2350	602	804	84	95	76	29
19	58	123	238	278	70	2930	776	799	63	127	76	24
20	65	123	2250	240	70	3040	1050	794	63	137	70	24
21	45	167	3720	286	71	1390	1680	790	63	101	52	24
22	36	162	3710	346	114	3420	1870	600	63	84	43	24
23	56	100	3680	300	132	4140	1880	1280	63	83	43	24
24	65	56	3610	300	132	4700	1900	1740	63	72	43	24
25	65	65	3520	221	101	5190	1930	1760	63	61	43	24
26	51	65	3510	241	70	5170	2180	1370	63	61	32	24
27	44	85	3510	241	71	5270	2360	848	63	44	27	24
28	44	114	3450	182	94	5240	2350	524	63	27	50	24
29	44	52	2490	182	---	5220	2310	265	63	27	61	24
30	51	9.0	1450	182	---	5520	2240	183	63	27	78	24
31	47	---	998	205	---	5750	---	179	---	27	123	---
TOTAL	3232	2575.0	42791	9474	6298	62498	88969	20508	3511	7823	1543	2526
MEAN	104	85.8	1380	306	225	2016	2966	662	117	252	49.8	84.2
MAX	480	202	3720	892	410	5750	5660	1760	229	1450	123	667
MIN	30	9.0	122	123	70	44	566	179	63	27	27	24
CAL YR 1977	TOTAL	147475.0	MEAN	404	MAX	3750	MIN	9.0				
WTR YR 1978	TOTAL	251748.0	MEAN	690	MAX	5750	MIN	9.0				

03324000 LITTLE RIVER NEAR HUNTINGTON, IN

LOCATION.--Lat 40°54'14", long 85°24'22", in NE¼NW¼ 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 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 728.10 ft (221.925 m) National Geodetic Vertical Datum of 1929. 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 except those for period of no gage-height record, Jan. 27 to Mar. 13, which are fair. 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.--35 years, 223 ft³/s (6.315 m³/s), 11.51 in/yr (292 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 (5.617 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 15	0500	3140 88.9	13.87 4.227	Mar. 22	0500	*4080 116	*16.04 4.889
Mar. 16	2200	3420 96.8	14.54 4.432	Apr. 6	2400	2980 84.4	13.49 4.112

Minimum daily discharge, 15 ft³/s (0.424 m³/s) Sept. 5-13, 27.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	106	1820	102	37	37	677	119	79	29	22	19
2	127	135	1490	91	37	37	430	108	75	49	22	19
3	92	96	662	80	37	37	710	101	71	163	22	18
4	71	80	407	71	37	37	610	94	64	119	22	16
5	59	67	305	69	36	37	641	102	59	70	21	15
6	51	61	250	80	36	37	1590	94	52	49	21	15
7	45	75	210	98	36	36	2750	83	82	40	21	15
8	72	101	170	428	36	36	1460	84	134	37	32	15
9	153	91	138	290	35	37	636	101	95	35	31	15
10	133	96	113	210	35	38	549	87	70	32	27	15
11	91	90	91	159	36	40	1860	75	59	28	25	15
12	74	76	80	135	36	60	840	75	57	25	23	15
13	62	68	220	130	36	250	428	319	62	27	21	15
14	55	69	2020	112	36	1100	287	963	49	31	20	17
15	51	86	3010	95	36	3060	220	1030	45	28	18	22
16	49	98	2430	81	36	3290	179	757	43	25	18	28
17	43	110	2090	72	36	3200	157	428	41	23	18	28
18	42	95	2090	65	36	2410	232	291	41	22	19	28
19	41	76	1580	57	36	1810	910	210	39	23	20	28
20	38	76	961	52	36	2320	1770	357	37	25	21	27
21	36	132	630	48	36	3630	1330	942	37	26	20	21
22	35	125	395	44	36	4040	822	369	36	25	18	20
23	54	103	305	42	36	3690	488	286	36	24	17	18
24	89	100	294	39	37	2870	488	460	34	23	18	17
25	77	96	919	38	40	1710	386	287	33	24	17	17
26	68	130	440	38	39	1280	287	200	42	25	17	17
27	61	86	310	37	38	1490	218	159	41	25	18	15
28	56	76	235	37	37	1430	177	135	35	23	25	16
29	49	72	182	37	---	1370	153	117	30	21	28	16
30	46	118	136	37	---	884	136	103	28	21	22	16
31	44	---	116	37	---	685	---	90	---	22	21	---
TOTAL	2041	2790	24099	2911	1021	40988	21421	8626	1606	1139	665	558
MEAN	65.8	93.0	777	93.9	36.5	1322	714	278	53.5	36.7	21.5	18.6
MAX	153	135	3010	428	40	4040	2750	1030	134	163	32	28
MIN	35	61	80	37	35	36	136	75	28	21	17	15
CFSM	.25	.35	2.95	.36	.14	5.03	2.72	1.06	.20	.14	.08	.07
IN.	.29	.39	3.41	.41	.14	5.80	3.03	1.22	.23	.16	.09	.08

CAL YR 1977 TOTAL 79478.5 MEAN 218 MAX 3010 MIN 5.2 CFSM .83 IN 11.24
WTR YR 1978 TOTAL 107865.0 MEAN 296 MAX 4040 MIN 15 CFSM 1.13 IN 15.26

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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	TEMPER- ATURE (DEG C)
DEC 19...	1340	1510	80	326	4.5
MAR 18...	1430	2350	150	952	--
22...	1240	4040	180	1960	6.0

03324200 SALAMONIE RIVER AT PORTLAND, IN

LOCATION.--Lat 40°25'40", long 85°02'20", in NE¼ 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) National Geodetic Vertical Datum of 1929 (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 fair. Natural flow partially affected by sewage effluent.

AVERAGE DISCHARGE.--19 years, 71.5 ft³/s (2.025 m³/s), 11.34 in/yr (288 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 15	0200	2560	72.5	13.63	4.154	Mar. 21	1800	*2980	84.4	*14.51	4.423
Dec. 18	1700	2430	68.8	13.35	4.069	Apr. 6	2200	2530	71.6	13.56	4.133
Mar. 15	2400	2310	65.4	13.07	3.984	Apr. 25	1700	1600	45.3	11.00	3.35

Minimum daily discharge, 1.7 ft³/s (0.048 m³/s) Sept. 25.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	4.5	387	16	7.8	8.4	112	27	8.4	22	2.6	3.3
2	213	5.1	152	15	7.7	8.4	72	23	9.3	178	3.9	2.7
3	54	4.7	73	14	7.6	8.3	100	21	6.4	404	4.0	2.2
4	25	4.4	58	13	7.5	8.2	124	19	6.7	88	3.8	2.0
5	15	3.8	37	13	7.5	8.2	157	17	6.7	37	2.4	2.3
6	11	2.8	24	12	7.4	8.1	1300	15	6.7	19	2.1	2.7
7	8.0	21	18	18	7.4	8.0	1260	14	7.2	12	4.9	2.4
8	25	30	15	82	7.3	8.0	189	31	7.8	10	4.0	2.4
9	149	18	14	105	7.3	8.0	126	79	8.1	7.5	3.8	2.4
10	53	19	13	57	7.2	7.9	92	45	6.7	5.9	114	2.0
11	27	21	12	35	7.3	8.7	94	27	4.2	4.9	34	2.2
12	17	12	36	29	7.5	10	74	23	15	4.4	10	3.2
13	12	7.8	133	24	7.7	46	46	551	62	5.6	6.1	3.0
14	8.9	6.6	1640	20	7.9	872	33	383	17	4.4	5.9	3.9
15	7.0	6.8	1950	17	7.8	2140	26	300	8.7	4.7	4.7	8.4
16	5.7	19	898	14	7.8	2070	22	143	6.7	3.0	4.7	6.1
17	5.1	53	919	12	7.7	1420	21	97	6.1	2.3	4.2	4.7
18	4.8	36	1850	10	7.7	636	44	62	4.9	3.2	4.2	4.1
19	5.3	19	792	10	7.6	509	238	41	8.1	2.3	3.6	3.8
20	4.4	13	234	10	7.5	818	893	46	4.7	2.3	3.2	3.2
21	4.2	15	122	10	7.5	2400	289	57	5.0	2.8	2.8	2.9
22	3.3	19	69	10	7.5	1460	140	32	4.8	3.6	3.0	2.6
23	2.8	16	52	11	7.4	725	100	73	4.8	3.0	3.2	2.4
24	2.2	13	53	6.8	7.6	346	334	284	4.9	4.2	3.2	1.8
25	3.4	12	116	6.6	7.7	194	957	101	6.3	4.4	3.2	1.7
26	8.6	10	79	6.2	7.8	479	315	51	13	4.2	3.2	1.8
27	5.4	9.0	60	6.0	8.0	409	105	32	13	3.6	4.0	2.0
28	5.8	8.0	45	8.0	8.2	232	62	23	13	3.6	18	2.2
29	4.9	7.1	34	7.9	---	214	45	20	15	2.6	5.9	2.3
30	3.8	16	25	7.8	---	128	35	15	18	3.4	5.6	2.5
31	3.8	---	19	7.8	---	103	---	12	---	2.4	5.8	---
TOTAL	1009.4	432.6	9929	614.1	212.9	15301.2	7405	2664	309.2	858.3	284.0	89.2
MEAN	32.6	14.4	320	19.8	7.60	494	247	85.9	10.3	27.7	9.16	2.97
MAX	311	53	1950	105	8.2	2400	1300	551	62	404	114	8.4
MIN	2.2	2.8	12	6.0	7.2	7.9	21	12	4.2	2.3	2.1	1.7
CFSM	.38	.17	3.74	.23	.09	5.77	2.89	1.00	.12	.32	.11	.04
IN.	.44	.19	4.31	.27	.09	6.65	3.22	1.16	.13	.37	.12	.04
CAL YR 1977	TOTAL	19599.9	MEAN	53.7	MAX	1950	MIN	1.3	CFSM	.63	IN	8.52
WTR YR 1978	TOTAL	39108.9	MEAN	107	MAX	2400	MIN	1.7	CFSM	1.25	IN	17.00

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) National Geodetic Vertical Datum of 1929 (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.--21 years, 383 ft³/s (10.85 m³/s), 12.23 in/yr (311 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 17	0700	5310	150	11.91	3.630	Apr. 7	1000	4580	130	11.26	3.432
Mar. 18	2000	*11430	324	*16.21	4.941	Apr. 25	2100	3330	94.3	10.12	3.084
Mar. 23	0800	6530	185	12.95	3.947						

Minimum daily discharge, 8.3 ft³/s (0.24 m³/s) Sept. 10.

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 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	67	1020	120	48	48	709	211	59	40	30	100
2	834	64	1660	100	48	48	547	174	55	349	33	68
3	601	64	794	86	46	51	505	149	51	2240	39	48
4	227	71	480	78	45	48	565	137	47	1600	33	37
5	101	74	365	75	45	47	665	137	44	614	30	31
6	61	81	250	72	44	47	1760	128	41	299	27	27
7	46	186	110	76	44	48	4380	111	61	183	34	23
8	51	328	87	222	44	48	4080	107	146	143	34	17
9	84	287	80	268	43	48	2260	128	91	113	38	11
10	314	211	75	201	43	51	818	217	56	86	53	8.3
11	186	171	72	160	44	53	739	146	44	63	83	15
12	81	140	70	130	45	61	610	113	44	50	120	25
13	56	101	233	110	47	88	398	538	54	49	60	38
14	44	71	2580	95	48	1640	268	2200	94	48	44	50
15	37	64	4640	80	51	4560	211	1840	63	45	39	131
16	34	64	4990	70	51	6790	177	1090	44	40	37	61
17	32	250	5250	60	49	8980	156	652	38	35	34	30
18	41	357	4490	55	48	9430	172	427	36	34	212	22
19	39	250	3670	51	47	8670	544	280	36	33	672	20
20	39	176	3500	51	46	4970	1860	219	33	30	439	18
21	37	148	1760	54	46	5640	2090	276	33	31	165	16
22	39	144	709	61	46	6160	1060	291	34	32	97	14
23	46	140	465	67	48	6360	615	240	31	41	64	13
24	48	140	397	57	46	4960	1570	442	31	38	48	14
25	48	129	778	59	46	2450	2930	586	35	37	39	14
26	48	119	570	44	46	1680	2910	280	46	37	34	15
27	48	114	430	39	51	2730	1630	180	54	38	39	17
28	51	105	330	48	48	2050	601	123	45	35	382	16
29	53	96	265	46	---	1500	376	90	38	33	495	15
30	64	101	205	44	---	1060	271	77	31	32	190	19
31	61	---	150	44	---	786	---	66	---	31	124	---
TOTAL	3532	4313	40475	2723	1303	81102	35477	11655	1515	6479	3768	933.3
MEAN	114	144	1306	87.8	46.5	2616	1183	376	50.5	209	122	31.1
MAX	834	357	5250	268	51	9430	4380	2200	146	2240	672	131
MIN	32	64	70	39	43	47	156	66	31	30	27	8.3
CFSM	.27	.34	3.07	.21	.11	6.16	2.78	.89	.12	.49	.29	.07
IN.	.31	.38	3.54	.24	.11	7.10	3.11	1.02	.13	.57	.33	.08
CAL YR 1977	TOTAL	101770.1	MEAN	279	MAX	5250	MIN	5.1	CFSM	.66	IN	8.91
WTR YR 1978	TOTAL	193275.3	MEAN	530	MAX	9430	MIN	8.3	CFSM	1.25	IN	16.92

03324450 SALAMONIE LAKE AT DORA, IN

LOCATION.--Lat 40°48'25", long 85°40'38", in SW¼NW¼ 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) National Geodetic Vertical Datum of 1929 (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, 168,100 acre-ft (207 hm³) Mar. 30, 1978, elevation, 780.20 ft (237.805 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, 168,100 acre-ft (207 hm³) Mar. 30, elevation, 780.20 ft (237.805 m); minimum, 13,100 acre-ft (16.2 hm³) Nov. 25, elevation, 730.00 ft (222.504 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	755.33	61,640	
Oct. 31.....	749.20	45,630	-16,010
Nov. 30.....	730.50	16,600	-29,030
Dec. 31.....	754.22	58,500	+41,900
CAL YR 1977.....			+45,130
Jan. 31.....	730.33	13,430	-45,070
Feb. 28.....	730.15	13,250	-180
Mar. 31.....	779.91	166,360	+153,110
Apr. 30.....	765.65	96,930	-69,430
May 31.....	762.47	84,870	-12,060
June 30.....	755.30	61,560	-23,310
July 31.....	754.97	60,610	-950
Aug. 31.....	755.50	62,140	+1,530
Sept. 30.....	746.87	40,320	-21,820
WTR YR 1978.....			-21,320

WABASH RIVER BASIN

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.--None. Datum of gage was 673.96 ft (205.423 m) National Geodetic Vertical Datum of 1929 (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) National Geodetic Vertical Datum of 1929 (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) National Geodetic Vertical Datum of 1929 (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.--54 years (1924 to current year), 508 ft³/s (14.39 m³/s), 12.39 in/yr (315 mm/yr).

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 CURRENT YEAR.--Maximum daily discharge, 4,900 ft³/s (139 m³/s) Apr. 29; minimum daily, 25 ft³/s (0.71 m³/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	466	54	3710	135	112	2390	4440	191	182	26	158
2	120	464	242	3780	135	112	3120	4400	191	227	26	26
3	174	462	579	3960	135	112	3250	4500	191	600	26	26
4	291	460	582	3900	135	112	3220	4370	191	1100	26	26
5	365	458	772	3810	135	112	3200	2520	191	1100	26	26
6	511	456	896	3020	135	112	1440	440	191	953	26	693
7	509	454	668	1160	135	112	107	440	191	96	26	872
8	508	453	551	402	135	112	455	439	1020	97	25	678
9	506	452	543	446	135	112	1390	439	1990	1250	26	676
10	505	728	535	318	135	112	2390	286	1970	2230	26	673
11	504	880	385	186	135	97	2380	183	1940	828	26	670
12	503	872	282	234	134	90	2380	183	1680	120	26	555
13	501	862	433	235	134	90	3310	183	1500	275	26	516
14	500	852	295	235	134	93	4550	184	1490	184	26	514
15	498	841	343	235	134	101	4490	186	1480	120	26	512
16	496	829	381	235	134	109	4430	187	1150	120	26	510
17	495	818	412	235	107	115	4360	188	437	120	26	509
18	493	1090	436	235	90	120	4300	188	182	50	26	616
19	491	1330	456	234	90	123	4240	188	182	26	108	650
20	489	1290	470	209	90	126	2360	189	117	26	400	647
21	487	1250	479	183	90	130	1410	189	26	26	464	644
22	485	1200	481	183	90	132	2250	189	26	26	299	641
23	484	1150	482	183	107	134	2960	190	55	26	26	578
24	482	1090	482	147	112	135	3410	190	70	26	26	515
25	480	468	483	135	112	135	3200	191	70	26	26	513
26	478	303	1240	135	112	135	2880	191	70	26	26	510
27	476	130	2180	135	112	136	3260	191	70	26	65	472
28	474	130	2160	135	112	1120	4150	191	108	26	120	448
29	472	75	2530	135	---	1860	4900	191	133	26	276	446
30	470	52	3430	135	---	1860	4800	191	164	26	340	443
31	468	---	3830	135	---	1860	---	191	---	26	340	---
TOTAL	13947	20365	27092	28420	3379	9821	90982	26228	17267	9990	2983	14763
MEAN	450	679	874	917	121	317	3033	846	576	322	96.2	492
MAX	511	1330	3830	3960	135	1860	4900	4500	1990	2230	464	872
MIN	120	52	54	135	90	90	107	183	26	26	25	26
CAL YR 1977	TOTAL	114236	MEAN 313	MAX 3830	MIN 22							
WTR YR 1978	TOTAL	265237	MEAN 727	MAX 4900	MIN 25							

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) National Geodetic Vertical Datum of 1929. 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.--55 years, 1,486 ft³/s (42.08 m³/s), 11.41 in/yr (290 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, 13,100 ft³/s (372 m³/s) Mar. 21, gage height, 15.96 ft (4.865 m); minimum daily, 119 ft³/s (3.37 m³/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	674	3060	4800	360	245	8880	6090	541	289	125	414
2	878	791	3770	4510	370	250	9300	4980	601	433	126	218
3	780	749	2720	4420	375	250	9570	5120	521	935	125	213
4	735	694	2090	4440	380	245	9520	5030	501	2200	124	189
5	1010	660	2110	4430	380	235	9240	3540	488	2250	120	126
6	674	644	2890	3990	385	230	9770	941	421	2690	119	363
7	617	689	2510	2260	390	230	8590	890	461	1810	131	915
8	655	750	1610	1410	390	230	8740	883	968	707	180	599
9	710	735	1360	1220	390	230	7650	890	2250	1380	152	598
10	763	931	1090	1040	385	230	8360	778	2210	2860	149	609
11	786	1190	970	870	380	240	10700	614	2170	1530	136	613
12	817	1250	921	740	375	250	8290	738	1860	336	133	596
13	916	1140	1240	620	370	349	6460	915	1600	370	215	590
14	720	1120	4950	560	360	2430	5690	1690	1570	390	131	585
15	682	1080	7360	520	345	5420	5340	2360	1560	254	142	601
16	673	1130	6090	500	330	5460	5110	2420	1420	237	165	1270
17	668	1140	6520	480	310	6620	4690	1780	737	228	164	1290
18	611	1350	6370	470	290	6520	4780	1500	399	217	168	876
19	587	1790	5860	445	270	6690	5320	1340	340	206	180	633
20	598	1750	5220	425	254	7810	6140	1320	315	242	428	612
21	597	1770	5860	400	241	11300	4430	2290	205	253	604	604
22	574	1900	5500	390	234	8990	5080	1660	189	211	572	589
23	628	1750	5250	450	274	10600	5120	2390	191	189	160	578
24	727	1660	5120	510	270	9290	5740	2720	205	190	134	533
25	707	1160	5860	430	270	8520	6160	2490	213	181	132	527
26	684	442	5690	350	260	7570	5200	2340	227	158	130	523
27	647	427	7110	300	255	8300	5480	1390	224	159	132	517
28	624	409	7300	320	245	8560	6080	1140	224	156	179	507
29	608	400	6460	330	---	9540	6890	818	227	145	275	505
30	595	341	5160	340	---	8790	6760	598	222	126	436	509
31	602	---	4930	355	---	8780	---	559	---	124	403	---
TOTAL	21903	30516	132951	42325	9138	144404	209080	62214	23060	21456	6370	17302
MFAN	707	1017	4289	1365	326	4658	6969	2007	769	692	205	577
MAX	1030	1900	7360	4800	390	11300	10700	6090	2250	2860	604	1290
MIN	574	341	921	300	234	230	4430	559	189	124	119	126
CFSM	.40	.58	2.43	.77	.18	2.64	3.94	1.14	.44	.39	.12	.33
IN.	.46	.64	2.80	.89	.19	3.04	4.40	1.31	.49	.45	.13	.36

CAL YR 1977 TOTAL 415479 MEAN 1138 MAX 7880 MIN 65 CFSM .64 IN 8.74
WTR YR 1978 TOTAL 720719 MEAN 1975 MAX 11300 MIN 119 CFSM 1.12 IN 15.16

WABASH RIVER BASIN

03325500 MISSISSINAWA RIVER NEAR RIDGEVILLE, IN

LOCATION.--Lat 40°16'49", long 84°59'44", in SE¼SE¼ 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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 5, 1950, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--32 years, 122 ft³/s (3.455 m³/s), 12.46 in/yr (316 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 14	2200	2960 83.8	11.64 3.563	Mar. 15	1100	*3750 106	*12.38 3.773
Dec. 18	1100	2870 81.3	11.60 3.536	Mar. 21	1600	2860 81.0	11.59 3.533

Minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Sept. 25, 26.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	647	7.3	466	27	19	19	232	86	41	13	5.4	37
2	270	7.6	206	23	19	19	145	74	37	135	5.7	18
3	91	7.9	111	22	19	19	145	67	34	458	8.3	10
4	45	7.9	79	21	19	19	151	67	30	153	6.9	7.1
5	25	7.6	54	20	18	19	151	66	28	81	5.3	5.5
6	19	7.6	39	20	18	19	980	52	26	54	4.9	5.7
7	15	24	30	47	18	19	907	47	31	38	4.8	5.0
8	90	20	28	210	18	19	303	72	30	30	6.3	4.7
9	196	14	27	112	17	19	187	166	24	24	13	4.4
10	55	27	26	80	17	20	145	89	20	21	157	4.2
11	28	23	26	63	18	20	158	70	18	17	34	3.7
12	19	15	49	53	19	21	131	66	23	15	20	4.1
13	13	11	126	44	19	73	101	525	27	16	12	4.5
14	12	9.5	2150	38	19	1610	81	405	18	16	7.3	5.1
15	11	9.8	2290	33	19	3430	73	365	16	13	6.7	8.8
16	9.5	18	1380	29	19	2630	67	216	16	11	6.1	7.2
17	8.9	28	1480	27	19	1880	63	211	15	9.1	6.7	6.9
18	9.2	20	2510	24	19	928	99	137	15	9.2	5.9	4.4
19	9.5	14	1430	23	19	798	187	103	17	8.6	5.5	4.5
20	8.9	13	588	22	20	1110	760	92	15	7.8	6.2	4.1
21	7.9	15	322	21	20	2420	335	91	54	7.5	4.4	3.8
22	7.6	16	198	20	20	1720	194	74	34	7.2	4.7	3.6
23	7.0	15	146	20	19	1120	219	131	19	6.7	4.8	3.4
24	7.0	14	139	18	19	673	602	373	15	12	4.7	3.3
25	7.0	12	300	17	19	433	1610	179	14	11	4.6	3.1
26	11	12	132	14	19	935	805	113	19	8.5	4.5	3.1
27	11	9.8	90	13	19	729	304	88	15	7.2	6.4	3.3
28	8.9	9.2	109	14	19	482	181	74	12	6.6	106	3.4
29	8.2	8.9	56	15	---	426	130	63	11	5.8	76	3.5
30	7.6	23	44	17	---	279	103	56	10	5.8	39	3.7
31	7.3	---	35	18	---	240	---	48	---	5.4	69	---
TOTAL	1672.5	427.1	14666	1125	526	22148	9549	4266	684	1213.4	652.1	189.1
MEAN	54.0	14.2	473	36.3	18.8	714	318	138	22.8	39.1	21.0	6.30
MAX	647	28	2510	210	20	3430	1610	525	54	458	157	37
MIN	7.0	7.3	26	13	17	19	63	47	10	5.4	4.4	3.1
CFSM	.41	.11	3.56	.27	.14	5.37	2.39	1.04	.17	.29	.16	.05
IN.	.47	.12	4.10	.31	.15	6.19	2.67	1.19	.19	.34	.18	.05
CAL YR 1977	TOTAL	27465.0	MEAN	75.2	MAX	2510	MIN	2.1	CFSM	.57	IN	7.68
WTR YR 1978	TOTAL	57118.2	MEAN	156	MAX	3430	MIN	3.1	CFSM	1.17	IN	15.98

03325500 MISSISSINAWA 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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	TEMPER- ATURE (DEG C)
OCT 05...	1545	24	41	2.7	15.0
NOV 10...	1120	36	4	.39	12.0
DEC 12...	1215	47	3	.38	1.0
JAN 23...	1700	19	5	.27	.0
FEB 22...	1645	19	4	.21	--
MAR 28...	1510	390	25	26	--
JUN 20...	1255	14	23	.87	23.5
AUG 01...	1345	5.6	12	.18	24.0
30...	1245	34	50	4.6	--

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--7 years, 27.2 ft³/s (0.770 m³/s), 12.66 in/yr (322 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 discharge, 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	1900	581	16.4	12.32	3.755	Apr. 6	1900	693	19.6	13.29	4.051
Mar. 15	2300	662	18.7	13.03	3.972	Apr. 25	1100	400	11.3	10.57	3.222
Mar. 21	1300	*758	21.5	*13.82	4.212	July 2	2000	318	9.00	9.65	2.941

Minimum daily discharge, 0.64 ft³/s (0.02 m³/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	3.5	171	5.5	3.0	3.7	42	11	4.8	16	2.3	8.2
2	71	3.2	77	4.8	3.1	3.7	28	8.6	4.6	149	2.5	4.9
3	18	3.0	35	4.3	3.1	3.7	41	7.9	4.3	156	2.5	3.4
4	8.2	2.7	25	4.0	3.2	3.7	44	8.3	3.8	48	2.0	2.3
5	5.4	5.1	17	3.6	3.2	3.7	50	9.3	3.6	18	1.7	1.8
6	4.7	11	12	3.5	3.2	3.7	380	6.6	3.3	11	1.6	1.7
7	3.9	23	8.2	11	3.2	3.8	302	6.3	5.1	8.3	2.0	1.4
8	12	15	7.0	34	3.3	3.9	97	9.8	4.9	12	2.7	1.3
9	40	8.4	6.3	18	3.3	4.0	61	20	3.1	6.1	2.4	1.0
10	13	6.9	6.0	7.8	3.3	4.1	43	10	2.8	4.8	16	1.0
11	8.6	5.4	5.8	6.5	3.3	4.4	49	7.4	2.5	4.2	2.5	1.1
12	6.5	3.9	5.8	5.7	3.4	7.0	32	7.2	5.1	3.7	1.7	1.5
13	5.2	3.1	17	4.9	3.4	46	21	119	6.0	4.2	1.3	1.9
14	4.8	2.8	456	4.4	3.4	404	15	143	2.7	4.1	1.2	2.5
15	4.3	3.3	420	4.0	3.4	575	12	85	2.1	3.4	1.6	4.0
16	4.0	20	250	3.7	3.5	580	10	50	2.1	3.1	1.3	14
17	3.6	32	220	3.5	3.5	397	9.2	31	3.2	2.9	1.2	8.5
18	3.9	16	230	3.4	3.5	237	16	19	3.6	2.8	75	2.9
19	4.1	9.1	128	3.4	3.5	187	30	13	5.0	2.8	12	1.7
20	4.0	7.6	82	3.4	3.5	246	136	47	2.9	2.7	5.1	1.5
21	3.9	8.2	51	3.4	3.5	615	60	105	2.7	2.9	2.8	1.5
22	3.8	7.8	31	3.4	3.6	322	35	31	2.2	2.7	2.0	1.4
23	3.7	7.3	23	3.5	3.7	219	33	66	2.1	2.8	1.7	1.1
24	3.6	6.4	24	3.7	3.7	129	120	84	2.3	3.0	1.5	.95
25	3.8	6.0	44	3.2	3.7	93	265	32	9.8	3.0	1.3	.78
26	4.5	5.2	22	2.8	3.7	154	106	18	17	2.8	1.3	.66
27	4.5	4.5	11	2.6	3.7	157	49	12	6.0	2.6	1.8	.64
28	4.1	4.0	8.9	2.3	3.7	95	28	9.3	4.1	2.7	112	.96
29	3.8	3.3	8.1	2.5	---	85	19	7.4	2.7	2.6	24	1.2
30	3.6	14	7.1	2.8	---	59	14	6.4	2.0	2.8	16	1.1
31	3.3	---	6.4	2.9	---	48	---	5.5	---	2.6	26	---
TOTAL	378.8	251.7	2415.6	172.5	95.6	4697.4	2147.2	996.0	126.4	493.6	329.0	76.89
MEAN	12.2	8.39	77.9	5.56	3.41	152	71.6	32.1	4.21	15.9	10.6	2.56
MAX	111	32	456	34	3.7	615	380	143	17	156	112	14
MIN	3.3	2.7	5.8	2.3	3.0	3.7	9.2	5.5	2.0	2.6	1.2	.64
CFSM	.42	.29	2.67	.19	.12	5.21	2.45	1.10	.14	.55	.36	.09
IN.	.48	.32	3.08	.22	.12	5.98	2.74	1.27	.16	.63	.42	.10
CAL YR 1977	TOTAL	6267.96	MEAN 17.2	MAX 456	MIN .54	CFSM .59	IN 7.98					
WTR YR 1978	TOTAL	12180.69	MEAN 33.4	MAX 615	MIN .64	CFSM 1.14	IN 15.52					

03326500 MISSISSINewa 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) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow periodically regulated by dam above station.

AVERAGE DISCHARGE.--55 years, 627 ft³/s (17.76 m³/s), 12.48 in/yr (317 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 17	0100	9180	260	10.24	3.121	Mar. 22	0200	10700	303	11.04	3.365
Mar. 17	1900	*10800	306	*11.09	3.380	Apr. 7	0900	6540	185	8.63	2.630

Minimum daily discharge, 8.1 ft³/s (0.229 m³/s) Sept. 16.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
 CHEMICAL ANALYSES: November 1975 to September 1976.
 WATER TEMPERATURE: November 1975 to September 1976.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	843	92	1280	305	190	117	1140	525	254	180	58	379
2	1730	89	1790	285	160	116	972	427	234	850	63	248
3	1670	90	1420	274	148	116	896	250	213	2570	73	208
4	780	87	941	260	145	116	843	312	196	1880	68	160
5	432	83	620	252	142	116	965	331	180	1090	68	127
6	294	82	370	246	140	116	2490	302	166	644	63	109
7	222	148	333	264	138	116	6210	275	258	462	123	99
8	235	201	300	584	136	119	4370	271	271	351	115	89
9	296	231	285	511	134	122	1960	312	217	284	109	80
10	627	246	270	425	132	129	1270	525	184	217	118	75
11	517	203	250	343	130	137	1130	410	162	177	139	115
12	331	167	245	315	129	151	972	321	155	148	221	68
13	250	153	240	285	128	251	772	808	145	162	250	76
14	203	143	3350	265	128	2870	559	2610	148	145	145	102
15	173	131	6980	250	128	6030	444	2450	152	132	104	75
16	151	160	7840	240	128	7830	377	1720	139	123	99	8.1
17	133	397	8190	230	126	10400	331	1170	126	107	83	104
18	121	381	5750	220	125	8840	341	869	121	96	123	171
19	116	319	5390	215	124	5750	552	667	118	83	271	107
20	110	253	4890	205	123	4720	1320	532	118	80	271	88
21	104	224	2480	200	122	8120	1930	910	123	78	382	78
22	98	198	1530	195	121	10300	1400	659	112	83	238	70
23	100	183	1110	187	120	8480	876	565	104	73	169	63
24	92	180	922	182	120	4370	1400	916	107	70	132	61
25	90	176	1180	175	120	2700	3560	1300	148	70	109	57
26	90	167	1050	189	119	2430	3930	823	284	68	96	52
27	92	156	692	231	117	3350	2990	559	444	68	166	52
28	93	145	426	280	117	2790	1470	433	302	66	289	49
29	90	132	385	340	---	2150	903	366	200	63	302	52
30	86	177	350	275	---	1790	675	316	145	63	512	49
31	88	---	325	234	---	1380	---	280	---	63	452	---
TOTAL	10257	5394	61184	8462	3690	96022	47048	22214	5526	10546	5411	3071.1
MEAN	331	180	1974	273	132	3097	1568	717	184	340	175	102
MAX	1730	397	8190	584	190	10400	6210	2610	444	2570	512	379
MIN	86	82	240	175	117	116	331	250	104	63	58	8.1
CFSM	.49	.26	2.89	.40	.19	4.54	2.30	1.05	.27	.50	.26	.15
IN.	.56	.29	3.34	.46	.20	5.24	2.57	1.21	.30	.58	.30	.17

CAL YR 1977 TOTAL 157918.0 MEAN 433 MAX 8190 MIN 7.3 CFSM .64 IN 8.61
 WTR YR 1978 TOTAL 278825.1 MEAN 764 MAX 10400 MIN 8.1 CFSM 1.12 IN 15.21

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) National Geodetic Vertical Datum of 1929 (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, 212,290 acre-ft (262 hm³) Mar. 28, 1978, elevation, 763.54 ft (232.727 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, 212,290 acre-ft (262 hm³) Mar. 28, elevation, 763.54 ft (232.727 m); minimum, 23,230 acre-ft (28.6 hm³) Jan. 29, elevation, 711.95 ft (217.002 m).

MONTH-END ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	737.11	75,540	
Oct. 31.....	735.44	70,380	-5,160
Nov. 30.....	712.32	23,700	-46,680
Dec. 31.....	743.95	100,550	+76,850
CAL YR 1977.....			+77,110
Jan. 31.....	712.10	23,420	-77,130
Feb. 28.....	712.18	23,520	+100
Mar. 31.....	762.05	201,230	+177,710
Apr. 30.....	752.70	142,380	-58,850
May 31.....	739.10	82,160	-60,220
June 30.....	737.06	75,380	-6,780
July 31.....	737.04	75,310	-70
Aug. 31.....	737.10	75,500	+190
Sept. 30.....	736.15	72,530	-2,970
WTR YR 1978.....			-3,010

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) National Geodetic Vertical Datum of 1929 (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.--35 years, 2,350 ft³/s (66.55 m³/s), 11.88 in/yr (302 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, 15,100 ft³/s (426 m³/s) Apr. 4, gage height, 12.11 ft (3.691 m); minimum daily, 320 ft³/s (9.06 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	1320	2570	8930	800	492	13400	11600	1130	598	350	870
2	1260	1440	4480	8960	810	490	14500	10200	1130	1100	336	830
3	1110	1460	3480	9360	840	500	14900	10700	1030	2520	338	800
4	1140	1380	2760	10000	860	490	15000	10700	976	3650	349	570
5	1300	1310	2930	10500	870	480	14600	9980	930	3820	338	430
6	1410	1290	4370	10500	870	465	14000	5380	835	4250	331	350
7	1190	1330	4120	8790	870	457	10100	1950	838	3740	356	580
8	1240	1410	3280	6630	870	450	9780	1910	1120	2680	394	900
9	1220	1390	3090	4760	860	460	9240	1900	2870	1460	391	580
10	1300	1700	2470	2060	860	470	10400	1950	3020	3480	382	580
11	1320	2650	2130	1600	850	480	12400	1850	2970	2560	369	580
12	1320	2670	1800	1810	830	491	11300	1890	3040	1010	387	580
13	1490	2610	1930	1230	820	529	8990	2130	2980	674	592	580
14	1440	2630	5560	1150	810	2540	8360	2670	2810	944	776	780
15	1340	2770	8790	1030	800	6300	8360	3630	2160	620	490	1000
16	1320	2770	7150	1020	780	6430	8430	3910	2040	551	485	1300
17	1300	2790	7630	1000	760	7260	8370	3270	1440	498	424	1800
18	1270	2970	7440	960	750	7180	8620	2880	962	494	378	1300
19	1240	3880	6860	940	730	7480	9630	2680	758	479	850	790
20	1220	3860	6000	880	700	8840	9960	2600	655	471	2000	760
21	1230	3830	6810	830	668	12800	5330	3310	564	478	820	740
22	1230	3870	6450	780	618	10700	7650	3160	468	471	680	720
23	1250	3830	6150	820	605	11900	8160	3470	429	423	600	700
24	1380	3790	6000	860	580	10800	9460	4080	429	400	410	690
25	1380	3460	6640	890	560	9890	10400	3880	463	395	360	670
26	1350	1860	6960	740	540	9420	8270	3670	564	376	320	650
27	1310	835	9590	600	520	10800	8560	3160	809	344	340	640
28	1270	766	10300	640	496	11600	10000	3520	1020	351	380	620
29	1260	784	10200	700	---	13900	12100	3540	761	368	740	600
30	1250	732	8600	730	---	13200	12000	3780	567	350	1500	590
31	1280	---	9150	760	---	13100	---	3140	---	342	1100	---
TOTAL	40390	67387	175690	100460	20927	180394	312270	132490	39768	39897	17566	22580
MEAN	1303	2246	5667	3241	747	5819	10410	4274	1326	1287	567	753
MAX	1770	3880	10300	10500	870	13900	15000	11600	3040	4250	2000	1800
MIN	1110	732	1800	600	496	450	5330	1850	429	342	320	350
CFSM	.49	.84	2.11	1.21	.28	2.17	3.88	1.59	.49	.48	.21	.28
IN.	.56	.93	2.43	1.39	.29	2.50	4.32	1.83	.55	.55	.24	.31
CAL YR 1977 TOTAL		606909	MEAN 1663	MAX 10300	MIN 152	CFSM .62	IN 8.41					
WTR YR 1978 TOTAL		1149819	MEAN 3150	MAX 15000	MIN 320	CFSM 1.17	IN 15.92					

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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--10 years, 142 ft³/s (4.021 m³/s), 12.13 in/yr (308 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 15	0100	1230	34.8	8.42	2.566	Mar. 22	0600	*2160	61.2	*11.21	3.417
Dec. 18	1000	1420	40.2	9.03	2.752	Apr. 7	1000	1360	38.5	8.84	2.694
Mar. 16	1400	1740	49.3	9.97	3.039	July 3	0600	1050	29.7	7.78	2.371

Minimum daily discharge, 9.1 ft³/s (0.258 m³/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	37	261	83	20	26	358	125	59	46	19	19
2	542	37	426	71	21	26	263	103	57	575	23	16
3	389	36	320	66	22	26	267	90	53	976	28	15
4	251	34	234	64	22	26	286	86	49	658	20	14
5	178	32	203	61	23	26	270	86	45	352	18	13
6	131	31	178	60	24	26	726	72	42	227	16	12
7	101	92	145	62	24	26	1290	64	62	200	20	12
8	138	137	130	85	25	26	800	68	170	272	24	11
9	193	100	120	80	25	27	444	68	111	136	20	11
10	154	83	110	76	25	28	332	60	76	97	18	11
11	115	68	100	73	26	30	446	54	62	76	26	10
12	93	56	93	69	26	34	339	56	58	63	70	10
13	77	48	195	65	26	66	240	115	53	71	36	11
14	67	45	904	62	26	856	174	160	45	69	23	12
15	62	45	1220	59	26	1540	136	257	41	64	20	24
16	56	46	1180	57	26	1670	114	280	40	111	17	18
17	51	45	1290	54	26	1550	101	224	38	73	15	14
18	51	42	1400	51	26	1420	99	172	37	52	14	13
19	50	40	1110	49	26	1380	110	137	36	41	14	15
20	45	38	769	47	26	1290	226	137	34	37	15	13
21	41	39	534	45	27	1950	196	123	35	33	13	11
22	38	37	371	44	27	2110	149	106	34	29	14	11
23	37	37	287	43	27	1630	129	118	31	30	14	10
24	37	37	255	42	27	968	178	116	29	29	14	10
25	37	37	309	40	27	595	683	103	29	27	13	9.7
26	38	36	253	38	26	549	804	92	35	25	13	9.6
27	37	35	210	32	26	864	438	84	33	24	14	9.1
28	37	35	163	23	26	812	281	79	28	22	44	10
29	36	31	129	17	---	692	206	75	26	21	48	10
30	35	36	101	19	---	511	160	71	24	20	29	10
31	34	---	88	20	---	420	---	65	---	20	23	---
TOTAL	3351	1452	13088	1657	704	21200	10245	3446	1472	4476	695	374.4
MEAN	108	48.4	422	53.5	25.1	684	342	111	49.1	144	22.4	12.5
MAX	542	137	1400	85	27	2110	1290	280	170	976	70	24
MIN	34	31	88	17	20	26	99	54	24	20	13	9.1
CFSM	.68	.30	2.65	.34	.16	4.30	2.15	.70	.31	.91	.14	.08
IN.	.78	.34	3.06	.39	.16	4.96	2.40	.81	.34	1.05	.16	.09
CAL YR 1977	TOTAL	41843.4	MEAN 115	MAX 1400	MIN 3.3	CFSM .72	IN 9.79					
WTR YR 1978	TOTAL	62160.4	MEAN 170	MAX 2110	MIN 9.1	CFSM 1.07	IN 14.54					

WABASH RIVER BASIN

03327520 PIPE CREEK NEAR BUNKER HILL, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
OCT 13...	1640	76	61	12	11.0
NOV 16...	1500	46	52	6.5	9.0
DEC 22...	1105	373	23	23	1.0
APR 13...	1245	245	65	43	10.0
JUL 06...	1310	209	100	56	22.0
AUG 23...	1725	14	45	1.7	--
SEP 26...	1230	9.7	15	.39	14.0

WABASH RIVER BASIN

03328000 EEL RIVER AT NORTH MANCHESTER, IN

LOCATION.--Lat 40°59'55", long 85°45'50", in NE¼ 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) National Geodetic Vertical Datum of 1929. 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 and those below 95 ft³/s (2.690, m³/s), which are fair.

AVERAGE DISCHARGE.--49 years, 353 ft³/s (10.00 m³/s), 11.50 in/yr (292 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 1	2000	2380	67.4	6.96	2.121	Mar. 22	0100	*4560	129	*10.63	3.24
Dec. 15	0100	3250	92.0	8.60	2.62	Apr. 7	0400	3190	90.3	8.48	2.58
Mar. 17	0300	2960	83.8	8.01	2.44						

Minimum daily discharge, 57 ft³/s (1.61 m³/s) Sept. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	129	1770	319	155	122	1490	339	202	115	76	77
2	234	192	2150	295	155	121	1220	315	200	137	76	76
3	206	180	1580	280	155	120	1380	293	194	160	83	76
4	183	169	998	260	155	120	1550	282	180	162	77	72
5	171	157	703	250	155	120	2160	300	170	136	76	77
6	161	151	569	235	154	121	2310	295	162	123	74	74
7	152	159	439	241	152	122	3040	277	184	116	105	69
8	180	167	390	300	150	123	2510	275	250	113	134	65
9	219	159	360	280	148	125	2020	279	208	107	93	65
10	201	158	340	265	146	130	1460	261	178	105	91	68
11	183	159	325	250	144	135	1300	243	161	100	90	65
12	160	154	310	240	142	150	1160	241	157	98	86	66
13	135	154	300	230	141	207	887	341	162	102	85	85
14	128	163	2070	220	140	1160	714	610	155	107	82	90
15	124	204	2970	210	140	2680	608	1040	146	100	77	90
16	117	235	2520	200	138	2890	538	1190	141	98	85	85
17	113	248	2420	195	135	2840	488	819	138	95	83	79
18	112	246	2300	195	134	2410	482	592	136	91	80	83
19	112	218	2010	190	132	2040	625	462	144	88	85	76
20	110	219	1690	185	130	2480	1690	409	133	86	82	76
21	107	281	1310	185	129	3900	1610	566	133	86	77	76
22	103	270	971	178	127	4490	1480	490	126	86	77	70
23	117	242	785	175	125	4280	1090	409	121	88	74	68
24	140	234	705	173	125	3630	855	439	118	88	72	64
25	132	223	1130	170	125	3050	732	404	117	90	72	60
26	126	229	756	150	124	2530	606	348	126	86	71	58
27	121	214	580	110	123	2440	513	306	146	80	76	57
28	115	213	470	130	122	2300	449	274	152	83	91	57
29	111	203	420	140	---	2300	406	250	131	85	96	57
30	107	203	380	150	---	2030	372	232	118	86	82	60
31	106	---	347	155	---	1710	---	217	---	79	74	---
TOTAL	4489	5933	34068	6556	3901	50876	35745	12798	4689	3176	2582	2141
MEAN	145	198	1099	211	139	1641	1192	413	156	102	83.3	71.4
MAX	234	281	2970	319	155	4490	3040	1190	250	162	134	90
MIN	103	129	300	110	122	120	372	217	117	79	71	57
CFSM	.35	.48	2.64	.51	.33	3.94	2.86	.99	.37	.25	.20	.17
IN.	.40	.53	3.04	.58	.35	4.54	3.19	1.14	.42	.28	.23	.19

CAL YR 1977 TOTAL 135042 MEAN 370 MAX 2970 MIN 35 CFSM .89 IN 12.05
WTR YR 1978 TOTAL 166954 MEAN 457 MAX 4490 MIN 57 CFSM 1.10 IN 14.89

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--8 years, 9.37 ft³/s (0.265 m³/s), 14.34 in/yr (364 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	1100	122	3.46	4.19	1.277	Apr. 6	1800	146	4.13	4.48	1.366
Mar. 21	0600	*219	6.20	*5.25	1.600						

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Sept. 23-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	4.9	61	5.1	2.6	2.6	18	7.9	5.9	9.8	2.0	1.6
2	5.7	6.0	36	4.7	2.6	2.6	17	7.5	6.6	10	2.0	1.9
3	5.5	5.5	19	4.4	2.5	2.6	22	7.2	6.2	9.0	1.9	1.5
4	3.5	5.0	14	4.2	2.5	2.6	19	7.3	5.7	6.8	1.8	1.5
5	3.3	4.6	11	3.9	2.5	2.6	18	7.9	5.4	5.5	1.8	1.4
6	2.9	4.4	9.2	3.7	2.5	2.6	66	7.6	5.0	4.9	1.6	1.4
7	2.8	5.5	8.0	3.6	2.5	2.6	75	7.8	10	4.4	1.8	1.4
8	4.7	6.2	7.5	5.1	2.6	2.7	33	8.2	12	3.9	1.8	1.5
9	5.1	5.5	7.0	4.7	2.6	2.7	21	7.9	7.9	3.5	2.0	1.4
10	4.0	5.5	6.5	4.5	2.6	2.8	18	7.3	6.3	3.3	2.0	1.4
11	3.5	5.1	6.2	4.3	2.6	3.0	35	7.5	5.7	3.1	1.8	1.3
12	3.1	4.6	6.1	4.1	2.6	3.5	19	7.3	5.6	2.9	2.1	1.3
13	2.6	4.2	6.0	3.9	2.6	6.2	14	31	5.3	3.5	1.9	5.9
14	2.6	4.2	102	3.8	2.6	56	12	47	4.8	3.1	1.6	2.2
15	2.4	4.6	74	3.7	2.6	73	11	43	4.7	2.9	1.6	1.7
16	2.4	4.7	48	3.5	2.7	77	9.9	32	4.7	2.7	1.8	1.5
17	2.3	4.9	47	3.4	2.7	74	9.3	19	4.7	2.6	1.5	1.7
18	2.3	4.7	39	3.3	2.7	51	9.7	14	5.7	2.4	1.5	1.8
19	2.3	4.2	25	3.2	2.8	52	14	11	6.0	2.4	1.6	1.6
20	2.3	4.6	23	3.1	2.8	66	22	10	5.1	2.3	1.5	1.4
21	2.3	5.4	19	3.1	2.7	162	16	9.5	4.5	2.3	1.4	1.3
22	2.3	5.2	15	3.0	2.7	91	13	8.5	4.0	2.1	1.3	1.3
23	5.9	4.9	13	2.9	2.6	64	12	9.2	3.6	2.1	1.4	1.2
24	7.4	4.6	15	2.9	2.6	42	15	11	3.7	2.1	1.4	1.2
25	5.8	4.4	23	2.8	2.6	28	15	9.6	3.7	2.1	1.4	1.2
26	5.1	4.3	11	3.6	2.6	31	12	8.5	4.0	2.0	1.4	1.3
27	4.7	4.1	8.4	3.9	2.7	45	10	7.6	3.6	2.0	1.8	1.3
28	4.2	4.0	7.2	3.4	2.7	39	9.2	7.1	3.3	1.9	2.0	1.4
29	4.0	4.0	6.5	3.0	---	31	8.7	6.7	3.1	1.9	1.8	1.3
30	3.7	4.0	6.0	2.8	---	22	8.3	6.2	3.0	1.9	1.9	1.4
31	3.7	---	5.5	2.7	---	19	---	5.8	---	1.8	1.9	---
TOTAL	117.7	143.8	685.1	114.3	73.4	1062.1	582.1	388.1	159.8	111.2	53.3	48.3
MEAN	3.80	4.79	22.1	3.69	2.62	34.3	19.4	12.5	5.33	3.59	1.72	1.61
MAX	7.4	6.2	102	5.1	2.8	162	75	47	12	10	2.1	5.9
MIN	2.3	4.0	5.5	2.7	2.5	2.6	8.3	5.8	3.0	1.8	1.3	1.2
CFSM	.43	.54	2.49	.42	.30	3.87	2.19	1.41	.60	.41	.19	.18
IN.	.49	.60	2.87	.48	.31	4.45	2.44	1.63	.67	.47	.22	.20
CAL YR 1977 TOTAL	2877.38			MEAN 7.88	MAX 102	MIN .26	CFSM .89	IN 12.07				
WTR YR 1978 TOTAL	3539.20			MEAN 9.70	MAX 162	MIN 1.2	CFSM 1.09	IN 14.84				

03328500 EEL RIVER NEAR LOGANSPOET, IN

LOCATION.--Lat 40°46'55", long 86°15'50", in NE&SE¼ 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) National Geodetic Vertical Datum of 1929. Prior to Aug. 16, 1956, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--35 years, 729 ft³/s (20.64 m³/s), 12.55 in/yr (319 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)
Dec. 14	1200	ice jam	9.03 2.752	Mar. 22	1100	*8220 233	*9.46 2.883
Dec. 15	1400	5820 165	8.15 2.484	Apr. 7	1600	5670 160	8.07 2.460
Mar. 16	2100	5990 170	8.25 2.515				

Minimum daily discharge, 136 ft³/s (3.85 m³/s) Sept. 11, 12.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	357	1690	630	310	345	2310	754	592	343	237	155
2	730	444	3890	564	310	345	2000	705	664	493	211	152
3	646	442	2900	550	310	340	2010	668	616	632	203	148
4	528	397	1980	540	315	340	2140	651	567	582	195	145
5	454	360	1470	535	335	345	2740	674	529	486	190	144
6	418	335	1190	525	345	348	3280	677	503	413	185	141
7	390	361	913	515	350	345	5440	658	591	374	187	142
8	423	426	763	500	375	330	4430	662	792	347	191	141
9	514	422	710	470	380	325	3150	655	726	328	227	139
10	527	397	670	435	375	325	2510	630	614	311	209	137
11	454	374	640	450	375	330	2430	597	537	292	196	136
12	404	347	620	460	385	352	2240	590	506	282	199	136
13	373	327	610	455	385	370	1720	1020	500	297	192	184
14	345	319	3420	445	380	1550	1380	1400	482	305	184	189
15	328	337	5720	440	385	5190	1180	1870	457	295	179	202
16	320	383	4970	435	380	5870	1050	2300	442	276	173	174
17	308	425	4240	425	365	5760	960	1810	430	260	171	168
18	301	431	3970	410	355	4740	931	1330	419	250	171	172
19	301	416	3280	400	365	3800	1090	1060	442	243	169	168
20	299	391	2740	390	365	4570	2490	944	435	236	163	170
21	296	402	2380	385	365	6780	2410	1020	412	232	162	170
22	285	470	1820	365	360	8020	2240	1030	386	224	161	158
23	394	466	1450	375	360	7190	1910	1070	374	223	158	152
24	675	434	1300	390	360	6110	1660	1190	354	222	155	150
25	544	426	1740	380	370	4880	1680	1070	355	226	153	146
26	453	420	1590	285	365	3900	1400	910	377	225	151	145
27	403	414	1100	215	355	4090	1130	808	372	218	160	144
28	372	407	881	260	345	3910	977	736	378	207	172	142
29	361	401	784	280	---	3590	883	688	383	201	171	140
30	318	395	785	295	---	3100	816	656	356	200	169	141
31	311	---	661	305	---	2650	---	619	---	197	159	---
TOTAL	12974	11926	60877	13109	10025	90140	60787	29452	14591	9420	5603	4631
MEAN	419	398	1964	423	358	2908	2026	950	486	304	181	154
MAX	730	470	5720	630	385	8020	5440	2300	792	632	237	202
MIN	285	319	610	215	310	375	816	590	354	197	151	136
CFSM	.53	.50	2.49	.54	.45	3.69	2.57	1.20	.62	.39	.23	.20
IN.	.61	.56	2.87	.62	.47	4.25	2.87	1.39	.69	.44	.26	.22
CAL YR 1977	TOTAL	277375	MEAN 760	MAX 5720	MIN 82	CFSM .96	IN 13.08					
WTR YR 1978	TOTAL	323535	MEAN 886	MAX 8020	MIN 136	CFSM 1.12	IN 15.25					

WARASH RIVER BASIN

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 21; minimum, unknown.

SEDIMENT CONCENTRATION: Maximum daily, 598 mg/L March 21; minimum daily, 11 mg/L Mar. 1-10, may have been less during period of ice effect.

SEDIMENT DISCHARGE: Maximum daily, 11,400 tons (10,300 tonnes) Mar. 22; minimum daily, 8.1 tons (7.3 tonnes) Sept. 10-12.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

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

03328500 EEL RIVER NEAR LOGANSFORT, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)										
1	64	90	53	51	232	1160					11	10
2	87	171	60	72	287	3010					11	10
3	68	119	55	66	133	1040					11	10
4	65	93	52	56	86	460					11	10
5	62	76	50	49	67	266					11	10
6	60	68	50	45	58	146					11	10
7	58	61	51	50	55	136					11	10
8	63	72	67	77	52	107					11	9.8
9	68	94	79	90	50	96					11	9.7
10	80	114	70	75	48	87					11	9.7
11	73	89	64	65	45	78					12	11
12	67	73	61	57	42	70					12	11
13	62	62	59	52	40	66					17	17
14	56	52	57	49	200	1850					190	1110
15	54	48	58	53	596	9200					402	5630
16	53	46	68	70	272	3650					349	5530
17	53	44	69	79	190	2180					367	5710
18	52	42	63	73	198	2120					188	2410
19	50	41	61	69	168	1490					137	1410
20	48	39	59	62	147	1090					263	3250
21	46	37	58	63	126	810					598	10900
22	44	34	65	82	111	545					528	11400
23	65	69	67	84	89	348					299	5800
24	104	190	62	73	82	288					246	4060
25	66	97	63	72	160	752					131	1730
26	55	67	70	79	145	622					95	1000
27	51	55	71	79	126	374					103	1140
28	50	50	69	76	119	283					70	739
29	50	46	68	74	122	258					75	727
30	49	42	67	71	182	386					64	536
31	49	41	---	---	141	252					56	401
TOTAL	---	2222	---	2013	---	33260					---	63621.2

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION (MG/L)											
	CONCENTRATION (MG/L)	LOADS (T/DAY)										
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	52	324	38	77	45	72	52	48	62	40	24	10
2	49	265	34	65	79	142	68	91	50	28	24	9.8
3	52	282	30	54	71	118	52	89	45	25	24	9.6
4	66	381	30	53	65	100	48	75	43	23	24	9.4
5	166	1230	35	64	63	90	45	59	42	22	23	8.9
6	210	2000	34	62	62	84	45	50	40	20	23	8.8
7	493	7240	36	64	77	123	46	46	44	22	23	8.8
8	240	2870	35	63	65	139	47	44	57	29	23	8.8
9	136	1160	30	53	61	120	47	42	73	45	22	8.3
10	88	596	28	48	67	111	48	40	61	34	22	8.1
11	79	518	26	42	73	106	48	38	51	27	22	8.1
12	74	448	25	40	80	109	45	34	45	24	22	8.1
13	62	288	89	242	83	112	68	55	43	22	60	30
14	54	201	78	295	81	105	65	54	41	20	80	41
15	48	153	75	379	79	97	64	51	40	19	76	41
16	45	128	100	621	77	92	65	48	39	18	56	26
17	43	111	69	337	74	86	63	44	36	17	49	22
18	50	126	51	183	72	81	60	40	32	15	59	27
19	63	185	44	126	71	85	57	37	28	13	56	25
20	241	1660	44	112	69	81	54	34	26	11	49	22
21	263	1850	54	149	68	76	52	33	24	10	52	24
22	118	714	46	128	67	70	51	31	21	9.1	51	22
23	75	387	64	185	66	67	53	32	22	9.4	49	20
24	57	255	83	267	65	62	55	33	23	9.6	47	19
25	55	249	82	237	64	61	57	35	23	9.5	45	18
26	51	193	72	177	62	63	57	35	24	9.8	43	17
27	45	137	65	142	60	60	56	33	25	11	42	16
28	42	111	59	117	58	59	55	31	30	14	39	15
29	42	100	53	98	56	58	52	28	28	13	36	14
30	41	90	49	87	54	52	50	27	26	12	35	13
31	---	---	46	77	---	---	49	26	25	11	---	---
TOTAL	---	24252	---	4644	---	2681	---	1363	---	592.4	---	518.7
TOTAL LOAD FOR YEAR: 135167.3 TONS.												

WABASH RIVER BASIN

87

03329000 WABASH RIVER AT LOGANSFORT, 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 Eel 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) National Geodetic Vertical Datum of 1929 (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.--55 years (1923 to current year), 3,287 ft³/s (93.1 m³/s), 11.81 in/yr (300 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, 25,800 ft³/s (731 m³/s) Mar. 21, gage height, 11.22 ft (3.420 m); minimum daily, 474 ft³/s (13.4 m³/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2430	1690	4260	9970	1120	890	16600	12900	1830	901	547	1060
2	2660	1860	8770	10100	1170	960	17300	11400	1790	1590	531	991
3	2240	1940	6670	11400	1210	910	17800	11800	1660	4070	542	740
4	1930	1830	4960	11700	1220	860	18100	11800	1520	4700	504	632
5	1780	1720	4380	11400	1240	840	18400	11200	1450	4630	491	610
6	2050	1680	5650	11800	1280	890	19300	6800	1340	4780	474	522
7	1710	1780	5090	10100	1290	850	18800	2760	1390	4420	496	657
8	1800	2040	4220	8000	1270	830	16000	2650	1850	3720	521	1070
9	2000	2000	3790	6620	1200	880	13700	2610	3210	1930	599	869
10	2030	2030	3110	2900	1180	820	13800	2590	3650	3240	551	860
11	1950	3080	2630	2570	1170	860	15700	2480	3510	3190	535	864
12	1870	3110	2660	2620	1170	1000	15100	2530	3480	1650	546	845
13	1890	3040	2800	2070	1170	1590	11800	3500	3490	1010	660	913
14	1960	3010	8390	1780	1110	4410	10200	4330	3360	1140	868	953
15	1770	3190	17000	1690	1050	14100	10000	6000	2640	1020	706	1020
16	1750	3220	14200	1640	1300	15200	9780	6740	2450	871	591	1390
17	1700	3270	13900	1540	1220	15600	9700	5480	1990	822	562	2130
18	1670	3320	13700	1520	1150	14600	9770	4450	1450	746	518	1550
19	1630	4250	12200	1550	1080	13500	11000	3890	1150	733	495	1100
20	1590	4280	10100	1370	990	15800	13500	3770	1050	705	2470	1000
21	1590	4250	9960	1320	940	22900	8380	4390	968	687	1210	1000
22	1560	4350	8820	1220	920	23100	10200	4330	834	683	1070	970
23	1710	4320	7970	1300	900	22400	10400	4810	770	651	927	926
24	2070	4260	7580	1410	920	19600	11700	5540	743	626	621	923
25	2000	4050	8680	1320	950	16700	13500	5120	781	610	536	887
26	1870	2560	8440	1090	930	14600	11200	4700	854	604	482	861
27	1790	1400	10200	800	920	16600	10400	4160	974	573	493	851
28	1700	1240	10400	900	940	16900	11500	4120	1280	542	559	843
29	1650	1210	11300	990	---	19200	13500	4300	1060	527	756	832
30	1610	1250	9870	1020	---	18000	13400	4130	910	524	1710	806
31	1610	---	10300	1080	---	17000	---	4590	---	502	1300	---
TOTAL	57570	81230	252000	124790	31010	312390	400530	169870	53434	52397	22871	28675
MEAN	1857	2708	8129	4025	1108	10080	13350	5480	1781	1690	738	956
MAX	2660	4350	17000	11800	1300	23100	19300	12900	3650	4780	2470	2130
MIN	1560	1210	2630	800	900	820	8380	2480	743	502	474	522
CFSM	.49	.72	2.15	1.07	.29	2.67	3.53	1.45	.47	.45	.20	.25
IN.	.57	.80	2.48	1.23	.31	3.08	3.94	1.67	.53	.52	.23	.28
CAL YR 1977	TOTAL	935378	MEAN	2563	MAX	17000	MIN	310	CFSM	.68	IN	9.21
WTR YR 1978	TOTAL	1586767	MEAN	4347	MAX	23100	MIN	474	CFSM	1.15	IN	15.62

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--10 years, 7.42 ft³/s (0.210 m³/s), 14.75 in/yr (375 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft³/s (8.50 m³/s) June 25, 1978, gage height, 3.82 ft (1.164 m); maximum gage height, 4.30 ft (1.311 m) June 14, 1975; 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		Gage height		Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Oct. 1	0900	77	2.18	2.89	0.88	Apr. 6	1700	99	2.80	2.91	0.89
Dec. 14	0800	81	2.29	2.74	0.84	May 13	0400	106	3.00	2.96	0.90
Mar. 16	2000	114	3.23	3.01	0.92	June 25	2100	*300	8.50	*3.82	1.16
Mar. 21	0700	249	7.05	3.65	1.11	July 7	1600	142	4.02	3.18	0.97

Minimum daily discharge, 0.32 ft³/s (0.009 m³/s) Sept. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	5.4	16	6.0	1.5	1.7	8.9	3.9	7.1	21	1.7	.91
2	36	5.0	17	5.7	1.6	1.7	8.3	3.7	10	38	2.0	.83
3	25	4.7	15	5.4	1.6	1.7	11	3.5	6.4	24	2.0	.83
4	18	4.4	11	5.2	1.7	1.6	8.9	3.8	5.0	12	1.6	.70
5	14	4.2	11	5.2	1.8	1.6	7.5	3.8	4.1	7.9	1.5	.71
6	11	4.4	8.3	5.4	1.8	1.6	45	3.4	3.7	6.2	1.4	.63
7	11	5.4	7.4	5.9	1.9	1.6	39	4.1	4.4	34	1.5	.63
8	31	6.0	7.0	6.9	1.8	1.7	27	5.4	6.9	22	1.5	.63
9	20	5.9	6.8	6.9	1.8	1.7	15	4.5	4.9	10	1.7	.51
10	14	5.2	6.8	5.5	1.8	1.8	14	3.8	4.1	6.2	1.6	.51
11	11	4.4	6.8	5.0	1.9	1.9	26	3.9	3.9	4.7	1.7	.51
12	8.7	3.8	7.9	4.5	2.0	2.0	15	4.2	4.7	4.2	1.7	.51
13	7.5	3.5	18	4.1	1.9	2.7	8.5	62	3.4	8.1	1.5	.51
14	6.9	3.8	74	3.7	1.8	39	6.2	40	3.3	4.9	1.4	.46
15	6.6	3.8	54	3.4	1.8	68	5.2	34	3.4	3.9	1.3	.46
16	6.0	3.5	48	3.3	1.8	71	4.7	27	3.1	3.5	1.2	.99
17	5.7	3.4	51	3.2	1.8	55	4.2	20	2.9	3.1	1.3	.57
18	5.7	3.0	37	3.1	1.8	36	5.4	14	2.9	3.0	1.2	.76
19	5.0	2.9	28	3.0	1.8	48	5.9	10	2.6	2.9	1.6	.46
20	4.2	3.1	27	2.9	1.7	45	5.9	8.5	2.6	2.6	1.2	.41
21	4.1	2.9	21	2.8	1.6	146	5.4	6.9	2.5	2.5	1.1	.41
22	3.8	2.7	16	2.7	1.6	53	4.7	6.0	2.3	2.5	1.1	.41
23	8.3	3.0	15	2.5	1.6	41	5.2	8.5	2.4	2.5	1.1	.36
24	8.1	2.7	16	2.4	1.6	27	71	8.3	2.4	2.4	1.1	.36
25	7.3	2.9	16	2.2	1.6	21	27	6.7	46	2.3	1.1	.36
26	11	2.5	11	2.0	1.6	23	16	5.7	70	2.3	1.4	.32
27	9.1	2.5	8.7	1.9	1.6	32	9.1	5.0	33	2.3	3.9	.32
28	7.3	2.1	7.7	1.7	1.6	34	6.6	4.5	18	1.9	2.3	.36
29	6.2	2.0	7.1	1.5	---	24	5.5	4.2	11	1.9	1.3	.36
30	5.7	3.0	6.7	1.4	---	15	4.7	3.9	7.5	1.9	1.2	.36
31	5.5	---	6.2	1.4	---	12	---	3.7	---	1.8	.99	---
TOTAL	377.7	112.1	589.4	116.8	48.4	813.3	421.8	326.9	284.5	246.5	47.19	16.15
MEAN	12.2	3.74	19.0	3.77	1.73	26.2	14.1	10.5	9.48	7.95	1.52	.54
MAX	54	6.0	74	6.9	2.0	146	71	62	70	38	3.9	.99
MIN	3.8	2.0	6.2	1.4	1.5	1.6	4.2	3.4	2.3	1.8	.99	.32
CFSM	1.79	.55	2.78	.55	.25	3.84	2.06	1.54	1.39	1.16	.22	.08
IN.	2.06	.61	3.21	.64	.26	4.43	2.30	1.78	1.55	1.34	.26	.09

CAL YR 1977 TOTAL 2603.01 MEAN 7.13 MAX 124 MIN .06 CF5M 1.04 IN 14.18
WTR YR 1978 TOTAL 3400.74 MEAN 9.32 MAX 146 MIN .32 CF5M 1.37 IN 18.52

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) National Geodetic Vertical Datum of 1929 (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, Feb. 7 to Mar. 30, and winter periods, which are fair.

AVERAGE DISCHARGE.--35 years, 239 ft³/s (6.768 m³/s), 11.84 in/yr (301 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 15	0400	2610	73.9	7.49	2.282	Mar. 21	----	*4610	130	*9.85	3.00
Mar. 17	----	3000	85.0	Unknown		Apr. 7	0400	2150	60.9	6.87	2.094

Minimum daily discharge, 21 ft³/s (0.59 m³/s) Sept. 28-30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	77	212	176	51	55	579	265	140	318	57	39
2	840	78	476	147	52	54	462	224	143	1030	97	36
3	533	78	407	140	54	56	458	201	132	1470	146	34
4	368	76	322	133	54	56	477	199	121	836	85	32
5	273	72	296	132	55	55	505	202	113	518	68	31
6	216	71	253	133	56	56	857	177	105	360	59	31
7	179	78	157	134	57	59	1970	168	116	586	60	29
8	256	215	267	176	57	62	1170	176	126	913	59	29
9	324	211	227	165	56	61	701	173	114	492	63	28
10	263	172	162	152	55	60	555	156	100	316	57	27
11	212	144	152	144	56	60	837	143	89	221	58	26
12	176	123	158	134	56	61	744	144	85	173	58	26
13	148	107	200	128	57	64	515	515	82	225	54	25
14	133	98	971	122	58	70	381	591	77	214	63	27
15	124	98	2150	117	58	600	314	701	74	177	56	27
16	115	99	1630	113	59	2200	270	764	73	232	50	34
17	106	94	1970	111	58	2600	239	590	71	279	46	31
18	100	86	2000	109	57	2500	249	459	70	201	43	29
19	94	80	1380	105	57	2300	275	370	68	141	42	28
20	87	77	981	102	58	2200	423	378	65	114	40	26
21	81	77	733	98	58	3700	386	354	66	97	38	26
22	76	74	559	95	59	3400	320	280	61	86	36	26
23	84	72	460	90	58	3100	292	287	58	83	36	24
24	85	73	418	80	57	2500	329	293	56	86	35	23
25	85	74	461	74	56	1700	1020	261	230	83	35	23
26	97	72	397	66	57	1300	1290	229	404	76	35	22
27	93	72	375	60	58	1180	720	206	191	70	38	22
28	87	73	315	54	56	1160	497	189	122	66	47	21
29	81	72	268	52	---	1100	388	177	92	62	43	21
30	78	71	214	50	---	765	319	165	78	62	41	21
31	77	---	187	50	---	667	---	150	---	60	42	---
TOTAL	6008	2864	18758	3442	1580	33801	17542	9187	3322	9647	1687	824
MEAN	194	95.5	605	111	56.4	1090	585	296	111	311	54.4	27.5
MAX	840	215	2150	176	59	3700	1970	764	404	1470	146	39
MIN	76	71	152	50	51	54	239	143	56	60	35	21
CFSM	.71	.35	2.21	.41	.21	3.98	2.14	1.08	.41	1.14	.20	.10
IN.	.82	.39	2.55	.47	.21	4.59	2.38	1.25	.45	1.31	.23	.11

CAL YR 1977 TOTAL 61349 MEAN 168 MAX 2150 MIN 15 CFSM .61 IN 8.33
WTR YR 1978 TOTAL 108662 MEAN 298 MAX 3700 MIN 21 CFSM 1.09 IN 14.75

WABASH RIVER BASIN

03329700 DEER CREEK NEAR DELPHI, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: August 1969 to September 1978 (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
NOV 01...	1130	77	17	3.5	13.0
DEC 13...	0830	190	17	8.7	--
MAR 21...	1125	4420	1540	18400	5.0
23...	1240	2230	177	1070	--

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) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1953, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--29 years, 98.5 ft³/s (2.790 m³/s), 11.84 in/yr (301 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, 565 ft³/s (16.00 m³/s) Mar. 28, gage height, 8.46 ft (2.579 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	65	104	211	78	61	521	185	115	19	12	12
2	171	81	117	200	78	59	515	172	84	45	12	12
3	161	80	121	185	76	59	505	162	64	45	12	12
4	140	78	131	173	73	58	502	156	17	44	12	12
5	140	75	144	165	73	57	499	148	18	43	12	12
6	133	73	148	156	72	56	508	143	19	31	12	12
7	127	71	152	148	70	54	518	138	51	15	13	11
8	125	68	159	141	70	54	521	134	97	15	13	11
9	121	67	162	135	71	52	515	130	92	16	13	12
10	117	63	164	129	72	51	505	127	88	16	13	13
11	112	61	165	122	72	51	499	124	67	16	13	13
12	108	54	164	118	72	53	480	121	55	16	13	13
13	105	35	165	114	73	53	460	127	57	54	14	13
14	98	35	174	109	73	58	434	128	56	65	14	13
15	90	35	181	105	73	62	412	132	54	37	14	13
16	83	36	190	101	73	68	390	133	54	17	14	13
17	61	37	203	97	73	78	363	136	51	17	14	13
18	8.0	37	219	93	73	96	344	137	51	17	14	16
19	8.8	37	235	90	73	116	326	141	52	17	14	18
20	12	38	256	89	73	141	309	147	50	17	14	21
21	22	41	275	88	71	215	300	154	47	19	13	20
22	33	44	286	85	69	295	289	159	47	65	13	19
23	54	47	286	83	68	412	280	162	38	83	13	18
24	53	79	290	81	66	453	271	163	13	79	13	17
25	54	96	282	80	66	505	262	163	13	43	13	16
26	54	96	275	88	64	530	249	162	14	12	13	16
27	55	97	263	89	63	554	238	158	28	12	13	15
28	55	96	248	87	62	557	225	156	44	12	13	14
29	56	95	238	85	---	554	214	152	43	12	13	14
30	56	96	225	83	---	547	200	143	26	12	13	13
31	57	---	217	81	---	534	---	133	---	12	13	---
TOTAL	2649.8	1913	6239	3611	1990	6493	11654	4526	1505	923	405	427
MEAN	85.5	63.8	201	116	71.1	209	388	146	50.2	29.8	13.1	14.2
MAX	180	97	290	211	78	557	521	185	115	83	14	21
MIN	8.0	35	104	80	62	51	200	121	13	12	12	11
CFSM	.76	.57	1.78	1.03	.63	1.85	3.43	1.29	.44	.26	.12	.13
IN.	.87	.63	2.05	1.19	.66	2.14	3.84	1.49	.50	.30	.13	.14
CAL YR 1977	TOTAL	37005.8	MEAN 101	MAX 302	MIN 8.0	CFSM .89	IN 12.18					
WTR YR 1978	TOTAL	42335.8	MEAN 116	MAX 557	MIN 8.0	CFSM 1.03	IN 13.94					

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow occasionally regulated by lakes upstream.

AVERAGE DISCHARGE.--9 years, 16.0 ft³/s (0.453 m³/s), 11.00 in/yr (281 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 203 ft³/s (5.75 m³/s) Mar. 21, 1978, gage height, 3.57 ft (1.088 m); minimum daily, 0.49 ft³/s (0.014 m³/s) Sept. 11, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 203 ft³/s (5.75 m³/s) Mar. 21, gage height, 3.57 ft (1.088 m); minimum daily, 0.49 ft³/s (0.014 m³/s) Sept. 11.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUFS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.1	31	13	6.4	1.5	53	14	7.8	7.3	1.7	.79
2	14	8.9	44	12	6.2	1.5	47	14	7.5	8.7	1.6	.74
3	12	9.0	44	11	6.1	1.5	51	12	7.4	12	1.5	.70
4	12	8.7	36	10	6.0	1.5	62	12	7.2	9.7	1.4	.66
5	9.6	8.0	30	9.7	6.0	2.5	76	13	6.5	7.4	1.3	.62
6	8.6	7.4	24	9.2	6.0	2.3	91	14	5.7	7.8	1.2	.59
7	7.3	8.0	22	9.0	6.0	2.2	105	14	7.2	7.4	1.6	.58
8	9.2	9.6	19	12	6.0	2.2	93	14	11	6.4	2.4	.53
9	9.9	9.1	18	11	6.0	2.2	73	14	11	6.7	3.0	.52
10	9.2	8.7	17	10	6.0	2.2	60	13	9.8	5.5	2.5	.52
11	8.3	7.8	16	9.7	5.9	2.3	62	12	8.0	4.9	2.0	.49
12	7.8	7.7	16	9.4	5.9	2.6	57	12	7.1	5.6	1.8	.50
13	7.2	8.0	16	9.0	5.9	5.2	48	18	6.5	5.1	1.5	1.2
14	6.9	9.1	49	8.8	5.9	19	39	22	5.8	4.3	1.4	.99
15	6.2	11	79	8.5	5.8	53	32	27	5.5	3.7	1.3	1.1
16	6.0	13	83	8.3	5.8	72	28	30	5.3	3.1	1.4	1.0
17	5.8	14	83	8.1	5.7	74	25	28	4.9	2.7	1.3	1.2
18	6.0	14	85	8.0	5.7	67	25	25	4.6	2.4	1.2	1.5
19	6.4	13	77	7.7	5.6	59	29	21	4.5	2.1	1.1	2.5
20	6.5	16	69	7.6	5.6	76	36	18	4.1	2.0	1.0	2.3
21	23	20	62	7.4	5.6	171	39	17	3.9	2.1	.95	1.9
22	46	18	53	7.2	5.6	186	36	16	4.3	2.0	.91	1.5
23	25	15	44	7.2	5.6	172	31	16	4.5	2.0	.85	1.3
24	17	14	38	7.2	5.5	139	30	17	4.7	2.0	.80	1.2
25	11	13	41	7.2	5.5	107	28	16	4.7	1.9	.79	1.1
26	8.8	13	29	8.7	5.4	88	24	15	5.6	1.9	.81	.97
27	7.4	12	22	8.1	5.3	83	21	13	5.7	1.8	.84	.92
28	6.7	12	19	7.6	4.5	79	19	12	5.5	1.7	1.0	.90
29	6.5	12	16	7.2	---	76	17	10	8.3	1.9	.88	.82
30	6.0	14	15	6.9	---	68	15	9.2	7.2	1.9	.86	.91
31	6.0	---	13	6.6	---	59	---	8.4	---	1.7	.83	---
TOTAL	336.3	342.1	1210	273.3	161.5	1677.7	1352	496.6	191.8	135.7	41.72	30.55
MEAN	10.8	11.4	39.0	8.82	5.77	54.1	45.1	16.0	6.39	4.38	1.35	1.02
MAX	46	20	85	13	6.4	186	105	30	11	12	3.0	2.5
MIN	5.8	7.4	13	6.6	4.5	1.5	15	8.4	3.9	1.7	.79	.49
CFSM	.55	.58	1.99	.45	.29	2.76	2.30	.82	.33	.22	.07	.05
IN.	.64	.65	2.30	.52	.31	3.18	2.57	.94	.36	.26	.08	.06
CAL YR 1977	TOTAL	5403.35	MEAN	14.8	MAX	85	MIN	.65	CFSM	.76	IN	10.25
WTR YR 1978	TOTAL	6249.27	MEAN	17.1	MAX	186	MIN	.49	CFSM	.87	IN	11.86

WABASH RIVER BASIN

03331500 TIPPECANOH RIVER NEAR ORA, IN

LOCATION.--Lat 41°09'26", long 86°33'49", in SE4SE1/4 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 Rartee 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.--35 years, 808 ft³/s (22.88 m³/s), 12.82 in/yr (326 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 discharges 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)
Dec. 17	0300	ice jam	11.91 3.630	Mar. 23	2300	*6720 190	*13.71 4.178
Dec. 19	0100	2670 75.6	10.52 3.206	Apr. 8	1600	4620 131	12.27 3.740
Dec. 26	1500	2680 75.8	10.53 3.209				
Mar. 18	1800	2670 75.6	10.52 3.206				

Minimum daily discharge, 158 ft³/s (4.47 m³/s) Sept. 11.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

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

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	761	393	662	900	400	430	3600	1160	789	364	223	188
2	796	394	1150	820	400	430	3370	1090	771	440	222	183
3	792	399	1340	770	410	430	3210	1040	768	497	227	177
4	751	399	1300	740	410	430	3190	992	732	492	218	173
5	730	399	1250	710	420	430	3120	989	684	480	211	170
6	686	399	1210	690	440	420	3540	982	621	452	205	166
7	635	399	1000	680	450	420	4040	958	586	422	203	162
8	629	401	816	650	460	410	4550	957	637	400	207	161
9	641	399	780	600	480	400	4480	944	649	380	205	160
10	636	399	770	540	480	410	4080	902	643	349	210	161
11	619	399	790	550	470	420	3830	882	627	325	214	158
12	589	399	1080	570	480	440	3810	866	602	313	207	163
13	553	393	1400	590	490	470	3630	1090	631	321	210	184
14	537	388	1600	590	500	716	3240	1480	597	331	208	194
15	509	401	2210	600	470	1340	2870	1740	554	326	203	207
16	492	422	2350	590	460	1970	2560	1830	518	336	196	216
17	481	447	2450	590	460	2410	2310	1790	501	329	193	226
18	475	485	2550	580	450	2640	2110	1620	485	309	193	230
19	481	494	2650	570	460	2600	2030	1430	477	283	196	229
20	480	494	2590	560	460	2690	1950	1300	464	267	193	241
21	449	496	2410	550	460	3670	1860	1250	447	260	190	256
22	413	499	2250	540	460	5370	1780	1170	422	252	186	246
23	389	508	2030	530	460	6570	1700	1100	405	253	180	236
24	391	513	1840	520	450	6640	1630	1260	387	266	175	227
25	403	513	1770	470	450	6260	1610	1410	376	281	175	219
26	404	513	2130	350	460	5610	1550	1300	396	302	174	209
27	409	522	2430	290	450	4990	1450	1190	394	297	176	189
28	407	560	2300	330	440	4660	1370	1080	380	272	196	181
29	401	583	2180	350	---	4410	1310	981	370	242	202	177
30	401	589	1500	370	---	4150	1240	905	348	232	198	174
31	396	---	1100	380	---	3870	---	848	---	228	196	---
TOTAL	16736	13599	51888	17570	12680	76106	81220	36536	16261	10299	6187	5863
MEAN	540	453	1674	567	453	2455	2707	1179	542	332	200	195
MAX	796	589	2650	900	500	6640	4550	1830	789	497	223	256
MIN	389	388	662	290	400	400	1240	848	348	226	174	158
CFSM	.63	.53	1.96	.66	.53	2.87	3.16	1.38	.63	.39	.23	.23
IN.	.73	.59	2.25	.76	.55	3.31	3.53	1.59	.71	.45	.27	.25

CAL YR 1977 TOTAL 264096 MEAN 724 MAX 2800 MIN 184 CFSM .85 IN 11.48
WTR YR 1978 TOTAL 344945 MEAN 945 MAX 6640 MIN 158 CFSM 1.10 IN 14.99

WABASH 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.--47 years, 1,496 ft³/s (42.37 m³/s), 11.74 in/yr (298 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, 11,200 ft³/s (317 m³/s) Mar. 22; minimum daily, 163 ft³/s (4.62 m³/s) Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2070	833	1920	1910	663	724	5300	1760	1420	915	390	282
2	2360	915	3010	1780	779	801	4660	1810	1570	1390	619	238
3	1940	816	2860	1540	760	685	5230	1600	1510	1430	520	347
4	1590	915	2470	1430	760	801	4890	1680	1370	1000	325	260
5	1540	783	2360	1510	760	724	5140	1670	1300	915	347	260
6	1430	915	2160	1600	721	686	5760	1810	1190	915	412	217
7	1300	915	1330	1660	793	734	7740	1810	1280	701	434	260
8	1720	915	1560	1810	758	840	6690	2060	1300	718	347	163
9	1810	915	1040	1060	793	886	6270	2020	1280	635	347	260
10	1490	915	915	1030	753	685	5800	1670	1220	635	520	217
11	1430	800	1130	915	791	800	6310	1680	1170	602	390	303
12	1300	734	1340	839	791	915	5830	1680	1240	734	520	238
13	1170	833	1670	1000	905	915	5080	4000	1130	635	520	216
14	1100	833	3670	1100	779	1530	4600	4860	963	635	520	358
15	1090	816	5200	1100	734	2850	4480	5040	958	619	433	347
16	1020	866	4500	1100	816	4620	4050	4380	1020	619	390	282
17	979	833	5660	1030	734	5760	3260	4150	961	520	368	368
18	1020	783	5750	1030	767	6010	3320	3360	1070	586	347	325
19	915	899	4480	1030	750	5500	3140	2920	915	520	368	390
20	915	800	3970	915	833	6980	3240	2780	786	520	363	303
21	915	915	4170	1000	732	10700	3050	2620	952	569	325	390
22	915	915	3620	915	780	11200	2670	2310	786	520	325	412
23	915	816	3620	915	741	10400	2710	2310	787	520	325	368
24	741	915	2970	915	741	9600	2630	3010	652	368	325	325
25	1000	882	3120	915	763	8820	3150	2800	1140	520	282	325
26	915	833	1290	686	572	8250	3460	2600	3310	520	282	282
27	915	718	1860	572	724	8280	2720	2330	2200	520	282	325
28	915	767	1320	377	801	7970	2310	1880	1640	548	390	238
29	915	767	1530	528	---	7190	2140	1810	801	520	368	238
30	915	1040	1750	508	---	6070	2010	1550	852	433	347	282
31	800	---	1810	799	---	5910	---	1590	---	412	368	---
TOTAL	38050	25602	84055	33519	21294	137836	127640	77550	36773	20694	12099	8819
MEAN	1227	853	2711	1081	761	4446	4255	2502	1226	668	390	294
MAX	2360	1040	5750	1910	905	11200	7740	5040	3310	1430	619	412
MIN	741	718	915	377	572	685	2010	1550	652	368	282	163
CFSM	.71	.49	1.57	.62	.44	2.57	2.46	1.45	.71	.39	.23	.17
IN.	.82	.55	1.81	.72	.46	2.96	2.74	1.67	.79	.44	.26	.19
CAL YR 1977	TOTAL	482836	MEAN	1323	MAX	6130	MIN	260	CFSM	.76	IN	10.37
WTR YR 1978	TOTAL	623931	MEAN	1709	MAX	11200	MIN	163	CFSM	.99	IN	13.40

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) National Geodetic Vertical Datum of 1929 (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.--39 years (1939 to current year), 1,629 ft³/s (46.13 m³/s), 11.86 in/yr (301 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, 13,400 ft³/s (379 m³/s) Mar. 21, gage height, 11.37 ft (3.446 m); minimum daily, 253 ft³/s (7.16 m³/s) Sept. 28.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3110	1050	2000	2140	780	792	5150	1890	1770	1240	488	368
2	3200	999	3340	1900	850	884	4430	2070	1790	1760	861	363
3	2240	999	3300	1790	880	965	5200	1840	1760	1890	544	333
4	1900	1050	2610	1540	810	792	4820	1770	1630	1380	437	363
5	1890	877	2780	1630	820	807	5020	1990	1590	1210	432	287
6	1660	1050	2500	1700	780	957	5510	1990	1400	1130	507	292
7	1630	1100	1390	1870	880	792	7600	2000	1460	1250	577	292
8	2030	1070	1820	1950	880	884	6770	2370	1500	1350	426	305
9	2140	1040	1250	1600	860	974	5850	2300	1330	900	432	368
10	1800	1040	1190	1540	740	892	5620	1750	1370	845	634	310
11	1670	900	1420	1010	1000	884	6050	1960	1320	838	459	315
12	1590	1010	1570	949	900	949	5620	1930	1420	892	715	305
13	1340	941	1780	1100	970	1050	4900	4850	1190	853	706	269
14	1260	916	4100	1060	1020	1730	4250	5390	1090	845	616	353
15	1260	924	5720	1050	845	2880	4090	5390	1160	777	500	296
16	1250	1180	5080	1050	924	4740	3580	4810	1160	770	448	607
17	1040	807	5980	1120	1010	6150	3150	4220	1190	563	443	494
18	1190	949	6180	1040	661	6230	3500	3590	1310	761	448	405
19	1190	974	4930	900	1020	5770	3250	3220	1080	616	454	583
20	1010	1070	4360	1080	982	7060	3140	3000	800	634	448	378
21	1030	1070	4530	884	884	11300	3300	2700	1120	661	454	343
22	1050	991	3910	991	1040	11800	2570	2480	982	634	410	383
23	1260	916	3570	916	830	10300	2810	2630	900	697	305	363
24	777	1070	3220	991	777	9620	2960	3120	792	459	333	432
25	1260	1070	3280	1060	908	8540	3070	2890	1720	583	358	383
26	1270	982	1840	1020	845	8010	3300	2830	4760	697	477	410
27	1030	822	2590	689	770	7880	2790	2520	2850	680	507	343
28	1050	900	1580	500	941	7920	2730	2150	2210	590	465	253
29	957	861	1590	530	---	7060	2310	2100	916	557	421	261
30	1120	1100	1810	600	---	6030	2190	1820	1380	443	421	368
31	941	---	1950	880	---	5980	---	1640	---	477	426	---
TOTAL	46145	29728	93170	37080	24607	140622	125530	85210	44950	26982	15152	10825
MEAN	1489	991	3005	1196	879	4536	4184	2749	1498	870	489	361
MAX	3200	1180	6180	2140	1040	11800	7600	5390	4760	1890	861	607
MIN	777	807	1190	500	661	792	2190	1640	792	443	305	253
CFSM	.80	.53	1.61	.64	.47	2.43	2.24	1.47	.80	.47	.26	.19
IN.	.92	.59	1.86	.74	.49	2.80	2.50	1.70	.90	.54	.30	.22
CAL YR 1977	TOTAL	551554	MEAN	1511	MAX	6180	MIN	286	CFSM	.81	IN	11.00
WTR YR 1978	TOTAL	680001	MEAN	1863	MAX	11800	MIN	253	CFSM	1.00	IN	13.56

WABASH RIVER BASIN

03333450 WILDCAT CREEK NEAR JEROME, IN

LOCATION.--Lat 40°26'29", long 85°55'08", in NE 1/4 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--17 years, 127 ft³/s (3.597 m³/s), 11.81 in/yr (299 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 2	0600	1230	34.8	6.89	2.110	Mar. 17	1300	2120	60.0	9.14	2.786
Dec. 15	0500	1500	42.5	7.72	2.353	Mar. 21	1900	*2760	78.2	*10.23	3.118
Dec. 18	0300	1580	44.7	7.92	2.414	Apr. 7	0500	1470	41.6	7.62	2.322

Minimum daily discharge, 3.5 ft³/s (0.099 m³/s) Sept. 26.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	531	53	348	79	24	32	328	131	84	42	11	14
2	1120	51	472	66	25	32	245	110	80	291	9.6	10
3	686	49	338	60	26	31	262	99	72	704	11	8.0
4	419	47	273	58	26	31	263	98	65	410	10	6.8
5	279	43	245	56	28	30	279	100	62	234	8.5	6.0
6	200	42	164	55	29	30	636	82	57	148	7.8	5.5
7	148	54	111	60	29	29	1300	74	66	106	9.7	5.5
8	191	70	132	78	29	29	718	80	82	101	17	5.4
9	262	69	87	80	29	29	448	81	66	87	13	5.0
10	189	65	74	67	29	31	320	72	54	72	16	4.9
11	142	58	87	62	29	36	289	65	50	57	23	4.9
12	113	48	125	57	28	37	257	68	46	49	18	4.9
13	90	41	144	55	29	43	191	132	43	49	18	5.2
14	79	38	815	53	29	459	142	299	36	49	11	5.7
15	74	42	1420	52	28	1260	118	344	32	47	8.5	5.6
16	67	61	1160	51	30	1670	104	313	31	49	6.8	5.5
17	58	117	1340	50	29	1950	97	256	31	48	6.1	6.8
18	56	96	1470	49	28	1590	98	199	29	34	5.7	5.9
19	53	73	1040	48	28	1220	103	157	29	27	5.7	5.3
20	43	64	761	47	31	1390	234	192	27	24	5.7	5.0
21	40	61	551	46	31	2330	222	411	48	23	5.3	4.9
22	38	52	373	45	31	2050	159	253	64	21	4.5	4.9
23	39	52	279	43	30	1430	135	229	43	18	4.5	4.7
24	41	53	250	44	31	1030	191	323	33	18	4.5	4.5
25	44	49	317	44	32	717	542	262	30	18	4.5	4.3
26	53	43	232	40	31	708	758	203	32	16	4.5	3.5
27	67	43	183	33	30	978	432	162	52	14	5.3	3.8
28	63	40	158	21	31	794	277	137	42	14	40	4.4
29	58	33	116	19	---	663	206	120	33	12	57	4.2
30	54	39	93	20	---	502	164	106	30	12	28	4.1
31	52	---	82	23	---	408	---	92	---	11	19	---
TOTAL	5349	1646	13240	1561	810	21569	9518	5250	1449	2805	399.2	169.2
MEAN	173	54.9	427	50.4	28.9	696	317	169	48.3	90.5	12.9	5.64
MAX	1120	117	1470	80	32	2330	1300	411	84	704	57	14
MIN	38	33	74	19	24	29	97	65	27	11	4.5	3.5
CFSM	1.19	.38	2.93	.35	.20	4.77	2.17	1.16	.33	.62	.09	.04
IN.	1.36	.42	3.37	.40	.21	5.50	2.43	1.34	.37	.71	.10	.04
CAL YR 1977 TOTAL	43819.22			MEAN 120	MAX 1470	MIN .89	CFSM .82	IN 11.16				
WTR YR 1978 TOTAL	63765.40			MEAN 175	MAX 2330	MIN 3.5	CFSM 1.20	IN 16.25				

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--19 years, 20.8 ft³/s (0.589 m³/s), 11.44 in/yr (291 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 1	1500	330 9.35	5.14 1.567	Mar. 21	1000	*544 15.41	*6.86 2.091
Dec. 15	Unknown	315 8.92	5.01 1.527	Apr. 6	1800	531 15.04	6.76 2.060
Mar. 16	2200	382 10.81	5.57 1.698				

Minimum daily discharge, 0.46 ft³/s (0.013 m³/s) Sept. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	8.8	52	15	3.6	3.8	62	17	8.0	10	1.5	.78
2	191	8.4	62	12	3.6	3.8	50	14	7.2	80	1.7	.66
3	99	7.6	40	10	3.8	3.7	58	12	6.5	92	1.7	.60
4	69	7.2	32	10	3.8	3.6	55	13	5.9	49	1.3	.55
5	52	6.5	26	10	3.8	3.5	51	12	5.3	31	1.2	.55
6	41	6.5	23	10	3.8	3.4	247	9.6	4.5	20	1.1	.50
7	34	9.2	23	12	3.8	3.3	237	8.8	23	20	3.1	.50
8	56	10	24	20	3.8	3.4	111	10	26	21	2.3	.50
9	55	9.6	17	13	3.8	3.8	77	5.6	14	13	1.4	.50
10	41	9.6	14	9.6	3.7	4.2	56	8.0	9.6	10	1.3	.46
11	33	8.0	13	8.4	3.6	4.5	61	7.2	7.6	8.4	1.1	.46
12	27	6.2	13	8.4	3.5	5.3	49	8.0	6.9	7.2	1.1	.50
13	21	5.3	14	9.2	3.6	7.6	34	27	5.3	8.4	1.0	.60
14	20	5.6	64	8.8	3.4	83	24	37	4.2	6.9	.93	.72
15	18	6.2	248	8.0	3.5	203	20	51	4.0	18	.86	.78
16	15	8.0	210	6.9	3.5	288	17	54	3.8	75	.86	.60
17	14	10	210	6.2	3.4	296	15	40	3.5	29	.78	.72
18	12	8.8	200	6.5	3.4	203	16	30	3.1	14	.86	.72
19	12	6.9	130	6.5	3.6	193	15	23	2.9	8.0	1.0	.66
20	10	6.5	103	6.5	3.7	247	15	40	2.8	5.9	.93	.60
21	9.6	6.9	72	6.2	3.7	502	13	92	3.5	4.7	.86	.60
22	9.2	5.6	52	5.6	3.7	314	11	51	2.9	3.8	.72	.66
23	9.2	5.6	44	5.6	3.7	222	12	46	2.3	3.3	.72	.66
24	9.2	5.9	44	5.9	3.8	144	14	57	2.1	3.3	.72	.55
25	9.6	5.4	47	6.5	3.8	108	77	44	2.1	2.9	.86	.50
26	10	5.1	35	3.3	3.6	134	80	34	2.8	2.6	.86	.50
27	11	4.6	27	2.6	3.6	170	50	26	2.1	2.3	1.7	.50
28	10	4.3	22	3.1	3.7	126	34	21	1.6	2.0	4.2	.55
29	9.2	3.9	20	3.2	---	107	26	17	1.5	1.7	1.7	.60
30	8.8	4.3	17	3.3	---	85	21	14	1.4	1.8	1.2	.66
31	8.8	---	15	3.4	---	75	---	11	---	1.7	1.0	---
TOTAL	1146.6	206.5	1913	245.7	102.3	3553.9	1608	840.2	176.4	556.9	40.56	17.74
MEAN	37.0	6.88	61.7	7.93	3.65	115	53.6	27.1	5.88	18.0	1.31	.59
MAX	222	10	248	20	3.8	502	247	92	26	92	4.2	.78
MIN	8.8	3.9	13	2.6	3.4	3.3	11	5.6	1.4	1.7	.72	.46
CFSM	1.50	.28	2.50	.32	.15	4.66	2.17	1.10	.24	.73	.05	.02
IN.	1.73	.31	2.88	.37	.15	5.35	2.42	1.27	.27	.84	.06	.03
CAL YR 1977 TOTAL	7600.59		MEAN 20.8	MAX 248	MIN .31	CFSM .84	IN 11.45					
WTR YR 1978 TOTAL	10407.80		MEAN 28.5	MAX 502	MIN .46	CFSM 1.15	IN 15.67					

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) National Geodetic Vertical Datum of 1929 (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.--23 years, 224 ft³/s (6.344 m³/s), 12.57 in/yr (319 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 17	1100	2420 68.5	6.52 1.987	Mar. 22	0300	*4180 118	*8.87 2.704
Mar. 17	2400	2850 80.7	7.16 2.182	Apr. 7	1100	2340 66.3	6.38 1.944

Minimum daily discharge, 22 ft³/s (0.62 m³/s) Sept. 25, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	985	131	311	170	52	62	600	247	139	199	46	50
2	1630	184	659	148	53	63	513	201	133	657	62	41
3	1180	115	572	129	54	59	457	182	123	1170	57	36
4	700	86	438	129	56	60	479	197	104	761	46	35
5	460	78	400	128	58	62	481	166	101	434	42	41
6	345	71	311	128	60	62	1190	157	95	297	40	43
7	283	104	226	141	60	64	2270	152	185	262	115	41
8	331	95	245	184	60	67	1500	135	181	219	60	41
9	400	110	152	195	60	69	873	134	146	170	69	36
10	341	99	137	148	60	73	655	137	113	142	57	32
11	262	92	158	131	60	76	610	118	92	115	48	35
12	223	90	207	119	58	80	517	119	96	93	47	38
13	187	78	773	115	58	164	383	282	90	117	40	38
14	156	76	2030	116	60	459	304	405	82	93	42	48
15	133	74	2180	111	58	1430	247	570	74	122	48	42
16	128	92	2070	110	60	2200	211	544	70	234	46	35
17	118	99	2390	108	60	2650	198	450	66	136	42	31
18	104	150	2110	102	58	2490	206	355	63	99	42	33
19	129	137	1440	100	58	2150	203	287	68	81	61	36
20	144	107	1080	98	62	2260	255	292	64	71	37	35
21	72	99	784	96	64	3440	344	569	70	64	39	32
22	57	99	614	95	64	3780	276	450	85	57	42	30
23	72	92	507	92	62	2640	242	368	88	68	42	29
24	73	84	442	93	63	1900	261	451	73	54	41	23
25	98	86	442	94	66	1320	821	420	84	56	41	22
26	152	73	421	84	64	1190	1230	334	85	57	38	26
27	148	85	328	74	62	1570	805	273	75	55	109	27
28	144	79	253	66	60	1450	503	229	81	45	142	26
29	133	73	239	45	---	1190	367	198	70	45	61	22
30	128	107	205	49	---	924	299	177	64	44	60	27
31	129	---	179	51	---	732	---	162	---	42	49	---
TOTAL	9445	2945	22303	3449	1670	34736	17300	8761	2860	6059	1711	1031
MEAN	305	98.2	719	111	59.6	1121	577	283	95.3	195	55.2	34.4
MAX	1630	184	2390	195	66	3780	2270	570	185	1170	142	50
MIN	57	71	137	45	52	59	198	118	63	42	37	22
CFSM	1.26	.41	2.97	.46	.25	4.63	2.38	1.17	.39	.81	.23	.14
IN.	1.45	.45	3.43	.53	.26	5.34	2.66	1.35	.44	.93	.26	.16

CAL YR 1977 TOTAL 72870 MEAN 200 MAX 2390 MIN 16 CFSM .83 IN 11.20
WTR YR 1978 TOTAL 112270 MEAN 308 MAX 3780 MIN 22 CFSM 1.27 IN 17.26

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) National Geodetic Vertical Datum of 1929 (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 those for winter periods and period of no gage-height record, May 17 to June 20, which are fair.

AVERAGE DISCHARGE.--35 years, 239 ft³/s (6.768 m³/s), 13.36 in/yr (339 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 1	1900	4770 135	10.32 3.146	June 26	2000	*8870 251	*13.78 4.200
Mar. 21	1500	4870 138	10.42 3.176	July 2	2200	3370 95.4	8.85 2.697

Minimum daily discharge, 36 ft³/s (1.02 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2380	114	219	162	61	86	528	265	175	499	62	82
2	2750	114	369	150	64	83	439	240	160	1630	67	72
3	1340	111	322	142	67	78	401	221	153	2100	77	66
4	816	106	299	140	68	75	374	211	145	998	65	61
5	575	102	281	140	71	75	404	234	135	551	60	56
6	427	99	253	140	73	76	610	215	125	395	57	57
7	332	108	196	147	76	77	1650	198	130	341	58	56
8	439	120	221	200	76	78	995	235	154	626	58	53
9	502	117	206	179	76	79	639	249	150	372	56	52
10	367	114	169	149	76	83	511	229	138	257	55	51
11	289	112	194	137	74	89	895	205	120	198	56	49
12	238	106	200	130	73	93	689	195	110	163	90	48
13	202	102	221	124	74	105	483	666	102	171	82	48
14	178	98	1340	122	74	870	371	793	97	188	59	48
15	165	99	2000	120	77	2070	314	815	92	160	54	48
16	156	106	1530	118	78	2220	278	886	88	165	52	46
17	149	145	1820	116	76	2380	257	650	85	160	50	47
18	149	147	1820	114	75	1870	248	540	83	142	50	48
19	142	132	1260	110	76	1690	261	450	82	128	50	45
20	130	119	894	110	80	1980	411	435	80	106	49	43
21	122	117	648	109	81	4040	445	490	109	95	46	43
22	117	109	487	105	81	2820	368	490	105	87	44	42
23	119	105	396	100	80	1970	316	400	86	90	44	42
24	117	108	349	98	81	1320	311	370	80	98	43	40
25	116	103	386	92	86	934	476	380	640	87	43	39
26	132	100	321	90	86	887	760	320	7600	79	43	38
27	137	96	294	88	86	1270	541	285	3270	78	47	37
28	132	96	253	76	85	1070	404	240	955	74	474	37
29	123	93	239	60	---	899	336	225	654	67	232	36
30	119	96	195	58	---	713	296	200	491	63	116	37
31	114	---	179	60	---	600	---	185	---	61	98	---
TOTAL	13074	3294	17561	3686	2131	30680	15011	11517	16394	10229	2437	1467
MEAN	427	110	566	119	76.1	990	500	372	546	330	78.6	48.9
MAX	2750	147	2000	200	86	4040	1650	886	7600	2100	474	82
MIN	114	93	169	58	61	75	248	185	80	61	43	36
CFSM	1.74	.45	2.33	.49	.31	4.07	2.06	1.53	2.25	1.36	.32	.20
IN.	2.00	.50	2.69	.56	.33	4.70	2.30	1.76	2.51	1.57	.37	.22
CAL YR 1977	TOTAL	63468	MEAN 174	MAX 2750	MIN 19	CFSM .72	IN 9.72					
WTR YR 1978	TOTAL	127481	MEAN 349	MAX 7600	MIN 36	CFSM 1.44	IN 19.52					

WABASH RIVER BASIN

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°26'26", long 86°49'45", in SW 1/4 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) National Geodetic Vertical Datum of 1929 (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.--24 years, 753 ft³/s (21.32 m³/s), 12.88 in/yr (327 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 2	0100	7720	219	11.92	3.63	Mar. 21	1900	*13800	391	*16.18	4.93
Dec. 14	1400	7120	202	11.45	3.49	June 26	0900	11500	326	15.74	4.80
Dec. 18	0400	6800	193	11.20	3.41	July 3	0200	6380	181	10.85	3.31

Minimum daily discharge, 91 ft³/s (2.58 m³/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4350	357	537	580	190	245	2000	910	560	1010	198	255
2	6370	364	1140	539	190	240	1610	800	542	3440	215	214
3	4200	368	1350	480	200	225	1510	680	506	5010	237	200
4	3020	393	1240	460	200	220	1450	760	477	3150	225	189
5	2040	320	1090	460	220	220	1520	634	434	2200	195	163
6	1490	303	996	460	220	220	1980	621	404	1500	183	139
7	1150	313	840	500	225	220	4990	582	419	1000	183	135
8	1290	411	920	608	230	220	4760	580	510	1300	193	135
9	1510	419	780	531	230	230	3310	670	516	1000	222	129
10	1250	393	600	500	230	245	2280	589	446	800	185	127
11	1030	382	630	460	225	260	3110	541	386	643	188	124
12	845	350	740	430	220	273	2580	560	357	546	212	118
13	713	330	2960	410	220	300	1780	900	333	537	280	114
14	620	316	4380	400	225	1770	1300	1500	320	634	188	116
15	554	310	5900	395	220	5820	1070	3000	300	521	168	116
16	501	316	5510	390	230	6560	912	2660	289	546	154	123
17	467	350	6300	380	220	7230	815	2170	280	522	152	138
18	438	378	6260	360	220	6850	795	1640	273	453	149	127
19	419	378	5430	355	220	6310	886	1280	263	382	149	116
20	382	389	4520	350	240	6090	1780	1130	257	337	144	111
21	396	371	3220	340	240	10800	1230	1610	303	303	149	109
22	357	340	2380	335	240	9760	1120	1600	323	277	138	113
23	333	323	1820	335	235	9100	980	1290	263	283	128	107
24	310	326	1480	320	240	7440	1030	1200	263	323	128	104
25	316	316	1510	330	250	4790	1840	1220	1410	293	131	102
26	347	300	1280	320	240	3740	2860	1090	9930	257	138	103
27	408	296	1060	280	230	4570	2550	938	4990	257	142	97
28	411	286	872	220	235	4430	2410	825	1860	247	833	91
29	389	286	800	180	---	3860	1400	737	1330	222	784	93
30	378	286	720	170	---	2990	1010	665	1010	206	396	94
31	361	---	640	175	---	2400	---	605	---	203	298	---
TOTAL	36645	10270	67905	12053	6285	107628	56368	33987	29554	28402	7085	3902
MEAN	1182	342	2190	389	224	3472	1879	1096	985	916	229	130
MAX	6370	419	6300	608	250	10800	4990	3000	9930	5010	833	255
MIN	310	286	537	170	190	220	795	541	257	203	128	91
CFSM	1.49	.43	2.76	.49	.28	4.37	2.37	1.38	1.24	1.15	.29	.16
IN.	1.72	.48	3.18	.56	.29	5.04	2.64	1.59	1.38	1.33	.33	.18
CAL YR 1977	TOTAL	221650	MEAN	607	MAX	6370	MIN	53	CFSM	.76	IN	10.38
WTR YR 1978	TOTAL	400084	MEAN	1096	MAX	10800	MIN	91	CFSM	1.38	IN	18.74

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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM
NOV					
02...	1145	349	25	24	--
DEC					
16...	1400	5610	446	6760	64
MAR					
16...	1330	6580	496	8810	91
18...	1305	6680	364	6570	62
20...	1240	6220	361	6070	--
23...	1430	8950	403	9740	--
30...	1000	3100	83	695	--
JUN					
23...	0900	256	37	25	--
JUL					
25...	1330	293	65	51	--

WABASH RIVER BASIN

03335500 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) National Geodetic Vertical Datum of 1929. 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.--55 years (1923 to current year), 6,392 ft³/s (181.0 m³/s), 11.95 in/yr (304 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, 50,500 ft³/s (1,430 m³/s) Mar. 22, gage height, 20.31 ft (6.190 m); minimum daily, 1,170 ft³/s (33.1 m³/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9270	3420	3950	12100	2980	2700	27600	17500	6640	3780	1370	2120
2	16400	3480	9900	11800	3020	2540	26000	16200	4760	7840	1520	1840
3	12000	3590	13600	12000	3100	2790	25900	15000	4760	11800	2110	1750
4	8820	3660	11000	12700	3160	2530	26400	15100	4460	10700	1540	1500
5	6860	3460	9080	13000	3200	2460	26800	15300	4130	9200	1380	1390
6	5880	3220	8200	13100	3150	2360	28000	13700	3740	7910	1300	1260
7	5290	3460	8840	12000	3050	2620	33500	9010	3770	7640	1330	1170
8	6040	3690	8400	9300	3000	2530	34100	6670	4190	10800	1400	1200
9	6690	4010	7700	7500	2950	2400	29800	6790	4370	7250	1320	1650
10	6310	3890	6600	5400	2900	2590	25200	6200	5740	4890	1360	1540
11	5530	3890	5700	4220	2860	2310	26400	5740	5610	5450	1520	1470
12	5050	4700	4900	4560	2830	2450	28700	5740	5370	4890	1730	1470
13	4650	4450	5580	4780	2800	2680	24400	9440	5600	3960	1730	1440
14	4440	4420	10800	4370	2900	5250	19700	14400	5140	3430	1660	1480
15	4260	4480	25500	3850	2980	17600	17600	15200	4890	3200	1740	1600
16	4040	4810	30400	3650	3010	29200	16400	17300	4370	2950	1560	1840
17	3750	4640	30000	3500	3260	32700	15600	15600	4200	2800	1320	2360
18	3710	4780	31400	3400	3100	33600	15200	12800	3800	2510	1290	2800
19	3800	4840	29400	3280	2880	31600	16100	10400	3380	2330	1250	2330
20	3420	5740	25100	3100	2700	31900	17800	9420	2870	2130	1230	2050
21	3400	5740	21400	2930	2930	38000	18600	9670	2700	2020	2780	1660
22	3390	5640	18500	2830	2680	49500	14500	9760	2620	1900	2070	1700
23	3620	5550	15700	2640	2660	47300	15400	9200	2300	1910	1770	1600
24	3710	5680	14400	3090	2560	43100	16500	10400	2120	1930	1560	1570
25	3900	5630	13200	3080	2660	37200	18500	10700	2870	1670	1370	1620
26	4130	5250	12900	2500	2710	32800	22800	9860	22000	1760	1220	1620
27	3860	3810	12500	2150	2670	31500	19400	9120	14800	1780	1350	1460
28	3900	2970	12200	2600	2600	32700	17500	7890	8440	1730	1890	1450
29	3720	2750	12500	2850	---	32600	17600	7960	5050	1570	2130	1370
30	3380	2780	12500	2870	---	31900	18200	7600	4100	1510	1630	1390
31	3290	---	12400	2940	---	29600	---	7280	---	1380	1560	---
TOTAL	166510	128430	444250	178090	81300	621010	659900	336950	157190	134620	48990	49700
MEAN	5371	4281	14330	5745	2904	20030	22000	10870	5240	4343	1580	1657
MAX	16400	5740	31400	13100	3260	49500	34100	17500	22000	11800	2780	2800
MIN	3290	2750	3950	2150	2560	2310	14500	5740	2120	1380	1220	1170
CFSM	.74	.59	1.97	.79	.40	2.76	3.03	1.50	.72	.60	.22	.23
IN.	.85	.66	2.27	.91	.42	3.18	3.38	1.72	.80	.69	.25	.25
CAL YR 1977	TOTAL	1885791	MEAN	5167	MAX	31400	MIN	660	CFSM	.71	IN	9.65
WTR YR 1978	TOTAL	3006940	MEAN	8238	MAX	49500	MIN	1170	CFSM	1.13	IN	15.39

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION (MG/L)											
	LOADS (T/DAY)	LOADS (T/DAY)										
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	50	2360	46	825	88	932	62	229	48	275
2	---	---	48	2100	51	655	103	2180	71	291	44	219
3	---	---	34	1380	45	578	96	3060	40	228	41	194
4	---	---	44	1790	35	421	86	2480	46	191	38	154
5	---	---	33	1360	30	335	104	2580	47	175	37	139
6	---	---	29	1070	26	263	98	2090	46	161	34	116
7	---	---	28	681	34	346	123	2540	44	158	29	92
8	---	---	38	684	63	713	65	1920	42	159	27	87
9	---	---	34	623	67	791	93	1820	40	143	36	160
10	---	---	16	268	55	852	110	1450	37	136	33	137
11	---	---	10	155	57	863	107	1570	35	144	31	123
12	---	---	19	294	71	1030	104	1370	42	200	29	115
13	---	---	96	2830	61	922	101	1080	26	121	28	109
14	---	---	76	2950	53	736	99	917	43	193	27	108
15	---	---	125	5130	47	621	98	847	43	202	26	112
16	---	---	96	4480	41	484	90	717	42	177	25	124
17	---	---	50	2110	37	420	82	620	40	143	23	147
18	46	1890	45	1560	35	359	76	515	37	129	21	159
19	47	2040	44	1240	31	283	70	440	35	118	21	132
20	37	1780	50	1270	37	287	66	380	34	113	20	111
21	61	3060	45	1170	49	357	60	327	62	465	20	90
22	80	3130	116	3060	51	361	55	282	50	279	27	124
23	63	2620	118	2930	49	304	72	371	45	215	29	125
24	56	2490	69	1940	45	258	71	370	44	185	28	119
25	130	6490	59	1700	64	763	55	248	43	159	27	118
26	55	3390	46	1220	135	7880	50	238	42	138	25	109
27	64	3350	41	1010	98	3920	48	231	42	153	22	87
28	59	2790	42	895	95	1750	46	215	93	480	21	82
29	50	2380	46	989	92	1250	44	187	107	615	20	74
30	46	2260	49	1010	81	897	42	171	70	308	19	71
31	---	---	47	924	---	---	40	149	56	236	---	---
TOTAL	---	37670	---	51183	---	29524	---	32297	---	6644	---	3812

03335690 MJD 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and periods of missing record, Dec. 18 to Jan. 26 and May 16 to July 27, which are poor.

AVERAGE DISCHARGE.--7 years (1972 to current year), 37.9 ft³/s (1.073 m³/s), 13.06 in/yr (332 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	1000	667	18.9	7.64	3.327	Mar. 27	2300	280	7.9	5.77	1.759
Oct. 8	0700	263	7.4	5.67	1.728	Apr. 6	1900	309	8.8	5.94	1.810
Dec. 17	2000	442	12.5	6.93	2.112	May 13	0200	*872	24.7	*8.43	2.569
Mar. 21	unknown	unknown		unknown		Aug. 12	1500	402	11.4	6.44	1.963

Minimum daily discharge, 0.72 ft³/s (0.020 m³/s) Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467	43	124	25	5.4	5.6	76	15	27	26	3.3	1.3
2	260	45	120	22	5.7	5.6	62	14	38	30	6.4	1.2
3	168	41	104	20	6.0	5.7	69	14	35	49	7.6	1.1
4	124	36	80	18	6.2	5.7	64	18	22	32	3.8	.96
5	97	34	72	17	6.5	5.7	62	18	20	26	3.3	1.0
6	82	34	66	17	6.8	5.6	134	15	18	21	3.0	.87
7	77	56	52	18	7.0	5.6	157	71	17	25	3.5	.82
8	214	70	48	21	7.1	5.6	100	94	17	39	3.5	.85
9	138	59	46	23	7.0	5.6	73	60	17	30	3.0	.82
10	98	49	45	21	6.9	5.8	62	42	16	22	2.8	.79
11	79	38	45	19	6.9	6.0	89	38	15	19	2.4	.74
12	64	32	60	17	7.0	6.6	65	48	14	15	163	.77
13	55	30	137	17	7.8	7.0	46	408	13	40	83	.95
14	50	31	201	16	7.4	35	35	213	12	27	30	1.1
15	45	31	162	15	6.8	175	30	158	12	20	17	.97
16	39	28	165	14	6.6	165	26	123	12	16	11	28
17	37	26	336	14	6.3	200	25	98	11	13	8.5	9.0
18	35	22	222	14	6.3	160	33	70	11	11	7.3	5.1
19	29	21	180	13	6.2	130	32	54	10	9.6	5.9	2.7
20	27	23	140	12	6.0	110	30	50	9.7	8.8	4.2	2.4
21	26	25	105	12	5.8	480	28	74	9.2	8.4	3.5	1.6
22	24	22	84	11	5.8	300	24	54	8.8	8.2	3.1	1.5
23	78	24	70	10	5.7	180	26	40	8.4	7.9	2.6	1.2
24	67	20	56	9.6	5.6	120	26	39	8.0	7.8	2.5	1.0
25	73	22	64	9.2	5.5	82	30	35	7.6	7.4	2.3	.84
26	102	18	52	8.8	5.5	73	30	32	40	6.6	2.1	.76
27	74	21	45	7.6	5.5	117	24	29	130	5.8	2.6	.73
28	59	19	41	7.0	5.6	205	21	27	70	4.3	5.9	.72
29	51	14	35	6.2	---	161	20	24	50	4.0	2.2	.72
30	46	21	32	5.4	---	120	18	22	29	4.0	1.8	.72
31	43	---	28	5.2	---	98	---	20	---	3.8	1.4	---
TOTAL	2828	955	3017	445.0	176.9	2987.1	1517	2017	707.7	547.6	402.5	71.23
MEAN	91.2	31.8	97.3	14.4	6.32	96.4	50.6	65.1	23.6	17.7	13.0	2.37
MAX	467	70	336	25	7.8	480	157	408	130	49	163	28
MIN	24	14	28	5.2	5.4	5.6	18	14	7.6	3.8	1.4	.72
CFSM	2.32	.81	2.47	.37	.16	2.45	1.28	1.65	.60	.45	.33	.06
IN.	2.67	.90	2.85	.42	.17	2.82	1.43	1.90	.67	.52	.38	.07
CAL YR 1977	TOTAL	12631.00	MEAN	34.6	MAX	640	MIN	.28	CFSM	.88	IN	11.93
WTR YR 1978	TOTAL	15672.03	MEAN	42.9	MAX	480	MIN	.72	CFSM	1.09	IN	14.80

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) National Geodetic Vertical Datum of 1929 (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 fair.

AVERAGE DISCHARGE.--23 years, 260 ft³/s (7.363 m³/s), 10.93 in/yr (278 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	0700	*6920	196	*12.41	3.783	May 13	0300	6310	179	11.93	3.636
Mar. 21	0700	5970	169	11.65	3.551						

Minimum daily discharge, 17 ft³/s (0.481 m³/s) Sept. 28-30.

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 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3700	302	607	180	44	46	650	184	261	230	46	27
2	2350	303	778	170	47	47	531	165	395	357	77	25
3	1740	296	714	150	50	47	552	154	271	479	93	25
4	1190	272	577	140	54	46	584	157	226	337	70	24
5	855	249	521	140	55	45	575	199	208	241	52	24
6	667	246	411	145	56	45	1290	187	187	216	45	23
7	576	263	380	150	57	45	1340	191	180	263	45	22
8	1160	356	350	200	58	45	1100	490	184	346	45	19
9	1080	355	355	180	57	46	716	431	183	294	41	19
10	846	321	360	160	56	46	621	324	172	219	39	19
11	648	276	360	145	55	47	859	271	159	180	43	18
12	538	233	365	140	58	50	723	352	153	146	57	18
13	458	208	620	135	64	122	536	3190	150	361	590	18
14	406	204	1180	130	58	912	406	2000	135	228	255	18
15	376	207	1510	125	57	1550	345	1620	126	191	133	18
16	328	206	1510	120	55	1540	303	1260	124	156	89	18
17	295	191	2110	118	52	1580	277	964	121	135	68	82
18	286	177	2120	115	52	1580	297	750	117	118	57	65
19	263	159	1530	108	51	1560	329	596	114	104	57	41
20	231	159	1180	100	50	1510	320	538	110	96	64	31
21	215	169	921	96	48	4280	295	724	103	91	46	25
22	203	159	704	91	46	3120	269	508	100	88	39	23
23	434	156	579	84	45	2010	258	441	96	87	36	21
24	592	162	529	78	44	1360	264	426	91	87	34	19
25	500	149	530	70	44	925	279	387	88	87	33	18
26	609	132	424	66	44	769	313	343	418	73	32	18
27	505	125	360	60	44	866	291	309	1040	66	33	18
28	426	120	310	54	45	1300	248	284	884	58	50	17
29	366	121	270	48	---	1310	221	262	488	52	39	17
30	328	133	240	42	---	1000	205	240	291	48	34	17
31	310	---	210	43	---	773	---	220	---	48	29	---
TOTAL	22481	6409	22615	3583	1446	28622	14997	18167	7175	5482	2371	747
MEAN	725	214	730	116	51.6	923	500	586	239	177	76.5	24.9
MAX	3700	356	2120	200	64	4280	1340	3190	1040	479	590	82
MIN	203	120	210	42	44	45	205	154	88	48	29	17
CFSM	2.25	.66	2.26	.36	.16	2.86	1.55	1.81	.74	.55	.24	.08
IN.	2.59	.74	2.60	.41	.17	3.30	1.73	2.09	.83	.63	.27	.09

CAL YR 1977 TOTAL 100127.4 MEAN 274 MAX 4320 MIN 7.7 CFSM .85 IN 11.53
WTR YR 1978 TOTAL 134095.0 MEAN 367 MAX 4280 MIN 17 CFSM 1.14 IN 15.44

03336000 WABASH RIVER AT COVINGTON, IN

LOCATION.--Lat 40°08'24", long 87°24'20", in NE¼ 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 Opposum 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--39 years, 7,252 ft³/s (205 m³/s), 11.98 in/yr (304 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, 53,500 ft³/s (1,520 m³/s) Mar. 23, gage height, 24.65 ft (7.513 m); minimum daily, 1,600 ft³/s (45.3 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18600	4270	4360	13100	3100	2800	30600	19800	8200	5300	2290	2380
2	22900	4340	7390	12600	3150	2760	28400	17400	7470	5000	2290	2380
3	23000	4390	12400	11800	3150	2690	27000	15700	6520	7400	2740	2380
4	19000	4410	13100	12000	3200	2640	26300	15100	5790	11300	2900	2210
5	13800	4430	11400	13100	3240	2690	26800	14800	5430	10500	2380	2030
6	10200	4390	10700	13300	3200	2740	30200	12400	5000	9600	2280	1890
7	7820	4360	9490	13700	3190	2840	29400	10100	4760	8000	2160	1880
8	8460	4410	8880	12900	3140	2900	32400	9270	4850	9300	2190	1690
9	9460	4620	7300	11200	3100	2700	34400	8460	5270	11200	2250	1830
10	9030	4700	6400	8640	3040	2740	31100	8060	5560	8450	2230	2150
11	8110	4630	5600	7160	3000	2740	29000	7410	6360	5980	2300	2060
12	6910	4810	4500	5670	2970	2800	27800	6990	6360	6240	2600	1980
13	6280	5200	6000	5100	2960	3050	27300	14400	6170	5790	2800	1950
14	5790	5030	10400	4620	2900	5180	25900	17300	6250	6400	2850	1870
15	5510	5050	17800	4300	3000	13200	22400	18600	5930	4280	2590	1970
16	5230	5150	24200	4000	3050	22600	18600	19500	5690	4040	2540	2160
17	4950	5360	29100	3800	3150	27700	16600	18700	5060	3870	2320	2420
18	4730	5330	32000	3650	3100	32300	15900	16900	4730	3670	2180	2860
19	4600	5360	33000	3400	3000	34800	15900	13600	4570	3380	2120	3080
20	4410	5590	31500	3300	2900	34900	17200	11800	4200	3190	2050	2760
21	4270	6140	27500	3100	2900	38400	18000	11500	3890	3010	2240	2420
22	4220	6140	23500	2900	2760	47900	16600	11400	3730	2870	3010	2110
23	4430	6060	21300	2700	2700	52600	16100	11200	3500	2770	2630	2080
24	4850	6000	17100	2740	2700	52300	15900	10800	3170	2930	2240	1980
25	5750	6010	15100	3450	2700	47200	17200	12000	3030	2870	2060	1900
26	5580	5880	14100	3050	2680	41600	19300	11300	3030	2660	2060	1820
27	5460	5640	13400	2700	2670	40900	21400	10200	18000	2660	2060	1800
28	5030	5460	13100	2600	2800	37900	21400	9640	12500	2540	2410	1760
29	4750	5100	13000	2500	---	34900	18600	8940	7820	2410	2710	1660
30	4580	4660	13400	2900	---	33700	18100	8910	5750	2410	2620	1600
31	4270	---	13400	3000	---	32800	---	8550	---	2390	2400	---
TOTAL	251380	152720	470420	198980	83450	666960	695800	390730	178590	162410	74500	63060
MEAN	8109	5091	15170	6419	2980	21510	23190	12600	5953	5239	2403	2102
MAX	23000	6140	33000	13700	3240	52600	34400	19800	18000	11300	3010	3080
MIN	4220	4270	4360	2500	2670	2640	15900	6990	3030	2390	2050	1600
CFSM	.99	.62	1.85	.78	.36	2.62	2.82	1.53	.72	.64	.29	.26
IN.	1.14	.69	2.13	.90	.38	3.02	3.15	1.77	.81	.74	.34	.29
CAL YR 1977 TOTAL		2143420		MEAN 5872		MAX 33000		MIN 760		CFSM .72		IN 9.70
WTR YR 1978 TOTAL		3389000		MEAN 9285		MAX 52600		MIN 1600		CFSM 1.13		IN 15.34

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, Illinois, 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) National Geodetic Vertical Datum of 1929 (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.--Water-discharge records good except those for winter periods and those for period of no gage-height record, Sept. 1-16, 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 hm³), and by Danville sewage-disposal plant.

AVERAGE DISCHARGE.--57 years, 930 ft³/s (26.34 m³/s), 9.79 in/yr (249 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)	
Oct. 2	1615	*14800	419	*18.67	5.691	Mar. 15	1500	8270	234	13.01	3.965
Oct. 8	2145	6100	173	10.76	3.280	Mar. 21	2145	12100	343	16.63	5.069
Dec. 18	0045	8570	243	13.31	4.057	May 14	0900	7720	219	12.46	3.798

Minimum daily discharge, 90 ft³/s (2.55 m³/s) Sept. 11.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9130	1240	968	1110	192	219	2370	760	639	300	285	120
2	14600	2370	2580	915	200	225	1950	581	723	319	392	110
3	11800	2230	2760	390	208	224	1710	534	717	482	1540	105
4	7260	1760	2430	460	214	221	1620	608	610	627	1200	100
5	3850	1490	1500	770	216	216	1740	828	513	539	735	98
6	2830	1350	1200	778	226	205	2420	909	482	438	448	97
7	2260	1270	1000	635	233	209	3170	853	482	374	356	96
8	4410	1280	900	644	238	207	2890	1270	477	340	315	96
9	5790	1170	700	433	243	207	2100	2060	457	365	290	95
10	4460	1030	600	265	241	214	1750	1680	419	780	270	94
11	2770	949	550	504	242	275	1880	1310	387	686	245	90
12	2260	862	800	608	247	436	2080	1140	323	457	307	96
13	1930	781	1180	558	243	855	1750	4480	311	704	492	100
14	1710	794	3520	551	247	2340	1190	7280	305	2070	335	110
15	1530	994	6440	510	244	6580	871	5340	300	2580	240	105
16	1190	844	5550	476	249	6980	807	3590	290	1750	210	110
17	1240	672	7310	445	245	5820	772	2600	290	1220	190	261
18	1180	623	8270	423	237	4870	1120	2060	283	825	173	652
19	1000	582	7400	411	235	4380	1160	1590	289	616	158	492
20	816	562	4410	414	234	4740	1110	1640	299	462	150	255
21	770	597	2800	400	226	9200	1060	1540	300	392	140	200
22	880	569	2400	407	224	10900	953	1160	539	340	132	165
23	1540	536	2080	380	219	7090	882	1160	508	315	128	140
24	3430	548	1890	349	218	4930	850	1300	405	327	120	120
25	2880	531	1790	362	221	3840	841	1130	356	492	120	105
26	3020	498	1420	330	225	3040	1190	1040	405	374	160	104
27	2880	418	700	282	224	3250	1230	917	429	340	190	110
28	1970	442	650	219	215	4710	975	767	348	467	280	104
29	1520	490	1100	191	---	5130	868	735	315	378	190	93
30	1560	501	1260	189	---	4210	878	698	311	315	150	96
31	1270	---	1190	192	---	2780	---	668	---	275	130	---
TOTAL	103736	27983	77348	14606	6406	98503	44187	52228	12512	19949	10071	4519
MEAN	3344	933	2495	471	229	3178	1473	1685	417	644	325	151
MAX	14600	2370	8270	1110	249	10900	3170	7280	723	2580	1540	652
MIN	770	418	550	189	192	205	772	534	283	275	120	90
CFSM	2.59	.72	1.93	.37	.18	2.46	1.14	1.31	.32	.50	.25	.12
IN.	2.99	.81	2.23	.42	.18	2.84	1.27	1.51	.36	.58	.29	.13
CAL YR 1977	TOTAL	421344	MEAN	1154	MAX	14600	MIN	27	CFSM	.90	IN	12.15
WTR YR 1978	TOTAL	472048	MEAN	1293	MAX	14600	MIN	90	CFSM	1.00	IN	13.61

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 36.8 ft³/s (1.039 m³/s), 14.96 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,610 ft³/s (73.9 m³/s) Oct. 1, 1977, gage height, 10.33 ft (3.149 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Oct. 1	0600	*2610	73.9	*10.33	3.149
Mar. 21	0700	969	27.4	6.43	1.960

Minimum daily discharge, 4.4 ft³/s (0.125 m³/s) Aug. 24.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	22	66	22	10	7.6	62	25	30	12	15	16
2	199	21	48	21	9.8	7.5	53	24	31	15	24	14
3	132	20	39	21	9.4	7.5	42	24	28	22	26	12
4	108	19	34	23	9.0	7.5	37	41	27	17	18	11
5	93	18	30	20	8.8	7.5	35	49	26	15	15	11
6	84	18	28	19	8.7	7.5	46	37	24	14	13	9.5
7	79	21	25	22	8.6	7.5	120	53	27	109	10	9.1
8	135	24	23	25	8.6	7.5	100	59	26	119	8.4	9.0
9	100	23	21	28	8.5	7.5	70	46	24	42	31	8.5
10	78	20	26	19	8.4	7.6	54	38	22	29	69	8.0
11	64	18	35	16	8.3	8.4	80	36	22	23	22	7.2
12	52	17	47	14	8.1	16	68	41	22	21	18	7.0
13	44	16	59	14	8.4	50	60	80	20	27	16	8.0
14	38	16	226	13	8.5	253	37	138	19	24	14	9.2
15	33	17	149	13	8.3	310	30	103	19	20	13	12
16	26	41	133	12	8.1	320	27	92	19	19	10	14
17	22	35	184	12	7.9	257	25	73	18	18	7.4	12
18	18	26	81	12	7.8	160	27	60	20	17	6.7	12
19	18	22	51	12	7.6	239	40	53	21	16	9.2	11
20	17	21	48	12	7.5	263	62	125	18	14	8.8	9.6
21	16	19	34	11	7.5	591	45	95	61	13	7.6	8.9
22	16	18	25	11	7.5	168	38	63	29	12	6.4	8.4
23	36	18	20	11	7.5	142	37	75	22	15	5.4	7.4
24	31	17	17	11	7.6	116	38	61	19	22	4.4	6.6
25	29	17	16	12	7.8	104	36	52	17	19	11	6.1
26	53	16	14	12	8.0	146	34	46	17	17	30	5.8
27	39	16	14	11	7.9	131	30	42	16	16	25	5.6
28	32	16	13	10	7.8	95	28	38	15	14	132	5.4
29	27	15	26	10	---	86	27	35	13	12	34	5.2
30	25	18	25	10	---	78	26	33	13	11	22	5.0
31	24	---	23	10	---	69	---	31	---	9.4	22	---
TOTAL	3278	605	1580	469	231.9	3677.6	1414	1768	685	753.4	654.3	274.5
MEAN	106	20.2	51.0	15.1	8.28	119	47.1	57.0	22.8	24.3	21.1	9.15
MAX	1610	41	226	28	10	591	120	138	61	119	132	16
MIN	16	15	13	10	7.5	7.5	25	24	13	9.4	4.4	5.0
CFSM	3.17	.61	1.53	.45	.25	3.56	1.41	1.71	.68	.73	.63	.27
IN.	3.65	.67	1.76	.52	.26	4.10	1.57	1.97	.76	.84	.73	.31
CAL YR 1977	TOTAL	10912.4	MEAN	29.9	MAX	1610	MIN	3.5	CFSM	.90	IN	12.15
WTR YR 1978	TOTAL	15390.7	MEAN	42.2	MAX	1610	MIN	4.4	CFSM	1.26	IN	17.14

WABASH RIVER BASIN

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 3.27 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--40 years, 483 ft³/s (13.68 m³/s), 12.89 in/yr (327 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharges, 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 15	0300	5650 160	5.12 1.561	Mar. 27	0500	4170 118	4.36 1.329
Dec. 17	2300	5760 163	5.18 1.579	May 13	1000	4090 116	4.32 1.317
Mar. 16	2100	7300 207	6.12 1.865	June 27	0200	*12200 346	*9.39 2.862
Mar. 21	1900	7460 211	6.22 1.896	Aug. 28	1600	4310 122	4.46 1.359

Minimum daily discharge, 41 ft³/s (1.16 m³/s) Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9260	211	626	270	152	115	1020	392	260	608	110	560
2	7510	218	1080	182	148	115	752	338	243	1000	175	363
3	3190	209	916	164	142	115	616	309	234	2400	257	262
4	1810	198	809	181	138	112	560	340	215	1250	173	200
5	1250	184	800	251	136	110	553	434	201	743	127	160
6	937	180	761	252	136	110	1300	380	187	512	107	134
7	725	192	450	375	135	112	3080	362	205	674	100	116
8	1200	203	400	892	132	115	1780	627	259	2000	99	102
9	1310	200	360	370	130	118	1190	579	244	1000	97	92
10	877	191	330	260	128	125	944	448	200	547	540	89
11	649	177	300	240	126	140	1840	371	177	372	211	80
12	502	163	370	225	124	250	1280	375	170	293	144	70
13	411	150	652	220	135	700	825	2730	165	634	229	74
14	351	148	3260	210	130	2500	569	2890	150	749	161	77
15	320	151	5400	205	122	5440	460	2470	141	421	117	74
16	284	358	4380	200	120	6430	392	2500	139	302	97	112
17	256	632	5320	195	115	6430	352	1780	136	244	83	123
18	240	466	5190	190	112	5080	353	1250	139	205	80	102
19	223	343	3430	185	110	4370	387	929	153	181	127	83
20	205	297	2370	185	110	4590	451	807	195	164	98	70
21	191	281	1670	182	110	6810	431	798	686	151	78	62
22	178	247	1170	178	110	6380	380	604	324	139	66	59
23	181	235	902	175	112	4090	349	599	211	166	61	54
24	181	229	784	175	118	3190	382	773	173	556	57	51
25	180	216	841	195	128	2510	954	650	186	525	55	49
26	298	196	600	180	120	2910	1490	527	7080	318	89	46
27	338	189	520	160	118	3730	984	446	8170	229	109	44
28	295	184	450	160	115	2560	694	390	2290	179	3260	41
29	254	170	400	160	---	2020	547	350	1220	146	2200	41
30	227	181	350	160	---	1560	464	317	829	131	980	41
31	216	---	320	155	---	1240	---	290	---	121	872	---
TOTAL	34049	6999	45211	7132	3512	74077	25379	26055	24982	16960	10959	3431
MEAN	1098	233	1458	230	125	2390	846	840	833	547	354	114
MAX	9260	632	5400	892	152	6810	3080	2890	8170	2400	3260	560
MIN	178	148	300	155	110	110	349	290	136	121	55	41
CFSM	2.16	.46	2.86	.45	.25	4.70	1.66	1.65	1.64	1.08	.70	.22
IN.	2.49	.51	3.30	.52	.26	5.41	1.85	1.90	1.83	1.24	.80	.25

CAL YR 1977 TOTAL 137627 MEAN 377 MAX 9260 MIN 14 CFSM .74 IN 10.06
WTR YR 1978 TOTAL 278746 MEAN 764 MAX 9260 MIN 41 CFSM 1.50 IN 20.37

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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	TEMPER- ATURE (DEG C)
OCT 03...	1435	3030	129	1060	--	--
DEC 03...	1200	916	193	477	--	--
MAR 15...	1550	6130	481	7960	82	--
22...	1320	6430	250	4340	--	--
MAY 23...	1110	528	55	78	--	15.0
JUN 26...	1130	6580	2350	41800	--	--
26...	1740	8720	2120	49900	--	--
JUL 05...	1100	722	92	179	--	--
AUG 01...	0955	110	26	7.7	--	--

WABASH RIVER BASIN

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).

PERIOD OF RECORD.--October 1927 to current year. July 1924 to September 1927 (gage height only) in reports of State of Indiana, Department of Natural Resources.

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) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1927 to July 12, 1950, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--51 years, 9,594 ft³/s (272 m³/s), 11.72 in/yr (298 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, 71,900 ft³/s (2,040 m³/s) Mar. 25, gage height, 25.77 ft (7.855 m); minimum daily, 1,950 ft³/s (55.2 m³/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20200	6760	5800	17800	4450	3920	40100	21100	10700	7220	3340	4100
2	39700	6820	9390	17100	4470	3860	38000	20800	10500	7010	3590	3910
3	41400	7890	15400	15900	4600	3800	35800	20700	9000	10700	5130	3370
4	39600	7660	19700	15100	4600	3720	33600	20700	8040	14900	5580	3010
5	32700	7200	18500	16000	4600	3800	32000	20800	7400	13700	4460	2750
6	22400	6790	16600	17300	4600	3900	31900	20000	6880	11800	3590	2480
7	15900	6450	15800	17600	4600	4000	34600	18900	6590	11100	3190	2280
8	15100	6330	13500	18200	4600	4000	36400	16700	6390	13700	3050	2120
9	19200	6470	11500	16500	4520	3750	37500	14300	6390	15100	3020	1950
10	19000	6500	9200	12800	4500	3780	38200	13200	6520	12500	3020	2150
11	16200	6310	6400	10100	4500	3900	39600	11700	6970	10700	3320	2330
12	13400	6100	8200	8950	4500	4200	38200	10900	7390	9360	3150	2180
13	11600	6350	11000	8200	4450	6800	36200	18700	7150	9710	3380	2140
14	10300	6460	22700	7800	4400	10000	34300	29100	7050	10500	4030	2140
15	9310	6460	33500	7600	4360	17000	31500	29700	6830	10500	3490	2110
16	8550	7030	36200	7100	4320	34900	27500	29000	6540	8900	3190	2320
17	7830	7700	38800	6790	4360	39500	23800	28500	6160	7440	3050	2930
18	7370	7420	42100	6500	4250	43200	21500	26200	5940	6420	2800	3850
19	6970	6950	46000	6200	4200	46300	21000	22200	5780	5690	2650	4120
20	6690	6860	46000	5800	4000	50100	22700	18200	5370	5150	2610	3660
21	6310	7410	43000	5250	4000	55900	22400	16900	5520	4740	2510	3260
22	5890	7650	40000	4800	3900	63300	22700	16000	5360	4440	3010	2820
23	6040	7590	35000	4500	3840	66500	20600	15300	5190	4340	3300	2590
24	8200	7510	29000	4500	3740	70100	19800	15400	4660	5240	2890	2560
25	9960	7510	25000	5200	3740	71900	20400	15300	4260	5090	2680	2460
26	10100	7400	22000	4500	3740	71800	22200	15500	5730	4920	2480	2410
27	11000	7090	19000	4000	3740	66400	24200	14700	21500	4780	2430	2370
28	10100	6060	18000	3600	3860	52900	24300	13500	21200	4280	9110	2370
29	8300	5060	17000	3600	---	47300	22700	12200	12900	4110	8060	2220
30	7630	4570	17300	3600	---	44600	21400	11600	9380	4180	5610	2160
31	7150	---	18000	4000	---	42200	---	11200	---	3750	4320	---
TOTAL	454100	204360	709590	286890	119440	947330	875100	569000	239290	251970	116040	81120
MEAN	14650	6812	22890	9255	4266	30560	29170	18350	7976	8128	3743	2704
MAX	41400	7890	46000	18200	4600	71900	40100	29700	21500	15100	9110	4120
MIN	5890	4570	5800	3600	3740	3720	19800	10900	4260	3750	2430	1950
CFSM	1.32	.61	2.06	.83	.38	2.75	2.62	1.65	.72	.73	.34	.24
IN.	1.52	.68	2.37	.96	.40	3.17	2.93	1.90	.80	.84	.39	.27

CAL YR 1977 TOTAL 3085400 MEAN 8453 MAX 46000 MIN 900 CFSM .76 IN 10.32
WTR YR 1978 TOTAL 4854230 MEAN 13300 MAX 71900 MIN 1950 CFSM 1.20 IN 16.24

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--21 years, 141 ft³/s (3.995 m³/s), 13.77 in/yr (350 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 2	0100	*5310	150.4	*12.79	3.898	Mar. 21	1900	2920	82.7	10.31	3.142
Dec. 14	2400	3400	96.3	10.96	3.341	May 13	1300	3470	98.3	11.04	3.365
Mar. 14	2200	3920	111.0	11.58	3.530	Aug. 29	0300	3230	91.5	11.08	3.377

Minimum daily discharge, 10 ft³/s (0.28 m³/s) Aug. 23-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2910	48	310	74	44	33	215	97	77	49	19	249
2	2450	52	350	54	42	31	168	83	71	76	34	159
3	577	49	287	47	40	30	162	76	67	161	36	107
4	355	44	252	56	40	29	169	195	61	98	27	81
5	244	42	245	63	39	28	169	277	58	60	21	68
6	177	41	215	70	38	28	465	177	54	47	18	61
7	137	51	175	213	37	27	703	184	67	144	19	57
8	309	63	150	427	37	27	375	290	73	273	18	54
9	326	58	138	255	36	28	269	228	60	130	16	50
10	201	55	133	140	36	29	225	166	52	67	15	47
11	154	49	132	84	37	30	502	133	48	47	16	45
12	119	43	133	72	38	34	329	160	47	37	25	43
13	92	39	513	67	40	62	218	2410	45	59	18	42
14	80	38	2540	64	38	2580	160	1310	41	62	14	42
15	75	40	2230	63	37	2800	135	909	40	47	14	41
16	66	190	1200	61	35	1890	117	789	40	37	13	40
17	58	261	1680	60	35	1580	105	537	39	32	12	47
18	56	164	1130	60	34	935	110	385	39	28	12	50
19	52	117	638	60	33	853	141	288	43	26	12	45
20	48	104	479	60	33	944	163	229	38	25	11	41
21	43	96	351	60	32	2290	136	209	41	24	11	39
22	40	83	262	56	31	1250	116	172	37	22	11	38
23	39	82	214	56	31	774	113	251	34	21	10	37
24	37	80	197	56	32	759	124	359	33	32	10	36
25	38	73	170	60	33	805	255	256	32	36	10	35
26	66	66	140	60	36	960	330	196	413	30	10	35
27	78	63	134	60	38	848	217	158	281	26	22	35
28	64	62	120	64	35	517	160	134	118	23	1900	34
29	55	53	107	52	---	401	132	115	74	21	1690	34
30	50	61	102	48	---	312	116	100	56	20	458	34
31	49	---	91	46	---	257	---	88	---	19	429	---
TOTAL	9045	2267	14818	2668	1017	21171	6599	10961	2179	1779	4931	1726
MEAN	292	75.6	478	86.1	36.3	683	220	354	72.6	57.4	159	57.5
MAX	2910	261	2540	427	44	2800	703	2410	413	273	1900	249
MIN	37	38	91	46	31	27	105	76	32	19	10	34
CFSM	2.10	.54	3.44	.62	.26	4.91	1.58	2.55	.52	.41	1.14	.41
IN.	2.42	.61	3.97	.71	.27	5.67	1.77	2.93	.58	.48	1.32	.46

CAL YR 1977 TOTAL 46241.6 MEAN 127 MAX 2910 MIN 3.9 CFSM .91 IN 12.38
WTR YR 1978 TOTAL 79161.0 MEAN 217 MAX 2910 MIN 10 CFSM 1.56 IN 21.19

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1975 to September 1977.

WATER TEMPERATURE: July 1965 to September 1977. 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, 0 mg/L June 9, 1978.

SEDIMENT DISCHARGE: Maximum daily, 295,000 tons (268,000 tonnes) Dec. 22, 1967; minimum daily, 0.00 ton (0.000 tonne) June 9, 1978.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily, 3,130 mg/L March 21; minimum daily, 0 mg/L June 9.

SEDIMENT DISCHARGE: Maximum daily, 20,200 tons (18,300 tonnes) March 21; minimum daily, 0.00 ton (0.00 tonne) June 9.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION LOADS (MG/L) (T/DAY)		MEAN CONCENTRATION LOADS (MG/L) (T/DAY)		MEAN CONCENTRATION LOADS (MG/L) (T/DAY)		MEAN CONCENTRATION LOADS (MG/L) (T/DAY)		MEAN CONCENTRATION LOADS (MG/L) (T/DAY)	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	20	19	---	---	---	---	---	---	---	---	---	---
5	15	9.9	---	---	---	---	---	---	---	---	---	---
6	12	5.7	---	---	---	---	---	---	---	---	---	---
7	10	3.7	---	---	---	---	---	---	---	---	---	---
8	13	11	---	---	---	---	---	---	---	---	---	---
9	20	18	---	---	---	---	---	---	---	---	---	---
10	33	18	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	378	855	---	---	---	---	---	---
14	---	---	---	---	1410	10100	---	---	---	---	960	5400
15	---	---	---	---	1040	7090	---	---	---	---	350	2650
16	---	---	---	---	75	243	---	---	---	---	370	1890
17	---	---	---	---	20	91	---	---	---	---	460	1960
18	---	---	---	---	31	95	---	---	---	---	440	1110
19	---	---	---	---	34	59	---	---	---	---	340	783
20	32	4.1	---	---	44	57	---	---	---	---	620	1580
21	30	3.5	---	---	45	43	---	---	---	---	3130	20200
22	24	3.0	---	---	37	26	---	---	---	---	784	3480
23	23	2.4	---	---	28	16	---	---	---	---	120	251
24	13	1.3	---	---	23	12	---	---	---	---	60	123
25	3	.31	---	---	26	12	---	---	---	---	120	261
26	3	.53	---	---	29	11	---	---	---	---	240	622
27	2	.42	---	---	30	11	---	---	---	---	250	572
28	---	---	---	---	33	11	---	---	---	---	180	251
29	---	---	---	---	34	9.8	---	---	---	---	80	87
30	---	---	---	---	33	9.1	---	---	---	---	37	31
31	---	---	---	---	31	7.6	---	---	---	---	28	19

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN--Continued

SUSPENDED-SEDIMENT. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCN-TRATION (MG/L) LOADS (T/DAY)		MEAN CONCN-TRATION (MG/L) LOADS (T/DAY)		MEAN CONCN-TRATION (MG/L) LOADS (T/DAY)		MEAN CONCN-TRATION (MG/L) LOADS (T/DAY)		MEAN CONCN-TRATION (MG/L) LOADS (T/DAY)		MEAN CONCN-TRATION (MG/L) LOADS (T/DAY)	
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	36	21	36	9.4	6	1.2	430	57				
2	54	24	37	8.3	5	.96	500	103				
3	64	28	36	7.4	4	.72	---	---				
4	62	28	118	71	4	.66	---	---				
5	48	22	152	114	4	.63	---	---				
6	215	315	90	43	3	.44	---	---				
7	310	588	85	42	40	7.2	---	---				
8	238	241	158	124	40	7.9	---	---				
9	210	153	105	65	0	.00	---	---				
10	200	121	85	38	1	.14	---	---				
11	273	370	76	27	1	.13	---	---				
12	175	155	65	28	2	.25	---	---				
13	120	71	1120	8620	2	.24	---	---				
14	94	41	760	2690	3	.33	---	---				
15	78	28	400	982	3	.32	---	---				
16	66	21	150	320	2	.22	---	---				
17	48	14	57	83	1	.11	---	---				
18	38	11	27	28	1	.11	---	---				
19	32	12	8	6.2	5	.58	---	---				
20	32	14	4	2.5	4	.41	---	---				
21	32	12	7	4.0	5	.55	---	---				
22	38	12	4	1.9	4	.40	---	---				
23	37	11	639	513	4	.37	---	---				
24	38	13	440	426	3	.27	---	---				
25	102	88	120	83	2	.17	---	---				
26	100	89	150	79	874	1590	---	---				
27	38	22	70	30	1420	1180	---	---				
28	18	7.8	4	1.4	430	137	---	---				
29	22	7.8	6	1.9	280	56	---	---				
30	32	10	8	2.2	380	57	---	---				
31	---	---	7	1.7	---	---	---	---				

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (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, 84,400 acre-ft (104.1 hm³) April 12, elevation, 675.43 ft (205.871 m); minimum, 16,260 acre-ft (20.0 hm³) Feb. 24, elevation, 640.07 ft (195.093 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	660.95	49,140	
Oct. 31.....	656.03	39,610	-9,530
Nov. 30.....	640.27	16,480	-23,130
Dec. 31.....	657.32	42,010	+25,530
CAL YR 1977.....			+25,800
Jan. 31.....	640.13	16,330	-25,680
Feb. 28.....	640.10	16,300	-30
Mar. 31.....	671.89	74,730	+58,430
Apr. 30.....	666.45	61,220	-13,510
May 31.....	663.30	54,130	-7,090
June 30.....	661.22	49,710	-4,420
July 31.....	661.18	49,620	-90
Aug. 31.....	665.01	57,910	+8,290
Sept. 30.....	660.20	47,630	-10,280
WTR YR 1978.....			-1,510

03340900 BIG RACCOON CREEK AT FERNDAL, IN

LOCATION.--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--None. Datum of gage was 582.36 ft (177.503 m) National Geodetic Vertical Datum of 1929 (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.--22 years, 226 ft³/s (6.400 m³/s), 13.80 in/yr (351 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 CURRENT YEAR.--Maximum daily discharge, 1,310 ft³/s (37.1 m³/s) Jan. 13; minimum daily, 28 ft³/s (0.79 m³/s) July 24 to Aug. 6, Aug. 18-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	803	129	1060	62	50	92	1030	999	48	28	685
2	91	797	281	1050	62	50	93	1020	992	48	28	789
3	92	845	424	1040	62	50	93	1010	650	154	28	785
4	92	883	463	1080	62	50	93	830	148	207	28	781
5	93	873	463	1190	62	50	93	808	79	153	28	776
6	93	863	465	1280	62	50	94	1000	79	81	28	772
7	93	368	464	996	62	50	95	742	79	81	151	327
8	247	71	462	279	55	50	95	320	79	82	139	81
9	428	71	462	675	50	50	95	320	79	82	73	81
10	428	228	458	1140	50	50	96	320	79	195	73	81
11	621	505	349	1210	50	50	96	422	79	241	73	59
12	756	501	200	1280	50	51	362	494	62	241	73	48
13	753	498	203	1310	50	51	629	261	48	241	73	48
14	749	494	127	781	50	57	852	166	48	241	63	48
15	746	490	102	211	50	68	983	478	48	240	51	65
16	743	489	107	245	58	73	979	868	48	240	48	73
17	739	488	111	159	61	76	974	931	48	127	36	73
18	735	486	114	123	61	78	970	628	48	81	28	123
19	801	484	116	87	61	79	966	134	48	59	28	152
20	865	481	117	80	61	80	541	134	48	48	28	152
21	595	545	118	82	61	83	760	871	48	48	28	151
22	245	588	118	82	61	86	959	667	48	48	28	98
23	369	649	118	82	61	87	955	751	48	35	28	62
24	770	689	119	82	54	88	951	932	48	28	28	57
25	846	680	119	82	50	89	947	924	48	28	28	56
26	841	670	507	82	50	90	943	1040	48	28	28	56
27	834	660	977	82	50	90	1000	1040	246	28	28	56
28	829	499	543	82	50	91	1050	1030	286	28	270	56
29	823	296	78	78	---	92	1040	1020	180	28	547	56
30	817	159	288	76	---	92	1040	1010	98	28	86	56
31	810	---	824	67	---	92	---	1010	---	28	357	---
TOTAL	17031	16153	9426	16153	1578	2143	17936	22211	4886	3245	2561	6703
MEAN	549	538	304	521	56.4	69.1	598	716	163	105	82.6	223
MAX	865	883	977	1310	62	92	1050	1040	999	241	547	789
MIN	87	71	78	67	50	50	92	134	48	28	28	48
CAL YR 1977 TOTAL	58948.00		MEAN 162	MAX 977	MIN .00							
WTR YR 1978 TOTAL	120026.00		MEAN 329	MAX 1310	MIN 28							

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) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good. Flow regulated by Cecil M. Harden Lake (See sta 03340870).

AVERAGE DISCHARGE.--22 years, 477 ft³/s (13.51 m³/s), 14.46 in/yr (367 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, 5,150 ft³/s (146 m³/s) Dec. 14, gage height, 12.30 ft (3.749 m); minimum daily, 89 ft³/s (2.52 m³/s) Aug. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	998	950	628	1230	200	122	498	1340	1200	140	100	654
2	1090	950	649	1280	190	120	447	1320	1190	442	1100	834
3	630	950	677	1240	180	122	448	1300	1100	354	752	826
4	506	1060	723	1250	180	119	462	1700	518	284	298	813
5	381	1050	976	1380	180	117	449	1680	317	265	211	801
6	286	1040	1030	1510	180	121	570	1660	280	184	176	791
7	244	942	843	1720	180	120	784	1680	273	169	169	710
8	383	350	795	978	170	120	582	1150	256	264	279	261
9	619	285	918	663	160	121	498	912	239	436	190	213
10	597	260	817	1510	150	122	504	768	224	341	185	193
11	583	506	721	1510	150	132	1570	717	208	333	219	180
12	825	570	521	1520	150	144	903	905	200	305	248	153
13	833	571	1100	1600	150	189	1080	2300	181	772	241	141
14	830	570	3990	1460	150	2740	1050	1670	167	533	186	136
15	830	570	3040	475	151	2800	1290	1280	161	404	158	129
16	824	886	1700	400	149	2230	1260	1680	154	355	142	143
17	817	795	1710	330	156	2110	1240	1620	147	313	130	154
18	811	677	1250	300	160	1560	1280	1480	144	208	117	157
19	810	627	972	280	160	1400	1500	728	142	184	110	186
20	929	622	797	260	158	1600	1950	586	136	157	105	190
21	919	617	663	250	150	3000	1120	569	165	144	100	192
22	446	706	528	240	144	1680	1420	895	157	134	97	189
23	360	715	484	230	138	1270	1390	1290	141	127	94	137
24	619	808	462	230	135	1350	1380	741	131	168	92	120
25	926	799	458	240	129	1800	1490	617	128	162	89	113
26	1010	779	454	260	125	1660	1450	1280	131	136	89	109
27	1000	764	1070	320	125	1160	1370	1300	150	151	95	106
28	981	737	1290	360	124	877	1430	1280	281	122	1110	105
29	969	442	421	320	---	719	1400	1260	277	111	1000	95
30	958	410	348	260	---	610	1380	1240	182	113	679	105
31	952	---	697	220	---	548	---	1220	---	108	494	---
TOTAL	22966	21008	30732	23826	4374	30783	32195	38168	8980	7919	9055	8936
MEAN	741	700	991	769	156	993	1073	1231	299	255	292	298
MAX	1090	1060	3990	1720	200	3000	1950	2300	1200	772	1110	834
MIN	244	260	348	220	124	117	447	569	128	108	89	95
CFSM	1.65	1.56	2.21	1.72	.35	2.22	2.40	2.75	.67	.57	.65	.67
IN.	1.91	1.74	2.55	1.98	.36	2.56	2.67	3.17	.75	.66	.75	.74
CAL YR 1977	TOTAL	122547	MEAN	336	MAX	3990	MIN	16	CFSM	.75	IN	10.18
WTR YR 1978	TOTAL	238942	MEAN	655	MAX	3990	MIN	89	CFSM	1.46	IN	19.84

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) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 27, 1928.

REMARKS.--Records good except those for periods of no gage-height record, July 31 to Sept. 5, which are fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--51 years, 10,610 ft³/s (300.5 m³/s), 11.75 in/yr (298 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, 67,500 ft³/s (1,910 m³/s) Mar. 25, gage height, 24.16 ft (7.364 m); minimum daily, 2,550 ft³/s (72.2 m³/s) Sept. 17.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10200	7600	6050	17500	4170	3790	42000	22900	12900	8240	8550	5700
2	27400	7350	8680	17100	4270	3830	40100	22400	12700	7920	10500	5200
3	33000	7940	12500	15900	4330	3910	38100	21500	12100	9790	10800	4800
4	36300	8210	17500	15100	4380	3710	36200	20700	11000	14300	8200	4450
5	35800	7900	18900	15400	4390	3740	34500	22300	10000	15000	6400	3900
6	30300	7580	18200	16500	4280	3650	33400	22200	8900	13200	6200	3600
7	21000	7260	15400	17200	4340	3690	33900	21600	8500	11400	4500	3300
8	16200	6970	13200	18300	4400	3780	35300	21100	8100	12500	4300	3100
9	17700	6790	13100	16900	4250	3720	36300	18300	7800	15100	3900	2900
10	18900	6880	12100	13900	4200	3660	37400	16400	7500	15000	3900	2800
11	17200	6770	9570	11500	4250	3710	39300	14800	7700	11400	4200	2850
12	14500	6690	6300	9540	4200	3940	39900	13600	7800	9020	4700	2800
13	12500	6690	9320	8400	4150	4210	38600	16700	7900	10400	4850	2750
14	11100	6940	20700	7900	4090	9910	36900	27300	7700	13300	4750	2700
15	10000	6850	30000	7500	4140	22700	35200	30500	7500	12300	4450	2650
16	9370	7570	32700	7210	4230	29800	33000	31200	7200	10400	4200	2680
17	8700	8350	35500	6820	4120	34200	30400	31000	7000	8500	3750	2550
18	8300	8160	38100	5430	4040	38300	27500	30000	6800	7230	3600	3710
19	7870	7670	40900	6160	4060	42600	25300	27700	6560	6220	3450	4170
20	7570	7430	43500	5700	3990	47200	25700	22900	6300	5610	3150	4100
21	7260	7600	43400	5400	3890	51900	25400	20100	6200	5170	3100	3700
22	6820	8000	41000	5020	3820	56800	24900	18800	6130	4790	3100	3360
23	6460	8060	37900	4820	3830	59700	23900	19500	5780	4520	3450	3300
24	7300	7990	33800	4400	3740	61700	22300	21000	5310	4820	3350	3100
25	9350	7990	29700	4760	3760	66700	22100	19500	4800	5550	3150	3000
26	9960	7990	24700	5070	3660	66200	22900	18000	4610	5000	3100	2950
27	10700	7800	21100	3500	3700	61600	24600	17000	14500	4480	3400	2850
28	10400	7230	18400	3920	3800	55800	25700	16000	22300	4290	8400	2750
29	9450	6190	17400	3480	---	50800	25200	14900	16700	4100	9600	2750
30	8380	5440	17000	3470	---	46900	23700	13900	11000	3900	7400	2750
31	8060	---	17400	3860	---	44300	---	13500	---	3700	6600	---
TOTAL	448250	221890	704020	288660	114480	896450	939700	647300	269290	267150	163000	101220
MEAN	14460	7396	22710	9312	4089	28920	31320	20880	8976	8618	5258	3374
MAX	36300	8350	43500	18300	4400	66700	42000	31200	22300	15100	10800	5700
MIN	6460	5440	6050	3470	3660	3650	22100	13500	4610	3700	3100	2550
CFSM	1.18	.60	1.85	.76	.33	2.36	2.55	1.70	.73	.70	.43	.28
IN.	1.36	.67	2.14	.88	.35	2.72	2.85	1.96	.82	.81	.49	.31
CAL YR 1977 TOTAL		3173090	MEAN	8693	MAX	43500	MIN	1000	CFSM	.71	IN	9.62
WTR YR 1978 TOTAL		5061410	MEAN	13870	MAX	66700	MIN	2550	CFSM	1.13	IN	15.35

WABASH RIVER BASIN

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE&SW¼ 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) National Geodetic Vertical Datum of 1929. Prior to July 17, 1951, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--40 years, 11,530 ft³/s (326.5 m³/s), 11.90 in/yr (302 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, 79,800 ft³/s (2,260 m³/s) Mar. 27, gage height, 21.81 ft (6.648 m); minimum daily, 2,790 ft³/s (79.0 m³/s) Sept. 16.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7850	8420	6950	18900	4400	4170	59500	25500	13400	11000	4460	6810
2	14900	8020	8260	18100	4620	4180	55700	24500	12800	8820	4370	5750
3	24500	7870	10400	17800	4710	4230	52500	23600	12400	8730	11100	5430
4	28300	8460	14300	16700	4750	4230	49800	23000	11300	10900	11500	5020
5	30800	8590	19900	16100	4770	4080	47000	23400	10100	14100	9110	4560
6	32500	8300	23300	16800	4770	4080	44800	24100	9290	14100	6910	4250
7	32800	8000	20100	17800	4680	4080	42600	24300	8760	12700	5490	3980
8	27900	7700	16300	19800	4720	4130	41100	25200	8390	12000	4730	3730
9	21100	7390	14900	19600	4750	4140	40400	23300	8040	13000	4350	3440
10	20400	7210	14500	17000	4640	4080	40800	19600	7870	14800	4200	3060
11	20100	7210	12900	14900	4590	4070	42500	17000	7860	13900	4070	2890
12	17800	7100	9830	12200	4610	4280	44500	15700	8160	10900	4360	3000
13	15000	6990	8330	10400	4600	4690	46000	19300	8470	9480	5090	2980
14	13100	7040	20800	9720	4550	12100	46400	25500	8260	13400	5020	2890
15	11700	7240	30500	9530	4480	26400	45700	28900	8110	14500	5020	2840
16	10700	8710	32600	8860	4520	33000	44200	30800	7910	13100	4720	2790
17	9940	10000	34000	8130	4560	36400	42100	32300	7580	10400	4220	2830
18	9210	9340	36200	7640	4470	38600	39600	33300	7250	8650	3970	3140
19	8740	8800	38700	7000	4410	42300	36300	33500	7240	7440	3750	3830
20	8310	8300	42200	6700	4410	47400	33200	32300	7190	6550	3540	4300
21	7990	8120	45800	6300	4340	53400	31100	28200	6700	5930	3390	4290
22	7650	8340	49000	6000	4250	59100	29400	23400	6550	5430	3290	3940
23	7230	8590	50900	5700	4190	63500	28200	22500	6500	5060	3260	3630
24	7000	8570	50800	5400	4170	68400	26900	24500	6210	5120	3740	3360
25	8290	8480	48600	5250	4100	74900	26000	22000	5750	5300	3630	3200
26	10600	8420	46000	5410	4090	78100	25500	19700	5310	5660	3390	3130
27	10900	8340	38000	5200	4030	79500	25500	18700	5900	5490	3230	3040
28	11300	8100	32000	4300	4090	78400	26200	17600	16200	5130	3560	3000
29	10900	7410	26000	4200	---	75000	26700	16200	19800	4930	8840	2960
30	9700	6530	22000	4100	---	69800	26500	14800	15000	5250	10500	2900
31	8840	---	19000	4000	---	64300	---	14000	---	5420	8310	---
TOTAL	466050	241590	843070	329540	125270	1055040	1166700	726700	274300	287190	165120	110970
MEAN	15030	8053	27200	10630	4474	34030	38890	23440	9143	9264	5326	3699
MAX	32800	10000	50900	19800	4770	79500	59500	33500	19800	14800	11500	6810
MIN	7000	6530	6950	4000	4030	4070	25500	14000	5310	4930	3230	2790
CFSM	1.14	.61	2.07	.81	.34	2.59	2.96	1.78	.70	.70	.41	.28
IN.	1.32	.68	2.38	.93	.35	2.98	3.30	2.05	.78	.81	.47	.31
CAL YR 1977	TOTAL	3365190	MEAN	9220	MAX	50900	MIN	1100	CFSM	.70	IN	9.51
WTR YR 1978	TOTAL	5791540	MEAN	15870	MAX	79500	MIN	2790	CFSM	1.21	IN	16.37

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, 33.5°C June 27, July 21-23; minimum, 0.0°C Dec. 7-14, Mar. 18.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	14.5	14.5	14.0	3.0	2.5	2.0	2.0	3.0	2.5	7.5	6.0
2	20.0	17.0	15.0	14.5	3.5	3.0	2.0	1.0	4.0	3.0	6.5	5.0
3	17.0	16.5	16.0	15.0	4.0	3.5	1.0	.5	4.0	4.0	5.0	4.5
4	16.5	15.5	16.0	15.5	3.5	3.0	1.0	.5	5.0	4.0	4.5	3.5
5	15.5	15.5	16.0	15.5	3.0	2.5	.5	.5	5.0	4.5	3.5	3.0
6	15.5	15.5	16.0	16.0	2.0	1.0	1.5	.5	4.5	3.5	5.0	3.5
7	15.5	15.0	16.0	16.0	1.0	.0	2.5	1.5	3.0	2.5	5.0	4.5
8	15.0	15.0	16.5	16.0	.5	.0	2.5	2.0	3.0	2.5	4.0	3.5
9	15.0	14.5	16.5	16.0	.5	.0	2.0	.5	3.0	2.5	4.5	3.5
10	14.5	14.0	16.0	14.0	.5	.0	.5	.5	3.5	2.5	6.0	4.0
11	14.0	13.5	14.0	12.5	.5	.0	.5	.5	4.5	3.0	6.0	5.5
12	13.5	13.5	12.5	11.0	.5	.0	.5	.5	5.0	4.0	8.0	6.0
13	14.0	13.0	11.0	9.5	.5	.0	.5	.5	5.0	4.5	7.0	5.0
14	13.5	13.0	9.5	9.0	.5	.0	.5	.5	5.5	4.5	4.0	2.5
15	13.5	13.0	9.0	9.0	1.5	.5	1.0	.5	5.5	5.0	2.5	1.5
16	13.0	12.5	9.5	9.0	3.0	1.5	1.5	1.0	5.0	4.5	1.5	.5
17	13.0	12.5	10.0	9.5	6.0	3.0	1.5	1.0	4.5	4.0	1.5	.5
18	13.5	13.0	10.0	9.5	7.0	6.0	1.0	.5	5.0	4.0	1.0	.0
19	13.0	13.0	9.5	9.0	8.5	7.0	1.0	1.0	4.0	3.0	3.5	1.0
20	13.5	13.0	9.5	9.0	8.0	4.5	2.0	1.0	3.0	2.5	5.5	2.0
21	14.0	13.0	9.5	9.0	5.0	2.5	2.5	1.5	3.5	3.0	7.5	5.0
22	14.5	13.5	9.0	8.5	3.0	2.0	2.5	2.0	3.5	2.5	9.0	4.5
23	15.5	14.5	8.5	8.0	4.0	2.0	3.0	2.0	3.5	3.5	7.5	7.0
24	15.5	15.0	7.5	7.0	4.5	2.5	4.0	3.0	5.0	3.5	7.5	6.0
25	15.5	14.5	7.5	6.0	3.5	.5	4.0	3.5	5.5	5.0	6.0	5.5
26	14.5	14.5	6.0	4.5	1.0	.5	3.5	1.5	6.5	5.0	5.5	5.0
27	14.5	14.0	4.5	3.5	1.0	1.0	1.5	.5	6.0	5.0	5.0	4.5
28	14.5	14.0	3.5	2.5	1.0	.5	1.0	.5	7.0	5.5	---	---
29	15.0	14.0	3.0	2.5	.5	.5	1.0	1.0	---	---	---	---
30	14.5	14.0	3.0	2.5	.5	.5	1.5	1.0	---	---	---	---
31	14.0	14.0	---	---	2.0	.5	2.5	1.5	---	---	---	---
MONTH	20.5	12.5	14.5	2.5	8.5	.0	4.0	.5	7.0	2.5	9.0	.0

WABASH RIVER BASIN

03342000 WABASH RIVER AT RIVERTON, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					29.0	27.5	32.5	31.5	26.0	25.5		
2					28.5	27.0	33.0	31.5	---	---		
3					27.5	26.0	32.5	31.0	---	---		
4					26.5	25.5	31.0	29.0	---	---		
5					26.5	25.0	29.0	26.5	---	---		
6					26.5	26.0	27.5	25.0	---	---		
7					26.5	25.5	29.0	26.5	---	---		
8					26.0	24.5	30.0	26.5	---	---		
9					27.0	24.0	30.0	28.5	---	---		
10					27.0	25.0	24.5	27.0	---	---		
11					27.5	25.5	27.0	25.0	---	---		
12					27.5	26.0	26.0	24.5	---	---		
13					28.0	25.5	26.5	26.0	---	---		
14					27.5	25.5	26.5	23.0	---	---		
15					26.5	24.5	25.0	22.0	---	---		
16					25.0	23.5	24.5	24.5	---	---		
17					26.5	24.0	24.0	26.0	---	---		
18					27.5	25.5	29.5	27.5	---	---		
19					28.0	25.0	31.5	29.5	---	---		
20					28.5	26.0	33.0	30.0	---	---		
21					30.0	27.5	33.5	31.0	---	---		
22					30.5	27.0	33.5	32.0	---	---		
23					29.0	27.5	33.5	31.5	---	---		
24					29.5	26.5	31.0	27.5	---	---		
25					30.0	28.0	31.0	27.5	---	---		
26					31.5	28.5	30.5	28.0	---	---		
27					33.5	30.0	29.5	26.5	---	---		
28					32.5	27.5	30.0	27.0	---	---		
29					29.0	27.0	31.0	27.5	---	---		
30					32.0	29.0	29.0	24.5	---	---		
31					---	---	27.0	23.5	---	---		
MONTH					33.5	23.5	33.5	22.0				

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 Busseron Creek, 1.9 miles (3.1 km) northwest of Hymera, 4.1 miles (6.6 km) upstream from West Fork Busseron 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) National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service bench mark).

REMARKS.--Records fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--12 years, 18.3 ft³/s (0.518 m³/s), 14.88 in/yr (378 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, about 1,100 ft³/s (31.2 m³/s) Mar. 14, gage height, unknown; no flow Aug. 21-27.

NOTE.--No gage-height record Mar. 14-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	2.6	45	1.6	1.4	2.1	21	11	8.9	.90	4.9	16
2	11	2.5	26	1.5	1.3	2.3	15	8.0	6.5	.80	33	13
3	6.0	2.3	19	1.4	1.2	2.5	11	6.4	3.6	.27	36	9.7
4	4.3	2.2	14	1.4	1.1	2.6	7.6	7.0	1.8	.13	17	6.8
5	3.4	1.7	176	1.6	1.0	2.5	7.0	22	1.0	.07	8.6	4.5
6	3.0	1.7	72	1.8	.96	2.2	22	16	.68	.05	4.5	3.0
7	3.0	1.8	59	2.5	.92	2.1	20	32	7.2	.07	4.1	1.8
8	17	2.2	45	3.6	.90	2.8	15	33	2.8	.07	2.2	1.5
9	7.5	1.8	53	4.2	.94	3.3	11	26	2.5	.33	1.5	1.4
10	4.7	1.5	45	2.5	1.3	5.0	10	19	2.0	.07	1.2	1.1
11	3.6	1.2	33	1.5	1.4	10	34	18	2.0	.02	.90	.90
12	2.8	1.0	24	1.5	1.9	25	21	74	1.7	.01	.90	.80
13	2.6	.90	142	1.5	2.6	45	14	150	1.2	1.1	.68	.58
14	2.5	.80	399	1.5	3.3	310	11	76	1.1	.41	.50	1.0
15	2.3	.90	88	1.5	4.0	220	7.9	67	.90	7.2	.33	.68
16	2.2	35	65	1.4	2.5	140	6.1	59	.80	1.5	.27	.50
17	1.7	19	55	1.4	1.9	80	5.0	48	.58	1.0	.10	.33
18	1.7	11	43	1.3	1.7	52	20	38	.80	.68	.05	.19
19	1.4	6.4	34	1.3	1.6	110	72	29	1.0	.41	.03	.10
20	1.4	4.9	27	1.3	1.5	76	54	24	.68	.27	.01	.07
21	1.7	9.5	21	1.2	1.4	100	36	19	.58	.10	.00	.13
22	1.7	5.8	15	1.2	1.4	35	27	16	.33	.02	.00	.13
23	1.1	4.6	10	1.6	1.3	60	29	199	.27	1.1	.00	.05
24	.90	3.7	7.0	2.9	1.4	100	44	99	.19	9.2	.00	.02
25	15	3.2	5.0	3.4	1.5	160	54	60	.19	1.8	.00	.02
26	27	2.3	3.5	3.5	1.6	130	36	48	.19	1.2	.00	.01
27	13	2.4	2.9	3.2	1.7	80	26	39	.10	.80	.00	.01
28	7.0	2.2	2.3	2.5	1.9	54	21	29	.05	.50	26	.01
29	4.5	2.1	2.0	2.1	---	40	17	22	.02	.33	24	.01
30	3.2	18	1.9	1.8	---	34	14	16	.07	31	33	.02
31	2.8	---	1.7	1.6	---	27	---	12	---	10	22	---
TOTAL	182.00	155.20	1536.3	61.3	45.62	1915.4	690.6	1335.4	49.73	71.41	221.77	64.36
MEAN	5.87	5.17	49.6	1.98	1.63	61.8	23.0	43.1	1.66	2.30	7.15	2.15
MAX	27	35	399	4.2	4.0	310	72	199	8.9	31	36	16
MIN	.90	.80	1.7	1.2	.90	2.1	5.0	6.4	.02	.01	.00	.01
CFSM	.35	.31	2.97	.12	.10	3.70	1.38	2.58	.10	.14	.43	.13
IN.	.41	.35	3.42	.14	.10	4.27	1.54	2.97	.11	.16	.49	.14
CAL YR 1977	TOTAL	4394.93	MEAN	12.0	MAX	399	MIN	.00	CFSM	.72	IN	9.79
WTR YR 1978	TOTAL	6329.09	MEAN	17.3	MAX	399	MIN	.00	CFSM	1.04	IN	14.10

WABASH RIVER BASIN

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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--12 years, 13.4 ft³/s (0.379 m³/s), 12.64 in/yr (321 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	Unknown	1000	28.32	Unknown		May 13	0400	574	16.26	10.78	3.286
Mar. 14	Unknown	*1200	31.15	^a *12.18	3.712	May 23	2200	709	20.08	11.14	3.396

Minimum daily discharge, 0.16 ft³/s (0.005 m³/s) Sept. 29, 30.

^aFrom floodmark.

NOTE.--No gage-height record Mar. 9-15.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	2.1	67	3.6	1.9	2.8	7.2	7.0	2.1	6.2	1.4	1.7
2	9.0	2.3	20	2.5	1.4	3.4	4.3	5.3	2.5	5.0	12	.87
3	2.3	1.9	11	1.9	1.8	3.5	5.2	4.7	2.0	1.4	15	.63
4	1.6	1.4	7.4	1.8	1.7	3.2	5.3	19	1.7	.81	2.9	.48
5	1.2	1.2	150	2.2	1.5	2.4	4.6	22	1.2	.63	1.9	.52
6	.81	1.2	35	2.5	1.5	2.4	15	10	1.5	.43	1.2	.48
7	.87	1.7	14	3.2	1.5	2.5	15	28	3.5	.35	1.3	.39
8	22	2.7	15	5.0	1.5	3.0	2.4	28	2.2	.31	.94	.35
9	8.0	2.2	40	3.5	1.5	3.9	6.0	21	1.7	.52	.52	.31
10	2.8	1.5	15	2.3	1.7	10	6.5	11	1.4	.57	.48	.40
11	1.6	.87	7.2	1.7	2.0	12	34	8.8	1.1	.35	.48	.36
12	.81	.69	7.0	1.7	2.5	50	12	63	1.1	.28	.75	.34
13	.75	.57	81	1.7	4.0	110	8.2	206	.87	.94	.75	.33
14	.63	.57	400	1.7	5.0	500	7.0	53	.87	1.3	.63	.33
15	.69	.87	42	1.7	4.3	250	6.0	31	.87	5.6	.40	.34
16	.69	60	26	1.7	3.7	178	4.9	30	.94	1.8	.39	.35
17	.63	18	22	1.7	2.9	93	4.9	17	.87	.69	.39	.28
18	.63	8.4	14	1.6	2.4	54	22	11	1.5	.39	.28	.25
19	.87	5.6	9.8	1.6	2.1	119	7.8	8.2	2.1	.28	.35	.22
20	1.1	5.3	8.6	1.5	1.9	81	37	6.7	1.2	.25	.38	.22
21	.94	14	6.7	1.5	1.8	118	17	5.2	1.0	.20	.35	.22
22	.75	8.4	5.5	1.5	1.6	35	12	4.4	.94	.17	.34	.21
23	.87	6.2	5.0	1.7	1.7	52	19	247	.81	.75	.28	.20
24	1.1	4.9	4.5	2.7	1.9	81	32	65	.75	8.0	.28	.19
25	8.0	4.0	3.9	4.8	2.0	192	46	19	.75	1.6	.28	.18
26	32	2.7	3.5	4.2	2.1	40	22	11	.81	.87	.28	.17
27	9.6	2.5	2.9	3.5	2.4	25	13	6.8	.81	.52	.28	.17
28	5.6	2.6	2.5	3.0	2.4	17	0.4	5.2	.69	.43	9.0	.17
29	3.8	2.5	2.5	2.6	---	12	2.0	4.0	.63	.35	9.6	.16
30	2.8	31	2.6	2.7	---	9.8	10	3.2	.75	17	13	.16
31	2.2	---	2.8	2.0	---	8.8	---	2.4	---	3.2	5.2	---
TOTAL	157.64	197.87	1034.4	75.3	63.4	2055.5	480.9	963.9	39.16	61.19	81.33	10.98
MEAN	5.09	6.60	33.4	2.43	2.26	66.3	14.0	31.1	1.31	1.97	2.62	.37
MAX	33	60	400	5.0	5.0	500	78	247	3.5	17	15	1.7
MIN	.63	.57	2.5	1.5	1.5	2.5	4.6	2.4	.63	.17	.28	.16
CFSM	.35	.46	2.32	.17	.16	4.60	1.11	2.16	.09	.14	.18	.03
IN.	.41	.51	2.67	.19	.16	5.31	1.24	2.49	.10	.16	.21	.03
CAL YR 1977	TOTAL	3464.17	MEAN	4.49	MAX	402	MIN	.02	CFSM	.66	IN	8.95
WTR YR 1978	TOTAL	5221.57	MEAN	14.3	MAX	500	MIN	.16	CFSM	.99	IN	13.49

03342150 WEST FORK BUSSEYON CREEK NEAR HYMERA, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: February 1978 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
FER 11...	1850	1.9	44	.23
MAP 09...	1715	4.4	0	.00

WABASH RIVER BASIN

03342250 MUD CREEK NEAR DUGGER, IN

LOCATION.--Lat 39°06'28", long 87°16'42", in SE¼ 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) National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service bench mark).

REMARKS.--Records poor. Flow affected by surface-mined areas.

AVERAGE DISCHARGE.--12 years, 13.6 ft³/s (0.385 m³/s), 15.52 in/yr (394 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, 890 ft³/s (25.2 m³/s) Mar. 13, gage height, unknown; minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 27-29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	5.7	15	6.6	4.5	5.6	15	13	5.5	25	7.4	3.2
2	5.5	5.3	9.6	7.0	4.4	6.2	14	12	5.7	10	5.7	2.7
3	3.6	5.1	8.2	4.5	4.2	6.8	14	11	5.3	6.4	11	2.7
4	1.4	5.1	6.9	3.9	3.9	6.4	15	23	4.9	4.5	5.3	2.6
5	3.2	5.1	29	4.1	3.7	6.0	15	25	4.5	3.3	3.6	2.7
6	3.4	5.1	18	4.7	3.6	5.6	15	18	4.7	2.9	3.3	2.7
7	3.9	6.0	47	5.4	3.5	5.3	16	23	14	2.6	4.5	2.6
8	9.6	6.4	62	7.7	3.3	4.9	15	25	7.2	2.6	3.9	2.7
9	4.5	5.5	103	11	3.2	4.6	14	25	5.7	2.7	3.8	2.7
10	3.6	4.6	60	7.1	3.2	4.3	14	17	5.1	2.7	4.3	2.7
11	3.2	3.3	45	4.8	3.1	14	19	15	4.7	2.5	3.6	2.7
12	2.7	2.7	48	3.8	3.1	50	14	26	7.6	2.2	4.7	2.7
13	2.4	2.3	228	3.7	5.2	340	13	64	5.3	5.1	4.1	2.7
14	2.1	2.2	149	3.8	10	150	12	38	4.7	2.9	3.6	4.9
15	2.2	5.3	38	3.9	10	74	12	29	4.7	17	3.4	3.3
16	2.1	38	25	4.0	8.5	38	12	27	4.5	11	4.7	2.9
17	2.1	17	20	4.1	7.0	50	11	20	4.1	6.0	3.6	2.6
18	2.1	12	16	3.8	5.8	88	24	15	7.6	4.5	3.2	2.4
19	2.0	11	14	3.6	4.9	200	54	12	6.4	3.6	2.6	2.4
20	2.0	9.6	12	3.5	4.4	140	32	10	5.3	3.2	2.7	2.1
21	2.1	16	11	3.4	4.1	190	20	9.6	5.3	3.0	2.7	2.0
22	2.4	11	11	3.3	3.8	63	16	9.3	4.7	2.9	2.7	1.9
23	4.7	9.6	11	3.2	3.5	115	21	49	4.1	3.0	2.6	1.7
24	3.2	8.2	10	5.0	3.3	220	25	27	3.9	9.6	2.5	1.6
25	29	7.9	9.0	7.8	3.7	300	31	15	3.8	6.0	2.5	1.4
26	18	10	8.0	11	4.1	180	23	11	3.8	4.1	2.4	1.4
27	8.4	16	7.0	8.9	4.5	96	17	9.3	3.4	3.9	3.2	1.3
28	6.7	12	6.0	7.6	4.9	54	14	8.2	3.3	3.2	3.9	1.3
29	5.5	6.2	5.4	6.4	---	27	13	7.2	3.3	2.7	2.5	1.3
30	6.0	10	5.4	5.4	---	16	15	6.4	32	23	21	1.4
31	5.7	---	5.6	4.7	---	15	---	6.0	---	16	5.7	---
TOTAL	174.3	264.2	1043.1	167.7	131.4	2475.7	545	606.0	185.1	198.1	140.7	71.3
MEAN	5.62	8.81	33.6	5.41	4.69	79.9	18.2	19.5	6.17	6.39	4.54	2.38
MAX	29	38	228	11	10	340	54	64	32	25	21	4.9
MIN	1.4	2.2	5.4	3.2	3.1	4.3	11	6.0	3.3	2.2	2.4	1.3
CFSM	.47	.74	2.82	.46	.39	6.71	1.53	1.64	.52	.54	.38	.20
IN.	.54	.83	3.26	.52	.41	7.74	1.70	1.89	.58	.62	.44	.22
CAL YR 1977	TOTAL	3588.48	MEAN	9.83	MAX	228	MIN	.40	CFSM	.83	IN	11.22
WTR YR 1978	TOTAL	6002.60	MEAN	16.4	MAX	340	MIN	1.3	CFSM	1.38	IN	18.76

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) National Geodetic Vertical Datum of 1929 (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.--12 years, 140 ft³/s (3.965 m³/s), 13.78 in/yr (350 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, 3,440 ft³/s (97.4 m³/s) Mar. 15, gage height, 14.67 ft (4.471 m); minimum daily, 3.6 ft³/s (0.102 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	92	450	41	18	21	226	121	61	111	89	47
2	137	91	185	55	18	25	178	99	52	47	73	32
3	66	87	110	50	18	29	152	93	47	29	364	25
4	48	59	76	46	17	26	141	132	42	20	175	21
5	36	21	375	42	17	24	121	260	38	14	88	19
6	32	20	745	41	17	23	98	187	34	13	59	16
7	28	22	349	40	16	24	148	206	75	13	52	15
8	60	24	227	53	16	27	115	389	91	14	42	14
9	70	39	357	68	16	33	104	312	57	15	32	13
10	40	32	270	43	16	45	184	188	43	16	28	16
11	31	24	173	34	15	100	228	144	39	15	28	16
12	25	17	141	30	15	269	159	263	34	13	25	13
13	21	13	353	27	20	426	128	954	34	16	25	12
14	18	10	1350	26	28	1580	106	1210	31	17	20	12
15	17	12	1720	24	24	3000	96	743	36	80	22	13
16	16	64	1270	23	22	2820	88	572	33	51	25	11
17	14	520	758	23	20	2110	82	396	26	24	17	10
18	12	200	530	23	19	1530	166	255	24	17	17	8.9
19	11	130	373	22	18	1190	418	189	39	12	14	8.0
20	11	90	251	22	17	1110	688	142	34	7.8	13	7.2
21	10	170	151	21	17	1080	356	112	26	7.2	14	6.3
22	9.7	150	113	21	17	955	223	89	19	6.7	11	5.9
23	12	120	93	21	16	637	191	472	17	6.9	9.7	5.5
24	11	94	81	22	18	737	711	1180	16	50	9.2	5.4
25	63	74	70	35	24	1260	399	834	15	73	8.7	5.0
26	293	56	58	27	21	1370	324	402	11	29	9.2	4.5
27	167	43	49	24	20	852	207	228	11	21	8.9	4.2
28	130	40	60	22	20	532	160	158	10	17	12	3.7
29	113	40	54	21	---	388	133	119	8.1	16	74	3.6
30	101	160	50	20	---	319	134	90	21	240	70	3.6
31	94	---	54	19	---	269	---	71	---	215	121	---
TOTAL	1917.7	2514	10896	986	520	22811	5964	10610	1024.1	1226.6	1555.7	376.8
MEAN	61.9	83.8	351	31.8	18.6	736	199	342	34.1	39.6	50.2	12.6
MAX	293	520	1720	68	28	3000	688	1210	91	240	364	47
MIN	9.7	10	49	19	15	21	82	71	8.1	6.7	8.7	3.6
CFSM	.45	.61	2.54	.23	.14	5.33	1.44	2.48	.25	.29	.36	.09
IN.	.52	.68	2.94	.27	.14	6.15	1.61	2.86	.28	.33	.42	.10
CAL YR 1977	TOTAL	32522.2	MEAN	89.1	MAX	1720	MIN	1.8	CFSM	.65	IN	8.77
WTR YR 1978	TOTAL	60401.9	MEAN	165	MAX	3000	MIN	3.6	CFSM	1.20	IN	16.28

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 September 1978 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 446.35 ft (136.047 m) National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service bench mark).

REMARKS.--Records poor. Flow affected by surface-mined areas and backwater from Busseron Creek. Beginning in May 1978, some of the flow was diverted through a newly dredged ditch south of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 594 ft³/s (16.8 m³/s) Mar. 14, 1978, gage height, 9.96 ft (3.036 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Jan. 16, 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 594 ft³/s (16.8 m³/s) Mar. 14, gage height, 9.96 ft (3.036 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	8.7	31	5.2	3.8	4.6	20	12	11	52	9.8	2.9
2	25	8.0	15	6.4	3.5	5.0	17	11	8.5	20	19	2.8
3	10	6.6	10	4.8	3.3	5.4	15	9.5	8.2	7.7	42	2.4
4	2.1	3.0	7.0	3.8	3.2	6.0	14	24	4.6	5.8	16	2.0
5	5.4	2.1	85	3.3	3.1	5.7	13	43	4.6	4.8	12	2.1
6	5.2	3.2	52	3.8	3.0	5.2	27	25	4.6	5.8	9.5	2.4
7	5.2	6.8	39	4.7	2.9	4.9	24	32	9.8	4.0	10	2.6
8	14	5.8	34	6.0	2.8	4.5	20	44	8.0	6.2	8.2	2.1
9	4.6	3.0	117	9.0	2.8	4.8	18	51	6.8	4.6	8.0	1.8
10	5.4	2.1	65	5.0	2.9	7.4	16	27	5.2	4.8	9.5	1.7
11	6.2	1.6	32	4.2	3.0	13	27	20	3.4	2.8	7.7	1.6
12	6.6	2.6	24	3.3	3.3	57	18	38	4.2	2.4	8.5	1.7
13	5.8	1.5	194	3.2	4.1	146	15	108	3.4	3.9	9.5	2.1
14	1.4	2.9	298	3.1	6.4	563	13	85	2.6	3.2	6.8	2.5
15	1.2	3.0	119	3.0	9.2	223	11	55	2.5	19	4.0	2.4
16	.30	112	87	3.1	8.8	300	9.0	55	2.2	16	4.8	1.9
17	.80	32	61	3.2	7.0	243	10	36	2.0	9.0	3.2	1.7
18	3.2	15	35	3.2	6.6	186	32	26	2.9	7.0	3.2	1.9
19	.60	12	26	3.1	4.9	173	80	20	3.9	6.0	2.9	2.2
20	2.5	9.8	21	3.0	4.3	151	51	17	2.4	5.2	2.6	1.6
21	2.0	20	18	2.9	3.7	166	30	13	4.8	3.4	2.6	1.5
22	1.4	12	13	2.8	3.4	135	23	13	2.5	4.8	2.4	1.6
23	.70	9.2	10	2.7	3.2	114	26	73	1.9	6.6	2.2	1.3
24	.90	6.0	9.0	2.9	3.0	130	28	89	1.9	31	2.5	1.2
25	21	4.6	8.3	8.6	3.2	284	54	50	2.6	30	2.5	1.2
26	71	6.0	7.4	7.8	3.5	120	34	30	2.5	12	3.2	1.2
27	19	7.3	6.3	7.0	3.8	50	22	23	2.4	9.2	2.8	1.2
28	13	6.4	5.5	6.2	4.1	39	17	18	2.2	6.2	2.5	1.3
29	6.4	3.0	4.7	5.6	---	33	14	15	1.8	5.8	2.9	2.0
30	5.4	8.7	4.5	5.0	---	28	13	14	6.6	42	17	2.0
31	7.5	---	4.8	4.4	---	24	---	12	---	15	7.3	---
TOTAL	376.80	324.9	1443.5	140.3	116.8	3231.5	711.0	1088.5	130.0	356.2	245.1	56.9
MEAN	12.2	10.8	46.6	4.53	4.17	104	23.7	35.1	4.33	11.5	7.91	1.90
MAX	123	112	298	9.0	9.2	563	80	108	11	52	42	2.9
MIN	.30	1.5	4.5	2.7	2.8	4.5	9.0	9.5	1.8	2.4	2.2	1.2
CFSM	.69	.61	2.65	.26	.24	5.91	1.35	1.99	.25	.65	.45	.11
IN.	.80	.69	3.05	.30	.25	6.83	1.50	2.30	.27	.75	.52	.12
CAL YR 1977	TOTAL	4977.87	MEAN	13.6	MAX	330	MIN	.03	CFSM	.77	IN	10.52
WTR YR 1978	TOTAL	8221.50	MEAN	22.5	MAX	563	MIN	.30	CFSM	1.28	IN	17.38

03342500 BUSSEYON 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) National Geodetic Vertical Datum of 1929 (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.--35 years, 216 ft³/s (6.117 m³/s), 12.86 in/yr (327 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Dec. 14	1600	2390	67.7	14.03	4.28
Mar. 16	2400	*3930	111	*17.20	5.24

Minimum daily discharge, 6.9 ft³/s (0.195 m³/s) Sept. 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	753	139	473	74	30	43	394	164	105	218	153	74
2	369	138	412	72	29	50	296	132	90	174	128	46
3	146	127	241	59	28	48	230	121	79	56	569	35
4	85	112	175	46	28	45	199	247	66	33	296	28
5	62	46	672	45	27	43	181	490	53	23	132	25
6	51	36	1080	51	27	45	149	314	47	20	86	22
7	44	41	858	60	26	48	194	397	87	20	66	19
8	139	69	494	79	26	54	163	666	141	162	56	17
9	146	55	814	74	25	64	141	674	92	30	41	15
10	1130	45	717	62	25	100	149	363	66	26	37	16
11	60	35	470	50	26	157	364	234	52	22	35	16
12	48	28	313	41	28	245	228	378	46	17	32	15
13	39	25	737	38	35	624	173	1140	54	18	34	14
14	33	23	2260	36	44	2820	141	1360	39	29	29	15
15	28	28	2250	35	38	3530	123	1420	35	372	28	15
16	28	482	2150	34	35	3690	111	1310	42	169	33	14
17	24	562	1990	34	32	3700	104	903	30	74	29	13
18	24	240	1520	34	30	3200	752	490	25	50	23	12
19	24	149	910	34	30	2750	684	340	39	34	20	11
20	21	114	508	33	29	2280	1030	256	38	24	18	12
21	21	172	308	32	29	2020	778	198	29	18	17	12
22	20	161	219	33	29	1800	383	162	28	15	16	11
23	27	120	181	34	28	1530	298	898	22	22	13	11
24	27	97	163	35	30	1330	327	1630	20	266	13	10
25	144	81	144	39	40	2010	591	1430	20	190	13	8.7
26	749	63	93	50	45	1980	571	1160	17	76	15	9.0
27	378	52	104	40	40	1890	332	513	14	46	15	8.2
28	232	56	74	35	38	1560	230	282	13	35	18	7.7
29	180	49	66	33	---	997	184	196	12	28	59	7.4
30	152	73	62	32	---	641	177	157	9.6	327	148	6.9
31	139	---	64	30	---	499	---	124	---	428	195	---
TOTAL	5323	3418	20522	1384	877	39793	9177	18149	1410.6	3022	2367	525.9
MEAN	172	114	662	44.6	31.3	1284	306	585	47.0	97.5	76.4	17.5
MAX	1130	562	2760	79	45	3700	1030	1630	141	428	569	74
MIN	20	23	62	30	25	43	104	121	9.6	15	13	6.9
CFSM	.75	.50	2.90	.20	.14	5.63	1.34	2.57	.21	.43	.34	.08
IN.	.87	.56	3.35	.23	.14	6.49	1.50	2.96	.23	.49	.39	.09

CAL YR 1977 TOTAL 62851.7 MEAN 172 MAX 2260 MIN 2.9 CFSM .75 IN 10.25
WTR YR 1978 TOTAL 105968.5 MEAN 290 MAX 3700 MIN 6.9 CFSM 1.27 IN 17.29

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) National Geodetic Vertical Datum of 1929. 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 fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--49 years, 11,732 ft³/s (332.2 m³/s), 11.63 in/yr (295 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, 73,800 ft³/s (2,090 m³/s) Mar. 28, gage height, 25.27 ft (7.702 m); minimum daily, 2,900 ft³/s (82.1 m³/s) Sept 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8940	9490	7980	20600	4550	4300	60500	26500	15100	13500	5700	9400
2	11400	9050	9050	20000	4750	4300	55900	25700	14400	10500	4800	8000
3	19600	8710	10500	19000	4850	4300	52000	24900	14000	8960	8420	7000
4	24600	8850	13500	18000	4900	4400	48700	24800	13200	9920	12800	6000
5	26700	9210	19000	17400	4900	4400	45900	25400	11600	13400	11200	5600
6	27900	9100	24400	17500	4950	4400	43700	25500	10400	15000	8800	5100
7	28600	8820	24200	18200	4950	4490	41700	25500	9560	14100	6910	4700
8	29000	8600	20900	19400	4900	4560	39800	26800	9120	13400	5840	4300
9	25600	8270	17000	19000	4850	4600	38300	27400	8640	13000	5290	4100
10	21600	7960	16500	16000	4790	4670	37600	25400	8290	14900	4970	3700
11	21100	7870	16000	13000	4800	4670	38000	21500	8180	15200	4670	3500
12	19800	7850	13000	12000	4670	5050	39200	18800	8270	12600	4720	3170
13	17300	7830	9600	11000	4600	6200	40600	21100	8690	10200	5180	3240
14	15000	7680	21300	10000	4560	16100	41400	26100	8690	12300	5680	3190
15	13400	7810	29900	9500	4500	29500	41600	29800	8490	14900	5510	3110
16	12100	8670	31000	9000	4500	31000	41000	31800	8380	15300	5480	3050
17	11100	11500	31000	8500	4480	34000	40000	33000	8070	12200	4930	3010
18	10400	10900	31500	8000	4460	38000	38900	33700	7720	9750	4450	3090
19	9800	9990	32000	7600	4440	42000	37500	34000	7430	8270	4230	3510
20	9300	9310	33500	7300	4420	45000	36100	33700	7600	7200	3950	4160
21	8940	9010	37000	7000	4400	48600	34000	32200	7320	6360	3710	4470
22	8600	8980	41000	6700	4370	53300	31800	28600	6770	5840	3580	4250
23	8350	9240	42400	6300	4300	57400	30200	26000	6800	5600	3490	3890
24	7850	9280	43100	5700	4200	61300	28900	29400	6540	5700	3670	3490
25	8270	9190	43100	5600	4200	67700	27900	29000	6180	5890	3990	3260
26	11700	9080	41000	5800	4200	71700	27400	26200	5680	5820	3760	3110
27	12600	8980	38600	5900	4200	73400	27000	23300	5330	5700	3530	3030
28	12400	8850	33000	5200	4200	73600	26400	20700	10600	5500	3430	2970
29	12200	8400	27000	4700	---	72300	26700	18800	18700	5300	3700	2900
30	11300	7770	23800	4400	---	69200	26900	17300	17600	5700	6900	2900
31	10100	---	21300	4400	---	65000	---	15900	---	6640	11000	---
TOTAL	475550	266250	803130	341700	127890	1009440	1145800	808800	287350	308650	174290	125200
MEAN	15340	8875	25910	11020	4568	32560	38190	26090	9578	9956	5622	4173
MAX	29000	11500	43100	20600	4950	73600	60500	34000	18700	15300	12800	9400
MIN	7850	7680	7980	4400	4200	4300	26600	15900	5330	5300	3430	2900
CFSM	1.12	.65	1.89	.80	.33	2.38	2.79	1.90	.70	.73	.41	.30
IN.	1.29	.72	2.18	.93	.35	2.74	3.11	2.20	.78	.84	.47	.34

CAL YR 1977 TOTAL 3547140 MEAN 9718 MAX 43100 MIN 1290 CFSM .71 IN 9.63
WTR YR 1978 TOTAL 5874050 MEAN 16090 MAX 73600 MIN 2900 CFSM 1.17 IN 15.94

03346000 NORTH FORK EMBARRAS RIVER NEAR OBLONG, IL

LOCATION.--Lat 39°00'01", long 87°56'42", in NE4SW4 sec.35, T.7 N., R.14 W., Crawford County, Illinois, 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) National Geodetic Vertical Datum of 1929. 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.--Water-discharge records good except those for winter periods and those for period of no gage-height record, Jan. 8 to Mar. 15, which are poor.

AVERAGE DISCHARGE.--38 years, 250 ft³/s (7.080 m³/s), 10.64 in/yr (270 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.--Peak discharges above base of 4,000 ft³/s (110 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)	
Dec. 15	0830	*6440	182	*17.38	5.297	Mar. 22	0130	5510	156	17.00	5.182
Mar. 17	1715	4980	141	16.76	5.108						

Minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Oct. 25.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	7.2	233	60	22	9.0	176	82	60	40	80	208
2	274	6.2	632	55	20	9.0	148	70	54	100	50	84
3	91	5.8	304	50	20	9.0	125	60	51	200	1360	46
4	30	5.4	153	55	20	8.0	114	65	52	150	920	32
5	14	5.3	648	50	18	8.0	100	100	45	1000	270	26
6	9.8	5.2	1800	48	17	8.0	103	200	42	500	161	25
7	7.7	5.7	700	46	17	8.0	152	310	42	300	103	24
8	26	6.6	250	250	14	8.0	168	1390	43	150	76	22
9	132	6.6	350	150	14	8.0	123	668	43	100	60	20
10	61	6.3	150	100	14	8.0	118	225	38	150	49	20
11	24	6.2	100	80	12	8.0	922	141	35	100	43	19
12	13	6.3	200	65	12	8.0	1000	457	34	70	41	18
13	8.5	5.9	500	55	11	8.0	251	1230	31	55	598	17
14	6.2	5.6	3060	50	11	8.0	154	2180	28	45	374	22
15	5.3	5.7	6410	45	13	20	118	1970	27	500	164	22
16	4.5	101	4750	40	12	2000	103	594	26	200	102	19
17	4.0	658	2780	35	11	4820	97	338	24	100	73	19
18	3.6	159	1280	35	10	4220	141	220	30	60	56	17
19	3.4	61	424	35	10	3280	221	166	100	40	45	16
20	3.2	39	269	30	10	3230	474	136	300	30	39	17
21	3.0	36	206	30	10	4180	230	116	600	25	35	16
22	2.9	37	154	30	10	4960	142	100	400	20	31	14
23	2.8	33	128	30	10	3400	115	658	200	18	29	14
24	2.7	25	116	30	10	2520	138	1870	130	20	27	13
25	2.6	21	106	25	10	3460	569	878	90	50	26	12
26	22	18	98	25	9.0	3230	771	217	70	200	24	12
27	54	16	90	25	9.0	1710	226	145	60	100	23	11
28	17	15	80	25	9.0	643	132	112	50	70	22	11
29	14	14	75	22	---	400	100	93	40	70	397	10
30	11	16	70	22	---	294	89	79	35	300	276	10
31	8.3	---	65	22	---	214	---	68	---	150	195	---
TOTAL	891.5	1339.0	26181	1620	365.0	42696.0	7320	14938	2780	4913	5749	816
MEAN	28.8	44.6	845	52.3	13.0	1377	244	482	92.7	158	185	27.2
MAX	274	658	6410	250	22	4960	1000	2180	600	1000	1360	208
MIN	2.6	5.2	65	22	9.0	8.0	89	60	24	18	22	10
CFSM	.09	.14	2.45	.16	.04	4.32	.77	1.51	.29	.50	.58	.09
IN.	.10	.16	3.05	.19	.04	4.98	.85	1.74	.32	.57	.67	.10
CAL YR 1977	TOTAL	47529.70	MEAN 130	MAX 6410	MIN .60	CFSM .41	IN 5.54					
WTR YR 1978	TOTAL	109609.50	MEAN 300	MAX 6410	MIN 2.6	CFSM .94	IN 12.78					

WABASH RIVER BASIN

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 21,900 (corrected) acre-ft (27.0 hm³). 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 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)
Sept. 30.....	987.0	18,240	
Oct. 31.....	987.5	18,830	+590
Nov. 30.....	987.9	19,310	+480
Dec. 31.....	990.0	21,860	+2,550
CAL YR 1977.....			+4,560
Jan. 31.....	990.0	21,860	0
Feb. 28.....	990.0	21,860	0
Mar. 31.....	990.0	21,860	0
Apr. 30.....	990.0	21,860	0
May 31.....	990.0	21,860	0
June 30.....	990.0	21,860	0
July 31.....	990.0	21,860	0
Aug. 31.....	990.0	21,860	0
Sept. 30.....	989.7	21,490	-370
WTR YR 1978.....			+3,250

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

			1977										1978
Oct.	Nov.	Dec.	Cal. year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
19.6	18.4	18.7	21.1	19.7	19.4	17.2	16.8	16.3	17.0	16.9	16.8	17.8	17.9

03347000 WHITE RIVER AT MUNCIE, IN

LOCATION.--Lat 40°12'15", long 85°23'14", in SEANW 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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (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 and by diversion of municipal water supply by Muncie Water Works Co. (See sta 03346900). Records of diversion available since October 1937.

AVERAGE DISCHARGE.--47 years (1931 to current year), 205 ft³/s (5.806 m³/s), 11.54 in/yr (293 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 15	1400	3690	104	8.69	2.649	Mar. 22	0400	3110	88.1	8.15	2.484
Mar. 15	1900	*3940	112	*8.89	2.710						

Minimum daily discharge, 6.9 ft³/s (0.195 m³/s) Sept. 28.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	19	266	112	52	43	396	275	164	112	22	438
2	481	19	332	105	53	43	334	238	145	385	25	283
3	208	20	232	100	53	43	295	212	143	502	36	210
4	126	18	176	95	54	43	285	207	118	349	26	163
5	80	15	154	94	54	43	285	204	103	229	22	127
6	57	14	133	96	54	43	746	186	92	180	22	102
7	42	35	120	105	54	43	1360	170	105	140	30	81
8	54	80	108	285	54	43	736	201	121	150	26	68
9	122	58	130	240	53	44	485	302	99	125	28	61
10	89	46	118	200	54	46	388	232	86	95	36	51
11	60	45	100	172	53	53	374	193	78	77	44	46
12	48	44	121	148	52	170	364	188	86	69	95	40
13	37	36	213	132	52	263	292	1040	159	74	69	38
14	31	29	2150	118	52	2090	241	1060	105	75	42	42
15	29	27	3420	107	51	3460	215	811	86	63	43	51
16	27	39	2150	98	51	3370	196	603	74	62	74	108
17	22	76	1670	92	50	2650	183	477	66	60	163	108
18	18	89	1800	87	49	1620	198	388	63	58	109	87
19	19	62	1840	83	49	1170	305	327	66	58	64	29
20	20	54	954	79	48	1360	603	275	66	56	47	23
21	19	49	572	76	48	2380	527	247	53	54	35	20
22	19	45	414	73	47	2610	381	220	50	53	25	17
23	17	42	318	71	47	1640	334	220	52	56	22	16
24	16	38	279	69	46	1160	646	1450	44	60	20	16
25	14	35	235	69	45	884	1360	710	327	51	16	14
26	19	33	210	57	44	1190	1750	457	410	43	18	12
27	18	31	190	40	44	1040	844	349	250	37	112	11
28	17	30	170	43	43	768	527	285	162	31	1090	6.9
29	19	29	155	45	---	646	403	244	123	26	1520	8.5
30	17	34	140	47	---	518	330	212	99	28	573	28
31	16	---	125	50	---	437	---	186	---	24	666	---
TOTAL	2057	1191	18995	3188	1406	29863	15383	12169	3595	3382	5120	2305.4
MEAN	66.4	39.7	613	103	50.2	963	513	393	120	109	165	76.8
MAX	481	89	3420	285	54	3460	1750	1450	410	502	1520	438
MIN	14	14	100	40	43	43	183	170	44	24	16	6.9
CFSM	.28	.17	2.54	.43	.21	4.00	2.13	1.63	.50	.45	.69	.32
IN.	.32	.18	2.93	.49	.22	4.61	2.37	1.88	.52	.52	.79	.36

CAL YR 1977 TOTAL 39032.6 MEAN 107 MAX 3420 MIN 3.2 CFSM .44 IN 6.02
WTR YR 1978 TOTAL 98654.4 MEAN 270 MAX 3460 MIN 6.9 CFSM 1.12 IN 15.23

WABASH RIVER BASIN

03347000 WHITE RIVER AT MUNCIE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	TEMPER- ATURE (DEG C)
OCT 06...	1540	53	35	5.0	--	17.0
NOV 09...	1220	56	18	2.7	--	16.0
DEC 16...	1125	2110	73	416	--	3.0
MAR 30...	1130	530	24	34	--	--
MAY 24...	1555	1750 --	622	2940	99	--
JUN 20...	0945	50	30	4.0	--	--
JUL 28...	1130	32	73	6.3	--	24.5
AUG 29...	1255	1310	137	485	--	--

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) National Geodetic Vertical Datum of 1929. Prior to May 5, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--24 years, 34.5 ft³/s (0.977 m³/s), 13.20 in/yr (335 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 14	1800	644 18.8	9.68 2.950	May 24	0300	473 13.4	8.39 2.557
Mar. 14	1700	*813 23.0	*10.48 3.194	Aug. 28	1100	650 18.4	9.60 2.926
Mar. 21	1300	430 12.2	8.04 2.450				

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Nov. 3-6, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	15	74	31	17	19	52	44	37	58	20	55
2	96	15	44	29	17	17	46	41	35	71	21	43
3	47	14	34	28	18	17	45	40	34	50	21	36
4	33	14	30	26	18	17	48	41	33	38	19	32
5	27	14	33	26	18	20	48	40	33	33	19	30
6	25	14	34	26	18	16	170	37	32	30	19	27
7	23	32	49	44	19	17	163	37	38	31	21	26
8	34	26	28	63	19	18	87	48	33	33	21	25
9	33	21	31	72	19	19	66	59	31	28	21	24
10	26	20	36	67	19	20	57	45	30	27	22	24
11	23	17	30	42	19	20	64	40	29	26	22	23
12	21	16	27	40	19	30	55	40	36	25	28	23
13	20	15	44	28	19	61	47	190	33	28	22	22
14	19	15	494	26	19	585	42	132	29	26	20	23
15	18	15	296	24	19	394	40	103	28	25	20	22
16	18	26	181	24	20	247	38	82	28	24	40	29
17	17	27	154	25	20	180	37	67	27	23	28	24
18	17	22	146	23	20	123	42	57	26	22	31	22
19	17	19	102	23	24	125	53	50	28	22	24	21
20	16	18	82	24	27	141	94	48	25	22	22	21
21	15	19	63	22	19	307	63	48	25	22	20	21
22	15	18	53	26	19	167	51	43	24	21	20	20
23	15	18	47	31	19	129	52	84	25	23	19	20
24	15	16	45	22	17	108	71	233	25	26	19	19
25	15	16	46	26	18	114	202	92	170	24	19	19
26	17	15	38	19	18	142	139	66	107	23	25	19
27	16	15	34	15	19	100	84	54	58	22	75	18
28	16	14	32	16	19	84	64	47	43	21	333	18
29	16	14	30	16	---	73	54	43	36	21	106	18
30	15	20	30	17	---	63	48	40	32	21	93	18
31	15	---	30	17	---	58	---	38	---	21	97	---
TOTAL	919	540	2397	918	536	3431	2122	2029	1170	887	1287	742
MEAN	29.6	18.0	77.3	29.6	19.1	111	70.7	65.5	39.0	28.6	41.5	24.7
MAX	217	32	494	72	27	585	202	233	170	71	333	55
MIN	15	14	27	15	17	16	37	37	24	21	19	18
CFSM	.83	.51	2.18	.83	.54	3.13	1.99	1.85	1.10	.81	1.17	.70
IN.	.96	.57	2.51	.96	.56	3.60	2.22	2.13	1.23	.93	1.35	.78

CAL YR 1977 TOTAL 9724.6 MEAN 26.6 MAX 494 MIN 4.7 CFSM .75 IN 10.19
WTR YR 1978 TOTAL 16978.0 MEAN 46.5 MAX 585 MIN 14 CFSM 1.31 IN 17.79

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) National Geodetic Vertical Datum of 1929. 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.--48 years, 372 ft³/s (10.54 m³/s), 12.44 in/yr (316 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 15	unknown	5730	162	11.52	3.511	Apr. 7	0900	2830	80.1	9.16	2.792
Dec. 19	1100	3060	86.6	9.37	2.856	Apr. 26	0600	4150	89.2	9.45	2.880
Mar. 16	1200	*6340	180	*11.95	3.642	May 24	unknown	unknown		unknown	
Mar. 22	0800	4870	138	10.88	3.316						

Minimum daily discharge, 65 ft³/s (1.84 m³/s) Sept. 22, 23.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	543	102	372	230	150	128	690	496	293	196	99	747
2	1260	103	648	219	160	123	587	426	269	491	109	422
3	548	102	463	204	162	120	520	380	254	695	134	278
4	321	102	352	200	163	117	499	373	238	538	103	208
5	234	98	322	195	164	112	506	379	226	356	92	170
6	197	93	280	195	165	110	1060	332	214	278	85	144
7	164	146	250	206	165	107	2600	307	244	248	125	125
8	191	183	230	476	165	104	1570	327	245	257	111	109
9	240	181	285	444	165	104	974	563	228	212	90	102
10	233	157	230	377	165	106	745	466	206	195	112	95
11	185	139	210	315	165	115	707	363	192	178	112	87
12	161	133	295	270	162	135	672	342	207	163	155	82
13	143	123	382	240	161	316	551	1290	256	181	165	80
14	128	115	2130	215	161	2630	447	1990	235	185	119	85
15	120	112	5600	200	160	5010	386	1590	192	161	102	96
16	115	153	5000	185	160	5910	346	1160	185	149	105	137
17	110	193	3100	175	158	4840	320	873	175	141	220	150
18	107	207	2630	165	156	2970	364	718	168	130	286	134
19	108	181	2920	155	154	2050	470	592	181	127	159	100
20	103	157	1940	150	152	2170	965	507	171	122	122	73
21	103	150	1240	145	150	3240	984	457	167	119	99	70
22	102	145	872	140	147	4610	672	402	153	114	85	65
23	95	138	658	135	144	2980	566	384	149	117	81	65
24	92	130	554	130	141	2110	895	3000	149	179	75	70
25	100	125	450	125	138	1690	1830	1200	401	161	72	71
26	115	120	400	125	135	2060	2890	830	820	138	70	73
27	109	120	350	100	132	1900	1440	594	513	122	151	70
28	102	118	320	110	130	1470	992	477	313	115	1430	69
29	98	120	290	120	---	1200	720	408	243	107	2450	67
30	96	125	265	130	---	943	590	362	209	103	1110	70
31	94	---	245	140	---	779	---	327	---	107	1060	---
TOTAL	6317	4071	33283	6216	4330	50259	26758	21915	7496	6385	9288	4114
MEAN	204	136	1074	201	155	1621	892	707	250	206	300	137
MAX	1260	207	5600	476	165	5910	2890	3000	820	695	2450	747
MIN	92	93	210	100	130	104	320	307	149	103	70	65
CFSM	.50	.34	2.65	.50	.38	3.99	2.20	1.74	.62	.51	.74	.34
IN.	.58	.37	3.05	.57	.40	4.60	2.45	2.01	.69	.59	.85	.38

CAL YR 1977 TOTAL 91932 MEAN 252 MAX 5600 MIN 45 CFSM .62 IN 8.42
WTR YR 1978 TOTAL 180432 MEAN 494 MAX 5910 MIN 65 CFSM 1.22 IN 16.53

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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 873.00 ft (266.090 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 24.1 ft³/s (0.682 m³/s), 12.82 in/yr (326 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 412 ft³/s (11.7 m³/s) Mar. 16, 1978, gage height, 11.07 ft (3.374 m); 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 15	2300	266	7.53	9.73	2.966	Mar. 22	0800	386	10.9	10.74	3.274
Mar. 16	1800	*412	11.7	*11.07	3.374	Apr. 7	0200	264	7.48	9.70	2.956

Minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Sept. 29, 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	4.7	29	16	4.2	5.2	57	31	15	13	6.2	13
2	35	4.6	26	15	4.2	5.2	48	28	15	78	6.3	9.7
3	13	4.3	15	14	4.2	5.3	48	25	14	131	6.4	8.3
4	7.7	4.2	11	13	4.2	5.3	46	24	13	66	6.1	7.2
5	5.9	3.9	9.8	12	4.0	5.1	49	24	13	39	5.7	6.7
6	5.1	3.9	9.5	12	4.1	5.1	135	21	12	28	5.6	6.3
7	4.7	4.4	6.8	12	4.2	5.2	241	20	13	21	6.5	5.9
8	6.1	6.2	7.2	15	4.3	5.0	117	21	13	19	6.1	5.6
9	13	5.1	8.2	20	4.4	5.0	75	23	11	16	5.6	5.5
10	11	4.6	6.3	13	4.5	5.4	59	21	11	14	5.6	5.2
11	8.0	4.3	6.1	12	4.6	5.9	56	18	11	13	5.9	4.9
12	4.9	3.9	6.4	11	4.7	5.6	50	18	11	11	6.4	4.9
13	6.1	3.6	8.8	11	4.8	10	41	43	11	12	6.0	4.7
14	5.4	3.5	161	11	4.7	134	34	57	10	13	5.5	4.9
15	5.1	3.5	255	9.8	4.7	275	30	55	9.6	11	5.4	5.3
16	4.8	5.2	249	9.1	4.6	373	28	44	9.6	10	5.3	5.6
17	4.7	8.1	222	8.5	4.6	373	26	37	9.5	8.8	5.2	5.2
18	5.1	7.0	195	7.4	4.5	250	27	32	9.4	8.3	10	4.8
19	5.3	6.0	137	8.3	4.5	182	29	28	11	7.7	24	4.5
20	5.2	5.5	96	7.9	4.6	196	54	26	9.5	7.5	10	4.2
21	4.9	5.3	71	7.3	5.0	320	46	24	8.6	7.4	7.7	4.2
22	4.9	5.4	54	7.3	5.5	377	36	21	7.9	7.1	6.8	4.0
23	4.8	5.3	44	7.6	5.5	255	32	23	7.5	6.8	6.3	3.9
24	4.9	5.1	38	8.0	5.6	154	63	32	7.1	7.5	6.0	3.8
25	4.9	4.8	42	8.8	5.4	114	159	27	36	7.4	5.9	3.7
26	5.1	4.6	35	6.0	5.3	144	171	23	87	7.1	5.7	3.5
27	5.2	4.3	28	4.0	5.1	157	81	21	49	6.9	6.3	3.4
28	5.2	4.2	23	4.1	5.2	112	52	20	28	6.7	23	3.3
29	4.9	4.1	20	4.1	---	92	42	19	20	6.5	27	3.1
30	4.7	4.6	19	4.1	---	75	36	17	15	6.4	14	3.1
31	4.8	---	17	4.1	---	64	---	16	---	6.3	17	---
TOTAL	238.4	144.2	1856.1	303.4	131.2	3721.3	1968	839	497.7	603.4	269.5	158.4
MEAN	7.69	4.81	59.9	9.79	4.69	120	65.6	27.1	16.6	19.5	8.69	5.28
MAX	35	8.1	255	20	5.6	377	241	57	87	131	27	13
MIN	4.7	3.5	6.1	4.0	4.0	5.0	26	16	7.1	6.3	5.2	3.1
CFSM	.30	.14	2.35	.38	.18	4.71	2.57	1.06	.65	.77	.34	.21
IN.	.35	.21	2.71	.44	.19	5.43	2.87	1.22	.73	.88	.39	.23
CAL YR 1977	TOTAL	4513.87	MEAN	12.4	MAX	255	MIN	.76	CFSM	.49	IN	6.58
WTR YR 1978	TOTAL	10730.60	MEAN	29.4	MAX	377	MIN	3.1	CFSM	1.15	IN	15.65

WABASH RIVER BASIN

03348020 KILLBUCK CREEK NEAR GASTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
OCT 07...	1430	4.5	43	.53	13.0
NOV 09...	1655	4.8	54	.70	16.0
DEC 16...	1655	244	39	25	--
JAN 25...	1500	8.6	20	.47	2.0
FEB 21...	1120	5.5	27	.40	1.0
JUN 19...	1025	10	62	1.6	--
JUL 26...	1000	7.3	89	1.7	23.5
AUG 31...	1415	18	51	2.5	20.0

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 105 ft³/s (2.974 m³/s), 12.63 in/yr (321 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0700	776 22.0	8.02 2.444	Mar. 21	2300	*2230 63.2	*10.90 3.322
Dec. 15	0900	1390 39.4	9.58 2.920	Apr. 7	0500	1720 48.7	10.16 3.097
Dec. 18	0500	1140 32.3	9.09 2.771	Apr. 26	0200	840 23.8	8.27 2.521
Mar. 15	0300	1910 54.1	10.45 3.185				

Minimum daily discharge, 10 ft³/s (0.28 m³/s) Sept. 28-30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	18	263	52	23	16	225	93	49	22	14	60
2	680	17	310	50	23	16	166	79	45	96	16	41
3	326	16	187	49	23	16	167	70	43	221	17	31
4	164	16	140	48	23	16	172	68	41	132	14	25
5	101	15	115	49	23	16	181	70	39	73	13	22
6	73	14	92	49	23	16	514	60	36	50	13	20
7	55	20	141	55	22	16	1370	56	43	41	21	19
8	78	32	100	103	22	16	646	59	47	47	19	18
9	111	29	80	93	21	16	397	65	39	36	16	17
10	81	28	68	76	20	16	277	62	33	31	22	17
11	61	26	64	62	20	16	259	53	30	27	20	16
12	49	22	62	51	20	17	217	51	30	24	35	16
13	41	20	80	41	19	57	147	167	29	28	23	16
14	35	18	581	37	19	953	110	301	26	31	18	16
15	32	18	1270	35	19	1740	93	287	25	25	17	16
16	29	55	992	34	18	1340	81	214	24	23	15	17
17	26	107	1040	33	18	1170	73	153	24	21	15	16
18	24	74	1060	32	18	836	76	120	23	19	17	15
19	23	51	538	32	17	667	133	96	30	18	16	14
20	22	40	517	31	17	754	290	87	26	17	15	14
21	20	33	367	31	17	1510	244	178	24	17	14	13
22	18	29	256	30	17	1560	153	120	22	16	13	13
23	18	26	186	29	17	927	126	151	21	16	13	12
24	17	24	160	28	16	691	280	281	20	19	13	12
25	17	22	140	28	16	506	496	182	20	18	12	11
26	21	21	120	22	16	509	686	121	23	16	12	11
27	20	20	105	15	16	633	379	94	23	15	23	11
28	19	19	91	17	16	505	222	79	20	15	421	10
29	19	19	80	19	---	417	147	69	19	14	195	10
30	18	22	70	21	---	332	114	61	18	14	93	10
31	17	---	59	22	---	274	---	54	---	15	88	---
TOTAL	2500	871	9334	1274	539	15574	8441	3601	892	1157	1253	539
MEAN	80.6	29.0	301	41.1	19.3	502	281	116	29.7	37.3	40.4	18.0
MAX	680	107	1270	103	23	1740	1370	301	49	221	421	60
MIN	17	14	59	15	16	16	73	51	18	14	12	10
CFSM	.71	.26	2.66	.36	.17	4.44	2.49	1.03	.26	.33	.36	.16
IN.	.82	.29	3.07	.42	.18	5.13	2.78	1.19	.29	.38	.41	.18

CAL YR 1977	TOTAL	23927.4	MEAN	65.6	MAX	1270	MIN	4.4	CFSM	.58	IN	7.88
WTR YR 1978	TOTAL	45975.0	MEAN	126	MAX	1740	MIN	10	CFSM	1.12	IN	15.13

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--32 years, 824 ft³/s (23.34 m³/s), 13.04 in/yr (331 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)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 16	2000	8060	228	14.05	4.282	Mar. 22	2100	9710	275	15.05	4.587
Mar. 17	0600	*10700	303	*15.73	4.794	Apr. 7	2400	6300	178	12.34	3.761

Minimum daily discharge, 166 ft³/s (4.70 m³/s) Nov. 6.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: November 1952 to September 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	684	175	595	590	255	245	1940	1290	509	309	206	1500
2	2480	175	1450	535	258	285	1570	1110	452	837	219	1210
3	1770	175	1190	485	255	269	1380	981	418	2250	251	842
4	867	173	873	470	252	258	1340	933	391	1740	239	600
5	539	171	768	499	249	244	1360	953	362	1030	201	485
6	395	166	663	475	241	247	1940	863	348	684	186	390
7	333	178	395	471	233	258	5430	780	399	549	295	348
8	341	247	373	706	228	285	5210	789	437	674	328	313
9	418	275	406	540	223	252	3070	940	402	509	246	287
10	448	269	337	418	222	266	2230	1040	348	406	264	266
11	384	244	326	400	223	295	1950	861	313	358	273	250
12	326	225	377	385	238	320	1770	785	302	323	281	244
13	285	214	461	375	245	452	1510	1250	348	351	406	237
14	255	201	2610	365	245	3980	1230	3260	355	448	318	235
15	239	195	6670	350	243	8350	1040	3140	313	369	254	253
16	225	244	7900	340	242	10200	914	2540	282	319	239	267
17	211	380	7600	330	241	10300	833	1950	269	289	238	356
18	203	406	7050	325	239	8710	820	1510	250	272	420	305
19	201	366	6170	320	235	6290	1040	1210	255	258	425	285
20	195	309	4910	310	226	5700	1780	996	272	244	314	235
21	190	289	3330	308	222	7440	2200	927	261	236	248	206
22	185	285	2330	305	227	9430	1660	879	244	230	217	197
23	175	264	1760	302	230	8660	1340	837	222	247	201	188
24	168	264	1480	308	232	6170	1580	1430	214	344	192	182
25	175	247	1500	320	249	4680	3120	2720	219	348	182	178
26	193	239	1330	290	276	4520	5210	1580	964	285	180	178
27	193	233	1000	271	260	5000	4350	1130	1040	255	217	177
28	185	225	873	260	241	4260	2610	885	615	236	2850	172
29	178	214	765	255	---	3400	1890	745	410	219	3800	169
30	173	225	700	253	---	2740	1540	642	323	206	2720	168
31	168	---	645	250	---	2200	---	574	---	201	1950	---
TOTAL	12782	7273	66837	11811	6730	115706	63857	39530	11537	15026	18360	10723
MEAN	412	242	2156	381	240	3732	2129	1275	385	485	592	357
MAX	2480	406	7900	706	276	10300	5430	3260	1040	2250	3800	1500
MIN	168	166	326	250	222	244	820	574	214	201	180	168
CFSM	.48	.28	2.51	.44	.28	4.35	2.48	1.49	.45	.57	.69	.42
IN.	.55	.32	2.90	.51	.29	5.02	2.77	1.71	.50	.65	.80	.46
CAL YR 1977	TOTAL	191865	MEAN	526	MAX	7900	MIN	73	CFSM	.61	IN	8.32
WTR YR 1978	TOTAL	380172	MEAN	1042	MAX	10300	MIN	166	CFSM	1.21	IN	16.48

03350300 MORSE RESERVOIR NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°04'21", long 86°02'47", in SE 1/4 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) National Geodetic Vertical Datum of 1929.

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, 23,280 acre-ft (28.7 hm³) Mar. 22, elevation, 811.52 ft (247.351 m); minimum, 20,530 acre-ft (25.3 hm³) Oct. 1, elevation, 809.50 ft (246.736 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	809.27	20,230	
Oct. 31.....	810.03	21,220	+990
Nov. 30.....	810.06	21,260	+40
Dec. 31.....	810.18	21,420	+160
CAL YR 1977.....			+1,210
Jan. 31.....	810.05	21,240	-180
Feb. 28.....	810.06	21,260	+20
Mar. 31.....	810.50	21,870	+590
Apr. 30.....	810.30	21,590	-280
May 31.....	810.14	21,370	-220
June 30.....	810.21	21,460	+90
July 31.....	810.02	21,210	-250
Aug. 31.....	810.39	21,720	+510
Sept. 30.....	809.90	21,050	-670
WTR YR 1978.....			+820

WABASH RIVER BASIN

03350500 CICERO CREEK AT NOBLESVILLE, IN

LOCATION.--Lat 40°03'20", long 86°02'30", in NW¼NE¼ 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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good. Flow regulated by Morse Reservoir (See sta 03350300).

AVERAGE DISCHARGE.--28 years, 193 ft³/s (5.466 m³/s), 12.13 in/yr (308 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, 3,660 ft³/s (104 m³/s) Mar. 21, gage height, 12.48 ft (3.804 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	23	170	125	36	32	468	199	96	181	15	259
2	591	26	377	104	36	32	359	146	91	1050	29	170
3	441	26	352	87	32	37	296	127	87	1850	48	121
4	266	46	275	81	30	32	300	144	70	996	28	78
5	178	24	326	84	33	34	282	154	57	549	22	48
6	138	13	250	85	34	28	525	138	50	354	20	41
7	87	26	143	100	31	29	1340	127	87	265	56	34
8	122	27	171	213	32	40	907	142	124	426	93	28
9	146	28	182	177	32	34	579	158	101	348	60	29
10	138	34	105	140	32	32	430	140	79	235	84	26
11	113	37	104	109	30	36	400	113	66	147	71	10
12	84	20	94	93	37	43	340	124	69	106	65	8.8
13	57	4.0	145	93	44	63	287	367	69	139	77	12
14	43	5.4	916	88	45	831	206	647	38	172	45	12
15	49	9.0	1870	73	40	2240	180	644	33	129	30	13
16	44	66	1560	72	37	2940	142	587	37	106	30	27
17	14	115	1780	88	36	3040	127	476	41	66	21	27
18	26	120	2100	64	37	2500	131	374	50	52	45	18
19	26	102	1530	56	38	1920	154	291	44	45	57	16
20	14	77	1040	63	40	1960	216	245	41	40	39	13
21	15	89	765	54	34	3160	233	225	57	34	14	16
22	22	60	531	53	34	3280	191	180	71	30	11	17
23	19	48	400	48	32	2300	176	218	57	55	10	5.6
24	17	53	355	48	32	1640	222	266	51	138	8.6	7.9
25	28	71	381	64	30	1190	559	247	56	145	8.5	5.5
26	52	45	303	238	30	1210	900	214	381	101	11	1.8
27	32	21	250	206	30	1450	584	191	538	68	38	5.0
28	37	29	188	66	29	1120	390	168	329	49	1560	3.6
29	29	32	170	32	---	882	289	152	208	37	1080	1.5
30	17	53	149	34	---	678	236	124	140	30	501	1.5
31	15	---	131	32	---	547	---	117	---	22	385	---
TOTAL	2910	1329.4	17113	2870	958	33360	11449	7445	3218	7965	4562.1	1056.2
MEAN	93.9	44.3	552	92.6	34.2	1076	382	240	107	257	147	35.2
MAX	591	120	2100	238	45	3280	1340	647	538	1850	1560	259
MIN	14	4.0	94	32	29	28	127	113	33	22	8.5	1.5
CFSM	.44	.21	2.56	.43	.16	4.98	1.77	1.11	.50	1.19	.68	.16
IN.	.50	.23	2.95	.49	.16	5.75	1.97	1.28	.55	1.37	.79	.18

CAL YR 1977 TOTAL 43606.9 MEAN 119 MAX 2100 MIN 1.0 CFSM .55 IN 7.51
WTR YR 1978 TOTAL 94235.7 MEAN 258 MAX 3280 MIN 1.5 CFSM 1.19 IN 16.23

03350700 STONY CREEK NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°01'44", long 85°59'42", in NE¼NE¼ 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.

DRAINAGE AREA.--50.8 mi² (131.6 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 749.00 ft (228.295 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records good.

AVERAGE DISCHARGE.--11 years, 46.7 ft³/s (1.322 m³/s), 12.47 in/yr (317 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,560 ft³/s (44.2 m³/s) Feb. 17, 1976, gage height, 7.35 ft (2.240 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Aug. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (8.496 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)	
Dec. 15	0030	351	9.94	4.31	1.314	Apr. 7	0315	321	9.09	4.11	1.253
Mar. 15	2315	*830	23.5	*5.83	1.777	Aug. 7	1430	492	13.9	4.74	1.445
Mar. 21	1715	710	20.1	5.47	1.667	Aug. 28	1645	506	14.3	4.79	1.460

Minimum daily discharge, 5.7 ft³/s (0.161 m³/s) Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	5.8	31	26	11	12	91	52	27	24	7.1	115
2	60	6.0	33	24	10	15	70	43	25	83	11	74
3	25	7.1	25	23	11	12	62	39	24	150	15	56
4	15	6.3	22	21	11	16	62	44	21	69	9.0	43
5	12	5.8	28	21	11	15	68	48	20	39	7.4	36
6	10	5.7	27	20	11	11	167	36	18	28	6.8	31
7	9.1	6.1	27	25	11	11	271	36	24	44	294	27
8	12	6.2	22	40	11	13	174	49	23	139	160	22
9	16	6.1	20	31	11	11	136	68	20	60	67	19
10	12	6.3	15	27	11	13	113	50	18	36	39	17
11	9.4	6.0	14	18	11	12	114	41	17	26	31	16
12	8.0	6.0	15	17	11	13	94	43	17	21	36	16
13	7.5	6.0	28	18	11	23	71	106	18	31	27	17
14	7.5	6.2	211	17	11	543	56	149	15	44	20	16
15	7.5	6.3	288	17	11	794	48	147	14	35	17	16
16	7.0	11	211	16	11	706	41	121	15	24	25	23
17	7.2	14	272	17	11	491	37	97	16	20	21	42
18	6.5	11	240	18	11	304	38	84	15	18	56	28
19	7.0	9.6	168	16	12	269	57	69	16	17	49	20
20	7.2	9.0	132	15	11	274	114	61	14	16	34	17
21	6.8	8.7	102	15	10	566	93	55	13	15	22	16
22	6.5	9.1	89	17	10	422	68	48	13	14	17	15
23	6.1	9.9	71	13	10	273	63	53	11	14	14	14
24	6.0	8.6	63	13	10	233	84	92	12	16	12	13
25	6.3	7.7	65	14	10	218	188	75	13	16	11	12
26	7.6	7.5	55	18	14	257	210	59	30	12	10	11
27	7.3	8.4	47	11	12	209	142	49	19	10	16	11
28	6.4	8.6	36	7.8	12	173	104	44	13	9.5	416	11
29	6.2	7.6	31	9.5	---	150	78	39	12	9.6	300	12
30	6.1	9.4	29	10	---	127	64	32	11	9.7	190	12
31	6.0	---	26	11	---	110	---	30	---	9.5	188	---
TOTAL	427.2	232.0	2443	566.3	308	6296	2978	1959	524	1059.3	2128.3	778
MEAN	13.8	7.73	78.8	18.3	11.0	203	99.3	63.2	17.5	34.2	68.7	25.9
MAX	110	14	288	40	14	794	271	149	30	150	416	115
MIN	6.0	5.7	14	7.8	10	11	37	30	11	9.5	6.8	11
CFSM	.27	.15	1.55	.36	.22	4.00	1.96	1.24	.34	.67	1.35	.51
IN.	.31	.17	1.79	.41	.23	4.61	2.18	1.43	.38	.78	1.56	.57
CAL YR 1977	TOTAL	9623.9	MEAN	26.4	MAX	288	MIN	2.3	CFSM	.52	IN	7.05
WTR YR 1978	TOTAL	19699.1	MEAN	54.0	MAX	794	MIN	5.7	CFSM	1.06	IN	14.43

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) National Geodetic Vertical Datum of 1929 (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. 10 to Mar. 9, which are poor. Flow slightly regulated by Morse Reservoir (see sta 03350300).

AVERAGE DISCHARGE.--49 years, 1,083 ft³/s (30.67 m³/s), 12.06 in/yr (306 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 17	1200	10200	289	11.54	3.517	Mar. 23	0400	13400	379	13.24	4.036
Mar. 17	1700	*14600	414	*13.85	4.221	Apr. 8	0600	7840	222	9.96	3.036

Minimum daily discharge, 202 ft³/s (5.72 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	215	605	900	341	320	2690	1750	906	856	289	2280
2	2440	225	1750	795	344	380	2320	1490	837	1830	352	1740
3	2670	229	1910	730	345	340	1980	1270	783	3630	393	1200
4	1670	229	1490	662	344	325	1920	1260	724	3060	352	881
5	1020	239	1380	707	338	320	1930	1340	673	2020	308	695
6	765	215	1250	667	332	440	2350	1190	634	1370	278	563
7	587	215	837	695	328	360	6160	1050	679	985	464	491
8	593	268	718	930	324	325	7210	1100	801	1520	736	441
9	679	343	831	710	319	310	4330	1230	765	1360	475	393
10	759	360	701	565	315	316	3060	1380	673	971	393	364
11	679	336	575	545	318	336	2690	1180	611	765	496	343
12	546	297	634	520	323	368	2500	1050	599	640	496	312
13	454	271	801	500	330	485	2110	1650	611	684	575	301
14	406	246	3050	485	329	4560	1820	3530	605	783	524	301
15	360	239	7380	470	329	9980	1580	4000	581	713	393	301
16	343	328	9250	455	328	13000	1350	3470	524	569	450	376
17	312	496	10000	440	328	14400	1200	2830	502	485	372	423
18	278	640	9550	430	322	13100	1140	2350	480	432	569	410
19	278	569	8260	420	314	10100	1350	1980	485	406	673	356
20	271	480	6590	415	305	7570	1950	1750	485	380	529	320
21	261	441	4440	405	304	10400	2590	1620	475	360	393	278
22	253	414	3150	405	302	12600	2210	1510	491	343	316	271
23	246	380	2400	405	310	13000	1840	1470	454	339	289	257
24	232	364	2040	400	320	9830	1870	1770	419	535	271	239
25	232	352	2010	420	333	6480	3310	3040	713	634	261	229
26	271	356	1790	390	365	5750	5880	2280	1950	513	253	222
27	282	304	1600	365	340	6240	5680	1780	2080	414	282	215
28	264	301	1420	348	330	5650	3390	1490	1560	368	4070	215
29	253	282	1260	342	---	4460	2460	1260	1050	336	5230	209
30	232	312	1060	340	---	3680	2030	1090	825	308	3980	202
31	219	---	971	340	---	3070	---	998	---	289	2670	---
TOTAL	19085	9946	89703	16201	9160	158495	82900	55158	22975	27898	27132	14828
MEAN	616	332	2894	523	327	5113	2763	1779	766	900	875	494
MAX	2670	640	10000	930	365	14400	7210	4000	2080	3630	5230	2280
MIN	219	215	575	340	302	310	1140	998	419	289	253	202
CFSM	.51	.27	2.37	.43	.27	4.19	2.27	1.46	.63	.74	.72	.41
IN.	.58	.30	2.74	.49	.28	4.84	2.53	1.68	.70	.85	.83	.45

CAL YR 1977 TOTAL 260816 MEAN 715 MAX 10000 MIN 112 CFSM .59 IN 7.96
WTR YR 1978 TOTAL 533481 MEAN 1462 MAX 14400 MIN 202 CFSM 1.20 IN 16.28

03351310 CROOKED CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'47", long 86°12'22", in NW 1/4 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) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

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

AVERAGE DISCHARGE.--9 years, 19.3 ft³/s (0.547 m³/s), 14.64 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft³/s (156 m³/s) June 26, 1978, gage height, 13.31 ft (4.057 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	0830	1100	31.2	7.32	2.231	June 26	Unknown	*5500	156	*13.31	4.057
Dec. 14	1600	554	15.7	5.88	1.792	Aug. 28	0630	787	22.3	7.04	2.146
Mar. 14	0400	1200	34.0	7.51	2.289						

Minimum daily discharge, 3.0 ft³/s (0.085 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	401	5.1	54	8.1	3.7	5.3	19	14	9.8	23	4.6	24
2	49	5.1	32	9.7	3.7	4.7	15	12	9.4	69	42	15
3	22	4.7	28	8.0	3.8	4.5	21	10	9.2	38	19	11
4	14	4.2	23	6.5	3.9	4.5	25	39	8.8	15	5.8	9.3
5	10	4.0	39	6.9	4.0	4.5	23	35	8.5	11	5.0	9.1
6	10	3.9	34	8.0	3.9	5.2	70	28	8.0	8.7	5.0	8.6
7	8.4	6.3	37	34	3.8	5.7	56	26	22	22	15	8.2
8	41	5.5	22	9.0	3.8	5.4	33	37	9.5	18	5.5	7.6
9	18	4.5	20	8.0	3.9	5.9	25	34	7.3	10	4.8	7.0
10	11	4.2	18	7.0	4.0	8.3	26	26	6.4	7.6	4.6	6.7
11	9.6	4.2	17	7.6	4.2	11	40	23	6.1	5.7	13	6.4
12	8.2	3.7	18	8.0	4.3	20	24	32	15	5.5	6.0	6.2
13	6.5	3.4	59	7.6	4.5	52	19	170	8.8	31	5.1	6.6
14	6.3	3.3	396	7.2	4.5	735	17	75	6.1	12	4.7	9.2
15	6.2	3.3	132	6.6	4.4	157	15	66	5.9	7.9	4.6	8.0
16	5.8	33	84	6.4	4.3	97	13	50	5.9	6.0	47	24
17	5.6	16	86	6.2	4.2	71	11	40	5.7	5.2	20	6.2
18	4.9	11	58	6.2	4.1	49	22	34	6.5	5.0	66	3.5
19	5.0	8.4	38	6.2	4.0	51	15	30	8.6	4.7	19	5.4
20	4.4	8.8	31	6.0	4.1	52	17	26	5.0	4.5	13	5.0
21	4.3	13	23	5.9	3.9	132	14	22	5.8	4.4	6.7	4.6
22	4.3	8.4	19	5.7	4.9	58	11	22	4.8	4.3	5.4	4.3
23	4.5	7.6	17	5.9	4.5	48	16	60	4.1	6.7	5.0	4.1
24	5.1	8.0	17	6.2	4.5	57	18	50	3.5	14	4.8	3.9
25	9.6	7.3	20	7.6	4.4	83	60	30	350	20	4.6	3.7
26	11	7.3	22	23	4.2	72	37	21	1570	5.6	4.6	3.5
27	6.3	6.2	13	11	4.0	43	25	16	43	5.0	25	3.3
28	5.1	5.9	11	6.5	5.3	33	21	13	23	5.0	423	3.2
29	4.8	5.6	8.8	5.6	---	27	18	12	13	5.0	62	3.1
30	4.8	20	8.1	5.0	---	23	16	11	11	5.0	57	3.0
31	4.9	---	8.0	5.3	---	20	---	11	---	4.9	47	---
TOTAL	711.6	231.9	1392.9	260.9	116.8	1945.0	742	1075	2200.7	389.7	954.8	223.7
MEAN	23.0	7.73	44.9	8.42	4.17	62.7	24.7	34.7	73.4	12.6	30.8	7.46
MAX	401	33	396	34	5.3	735	70	170	1570	69	423	24
MIN	4.3	3.3	8.0	5.0	3.7	4.5	11	10	3.5	4.3	4.6	3.0
CFSM	1.29	.43	2.51	.47	.23	3.50	1.38	1.94	4.10	.70	1.72	.42
IN.	1.48	.48	2.89	.54	.24	4.04	1.54	2.23	4.57	.81	1.98	.46
CAL YR 1977	TOTAL	5207.47	MEAN	14.3	MAX	401	MIN	.76	CFSM	.80	IN	10.82
WTR YR 1978	TOTAL	10245.00	MEAN	28.1	MAX	1570	MIN	3.0	CFSM	1.57	IN	21.29

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--10 years, 6.07 ft³/s (0.172 m³/s), 14.22 in/yr (361 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	0700	140	3.96	5.51	1.679	Mar. 14	0300	*429	12.1	*6.56	1.999
Dec. 14	1815	163	4.62	5.43	1.655	Aug. 28	0430	358	10.1	6.32	1.926

Minimum daily discharge 0.30 ft³/s (0.008 m³/s) Aug. 6.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	.84	15	1.1	1.2	.63	6.2	6.4	2.0	1.9	.34	9.8
2	22	.76	7.6	.94	1.1	.62	4.6	5.4	1.9	5.4	.49	5.3
3	9.6	.71	5.7	.82	1.1	.61	4.4	4.9	1.8	2.5	.51	3.4
4	4.7	.68	3.9	.74	1.0	.61	4.6	5.4	1.6	1.5	.37	2.2
5	3.3	.59	2.8	.77	.97	.60	4.9	5.2	1.5	1.1	.33	1.8
6	2.4	.61	2.7	.80	.92	.60	23	4.0	1.4	.95	.30	1.4
7	1.9	2.0	2.7	1.1	.90	.60	30	3.7	1.8	1.6	1.1	1.2
8	8.3	1.8	2.6	2.8	.88	.61	14	7.2	1.4	3.1	.61	1.0
9	5.7	1.4	2.6	2.6	.86	.61	10	10	1.3	1.4	.42	.85
10	3.4	1.4	2.5	1.6	.85	.61	9.6	7.8	1.1	1.0	1.6	.77
11	2.6	1.2	2.5	1.4	.84	.63	10	5.5	1.1	.80	.59	.72
12	2.0	.94	2.5	1.1	.82	4.0	9.4	5.4	4.5	.68	.50	.71
13	1.6	.74	7.6	.95	.80	27	7.8	30	2.5	.96	.44	.70
14	1.5	.78	96	.78	.78	303	6.4	27	1.5	.80	.39	.82
15	1.4	.80	52	.65	.77	96	6.2	22	1.3	.65	.36	.73
16	1.2	4.4	36	.60	.75	47	5.7	14	1.2	.57	5.9	3.3
17	1.1	4.2	30	.58	.74	29	5.4	10	1.1	.50	2.6	2.6
18	1.2	2.6	20	.55	.73	28	5.5	8.5	1.1	.44	1.6	1.4
19	1.1	1.8	13	.52	.72	24	7.4	5.7	1.1	.40	1.1	1.0
20	.82	1.6	9.8	.50	.71	27	15	5.0	.95	.38	.76	.88
21	.74	1.7	6.5	.48	.70	55	9.6	4.3	.99	.36	.53	.84
22	.76	1.5	4.3	.46	.69	27	8.5	3.7	.81	.34	.44	1.3
23	.72	1.6	3.6	.46	.68	25	8.2	8.5	.76	.59	.39	.78
24	.74	1.3	3.1	.51	.67	18	9.4	25	.74	1.0	.34	.71
25	.89	1.3	2.7	.90	.66	21	27	12	1.9	1.4	.33	.64
26	1.4	1.1	2.4	1.9	.65	23	22	6.4	9.7	.99	14	.55
27	1.1	.96	2.1	1.7	.64	16	12	4.4	3.0	.64	23	.54
28	.98	.86	1.8	1.6	.63	13	9.6	3.6	1.7	.48	131	.50
29	.84	.61	1.6	1.5	---	10	8.9	3.0	1.3	.41	25	.45
30	.78	2.0	1.4	1.4	---	5.7	7.6	2.6	1.1	.40	25	.42
31	.81	---	1.2	1.3	---	8.2	---	2.2	---	.39	22	---
TOTAL	144.58	42.78	348.2	33.11	22.76	813.63	312.9	268.8	54.15	33.63	262.34	47.31
MEAN	4.66	1.43	11.2	1.07	.81	26.2	10.4	8.67	1.81	1.08	8.46	1.58
MAX	59	4.4	96	2.8	1.2	303	30	30	9.7	5.4	131	9.8
MIN	.72	.59	1.2	.46	.63	.60	4.4	2.2	.74	.34	.30	.42
CFSM	.80	.25	1.93	.18	.14	4.52	1.79	1.50	.31	.19	1.46	.27
IN.	.93	.27	2.23	.21	.15	5.22	2.01	1.72	.35	.22	1.68	.30

CAL YR 1977 TOTAL 1259.74 MEAN 3.45 MAX 96 MIN .03 CFSM .60 IN 8.08
WTR YR 1978 TOTAL 2384.19 MEAN 6.53 MAX 303 MIN .30 CFSM 1.13 IN 15.29

03351500 FALL CREEK NEAR FORTVILLE, IN

LOCATION.--Lat 39°57'15", long 85°52'05", in NW4NE1/4 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) National Geodetic Vertical Datum of 1929 (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, Jan. 27 to Mar. 9, which are poor.

AVERAGE DISCHARGE.--37 years, 164 ft³/s (4.644 m³/s), 13.18 in/yr (335 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		Gage height		Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Dec. 15	1800	2390	67.7	7.25	2.210	Mar. 22	0500	1550	43.9	6.17	1.881
Mar. 15	0100	*3120	88.4	*7.85	2.393	Aug. 29	0300	1470	41.6	6.03	1.838

Minimum daily discharge, 44 ft³/s (1.25 m³/s) June 24.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	660	59	274	135	78	74	317	218	91	128	52	377
2	880	59	261	125	78	75	275	196	86	245	59	251
3	520	58	204	120	79	76	257	184	83	268	66	194
4	310	57	186	120	79	70	251	192	78	166	58	158
5	171	56	206	99	80	60	251	203	74	122	51	135
6	137	56	225	100	82	60	488	178	70	103	49	120
7	114	62	363	116	80	60	1040	169	81	107	172	107
8	153	76	373	219	77	60	631	204	84	186	109	97
9	205	74	271	186	75	61	439	281	74	136	77	91
10	153	73	180	165	74	65	365	236	66	105	71	85
11	123	67	164	145	79	71	352	199	62	90	73	81
12	108	62	162	125	77	85	330	190	71	81	76	78
13	97	59	215	115	75	167	276	488	104	88	74	78
14	88	57	1110	105	74	2040	231	639	76	118	65	79
15	84	58	2180	100	78	3010	210	570	65	100	58	80
16	80	85	1600	94	77	2410	194	429	63	83	84	93
17	76	135	1100	93	75	1650	182	335	59	74	115	134
18	73	114	823	90	74	1070	186	273	56	68	247	105
19	72	95	650	87	74	802	228	229	58	64	141	87
20	68	85	520	85	80	800	389	205	54	61	111	78
21	65	88	430	84	75	1170	355	204	51	58	85	74
22	62	89	370	83	72	1350	285	178	49	55	72	73
23	60	85	320	82	73	896	255	193	46	58	63	71
24	59	82	280	80	73	728	269	287	44	80	58	65
25	60	77	250	80	73	683	502	273	46	88	56	63
26	68	74	230	66	73	865	768	189	254	90	54	59
27	70	70	225	64	73	691	474	152	194	73	143	57
28	66	67	195	76	73	545	349	132	125	63	1150	54
29	63	63	170	76	---	461	290	118	99	57	1210	52
30	60	69	160	77	---	391	253	108	86	55	571	52
31	59	---	150	78	---	350	---	99	---	56	624	---
TOTAL	4864	2211	13797	3270	2130	20896	10692	7551	2449	3126	5894	3128
MEAN	157	73.7	445	105	76.1	674	356	244	81.6	101	190	104
MAX	880	135	2180	219	82	3010	1040	639	254	268	1210	377
MIN	59	56	150	64	72	60	182	99	44	55	49	52
CFSM	.93	.44	2.63	.62	.45	3.99	2.11	1.44	.48	.60	1.12	.62
IN.	1.07	.49	3.04	.72	.47	4.60	2.35	1.66	.54	.69	1.30	.69
CAL YR 1977	TOTAL	44204	MEAN 121	MAX 2180	MIN 12	CFSM .72	IN 9.73					
WTR YR 1978	TOTAL	80008	MEAN 219	MAX 3010	MIN 44	CFSM 1.30	IN 17.61					

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929.

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, 24,450 acre-ft (30.1 hm³) March 16, elevation, 786.63 ft (239.765 m); minimum, 21,380 acre-ft (26.4 hm³) Aug. 28, elevation, 785.11 ft (239.302 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	785.05	21,270	
Oct. 31.....	785.19	21,540	+270
Nov. 30.....	785.20	21,560	+20
Dec. 31.....	785.29	21,730	+170
CAL YR 1977.....			+5,160
Jan. 31.....	785.21	21,570	-150
Feb. 28.....	785.21	21,570	0
Mar. 31.....	785.53	22,190	+620
Apr. 30.....	785.45	22,030	-160
May 31.....	785.25	21,650	-380
June 30.....	785.23	21,610	-40
July 31.....	785.18	21,520	-90
Aug. 31.....	785.82	22,780	+1,260
Sept. 30.....	785.15	21,460	-1,320
WTR YR 1978.....			+190

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

			1977								1978		
Oct.	Nov.	Dec.	Cal. year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
158	150	157	170	159	160	147	154	166	189	190	168	176	164

03352500 FALL CREEK AT MILLERSVILLE, IN

LOCATION.--Lat 39°51'07", long 86°05'15", in NE1/4 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 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) National Geodetic Vertical Datum of 1929. 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.--49 years, 278 ft³/s (7.873 m³/s), 12.68 in/yr (322 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, 4,810 ft³/s (136 m³/s) Mar. 16, gage height, 10.17 ft (3.100 m); minimum daily, 67 ft³/s (1.90 m³/s) Oct. 31.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	78	320	160	118	94	530	369	203	230	78	940
2	1640	82	477	157	119	95	500	287	196	747	122	659
3	998	78	451	155	119	96	432	272	188	823	154	465
4	627	84	390	154	120	94	417	346	162	595	116	357
5	423	106	506	156	120	87	417	405	151	390	87	272
6	340	74	520	170	119	88	776	340	138	274	77	222
7	255	70	414	212	117	90	1490	320	204	241	429	190
8	337	72	361	352	111	100	1240	361	199	470	627	169
9	387	78	393	310	105	96	809	519	167	363	355	156
10	346	76	363	275	103	99	655	468	138	272	250	146
11	267	77	349	245	109	106	609	375	116	206	190	135
12	210	80	262	225	104	127	547	355	129	152	180	122
13	188	72	375	212	100	200	470	862	178	202	196	121
14	149	68	1820	190	99	2380	393	1220	157	214	165	121
15	140	69	2830	180	106	4470	343	1120	136	192	126	121
16	127	182	2840	169	101	4600	301	911	123	169	269	210
17	106	212	2170	162	101	3400	277	710	115	139	279	225
18	100	198	1650	159	98	2290	290	564	113	113	616	198
19	99	180	1230	158	96	1600	326	469	124	99	670	165
20	97	149	936	150	102	1460	445	451	107	95	490	139
21	88	161	751	145	95	1830	526	491	107	96	309	126
22	86	170	595	146	93	2220	457	365	99	95	225	129
23	87	140	483	138	94	1670	405	462	93	104	176	101
24	75	132	432	135	94	1340	399	579	89	161	144	89
25	85	121	396	131	92	1250	849	588	266	208	129	93
26	110	109	390	118	92	1380	1170	471	1090	158	180	82
27	94	112	318	117	91	1220	886	391	523	132	390	76
28	93	104	260	117	91	983	648	331	358	113	2390	90
29	88	104	218	117	---	838	503	283	248	93	2530	75
30	81	127	230	117	---	695	432	247	194	97	1580	72
31	67	---	214	118	---	599	---	228	---	91	1300	---
TOTAL	9310	3365	22944	5350	2909	35597	17542	15160	6111	7334	14829	6066
MEAN	300	112	740	173	104	1148	585	489	204	237	478	202
MAX	1640	212	2840	352	120	4600	1490	1220	1090	823	2530	940
MIN	67	68	214	117	91	87	277	228	89	91	77	72
CFSM	1.01	.38	2.48	.58	.35	3.85	1.96	1.64	.69	.80	1.60	.68
IN.	1.16	.42	2.86	.67	.36	4.44	2.19	1.89	.76	.92	1.85	.76
CAL YR 1977	TOTAL	75938	MEAN 209	MAX 2840	MIN 45	CFSM .70	IN 9.48					
WTR YR 1978	TOTAL	146517	MEAN 401	MAX 4600	MIN 67	CFSM 1.35	IN 18.29					

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) National Geodetic Vertical Datum of 1929. 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 good except those for winter periods which are poor. 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.--49 years (1904-5, 1930 to current year), 1,378 ft³/s (39.02 m³/s), 11.44 in/yr (291 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 17	1600	13200 374	12.34 3.761	Apr. 8	0700	8780 249	10.20 3.110
Mar. 17	0100	*19200 544	*14.65 4.465	June 26	0400	9840 279	13.93 4.246
Mar. 23	0300	15300 433	13.20 4.023	Aug. 28	2000	10000 283	10.85 3.307

Minimum daily discharge, 173 ft³/s (4.90 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1910	240	835	1090	443	401	3390	1800	1200	1490	258	3250
2	3100	237	1580	933	455	366	2960	1460	1060	2620	636	2420
3	3420	243	2160	796	440	362	2510	1210	1020	4030	657	1760
4	2450	243	1640	687	435	374	2400	1630	924	3740	430	1310
5	1600	258	1970	804	430	349	2350	1690	843	2540	344	988
6	1150	252	1730	780	415	357	3480	1370	758	1460	283	758
7	784	249	1220	1010	401	405	6900	1250	1230	1610	467	657
8	1140	288	974	1020	392	366	8380	1420	1010	1830	1210	657
9	955	345	1030	1000	375	405	5620	1640	932	1650	851	528
10	975	390	867	830	388	467	4170	1640	835	1140	565	478
11	874	360	671	760	425	565	3650	1470	713	773	517	457
12	704	322	691	730	392	684	3260	1340	835	590	859	415
13	568	299	1450	705	396	1190	2720	2740	735	1060	713	401
14	484	300	6250	670	406	9410	2280	4440	713	859	650	457
15	451	305	10200	640	425	14800	1880	5430	663	758	489	388
16	402	600	12100	615	415	17600	1610	4740	603	578	1060	636
17	373	705	12900	600	399	18500	1470	3810	571	511	657	643
18	311	670	11800	590	379	16100	1530	3100	643	401	1360	590
19	297	630	9890	570	366	12100	1570	2610	663	362	1340	484
20	294	578	7960	550	344	9160	1900	2340	553	344	1050	420
21	276	540	5610	540	353	11300	2690	2430	540	318	670	349
22	257	450	3980	530	353	14500	2520	2000	522	297	484	293
23	256	420	2990	525	357	14800	2140	2330	500	511	396	280
24	247	390	2520	515	357	11600	2010	2510	446	750	328	252
25	322	375	2340	560	354	8340	3630	3150	1190	859	283	225
26	370	365	2210	520	370	7500	6320	3110	6170	590	273	220
27	310	340	1820	465	374	7500	6650	2310	2790	462	610	203
28	299	332	1490	455	362	6930	4250	1930	2010	370	7620	192
29	264	324	1360	450	---	5780	2870	1640	1340	321	8130	200
30	248	392	1280	445	---	4750	2220	1470	951	344	6200	173
31	234	---	1120	440	---	3980	---	1260	---	314	4260	---
TOTAL	25325	11442	114638	20825	11001	200941	99330	71270	32963	33482	43650	20084
MEAN	817	381	3698	672	393	6482	3311	2299	1099	1080	1408	669
MAX	3420	705	12900	1090	455	18500	8380	5430	6170	4030	8130	3250
MIN	234	237	671	440	344	349	1470	1210	446	297	258	173
CFSM	.50	.23	2.26	.41	.24	3.97	2.03	1.41	.67	.66	.86	.41
IN.	.58	.26	2.61	.47	.25	4.57	2.26	1.62	.75	.76	.99	.46

CAL YR 1977 TOTAL 319549 MEAN 875 MAX 12900 MIN 58 CFSM .54 IN 7.27
WTR YR 1978 TOTAL 684951 MEAN 1877 MAX 18500 MIN 173 CFSM 1.15 IN 15.58

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) National Geodetic Vertical Datum of 1929 (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. 21 to Feb. 8, which are poor.

AVERAGE DISCHARGE.--18 years (1960 to current year), 7.51 ft³/s (0.213 m³/s), 13.45 in/yr (342 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s (73.6 m³/s) June 25, 1978, gage height, 13.86 ft (4.225 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 1	0600	1170 33.1	8.86 2.70	July 1	1730	1180 33.4	8.92 2.719
Mar. 14	0330	1280 36.2	9.27 2.825	18	0030	518 14.7	6.22 1.896
June 25	Unknown	*2600 73.6	*13.86 4.225		0030	732 20.7	7.16 2.182

Minimum daily discharge, 0.47 ft³/s (0.013 m³/s) Sep

DISCHARGE, IN CUBIC FEET PFR SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	4.0	25	1.9	.66	3.0	1.9	1.4	2.3	183	1.6	5.4
2	7.6	4.7	8.0	1.7	.66	2.2	1.6	1.3	2.3	64	32	3.3
3	2.7	3.8	14	1.4	.68	1.5	3.4	1.2	1.9	16	11	2.1
4	1.6	1.6	5.4	1.2	.78	1.3	6.8	38	1.9	7.8	2.4	2.3
5	1.1	2.1	30	1.4	1.1	1.1	3.2	12	1.9	5.4	1.5	1.7
6	2.7	1.8	12	7.4	1.1	2.6	69	3.8	1.9	4.1	1.0	1.7
7	3.7	4.0	7.0	17	1.0	12	21	9.9	25	51	16	1.5
8	26	1.6	5.6	5.8	.98	3.8	9.2	41	3.6	15	2.5	1.7
9	4.0	3.3	10	3.3	1.0	3.4	7.4	11	2.3	5.6	2.1	1.5
10	2.1	4.7	8.0	1.8	1.1	2.9	4.7	5.0	1.7	4.1	1.5	.90
11	2.0	1.3	6.0	1.4	1.1	6.6	13	6.4	1.9	3.3	1.2	1.5
12	1.4	1.0	5.0	1.2	1.2	25	3.0	16	21	3.2	22	1.3
13	.98	.92	35	1.2	1.3	53	2.6	58	3.3	23	4.9	1.5
14	.88	.96	150	1.1	1.2	383	1.6	32	2.3	3.8	1.6	9.2
15	.80	2.8	30	1.0	1.1	42	1.4	16	2.3	2.2	1.4	1.7
16	.67	46	15	1.0	1.1	26	1.1	9.3	2.3	1.7	42	28
17	.62	6.2	9.0	1.0	1.0	18	1.1	6.5	2.1	1.7	22	2.8
18	.70	2.8	7.0	1.0	.96	11	7.8	5.0	8.7	1.5	64	1.5
19	.73	2.5	4.5	1.2	.94	13	6.4	3.6	5.0	1.5	6.7	.87
20	.69	2.5	3.0	1.1	1.1	11	5.6	43	2.3	1.8	2.8	.81
21	.68	12	2.6	1.0	.96	28	1.9	12	3.0	2.3	2.0	.81
22	.75	3.5	2.2	1.0	1.0	11	1.4	6.5	2.1	1.7	1.5	.69
23	.70	2.3	2.0	1.0	.94	13	9.7	78	1.9	25	1.4	.63
24	.60	2.0	5.0	1.0	1.2	22	12	20	1.5	35	1.5	.59
25	8.9	1.8	4.0	4.0	1.0	38	71	9.7	351	6.3	1.4	.69
26	3.5	1.6	3.0	1.5	.96	19	14	5.5	122	4.1	1.2	.55
27	.95	1.5	2.5	.90	.90	9.9	5.7	4.0	9.6	2.3	47	.55
28	.95	1.4	2.0	.75	4.0	6.5	3.2	3.3	7.8	1.7	112	.47
29	1.4	1.4	1.5	.70	---	4.6	2.2	2.8	7.5	1.5	7.4	.69
30	1.7	21	1.3	.68	---	3.4	1.8	2.8	4.0	11	61	2.3
31	1.8	---	1.5	.66	---	2.7	---	2.5	---	2.6	14	---
TOTAL	370.90	147.08	417.1	67.29	31.02	780.5	294.7	467.5	606.4	493.2	490.6	79.25
MEAN	12.0	4.90	13.5	2.17	1.11	25.2	9.82	15.1	20.2	15.9	15.8	2.64
MAX	288	46	150	17	4.0	383	71	78	351	183	112	28
MIN	.60	.92	1.3	.66	.66	1.1	1.1	1.2	1.5	1.5	1.0	.47
CFSM	1.58	.65	1.78	.29	.15	3.33	1.30	1.99	2.67	2.10	2.08	.35
IN.	1.82	.72	2.05	.33	.15	3.83	1.45	2.29	2.98	2.42	2.41	.39
CAL YR 1977	TOTAL	2603.51	MEAN	7.13	MAX	288	MIN	.27	CFSM	.94	IN	12.78
WTR YR 1978	TOTAL	4245.54	MEAN	11.6	MAX	383	MIN	.47	CFSM	1.53	IN	20.83

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--18 years (1960 to current year), 9.96 ft³/s (0.282 m³/s), 13.39 in/yr (340 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,000 ft³/s (85.0 m³/s) June 25, 1978, gage height, 11.28 ft (3.438 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	0515	1460	41.3	7.85	2.393	July 1	Unknown	1600	45.3	8.22	2.505
Mar. 14	0115	1510	42.8	7.99	2.435	Aug. 27	2400	986	27.9	6.56	1.999
June 25	2300	*3000	85.0	*11.28	3.438						

Minimum daily discharge, 0.67 ft³/s (0.019 m³/s) Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381	4.0	29	2.9	.84	3.7	5.6	2.7	3.0	248	1.7	6.8
2	9.3	3.1	9.2	2.4	.85	2.6	4.5	2.6	3.0	88	38	4.3
3	3.0	4.3	17	1.5	1.0	1.8	6.3	2.6	2.7	28	15	2.8
4	1.8	1.8	6.4	1.4	1.1	1.5	11	43	2.4	13	2.8	2.8
5	1.3	2.3	43	1.8	1.3	1.4	6.0	18	2.5	8.0	2.1	2.5
6	2.8	2.2	16	6.9	1.2	3.5	82	6.2	2.5	6.3	1.6	2.5
7	3.6	3.6	8.2	31	1.1	20	24	13	32	61	22	2.4
8	31	2.0	6.9	8.0	1.1	4.4	11	49	4.6	25	3.7	2.6
9	4.1	2.1	12	4.1	1.2	4.0	9.4	15	2.8	8.1	3.3	2.5
10	2.3	6.8	8.9	2.3	1.3	3.5	7.2	6.7	2.2	5.8	2.1	1.9
11	2.3	2.4	7.3	1.7	1.4	8.0	16	7.1	2.1	5.0	1.8	2.4
12	1.8	2.0	6.3	1.5	1.5	37	3.9	14	25	3.6	25	2.2
13	1.5	1.9	89	1.5	1.9	117	3.5	78	4.1	32	9.0	2.4
14	1.5	1.5	211	1.4	1.5	423	2.6	41	2.6	5.8	2.3	14
15	1.3	2.9	35	1.4	1.4	58	2.3	22	2.4	3.9	1.9	3.3
16	.97	59	24	1.4	1.3	43	2.0	11	2.4	2.6	53	31
17	.78	7.5	20	1.4	1.2	32	1.9	7.6	2.2	2.6	24	4.2
18	.80	3.8	14	1.4	1.1	23	10	5.9	8.2	2.3	77	2.7
19	.76	3.2	8.5	1.6	1.1	26	6.3	4.6	6.5	3.0	8.7	1.6
20	.76	3.7	7.3	1.5	1.2	23	8.7	40	2.4	4.0	3.7	1.8
21	.76	15	5.7	1.5	1.1	48	2.9	16	3.1	5.8	2.2	1.4
22	.80	3.9	4.9	1.5	1.3	23	2.4	7.5	2.1	5.1	1.8	1.3
23	.78	3.1	4.5	1.5	1.1	29	12	80	2.1	32	1.8	1.2
24	.67	2.8	7.3	1.8	2.1	41	11	25	1.9	44	1.8	1.3
25	9.6	2.5	5.9	6.0	1.5	59	75	10	409	8.3	1.7	1.4
26	5.6	2.4	3.6	2.0	1.3	32	16	6.2	270	5.4	1.7	1.0
27	1.9	2.3	3.2	1.4	1.2	19	7.6	4.5	16	3.3	61	1.2
28	1.5	2.2	2.4	1.1	6.0	13	5.0	3.7	9.2	2.0	145	1.3
29	1.2	2.1	1.9	.90	---	8.2	3.9	3.4	16	2.5	10	1.5
30	1.3	25	1.7	.86	---	6.8	3.4	3.4	16	16	63	3.3
31	1.8	---	2.0	.85	---	6.1	---	3.1	---	3.5	19	---
TOTAL	478.58	181.4	622.1	96.51	40.19	1121.5	363.4	552.8	861.0	683.9	607.7	111.6
MEAN	15.4	6.05	20.1	3.11	1.44	36.2	12.1	17.8	28.7	22.1	19.6	3.72
MAX	381	59	211	31	6.0	423	82	80	409	248	145	31
MIN	.67	1.5	1.7	.85	.84	1.4	1.9	2.6	1.9	2.0	1.6	1.0
CFSM	1.53	.60	1.99	.31	.14	3.58	1.20	1.76	2.84	2.19	1.94	.37
IN.	1.76	.67	2.29	.36	.15	4.13	1.34	2.04	3.17	2.52	2.24	.41
CAL YR 1977	TOTAL	3353.24	MEAN	9.19	MAX	381	MIN	.17	CFSM	.91	IN	12.35
WTR YR 1978	TOTAL	5720.68	MEAN	15.7	MAX	423	MIN	.67	CFSM	1.55	IN	21.07

03353180 BFAN 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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 735.00 ft (224.028 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--8 years, 5.44 ft³/s (0.154 m³/s), 16.79 in/yr (426 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 770 ft³/s (21.8 m³/s) June 25, 1978, gage height, 7.77 ft (2.368 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)	
Oct. 1	0230	151	4.28	4.03	1.228	June 25	2200	*770	21.8	*7.77	2.368
Nov. 16	0445	94	2.66	3.40	1.036	July 1	Unknown	Unknown		Unknown	
Dec. 14	0215	138	3.91	3.90	1.189	July 7	Unknown	Unknown		Unknown	
Mar. 14	0100	531	15.0	6.46	1.969	Aug. 27-28	Unknown	Unknown		Unknown	
May 13	0045	97	2.75	3.26	0.994						

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) July 22.

DISCHARGE IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	2.2	11	2.2	1.3	1.9	3.7	3.3	2.4	50	2.0	3.6
2	3.4	1.7	3.1	1.9	1.4	1.8	3.5	3.2	2.4	23	6.2	3.0
3	2.4	1.7	8.7	1.9	1.5	1.7	3.4	3.1	2.1	7.3	3.6	2.7
4	2.1	1.7	2.3	1.9	1.6	1.7	4.4	20	1.8	4.6	2.9	2.5
5	2.1	1.7	27	2.0	1.7	1.6	3.4	7.8	2.0	3.6	2.7	2.5
6	2.4	1.7	9.4	3.3	1.6	2.3	29	4.7	2.1	3.4	2.6	2.6
7	3.6	2.9	7.8	14	1.5	2.2	8.5	5.3	12	24	3.7	2.6
8	11	1.8	5.1	4.4	1.5	2.1	5.0	19	2.2	9.2	1.6	2.6
9	2.6	2.0	7.2	2.9	1.7	3.0	4.5	8.7	2.1	4.0	1.6	2.3
10	2.2	2.2	5.0	2.5	1.9	6.5	4.6	5.3	1.8	3.4	1.5	2.1
11	2.2	1.5	3.9	2.8	2.0	7.1	8.1	6.3	1.8	3.1	1.5	2.0
12	2.1	1.4	3.7	3.3	2.1	13	3.7	7.4	6.1	3.0	5.9	2.2
13	2.0	1.3	36	2.8	2.2	49	3.1	36	2.6	10	1.8	2.4
14	2.0	1.5	76	2.3	2.1	156	3.0	18	2.7	3.2	1.6	4.6
15	2.0	2.2	17	2.0	2.0	27	2.8	9.4	2.9	2.7	1.9	1.7
16	1.5	29	11	1.9	1.8	19	2.4	5.7	2.7	2.4	13	1.8
17	1.6	3.6	7.6	1.8	1.6	13	2.4	4.4	2.6	2.0	12	1.5
18	1.7	2.7	5.8	1.8	1.5	11	4.8	3.7	3.8	1.6	7.1	1.5
19	2.0	2.4	4.5	1.8	1.5	9.9	3.3	3.4	3.2	1.5	2.2	1.7
20	1.7	2.2	4.5	1.8	1.7	9.0	3.6	4.7	2.6	1.4	1.8	1.7
21	1.7	7.7	3.9	1.8	1.6	16	2.6	2.9	2.1	1.2	2.0	1.6
22	1.7	3.0	3.3	1.8	2.1	8.2	2.5	2.4	2.0	1.1	1.7	1.6
23	2.0	2.8	3.0	1.8	1.8	9.6	6.9	18	2.0	2.8	1.6	1.5
24	2.0	2.4	3.8	1.8	1.9	13	9.6	6.3	1.8	11	1.6	1.3
25	7.0	1.9	3.4	2.5	1.7	23	40	4.1	69	2.9	1.6	1.4
26	4.5	1.7	2.7	4.4	1.5	14	8.9	3.4	73	2.1	1.6	1.6
27	2.2	1.5	2.3	2.4	1.4	9.1	5.0	3.1	7.3	1.7	21	1.7
28	2.2	1.4	2.1	1.9	2.0	7.3	4.4	2.7	5.4	1.6	32	1.7
29	2.0	1.2	1.9	1.6	---	6.1	3.8	2.6	4.1	1.6	3.4	1.7
30	1.8	12	1.8	1.4	---	4.8	3.5	2.6	3.6	3.3	21	1.5
31	2.0	---	1.9	1.4	---	4.0	---	2.4	---	2.3	5.6	---
TOTAL	135.7	103.0	286.7	82.1	48.2	453.9	194.4	229.9	232.2	195.0	170.3	63.2
MEAN	4.38	3.43	9.25	2.65	1.72	14.6	6.48	7.42	7.74	6.29	5.49	2.11
MAX	56	29	76	14	2.2	156	40	36	73	50	32	4.6
MIN	1.5	1.2	1.8	1.4	1.3	1.6	2.4	2.4	1.8	1.1	1.5	1.3
CFSM	1.00	.78	2.10	.60	.39	3.32	1.47	1.69	1.76	1.43	1.25	.48
IN.	1.15	.87	2.42	.69	.41	3.84	1.64	1.94	1.96	1.65	1.44	.53
CAL YR 1977	TOTAL	1678.19	MEAN	4.60	MAX	76	MIN	.54	CFSM	1.05	IN	14.19
WTR YR 1978	TOTAL	2194.60	MEAN	6.01	MAX	156	MIN	1.1	CFSM	1.37	IN	18.55

WABASH RIVER BASIN

03353180 BEAN CREEK AT INDIANAPOLIS, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	
OCT						APR					
06...	1410	1.9	5	.02	17.0	20...	1010	2.9	9	.07	--
13...	0905	2.0	12	.06	13.0	MAY					
19...	1250	1.7	58	.27	13.0	11...	1525	5.1	58	.81	--
27...	1420	1.8	10	.04	--	18...	0830	3.9	50	.53	--
NOV						JUN					
03...	0830	1.6	32	.14	14.0	02...	1535	2.0	47	.25	--
11...	1310	1.4	9	.03	7.5	09...	1525	1.8	20	.10	--
17...	1230	3.3	1	.00	--	26...	0630	60	265	43	--
DEC						26...	0905	36	127	12	--
06...	1000	7.2	7	.13	--	26...	1400	17	50	2.3	--
22...	1525	2.9	84	.67	3.0	JUL					
JAN						06...	1400	3.6	65	.63	--
05...	1115	2.0	2	.01	--	14...	1515	2.8	42	.32	
11...	0900	3.1	42	.35	.0	21...	1400	1.1	46	.14	
12...	0900	3.1	42	.35	.0	22...	1450	1.2	25	.08	
19...	1400	1.7	7	.03	1.0	AUG					
31...	1445	1.3	4	.01	.0	10...	1000	1.4	9	.03	
FEB						18...	1500	3.5	26	.25	
03...	1515	1.4	8	.03	.0	25...	0815	1.6	26	.11	
10...	1620	1.9	1	.00	--	SEP					
17...	1600	1.6	4	.01	--	22...	1050	1.6	12	.05	
22...	1745	1.9	3	.01	.5	29...	1300	1.3	6	.02	
24...	1410	1.6	2	.00	3.0						
MAR											
03...	1400	1.7	2	.01	3.0						
10...	1545	6.8	46	.84	5.5						
14...	0930	99	227	60	3.0						

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'56", long 86°15'22", in ~~SW~~ sec.1, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on down-stream 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) National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Jan. 9 to Apr. 12, which are poor.

AVERAGE DISCHARGE.--21 years, 96.3 ft³/s (2.727 m³/s), 12.70 in/yr (323 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	1600	1980	56.1	7.82	2.384	June 26	0400	*5580	158	*11.87	3.618
Dec. 17	1900	1610	45.6	7.08	2.158	Aug. 28	1000	3550	100	10.33	3.149
Mar. 14	Unknown	3080	87.2	9.27	2.825						

Minimum daily discharge, 4.1 ft³/s (0.12 m³/s) Sept. 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	693	18	180	48	20	17	76	61	47	87	14	210
2	232	18	159	58	20	17	66	53	47	362	16	142
3	98	17	122	41	20	17	70	49	47	359	41	102
4	54	16	102	34	21	17	89	62	45	194	24	72
5	35	15	122	32	21	17	120	83	43	133	16	53
6	26	14	119	32	20	19	360	65	39	93	12	40
7	20	17	152	68	20	20	230	68	74	88	11	31
8	61	19	115	131	19	19	150	105	100	230	12	27
9	72	28	98	72	19	18	130	102	71	115	12	24
10	47	16	78	50	20	25	145	74	55	72	11	21
11	35	15	74	50	21	31	210	63	46	49	11	19
12	27	13	84	50	22	40	130	71	50	35	39	17
13	21	12	171	55	22	50	107	482	46	95	56	15
14	17	11	1470	44	22	2700	83	395	36	83	45	16
15	16	11	1120	41	21	840	73	347	32	51	25	15
16	16	53	865	38	20	490	64	275	32	38	19	33
17	14	71	1520	35	20	270	59	193	30	28	19	26
18	13	48	1070	34	19	220	64	143	27	22	86	21
19	13	35	536	33	19	230	65	111	26	18	49	15
20	12	30	362	33	20	230	70	98	24	16	27	12
21	11	29	233	32	19	700	64	83	24	14	17	10
22	11	24	160	31	22	360	56	66	25	13	12	9.6
23	9.6	23	130	32	21	235	57	106	19	18	10	8.8
24	10	23	124	35	21	255	72	126	16	78	9.9	7.5
25	13	20	167	39	20	440	212	101	902	93	8.9	7.0
26	22	18	180	100	19	350	229	83	2980	50	8.3	5.9
27	24	18	140	43	18	260	141	71	398	32	64	5.3
28	22	16	110	32	20	180	104	63	190	24	2520	4.7
29	20	14	70	27	---	130	84	59	114	18	714	4.3
30	19	22	56	23	---	99	72	56	78	16	382	4.1
31	18	---	46	21	---	90	---	52	---	15	344	---
TOTAL	1701.6	684	9935	1394	566	8386	3452	3766	5663	2539	4635.1	978.2
MEAN	54.9	22.8	320	45.0	20.2	271	115	121	189	81.9	150	32.6
MAX	693	71	1520	131	22	2700	360	482	2980	362	2520	210
MIN	9.6	11	46	21	18	17	56	49	16	13	8.3	4.1
CFSM	.53	.22	3.11	.44	.20	2.63	1.12	1.18	1.84	.80	1.46	.32
IN.	.61	.25	3.59	.50	.20	3.03	1.25	1.36	2.05	.92	1.67	.35
CAL YR 1977	TOTAL	20302.48	MEAN	55.6	MAX	1520	MIN	.02	CFSM	.54	IN	7.33
WTR YR 1978	TOTAL	43699.90	MEAN	120	MAX	2980	MIN	4.1	CFSM	1.17	IN	15.78

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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
MAY 25...	1510	101	48	13	20.0
JUN 26...	0935	4130	843	9400	--
JUL 05...	1345	132	72	25	--
31...	1540	13	75	2.7	--

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) National Geodetic Vertical Datum of 1929.

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, 27,350 acre-ft (33.7 hm³) June 26, 1978, elevation, 792.39 ft (241.520 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, 27,350 acre-ft (33.7 hm³) June 26, elevation, 792.39 ft (241.520 m); minimum, 20,630 acre-ft (25.4 hm³) Oct. 1, elevation, 787.41 ft (240.003 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	787.41	20,630	
Oct. 31.....	790.03	24,040	+3,410
Nov. 30.....	790.08	24,110	+70
Dec. 31.....	790.07	24,100	-10
CAL YR 1977.....			+6,880
Jan. 31.....	790.07	24,100	0
Feb. 28.....	790.08	24,110	+10
Mar. 31.....	790.03	24,040	-70
Apr. 30.....	790.04	24,060	+20
May 31.....	789.99	23,990	-70
June 30.....	789.99	23,990	0
July 31.....	790.02	24,030	+40
Aug. 31.....	789.99	23,990	-40
Sept. 30.....	789.62	23,510	-480
WTR YR 1978.....			+2,880

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) National Geodetic Vertical Datum of 1929. 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. Flow regulated since November 1969 by Eagle Creek Reservoir, 4.7 miles (7.6 km) upstream (See sta 03353450).

AVERAGE DISCHARGE.--39 years (1939 to current year), 153 ft³/s (4.333 m³/s), 11.94 in/yr (303 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, 10,500 ft³/s (297 m³/s) June 26, gage height, 11.37 ft (3.466 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 18-20, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	14	336	117	15	39	268	170	21	275	28	296
2	334	12	221	54	50	15	198	122	50	523	136	167
3	250	12	288	25	24	14	245	19	80	501	119	160
4	138	13	101	22	20	13	241	302	15	211	34	154
5	24	34	374	107	18	12	296	160	14	184	27	33
6	115	12	282	19	17	12	1000	152	14	168	23	27
7	23	16	78	218	16	81	1350	149	184	171	32	16
8	227	12	184	287	15	17	751	320	118	309	25	147
9	163	12	57	151	14	15	453	157	16	160	26	26
10	82	18	113	124	13	13	489	182	125	39	24	24
11	23	15	129	40	54	95	415	168	23	28	27	23
12	82	16	94	118	18	22	561	130	28	29	32	23
13	14	15	290	20	16	227	209	1170	22	215	26	23
14	13	15	2310	91	15	3400	193	946	22	158	25	30
15	68	15	2120	28	14	3110	114	795	25	32	24	30
16	14	118	1630	133	14	2290	126	665	22	80	108	35
17	13	114	2240	23	103	1920	86	492	20	37	36	25
18	11	95	2020	89	16	1390	194	287	70	31	106	21
19	11	18	1000	19	14	1220	168	304	24	30	34	20
20	11	94	580	31	13	1400	183	296	20	28	30	20
21	12	104	414	121	12	3210	79	312	20	30	28	22
22	13	18	348	25	12	1730	58	155	19	28	26	21
23	11	16	335	16	12	1360	229	309	19	32	27	19
24	12	65	122	106	13	1240	270	394	19	36	26	17
25	17	16	294	18	12	1020	564	274	704	130	25	16
26	15	21	183	76	12	1230	456	216	7360	26	26	17
27	12	17	211	25	12	849	730	138	1340	27	67	17
28	52	15	113	18	12	636	247	165	574	26	3460	16
29	12	14	117	16	---	500	154	86	321	24	1340	15
30	12	94	136	15	---	426	161	132	193	25	645	16
31	15	---	72	15	---	390	---	108	---	24	581	---
TOTAL	2055	1050	16792	2167	576	27896	10088	9275	11482	3617	7173	1476
MEAN	66.3	35.0	542	69.9	20.6	900	336	299	383	117	231	49.2
MAX	334	118	2310	287	103	3400	1350	1170	7360	523	3460	296
MIN	11	12	57	15	12	12	58	19	14	24	23	15
CFSM	.38	.20	3.12	.40	.12	5.17	1.93	1.72	2.20	.67	1.33	.28
IN.	.44	.22	3.59	.46	.12	5.96	2.16	1.98	2.45	.77	1.53	.32

CAL YR 1977 TOTAL 32386.3 MEAN 88.7 MAX 2310 MIN 5.1 CFSM .51 IN 6.92
WTR YR 1978 TOTAL 93647.0 MEAN 257 MAX 7360 MIN 11 CFSM 1.48 IN 20.02

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) National Geodetic Vertical Datum of 1929 (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 fair. High-water flow is diverted from Dry Run basin into Little Eagle Creek above gage.

AVERAGE DISCHARGE.--14 years (water years 1965 to current year) 19.7 ft³/s (0.558 m³/s), 11.19 in/yr (284 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s (92.0 m³/s) June 26, 1978, gage height, 12.13 ft (3.697 m); no flow at times in 1960-64, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Oct. 1	0330	1690	47.9	8.87	2.704	June 26	0130	*3250	92.0	*12.13	3.697
Dec. 14	1430	721	20.4	6.61	2.015	Aug. 16	0515	482	13.6	5.76	1.756
Mar. 14	Unknown	2000	56.6	Unknown		Aug. 28	0115	1350	38.2	8.25	2.515

Minimum daily discharge, 2.1 ft³/s (0.059 m³/s) Oct. 24.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	697	5.6	39	8.8	3.4	5.0	17	11	4.6	49	5.0	26
2	60	6.0	32	13	3.5	4.8	12	9.3	4.1	133	65	16
3	23	5.8	27	10	3.6	4.5	28	8.5	3.8	40	29	11
4	11	5.0	48	7.8	3.7	4.4	35	65	3.5	24	13	8.1
5	6.7	4.6	35	7.8	3.8	4.4	30	56	3.4	18	8.0	6.7
6	6.4	4.1	42	8.2	3.7	4.4	92	27	3.2	15	6.6	5.7
7	6.6	8.4	26	61	3.6	5.6	65	32	34	43	22	4.8
8	67	6.0	22	11	3.5	5.2	33	50	5.5	26	8.6	4.2
9	22	5.0	18	8.8	3.6	5.8	23	44	3.3	16	6.9	3.7
10	9.5	4.5	16	7.8	3.7	7.4	21	25	2.6	13	6.3	3.5
11	7.0	4.3	17	8.2	3.8	12	40	22	3.3	11	6.6	3.3
12	5.3	4.7	50	9.6	3.9	24	20	36	27	10	27	3.1
13	4.0	4.0	491	8.2	4.0	68	14	209	7.3	64	12	3.3
14	3.6	3.7	625	7.4	4.0	1300	11	96	3.8	22	7.3	7.7
15	3.3	3.5	326	6.8	3.9	180	9.7	75	3.3	15	6.7	4.0
16	3.2	74	203	6.2	3.8	110	8.8	50	3.1	12	107	31
17	3.1	20	154	5.8	3.7	80	7.9	35	2.7	8.5	37	12
18	2.8	10	106	5.6	3.6	58	22	25	5.4	6.6	66	7.0
19	2.8	8.1	61	5.6	3.5	56	14	18	5.2	5.5	24	4.7
20	2.4	8.2	46	5.4	3.5	58	15	35	3.3	4.9	16	3.7
21	2.3	21	31	5.2	3.5	190	10	58	3.6	4.4	10	3.6
22	2.6	9.5	23	5.2	4.3	75	8.4	24	2.7	4.0	8.9	3.5
23	2.3	8.1	20	5.0	4.1	58	17	95	2.3	8.8	8.2	3.4
24	2.1	7.4	22	5.4	4.1	62	20	64	2.2	22	7.8	3.2
25	18	6.8	27	6.4	4.0	110	101	33	359	29	7.5	2.8
26	16	6.3	42	31	3.9	76	60	20	1270	10	7.8	3.0
27	7.6	5.7	17	13	3.8	47	32	14	58	7.6	63	2.8
28	6.0	5.9	13	7.8	5.4	35	22	9.8	30	6.4	557	2.6
29	5.2	5.2	10	6.0	---	27	17	7.7	22	5.8	53	2.5
30	5.0	34	9.4	5.0	---	23	14	6.4	19	5.4	70	3.5
31	5.0	---	8.8	4.2	---	20	---	5.4	---	5.2	53	---
TOTAL	1018.8	305.4	2607.2	307.2	106.9	2720.5	819.8	1266.1	1901.2	645.1	1326.2	200.4
MEAN	32.9	10.2	84.1	9.91	3.82	87.8	27.3	40.8	63.4	20.8	42.8	6.68
MAX	697	74	625	61	5.4	1300	101	209	1270	133	557	31
MIN	2.1	3.5	8.8	4.2	3.4	4.4	7.9	5.4	2.2	4.0	5.0	2.5
CAL YR 1977	TOTAL	8007.21	MEAN	21.9	MAX	697	MIN	.24				
WTR YR 1978	TOTAL	13224.80	MEAN	36.2	MAX	1300	MIN	2.1				

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good. The City of Beech Grove sewage treatment plant puts in effluent 1.1 miles (1.8 km) upstream.

AVERAGE DISCHARGE.--8 years, 19.4 ft³/s (0.549 m³/s), 16.89 in/yr (429 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) June 25, 1978, gage height, 9.61 ft (2.929 m); minimum daily, 0.76 ft³/s (0.022 m³/s) Sept. 28, 29, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (8.50 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)	
Oct. 1	Unknown	950	26.9	5.51	1.679	June 25	2400	*2500	70.8	*9.61	2.929
Dec. 14	0330	548	15.5	4.98	1.518	July 1	2245	501	14.2	5.01	1.527
Mar. 14	0315	1300	36.8	6.49	1.978	Aug. 27	2230	326	9.23	4.36	1.329

Minimum daily discharge, 0.76 ft³/s (0.022 m³/s) Sept. 28, 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	4.5	51	7.5	4.1	5.4	18	11	6.1	133	4.5	16
2	31	4.2	18	6.6	4.1	5.2	15	9.1	5.8	138	18	9.7
3	12	3.9	33	5.3	4.1	5.1	15	8.1	5.1	48	12	7.5
4	6.6	4.2	15	5.3	4.5	5.1	20	57	4.6	23	5.6	6.3
5	4.9	3.9	79	6.6	4.9	5.2	17	46	5.0	14	6.3	5.4
6	5.7	3.6	37	9.7	5.7	8.0	108	23	4.0	10	3.7	4.8
7	6.6	7.1	21	38	5.3	9.4	69	25	34	41	12	4.4
8	41	8.0	19	23	4.5	8.8	38	57	12	50	5.8	4.1
9	14	4.9	25	13	4.3	11	28	45	6.4	16	4.1	3.8
10	7.5	6.6	16	7.6	4.2	21	25	24	4.9	10	3.6	3.4
11	6.2	3.6	12	5.8	4.3	33	37	20	4.1	9.7	3.4	3.4
12	4.5	3.0	12	6.6	4.2	59	23	29	25	8.6	9.7	3.4
13	3.9	2.6	98	7.1	4.5	124	17	145	10	33	9.7	3.4
14	3.3	2.6	374	6.6	4.5	661	15	91	5.2	11	4.3	8.8
15	3.3	3.6	103	5.7	4.2	130	13	65	4.4	7.7	3.7	5.2
16	3.9	77	66	5.3	4.1	100	12	40	3.9	6.3	29	7.7
17	3.6	17	53	5.1	4.2	77	11	29	3.4	5.5	17	5.8
18	3.3	7.1	38	4.9	4.2	60	20	21	10	4.8	62	4.1
19	3.3	4.6	29	4.9	4.2	60	15	17	8.4	4.4	14	5.2
20	3.3	4.2	23	4.8	4.9	52	20	33	4.4	4.2	7.0	3.4
21	2.8	12	18	4.8	4.5	81	13	27	3.8	4.0	5.1	2.8
22	2.8	5.7	15	4.7	4.5	51	11	15	3.2	3.7	4.3	2.6
23	3.6	4.6	13	4.8	4.5	50	22	80	3.0	11	4.0	2.6
24	3.3	3.9	15	5.3	5.7	61	26	54	2.9	38	4.1	2.5
25	8.5	3.3	14	9.1	6.3	95	134	27	256	11	3.7	1.6
26	12	3.0	9.7	12	5.2	69	67	18	854	6.3	3.8	1.2
27	5.7	2.8	8.0	6.4	5.0	48	32	14	78	4.8	25	.84
28	4.2	2.6	7.1	4.9	6.0	34	21	11	42	4.0	96	.76
29	4.9	2.4	6.8	4.4	---	28	16	9.6	26	3.7	19	.76
30	3.9	24	6.4	4.2	---	23	14	8.3	18	13	79	.84
31	4.5	---	7.1	4.1	---	21	---	7.0	---	6.4	45	---
TOTAL	528.1	240.5	1242.1	244.1	130.7	2001.2	892	1066.1	1453.6	684.1	524.4	132.30
MEAN	17.0	8.02	40.1	7.87	4.67	64.6	29.7	34.4	48.5	22.1	16.9	4.41
MAX	304	77	374	38	6.3	661	134	145	854	138	96	16
MIN	2.8	2.4	6.4	4.1	4.1	5.1	11	7.0	2.9	3.7	3.4	.76
CFSM	1.09	.51	2.57	.50	.30	4.14	1.90	2.21	3.11	1.42	1.08	.28
IN.	1.26	.57	2.96	.58	.31	4.77	2.13	2.54	3.47	1.63	1.25	.32
CAL YR 1977	TOTAL	5805.70	MEAN	15.9	MAX	378	MIN	1.8	CFSM	1.02	IN	13.84
WTR YR 1978	TOTAL	9139.20	MEAN	25.0	MAX	854	MIN	.76	CFSM	1.60	IN	21.79

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) National Geodetic Vertical Datum of 1929. Prior to Oct. 25, 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 fair. Low flow affected by releases from Danville Filtration Plant.

AVERAGE DISCHARGE.--20 years, 29.0 ft³/s (0.821 m³/s), 13.68 in/yr (347 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, 1978.

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		Gage height		Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Oct. 1	0730	*1980	56.1	*9.13	2.783	Mar. 14	0330	1730	49.0	7.98	2.432
Dec. 14	1230	1050	29.7	6.35	1.935						

Minimum daily discharge, no flow Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	8.9	124	15	10	4.0	42	17	13	21	.16	59
2	228	8.1	90	14	10	3.7	30	14	11	59	74	37
3	113	7.8	77	13	10	3.6	32	13	8.5	25	55	25
4	73	7.2	64	12	10	3.6	47	41	7.7	8.8	9.6	17
5	49	6.6	114	11	10	3.7	56	62	7.2	5.1	3.3	12
6	34	7.0	90	11	9.9	3.7	202	38	6.8	3.4	1.3	9.1
7	29	11	70	75	9.6	3.8	155	37	49	17	.73	7.3
8	106	12	53	87	9.4	4.1	87	47	28	32	.39	6.0
9	71	10	43	60	9.3	5.6	64	39	15	5.8	.26	5.3
10	45	9.3	34	32	9.2	8.0	54	28	9.7	3.0	.18	3.1
11	33	8.0	29	20	9.2	11	61	23	8.5	1.4	.15	1.4
12	24	6.5	47	14	9.0	17	45	31	32	.83	.34	.98
13	19	5.9	168	13	9.0	91	31	227	19	18	.66	1.0
14	16	6.2	829	12	8.8	1310	23	152	8.9	5.2	.49	1.7
15	15	6.6	383	12	8.6	456	20	129	7.7	2.1	.36	.95
16	12	77	281	12	8.5	317	17	109	7.2	.95	8.9	2.3
17	11	59	345	11	8.4	204	16	82	6.3	.44	2.6	2.1
18	11	33	217	11	8.3	140	21	64	5.9	.31	1.5	2.5
19	9.7	23	134	11	8.2	146	18	48	5.7	.20	1.1	.96
20	8.3	23	104	11	8.2	150	16	38	4.8	.20	.76	.30
21	8.0	23	76	11	8.2	401	14	28	4.8	.17	.52	.26
22	7.8	19	56	10	8.2	163	11	23	3.5	.17	.46	.23
23	7.6	19	47	10	8.2	140	15	76	3.1	.19	.46	.17
24	8.5	15	49	10	8.2	149	19	106	2.8	9.1	.45	.15
25	12	15	46	11	8.2	171	76	68	17	100	.45	.10
26	18	13	35	13	8.2	182	68	47	150	12	29	.06
27	14	11	27	14	8.2	127	43	34	58	3.6	35	.05
28	13	14	22	10	4.8	91	30	26	19	.93	277	.01
29	10	7.7	20	10	---	76	25	21	7.5	.41	133	.00
30	9.3	22	16	10	---	63	21	17	5.1	.48	102	.04
31	9.2	---	16	10	---	53	---	14	---	.34	96	---
TOTAL	2054.4	494.8	3706	576	245.8	4501.8	1359	1699	532.7	337.12	836.12	196.06
MEAN	66.3	16.5	120	18.6	8.78	145	45.3	54.8	17.8	10.9	27.0	6.54
MAX	1030	77	829	87	10	1310	202	227	150	100	277	59
MIN	7.6	5.9	16	10	4.8	3.6	11	13	2.8	.17	.15	.00
CFSM	2.30	.57	4.17	.65	.31	5.04	1.57	1.90	.62	.38	.94	.23
IN.	2.65	.64	4.79	.74	.32	5.81	1.76	2.19	.69	.44	1.08	.25
CAL YR 1977	TOTAL	12415.43	MEAN	34.0	MAX	1030	MIN	.01	CFSM	1.18	IN	16.04
WTR YR 1978	TOTAL	16538.80	MEAN	45.3	MAX	1310	MIN	.00	CFSM	1.57	IN	21.36

WABASH RIVER BASIN

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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft (196.486 m) National Geodetic Vertical Datum of 1929. 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 fair.

AVERAGE DISCHARGE.--21 years, 218 ft³/s (6.174 m³/s), 13.96 in/yr (355 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 discharges 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 1	1500	5440 154	19.06 5.810	Mar. 21	1500	3890 110	16.76 5.108
Dec. 14	2000	6150 174	19.58 5.968	June 26	1800	3450 97.7	16.33 4.977
Mar. 14	1100	*10600 300	*21.82 6.651	Aug. 28	0500	4700 133	18.24 5.560

Minimum daily discharge, 34 ft³/s (0.96 m³/s) Aug. 23-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3160	64	474	130	70	57	330	166	122	539	49	415
2	1240	63	440	125	69	56	259	144	118	758	160	287
3	431	61	338	110	68	57	244	134	109	379	325	223
4	257	60	280	100	67	54	266	396	88	219	131	187
5	184	58	684	100	66	54	343	520	92	158	83	164
6	149	56	575	115	64	54	1060	320	89	131	65	148
7	127	70	346	208	63	56	1300	287	171	180	58	136
8	264	79	305	615	62	56	637	335	215	359	52	127
9	276	73	330	235	62	56	431	320	140	157	50	119
10	175	68	246	144	61	62	365	241	95	64	46	111
11	139	64	235	156	60	74	422	206	85	88	42	105
12	118	59	230	120	59	96	338	376	77	92	49	101
13	103	56	848	112	58	372	262	1880	103	236	52	100
14	93	56	5210	108	58	8090	216	1110	84	119	48	104
15	87	56	2920	106	58	4340	194	866	73	114	40	102
16	80	300	1530	102	58	2520	175	692	66	96	67	96
17	74	278	1790	98	57	1820	164	503	61	85	69	148
18	71	171	1570	96	57	1240	190	382	61	70	54	120
19	68	134	965	92	57	1240	180	307	58	69	44	103
20	66	129	664	90	57	1230	171	264	47	64	39	96
21	62	141	465	88	56	2800	160	255	51	60	40	93
22	60	132	425	88	56	1480	144	217	46	51	37	91
23	58	123	343	86	56	1170	169	620	42	75	34	89
24	57	116	312	86	56	1270	216	752	37	129	34	88
25	64	109	370	88	56	1690	712	433	88	183	34	86
26	100	103	268	100	56	1620	600	310	2560	99	700	85
27	92	96	226	78	57	1090	351	246	650	73	288	84
28	80	95	186	76	57	736	264	206	284	61	3330	83
29	74	88	169	74	---	582	220	179	198	54	1590	82
30	68	100	158	72	---	459	194	156	163	56	676	81
31	66	---	140	71	---	385	---	135	---	55	684	---
TOTAL	7943	3058	23042	3869	1681	34866	10577	12958	6073	4873	8970	3854
MEAN	256	102	743	125	60.0	1125	353	418	202	157	289	128
MAX	3160	300	5210	615	70	8090	1300	1880	2560	758	3330	415
MIN	57	56	140	71	56	54	144	134	37	51	34	81
CFSM	1.21	.48	3.51	.59	.28	5.31	1.67	1.97	.95	.74	1.36	.60
IN.	1.39	.54	4.04	.68	.29	6.12	1.86	2.27	1.07	.86	1.57	.68

CAL YR 1977 TOTAL 73814.2 MEAN 202 MAX 5210 MIN 9.6 CFSM .95 IN 12.95
WTR YR 1978 TOTAL 121764.0 MEAN 334 MAX 8090 MIN 34 CFSM 1.58 IN 21.37

03353800 WHITE LICK CREEK AT MOORESVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
 SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	TEMPER- ATURE (DEG C)
OCT 17...	1750	70	28	5.3	--	12.5
NOV 10...	1545	62	16	2.6	--	24.0
DEC 15...	1230	2340	473	2990	96	--
APR 03...	1605	234	40	25	--	10.0
MAY 30...	2030	149	61	24	--	23.0
JUN 27...	0945	736	86	171	--	--
29...	1210	213	60	35	--	--

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, 0.8 mile (1.3 km) downstream from White Lick Creek, 1 mile (1.6 km) south of Centerton, 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) National Geodetic Vertical Datum of 1929 (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 winter periods, which are fair. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--33 years (1930-31, 1946 to current year), 2,370 ft³/s (67.12 m³/s), 13.17 in/yr (334 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 2	0200	10700 302	9.51 2.898	Apr. 9	0100	11000 311	9.73 2.966
Dec. 18	1800	18000 509	13.20 4.023	June 26	Unknown	10400 294	Unknown
Mar. 15	0300	*26600 753	*15.53 4.734	Aug. 29	Unknown	15700 444	Unknown

Minimum daily discharge, 547 ft³/s (15.59 m³/s) Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5340	560	2200	2320	920	878	5430	3370	1750	2750	989	6100
2	7150	547	2650	2090	935	878	4690	2900	1780	4400	1020	4120
3	5140	567	3340	1790	905	825	4100	2490	1720	6200	2040	3140
4	3970	567	3130	1640	900	805	3810	3210	1580	5700	1430	2440
5	2490	574	3970	1640	870	800	3890	4440	1470	4090	1110	2070
6	2030	622	4090	1590	830	795	4590	3270	1380	3050	989	1730
7	1600	622	3100	1690	810	869	8900	2830	1790	2490	1010	1540
8	1930	695	2200	3030	790	911	10400	3000	1860	3810	1550	1400
9	2120	644	2420	2420	790	853	9860	3550	1680	3060	1650	1390
10	1790	695	2010	1980	795	963	6610	3130	1460	2540	1330	1200
11	1640	710	1870	1590	790	1130	5670	2870	1400	2000	1150	1110
12	1420	665	1860	1530	830	1330	4970	2750	1290	1720	1230	1060
13	1230	622	4100	1420	780	2070	4280	5130	1570	2270	1630	1020
14	1070	587	10200	1390	780	16700	3620	7330	1340	2280	1310	1020
15	963	594	16200	1340	780	24300	3060	8260	1290	1910	1210	1200
16	928	1630	15400	1300	745	21800	2750	7570	1220	1630	1500	981
17	828	1860	16600	1270	740	22800	2530	6250	1150	1470	1700	1360
18	756	1450	17600	1230	720	22100	2510	5050	1360	1320	1780	1260
19	702	1370	16400	1200	710	20800	2560	4150	1880	1190	1990	1130
20	673	1290	13100	1170	700	17700	2480	3630	1190	1110	1810	1010
21	644	1330	9790	1130	720	16400	3310	3770	1100	1070	1500	937
22	608	1310	7060	1110	720	18800	3600	3140	1020	1020	1250	844
23	581	1120	5390	1000	720	19400	3310	4320	989	1020	1100	787
24	567	1060	4600	1110	795	19400	3240	5700	946	1860	989	748
25	594	1030	4260	1300	844	17800	4910	4550	920	1990	920	695
26	946	946	4060	1230	828	14500	8180	4800	9800	1660	1540	665
27	803	886	3560	1040	812	11900	8750	3710	5400	1340	1250	644
28	732	844	3000	980	853	11000	7320	3100	3200	1190	6990	601
29	695	903	2660	960	---	9230	4930	2660	2600	1070	14800	587
30	608	812	2610	945	---	7500	3920	2380	1990	1100	11000	581
31	574	---	2440	925	---	6280	---	2120	---	1130	7800	---
TOTAL	51122	27112	191870	45360	22412	311517	148280	124430	58125	69390	77567	43360
MEAN	1649	904	6189	1463	800	10050	4943	4078	1938	2238	2502	1445
MAX	7150	1860	17600	3030	935	24300	10400	8260	9800	6200	14800	6100
MIN	567	547	1860	925	700	795	2510	2120	920	1020	920	581
CFSM	.68	.37	2.53	.60	.33	4.11	2.02	1.67	.79	.92	1.02	.59
IN.	.78	.41	2.92	.69	.34	4.74	2.26	1.92	.88	1.06	1.18	.66
CAL YR 1977	TOTAL	611186	MEAN	1674	MAX	17600	MIN	240	CFSM	.69	IN	9.30
WTR YR 1978	TOTAL	1172545	MEAN	3212	MAX	24300	MIN	547	CFSM	1.31	IN	17.85

WABASH RIVER BASIN

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1					25.5	25.0	29.0	26.5				
2					25.5	23.5	31.0	26.5				
3					24.0	22.5	30.0	27.0				
4					23.5	22.5	30.0	25.0				
5					24.0	22.0	27.5	25.5				
6					23.0	22.0	28.0	25.5				
7					27.0	23.0	30.0	26.0				
8					24.0	23.5	30.5	26.5				
9					24.0	22.5	30.5	26.5				
10					24.5	22.5	29.0	24.5				
11					25.5	23.0	25.0	24.5				
12					26.5	23.5	25.0	24.0				
13					24.0	22.0	27.5	24.0				
14					24.0	21.0	28.5	26.5				
15					27.5	22.0	28.5	26.0				
16					24.5	22.0	28.5	26.0				
17					25.5	23.5	27.5	26.0				
18					26.5	24.5	28.5	26.0				
19					27.5	25.0	28.0	26.5				
20					28.0	25.0	30.5	27.5				
21					27.0	25.0	31.0	29.0				
22					26.0	24.0	31.5	29.0				
23					25.0	24.0	30.0	29.0				
24					26.5	24.0	---	---				
25					27.5	25.5	---	---				
26					28.5	24.0	---	---				
27					24.0	25.0	---	---				
28					28.5	26.5	---	---				
29					29.5	27.5	---	---				
30					29.5	27.5	---	---				
31					---	---	---	---				
MONTH					29.5	21.0						

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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--27 years, 15.5 ft³/s (0.439 m³/s), 14.42 in/yr (366 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; noflow 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)
Dec. 14	0400	*622 17.6	*5.47 1.667

Minimum daily discharge, no flow Sept. 24 to Sept. 26.

NOTE.--No gage-height record May 15 to Sept. 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.49	16	2.0	3.0	3.9	12	6.3	4.4	.02	.03	4.0
2	1.2	.42	8.1	1.9	2.8	3.6	8.8	4.3	3.9	6.8	21	2.8
3	.72	.44	6.4	1.7	2.6	3.3	7.8	3.5	3.4	3.0	19	2.5
4	.60	.41	5.3	1.6	2.5	3.1	8.0	24	2.9	1.0	14	2.1
5	.35	.48	22	1.6	2.4	3.1	9.4	38	2.5	.36	8.8	1.8
6	.43	.56	17	1.9	2.3	3.1	12	19	2.2	.18	6.0	1.6
7	.48	.59	10	3.5	2.2	3.3	14	15	1.9	.72	4.0	1.4
8	2.6	.61	13	4.0	2.1	3.7	11	112	1.7	1.5	2.8	1.2
9	1.7	.58	29	3.5	2.0	5.0	10	135	1.5	1.1	1.8	1.0
10	1.2	.56	12	2.6	2.0	7.2	10	76	1.3	.75	1.2	.88
11	.90	.49	9.1	2.3	1.9	20	19	19	1.1	.47	.84	.76
12	.69	.44	8.2	2.1	1.8	30	16	33	.94	.31	.64	.64
13	.39	.36	63	2.0	1.8	52	13	240	2.4	.21	.50	.64
14	.69	.34	286	1.9	1.8	84	11	131	1.9	.14	.38	.76
15	.18	.50	54	1.8	1.7	135	8.4	59	1.4	.09	.29	4.4
16	.16	1.7	25	1.7	1.7	107	7.2	33	1.0	.07	.22	2.2
17	.15	1.8	17	1.6	1.7	78	6.2	19	.72	.04	.17	.70
18	.15	1.2	12	1.5	1.6	47	11	12	.56	.04	.13	.27
19	.14	.99	9.5	1.4	1.6	60	11	8.5	8.8	.03	.10	.11
20	.14	.94	7.3	1.4	1.6	57	9.8	5.8	3.7	.02	.08	.04
21	.15	2.0	5.8	1.3	1.6	91	8.6	3.6	10	.02	.06	.02
22	.16	1.7	4.9	1.3	1.6	48	7.6	2.6	2.3	.02	.05	.01
23	.16	1.4	4.4	1.3	1.5	35	14	16	.70	.01	.04	.01
24	.16	1.1	4.3	1.6	1.5	34	22	27	.17	56	.03	.00
25	.40	1.0	3.9	6.6	1.8	99	93	10	.60	20	7.2	.00
26	.76	.83	3.5	6.0	2.2	61	90	5.5	12	7.0	6.0	.00
27	.63	.79	3.2	5.2	2.8	38	30	3.3	3.5	2.0	4.8	.02
28	.48	.75	.47	4.4	3.5	27	16	8.0	1.1	.55	3.8	.10
29	.44	.74	.39	3.9	---	20	10	7.0	.30	.20	3.2	1.0
30	.40	4.4	2.4	3.5	---	16	9.6	6.0	.10	.08	18	5.0
31	.42	---	1.9	3.2	---	13	---	5.2	---	.04	9.2	---
TOTAL	18.03	28.61	665.06	80.3	57.6	1191.3	516.4	1047.6	78.99	102.77	134.36	35.96
MEAN	.58	.95	21.5	2.59	2.06	38.4	17.2	33.8	2.63	3.32	4.33	1.20
MAX	2.6	4.4	286	6.6	3.5	135	93	240	12	56	21	5.0
MIN	.14	.34	.39	1.3	1.5	3.1	6.2	2.6	.10	.01	.03	.00
CFSM	.04	.07	1.47	.18	.14	2.63	1.18	2.32	.18	.23	.30	.08
IN.	.05	.07	1.69	.20	.15	3.04	1.32	2.67	.20	.26	.34	.09

CAL YR 1977 TOTAL 4010.85 MEAN 11.0 MAX 659 MIN .00 CFSM .75 IN 10.22
WTR YR 1978 TOTAL 3956.98 MEAN 10.8 MAX 286 MIN .00 CFSM .74 IN 10.08

03354500 BEANBLOSSOM CREEK AT BEANBLOSSOM, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STRFAM- FLOW- INSTAN- TANFOUIS (CFS)	SEDI- MENT- SUS- PENDEFD (MG/L)	SEDI- MENT DIS- CHARGE- SUS- PENDEFD (T/DAY)	TEMPER- ATURE (DEG C)	DATE	TIME	STRFAM- FLOW- INSTAN- TANFOUIS (CFS)	SEDI- MENT- SUS- PENDEFD (MG/L)	SEDI- MENT DIS- CHARGE- SUS- PENDEFD (T/DAY)	TEMPER- ATURE (DEG C)
OCT						AUG					
02...	1730	.94	105	.27	--	08...	1200	.03	14	.00	22.0
09...	1800	1.4	28	.11	--	08...	1800	.00	20	.00	22.0
14...	1020	.29	10	.00	--	SEP					
16...	1800	.16	11	.00	--	14...	1030	.98	14	.03	23.0
30...	1700	.39	1	.00	--						
NOV											
06...	1700	.51	4	.00	--						
08...	1415	.64	4	.00	--						
13...	1700	.34	9	.00	--						
20...	1800	.94	10	.02	--						
28...	1800	.72	3	.00	--						
DEC											
11...	1730	8.5	3	.06	--						
18...	1700	11	6	.19	--						
25...	1800	4.3	6	.07	--						
28...	1130	2.8	2	.01	--						
JAN											
01...	1700	2.0	10	.05	--						
08...	1800	5.6	10	.18	--						
15...	1800	2.0	8	.04	--						
FEB											
06...	1700	2.2	4	.02	--						
09...	1730	2.0	7	.03	--						
12...	1700	1.9	3	.01	--						
MAR											
05...	1800	2.0	2	.01	--						
09...	1230	5.9	21	.33	--						
APR											
13...	1240	14	9	.34	15.0						
JUN											
07...	1130	1.9	5	2.6	29.0						
11...	1800	.58	12	.01	23.0						
14...	1800	.54	12	.01	25.0						
25...	1800	.08	13	.00	29.0						
JUL											
02...	1800	.21	24	.01	28.0						
09...	1800	1.0	46	.13	29.0						
10...	1710	.75	48	.10	25.0						
16...	1800	.18	23	.01	29.0						
30...	1800	.87	40	.09	2.2						

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 September 1978 (discontinued).

REVISED RECORDS.--WRD Ind. 1968: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 620.10 ft (189.006 m) National Geodetic Vertical Datum of 1929.

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, 16,680 acre-ft (20.6 hm³) Mar. 14, gage height, 11.30 ft (3.444 m); minimum, 12,890 acre-ft (15.9 hm³) Nov. 15, gage height, 8.92 ft (2.719 m).

MONTHEND GAGE HEIGHT AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	9.09	13,140	
Oct. 31.....	8.93	12,900	-240
Nov. 30.....	8.95	12,930	+30
Dec. 31.....	10.03	14,650	+1,720
CAL YR 1977.....			+5,330
Jan. 31.....	10.17	14,870	+220
Feb. 28.....	10.20	14,920	+50
Mar. 31.....	10.50	15,400	+480
Apr. 30.....	10.45	15,320	-80
May 31.....	10.28	15,050	-270
June 30.....	10.03	14,650	-400
July 31.....			
Aug. 31.....			
Sept. 30.....	9.86	14,380	-270
WTR YR 1978.....			+1,240

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 September 1978 (discontinued). 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) National Geodetic Vertical Datum of 1929 (unadjusted). Prior to Sept. 28, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for January and February, which are fair. Flow regulated by Lake Lemon 8.2 miles (13.2 km) upstream (See sta 03355400).

AVERAGE DISCHARGE.--32 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, 2,660 ft³/s (75.3 m³/s) Mar. 15, gage height, 14.49 ft (4.417 m); minimum daily, 1.3 ft³/s (0.04 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	8.4	81	25	22	20	100	124	29	8.4	33	47
2	8.0	7.6	35	28	21	19	91	93	27	28	25	29
3	5.5	7.6	21	25	20	19	81	81	22	17	70	20
4	4.6	8.0	14	20	20	18	64	125	17	12	76	14
5	4.4	7.2	71	19	20	14	64	264	14	9.2	47	12
6	4.4	7.2	53	20	19	20	86	246	12	6.8	32	9.2
7	4.4	7.2	28	22	19	25	151	217	15	6.0	24	8.0
8	13	7.6	27	33	19	42	141	215	17	12	17	7.6
9	10	9.2	86	40	19	58	121	402	14	23	14	6.0
10	7.6	9.6	102	44	19	74	112	358	12	19	12	5.5
11	6.4	3.4	93	35	18	110	144	245	10	12	9.6	5.2
12	5.3	2.7	78	30	18	165	178	232	10	9.6	10	4.6
13	5.5	2.4	220	28	24	316	150	568	9.6	25	10	4.6
14	5.2	2.7	1340	27	23	1630	120	899	7.2	22	8.8	4.8
15	5.2	3.0	1050	26	22	2450	94	693	6.4	20	7.2	4.9
16	4.9	12	433	24	21	1280	80	445	6.0	19	6.8	4.2
17	4.6	15	245	23	21	822	70	301	5.5	14	5.2	3.9
18	4.6	10	179	22	20	532	84	216	5.5	10	4.9	3.8
19	5.2	7.6	133	22	20	419	81	158	27	8.4	4.9	4.0
20	6.0	6.0	100	21	19	476	80	119	12	7.2	4.0	3.8
21	5.5	12	76	20	19	526	76	89	9.6	6.0	3.7	3.6
22	5.2	12	61	20	18	539	73	72	7.6	5.2	3.4	3.0
23	4.9	10	56	20	18	361	101	233	6.4	5.2	2.7	2.1
24	4.6	7.6	46	21	19	300	165	617	5.7	60	2.4	2.3
25	7.6	6.8	44	21	22	458	309	366	5.5	77	4.4	2.6
26	21	5.5	50	30	21	642	574	220	35	46	5.7	1.3
27	12	4.9	39	29	20	435	411	138	19	29	4.6	2.1
28	9.2	4.9	36	27	20	288	259	93	14	19	4.9	8.8
29	8.4	4.0	28	25	---	208	185	67	11	14	13	27
30	8.4	12	25	24	---	156	159	51	9.2	64	134	25
31	7.6	---	24	22	---	125	---	35	---	57	113	---
TOTAL	218.8	224.1	4874	793	561	12547	4404	7982	401.2	671.0	713.2	279.9
MEAN	7.06	7.47	157	25.6	20.0	405	147	257	13.4	21.6	23.0	9.33
MAX	21	15	1340	44	24	2450	574	899	35	77	134	47
MIN	4.4	2.4	14	19	18	14	64	35	5.5	5.2	2.4	1.3
CFSM	.07	.08	1.57	.26	.20	4.05	1.47	2.57	.13	.22	.23	.09
IN.	.08	.08	1.81	.29	.21	4.67	1.64	2.97	.15	.25	.27	.10

CAL YR 1977	TOTAL	27930.07	MEAN	76.5	MAX	3100	MIN	.37	CFSM	.77	IN	10.39
WTR YR 1978	TOTAL	33669.20	MEAN	92.2	MAX	2450	MIN	1.3	CFSM	.92	IN	12.52

03357350 PLUM CREEK NEAR BAINBRIDGE, IN

LOCATION.--Lat 39°45'42", long 86°43'46", in SW¹/₄SE¹/₄ 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) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

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

AVERAGE DISCHARGE.--9 years, 3.69 ft³/s (0.104 m³/s), 16.71 in/yr (424 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	0515	410	11.6	4.35	1.326	May 13	0045	176	4.98	3.29	1.003
Dec. 14	1045	182	5.15	3.31	1.009	June 25	2345	179	5.07	3.36	1.024
Mar. 14	0200	*455	12.9	*4.52	1.378	July 7	2245	151	4.28	3.19	0.972
Mar. 21	0545	164	4.64	3.24	0.988						

Minimum daily discharge, 0.03 ft³/s (0.001 m³/s) Sept. 19-30.

DISCHARGE IN CUBIC FEET PFR SECOND WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	1.0	9.4	1.5	.92	.33	3.3	1.5	.81	.94	.09	1.3
2	5.3	.93	4.6	1.4	.90	.31	2.4	1.4	.78	2.8	26	.89
3	2.8	.86	4.1	1.3	.88	.29	2.5	1.3	.70	1.4	5.1	.67
4	1.8	.81	3.3	1.3	.86	.28	5.9	12	.61	.49	1.2	.45
5	.96	.73	9.6	1.4	.84	.28	5.7	10	.52	.28	.77	.33
6	.56	.75	5.3	1.7	.84	.28	14	5.5	.44	.20	.54	.24
7	.61	1.4	4.0	25	.84	.30	10	7.7	7.0	22	.76	.19
8	5.6	1.3	3.3	7.0	.83	.31	6.6	8.5	1.7	8.5	.41	.15
9	2.9	1.1	2.9	3.3	.82	.35	4.4	5.9	1.0	1.8	.28	.13
10	2.0	.90	3.0	1.8	.80	.50	3.6	3.4	.82	1.0	.23	.10
11	1.5	.76	2.6	1.5	.78	.68	6.2	2.9	.69	.65	.19	.08
12	1.3	.63	2.5	1.4	.78	1.3	3.3	9.8	3.6	.46	8.2	.06
13	.91	.58	28	1.4	.82	27	2.2	53	.89	.88	1.8	.07
14	.77	.60	126	1.3	.75	193	1.8	23	.59	.48	1.1	.06
15	.73	.64	27	1.3	.73	43	1.7	18	.51	.34	.92	.05
16	.68	6.9	40	1.3	.71	33	1.6	13	.46	.25	4.2	.04
17	.60	3.0	34	1.2	.70	20	1.5	7.9	.35	.17	1.0	.07
18	.64	2.3	12	1.2	.70	14	2.0	5.7	.29	.13	.81	.05
19	.59	2.0	7.5	1.2	.69	21	2.0	4.1	.30	.09	.73	.03
20	.52	2.2	5.7	1.2	.69	21	1.9	3.2	.27	.07	.47	.03
21	.50	2.2	4.0	1.1	.69	63	1.6	2.1	.33	.05	.15	.03
22	.58	1.9	3.3	1.1	.69	17	1.5	1.8	.16	.04	.08	.03
23	.57	1.9	3.2	1.1	.69	17	2.0	6.2	.11	.04	.05	.03
24	.58	1.8	5.1	1.2	.70	22	2.5	6.0	.09	1.1	.04	.03
25	1.5	1.6	4.2	1.3	.72	30	8.4	3.4	23	6.5	.04	.03
26	2.4	1.2	2.9	1.0	.70	24	6.5	2.3	13	.68	1.0	.03
27	1.6	1.2	2.3	1.0	.66	14	3.5	1.7	1.5	.41	14	.03
28	1.2	1.1	1.9	.98	.62	10	2.5	1.4	.77	.21	26	.03
29	1.1	1.0	1.9	.96	---	8.1	2.1	1.2	.55	.15	4.4	.03
30	1.0	2.8	1.7	.94	---	6.2	1.8	1.0	.34	.21	4.6	.03
31	.99	---	1.6	.94	---	5.1	---	.92	---	.16	3.2	---
TOTAL	164.79	46.09	366.9	70.32	21.35	593.61	115.0	225.82	62.18	52.48	108.36	5.29
MEAN	5.32	1.54	11.8	2.27	.76	19.1	3.83	7.28	2.07	1.69	3.50	.18
MAX	122	6.9	126	25	.92	193	14	53	23	22	26	1.3
MIN	.50	.58	1.6	.94	.62	.28	1.5	.92	.09	.04	.04	.03
CFSM	1.77	.51	3.93	.76	.25	6.37	1.28	2.43	.69	.56	1.17	.06
IN.	2.04	.57	4.55	.87	.26	7.36	1.43	2.80	.77	.65	1.34	.07
CAL YR 1977 TOTAL	1159.62		MEAN 3.18	MAX 126	MIN .00	CFSM 1.06	IN 14.37					
WTR YR 1978 TOTAL	1832.19		MEAN 5.02	MAX 193	MIN .03	CFSM 1.67	IN 22.71					

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Water-discharge records fair except those for winter periods, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,350 ft³/s (236 m³/s), Mar. 14, 1978, gage height, 13.55 ft (4.130 m); minimum daily, 3.1 ft³/s (0.088 m³/s) Oct. 18, 1976.

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)	
Oct. 1	1500	3550	101	11.43	3.484	Mar. 21	1200	4510	128	11.47	3.496
Dec. 14	1800	5430	154	11.87	3.618	May 13	0400	3210	90.9	10.74	3.274
Dec. 17	0600	1990	56.4	10.00	3.048	Aug. 28	2300	2770	78.4	10.63	3.240
Mar. 14	2300	*8350	236	*13.55	4.130						

Minimum daily discharge, 14 ft³/s (0.396 m³/s) July 22-24.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: December 1973 to September 1977.

WATER TEMPERATURE: December 1973 to September 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2540	50	308	120	66	52	403	175	135	224	38	352
2	1880	48	330	100	64	52	323	155	126	403	547	239
3	676	46	267	90	62	52	316	140	106	403	472	171
4	430	44	224	100	61	52	761	369	95	295	160	132
5	394	42	295	120	60	50	438	577	74	211	95	109
6	345	40	260	110	58	50	715	403	54	192	77	92
7	302	48	235	361	58	50	1230	377	345	353	95	81
8	472	71	205	685	56	51	725	464	377	588	77	74
9	455	65	190	237	56	52	518	403	244	267	65	67
10	330	57	181	150	56	53	412	323	175	170	65	63
11	267	54	230	105	56	54	464	275	140	131	57	59
12	224	48	259	100	55	72	394	361	155	102	126	55
13	181	46	620	96	54	230	308	2370	211	110	99	53
14	140	42	4670	90	54	6770	244	1490	126	118	74	53
15	131	44	2600	85	54	4450	217	1170	131	110	60	52
16	118	160	1420	84	53	2130	192	1060	95	114	80	52
17	99	217	1910	82	52	1590	181	766	89	92	74	78
18	80	140	1500	80	52	1110	204	588	80	71	57	73
19	77	106	957	78	52	1120	224	464	80	60	42	59
20	62	99	735	77	52	1250	224	377	65	74	50	52
21	60	95	557	76	52	3620	192	338	71	99	46	47
22	57	83	430	74	52	1880	170	288	77	62	42	47
23	50	80	353	76	52	1260	175	629	99	68	40	44
24	48	80	330	80	52	1320	204	892	86	71	40	42
25	57	14	255	78	52	1620	369	557	83	191	38	41
26	95	62	190	70	52	1570	464	394	1300	95	46	40
27	86	57	160	74	52	1230	345	288	957	68	330	38
28	71	60	130	72	52	840	267	237	472	52	2420	37
29	60	54	240	72	---	676	230	204	338	44	1860	36
30	54	71	260	70	---	567	204	175	252	44	755	36
31	52	---	130	68	---	481	---	155	---	44	647	---
TOTAL	9893	2123	20431	3760	1547	34354	10713	16464	6638	4926	8674	2374
MEAN	319	70.8	659	121	55.3	1108	357	531	221	159	280	79.1
MAX	2540	217	4670	685	66	6770	1230	2370	1300	588	2420	352
MIN	48	14	130	68	52	50	170	140	54	44	38	36
CFSM	1.48	.33	3.05	.56	.26	5.13	1.65	2.46	1.02	.74	1.30	.37
IN.	1.70	.37	3.52	.65	.27	5.92	1.85	2.84	1.14	.85	1.49	.41

CAL YR 1977 TOTAL 62123.3 MEAN 170 MAX 4670 MIN 5.4 CFSM .79 IN 10.70
WTR YR 1978 TOTAL 121897.0 MEAN 334 MAX 6770 MIN 14 CFSM 1.55 IN 20.99

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 Mill Creek.

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) National Geodetic Vertical Datum of 1929 (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.--29 years, 339 ft³/s (9.600 m³/s), 14.13 in/yr (359 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	2100	3660	104	10.31	3.142	Mar. 25	0800	2970	84.1	9.08	2.768
Dec. 14	1800	6620	187	13.69	4.173	May 13	0700	5720	162	12.87	3.923
Mar. 14	1600	*7890	223	*14.43	4.398	May 23	2000	3040	86.1	9.39	2.862
Mar. 21	1300	5770	163	12.71	3.874						

Minimum daily discharge, 57 ft³/s (1.61 m³/s) Aug. 1, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2070	88	478	260	120	97	643	246	212	150	57	541
2	2310	91	542	240	120	97	547	213	194	711	781	385
3	780	88	449	211	115	97	496	194	179	375	945	292
4	472	85	391	214	110	97	522	598	163	261	315	227
5	379	82	460	218	110	97	587	811	150	169	171	184
6	332	79	390	216	110	97	701	513	138	129	123	155
7	290	83	350	382	105	97	1440	497	275	141	135	138
8	403	110	320	929	105	97	963	565	394	910	120	121
9	485	113	290	800	396	98	705	492	282	617	94	113
10	368	106	310	1000	94	100	582	397	202	295	104	104
11	302	94	400	600	94	105	695	338	165	182	81	99
12	252	89	487	350	94	160	556	438	148	140	137	96
13	220	84	754	190	94	315	422	4150	210	378	164	86
14	177	82	5220	170	94	6780	352	2700	146	235	101	85
15	162	82	4250	160	94	6130	315	1770	124	166	81	83
16	152	106	2330	150	94	3660	280	1510	116	133	92	84
17	145	376	2590	150	329	3050	254	1100	109	112	101	112
18	118	272	2150	150	313	2000	289	824	102	101	86	125
19	102	211	1420	150	288	2040	465	645	100	93	80	95
20	96	207	1080	140	256	2120	472	529	97	87	74	83
21	88	200	844	140	244	4580	353	459	95	80	67	79
22	83	187	653	140	223	3340	299	400	88	76	64	76
23	80	173	542	140	213	2000	292	1080	81	73	61	72
24	77	171	460	145	209	2100	328	1250	77	101	59	67
25	82	159	390	150	95	2810	489	755	74	139	58	64
26	130	148	360	140	96	2600	550	552	676	180	57	62
27	138	142	320	130	96	1890	444	439	955	104	249	61
28	116	136	280	125	96	1370	361	367	449	80	2120	60
29	104	128	260	125	---	1080	312	319	291	69	2270	59
30	93	156	230	125	---	875	281	277	199	68	1060	59
31	89	---	210	120	---	742	---	242	---	65	801	---
TOTAL	10695	4128	29210	8160	4407	50721	14995	24670	6491	6420	10708	3867
MEAN	345	138	942	263	157	1636	500	796	216	207	345	129
MAX	2310	376	5220	1000	396	6780	1440	4150	955	910	2270	541
MIN	77	79	210	120	94	97	254	194	74	65	57	59
CFSM	1.06	.42	2.89	.81	.48	5.02	1.53	2.44	.66	.64	1.06	.40
IN.	1.22	.47	3.33	.93	.50	5.79	1.71	2.82	.74	.73	1.22	.44

CAL YR 1977 TOTAL 89236 MEAN 244 MAX 5220 MIN 10 CFSM .75 IN 10.18
WTR YR 1978 TOTAL 174472 MEAN 478 MAX 6780 MIN 57 CFSM 1.47 IN 19.91

WABASH RIVER BASIN

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 1977 TO SEPTEMBER 1978

DATE	TIME	STPFAM- FLOW- INSTAN- TANFOUS (CFS)	SFOI- MFNT, SUS- PENED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENED (T/DAY)
DEC 15...	1245	4070	798	8770
MAR 15...	1110	6590	646	115000
APR 11...	1430	732	113	223

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) National Geodetic Vertical Datum of 1929. 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 fair.

AVERAGE DISCHARGE.--29 years, 251 ft³/s (7.108 m³/s), 13.93 in/yr (354 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)	
Dec. 15	0800	4100	116	15.22	4.639	May 14	0600	3020	85.5	13.42	4.090
Mar. 15	2200	*7010	198	*18.90	5.761	May 23	2400	2680	75.9	12.76	3.889
Mar. 22	0100	2620	74.2	12.42	3.786	Aug. 28	2200	2560	72.5	12.36	3.767
Mar. 25	1600	2600	73.6	12.39	3.776						

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	74	683	88	49	40	275	127	91	32	45	333
2	1060	72	602	77	48	39	219	100	80	919	137	171
3	302	68	453	68	47	39	183	88	75	704	726	110
4	178	65	406	65	46	39	177	376	66	257	201	80
5	125	61	1170	65	45	39	179	904	59	140	88	62
6	101	60	1310	70	44	39	420	403	49	93	60	50
7	87	77	587	110	43	39	848	330	158	73	146	41
8	320	198	435	436	43	39	403	503	166	703	105	35
9	353	146	360	170	42	39	288	466	88	444	54	30
10	190	118	320	125	42	39	237	290	63	260	43	26
11	134	94	290	100	41	40	298	203	52	120	37	23
12	104	78	370	87	41	60	258	271	45	80	108	21
13	82	68	1000	80	40	200	182	2570	47	351	191	20
14	70	65	3630	76	40	4160	140	2790	39	268	65	25
15	63	66	4050	73	40	6760	122	1230	34	132	40	35
16	57	1120	3260	69	40	6190	109	844	34	102	55	23
17	50	840	1610	66	40	4500	98	555	32	72	66	225
18	46	384	819	64	40	2770	135	384	36	52	31	445
19	43	245	518	62	40	2090	179	283	79	43	24	111
20	38	212	400	61	40	2000	149	223	38	39	23	56
21	34	235	315	60	40	2400	124	176	30	30	18	39
22	32	233	252	59	40	1960	104	138	28	25	15	31
23	31	196	220	58	40	1120	143	1200	23	34	14	25
24	30	168	215	57	40	1380	251	2460	21	470	13	21
25	40	145	246	56	40	2420	670	846	20	371	12	19
26	159	124	178	51	40	2350	769	398	365	133	35	16
27	154	110	150	44	40	1170	367	262	144	73	165	14
28	114	96	135	47	40	737	237	189	65	49	1940	14
29	94	87	120	50	---	563	179	147	43	35	1190	13
30	81	101	110	52	---	434	156	128	35	183	735	13
31	76	---	105	50	---	338	---	109	---	94	977	---
TOTAL	5244	5606	24319	2596	1171	44033	7899	18993	2105	6381	7359	2127
MEAN	169	187	784	83.7	41.8	1420	263	613	70.2	206	237	70.9
MAX	1060	1120	4050	436	49	6760	848	2790	365	919	1940	445
MIN	30	60	105	44	40	39	98	88	20	25	12	13
CFSM	.69	.76	3.20	.34	.17	5.80	1.07	2.50	.29	.84	.97	.29
IN.	.80	.85	3.69	.39	.18	6.69	1.20	2.88	.32	.97	1.12	.32
CAL YR 1977	TOTAL	83836.0	MEAN	230	MAX	4050	MIN	4.7	CFSM	.94	IN	12.73
WTR YR 1978	TOTAL	127833.0	MEAN	350	MAX	6760	MIN	12	CFSM	1.43	IN	19.41

WABASH RIVER BASIN

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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
DEC 14...	1620	3910	231	2440	--
MAR 15...	1130	5890	104	1650	5.0
17...	1710	4320	114	1330	--
31...	1230	321	47	40	11.0

03358900 CAGLES MILL LAKE NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'14", long 86°55'02", in NE¼ 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) National Geodetic Vertical Datum of 1929 (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, 111,660 acre-ft (137.7 hm³) Mar. 31, elevation, 674.28 ft (205.520 m); minimum, 27,300 acre-ft (33.7 hm³) Feb. 28, elevation, 636.13 ft (193.892 m).

MONTH-END ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	638.27	30,400	
Oct. 31.....	638.66	30,990	+590
Nov. 30.....	638.08	30,120	-870
Dec. 31.....	651.28	53,640	+23,520
CAL YR 1977.....			+26,050
Jan. 31.....	636.17	27,350	-26,290
Feb. 28.....	636.13	27,300	-50
Mar. 31.....	674.28	111,660	+84,360
Apr. 30.....	657.55	67,220	-44,440
May 31.....	654.53	60,510	-6,710
June 30.....	637.56	29,350	-31,160
July 31.....	637.95	29,920	+570
Aug. 31.....	644.09	39,860	+9,940
Sept. 30.....	637.30	28,970	-10,890
WTR YR 1978.....			-1,430

03359000 MILL CREEK NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'22", long 86°55'50", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ 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) 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.--None. Datum of gage was 581.83 ft (177.342 m) National Geodetic Vertical Datum of 1929. 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.--40 years (1938 to current year), 293 ft³/s (8.298 m³/s), 13.52 in/yr (343 mm/yr).

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 CURRENT YEAR.--Maximum daily discharge, 2,260 ft³/s (64.0 m³/s) Apr. 5; minimum daily, 35 ft³/s (0.99 m³/s) Aug. 25-27, Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	44	199	1790	53	65	898	1530	1850	173	166	106
2	45	44	398	1750	43	65	1190	1670	1820	131	140	860
3	45	44	467	1700	66	65	1630	1740	1800	415	240	1470
4	372	44	466	1790	74	65	2090	1120	1770	1010	521	1520
5	570	44	224	1810	74	65	2260	96	1810	842	518	1490
6	564	44	104	1760	74	65	2240	695	1820	354	373	1170
7	436	82	333	1700	74	65	2230	691	467	93	95	340
8	192	101	738	965	59	65	1430	369	596	255	165	53
9	193	162	564	895	43	65	282	1240	1340	221	199	53
10	193	191	102	436	53	65	282	1470	1540	347	124	53
11	192	191	102	90	58	65	282	1620	1510	522	94	53
12	192	269	102	97	58	98	282	1050	1480	518	94	53
13	191	44	103	97	58	116	799	114	1040	236	319	53
14	191	44	63	97	58	134	1460	117	247	510	199	53
15	132	44	86	97	58	146	1650	120	167	632	163	53
16	44	82	107	97	58	141	1630	121	124	196	93	53
17	44	103	109	97	58	141	1780	121	124	93	93	53
18	44	327	109	97	58	146	1560	297	76	67	93	83
19	44	485	110	61	58	133	1050	866	53	52	62	238
20	44	481	110	64	58	127	807	1280	53	52	52	377
21	44	478	110	74	58	129	1280	1400	53	52	52	250
22	44	475	110	74	58	130	1570	1480	53	52	52	66
23	44	471	110	74	58	131	1550	441	53	52	52	52
24	44	466	110	74	58	131	1540	94	53	54	44	52
25	44	461	110	74	58	133	1160	95	53	224	35	52
26	44	324	736	90	58	134	654	454	54	308	35	41
27	44	100	1550	97	58	135	161	1320	111	307	35	35
28	44	100	1860	86	58	136	161	1550	130	234	37	35
29	44	100	1910	74	---	136	161	1710	190	94	38	35
30	44	100	1870	74	---	136	916	1780	231	95	87	35
31	44	---	1830	74	---	407	---	1810	---	97	106	---
TOTAL	4256	5945	14902	16355	1657	3635	34985	28461	20668	8288	4376	8837
MEAN	137	198	481	528	59.2	117	1166	918	689	267	141	295
MAX	570	485	1910	1810	74	407	2260	1810	1850	1010	521	1520
MIN	44	44	63	61	43	65	161	94	53	52	35	35
CAL YR 1977	TOTAL	77814.0	MEAN	213	MAX	1910	MIN	7.0				
WTR YR 1978	TOTAL	152365.0	MEAN	417	MAX	2260	MIN	35				

03360000 EEL RIVER AT BOWLING GREEN, IN

LOCATION.--Lat 39°22'58", long 87°01'14", in NE1/4 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) National Geodetic Vertical Datum of 1929 (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.--47 years, 854 ft³/s (24.18 m³/s), 13.97 in/yr (355 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, 15,700 ft³/s (445 m³/s) Mar. 15, gage height, 20.21 ft (6.160 m); minimum daily, 111 ft³/s (3.14 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	784	192	951	2180	205	187	1650	1830	2120	416	248	922
2	3290	180	1230	2100	200	190	1800	1850	2070	2220	890	905
3	1260	180	1190	1990	210	190	2050	1960	2020	1030	2360	1610
4	803	172	1080	2020	225	190	2470	2130	1970	1430	1010	1650
5	1030	169	2120	2150	225	190	2780	2260	1960	1130	711	1580
6	492	161	1870	2120	225	190	2950	1430	1980	779	604	1480
7	931	169	1100	2190	225	190	3730	1950	1810	355	342	749
8	412	234	1290	2760	220	190	3480	1350	1120	1510	343	307
9	872	281	1950	1640	215	190	1420	1870	1630	1880	333	258
10	731	353	830	1140	220	190	1140	2120	1820	935	306	239
11	621	337	1040	492	220	195	1320	2060	1720	829	271	219
12	556	324	1460	450	218	278	1190	2160	1660	731	363	206
13	508	192	2280	400	216	681	1220	5800	1510	1370	428	195
14	466	168	5840	397	215	10200	1790	5910	628	913	348	189
15	431	165	8080	395	215	13000	2080	3480	446	1090	296	185
16	291	1390	4760	385	214	6970	2020	2690	354	565	219	177
17	262	866	3220	380	213	5390	2020	1990	330	344	208	176
18	242	637	3020	375	211	3430	2170	1540	333	303	191	365
19	217	805	2160	300	210	2980	2050	1750	294	257	170	265
20	206	771	1640	287	210	3460	2000	2070	249	238	147	351
21	185	838	1360	295	205	4540	1660	2110	239	223	136	430
22	181	784	1120	297	200	5710	2060	2050	222	211	128	188
23	172	736	964	294	195	3170	2060	3130	204	208	122	155
24	171	721	884	299	190	3240	2120	3660	195	445	116	147
25	143	699	903	300	185	5240	2320	1590	186	454	207	140
26	247	657	1020	305	185	4760	1960	1250	367	567	138	134
27	276	344	1820	390	185	3110	1020	1920	1160	527	193	121
28	237	307	2070	305	185	2260	833	2120	653	443	3270	116
29	211	301	2260	290	---	1740	736	2110	477	260	3720	112
30	194	356	2240	280	---	1430	946	2150	448	290	2250	111
31	187	---	2200	275	---	1290	---	2100	---	266	1600	---
TOTAL	17599	13479	64457	27485	5842	84971	57045	72390	30175	22219	21668	13682
MEAN	562	449	2095	887	209	2741	1902	2335	1006	717	699	456
MAX	3290	1390	8080	2760	225	13000	3730	5910	2120	2220	3720	1650
MIN	171	161	630	275	185	187	736	1250	186	208	116	111
CFSM	.68	.54	2.52	1.07	.25	3.30	2.29	2.81	1.21	.86	.84	.55
IN.	.70	.60	2.91	1.23	.26	3.81	2.56	3.24	1.35	1.00	.97	.61
CAL YR 1977 TOTAL	241610		MEAN	662	MAX	8080	MIN	19	CFSM	.80	IN	10.83
#TD YR 1978 TOTAL	431512		MEAN	1192	MAX	13000	MIN	111	CFSM	1.42	IN	19.34

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929. 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.--50 years, 4,622 ft³/s (131 m³/s), 13.39 in/yr (340 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, 45,000 ft³/s (1,270 m³/s) Mar. 18, gage height, 21.51 ft (6.556 m); minimum daily, 1,100 ft³/s (31.2 m³/s) Sept. 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2420	1320	2990	5000	1900	1500	11800	7760	5580	4380	3710	13500
2	2760	1270	4340	4900	1800	1500	10100	7280	5290	3760	2340	11600
3	7440	1240	4770	4800	1800	1500	9050	6690	5000	6620	3960	7530
4	7100	1220	4870	4500	1700	1500	8420	6490	4700	8090	4640	6200
5	5650	1180	6130	4460	1700	1500	8230	7760	4510	7360	3800	5380
6	4720	1140	9000	4460	1700	1550	8340	9070	4270	6670	3040	4670
7	3850	1200	8890	4560	1700	1650	8830	7890	4260	5370	2780	4180
8	3650	1320	6470	4990	1700	1700	10900	8170	4580	4160	2720	3390
9	3730	1360	7230	5880	1650	1750	12800	7850	4000	4710	2330	2680
10	3670	1380	7360	4500	1600	1800	13000	7810	3960	5940	2520	2330
11	3300	1370	5540	3300	1600	2050	12500	7700	4010	4940	2480	2140
12	2900	1380	4360	3000	1600	2850	10500	7380	3830	3930	2360	1970
13	2630	1350	5140	2900	1600	4390	9030	12500	3710	3690	2800	1840
14	2370	1270	15300	2800	1600	14800	7890	16500	3640	4530	2560	1780
15	2160	1150	19900	2600	1500	23600	7440	17900	3030	6350	2400	1730
16	1970	1610	20800	2600	1500	27900	7070	18500	2590	5820	2130	1700
17	1780	3950	23200	2500	1500	36900	6530	17800	2400	3730	1980	1650
18	1630	3950	25600	2400	1500	44400	6450	15400	2290	2920	2130	1620
19	1520	2980	25100	2300	1500	42500	7060	11400	2390	3120	2170	1850
20	1420	2690	23100	2250	1500	38000	8770	8990	2900	2390	2360	1840
21	1340	2750	21300	2200	1500	34800	7990	7980	2550	2210	2360	1750
22	1290	3020	19600	2150	1500	32500	6730	7460	2220	2090	2190	1750
23	1240	2850	16300	2100	1500	28800	7230	9020	2080	2040	1950	1600
24	1210	2590	10700	2050	1500	26900	7900	13900	1980	2780	1760	1410
25	1240	2390	7880	2150	1500	29000	8560	15100	1910	3790	1610	1320
26	2250	2240	6810	2340	1500	31300	9820	13800	1840	3600	1520	1270
27	2360	2120	6240	2500	1500	31100	11100	9700	3430	3690	1600	1210
28	1990	1840	5800	2400	1500	28300	11600	8250	8300	2820	1980	1170
29	1700	1630	5600	2200	---	23600	11300	7310	9950	2480	5150	1130
30	1510	1700	5300	2100	---	19100	9750	6550	6170	3320	11000	1100
31	1400	---	5200	2000	---	15100	---	6020	---	3680	13900	---
TOTAL	84200	57460	340820	98890	44650	553840	276690	315930	117370	130980	100230	93290
MEAN	2716	1915	10990	3190	1595	17870	9223	10190	3912	4225	3233	3110
MAX	7440	3950	25600	5880	1900	44400	13000	18500	9950	8090	13900	13500
MIN	1210	1140	2990	2000	1500	1500	6450	6020	1840	2040	1520	1100
CFSM	.58	.41	2.34	.68	.34	3.81	1.97	2.17	.83	.90	.69	.66
IN.	.67	.46	2.70	.78	.35	4.39	2.20	2.51	.93	1.04	.80	.74

CAL YR 1977 TOTAL 1255536 MEAN 3440 MAX 25600 MIN 350 CFSM .73 IN 9.96
WTR YR 1978 TOTAL 2214350 MEAN 6067 MAX 44400 MIN 1100 CFSM 1.29 IN 17.57

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW 1/4 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) National Geodetic Vertical Datum of 1929. 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.--28 years, 193 ft³/s (5.466 m³/s), 14.24 in/yr (362 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Dec. 14	2100	*3150	89.2	*8.73	2.661
Mar. 14	2200	2910	82.4	8.48	2.585

Minimum daily discharge, 50 ft³/s (1.42 m³/s) Nov. 13.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	55	449	146	94	74	290	223	182	121	68	337
2	700	53	325	135	90	74	250	203	173	198	92	234
3	295	53	273	130	85	73	236	191	166	182	160	183
4	194	54	234	123	80	71	229	201	157	143	94	151
5	140	52	334	126	78	70	233	209	149	121	76	131
6	119	52	373	129	76	72	407	182	141	111	69	118
7	96	69	253	166	74	74	868	176	278	107	94	106
8	173	70	212	361	74	74	511	189	264	117	85	99
9	185	64	239	222	74	75	376	237	195	99	71	92
10	135	63	227	182	74	90	313	205	165	94	77	86
11	108	57	223	164	74	110	349	182	149	89	77	82
12	93	53	167	141	74	150	307	188	178	84	163	90
13	82	50	234	136	73	263	253	890	184	110	102	108
14	74	51	2210	127	73	1900	218	825	147	102	80	108
15	70	53	2310	119	73	2550	201	685	135	89	72	103
16	67	148	1070	113	74	1980	187	528	130	82	134	136
17	63	191	824	118	74	1360	181	416	124	78	151	135
18	62	143	728	113	74	909	210	333	125	75	117	100
19	61	109	607	107	72	822	258	287	214	72	98	87
20	57	99	473	107	72	884	454	272	142	69	87	79
21	55	130	368	105	72	1380	359	300	150	67	73	71
22	54	127	298	102	72	1160	283	240	130	64	67	67
23	51	113	258	100	72	844	270	410	118	79	63	62
24	51	100	236	114	72	738	330	1080	113	126	59	61
25	54	89	237	135	72	713	583	640	137	109	57	60
26	70	83	201	94	72	844	826	222	290	100	55	58
27	60	78	183	90	73	630	488	323	170	82	158	57
28	56	74	177	100	74	510	355	270	137	73	738	56
29	53	70	157	100	---	436	291	233	118	67	709	55
30	52	94	150	98	---	363	253	214	107	84	472	58
31	52	---	145	96	---	322	---	198	---	78	606	---
TOTAL	4402	2497	14175	4099	2111	19615	10369	10752	4868	3072	5024	3170
MEAN	142	83.2	457	132	75.4	633	346	347	162	99.1	162	106
MAX	1020	191	2310	361	94	2550	868	1080	290	198	738	337
MIN	51	50	145	90	72	70	181	176	107	64	55	55
CFSM	.77	.45	2.48	.72	.41	3.44	1.88	1.89	.88	.54	.88	.58
IN.	.89	.50	2.87	.83	.43	3.97	2.10	2.17	.98	.62	1.02	.64
CAL YR 1977	TOTAL	46251	MEAN 127	MAX 2310	MIN 17	CFSM .69	IN 9.35					
WTR YR 1978	TOTAL	84154	MEAN 231	MAX 2550	MIN 50	CFSM 1.26	IN 17.01					

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: JULY 1973 to September 1977.

WATER TEMPERATURE: November 1974 to September 1977.

SUSPENDED SEDIMENT DISCHARGE: October 1977 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler.

REMARKS.--Sediment-discharge record 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.

SEDIMENT CONCENTRATIONS: Maximum daily concentration, 455 mg/L Aug 28, 1978; minimum daily, 8 mg/L Jan. 6, 1978.

SEDIMENT LOADS: Maximum daily load, 1990 tons/day (1810 tonnes) Mar. 14, 1978; minimum daily, 1.6 tons/day (1.45 tonnes) Sept. 25, 29, 1978.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily concentration, 455 mg/L Aug. 28; minimum daily, 8 mg/L Jan. 6.

SEDIMENT LOADS: Maximum daily load, 1990 tons/day (1810 tonnes) Mar. 14; minimum daily, 1.6 tons/day (1.45 tonnes) Sept. 25, 29.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION LOADS											
	(MG/L)	(T/DAY)										
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	417	1150	25	3.7	101	122	38	15			---	---
2	132	249	32	4.6	35	31	24	4.7			---	---
3	71	57	30	4.3	31	23	23	4.1			---	---
4	37	19	28	4.1	24	18	20	6.6			---	---
5	41	15	21	2.4	46	41	12	4.1			---	---
6	43	14	27	3.8	24	29	8	2.8			---	---
7	32	8.3	36	6.7	25	17	26	12			---	---
8	47	22	15	2.4	23	13	100	97			---	---
9	45	22	14	2.4	25	16	26	16			---	---
10	38	14	18	3.1	---	---	---	---			9	2.2
11	35	10	16	2.5	---	---	---	---			19	5.6
12	29	7.3	28	4.0	---	---	---	---			14	5.7
13	39	8.6	27	3.6	---	---	---	---			---	---
14	35	7.0	23	3.2	---	---	---	---			387	1990
15	37	7.0	19	2.7	119	742	---	---			130	895
16	25	4.5	46	18	99	286	---	---			123	658
17	28	4.8	35	14	80	178	---	---			110	404
18	30	5.0	24	10	71	140	---	---			78	191
19	15	2.5	20	5.4	73	120	---	---			59	131
20	22	3.4	25	6.7	40	51	---	---			70	167
21	21	3.1	31	11	27	27	---	---			175	652
22	25	3.6	16	5.5	23	19	---	---			112	351
23	17	2.3	9	2.7	23	16	---	---			75	171
24	26	3.6	9	2.4	23	15	---	---			53	106
25	24	3.5	13	3.1	25	16	---	---			58	112
26	26	4.9	13	2.9	31	17	---	---			61	139
27	---	---	14	2.9	28	14	---	---			37	63
28	---	---	13	2.6	27	13	---	---			29	40
29	---	---	17	3.2	27	11	---	---			34	40
30	27	3.8	20	5.1	20	4.1	---	---			37	36
31	24	3.9	---	---	28	11	---	---			38	33

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

SUSPENDED-SEDIMENT. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)										
1	44	34	52	31	71	35	65	21	26	4.8	104	95
2	---	---	27	15	65	30	---	---	33	8.2	99	63
3	---	---	37	19	60	27	71	35	93	40	65	32
4	---	---	35	19	67	28	65	25	36	9.1	50	20
5	---	---	39	22	61	25	---	---	30	6.2	---	---
6	---	---	25	12	49	19	---	---	---	---	---	---
7	---	---	33	16	156	117	23	6.6	153	39	---	---
8	---	---	38	19	62	44	66	21	---	---	33	8.8
9	---	---	54	36	71	37	---	---	---	---	---	---
10	---	---	35	19	65	29	---	---	---	---	---	---
11	---	---	57	28	60	24	---	---	60	12	---	---
12	---	---	36	18	76	37	2A	6.4	---	---	---	---
13	---	---	36A	8A4	69	34	---	---	---	---	22	6.4
14	---	---	120	267	70	2A	24	6.6	26	5.6	---	---
15	---	---	62	115	74	27	22	5.3	---	---	20	5.6
16	---	---	5A	83	66	23	21	4.6	---	---	---	---
17	29	14	59	66	---	---	21	4.4	136	55	---	---
18	34	19	89	80	---	---	20	4.1	---	---	---	---
19	27	19	90	70	---	---	17	3.3	---	---	18	4.2
20	85	104	89	65	---	---	19	3.5	---	---	---	---
21	30	29	101	82	---	---	---	---	49	9.7	---	---
22	19	15	8A	57	---	---	---	---	51	9.2	---	---
23	22	16	99	110	68	22	---	---	---	---	---	---
24	25	22	2A2	822	---	---	30	10	---	---	---	---
25	146	230	82	142	---	---	---	---	---	---	10	1.6
26	85	190	74	44	---	---	22	5.9	---	---	---	---
27	46	61	85	74	82	3A	2A	6.2	---	---	---	---
28	47	45	83	61	50	1A	---	---	455	907	---	---
29	47	37	82	52	---	---	---	---	274	525	11	1.6
30	59	40	76	44	---	---	---	---	210	26A	---	---
31	---	---	7A	42	---	---	25	5.3	157	257	---	---

WABASH RIVER BASIN

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE¹SE⁴ 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) National Geodetic Vertical Datum of 1929. 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.--35 years, 455 ft³/s (12.89 m³/s), 14.68 in/yr (373 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Dec. 16	0100	5530	157	13.70	4.176
Mar. 16	0300	*6420	182	*14.32	4.365

Minimum daily discharge, 110 ft³/s (3.12 m³/s) Nov. 14.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	124	977	318	210	150	751	557	426	422	188	1340
2	2640	123	1170	296	210	150	647	495	390	1400	196	843
3	1300	120	859	274	200	150	578	449	365	1490	824	601
4	782	118	781	269	200	150	550	454	340	826	474	450
5	538	117	894	265	190	150	531	492	322	553	274	340
6	397	115	1420	266	190	127	592	435	306	420	219	280
7	313	119	1000	278	190	138	1470	390	443	343	620	245
8	435	133	783	615	180	141	1190	416	728	443	612	221
9	726	133	826	542	180	142	873	533	503	363	334	204
10	539	128	696	450	180	155	736	525	384	295	248	190
11	392	124	618	370	180	179	729	446	331	256	227	180
12	304	117	612	330	180	276	749	431	356	233	413	174
13	255	112	644	310	180	700	621	1400	533	234	323	182
14	223	110	3200	290	180	3390	528	2280	404	257	233	190
15	204	111	5240	270	170	5780	476	1850	324	225	208	188
16	188	156	4750	260	170	6230	434	1420	298	209	206	179
17	174	517	2300	270	170	4590	406	1100	280	195	312	247
18	165	446	1770	250	165	2800	424	895	301	185	965	200
19	158	308	1480	240	165	2240	542	743	630	178	609	173
20	150	252	1180	240	160	2240	647	641	501	171	434	160
21	141	314	955	250	160	2630	744	779	380	166	281	151
22	135	451	787	240	160	2980	601	634	378	160	227	142
23	130	371	662	230	160	2240	548	1300	307	159	200	134
24	124	304	594	220	163	1910	690	2360	273	234	187	131
25	127	257	580	240	163	1920	975	1840	378	266	174	127
26	139	230	493	250	165	2220	2030	1160	2520	218	167	124
27	151	207	456	170	150	1710	1360	880	1100	191	162	122
28	141	195	400	170	149	1090	945	716	654	172	948	118
29	133	176	387	180	---	2580	753	604	474	163	1750	116
30	127	217	348	200	---	938	641	531	371	195	1600	116
31	125	---	326	210	---	832	---	478	---	233	2410	---
TOTAL	12756	6205	37228	8763	4920	50928	22761	27234	15000	10855	16025	7868
MEAN	411	207	1201	283	176	1643	759	879	500	350	517	262
MAX	2640	517	5280	615	210	6230	2030	2360	2520	1490	2410	1340
MIN	124	110	326	170	149	127	406	390	273	159	162	116
CFSM	.98	.49	2.85	.67	.42	3.90	1.80	2.09	1.19	.83	1.23	.62
IN.	1.13	.55	3.29	.77	.43	4.50	2.01	2.41	1.33	.96	1.42	.70
CAL YR 1977	TOTAL	121930	MEAN 334	MAX 5280	MIN 27	CFSM .79	IN 10.77					
WTR YR 1978	TOTAL	220543	MEAN 604	MAX 6230	MIN 110	CFSM 1.44	IN 19.49					

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN--Continued

WATER-DISCHARGE RECORDS--Continued

REVISIONS.--Revised daily discharges, in cubic feet per second, for 1975 water year are given below. These figures supersede those published in WRD for Indiana 1975.

Mar. 18.....	2130	Mar. 20.....	1860	Mar. 29.....	2580	
Mar. 19.....	2340	Mar. 28.....	1090			
Month	Total	Mean	Max	Min	CFSM	In.
March 1975	36002	1161	2730	514	2.76	3.18
Cal Yr 1975	193104	529	8470	58	1.26	17.10
Wtr Yr 1975	208972	573	8470	58	1.36	18.46

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to September 1978 (partial-record station).

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STP FAM- FLOW* INSTAN- TANEOUS (CFS)	SEDI- MENT* SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE* SUS- PENDED (T/DAY)
DEC 14...	1605	3760	262	2660

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 100 ft³/s (2.832 m³/s), 14.46 in/yr (367 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 16	0400	1230 34.8	7.70 2.347	June 26	0600	1550 43.9	*9.32 2.841
Mar. 15	0100	*1600 45.3	8.60 2.621				

Minimum daily discharge, 15 ft³/s (0.42 m³/s) Sept. 29-30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	23	165	50	45	27	159	83	58	143	22	237
2	444	22	224	48	45	26	130	70	53	293	21	141
3	475	21	187	45	44	26	111	62	49	305	24	97
4	211	20	145	42	44	26	109	73	45	172	23	72
5	121	20	259	40	43	25	110	102	44	106	22	63
6	86	19	254	38	42	26	191	82	42	75	19	50
7	66	20	205	62	41	26	429	71	56	67	239	42
8	100	21	157	111	40	26	411	93	54	94	173	37
9	128	21	161	73	39	26	257	141	54	69	86	34
10	111	24	140	60	38	26	194	132	44	54	54	32
11	80	22	130	52	37	28	176	98	38	43	39	29
12	63	20	113	60	36	38	162	88	52	36	36	26
13	53	19	193	54	36	49	134	195	50	38	74	25
14	46	18	986	48	35	1130	107	336	53	40	36	27
15	41	18	1030	46	35	1520	92	335	41	40	27	27
16	37	88	1090	44	34	1450	83	267	35	40	116	38
17	33	106	667	43	34	1210	77	189	33	31	175	52
18	31	109	492	42	33	867	76	142	34	26	548	38
19	29	62	367	41	33	599	80	112	38	24	306	34
20	28	47	272	40	32	527	93	107	31	22	168	29
21	26	48	201	40	31	686	129	127	29	20	109	25
22	24	46	150	40	31	712	106	99	25	18	77	23
23	21	44	122	40	30	654	94	194	23	22	71	21
24	20	39	105	47	30	508	98	227	22	40	67	19
25	21	36	101	53	29	517	243	244	133	43	54	18
26	25	32	86	40	28	539	409	164	824	53	96	18
27	25	29	76	37	28	482	309	121	193	48	97	17
28	25	25	69	39	27	351	179	96	116	35	432	16
29	25	23	61	42	---	277	127	81	80	29	311	15
30	24	41	57	44	---	222	102	71	59	27	329	15
31	23	---	52	45	---	186	---	64	---	25	374	---
TOTAL	2847	1083	8317	1506	1000	12812	4977	4266	2408	2078	4225	1317
MEAN	91.8	36.1	268	48.6	35.7	413	166	138	80.3	67.0	136	43.9
MAX	475	109	1090	111	45	1520	429	336	824	305	548	237
MIN	20	18	52	37	27	25	76	62	22	18	19	15
CFSM	.98	.38	2.85	.52	.38	4.40	1.77	1.47	.86	.71	1.45	.47
IN.	1.13	.43	3.29	.60	.40	5.08	1.97	1.69	.95	.82	1.67	.52
CAL YR 1977	TOTAL	25025.5	MEAN	68.6	MAX	1090	MIN	3.3	CFSM	.73	IN	9.91
WTR YR 1978	TOTAL	46836.0	MEAN	128	MAX	1520	MIN	15	CFSM	1.36	IN	18.55

03361850 BUCK CREEK AT ACTON, IN

LOCATION.--Lat 39°39'25", long 85°57'27", in NW¼ 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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft (230.734 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 91.6 ft³/s (2.594 m³/s), 15.79 in/yr (401 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	1430	1870	53.0	9.75	2.972	June 26	1000	*3950	112	*12.47	3.801
Mar. 14	1800	2390	67.7	10.45	3.185	July 2	0745	1650	46.7	9.20	2.804

Minimum daily discharge, 8.5 ft³/s (0.24 m³/s) June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	15	307	53	23	16	95	65	35	248	21	257
2	371	15	198	46	23	16	72	53	34	1190	22	154
3	158	15	191	43	23	16	65	40	31	459	33	109
4	96	15	157	43	22	16	69	100	23	223	27	80
5	64	15	344	46	22	16	66	196	22	138	21	59
6	49	14	290	50	22	17	249	123	24	96	19	54
7	38	15	183	66	21	18	417	101	70	86	375	46
8	116	16	141	172	20	19	207	154	54	297	210	39
9	128	15	170	92	20	20	143	236	34	120	115	30
10	74	17	155	45	19	25	122	139	22	76	71	21
11	52	16	120	33	19	40	140	102	23	54	50	19
12	39	15	110	40	18	61	109	101	38	43	81	17
13	30	15	224	33	18	205	83	648	47	53	170	16
14	25	14	1600	30	18	1880	65	488	23	52	82	20
15	22	14	1080	27	18	1640	53	355	16	37	55	22
16	20	182	527	25	18	1100	48	243	19	32	182	32
17	19	147	384	24	18	778	45	185	14	27	184	49
18	18	80	299	23	17	486	57	139	14	25	675	33
19	18	54	232	22	17	434	52	107	25	22	357	29
20	16	47	190	21	17	391	66	101	16	20	222	25
21	15	60	152	21	17	608	51	205	13	19	127	22
22	12	58	119	20	17	419	42	114	8.5	23	82	20
23	14	50	101	20	17	318	54	329	9.6	29	59	18
24	14	43	91	21	17	333	72	421	10	107	45	18
25	14	39	86	25	17	492	411	215	149	84	36	17
26	22	36	67	20	16	464	427	140	2890	49	31	17
27	19	30	60	19	16	293	207	105	904	34	117	17
28	17	29	52	20	16	224	136	81	234	25	665	16
29	17	25	47	22	---	176	100	66	141	20	478	17
30	16	50	45	22	---	136	82	51	96	32	441	18
31	15	---	45	23	---	115	---	47	---	46	668	---
TOTAL	2050	1156	7767	1167	526	10772	3805	5450	5039.1	3766	5721	1291
MEAN	66.1	38.5	251	37.6	18.8	347	127	176	168	121	185	43.0
MAX	522	182	1600	172	23	1880	427	648	2890	1190	675	257
MIN	12	14	45	19	16	16	42	40	8.5	19	19	16
CFSM	.84	.49	3.19	.48	.24	4.40	1.61	2.23	2.13	1.54	2.35	.55
IN.	.97	.55	3.67	.55	.25	5.09	1.80	2.57	2.38	1.78	2.70	.61
CAL YR 1977	TOTAL	23458.3	MEAN	64.3	MAX	1600	MIN	2.8	CFSM	.82	IN	11.07
WTR YR 1978	TOTAL	48510.1	MEAN	133	MAX	2890	MIN	8.5	CFSM	1.69	IN	22.90

WABASH RIVER BASIN

03361850 BUCK CREEK AT ACTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: June 1978 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW- INSTAN- TANFOUS (CFS)	SFDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
JUN				
26...	1115	3920	986	10400
28...	1000	242	106	69

03362000 YOUNGS CREEK NEAR EDINBURGH, IN
(Formerly published as Youngs Creek near Edinburg)

LOCATION.--Lat 39°25'08", long 86°00'18", in SE 1/4 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) National Geodetic Vertical Datum of 1929. Prior to June 30, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--36 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 15	0445	1840 52.1	8.08 2.463	June 27	0015	1960 55.5	8.29 2.527
Mar. 15	0615	*2830 80.1	*9.44 2.877	July 2	1845	1570 44.5	7.55 2.301
May 24	0015	1510 42.8	7.42 2.262				

Minimum daily discharge, 7.1 ft³/s (0.20 m³/s) Sept. 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	392	12	366	47	28	22	126	80	65	216	39	118
2	204	12	276	39	28	22	94	67	64	1380	149	67
3	65	12	167	37	27	22	81	59	57	780	256	46
4	38	11	117	34	27	21	77	181	50	275	111	34
5	25	9.6	344	35	27	20	72	326	46	158	62	28
6	22	9.6	442	37	26	18	95	197	42	109	46	24
7	19	11	302	43	25	21	241	145	102	90	60	21
8	34	13	213	89	24	21	158	167	98	318	43	19
9	81	15	267	62	24	21	115	255	63	130	33	17
10	51	16	240	60	23	28	101	161	48	85	28	15
11	35	16	204	48	22	35	114	118	41	66	28	14
12	27	16	135	41	22	51	101	134	49	54	40	13
13	23	12	256	39	22	178	78	592	46	108	38	14
14	20	11	1460	35	22	1530	62	535	35	102	27	15
15	18	11	1540	31	22	2560	56	444	32	63	23	15
16	17	65	641	28	22	1590	50	335	31	51	20	14
17	16	190	470	28	22	1140	48	251	29	41	19	13
18	15	80	374	28	22	635	60	187	59	35	19	15
19	15	49	297	28	22	643	60	143	312	31	36	11
20	13	39	241	27	23	615	52	117	116	29	40	10
21	12	48	180	27	22	796	45	96	72	27	23	9.6
22	11	57	134	26	21	574	40	81	52	24	17	8.8
23	10	47	108	24	21	427	54	513	41	23	15	8.1
24	9.1	41	98	26	21	419	82	894	35	65	14	7.4
25	9.8	34	102	31	23	621	232	394	52	89	13	7.5
26	16	31	75	25	21	569	468	245	1330	49	14	7.7
27	18	28	68	22	21	379	244	167	720	35	14	7.8
28	16	28	55	25	21	290	155	128	202	29	13	7.3
29	14	25	52	26	---	229	115	103	114	25	52	7.1
30	12	35	50	27	---	181	97	48	80	55	185	7.3
31	11	---	46	28	---	153	---	75	---	69	351	---
TOTAL	1272.9	984.2	4310	1103	651	13831	3373	7278	4083	4611	1828	601.6
MEAN	41.1	32.8	300	35.6	23.3	446	112	235	136	149	59.0	20.1
MAX	392	190	1540	89	28	2560	468	894	1330	1380	351	118
MIN	9.1	9.6	46	22	21	18	40	59	29	23	13	7.1
CFSM	.38	.31	2.80	.33	.22	4.17	1.05	2.20	1.27	1.39	.55	.19
IN.	.44	.34	3.24	.38	.23	4.81	1.17	2.53	1.42	1.60	.64	.21
CAL YR 1977	TOTAL	27411.4	MEAN	75.1	MAX	1540	MIN	1.9	CFSM	.70	IN	9.53
WTR YR 1978	TOTAL	48926.7	MEAN	134	MAX	2560	MIN	7.1	CFSM	1.25	IN	17.01

WABASH RIVER BASIN

03362500 SUGAR CREEK NEAR EDINBURGH, IN
(Formerly published as Sugar Creek near Edinburg)

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 (revised), 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) National Geodetic Vertical Datum of 1929. 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.--36 years, 483 ft³/s (13.68 m³/s), 13.84 in/yr (352 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)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 15	2100	6370	180	12.13	3.697	June 27	1800	7790	221	13.10	3.993
Mar. 16	0200	*8950	253	*13.69	4.173	July 3	0600	4250	120	10.16	3.097

Minimum daily discharge, 83 ft³/s (2.35 m³/s) Nov. 14, 15.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to September 1977 (partial-record station).

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	92	653	237	190	144	682	458	346	580	221	1710
2	1750	91	1070	222	190	150	565	389	321	3020	264	874
3	1060	90	783	210	180	148	476	340	301	3330	695	590
4	723	90	705	200	180	142	440	436	273	1470	420	439
5	413	86	811	194	180	140	431	851	251	874	275	346
6	282	85	1740	190	180	140	440	742	238	620	222	289
7	217	87	1120	198	170	144	1270	551	321	503	656	255
8	211	88	1000	401	160	148	1220	565	488	1150	1770	229
9	492	90	839	383	160	153	905	884	340	868	743	207
10	443	94	761	270	155	169	692	804	276	538	467	187
11	318	92	700	266	149	198	638	614	238	404	339	169
12	238	93	640	328	149	220	628	561	236	329	290	159
13	193	87	621	271	149	404	527	1370	307	343	312	153
14	164	83	3210	232	150	3150	427	2200	276	377	357	152
15	147	83	5630	229	149	6960	368	1910	231	306	253	152
16	136	106	5490	220	148	8150	332	1490	205	267	215	152
17	125	640	3450	215	145	6320	309	1090	199	242	440	158
18	117	448	2180	210	144	4490	317	862	213	217	973	196
19	113	304	1640	209	140	3120	336	687	613	197	2180	160
20	107	226	1270	202	140	2710	320	570	403	183	1030	148
21	102	209	986	195	140	2900	336	624	275	173	617	139
22	98	243	762	190	140	3250	336	600	224	162	425	129
23	93	228	608	184	140	2420	320	939	192	157	323	122
24	89	203	528	185	140	2100	397	3130	181	218	265	116
25	89	175	500	191	150	2340	628	1950	170	419	227	112
26	96	159	410	170	145	2790	2050	1210	3070	312	205	108
27	101	147	350	150	140	2080	1450	852	6960	249	254	103
28	106	135	320	170	140	1530	933	659	3730	214	657	101
29	101	126	290	170	---	1180	677	537	909	183	1660	97
30	96	126	270	180	---	939	551	453	623	224	1270	96
31	93	---	244	190	---	783	---	389	---	290	2480	---
TOTAL	8771	4806	39581	6862	4343	59512	19001	28717	22410	18419	20505	7848
MEAN	283	160	1277	221	155	1920	633	926	747	594	661	262
MAX	1750	640	5630	401	190	8150	2050	3130	6960	3330	2480	1710
MIN	89	83	244	150	140	140	709	340	170	157	205	96
CFSM	.60	.34	2.69	.47	.33	4.05	1.34	1.95	1.58	1.25	1.40	.55
IN.	.69	.38	3.11	.54	.34	4.67	1.49	2.25	1.76	1.45	1.61	.62
CAL YR 1977	TOTAL	124265	MEAN 340	MAX 5630	MIN 27	CFSM .72	IN 9.75					
WTR YR 1978	TOTAL	240775	MEAN 660	MAX 8150	MIN 83	CFSM 1.39	IN 18.90					

03363000 DRIFTWOOD RIVER NEAR EDINBURGH, IN
(Formerly published as Driftwood River near Edinburg)

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) National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and period of no gage-height record, July 19 to Aug. 30, which are poor.

AVERAGE DISCHARGE.--38 years, 1,128 ft³/s (31.94 m³/s), 14.45 in/yr (367 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 16	0700	10900 309	13.28 4.048	Mar. 22	1300	7000 198	10.96 3.341
Mar. 16	0900	*14800 419	*14.40 4.389	June 27	2000	11100 314	13.36 4.072

Minimum daily discharge, 252 ft³/s (7.14 m³/s) Nov. 15.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2590	294	1150	905	521	390	1910	1440	1050	1260	760	4620
2	4210	288	2550	834	521	380	1660	1270	973	4120	580	2380
3	3200	286	2140	785	511	390	1460	1160	932	5820	1600	1640
4	1820	280	1830	769	511	370	1360	1230	873	3520	2000	1270
5	1250	272	1810	780	502	360	1300	1690	818	2060	1200	1020
6	984	267	3470	759	492	370	1290	1580	780	1510	860	848
7	834	269	2900	769	470	370	2390	1320	830	1250	1100	738
8	922	275	2300	1030	450	370	3020	1300	1310	1800	2500	655
9	1510	290	2000	1400	440	362	2290	1730	1150	1720	1600	594
10	1300	290	1800	1240	430	405	1830	1780	932	1220	1100	543
11	1020	279	1650	759	420	459	1670	1470	810	991	860	506
12	828	277	1500	823	420	551	1690	1350	770	843	760	480
13	706	263	1500	850	410	1030	1490	2300	917	810	720	464
14	614	253	4940	819	410	4910	1290	4630	934	861	580	469
15	550	252	9250	775	410	11200	1150	4610	780	775	660	466
16	507	287	10600	717	410	14800	1060	3830	703	689	560	455
17	466	1040	8640	701	400	13600	1000	3000	661	635	580	473
18	433	1140	5710	640	400	10500	1000	2410	645	586	1500	534
19	406	898	4410	624	400	6940	1060	2000	1270	520	3600	458
20	388	715	3640	609	390	5950	1100	1720	1180	460	2700	421
21	369	662	2970	629	390	5980	1280	1740	898	430	1500	397
22	350	795	2420	604	380	6890	1210	1770	772	410	1100	379
23	333	815	1970	569	370	6360	1120	1960	700	400	860	361
24	310	725	1630	564	370	5180	1250	5340	636	620	740	346
25	310	637	1530	584	390	5080	1620	4980	594	900	620	336
26	321	570	1360	574	380	5740	3980	3280	3970	800	580	327
27	332	528	1220	428	370	5120	3860	2230	9540	620	600	319
28	338	488	1180	432	380	3900	2590	1760	6620	520	1600	310
29	322	455	1080	437	---	3030	1970	1470	2030	465	3500	302
30	310	450	984	497	---	2520	1660	1280	1470	480	4500	298
31	298	---	933	521	---	2150	---	1150	---	800	5200	---
TOTAL	28131	14340	91067	22427	11948	125657	51560	68780	45548	37895	46620	22409
MEAN	907	478	2938	723	427	4053	1719	2219	1518	1222	1504	747
MAX	4210	1140	10600	1400	521	14800	3980	5340	9540	5820	5200	4620
MIN	298	252	933	428	370	360	1000	1150	594	400	560	298
CFSM	.86	.45	2.77	.68	.40	3.82	1.62	2.09	1.43	1.15	1.42	.71
IN.	.99	.50	3.20	.79	.42	4.41	1.81	2.41	1.60	1.33	1.64	.79
CAL YR 1977	TOTAL	309044	MEAN	847	MAX	10600	MIN	88	CFSM	.80	IN	10.85
WTR YR 1978	TOTAL	566382	MEAN	1552	MAX	14800	MIN	252	CFSM	1.46	IN	19.88

WABASH RIVER BASIN

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE¼ 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) National Geodetic Vertical Datum of 1929 (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.

AVERAGE DISCHARGE.--48 years, 313 ft³/s (8.864 m³/s), 14.03 in/yr (356 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)	
Dec. 14	1400	4640	131	5.89	1.795
Mar. 14	2300	*6640	188	*7.20	2.194

Minimum daily discharge, 37 ft³/s (1.05 m³/s) Sept. 30.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	73	813	214	150	86	457	387	315	188	172	1000
2	1250	70	857	220	150	88	376	329	291	675	133	507
3	852	70	622	200	145	84	319	295	267	670	1020	325
4	391	70	477	180	140	82	304	309	236	402	593	241
5	253	67	778	171	135	80	285	308	216	262	278	187
6	195	65	1030	165	132	80	276	270	186	207	189	154
7	158	70	747	220	128	80	431	247	170	241	465	136
8	231	72	605	617	125	82	579	263	229	529	223	122
9	391	70	646	491	120	83	430	309	197	339	155	110
10	369	74	547	300	115	85	363	292	147	228	126	103
11	256	77	489	190	110	110	360	266	123	182	116	94
12	199	77	445	210	108	120	346	295	122	159	122	92
13	160	72	625	240	105	778	305	1390	157	157	145	87
14	138	67	4140	220	102	5110	256	1710	141	158	115	86
15	128	70	3550	200	100	5530	229	1550	111	141	98	87
16	111	96	2790	180	99	4560	213	1250	98	129	83	79
17	102	145	1770	160	97	3130	201	975	89	119	78	78
18	96	171	1300	150	95	2120	246	755	130	111	588	82
19	93	145	1220	170	93	1530	327	601	452	102	321	77
20	85	128	1040	155	92	1460	374	512	367	96	317	68
21	80	207	747	148	90	1840	437	526	260	93	150	60
22	77	282	577	140	89	1960	349	453	386	88	112	54
23	74	248	458	135	89	1760	406	607	188	113	95	51
24	70	207	426	135	88	1340	606	1310	135	251	84	47
25	72	179	547	135	86	1270	883	1360	197	187	77	45
26	88	160	440	110	82	1330	1380	919	1040	117	73	43
27	96	145	370	120	79	1240	1150	649	505	96	67	41
28	88	134	325	130	83	923	724	524	277	83	122	39
29	82	120	280	140	---	732	551	448	197	73	522	38
30	77	187	240	145	---	600	465	399	164	221	846	37
31	74	---	222	148	---	517	---	352	---	336	1580	---
TOTAL	7846	3618	29123	6139	3027	38890	13628	19860	7393	6753	9065	4170
MEAN	253	121	939	198	108	1255	454	641	246	218	292	139
MAX	1510	282	4140	617	150	5530	1380	1710	1040	675	1580	1000
MIN	70	65	222	110	79	80	201	247	89	73	67	37
CFSM	.84	.40	3.10	.65	.36	4.14	1.50	2.12	.81	.72	.96	.46
IN.	.96	.44	3.58	.75	.37	4.77	1.67	2.44	.91	.83	1.11	.51
CAL YR 1977	TOTAL	91873	MEAN 252	MAX 4140	MIN 11	CFSM .83	IN 11.28					
WTR YR 1978	TOTAL	149512	MEAN 410	MAX 5530	MIN 37	CFSM 1.35	IN 18.36					

03363500 FLATROCK RIVER AT ST. PAUL, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: January 1976 to current year.
 WATER TEMPERATURE: January 1976 to current year.
 SEDIMENT DISCHARGE: August 1969 to September 1977 (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, 620 micromhos May 30, 1978; minimum, 183 micromhos July 2, 1978.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1			---	---	598	580	364	218				
2			---	---	586	561	217	183				
3			---	---	575	565	---	---				
4			---	---	574	561	---	---				
5			---	---	581	552	---	---				
6			---	---	586	570	---	---				
7			---	---	586	554	---	---				
8			---	---	584	565	---	---				
9			---	---	573	571	---	---				
10			---	---	563	539	---	---				
11			---	---	572	547	---	---				
12			---	---	571	537	---	---				
13			---	---	546	570	---	---				
14			---	---	567	571	---	---				
15			---	---	528	494	---	---				
16			---	---	545	510	---	---				
17			---	---	553	578	---	---				
18			---	---	556	385	---	---				
19			---	---	405	296	---	---				
20			---	---	407	319	---	---				
21			562	535	473	361	---	---				
22			563	530	438	318	---	---				
23			552	457	392	320	---	---				
24			510	372	422	394	---	---				
25			470	400	436	283	---	---				
26			516	464	255	188	---	---				
27			508	492	262	274	---	---				
28			540	504	312	253	---	---				
29			412	512	342	314	---	---				
30			620	607	361	343	---	---				
31			608	591	---	---	---	---				
MONTH					598	188						

WABASH RIVER BASIN

03363500 FLATROCK RIVER AT ST. PAUL, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	23.0	21.0	24.5	24.0	22.5	21.0	---	---
2			---	---	22.5	20.5	24.0	22.0	23.5	22.0	---	---
3			---	---	21.0	19.5	22.0	21.5	23.0	22.0	---	---
4			---	---	21.0	19.0	22.0	20.5	22.5	20.5	---	---
5			---	---	21.5	19.0	22.5	21.0	21.5	20.0	---	---
6			---	---	20.5	19.5	23.5	21.5	---	---	---	---
7			---	---	20.0	19.0	25.0	22.5	---	---	---	---
8			---	---	21.0	19.5	24.0	22.0	---	---	---	---
9			---	---	21.0	19.5	23.5	22.0	---	---	---	---
10			---	---	22.0	19.0	23.5	22.0	---	---	---	---
11			---	---	23.0	19.5	22.5	20.5	---	---	---	---
12			---	---	23.0	21.0	22.5	20.0	---	---	---	---
13			---	---	22.0	20.0	22.5	20.5	---	---	---	---
14			---	---	21.0	18.5	25.0	22.0	---	---	---	---
15			---	---	19.5	18.5	24.0	22.5	---	---	---	---
16			---	---	21.0	18.0	25.0	22.0	---	---	---	---
17			---	---	23.5	20.0	25.5	22.0	---	---	---	---
18			---	---	25.0	22.0	25.5	22.0	---	---	---	---
19			---	---	22.5	21.5	26.5	22.5	---	---	---	---
20			---	---	22.5	20.0	27.5	23.5	---	---	---	---
21			19.0	18.5	22.5	22.0	24.0	24.5	---	---	---	---
22			18.5	16.5	21.5	19.5	28.5	25.0	---	---	---	---
23			17.5	16.5	21.0	20.0	28.0	25.0	---	---	---	---
24			17.5	16.0	22.5	19.5	25.0	22.5	---	---	---	---
25			18.0	15.5	24.0	21.0	24.0	22.0	---	---	---	---
26			20.0	16.5	23.0	20.5	25.5	22.5	---	---	19.0	17.0
27			20.5	18.0	25.0	22.0	25.5	23.5	---	---	19.0	16.0
28			20.5	19.0	25.5	24.0	26.0	22.5	---	---	18.5	16.0
29			21.5	19.5	26.0	24.5	26.0	22.5	---	---	18.0	15.0
30			21.5	20.5	27.0	24.5	24.5	22.5	---	---	17.0	16.0
31			21.5	20.0	---	---	22.0	21.0	---	---	---	---
MONTH					27.0	18.0	28.5	20.0				

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 584 ft³/s (16.54 m³/s), 14.85 in/yr (377 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)
Dec. 15	1200	8570 243	12.21 3.722	Mar. 22	1200	3680 104	9.12 2.780
Mar. 15	1600	*12000 340	*13.62 4.151	June 27	0500	5000 142	10.17 3.100

Minimum daily discharge, 114 ft³/s (3.23 m³/s) Sept. 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	789	154	726	469	318	170	914	736	472	461	440	2160
2	2660	152	1290	431	315	170	818	628	433	1010	313	1230
3	1870	149	1070	370	303	165	708	550	405	1560	815	805
4	1090	145	833	371	291	165	637	505	379	1180	1400	590
5	710	142	854	394	274	160	605	547	355	734	723	462
6	532	138	1640	369	260	160	567	549	336	541	480	381
7	428	137	1390	369	250	165	582	487	324	455	574	332
8	399	138	1010	565	240	170	737	450	328	634	817	297
9	665	137	1070	858	230	175	827	561	372	698	516	269
10	734	136	1040	500	220	196	691	554	335	502	385	245
11	564	135	853	400	215	234	629	481	299	402	318	225
12	476	134	765	430	210	308	628	480	279	345	288	212
13	391	133	752	450	205	718	606	2090	291	316	281	203
14	335	129	3060	441	200	2380	549	3030	317	310	280	197
15	298	126	7090	394	200	9970	491	2690	287	293	247	192
16	273	133	6150	351	195	9810	453	2100	260	268	224	187
17	249	155	3860	329	190	7650	426	1630	245	246	204	178
18	230	220	2460	304	190	5180	411	1270	237	228	1200	172
19	217	233	1990	304	185	3540	435	1020	937	213	2160	171
20	206	210	1750	316	180	2850	528	847	1090	200	1430	164
21	196	220	1350	303	175	2720	543	757	657	189	781	155
22	183	399	1070	281	170	3460	591	729	588	181	501	146
23	173	433	889	278	170	3140	537	685	530	173	387	138
24	164	378	790	271	170	2590	563	1540	392	250	312	132
25	159	324	823	301	170	2190	859	1780	333	420	267	127
26	162	288	790	250	170	2510	1320	1470	2380	323	242	123
27	172	261	674	250	160	2290	2050	1010	3510	247	230	120
28	182	238	588	280	165	1930	1690	802	1180	213	216	117
29	174	219	557	290	---	1500	1130	681	706	191	294	115
30	165	217	555	300	---	1220	867	591	532	220	799	114
31	157	---	500	310	---	1030	---	488	---	496	2250	---
TOTAL	15001	6013	48239	11529	6021	68916	22792	31738	18789	13499	19374	9959
MEAN	484	200	1556	372	215	2223	746	1024	626	435	625	332
MAX	2660	433	7090	858	318	9970	2050	3030	3510	1560	2250	2160
MIN	157	126	500	250	160	160	411	450	237	173	204	114
CFSM	.91	.38	2.91	.70	.40	4.16	1.40	1.92	1.17	.82	1.17	.62
IN.	1.05	.42	3.36	.80	.42	4.80	1.56	2.21	1.31	.94	1.35	.69

CAL YR 1977 TOTAL 164114 MEAN 450 MAX 7090 MIN 28 CFSM .84 IN 11.43
WTR YR 1978 TOTAL 271470 MEAN 744 MAX 9970 MIN 114 CFSM 1.39 IN 18.91

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) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1952, nonrecording gage 600 ft (183 m) upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--31 years, 1,809 ft³/s (51.23 m³/s), 14.39 in/yr (366 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 16	1800	17200	487	8.53	2.600	Mar. 22	1500	11600	329	5.45	1.661
Mar. 16	2100	*24500	694	*11.11	3.386	June 28	0700	12500	354	6.02	1.835

Minimum daily discharge, 342 ft³/s (9.68 m³/s) Nov. 15.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	870	405	1630	1350	959	628	3000	2300	1710	1950	1170	7630
2	5200	395	3830	1270	943	611	2620	1980	1560	4330	943	4490
3	5630	395	3520	1130	912	624	2270	1770	1450	7360	2450	2910
4	3840	386	2840	1100	886	599	2070	2060	1350	5380	3160	2180
5	2380	386	3000	1120	812	586	1980	2650	1250	3290	1890	1750
6	1700	377	5060	1090	792	606	1950	2410	1180	2330	1350	1470
7	1350	377	4790	1120	760	621	2770	2000	1160	1920	1530	1290
8	1240	377	3810	1520	740	630	4140	1960	1600	2690	3970	1160
9	1700	386	3370	2160	720	622	3460	2720	1680	2850	2540	1050
10	2110	385	3000	1420	710	662	2750	2720	1380	1940	1680	970
11	1700	372	2410	1150	700	778	2500	2240	1180	1560	1310	894
12	1350	364	2380	1280	680	1050	2480	2130	1090	1320	1160	839
13	1090	355	2500	1320	670	2050	2260	4860	1170	1240	1230	804
14	924	344	8320	1240	663	9020	1950	7970	1340	1280	1230	789
15	804	342	14800	1140	675	19000	1720	7850	1140	1190	1030	774
16	717	375	16800	1010	663	22200	1580	6400	1010	1060	900	760
17	649	854	15100	943	647	21000	1470	5240	938	967	906	745
18	584	1320	10100	917	643	17000	1550	4180	910	884	2470	837
19	535	1170	6290	909	642	12800	1690	3340	2170	824	5910	745
20	514	979	5410	932	630	10000	1770	2780	2490	775	4470	676
21	483	979	4400	900	620	9550	1940	2510	1720	740	2590	635
22	473	1150	3480	795	613	11400	1950	2670	1460	713	1780	572
23	462	1300	2830	797	615	10900	1860	2570	1320	691	1390	572
24	443	1150	2490	842	612	8210	2190	6120	1090	980	1170	547
25	424	1020	2450	886	633	7330	2900	7210	968	1360	1010	514
26	424	906	2220	799	633	8620	5500	5630	4880	1230	948	503
27	433	854	1890	799	610	7730	6000	4010	11600	969	885	493
28	453	789	1740	859	625	5950	4490	3070	11300	841	1010	473
29	443	745	1600	905	---	4880	3270	2530	3510	751	3280	462
30	424	789	1530	969	---	4020	2710	2170	2300	802	4940	458
31	414	---	1420	983	---	3410	---	1910	---	1260	6890	---
TOTAL	39763	20026	145010	33655	19808	203087	78790	109960	67906	55477	67192	37992
MEAN	1283	668	4678	1086	707	6551	2626	3547	2264	1790	2167	1266
MAX	5630	1320	16800	2160	959	22200	6000	7970	11600	7360	6890	7630
MIN	414	342	1420	795	610	586	1470	1770	910	691	885	458
CFSM	.75	.39	2.74	.64	.41	3.84	1.54	2.08	1.33	1.05	1.27	.74
IN.	.87	.44	3.16	.73	.43	4.43	1.72	2.40	1.48	1.21	1.46	.83

CAL YR 1977	TOTAL	495814	MEAN	1358	MAX	16800	MIN	141	CFSM	.80	IN	10.81
WTR YR 1978	TOTAL	878666	MEAN	2407	MAX	22200	MIN	342	CFSM	1.41	IN	19.15

WABASH RIVER BASIN

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 (6.10 m) 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 49.1 ft³/s (1.391 m³/s), 14.04 in/yr (357 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 1	1400	908	25.7	8.37	2.551	June 26	0800	2090	59.2	12.82	3.908
Dec. 14	unknown	2000	56.6	unknown		July 1	2100	1080	30.6	9.16	2.792
Mar. 14	1300	*2430	66.8	*13.70	4.176	Aug. 18	0800	1930	54.7	12.31	3.752
May 13	0600	1510	42.8	10.91	3.325	Aug. 30	2000	779	22.1	7.72	2.353

Minimum daily discharge, 5.9 ft³/s (0.17 m³/s) Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	401	9.2	111	32	28	13	51	36	28	213	16	114
2	138	8.9	81	27	26	13	41	30	26	206	12	62
3	62	8.9	66	25	24	13	38	27	24	139	117	41
4	39	8.6	236	24	23	13	37	59	22	51	37	31
5	26	8.3	208	25	22	13	34	70	20	31	21	24
6	19	8.0	112	25	21	13	35	48	19	24	17	20
7	18	8.3	101	82	20	14	32	42	19	24	80	18
8	49	8.6	100	103	19	14	30	44	19	161	60	16
9	63	8.3	169	86	18	17	28	53	16	42	30	14
10	39	8.0	96	52	18	28	28	42	15	27	17	13
11	27	7.5	71	35	17	49	33	36	14	20	13	12
12	22	6.9	55	32	16	147	30	47	14	16	20	11
13	17	6.6	349	30	16	308	26	812	15	17	15	11
14	16	6.4	1530	28	15	2080	23	412	14	15	10	12
15	14	6.6	311	25	15	755	22	241	13	13	8.0	11
16	14	12	177	23	14	468	21	167	13	12	7.4	10
17	12	28	136	25	14	309	21	135	12	9.8	7.0	9.8
18	12	18	116	24	14	197	24	101	42	9.2	1030	9.5
19	11	14	95	22	13	194	24	79	143	8.3	288	9.2
20	9.8	13	81	22	13	172	22	66	44	8.0	189	8.3
21	9.2	61	64	21	13	287	21	54	32	7.7	83	8.0
22	8.9	41	53	21	12	181	19	46	24	7.5	49	7.5
23	8.6	30	49	21	12	129	33	83	20	8.0	34	7.5
24	8.3	25	133	21	12	123	53	130	17	51	25	7.5
25	8.6	21	110	46	13	218	81	80	23	34	21	7.2
26	14	18	69	100	13	169	136	60	1140	16	20	6.9
27	16	16	49	70	13	119	78	48	135	12	21	6.4
28	13	14	43	50	13	96	56	42	55	9.8	19	5.9
29	12	51	38	40	---	78	46	38	35	8.6	16	5.9
30	10	213	35	35	---	64	42	35	27	49	292	5.9
31	9.8	---	33	30	---	58	---	30	---	28	324	---
TOTAL	1127.2	694.1	4877	1202	467	6352	1165	3193	2040	1277.9	2898.4	525.5
MEAN	36.4	23.1	157	38.8	16.7	205	38.8	103	68.0	41.2	93.5	17.5
MAX	401	213	1530	103	28	2080	136	812	1140	213	1030	114
MIN	8.3	6.4	33	21	12	13	19	27	12	7.5	7.0	5.9
CFSM	.77	.49	3.31	.82	.35	4.32	.82	2.17	1.43	.87	1.97	.37
IN.	.88	.54	3.82	.94	.37	4.97	.91	2.50	1.60	1.00	2.27	.41
CAL YR 1977	TOTAL	15888.26	MEAN	43.5	MAX	1530	MIN	.43	CFSM	.92	IN	12.44
WTR YR 1978	TOTAL	25819.10	MEAN	70.7	MAX	2080	MIN	5.9	CFSM	1.49	IN	20.22

WABASH RIVER BASIN

03364500 CLIFTY CREEK AT HARTSVILLE, IN

LOCATION.--Lat 39°16'25", long 85°42'10", in NW¼NW¼ 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) National Geodetic Vertical Datum of 1929. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and periods of no gage-height record, Dec. 7 to Jan. 19 and July 21 to Aug. 22, which are poor.

AVERAGE DISCHARGE.--30 years, 96.1 ft³/s (2.722 m³/s), 14.28 in/yr (363 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) National Geodetic Vertical Datum of 1929, from floodmarks, upstream from bridge.

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)	
Oct 1	1900	3570	101	8.71	2.655	July 24	Unknown	Unknown	Unknown	Unknown	Unknown
Dec. 14	Unknown	3660	104	8.83	2.691	Aug. 18	Unknown	Unknown	Unknown	Unknown	Unknown
Mar. 14	2100	*4420	125	*9.33	2.844	Aug. 30	2300	1350	38.2	5.14	1.567
June 25	2300	3270	92.6	8.30	2.530						

Minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Sept. 29.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: December 1970 to September 1975.

WATER TEMPERATURE: December 1970 to September 1975.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2360	34	698	54	57	21	101	95	60	141	65	281
2	789	31	351	52	54	20	82	77	52	269	68	162
3	317	29	246	50	50	21	71	68	45	260	500	104
4	216	27	209	48	47	21	67	80	40	123	200	70
5	147	25	539	48	44	19	64	83	36	62	90	51
6	90	25	482	50	42	18	60	64	32	41	50	38
7	69	26	259	60	40	20	63	58	34	41	250	31
8	177	26	200	230	38	20	57	59	35	286	200	26
9	241	24	450	130	37	21	53	62	33	184	90	22
10	166	24	200	80	36	27	51	58	30	54	50	19
11	124	23	140	60	35	62	57	51	27	37	37	17
12	98	20	120	54	34	244	56	86	25	27	60	15
13	75	18	300	50	33	804	49	690	23	27	30	14
14	63	16	3000	47	32	3660	43	598	21	27	20	15
15	57	17	700	45	32	2150	40	422	19	22	14	15
16	51	33	300	44	31	971	37	340	18	17	11	13
17	45	118	220	44	30	683	36	263	17	14	9.4	12
18	43	93	350	43	28	424	48	198	25	11	1600	10
19	40	58	250	42	27	434	89	150	44	8.8	350	9.0
20	34	46	180	41	28	507	76	122	41	7.3	400	7.8
21	29	182	130	41	28	901	71	108	109	6.9	150	6.6
22	27	197	100	31	26	567	58	89	87	6.4	62	5.4
23	25	133	84	31	25	330	87	160	39	15	43	4.4
24	24	104	86	35	25	267	229	513	25	900	31	3.9
25	26	84	130	80	25	315	267	249	302	200	24	3.5
26	74	70	80	212	23	322	385	169	1000	60	21	3.2
27	80	57	70	140	20	227	233	125	207	30	18	2.9
28	55	52	60	100	19	184	166	102	104	15	133	2.9
29	44	42	60	80	---	151	130	86	60	11	127	2.6
30	38	170	56	70	---	124	115	75	42	250	465	2.9
31	35	---	52	62	---	112	---	69	---	200	853	---
TOTAL	5659	1804	10102	2154	946	13647	2941	5369	2632	3353.4	6021.4	970.1
MEAN	183	60.1	326	69.5	33.8	440	98.0	173	87.7	108	194	32.3
MAX	2360	197	3000	230	57	3660	385	690	1000	900	1600	281
MIN	24	16	52	31	19	18	36	51	17	6.4	9.4	2.6
CFSM	2.00	.66	3.57	.76	.37	4.81	1.07	1.89	.96	1.18	2.12	.35
IN.	2.30	.73	4.11	.88	.39	5.55	1.20	2.19	1.07	1.36	2.45	.39
CAL YR 1977	TOTAL	33862.54	MEAN	92.8	MAX	3000	MIN	.82	CFSM	1.02	IN	13.78
WTR YR 1978	TOTAL	55598.90	MEAN	152	MAX	3660	MIN	2.6	CFSM	1.66	IN	22.63

03365000 SAND CREEK NEAR BREWERSVILLE, IN

LOCATION.--Lat 39°05'03", long 85°39'32", in W4NE1/4 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 Wyaloosing 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) National Geodetic Vertical Datum of 1929 (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.

AVERAGE DISCHARGE.--30 years, 169 ft³/s (4.786 m³/s), 14.81 in/yr (376 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 1	2400	3740 106	10.29 3.136	July 24	1400	3960 112	10.58 3.225
Dec. 14	1100	7600 215	14.40 4.389	Aug. 18	0900	7230 205	14.08 4.292
Mar. 14	1100	*9910 281	*16.11 4.910	Aug. 30	2100	3480 98.6	9.93 3.027
June 26	1000	3740 106	10.28 3.133				

Minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Sept. 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	40	1580	93	150	84	134	117	55	321	120	537
2	1580	39	612	88	140	86	119	95	49	1410	126	289
3	396	36	402	74	130	86	104	83	45	652	841	188
4	221	35	354	72	120	86	100	106	41	230	316	129
5	148	34	1330	73	115	76	101	161	37	125	133	94
6	112	32	852	79	110	73	95	120	35	86	90	72
7	96	31	368	121	111	87	106	95	36	70	535	58
8	231	33	304	544	107	100	98	181	34	322	356	47
9	443	34	734	319	106	115	88	230	33	128	154	41
10	261	31	371	160	105	178	83	129	29	86	95	37
11	160	31	237	142	99	374	95	92	26	58	69	33
12	120	30	221	133	97	850	123	162	24	44	113	30
13	94	26	556	119	95	1800	91	1530	23	42	84	28
14	79	24	6010	114	96	8210	77	1500	21	56	52	29
15	73	26	1290	102	90	2890	69	851	21	48	42	30
16	68	33	521	93	83	1280	65	592	19	36	38	31
17	61	106	369	94	83	867	62	446	18	31	37	25
18	55	133	574	92	81	505	84	300	41	26	3690	23
19	53	79	401	92	80	468	179	212	99	22	628	19
20	54	60	287	91	75	512	157	164	88	19	683	16
21	45	482	214	88	74	723	135	135	259	18	269	14
22	40	389	169	79	76	634	104	110	130	17	153	12
23	38	207	143	76	73	361	175	166	58	28	104	11
24	33	158	147	80	73	321	447	375	38	1650	77	9.5
25	31	128	221	134	75	500	327	184	30	419	62	8.5
26	68	114	141	550	78	509	487	129	1530	134	77	7.5
27	116	97	120	400	74	379	282	102	389	75	137	6.8
28	75	93	101	300	74	246	180	87	159	52	95	6.4
29	58	84	101	230	---	199	139	76	98	40	641	6.0
30	50	373	96	190	---	163	134	68	71	396	2190	7.0
31	44	---	91	170	---	144	---	61	---	392	1770	---
TOTAL	6113	3018	18917	4992	2670	22856	4436	8659	3536	7033	13777	1844.7
MEAN	197	101	610	161	95.4	737	148	279	118	227	444	61.5
MAX	1580	482	6010	550	150	8210	483	1530	1530	1650	3690	537
MIN	31	24	91	72	73	73	62	61	18	17	37	6.0
CFSM	1.27	.65	3.94	1.04	.62	4.76	.96	1.80	.76	1.47	2.87	.40
IN.	1.47	.72	4.54	1.20	.64	5.49	1.06	2.08	.85	1.69	3.31	.44

CAL YR 1977 TOTAL 63672.8 MEAN 174 MAX 6010 MIN 3.3 CFSM 1.12 IN 15.28
WTR YR 1978 TOTAL 97851.7 MEAN 268 MAX 8210 MIN 6.0 CFSM 1.73 IN 23.48

WABASH RIVER BASIN

03365000 SAND CREEK 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 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANFOUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
NOV 07...	1510	30	20	1.6
AUG 18...	1545	2570	1860	12900

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW1/4 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) National Geodetic Vertical Datum of 1929. Oct. 1, 1927 to July 2, 1931, nonrecording 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.

AVERAGE DISCHARGE.--51 years, 2,395 ft³/s (67.83 m³/s), 13.89 in/yr (353 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 15	1200	25500	722	16.46	5.017	Aug. 19	1000	12300	348	13.86	4.225
Mar. 15	1300	*36000	1020	*17.68	5.389	Aug. 31	2400	12600	357	13.99	4.264
May 14	2400	12900	365	14.09	4.295						

Minimum daily discharge, 392 ft³/s (11.1 m³/s) Oct. 1.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	392	671	3450	1930	1390	834	4130	3140	2280	2540	1660	11800
2	4870	656	5090	1830	1290	832	3690	2740	2080	4980	1330	9340
3	6660	643	4730	1670	1270	840	3290	2430	1940	7250	2270	5370
4	5650	629	4020	1540	1210	826	2990	2320	1830	8460	3860	3350
5	3610	614	4070	1510	1150	792	2820	3080	1720	5870	2980	2540
6	2430	605	6870	1510	1160	789	2700	3070	1630	3470	2340	2050
7	1970	596	6670	1500	1140	818	2760	2680	1570	2590	2240	1750
8	1640	599	5030	2050	1100	847	3680	2500	1610	2970	3490	1540
9	2090	600	4990	2980	1060	851	4090	2850	1910	3760	3650	1390
10	2680	612	4950	2210	1020	899	3520	3170	1790	2870	2350	1260
11	2370	599	3540	1690	1000	1110	3170	2800	1590	2150	1750	1160
12	2050	581	2970	1710	963	1740	3080	2610	1470	1790	1530	1080
13	1590	566	3000	1740	952	3440	2980	5450	1410	1590	1960	1030
14	1360	550	8060	1720	955	11900	2700	11400	1510	1530	1470	1010
15	1210	539	23600	1660	928	33800	2440	12300	1500	1500	1370	999
16	1100	566	22200	1540	926	31900	2250	10500	1370	1380	1160	972
17	1020	658	20600	1350	895	31200	2110	8680	1280	1260	1050	949
18	951	1240	17300	1340	878	26700	2060	6590	1230	1170	3710	934
19	893	1360	11300	1320	848	19900	2420	4850	1530	1090	11100	947
20	852	1170	8370	1300	819	13800	2480	3930	2610	1040	8700	903
21	817	1310	6700	1270	840	11400	2460	3380	2410	999	5350	869
22	777	2130	5210	1160	821	12800	2510	3220	2020	961	3000	834
23	741	1850	4170	1090	818	12600	2410	3080	1820	929	2160	803
24	710	1620	3540	1120	812	11200	3070	4300	1550	1770	1740	778
25	691	1410	3430	1180	820	5710	3440	7260	1360	3940	1470	756
26	689	1240	3440	1250	831	10200	4540	7540	2430	1970	1320	738
27	783	1120	2900	1540	821	10200	6800	5530	7950	1470	1460	723
28	824	1040	2420	1710	818	9060	6380	3960	9830	1200	1360	707
29	774	979	2250	1670	---	7340	4460	3270	9500	1060	2190	693
30	727	1080	2180	1560	---	5740	3600	2850	3870	1080	5410	692
31	695	---	2040	1430	---	4710	---	2530	---	1730	10800	---
TOTAL	53516	27833	209090	49080	27535	288778	99030	144010	76600	76369	96230	57967
MEAN	1726	928	6745	1583	983	9315	3301	4645	2553	2464	3104	1932
MAX	6660	2130	23600	2980	1390	33800	6800	12300	9830	8460	11100	11800
MIN	392	539	2040	1090	812	789	2060	2320	1230	929	1050	692
CFSM	.74	.40	2.88	.68	.42	3.98	1.41	1.98	1.09	1.05	1.33	.83
IN.	.85	.44	3.32	.78	.44	4.59	1.57	2.29	1.22	1.21	1.53	.92
CAL YR 1977 TOTAL	708093		MEAN	1940	MAX	23600	MIN	168	CFSM	.83	IN	11.25
WTR YR 1978 TOTAL	1206038		MEAN	1304	MAX	33800	MIN	392	CFSM	1.41	IN	19.16

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 (0.83 tonnes) Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 28.0°C July 22, 23; minimum, 0.0°C Dec. 28, 29, Jan. 9 to Feb. 22.

SEDIMENT CONCENTRATIONS: Maximum daily, 958 mg/L July 2; minimum daily, 4 mg/L Feb. 27, Mar. 9, 10.

SEDIMENT DISCHARGE: Maximum daily load, 30,500 tons (27,670 tonnes) Mar. 15; minimum daily, 8.9 ton (8.07 tonnes) Feb. 27.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	16.0	14.0	12.0	5.0	3.0	2.0	2.0	.0	.0	2.0	1.5
2	17.0	15.5	14.0	13.5	5.5	5.0	2.0	1.0	.0	.0	1.5	1.0
3	15.5	14.0	15.5	14.0	5.0	5.0	1.0	.5	.0	.0	1.5	1.0
4	14.0	13.5	16.0	15.0	5.0	5.0	1.0	.5	.0	.0	2.0	1.5
5	13.5	13.0	17.0	16.0	5.0	4.5	1.5	1.0	.0	.0	2.0	1.0
6	13.5	13.0	17.0	17.0	4.5	3.0	2.0	1.5	.0	.0	3.5	2.0
7	13.5	12.0	17.0	17.0	3.0	1.0	3.5	1.0	.0	.0	3.5	3.0
8	12.0	12.0	17.0	17.0	1.0	.5	3.5	1.5	.0	.0	3.0	3.0
9	12.0	11.5	17.0	16.5	.5	.5	1.5	.0	.0	.0	3.0	2.0
10	11.5	11.0	16.5	13.0	.5	.5	.0	.0	.0	.0	4.5	3.0
11	11.0	10.0	13.0	10.5	.5	.5	.0	.0	.0	.0	4.5	3.5
12	10.5	9.5	10.5	9.0	.5	.5	.0	.0	.0	.0	3.5	2.0
13	9.5	9.0	9.0	8.0	1.0	.5	.0	.0	.0	.0	2.0	1.5
14	9.5	9.0	8.0	7.0	3.0	.5	.0	.0	.0	.0	1.5	.5
15	9.5	9.0	8.5	8.0	3.5	3.0	.0	.0	.0	.0	1.0	.5
16	9.0	9.0	9.5	8.5	4.0	3.5	.0	.0	.0	.0	2.0	1.0
17	9.0	8.0	10.0	9.5	4.5	4.0	.0	.0	.0	.0	2.0	1.0
18	9.0	8.5	9.5	8.5	5.5	4.5	.0	.0	.5	.0	3.5	1.5
19	9.0	8.5	9.0	8.0	6.5	5.5	.0	.0	.5	.0	5.0	3.0
20	9.0	8.5	8.0	7.0	6.5	6.0	.0	.0	.0	.0	6.0	4.5
21	10.0	9.0	8.5	8.0	6.0	5.0	.0	.0	.5	.0	6.5	6.0
22	11.0	10.0	8.5	7.0	5.0	4.0	.0	.0	.5	.0	7.0	6.0
23	13.0	11.0	7.0	6.5	4.0	3.5	.0	.0	.5	.5	7.0	6.5
24	13.0	12.0	7.0	6.5	4.5	3.5	.0	.0	1.5	.5	7.0	6.5
25	13.0	12.0	6.5	5.5	4.5	3.5	.0	.0	3.0	1.5	6.5	5.5
26	13.5	12.0	5.5	4.0	3.5	1.0	.0	.0	2.0	1.5	5.5	5.5
27	13.5	13.0	4.0	3.0	1.0	.5	.0	.0	1.5	1.0	5.5	5.5
28	13.5	13.0	3.0	1.5	.5	.0	.0	.0	2.0	1.0	6.5	5.5
29	13.5	12.0	2.0	1.5	.5	.0	.0	.0	---	---	8.0	6.5
30	13.0	11.5	3.0	2.0	1.0	.5	.0	.0	---	---	8.5	8.0
31	12.0	12.0	---	---	2.0	1.0	.0	.0	---	---	10.0	8.5
MONTH	17.0	8.0	17.0	1.5	6.5	.0	3.5	.0	3.0	.0	10.0	.5

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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	45	48	82	149	293	2650	18	94	---	---	9	20
2	659	8440	74	131	134	1840	13	64	---	---	8	18
3	208	3740	70	122	58	741	12	54	---	---	8	18
4	112	1710	70	119	23	250	39	162	---	---	10	22
5	64	624	73	121	95	1040	76	310	---	---	8	17
6	72	472	71	116	117	2170	53	216	---	---	5	11
7	92	465	64	103	145	2610	7	28	---	---	5	11
8	93	412	50	81	56	761	6	33	---	---	6	14
9	80	451	34	55	100	1350	10	80	---	---	4	9.2
10	69	499	26	43	71	949	12	72	---	---	4	9.7
11	73	467	22	36	66	631	7	32	---	---	5	15
12	67	371	20	31	86	690	16	74	---	---	17	80
13	76	326	20	31	28	227	13	61	---	---	185	1760
14	70	257	24	36	345	11000	10	46	---	---	429	14100
15	53	173	26	38	337	20100	9	40	---	---	334	30500
16	55	163	28	43	153	9170	12	50	---	---	140	12100
17	65	179	31	55	74	4120	12	44	---	---	102	8590
18	68	175	32	107	117	5470	9	33	---	---	55	7960
19	66	159	23	84	122	3720	7	25	---	---	30	1610
20	58	133	19	60	62	1400	6	21	5	11	41	1530
21	50	110	24	85	52	941	5	17	5	11	66	2030
22	42	88	84	483	46	647	---	---	6	13	92	3180
23	39	78	29	145	8	90	---	---	6	13	134	4560
24	40	77	37	162	69	660	---	---	6	13	127	3840
25	40	75	34	129	78	722	---	---	5	11	60	1570
26	37	69	33	110	41	381	---	---	5	11	86	2370
27	70	148	22	67	35	274	---	---	4	8.9	40	1100
28	67	149	24	67	43	281	---	---	5	11	46	1130
29	85	178	22	58	26	158	---	---	---	---	54	1070
30	93	183	57	210	11	65	---	---	---	---	56	868
31	91	171	---	---	9	50	---	---	---	---	126	1600
TOTAL	---	20590	---	3077	---	75158	---	---	---	---	---	97712.9

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN CONCENTRATION (MG/L)											
	CONCENTRATION (MG/L)	LOADS (T/DAY)										
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	110	1230	17	144	131	806	60	411	180	807	178	5670
2	120	1200	19	141	114	640	958	13200	198	711	350	8830
3	170	1510	18	118	107	560	733	14300	489	3010	250	3620
4	124	1000	13	81	74	366	320	7310	210	2270	242	2190
5	127	967	16	133	70	325	192	3040	217	1750	190	1300
6	120	875	15	124	56	246	152	1420	607	3780	182	1010
7	87	648	14	101	57	242	166	1160	475	2790	150	709
8	60	596	11	74	71	309	370	2970	234	2200	115	478
9	88	972	16	123	72	371	320	3250	208	2050	108	405
10	25	238	32	274	66	319	178	1380	78	495	102	347
11	31	265	42	318	71	305	170	987	100	472	114	357
12	30	249	166	1170	66	262	118	570	120	496	109	318
13	33	266	429	6780	59	225	93	399	162	857	138	384
14	12	87	264	7840	71	289	171	706	156	619	222	605
15	17	112	101	3350	73	296	110	445	128	473	81	218
16	27	164	66	1870	71	263	69	257	123	385	82	215
17	30	171	51	1200	67	232	71	242	96	272	79	202
18	24	133	56	996	70	237	80	253	309	3960	66	166
19	14	91	50	655	109	489	81	238	169	5000	58	148
20	10	67	106	1120	406	2860	83	233	154	3620	51	124
21	11	73	78	712	284	1850	82	221	160	2310	48	113
22	10	68	82	713	184	1000	70	182	128	1040	44	99
23	12	78	79	657	188	924	61	153	140	816	41	89
24	32	265	101	1170	173	724	759	3950	110	517	34	71
25	16	149	136	2670	177	650	470	5520	104	413	29	59
26	59	723	64	1300	744	7350	330	1760	98	349	24	48
27	30	551	52	776	843	17000	147	583	450	1770	22	43
28	24	413	86	920	330	8760	181	586	420	1540	22	42
29	19	229	91	803	210	5390	159	455	695	4490	20	37
30	16	156	96	739	130	1360	222	647	651	9490	20	37
31	---	---	89	608	---	---	195	911	210	6120	---	---
TOTAL	---	13546	---	37680	---	54645	---	67739	---	64872	---	27934
TOTAL LOAD FOR YEAR:	464612.8		TONS.									

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 12.0 ft³/s (0.340 m³/s), 17.50 in/yr (444 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 500 ft³/s (14.2 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)
Nov. 21	0700	921 26.1	6.28 1.914	Mar. 14	0400	942 26.7	6.32 1.926
Dec. 5	0700	771 21.8	5.98 1.823	May 8	1200	587 16.6	5.54 1.688
Dec. 14	Unknown	*1300 36.8	*6.93 2.112	Aug. 6	1900	744 21.1	5.92 1.804
Jan. 8	0800	587 16.6	5.54 1.688				

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	1.9	12.8	3.1	1.7	2.0	4.2	5.1	1.4	15	2.7	13
2	2.8	1.8	24	3.0	1.6	2.0	5.6	3.7	1.3	5.6	1.8	4.8
3	1.1	1.8	14	2.6	1.5	1.9	5.4	3.1	1.3	1.2	20	2.9
4	.78	1.8	31	2.4	2.1	1.8	5.4	17	1.1	.65	2.8	2.0
5	.65	1.9	243	2.8	2.0	1.8	5.1	20	1.1	.40	1.6	1.5
6	.92	1.9	35	4.4	1.9	4.1	5.1	7.4	1.1	.30	171	1.2
7	.78	9.9	15	72	1.8	5.6	4.8	5.4	1.5	.26	28	1.0
8	11	6.8	13	233	1.9	10	4.6	154	1.1	.58	5.8	.95
9	5.1	4.8	50	16	2.0	21	4.4	95	.79	.35	3.4	.83
10	2.3	14	18	9.0	2.1	33	4.4	17	.68	.35	2.4	.77
11	1.7	4.8	10	6.0	2.4	76	9.1	8.9	.62	.30	1.9	.71
12	1.4	2.9	6.1	4.5	2.4	172	7.0	12	.90	.15	1.7	.71
13	1.2	2.3	216	3.7	2.2	215	5.3	116	.79	.92	1.5	.74
14	1.1	2.0	422	3.0	2.0	475	4.5	76	.52	.52	1.3	.93
15	1.1	1.9	42	2.6	1.8	84	4.2	32	.40	.22	1.0	.96
16	1.2	44	20	2.2	1.8	45	3.9	15	.40	.22	.94	.75
17	1.4	94	16	2.5	1.8	27	3.7	11	.35	.10	.83	.71
18	1.6	14	85	2.2	1.8	17	11	7.1	.89	.08	88	.69
19	1.7	7.7	23	1.9	1.7	18	13	5.1	3.1	.06	5.9	.67
20	1.7	43	16	2.2	1.7	15	12	3.9	.85	.05	2.4	.64
21	1.6	300	11	2.0	1.8	27	8.2	3.2	.71	.08	1.6	.56
22	1.5	30	7.5	1.9	1.9	18	5.8	2.6	.57	.15	1.3	.47
23	1.5	16	6.3	1.8	1.8	12	4.2	9.2	.46	.06	1.1	.43
24	1.5	11	4.8	2.1	1.9	9.9	4.8	9.1	.40	7.4	.96	.46
25	2.6	8.3	7.8	165	2.3	24	20	3.5	.30	1.9	.94	.45
26	17	6.5	3.6	15	2.3	19	12	2.4	2.1	.58	.82	.40
27	5.9	5.3	3.2	5.0	2.2	13	7.5	2.0	.58	.26	2.0	.39
28	3.5	4.8	2.9	1.9	2.1	9.9	5.5	1.8	.30	.15	4.2	.32
29	2.6	5.5	2.7	1.5	---	8.1	4.6	1.7	.18	.22	7.2	.37
30	2.1	167	2.5	1.4	---	6.8	6.8	1.6	.12	44	68	.60
31	1.9	---	2.3	1.5	---	6.5	---	1.5	---	36	65	---
TOTAL	93.23	817.6	1483.7	578.3	54.5	1381.4	285.1	653.3	25.91	118.11	498.09	40.91
MEAN	3.01	27.3	47.9	18.7	1.95	44.6	9.50	21.1	.86	3.81	16.1	1.36
MAX	17	300	422	233	2.4	475	48	154	3.1	44	171	13
MIN	.65	1.8	2.3	1.4	1.5	1.8	3.7	1.5	.12	.05	.82	.32
CFSM	.32	2.93	5.15	2.01	.21	4.79	1.02	2.27	.09	.41	1.73	.15
IN.	.37	3.27	5.93	2.31	.22	5.52	1.14	2.61	.10	.47	1.99	.16

CAL YR 1977 TOTAL 5821.98 MEAN 16.0 MAX 422 MIN .03 CFSM 1.72 IN 23.26
WTR YR 1978 TOTAL 6030.15 MEAN 16.5 MAX 475 MIN .05 CFSM 1.77 IN 24.09

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) National Geodetic Vertical Datum of 1929. 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. 9 to Mar. 11, which are poor.

AVERAGE DISCHARGE.--30 years (1948 to current year), 338 ft³/s (9.572 m³/s), 15.67 in/yr (398 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)	
Dec. 14	Unknown	10000	283	Unknown	
Mar. 14	1200	*14800	419	*23.03	7.020

Minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Sept. 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	33	5670	107	88	64	189	497	87	60	506	625
2	145	28	1770	108	84	64	170	362	78	41	242	295
3	63	25	700	94	82	62	151	1910	69	29	669	183
4	40	22	752	86	84	60	140	945	63	27	529	95
5	36	20	4070	81	81	58	133	537	51	22	253	62
6	32	18	2400	99	77	58	126	350	46	45	320	43
7	27	24	740	174	74	70	128	230	75	32	901	34
8	56	51	510	2990	68	100	130	540	78	28	252	29
9	160	64	1400	1400	66	150	123	1100	48	24	134	26
10	119	62	760	500	66	330	111	720	53	23	90	24
11	84	100	400	250	67	600	120	460	58	49	68	23
12	63	67	315	160	69	1450	165	300	40	32	54	22
13	50	45	595	120	76	4130	163	3500	32	26	48	21
14	40	36	8400	100	71	12300	117	3800	30	28	44	21
15	33	31	3000	92	67	5520	96	1800	164	26	41	25
16	30	93	960	86	67	1740	92	800	150	23	39	21
17	26	1050	618	84	66	1100	233	640	73	27	38	18
18	23	599	1740	86	64	710	207	450	50	20	2510	16
19	21	285	1190	90	62	560	848	301	41	17	1220	15
20	19	194	640	92	62	568	616	233	33	13	290	15
21	19	2710	452	92	60	551	363	187	27	12	142	15
22	14	1580	331	84	66	792	234	160	84	20	90	15
23	18	592	262	80	65	485	180	376	81	19	67	15
24	16	386	226	84	62	364	192	801	78	460	57	14
25	17	286	236	730	60	483	188	443	45	1870	48	13
26	71	220	203	1000	58	684	141	244	29	317	45	13
27	175	175	165	600	59	507	328	171	54	140	54	11
28	121	154	116	300	62	373	407	144	327	82	387	10
29	74	140	118	170	---	302	2330	121	136	61	385	9.0
30	55	1240	104	110	---	247	1270	105	90	763	2270	10
31	42	---	101	92	---	211	---	96	---	1880	2070	---
TOTAL	1756	10330	38944	9641	1933	34693	9891	22323	2270	6216	13863	1738.0
MEAN	56.6	344	1256	311	69.0	1119	330	720	75.7	201	447	57.9
MAX	175	2710	8400	2990	88	12300	2330	3800	327	1880	2510	625
MIN	16	18	101	80	58	58	92	96	27	12	38	9.0
CFSM	.19	1.17	4.29	1.06	.24	3.82	1.13	2.46	.26	.69	1.53	.20
IN.	.22	1.31	4.94	1.22	.25	4.40	1.26	2.83	.29	.79	1.76	.22

CAL YR 1977 TOTAL 143179.4 MEAN 392 MAX 8400 MIN 8.4 CFSM 1.34 IN 18.18
WTR YR 1978 TOTAL 153598.0 MEAN 421 MAX 12300 MIN 9.0 CFSM 1.44 IN 19.50

WABASH RIVER BASIN

03366500 MUSCATATUCK RIVER NEAR DEPUTY, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to current year (partial-record station).

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW. INSTAN- TANEOUS (CFS)	SEDI- MENT. SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE. SUS- PENDED (T/DAY)	TEMPER- ATURE (DEG C)
NOV					
08...	1130	56	15	2.2	--
DEC					
01...	1950	5330	227	3270	8.0

03368000 BRUSH CREEK NEAR NEBRASKA, IN

LOCATION.--Lat 39°04'13", long 85°29'10", in NW¼NE¼ 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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--23 years, 12.6 ft³/s (0.357 m³/s), 15.01 in/yr (381 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
July 24	1015	1060	30.0	7.07	2.155	Aug. 18	2400	1400	39.6	7.86	2.396
Aug. 6	1945	*1740	49.3	8.59	2.618						

Minimum daily discharge, 0.06 ft³/s (0.002 m³/s) July 21, 22.

NOTE.--No gage-height record Apr. 9 to May 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	1.2	68	6.8	2.8	1.9	4.8	8.0	.90	35	1.9	10
2	2.6	.86	14	5.0	2.6	2.0	4.1	4.5	.96	16	28	4.6
3	1.4	.62	15	3.6	2.4	3.1	4.6	2.7	1.1	9.2	143	3.1
4	1.0	.43	9.8	3.3	2.8	2.7	4.7	18	.98	1.2	7.4	2.5
5	1.0	.45	124	5.5	2.5	2.3	4.2	11	.70	.70	2.7	1.9
6	2.3	.49	19	6.6	2.2	2.2	6.2	6.4	.56	.51	265	1.6
7	1.4	.56	9.8	14	2.0	4.5	12	12	.45	.42	58	1.4
8	5.3	.49	13	61	1.9	9.0	15	29	.39	1.0	8.4	1.4
9	4.8	.49	3.4	19	1.8	15	9.8	35	.33	.51	5.1	1.3
10	2.6	.62	10	11	1.9	50	15	20	.27	.82	4.3	1.2
11	2.0	.50	6.4	8.5	2.1	109	19	11	.23	.45	3.5	1.2
12	1.7	.42	5.6	6.0	2.2	224	17	80	1.5	.23	4.3	1.0
13	7.3	.37	133	5.0	2.5	448	8.0	40	.80	1.1	3.9	1.1
14	2.0	.34	356	4.0	2.2	113	4.0	34	.48	.69	3.0	1.2
15	2.6	.32	29	3.5	2.1	54	2.5	30	.35	.36	2.7	1.1
16	1.5	1.4	16	3.4	2.4	28	1.7	18	.29	.30	2.4	.94
17	1.1	2.3	12	3.4	2.2	26	1.6	10	.24	.20	3.8	.77
18	.85	1.2	119	3.6	2.1	24	1.5	5.2	20	.15	242	.67
19	.74	.78	21	3.3	1.9	26	7.0	3.1	3.0	.11	8.9	.59
20	.66	.78	14	3.0	1.8	17	10	2.2	.73	.08	6.0	.44
21	.60	35	10	2.8	1.8	33	9.0	1.5	8.4	.06	2.9	.40
22	.56	4.8	8.8	2.7	1.7	18	4.0	.98	.88	.06	2.2	.33
23	.52	2.9	8.2	2.6	1.7	14	35	5.8	.53	1.2	1.8	.25
24	.49	2.3	8.3	2.5	2.1	9.8	21	7.0	.40	206	1.6	.24
25	3.3	1.9	12	37	2.0	23	23	3.0	.39	5.3	1.4	.18
26	8.0	1.6	7.3	50	1.9	21	12	2.5	28	1.9	2.5	.15
27	5.3	1.4	6.0	17	1.8	14	6.0	2.0	.86	1.2	3.0	.15
28	3.7	1.4	4.3	9.0	1.8	9.0	3.2	1.5	.47	.86	6.5	.13
29	2.7	1.2	3.7	6.0	---	6.6	3.9	1.2	.33	10	45	.12
30	1.9	59	3.3	4.5	---	5.5	14	1.1	.27	13	273	.24
31	1.6	---	4.4	3.2	---	5.4	---	1.0	---	8.4	156	---
TOTAL	79.52	126.12	1074.3	316.8	59.2	1321.0	283.8	407.68	74.79	317.01	1300.2	40.20
MEAN	2.57	4.20	34.7	10.2	2.11	42.6	9.46	13.2	2.49	10.2	41.9	1.34
MAX	8.0	59	356	61	2.8	448	35	80	28	206	273	10
MIN	.49	.32	3.3	2.5	1.7	1.9	1.5	.98	.23	.06	1.4	.12
CFSM	.23	.37	3.04	.90	.19	3.74	.83	1.16	.22	.90	3.68	.12
IN.	.26	.41	3.51	1.03	.19	4.31	.93	1.33	.24	1.03	4.24	.13
CAL YR 1977	TOTAL	3374.37	MEAN	9.24	MAX	364	MIN	.00	CFSM	.81	IN	11.01
WTR YR 1978	TOTAL	5400.62	MEAN	14.8	MAX	448	MIN	.06	CFSM	1.30	IN	17.62

MABASH RIVER BASIN

03369000 VERNON FORK NEAR BUTLERVILLE, IN

LOCATION.--Lat 39°02'55", long 85°32'40", in NW¼ 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) National Geodetic Vertical Datum of 1929. 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.--36 years, 93.0 ft³/s (2.634 m³/s), 14.70 in/yr (373 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 14	0900	4970 141	12.17 3.709	Aug. 18	0900	5580 158	12.92 3.938
Mar. 14	0700	*8300 235	*16.09 4.904	Aug. 30	1600	4020 114	10.91 3.325
July 24	1300	4440 126	11.47 3.496				

Minimum daily discharge, 2.2 ft³/s (0.62 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	16	713	34	24	20	44	76	20	314	58	228
2	96	12	200	29	22	20	38	65	18	478	80	144
3	41	8.9	174	23	21	18	34	30	17	233	980	95
4	25	7.7	140	19	23	17	33	41	15	73	172	42
5	19	8.3	655	22	22	16	33	62	14	39	89	31
6	18	8.0	229	29	20	16	33	51	14	25	226	23
7	17	7.7	126	48	18	19	44	42	13	18	448	18
8	78	7.2	104	293	17	25	39	92	14	112	130	16
9	87	7.7	227	151	16	30	33	179	9.8	32	104	14
10	45	7.5	133	85	17	52	60	129	8.1	19	65	11
11	29	6.9	84	64	18	117	86	86	6.9	13	20	11
12	23	6.9	40	46	19	371	59	68	7.8	9.6	39	8.7
13	18	5.3	381	35	23	872	27	658	7.0	11	24	8.4
14	14	4.5	3270	29	19	4730	21	724	5.9	16	15	9.0
15	12	4.1	399	26	18	1160	19	354	5.6	12	12	9.0
16	12	11	203	25	20	259	18	219	4.8	8.9	9.7	8.4
17	11	58	156	26	18	337	17	225	4.4	6.7	12	7.4
18	10	38	490	26	17	143	51	134	7.2	5.3	2060	6.6
19	8.4	22	187	25	16	216	134	84	33	4.1	345	5.8
20	8.3	19	156	25	16	192	102	66	25	4.7	196	5.4
21	6.4	281	141	23	31	291	62	54	33	3.8	103	4.8
22	6.2	138	103	22	58	179	46	45	26	3.1	108	3.9
23	5.7	82	58	21	45	140	101	55	12	6.9	68	3.8
24	8.6	61	56	23	16	121	180	152	8.3	1280	22	3.6
25	14	48	122	90	17	151	139	89	7.2	188	17	3.1
26	52	39	56	242	16	143	135	46	658	75	21	2.8
27	62	32	45	100	17	121	73	37	73	40	29	3.2
28	36	30	31	66	18	94	53	32	35	25	122	2.5
29	27	27	29	46	---	62	45	29	22	24	848	2.2
30	22	340	28	34	---	52	51	25	15	176	2090	3.0
31	19	---	31	26	---	46	---	22	---	138	1030	---
TOTAL	1075.8	1344.7	8912	1753	602	10094	1810	3971	1140.0	3394.1	9542.7	734.6
MFAN	34.7	44.4	284	56.5	21.5	325	60.3	128	38.0	109	308	24.5
MAX	245	340	3270	293	58	4730	180	724	658	1280	2090	228
MIN	5.7	4.1	28	19	16	16	17	22	4.4	3.1	9.7	2.2
CFSM	.40	.52	3.31	.66	.25	3.78	.70	1.49	.44	1.27	3.59	.29
IN.	.47	.58	3.42	.76	.26	4.37	.78	1.72	.49	1.47	4.13	.32
CAL YR 1977	TOTAL	28497.5	MFAN	79.4	MAX	3270	MIN	1.2	CFSM	.92	IN	12.56
WTR YR 1978	TOTAL	44263.9	MFAN	121	MAX	4730	MIN	2.2	CFSM	1.41	IN	19.17

WABASH RIVER BASIN

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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929, (levels by State of Indiana, Department of Natural Resources). Prior to Jan. 14, 1940, and June 23 to Nov. 13, 1967, nonrecording gage, and Jan. 14, 1940 to June 22, 1967, water-stage recorder at site on right bank at same datum.

REMARKS.--Records good except those for winter periods, which are fair. 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.--39 years, 218 ft³/s (6.174 m³/s), 14.95 in/yr (380 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	1200	9590	272	14.93	4.551	Aug. 18	1000	10000	283	15.28	4.657
Mar. 14	1100	*13500	382	*17.94	5.468	Aug. 30	2000	6780	192	12.43	3.789

Minimum daily discharge, 6.1 ft³/s (0.173 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	22	2100	63	59	49	102	126	34	123	244	850
2	313	19	642	60	55	49	91	144	30	1240	173	353
3	91	17	364	49	54	47	78	76	27	576	1730	211
4	49	16	387	42	58	43	76	105	25	237	713	103
5	28	15	1570	42	56	41	75	187	22	121	296	68
6	23	15	949	60	54	41	72	152	21	76	148	52
7	19	16	338	76	51	48	95	112	19	52	1080	39
8	37	18	245	858	48	58	94	285	23	150	341	33
9	169	16	720	500	44	90	75	761	25	105	216	28
10	102	17	462	230	44	200	75	378	24	54	169	25
11	66	16	237	150	45	590	144	232	22	75	86	23
12	43	15	201	110	47	1950	161	189	20	32	105	21
13	31	14	332	80	60	2840	83	1840	72	29	259	20
14	24	13	7080	68	56	9540	63	1810	36	36	71	19
15	21	13	1470	66	47	2900	55	1020	21	36	45	21
16	18	20	587	62	49	1510	49	601	16	29	35	20
17	16	102	392	60	46	1070	44	504	14	23	28	18
18	15	113	1250	62	44	616	85	344	23	19	4640	17
19	13	64	614	65	42	547	318	183	600	16	770	15
20	12	45	354	67	40	597	264	140	152	13	748	14
21	10	676	280	67	75	738	189	110	282	10	213	13
22	11	457	220	60	110	678	136	88	134	9.6	154	11
23	9.6	186	130	56	160	368	216	99	67	7.9	123	9.9
24	8.5	129	112	61	87	296	560	420	36	2330	60	8.7
25	9.9	99	207	202	45	365	356	220	27	915	39	8.2
26	22	77	144	600	43	498	315	110	880	274	32	8.4
27	80	65	91	300	45	290	183	79	246	150	55	7.4
28	70	56	70	135	47	249	128	62	105	89	95	6.3
29	43	51	60	90	---	161	105	52	60	59	865	6.1
30	31	352	58	70	---	128	124	45	38	254	3260	6.8
31	26	---	58	62	---	112	---	41	---	765	3030	---
TOTAL	1493.0	2734	21724	4473	1611	26749	4411	10515	3101	7905.5	19823	2035.8
MEAN	48.2	91.1	701	144	57.5	863	147	339	103	255	639	67.9
MAX	313	676	7080	858	160	9580	560	1840	880	2330	4640	850
MIN	8.5	13	58	42	40	41	44	41	14	7.9	28	6.1
CFSM	.24	.46	3.54	.73	.29	4.36	.74	1.71	.52	1.29	3.23	.34
IN.	.28	.51	4.08	.84	.30	5.03	.83	1.98	.58	1.49	3.72	.38

CAL YR 1977 TOTAL 73039.6 MEAN 200 MAX 7080 MIN 3.5 CFSM 1.01 IN 13.72
WTR YR 1978 TOTAL 106575.3 MEAN 292 MAX 9580 MIN 6.1 CFSM 1.48 IN 20.02

WABASH RIVER BASIN

03369500 VERNON FORK AT VERNON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: November 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	TEMPER- ATURE (DEG C)
NOV 22...	1515	336	71	64	8.0
DEC 01...	1610	2260	211	1290	--
JUL 20...	1515	15	16	.65	28.0

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 down-stream 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) National Geodetic Vertical Datum of 1929. 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 winter periods, which are fair.

AVERAGE DISCHARGE.--25 years (1939-43, 1957 to current year), 3,741 ft³/s (105.9 m³/s), 13.16 in/yr (334 mm/yr). (The runoff in in/yr has been incorrectly published in previous WRD IN reports).

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)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 19	2100	23400	663	24.34	7.419	May 17	2200	14600	413	18.69	5.697
Mar. 18	2000	*45400	1290	*30.54	9.309						

Minimum daily discharge, 796 ft³/s (22.5 m³/s) Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2210	1140	4890	3380	1500	1400	7490	6430	3990	7440	5240	9120
2	2710	1070	6450	3250	1400	1500	6300	5490	3580	5130	5530	10300
3	2490	1020	7700	3100	1400	1500	5510	4770	3240	4440	6210	11600
4	4260	975	8560	2890	1500	1700	4920	4300	2960	6370	6250	12300
5	4950	931	10400	2710	1500	1800	4440	4300	2750	7290	6800	11400
6	4830	796	11200	2610	1400	1800	4090	4890	2560	7460	6730	8610
7	3790	878	10800	2620	1400	1900	3890	5270	2410	6110	6990	5340
8	3310	989	10900	2950	1400	1950	3750	5300	2290	4490	7100	3770
9	3260	1020	11600	4430	1400	2140	4030	6310	2200	3800	6750	3090
10	2950	1000	11700	3500	1400	2280	4740	7190	2300	4400	6140	2670
11	3210	996	11700	3100	1400	3560	4890	7570	2390	4310	4860	2380
12	3280	981	11700	2800	1400	5470	4750	7870	2280	3620	3810	2140
13	2890	957	11600	2600	1400	7490	4640	9480	2140	3380	3200	1960
14	2510	931	11100	2400	1400	12700	4450	9940	2010	3140	3270	1890
15	2700	889	12000	2200	1400	15300	4120	10500	1960	3350	3110	1850
16	1970	913	12400	2100	1300	20400	3720	12500	2020	4760	2670	1820
17	1790	1360	15900	2000	1300	37500	3410	14300	1960	3240	2340	1680
18	1660	2030	20900	1900	1300	44600	3400	14400	2020	2500	2100	1570
19	1540	2600	23100	1800	1300	44300	3880	13500	2690	2170	2590	1490
20	1430	2640	22900	1800	1300	35700	4440	11800	2260	1980	6540	1450
21	1350	2950	20400	1700	1300	33300	4700	9620	2920	1840	8630	1410
22	1280	4310	16600	1700	1300	27300	4460	6900	3250	1720	9510	1340
23	1210	5160	13000	1600	1300	22500	4280	5620	3030	1630	8550	1270
24	1140	5520	10400	1600	1300	19600	4940	6360	2700	1900	5460	1200
25	1100	5380	7920	1600	1300	17600	6210	6960	2390	3050	3710	1150
26	1110	4600	5900	1600	1300	15800	6980	7800	2140	5440	3140	1100
27	1200	3370	4300	1800	1300	13800	7140	8400	2260	5910	2860	1050
28	1200	2650	3900	1800	1400	12900	7570	8320	4380	4600	2610	1020
29	1300	2280	3800	1800	---	12200	7940	7060	6180	3000	2910	991
30	1320	2510	3700	1700	---	10800	7420	5540	7290	3160	4490	923
31	1240	---	3530	1600	---	9090	---	4590	---	3970	7780	---
TOTAL	70690	62846	341150	72640	38300	443880	152700	243280	86550	125600	157880	107884
MFAN	2280	2095	11000	2343	1368	14320	5090	7848	2885	4052	5093	3596
MAX	4950	5520	23100	4430	1500	44600	7940	14400	7290	7460	9510	12300
MIN	1100	796	3530	1600	1300	1400	3400	4300	1960	1630	2100	923
CFSM	.59	.54	2.45	.61	.35	3.71	1.32	2.03	.75	1.05	1.32	.93
IN.	.68	.61	3.29	.70	.37	4.28	1.47	2.34	.83	1.21	1.52	1.04
CAL YR 1977 TOTAL	1274101		MEAN 3491	MAX 23100	MIN 273	CFSM .90	IN 12.28					
WTR YR 1978 TOTAL	1903400		MEAN 5215	MAX 44600	MIN 796	CFSM 1.35	IN 18.34					

03371520 BACK CREEK AT LEESVILLE, IN

LOCATION.--Lat 38°50'48", long 86°18'06", in SW¼SE¼ 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--8 years, 32.8 ft³/s (0.929 m³/s), 18.48 in/yr (469 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 discharges 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 14	0200	1360	38.5	5.69	1.734	Aug. 3	0045	1060	30.0	5.85	1.783
Mar. 14	0345	1750	49.6	6.73	2.051	Aug. 30	1400	1330	37.7	6.24	1.902
May 13	0200	*1780	50.4	*6.76	2.060						

Minimum daily discharge, 0.10 ft³/s (0.003 m³/s) July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	11	104	13	16	21	30	36	9.1	.10	15	56
2	17	10	46	12	14	25	26	30	7.5	.40	60	30
3	10	9.7	38	11	13	22	24	26	6.8	.40	247	19
4	7.8	9.4	37	10	12	20	22	38	5.8	.83	42	14
5	6.6	8.4	281	10	11	19	20	37	4.8	.20	21	10
6	7.0	7.4	104	11	11	19	21	32	4.3	.30	14	7.9
7	6.2	11	75	16	10	18	19	32	4.0	2.1	12	6.4
8	61	14	82	25	10	19	17	64	3.8	4.3	8.3	5.1
9	30	13	146	21	9.4	20	19	80	3.1	33	6.1	4.3
10	20	11	139	18	9.4	28	21	55	2.8	6.4	4.8	3.8
11	15	9.9	139	15	9.2	81	41	42	2.4	2.6	4.3	3.3
12	13	9.3	98	14	9.0	205	34	86	3.3	1.3	12	3.0
13	12	8.6	186	13	9.0	434	27	428	4.0	77	6.4	3.0
14	11	8.0	633	12	8.9	1160	23	186	2.5	7.5	4.0	21
15	10	7.6	156	11	8.8	303	21	124	2.1	104	3.3	7.8
16	9.9	14	82	11	8.8	244	18	89	2.1	13	3.0	4.6
17	8.6	22	54	10	8.6	160	18	68	1.5	5.4	2.6	3.6
18	7.9	16	45	9.4	8.6	108	51	52	14	3.1	2.4	3.1
19	7.9	13	35	8.9	8.4	113	48	40	10	2.2	3.0	2.6
20	7.1	13	29	8.4	8.3	99	42	32	3.3	1.5	4.3	2.4
21	6.3	78	24	8.0	8.2	146	34	26	2.4	1.0	2.4	2.2
22	6.0	35	22	7.8	8.2	98	29	21	1.9	.53	2.1	1.9
23	5.8	26	19	7.6	8.0	71	55	166	1.3	1.0	1.9	1.6
24	5.4	21	18	9.0	8.2	56	71	104	1.0	162	1.5	1.4
25	7.8	18	17	41	9.0	110	68	57	1.0	21	21	1.3
26	18	15	16	32	11	87	76	39	1.5	8.3	4.3	1.1
27	13	13	15	27	14	71	56	28	.68	4.6	120	.96
28	11	12	14	24	18	56	44	21	.40	3.0	53	.78
29	11	11	13	21	---	47	38	17	.30	2.2	77	.68
30	10	111	12	19	---	39	48	14	.20	87	382	1.1
31	10	---	12	17	---	34	---	11	---	67	144	---
TOTAL	448.3	566.3	2691	473.1	288.0	3933	1061	2081	107.88	623.26	1284.7	223.92
MEAN	14.5	18.9	86.8	15.3	10.3	127	35.4	67.1	3.60	20.1	41.4	7.46
MAX	76	111	633	41	18	1160	76	428	14	162	382	56
MIN	5.4	7.4	12	7.6	8.0	18	17	11	.20	.10	1.5	.68
CFSM	.60	.78	3.60	.64	.43	5.27	1.47	2.78	.15	.83	1.72	.31
IN.	.69	.87	4.15	.73	.44	6.07	1.64	3.21	.17	.96	1.98	.35
CAL YR 1977	TOTAL	11398.44	MEAN	31.2	MAX	633	MIN	.51	CFSM	1.30	IN	17.59
WTR YR 1978	TOTAL	13781.46	MEAN	37.8	MAX	1160	MIN	.10	CFSM	1.57	IN	21.27

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN

LOCATION.--Lat 39°10'11", long 86°25'07", in NE1/4 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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 550.00 ft (167.640 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those of no gage-height record, Dec. 26 to Mar. 9, which are fair.

AVERAGE DISCHARGE.--8 years, 12.7 ft³/s (0.360 m³/s), 15.82 in/yr (402 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 14	0145	*896	25.4	*10.19	3.106

Minimum daily discharge, 0.20 ft³/s (0.006 m³/s) July 23, Sept. 29.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.1	4.9	3.2	3.7	4.6	13	15	4.4	.48	1.8	7.5
2	3.6	2.8	2.5	3.5	3.6	5.0	11	12	3.7	.95	4.1	4.6
3	2.6	2.6	2.0	4.0	3.4	4.9	9.5	10	3.3	1.2	4.2	3.0
4	1.9	2.3	1.4	3.8	3.3	4.5	8.8	26	2.8	1.0	1.2	2.2
5	1.5	2.0	5.6	3.3	3.2	4.3	8.0	33	2.4	.60	6.4	1.6
6	1.4	1.9	4.3	3.2	3.1	4.1	13	26	2.1	.41	4.2	1.2
7	1.3	1.9	3.5	4.2	3.1	4.4	16	24	2.7	.39	3.2	.86
8	1.1	1.5	4.2	1.1	3.0	5.5	15	26	3.0	.65	2.5	.70
9	6.9	1.8	5.4	9.0	3.0	8.6	14	44	2.2	7.5	1.9	.62
10	4.6	2.2	3.9	7.2	3.0	1.7	13	33	1.8	2.0	1.3	.50
11	3.6	2.2	2.8	5.9	3.0	3.0	27	24	1.6	1.1	1.1	.50
12	2.7	1.9	2.2	4.9	2.9	5.8	23	27	1.5	.66	1.9	.44
13	1.9	1.8	6.4	4.0	2.9	11.9	1.8	8.1	1.5	7.9	1.4	.43
14	1.6	1.6	4.4	3.6	2.8	3.2	14	8.3	1.3	2.7	1.0	.55
15	1.4	1.6	3.0	3.3	7.0	10.8	1.2	5.9	1.1	2.7	.80	.55
16	1.2	1.4	2.5	3.1	6.3	9.1	9.8	4.3	1.0	2.0	.66	.41
17	1.1	1.2	2.0	3.0	5.5	7.7	8.4	3.0	.92	1.1	.54	.34
18	.94	8.3	1.5	2.9	4.9	5.6	1.7	2.1	3.2	.70	.48	.34
19	.87	6.3	1.2	2.8	4.4	6.1	1.8	1.5	3.5	.49	.47	.34
20	.83	5.0	9.5	2.8	3.8	6.2	1.6	1.1	1.7	.36	.46	.27
21	.73	1.3	8.0	2.7	3.5	7.5	1.4	8.3	1.2	.27	.37	.34
22	.72	1.1	6.3	2.7	3.3	5.3	1.2	6.4	.94	.21	.31	.36
23	.75	8.3	5.2	2.6	3.2	4.1	1.9	4.1	.83	.20	.26	.33
24	.76	6.5	4.7	2.6	3.1	3.6	2.5	5.5	.67	4.4	.24	.31
25	3.1	5.4	6.6	2.6	3.1	8.6	4.5	3.0	.62	8.9	2.3	.27
26	8.2	4.6	5.8	6.3	3.2	6.7	5.5	2.2	.82	4.1	1.6	.25
27	6.2	4.0	4.9	5.8	3.6	4.7	3.8	1.5	.63	2.7	.92	.23
28	5.0	3.5	4.1	5.2	4.2	3.4	2.6	1.1	.51	1.7	1.4	.22
29	4.3	3.0	3.6	4.7	---	2.5	2.0	8.1	.49	1.1	2.2	.20
30	3.6	1.6	3.2	4.4	---	1.9	2.0	6.5	.46	3.9	5.6	.22
31	3.2	---	3.1	4.0	---	1.6	---	5.3	---	3.0	1.9	---
TOTAL	91.50	152.1	702.0	132.3	103.1	1546.9	558.5	851.6	52.89	104.97	209.71	29.68
MEAN	2.95	5.07	22.6	4.27	3.68	49.9	18.6	27.5	1.76	3.39	6.76	.99
MAX	11	16	64	11	7.0	37.3	55	83	4.4	44	56	7.5
MIN	.72	1.5	3.1	2.6	2.8	4.1	8.0	5.3	.46	.20	.24	.20
CFSM	.27	.47	2.07	.39	.34	4.58	1.71	2.52	.16	.31	.62	.09
IN.	.31	.52	2.40	.45	.35	5.28	1.91	2.91	.18	.36	.72	.10
CAL YR 1977	TOTAL	3713.49	MFAN	10.2	MAX	404	MIN	.06	CFSM	.94	IN	12.67
WTR YR 1978	TOTAL	4535.25	MFAN	12.4	MAX	323	MIN	.20	CFSM	1.14	IN	15.48

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
 SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	TEMPER-ATURE (DEG C)
OCT						APR					
06...	1700	1.2	5	.01	17.0	02...	1330	11	2	.06	10.0
13...	1700	1.8	8	.04	13.0	09...	0935	13	2	.07	10.0
13...	1930	1.7	3	.01	13.0	13...	0930	18	7	.35	10.0
23...	0935	.69	2	.00	14.0	16...	1600	9.5	2	.05	9.0
29...	0930	4.4	1	.01	10.0	25...	1930	58	24	3.8	9.0
NOV						30...	0845	20	2	.11	11.0
06...	1350	1.9	0	.00	15.0	MAY					
08...	1655	1.9	0	.00	17.0	07...	1145	23	2	.12	10.0
13...	1430	1.7	3	.01	6.0	14...	1215	82	10	2.2	10.0
20...	1215	5.3	4	.05	10.0	21...	1845	7.5	2	.04	20.0
27...	0930	4.5	5	.06	2.0	29...	2030	7.2	13	.25	22.0
DEC						JUN					
04...	1100	16	4	.18	5.0	05...	1920	2.1	2	.01	--
11...	1130	27	6	.44	.0	07...	1445	2.2	2	.01	20.0
19...	1230	11	4	.13	7.0	14...	2010	1.1	12	.03	20.0
26...	1300	5.9	3	.04	1.0	19...	1920	2.3	28	.17	24.0
28...	0930	4.1	6	.06	6.0	25...	1320	.62	10	.01	25.0
JAN						JUL					
01...	1300	3.2	5	.04	2.0	03...	1300	1.3	8	.03	23.0
08...	1145	11	4	.12	3.0	09...	1700	6.2	117	1.9	25.0
15...	1610	3.3	0	.00	.0	10...	1430	1.6	24	.11	24.0
22...	1210	2.7	0	.00	.0	16...	2005	1.4	12	.04	23.0
30...	1605	2.2	8	.04	.0	24...	1800	10	45	1.3	21.0
FEB						AUG					
05...	1730	2.7	5	.03	.0	06...	1025	5.0	6	.08	20.0
10...	0930	3.0	0	.00	.0	08...	1505	2.4	6	.03	24.0
12...	1600	2.7	2	.01	2.0	13...	1820	1.2	5	.02	24.0
18...	1820	2.6	5	.03	--	27...	1740	.95	2	.00	28.0
26...	0945	2.3	56	.35	1.0	SEP					
MAR						06...	1145	1.2	5	.02	20.0
08...	1900	5.0	7	.09	2.0	10...	1055	.39	3	.00	21.0
09...	0815	8.5	2	.04	--	14...	1315	.68	7	.01	24.0
12...	1515	56	19	2.9	3.0	17...	1115	.33	3	.00	21.0
19...	1700	69	19	3.5	--	28...	1730	.23	1	.00	23.0

03372400 MONROE LAKE NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'24", long 86°30'56", in SW1/4 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) National Geodetic Vertical Datum of 1929 (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, 281,980 acre-ft (348 hm³) Mar. 30, elevation, 546.11 ft (166.454 m); minimum, 181,710 acre-ft (224 hm³) July 23, elevation, 537.95 ft (163.967 m).

MONTH-END ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Oct. 31.....	538.75	190,420	-550
Nov. 30.....	539.35	197,100	+6,680
Dec. 31.....	540.92	215,240	+18,140
CAL YR 1977.....			+58,900
Jan. 31.....	538.30	185,490	-29,750
Feb. 28.....	538.09	183,220	-2,270
Mar. 31.....	545.97	280,030	+96,810
Apr. 30.....	539.32	196,770	-83,260
May 31.....	539.85	202,780	+6,010
June 30.....	538.16	183,980	-18,800
July 31.....	538.55	188,220	+4,240
Aug. 31.....	539.82	202,440	+14,220
Sept. 30.....	538.87	191,740	-10,700
WTR YR 1978.....			+770

WABASH RIVER BASIN

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.--None. Datum of gage was 480.00 ft (146.304 m) National Geodetic Vertical Datum of 1929 (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.--23 years, 472 ft³/s (13.36 m³/s), 14.82 in/yr (376 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, 2,440 ft³/s (69.1 m³/s) Apr. 5; minimum daily, 50 ft³/s (1.42 m³/s) July 4.

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 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	61	461	1880	486	92	1600	1970	1710	60	60	1290
2	61	61	978	1870	526	122	2070	1960	1700	60	61	1280
3	61	61	1070	1860	463	217	2240	1770	1690	60	99	1270
4	61	61	947	1930	408	259	2400	1410	1520	50	296	661
5	61	61	1010	1980	298	259	2440	1010	689	60	318	129
6	61	61	1070	1980	298	259	2430	1230	118	60	317	61
7	61	61	1070	1970	187	259	2420	1340	66	60	317	61
8	61	61	1070	1860	132	338	2410	1230	67	60	317	61
9	61	61	1070	1450	132	377	2400	1010	66	60	317	61
10	61	61	1070	1140	112	377	2400	1020	66	60	317	61
11	61	61	1070	597	92	378	2390	1020	62	60	316	61
12	61	61	1070	201	92	610	2180	1020	60	60	316	61
13	61	61	1070	201	92	967	2080	639	60	60	316	61
14	61	61	585	201	92	487	2070	225	60	60	316	61
15	61	61	206	201	92	140	2060	204	60	60	315	61
16	61	61	208	201	92	142	2050	205	60	60	315	61
17	61	61	208	201	92	143	2050	205	60	60	224	61
18	61	61	208	201	92	144	2040	206	60	60	133	61
19	61	61	208	201	92	144	2030	206	60	60	89	61
20	61	61	208	201	92	144	2020	206	60	60	66	61
21	61	61	208	201	92	145	2020	206	60	60	66	61
22	61	61	208	201	92	146	2010	926	60	60	66	61
23	61	61	208	201	92	146	2000	1420	60	60	62	61
24	61	61	208	200	92	146	2000	774	60	60	60	61
25	61	61	209	201	92	147	2000	775	60	60	60	61
26	61	61	209	201	92	147	2000	1220	60	60	60	61
27	61	61	793	201	92	148	2000	1740	60	60	60	61
28	61	61	1630	271	92	148	1990	1730	60	60	60	61
29	61	61	1840	367	---	148	1980	1730	60	60	60	61
30	61	147	1900	367	---	434	1980	1720	60	60	61	61
31	61	---	1890	366	---	1010	---	1710	---	60	1240	---
TOTAL	1891	1916	24160	23103	4698	8623	63760	32037	8894	1850	6680	6145
MEAN	61.0	63.9	779	745	168	278	2125	1033	296	59.7	215	205
MAX	61	147	1900	1980	526	1010	2440	1970	1710	60	1240	1280
MIN	61	61	206	200	92	92	1600	204	60	50	60	61
CAL YR 1977	TOTAL	118206	MEAN	324	MAX	2020	MIN	56				
WTR YR 1978	TOTAL	183757	MEAN	503	MAX	2440	MIN	50				

03373500 EAST FORK WHITE RIVER AT SHOALS, IN

LOCATION.--Lat 38°40'02", long 86°47'32", in SW¼NW¼ 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 Reaver 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: 1905-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.25 ft (134.798 m) National Geodetic Vertical Datum of 1929. 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.--64 years (1903-5, 1909-16, 1923 to current year), 5,349 ft³/s (151.5 m³/s), 14.74 in/yr (374 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 15	1400	22800 646	15.49 4.721	Mar. 21	0700	*48800 1380	*26.84 8.181
Dec. 21	0500	25700 728	17.37 5.294				

Minimum daily discharge, 1180 ft³/s (33.4 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2810	1530	6220	5950	2700	2400	11400	10100	5990	7270	5730	12100
2	5320	1430	8700	5790	2600	2500	10100	8680	5620	6830	5920	10900
3	3580	1350	9410	5590	2600	2600	9300	7650	5260	4830	7700	12300
4	3640	1300	10400	5350	2600	2600	8660	7050	4960	5190	8990	13600
5	4860	1250	13200	5230	2600	2600	8210	6740	4630	6740	7380	13700
6	5210	1220	16700	5180	2600	2600	7840	6500	3820	7450	7520	11600
7	4710	1220	15100	5150	2600	2600	7480	7050	3020	7180	7430	7700
8	4280	1450	13800	5480	2600	2800	7450	7410	2740	5660	7860	4960
9	4380	1560	15200	6280	2600	3500	7320	8210	2600	4430	7470	3760
10	3840	1610	15500	7180	2550	3700	7950	9120	2490	4220	7030	3230
11	3460	1500	14300	6100	2500	4400	8700	9430	2600	4650	6200	2890
12	3560	1420	13100	5300	2500	4850	8480	9850	2630	4280	5030	2630
13	3440	1360	12200	4900	2500	8500	7790	15800	2510	3760	4220	2440
14	3020	1300	17800	4500	2450	19000	7180	17300	2390	3900	3760	2340
15	2640	1260	22400	4200	2400	25400	6810	14700	2260	3600	3760	2330
16	2320	1300	20000	3900	2400	26400	6360	14300	2230	5570	3480	2330
17	2090	1600	17400	3700	2350	25400	5960	15900	2260	4760	3060	2230
18	1900	2390	20000	3600	2350	35500	6060	17000	2290	3420	2700	2110
19	1760	2990	23300	3400	2300	41100	6810	16600	3370	2760	2410	1950
20	1630	3380	25200	3300	2300	45400	7470	15100	3310	2410	3680	1840
21	1510	3750	25500	3200	2300	47200	7630	12800	2780	2190	7140	1790
22	1430	5290	23500	3100	2300	45500	7380	9650	3330	2030	9080	1710
23	1350	5990	19200	3000	2300	41100	7090	8060	3480	1940	9710	1610
24	1280	6390	14500	2950	2300	35300	7740	11000	3250	2280	7930	1500
25	1270	6370	11100	2900	2300	29400	8900	9560	2910	4050	5150	1430
26	1760	5940	8250	3000	2300	25100	10200	9030	2600	4630	3800	1350
27	1810	4930	6740	3100	2300	21200	10600	9910	2360	5990	3370	1300
28	1700	3830	6560	3100	2350	17800	10500	10600	2850	5850	3330	1250
29	1600	3170	6610	3000	---	16200	10700	9990	5100	4500	3130	1200
30	1640	3220	6380	2900	---	14700	10900	8270	6380	4130	4350	1180
31	1620	---	6160	2800	---	13000	---	6890	---	6010	11400	---
TOTAL	85420	81400	444430	133130	68550	574350	249370	330250	102020	142510	179720	131260
MEAN	2755	2713	14340	4295	2448	18530	8312	10650	3401	4597	5797	4375
MAX	5320	6390	25500	7180	2700	47200	11400	17300	6380	7450	11400	13700
MIN	1270	1220	6160	2800	2300	2400	5960	6500	2230	1940	2410	1180
CFSM	.56	.55	2.91	.87	.50	3.76	1.69	2.16	.69	.93	1.18	.89
IN.	.64	.61	3.36	1.01	.52	4.34	1.88	2.49	.77	1.08	1.36	.99
CAL YR 1977 TOTAL		1699093	MEAN	4655	MAX	25500	MIN	368	CFSM	.95	IN	12.83
WTR YR 1978 TOTAL		2522410	MEAN	6911	MAX	47200	MIN	1180	CFSM	1.40	IN	19.04

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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--13 years, 350 ft³/s (9.912 m³/s), 16.56 in/yr (421 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)	
Dec. 6	1100	2140	60.6	19.98	6.090	Mar. 14	1600	*6620	187	*24.36	7.425
Dec. 15	0400	2920	82.7	21.81	6.648	May 14	1700	2410	68.2	20.22	6.163

Minimum daily discharge, 39 ft³/s (1.10 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	98	1480	208	160	170	468	400	185	61	1840	900
2	450	94	1360	199	150	130	430	350	170	81	1500	600
3	302	89	893	181	135	130	392	311	161	66	1450	340
4	191	86	668	166	130	140	356	404	152	60	1230	230
5	141	82	1550	160	125	150	330	510	143	55	733	180
6	126	82	2120	159	120	160	310	414	136	51	485	140
7	116	94	1980	186	115	212	319	348	130	48	600	110
8	300	161	1490	400	110	292	298	867	125	46	1030	94
9	510	228	1480	290	110	437	275	1510	118	46	921	82
10	388	187	1280	240	105	556	311	1300	110	51	504	70
11	280	154	851	220	100	1000	477	852	104	105	377	62
12	220	132	618	200	100	1800	528	865	101	148	394	60
13	181	115	663	180	100	2260	405	1750	97	118	411	60
14	162	104	2300	170	100	5310	330	2330	93	267	329	130
15	144	99	2890	160	100	5910	291	2260	88	313	262	300
16	133	234	2580	150	100	4110	268	1800	79	486	222	200
17	122	912	1970	145	100	2730	270	1310	82	307	193	130
18	115	714	1490	140	100	2200	681	858	106	192	173	96
19	108	457	1080	130	100	1750	928	646	555	123	156	70
20	102	354	756	125	100	1430	1060	545	383	101	140	64
21	94	851	580	120	100	1200	854	483	215	88	128	60
22	91	1160	492	115	100	1160	609	426	169	89	120	56
23	87	767	410	126	100	987	585	381	133	93	115	52
24	83	518	360	431	100	839	919	407	112	242	110	50
25	90	409	320	480	100	905	971	445	100	371	100	48
26	182	344	290	390	100	1040	825	369	91	229	96	45
27	219	295	270	320	110	909	679	305	84	135	90	43
28	169	252	255	250	115	787	552	268	76	103	88	41
29	132	222	236	210	---	701	469	243	70	88	160	39
30	114	581	224	190	---	604	432	223	64	514	700	43
31	104	---	215	170	---	514	---	204	---	1750	1800	---
TOTAL	5651	9875	33151	6611	3085	40473	15622	23384	4232	6427	16457	4395
MEAN	182	329	1069	213	110	1305	521	754	141	207	531	147
MAX	510	1160	2890	480	160	5910	1060	2330	555	1750	1840	900
MIN	83	82	215	115	100	120	268	204	64	46	88	39
CFSM	.63	1.15	3.73	.74	.38	4.55	1.82	2.63	.49	.72	1.85	.51
IN.	.73	1.28	4.30	.86	.40	5.25	2.02	3.03	.55	.83	2.13	.57

CAL YR 1977 TOTAL 152671 MEAN 418 MAX 2890 MIN 15 CFSM 1.46 IN 19.79
WTR YR 1978 TOTAL 169363 MEAN 464 MAX 5910 MIN 39 CFSM 1.62 IN 21.95

03373700 LOST RIVER NEAR WEST BADEN SPRINGS, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STORM- FLOW. INSTAN- TANEOUS (CFS)	SEDI- MENT. SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE. SUS- PENDED (T/DAY)	TEMPER- ATURE (DEG C)
OCT					
11...	1700	263	47	33	15.0
NOV					
04...	1440	177	25	11	--
09...	0935	234	35	22	15.0
DEC					
22...	1530	440	81	105	4.0
FFF					
04...	1445	100	14	3.7	.0
MAR					
08...	1215	320	55	47	.0
APP					
11...	1500	550	121	180	9.0
MAY					
31...	1545	196	44	23	23.0
JUL					
12...	1515	126	121	41	20.0
AUG					
10...	1500	481	218	283	20.0
SEPT					
18...	1835	72	45	8.7	24.0

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) National Geodetic Vertical Datum of 1929.

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, 87,800 ft³/s (2,490 m³/s) Mar. 22, 1978, gage height, 24.61 ft (7.501 m); minimum daily, 870 ft³/s (24.6 m³/s) Jan. 11, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87,800 ft³/s (2,490 m³/s) Mar. 22, gage height, 24.61 ft (7.501 m); minimum daily, 2,950 ft³/s (83.5 m³/s) Nov. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3210	3780	8930	12900	5100	4860	40100	23400	15600	13700	11400	23700
2	6160	3590	11600	12400	5000	5120	34200	21200	14200	13600	11300	25200
3	8500	3420	14400	11900	5000	5350	27900	19700	13100	11500	12900	24700
4	9300	3260	15700	11400	5000	5410	23000	17500	12300	11200	14900	23100
5	10100	3140	19600	10900	5000	5450	20200	17500	11600	13000	15700	21800
6	10300	3030	24700	10500	4900	5360	18500	17400	11000	14100	13900	20500
7	10100	2960	27000	10500	4900	5470	17800	17800	10200	14400	12800	17700
8	9950	2950	27000	10900	4900	6660	17700	18500	9360	13300	13300	13800
9	9720	3180	26000	11400	4800	7370	18300	20000	9090	11000	12800	10400
10	9350	3500	24000	12400	4800	7400	20100	20400	8560	10100	12000	8510
11	8780	3570	22000	10800	4800	9030	22000	20500	8240	11200	11200	7510
12	8030	3450	21500	9800	4800	12800	23100	20500	8220	10600	10300	6970
13	7470	3320	20900	9000	4660	18500	22600	26900	8100	9760	9970	6600
14	6990	3220	29600	8600	4660	32400	20400	33600	7820	9490	8540	6350
15	6370	3110	37200	8000	4660	42200	17800	36100	7550	9340	7930	6190
16	5820	3320	40700	7400	4500	47500	16300	36800	7090	11100	7540	6080
17	5300	4490	42800	7100	4500	55400	15400	37100	6520	12900	7050	5970
18	4870	6040	43800	6970	4500	63500	15600	38400	6280	10800	6430	5780
19	4350	7220	45900	6780	4410	72200	16800	39100	6270	8380	6030	5570
20	3990	6970	49500	6780	4410	80400	18000	37700	7000	7000	5830	5520
21	3760	7520	53000	6620	4410	85600	19400	33200	7550	6260	6170	5460
22	3550	8560	53700	6480	4410	87400	19300	27000	7050	5800	8980	5290
23	3390	9620	51900	6260	4410	85300	17600	22000	6800	5450	11000	5180
24	3220	10100	47900	6150	4380	80900	17900	21800	6750	5730	11600	5030
25	3220	9940	40800	6270	4390	78700	19300	25300	6420	7590	10800	4760
26	4650	9500	30600	6510	4410	72500	20800	26100	6110	8410	8510	4550
27	5480	8890	21200	5910	4430	66400	22100	26400	5790	8930	6670	4380
28	5570	7900	15800	6390	4670	61700	22900	25800	6050	9400	6380	4240
29	5000	6680	14100	6000	---	56800	23300	23100	9650	9480	6200	4080
30	4380	6530	13900	5700	---	51900	23700	20700	13000	8970	8690	4000
31	3980	---	13300	5300	---	46200	---	17900	---	10200	46200	---
TOTAL	194860	162760	909030	264020	130810	1265780	632100	788400	263270	312690	314820	298920
MEAN	6286	5425	29320	8517	4672	40830	21070	25430	8776	10090	10160	9964
MAX	10300	10100	53700	12900	5100	87400	40100	39100	15600	14400	18000	25200
MIN	3210	2950	8930	5300	4380	4860	15400	17400	5790	5450	5830	4000
CFSM	.57	.49	2.64	.77	.42	3.67	1.89	2.29	.79	.91	.91	.90
IN.	.65	.54	3.04	.88	.44	4.23	2.11	2.64	.88	1.05	1.05	1.00

CAL YR 1977 TOTAL 3510130 MEAN 9617 MAX 53700 MIN 870 CFSM .87 IN 11.74
WTR YR 1978 TOTAL 5537460 MEAN 15170 MAX 87400 MIN 2950 CFSM 1.36 IN 18.52

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) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Apr. 1, 1941.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--51 years, 11,460 ft³/s (324.5 m³/s), 14.00 in/yr (356 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, 87,800 ft³/s (2,490 m³/s) Mar. 22, gage height, 24.34 ft (7.419 m); minimum daily, 3,020 ft³/s (85.5 m³/s) Nov. 8.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: June 1964 to September 1977.

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.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3300	3910	4930	12900	5100	4870	40100	23400	15600	13700	11400	23700
2	6160	3710	11600	12400	5000	5120	34200	21200	14200	13600	11300	25200
3	8500	3530	14400	11900	5000	5350	27900	18700	13100	11500	12900	24700
4	9300	3360	15700	11400	5000	5410	23000	17500	12300	11200	14900	23100
5	10100	3230	19600	10900	5000	5450	20200	17500	11600	13000	15700	21800
6	10300	3110	24700	10500	4900	5360	18500	17400	11000	14100	13900	20500
7	10100	3030	27000	10500	4900	5470	17800	17800	10200	14400	12800	17700
8	9950	3020	27000	10900	4900	6660	17700	18500	9360	13300	13300	13800
9	9720	3270	26000	11400	4800	7370	18300	20000	9090	11000	12800	10400
10	9350	3610	24000	12400	4800	7400	20100	20400	8560	10100	12000	8510
11	8780	3690	22000	10800	4800	9030	22000	20500	8240	11200	11200	7510
12	8030	3560	21500	9800	4800	12800	23100	20500	8220	10600	10300	6970
13	7470	3420	20900	9000	4700	18500	22600	26900	8100	9760	9970	6600
14	6990	3310	29600	8600	4700	32400	20400	31600	7820	9490	8540	6350
15	6370	3190	37200	8000	4700	42200	17800	36100	7550	9340	7930	6190
16	5820	3420	40700	7400	4600	47500	16300	36800	7090	11100	7540	6080
17	5300	4570	42800	7100	4600	55400	15400	37100	6520	12900	7050	5970
18	4870	6040	43800	6970	4600	63500	15600	38400	6280	10800	6430	5780
19	4450	7220	45900	6780	4500	72200	16800	39100	6270	8380	6030	5570
20	4140	6970	49500	6780	4500	80400	18000	37700	7000	7000	5830	5520
21	3890	7520	53000	6620	4500	85600	19400	33200	7550	6260	6170	5460
22	3670	8560	53700	6480	4500	87400	19300	27000	7020	5800	8980	5290
23	3490	9620	51900	6260	4500	85300	17600	22000	6800	5450	11000	5180
24	3310	10100	47900	6150	4480	80900	17900	21800	6750	5730	11600	5030
25	3310	9940	40800	6270	4490	78700	19400	25300	6420	7590	10800	4790
26	4690	9500	30600	6510	4500	72500	20800	26100	6110	8410	8510	4610
27	5480	8890	21200	5910	4510	66400	22100	26400	5790	8930	6670	4470
28	5570	7900	15800	6390	4710	61700	22900	25800	6050	9400	6380	4340
29	5000	6680	14100	6000	---	56800	23300	23100	9650	9480	6200	4230
30	4470	6530	13900	5700	---	51900	23700	20700	13000	8970	8690	4150
31	4130	---	13300	5300	---	46200	---	17900	---	10200	18000	---
TOTAL	196010	164410	909030	264020	132090	1265790	632200	788400	263240	312690	314820	299500
MEAN	6323	5480	29320	8517	4718	40830	21070	25430	8775	10090	10160	9983
MAX	10300	10100	53700	12900	5100	87400	40100	39100	15600	14400	18000	25200
MIN	3300	3070	8930	5300	4480	4870	15400	17400	5790	5450	5830	4150
CFSM	.57	.49	2.64	.77	.42	3.67	1.89	2.29	.79	.91	.91	.90
IN.	.66	.55	3.04	.88	.44	4.23	2.11	2.64	.88	1.05	1.05	1.00

CAL YR 1977 TOTAL 3519146 MEAN 9641 MAX 53700 MIN 787 CFSM .87 IN 11.77
WTR YR 1978 TOTAL 5542200 MEAN 15180 MAX 87400 MIN 3020 CFSM 1.36 IN 18.53

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 downstream 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, 30.0°C July 22-24; minimum, 0.5°C on many days during January and February.
SPECIFIC CONDUCTANCE: Maximum, 698 micromhos Nov. 18; minimum, 219 micromhos Mar. 17.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	NITRO- GEN. TOTAL (MG/L AS N)	NITRO- GEN. ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. AMMONIA TOTAL (MG/L AS N)	NITRO- GEN. AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN. NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN. AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN. NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN. AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
	TEMPER- ATURE (DEG C)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	OXYGEN, DIS- SOLVED (MG/L)	PH (UNITS)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	ALKA- LINITY (MG/L AS CACO3)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)
OCT 05...	3.4	--	--	--	--	1.7	1.7	--	.27	--	--	--
NOV 05...	--	--	.10	--	--	--	1.5	--	.25	--	10	11
DEC 16...	--	--	.28	--	--	--	2.0	--	.22	--	--	--
JAN 05...	--	--	.31	--	--	--	1.6	--	.12	--	--	--
FEB 09...	3.2	.32	.68	--	--	1.0	2.2	--	.18	.11	17	--
MAR 11...	2.8	.70	.50	--	--	1.2	1.6	.00	.23	.10	--	--
APR 14...	3.4	.61	.08	--	--	.69	2.7	--	.10	.08	--	--
MAY 06...	3.8	.93	.05	--	--	.98	2.8	--	.13	.02	11	--
JUN 14...	2.9	1.1	.08	--	--	1.2	1.7	--	.18	.00	--	--
JUL 26...	2.9	1.3	.17	--	--	1.5	1.4	--	.42	.05	--	--
AUG 11...	2.4	1.1	.01	--	--	1.1	1.3	--	.24	.07	5.1	--
SEP 26...	3.2	.58	.15	.41	.59	.73	2.5	--	.15	.04	--	--

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA: WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL TRI-THION, TOTAL (UG/L)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)	PHYTO-PLANKTON, TOTAL (CELLS PER ML)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM	NITROGEN, TOTAL (MG/L AS NO3)
OCT 05...	--	--	--	--	--	--	240	214	6390	.33	93	15
NOV 05...	ND	ND	ND	ND	ND	45000	380	360	2910	.52	--	--
DEC 16...	--	--	--	--	--	--	178	169	16200	.24	--	--
JAN 05...	--	--	--	--	--	--	284	255	8200	.39	--	--
FEB 09...	--	ND	--	ND	--	--	331	302	5020	.45	--	14
MAR 11...	--	--	--	--	--	1300	279	265	6950	.38	--	12
APR 14...	--	--	--	--	--	--	294	248	15100	.40	--	15
MAY 06...	--	ND	ND	ND	ND	12000	268	227	12300	.36	--	17
JUN 14...	--	--	--	--	--	29000	367	335	7250	.50	--	13
JUL 26...	--	--	--	--	--	42000	301	275	6730	.41	--	13
AUG 11...	--	--	--	--	--	31000	230	189	6830	.31	--	11
AUG 11...	--	ND	--	ND	--	--	--	--	--	--	--	--
SEP 26...	--	--	--	--	--	--	232	179	2360	.32	--	14

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY SUS-PENDED RECOVERABLE (UG/L AS HG)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	POTASSIUM 40 TOTAL (PCI/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 05...	--	--	--	--	513	13700
NOV 05...	<.5	.0	<.5	--	60	460
DEC 16...	--	--	--	--	174	15900
JAN 05...	--	--	--	--	48	1390
FEB 09...	<.5	.0	<.5	--	94	1430
MAR 11...	--	--	--	--	14	349
APR 14...	--	--	--	--	87	4460
MAY 06...	<.5	.0	<.5	--	116	5320
JUN 14...	--	--	--	1.9	122	2410
JUL 26...	--	--	--	2.8	398	8900
AUG 11...	<.5	.0	<.5	2.3	242	7190
AUG 11...	--	--	--	--	--	--
SEP 26...	--	--	--	2.2	90	916

WABASH RIVER BASIN

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	---	---	3.0	2.5	1.0	.5	6.0	4.5
2			---	---	---	---	3.0	2.0	1.5	1.0	5.0	4.5
3			---	---	---	---	2.5	2.0	1.5	1.0	3.5	3.0
4			---	---	---	---	2.5	2.0	1.5	1.0	3.5	2.5
5			19.5	14.5	---	---	2.5	2.0	2.0	1.5	3.5	2.0
6			19.5	18.5	---	---	3.0	2.5	1.5	.5	4.5	2.5
7			19.0	14.0	---	---	3.5	3.0	1.5	.5	4.5	4.0
8			19.0	18.5	---	---	4.5	3.0	1.5	.5	4.0	3.0
9			19.0	14.0	---	---	3.0	1.5	2.0	1.0	3.0	2.5
10			18.0	14.0	---	---	1.5	.5	1.5	1.0	4.0	2.5
11			14.0	12.0	---	---	.5	.5	2.0	1.0	3.5	3.5
12			11.5	10.5	---	---	.5	.5	3.0	1.5	3.5	3.5
13			10.5	9.0	---	---	1.0	.5	3.0	2.5	3.5	3.0
14			10.5	8.5	---	---	1.5	1.0	3.5	2.5	3.5	3.0
15			11.0	10.0	---	---	1.5	1.0	3.0	2.5	3.5	3.0
16			13.0	11.5	4.5	3.5	1.5	.5	2.5	2.0	3.5	3.0
17			13.0	12.0	5.0	4.5	1.0	.5	2.5	1.5	3.0	2.5
18			11.5	10.5	5.5	5.0	1.5	.5	2.5	2.0	3.0	2.5
19			10.5	8.5	5.0	4.5	1.5	1.5	3.0	1.5	4.5	3.0
20			9.0	7.5	5.5	4.5	2.0	1.5	2.5	2.0	5.5	4.0
21			8.5	6.5	4.5	3.0	2.0	1.5	3.0	2.0	6.5	5.5
22			---	---	3.5	2.5	2.0	1.5	3.0	2.0	7.5	6.0
23			---	---	3.5	2.5	2.0	1.0	3.0	3.0	8.0	7.5
24			---	---	3.5	3.5	2.5	2.0	4.5	3.0	8.0	7.0
25			---	---	3.5	2.5	3.0	2.0	5.0	4.0	7.0	6.5
26			---	---	2.0	1.5	1.5	.5	5.0	4.0	7.0	6.5
27			---	---	2.0	1.5	.5	.5	4.5	3.5	6.5	6.0
28			---	---	2.0	2.0	.5	.5	5.0	4.0	7.5	6.0
29			---	---	2.0	1.5	.5	.5	---	---	8.5	7.5
30			---	---	2.0	2.0	1.0	.5	---	---	9.0	8.0
31			---	---	2.5	2.0	1.5	.5	---	---	11.0	9.0
MONTH							4.5	.5	5.0	.5	11.0	2.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.5	11.0	14.5	13.5	---	---	---	---	---	---	23.0	22.5
2	12.5	12.0	15.0	14.0	---	---	---	---	---	---	22.5	22.0
3	13.5	12.0	14.5	14.5	---	---	---	---	---	---	22.5	21.5
4	13.5	13.0	14.5	14.0	---	---	---	---	---	---	23.0	22.5
5	13.5	13.0	14.0	13.5	---	---	---	---	---	---	23.0	22.5
6	13.5	13.0	13.5	13.0	---	---	---	---	---	---	23.5	22.5
7	13.5	13.0	13.0	13.0	---	---	---	---	---	---	24.0	23.0
8	14.0	13.0	14.0	13.0	---	---	---	---	---	---	24.5	23.5
9	14.0	13.5	14.5	13.5	---	---	---	---	---	---	25.5	24.5
10	14.5	13.5	15.5	14.5	---	---	---	---	---	---	26.0	25.0
11	15.0	14.5	15.5	15.0	---	---	---	---	25.5	25.0	26.5	25.5
12	15.0	14.5	16.0	15.5	---	---	---	---	25.5	25.0	26.5	25.5
13	15.5	14.5	16.0	16.0	---	---	---	---	26.0	25.5	26.5	25.5
14	15.0	14.5	16.0	14.5	---	---	27.0	27.0	27.0	25.5	26.5	26.0
15	15.0	14.5	14.5	14.0	---	---	27.0	26.5	27.5	26.5	26.5	25.0
16	14.5	13.5	14.0	13.5	---	---	26.5	26.0	28.0	26.5	26.0	25.5
17	13.5	13.0	15.0	13.5	---	---	26.0	25.5	27.5	27.0	26.5	25.0
18	14.0	13.0	15.5	14.0	---	---	26.5	25.5	28.0	26.5	27.5	26.0
19	14.0	13.5	16.5	15.0	---	---	27.5	26.5	28.0	27.0	28.0	26.5
20	13.5	12.5	14.0	16.5	---	---	28.5	27.0	27.5	26.5	28.5	27.0
21	12.5	12.0	19.0	17.5	---	---	29.5	28.0	27.5	25.5	28.0	26.5
22	12.0	11.0	---	---	---	---	30.0	28.5	26.5	25.5	26.5	25.0
23	12.0	11.5	---	---	---	---	30.0	29.0	26.0	25.5	25.0	23.5
24	12.5	12.0	---	---	---	---	30.0	28.0	26.0	24.5	24.0	22.5
25	12.0	12.0	---	---	---	---	28.5	27.5	26.0	25.5	23.5	22.5
26	12.5	11.5	---	---	---	---	28.5	27.0	26.5	25.5	23.5	21.5
27	13.0	12.0	---	---	---	---	---	---	27.0	26.0	23.5	21.5
28	13.5	12.5	---	---	---	---	---	---	27.5	26.0	23.0	21.5
29	13.5	13.5	---	---	---	---	---	---	27.0	26.0	22.5	21.0
30	14.5	13.5	---	---	---	---	---	---	26.0	24.0	22.5	21.5
31	---	---	---	---	---	---	---	---	24.0	23.0	---	---
MONTH	15.5	11.0									28.5	21.0

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	---	---	540	521	553	519	639	634
2			---	---	---	---	528	520	518	497	639	628
3			---	---	---	---	526	521	515	493	628	619
4			---	---	---	---	524	522	503	491	620	608
5			655	644	---	---	529	521	517	503	613	597
6			657	654	---	---	529	526	534	519	610	595
7			659	654	---	---	525	519	551	528	594	593
8			662	658	---	---	521	514	571	553	593	548
9			666	659	---	---	513	503	590	571	546	497
10			670	659	---	---	511	499	601	587	499	499
11			668	647	---	---	499	481	608	595	499	477
12			553	637	---	---	517	499	614	602	474	410
13			652	642	---	---	514	486	616	608	407	292
14			652	640	---	---	492	485	625	611	330	267
15			642	629	---	---	507	492	628	624	263	240
16			633	616	---	288	520	509	635	628	253	228
17			623	608	295	287	542	514	642	632	227	219
18			698	591	319	295	575	545	645	637	230	221
19			594	431	327	317	578	573	645	638	235	225
20			492	427	352	328	593	578	642	636	245	236
21			509	497	365	349	603	589	650	640	253	245
22			---	---	381	363	610	598	656	651	256	251
23			---	---	405	382	621	607	659	653	270	257
24			---	---	427	406	622	615	657	651	283	269
25			---	---	452	425	628	614	658	651	300	282
26			---	---	478	453	622	617	652	642	315	300
27			---	---	502	474	623	592	656	648	329	316
28			---	---	526	503	614	545	651	637	333	327
29			---	---	552	527	548	483	---	---	352	333
30			---	---	558	551	553	528	---	---	375	352
31			---	---	559	541	558	543	---	---	397	375
MONTH							628	481	659	491	639	219

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	425	398	450	440			---	---	---	---	375	328
2	450	426	463	450			---	---	---	---	375	314
3	466	451	474	464			---	---	---	---	364	333
4	472	464	477	466			---	---	---	---	357	345
5	475	470	469	461			---	---	---	---	370	351
6	471	465	468	460			---	---	---	---	392	371
7	469	458	465	448			---	---	---	---	417	393
8	463	456	456	446			---	---	---	---	428	417
9	465	451	465	444			---	---	---	---	449	430
10	462	429	449	416			---	---	---	---	467	450
11	445	424	425	414			---	---	365	353	498	469
12	445	429	438	426			---	---	398	362	537	497
13	449	438	435	343			---	---	430	397	569	539
14	454	442	344	317			526	473	451	405	582	569
15	461	451	335	305			540	466	458	445	594	585
16	474	461	319	305			546	472	464	437	598	587
17	479	469	349	321			498	422	502	461	607	585
18	473	460	367	349			458	440	536	505	589	584
19	463	439	398	368			485	462	543	532	584	561
20	450	437	425	399			504	488	555	499	572	557
21	437	416	449	427			509	491	545	509	590	562
22	415	393	---	---			517	500	573	544	598	576
23	423	401	---	---			514	498	560	350	643	600
24	443	424	---	---			505	485	346	328	642	598
25	440	430	---	---			525	470	368	335	600	588
26	430	418	---	---			517	440	407	370	597	577
27	424	407	---	---			---	---	422	408	587	563
28	409	391	---	---			---	---	450	423	577	561
29	418	398	---	---			---	---	466	439	571	550
30	441	419	---	---			---	---	533	470	584	557
31	---	---	---	---			---	---	552	337	---	---
MONTH	479	391									643	314

WABASH RIVER BASIN

03374455 PATOKA RIVER NEAR HARDINSBURG, IN

LOCATION.--Lat 38°26'41", long 86°23'14", in NW¼SE¼ 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 24.9 ft³/s (0.705 m³/s), 26.42 in/yr (671 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 800 ft³/s (22.7 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)
Nov. 21	0430	*1790 50.7	*7.89 2.405	Mar. 14	0230	1720 48.7	7.75 2.362
Dec. 5	0515	1280 36.2	6.76 2.060	May 13	0215	1270 36.0	6.73 2.051
Dec. 14	0030	1070 30.3	6.24 1.902	July 31	0130	1050 29.7	6.19 1.887

Minimum daily discharge, 1.00 ft³/s (0.30 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	4.9	229	7.2	11	12	15	23	4.1	23	25	16
2	20	4.6	72	6.7	10	13	13	18	3.8	7.7	13	7.2
3	11	4.3	45	6.2	9.4	11	12	15	3.5	3.7	15	4.7
4	7.8	4.1	40	5.7	8.8	10	11	35	3.3	2.7	9.9	3.6
5	6.2	3.9	491	5.4	8.2	9.6	10	33	3.1	2.2	7.7	3.0
6	5.6	3.8	110	5.7	7.8	9.2	11	23	2.9	2.0	5.7	2.6
7	5.1	6.4	54	6.8	7.2	11	11	20	3.2	1.8	14	2.3
8	80	13	52	46	6.8	19	9.7	106	2.9	1.7	7.2	2.1
9	36	11	114	34	6.5	33	9.4	66	2.6	1.6	4.8	1.9
10	20	9.4	49	20	6.2	78	9.7	38	2.3	1.9	3.9	1.8
11	14	7.4	34	13	6.0	162	30	28	2.3	1.8	3.3	1.7
12	9.9	6.0	28	11	5.9	341	27	94	3.4	1.5	6.2	1.6
13	7.8	5.2	139	10	5.8	362	18	477	2.6	15	6.1	1.6
14	6.7	5.0	559	9.0	5.6	805	13	172	2.2	4.9	3.9	2.1
15	6.0	4.8	118	8.2	5.5	174	12	83	2.0	18	3.1	2.0
16	5.4	148	62	7.8	5.4	99	11	53	2.0	10	2.8	1.7
17	4.8	194	44	7.6	5.3	65	14	38	1.9	4.7	2.4	1.6
18	4.4	52	40	7.0	5.2	45	99	29	105	3.3	2.2	1.4
19	4.0	30	32	6.8	5.2	38	84	22	79	2.6	2.0	1.4
20	3.7	28	26	6.4	5.2	32	124	18	14	2.3	1.8	1.3
21	3.5	610	21	6.2	5.2	41	59	15	10	1.9	1.7	1.2
22	3.3	101	17	5.8	5.3	40	38	11	6.8	1.8	1.6	1.1
23	3.1	52	14	5.6	5.5	32	47	9.8	4.7	1.6	1.6	1.1
24	2.9	34	12	8.0	5.8	25	103	21	3.9	13	1.5	1.1
25	4.1	26	10	45	6.5	55	79	14	3.4	8.3	1.7	1.1
26	15	20	9.0	37	8.0	45	57	9.8	3.1	4.2	1.6	1.1
27	11	17	8.0	31	9.4	36	39	8.0	2.7	2.9	1.4	1.1
28	8.3	14	7.2	23	11	29	30	6.8	2.4	2.3	1.9	1.1
29	6.8	14	6.6	18	---	24	25	5.9	2.2	2.0	2.3	1.0
30	5.9	180	6.0	15	---	20	27	5.3	2.0	195	9.2	1.8
31	5.4	---	6.4	13	---	17	---	4.7	---	243	70	---
TOTAL	359.7	1613.8	2455.2	438.1	193.7	2692.8	1047.8	1502.3	287.3	588.4	234.5	73.3
MEAN	11.6	53.8	79.2	14.1	6.92	86.9	34.9	48.5	9.58	19.0	7.56	2.44
MAX	80	610	559	46	11	805	124	477	105	243	70	16
MIN	2.9	3.8	6.0	5.4	5.2	9.2	9.4	4.7	1.9	1.5	1.4	1.0
CFSM	.91	4.20	6.19	1.10	.54	6.79	2.73	3.79	.75	1.48	.59	.19
IN.	1.05	4.69	7.13	1.27	.56	7.83	3.04	4.37	.83	1.71	.68	.21
CAL YR 1977	TOTAL	11453.04	MEAN	31.4	MAX	610	MIN	.48	CFSM	2.45	IN	33.28
WTR YR 1978	TOTAL	11486.90	MEAN	31.5	MAX	805	MIN	1.0	CFSM	2.46	IN	33.38

03374498 PATOKA LAKE NEAR CUZCO, IN

LOCATION.--Lat 38°25'58", long 86°42'30", in SW¼NE¼ sec.14, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, in discharge tower of reservoir on Patoka River, 2.9 miles south of Cuzco and 5.0 miles upstream from Dillon Creek.

DRAINAGE AREA.--168 mi² (435 km²).

PERIOD OF RECORD.--February 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth and rock fill dam. Releases normally controlled by two gates, 8.0 ft (2.44 m) wide and 12.0 ft (3.66 m) high, in an oblong concrete conduit through dam. Minimum pool capacity is 12,211 acre-ft (15.1 hm³), elevation 506 ft (154.2 m). Seasonal pool capacity is 178,730 acre-ft (220.4 hm³), elevation 536 (163.4 m). Capacity at uncontrolled spillway elevation, 548 ft (167.0 m) is 298,380 acre-ft (367.9 hm³). Reservoir is used for flood control, water supply, water quality, and recreation. Reservoir put in operation on Feb. 13, 1978.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 35,890 acre-ft (44.3 hm³) May 16, 1978, elevation, 514.26 ft (156.746 m); minimum, reservoir began filling Feb. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 35,890 acre-ft (44.3 hm³) May 16, elevation, 514.26 ft (156.746 m); minimum, reservoir began filling Feb. 13.

MONTHEND ELEVATION AND CONTENTS, AT 0700, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Feb. 28.....	497.40	2,250	
Mar. 31.....	510.10	21,990	+19,740
Apr. 30.....	511.46	25,980	+3,990
May 31.....	511.73	26,840	+860
June 30.....	511.97	27,610	+770
July 31.....	512.67	29,980	+2,370
Aug. 31.....	513.87	34,410	+4,430
Sept. 30.....	513.67	33,640	-770

WABASH RIVER BASIN

03374500 PATOKA RIVER NEAR ELLSWORTH, 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 Ellsworth, 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) National Geodetic Vertical Datum of 1929 (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. Flow regulated by Patoka Lake (See sta 03374498).

AVERAGE DISCHARGE.--17 years, 221 ft³/s (6.259 m³/s), 17.55 in/yr (446 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.--Maximum discharge, 1,360 ft³/s (38.5 m³/s) Dec. 15, gage height, 11.01 ft (3.356 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 26-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	54	764	97	80	30	194	196	39	24	77	25
2	466	49	843	97	70	30	164	118	23	22	224	95
3	583	45	818	82	62	30	162	72	17	20	106	95
4	546	42	728	71	53	30	134	227	17	20	46	97
5	412	40	991	68	47	32	80	292	11	20	45	100
6	308	39	1160	74	44	34	83	240	8.3	14	50	83
7	233	42	1180	91	40	37	81	195	24	10	56	104
8	283	74	1120	143	37	42	80	324	19	6.3	46	91
9	378	95	1140	192	35	50	81	206	19	6.3	45	48
10	404	102	1070	308	32	75	82	197	19	7.5	45	31
11	349	89	933	192	29	127	170	207	19	6.5	44	16
12	288	74	789	123	30	197	330	309	20	5.8	216	10
13	231	61	735	105	32	192	355	497	19	29	102	3.3
14	164	53	989	97	34	841	281	486	17	8.4	78	31
15	101	49	1000	93	36	231	291	430	13	35	62	26
16	76	153	1330	88	38	223	134	696	18	50	48	71
17	64	564	1290	84	39	526	105	949	18	49	36	93
18	56	719	1170	79	40	774	366	1050	100	48	35	62
19	49	688	1010	76	41	911	349	1040	47	48	35	39
20	43	588	828	74	39	899	470	1030	37	48	24	38
21	38	806	679	71	38	684	603	1020	58	48	12	38
22	35	1120	548	67	35	437	645	561	56	48	12	10
23	32	1200	435	65	34	762	618	133	55	36	12	11
24	30	1190	316	62	32	866	588	150	55	28	7.2	11
25	33	1060	239	150	31	585	559	180	55	41	1.5	.40
26	55	879	199	300	30	772	550	135	53	44	1.3	.30
27	80	716	162	230	30	872	390	87	53	44	1.7	.30
28	93	578	114	180	30	863	304	77	53	44	2.4	.30
29	80	460	95	150	---	854	273	69	82	44	2.4	.30
30	69	527	91	120	---	843	248	57	88	66	10	.30
31	59	---	91	100	---	546	---	45	---	58	6.7	---
TOTAL	5892	12156	22857	3729	1118	13395	8770	11275	1112.3	978.8	1489.2	1230.20
MEAN	190	405	737	120	39.9	432	292	364	37.1	31.6	48.0	41.0
MAX	583	1200	1330	308	80	911	645	1050	100	66	224	104
MIN	30	39	91	62	29	30	80	45	8.3	5.8	1.3	.30
CAL YR 1977 TOTAL		83608.80		MEAN 229	MAX 1330	MIN .30						
WTR YR 1978 TOTAL		84002.50		MEAN 230	MAX 1330	MIN .30						

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-stage recorder. Datum of gage is 446.00 ft (135.941 m) National Geodetic Vertical Datum of 1929 (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 fair except those for winter periods, which are poor. Flow regulated by Beaver Creek Reservoir beginning Oct. 11, 1955, and by Patoka Lake beginning Feb. 13, 1978 (See sta 03374498).

AVERAGE DISCHARGE.--30 years (1948 to current year), 360 ft³/s (10.20 m³/s), 18.66 in/yr (474 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, 1,890 ft³/s (53.5 m³/s) Dec. 16, gage height, 14.90 ft (4.542 m); minimum daily, 6.8 ft³/s (0.192 m³/s) Sept. 29.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	109	1140	127	130	40	702	391	74	111	266	246
2	597	104	1220	133	105	40	360	314	69	157	144	104
3	608	98	1220	120	90	41	292	222	56	82	759	114
4	669	92	1170	105	80	42	277	221	37	34	387	104
5	607	83	1290	94	70	44	241	434	31	27	124	102
6	482	79	1390	86	62	46	187	432	30	24	82	82
7	363	80	1470	105	56	50	214	373	22	22	1020	62
8	534	86	1500	244	52	54	191	647	24	18	553	52
9	583	104	1550	322	48	100	188	964	29	15	182	47
10	539	138	1550	330	45	200	253	662	27	12	101	42
11	503	145	1550	235	42	350	500	436	25	38	76	40
12	419	129	1500	190	39	600	587	523	26	33	337	38
13	334	111	1350	160	41	800	554	1080	27	92	724	35
14	271	99	1590	140	44	1000	482	1220	29	253	237	37
15	205	89	1740	135	47	1100	423	1240	27	68	107	150
16	139	217	1870	120	49	1000	402	1060	24	72	83	600
17	103	834	1750	115	51	900	281	969	22	77	69	200
18	90	897	1640	110	52	800	536	1040	86	60	61	100
19	79	903	1560	105	53	973	928	1100	641	53	56	64
20	71	822	1500	100	53	1040	849	1140	283	50	53	50
21	64	986	1410	96	52	1090	818	1160	111	49	47	47
22	56	1160	1210	93	48	1010	816	1160	92	47	33	43
23	51	1230	911	90	46	788	838	851	78	47	28	30
24	46	1270	604	86	44	909	948	328	70	58	26	26
25	46	1300	433	150	42	1000	986	265	66	84	25	25
26	73	1310	336	360	41	973	932	262	62	60	20	20
27	107	1270	278	330	41	1000	816	196	59	50	75	13
28	113	1100	200	280	40	1060	570	133	57	46	219	8.9
29	128	774	150	240	---	1070	461	108	54	45	67	6.8
30	122	829	130	190	---	1050	427	96	75	106	302	8.1
31	113	---	122	150	---	1030	---	84	---	510	660	---
TOTAL	8542	16448	35334	5141	1563	20200	16059	19111	2313	2400	6923	2496.8
MEAN	276	548	1140	166	55.8	652	535	616	77.1	77.4	223	83.2
MAX	669	1310	1870	360	130	1100	986	1240	641	510	1020	600
MIN	46	79	122	86	39	40	187	84	22	12	20	6.8
CFSM	1.05	2.09	4.35	.63	.21	2.49	2.04	2.35	.29	.30	.85	.32
IN.	1.21	2.34	5.02	.73	.22	2.87	2.28	2.71	.33	.34	.98	.35
CAL YR 1977	TOTAL	173895.0	MEAN 476	MAX 1870	MIN 12	CFSM 1.82	IN 24.69					
WTR YR 1978	TOTAL	136530.8	MEAN 374	MAX 1870	MIN 6.8	CFSM 1.43	IN 19.39					

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--8 years, 29.0 ft³/s (0.821 m³/s), 18.09 in/yr (459 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; no flow for many days in 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Nov. 21	1100	1950	55.2	11.35	3.459	Mar. 14	0500	2360	66.8	11.55	3.520
Dec. 5	0900	1220	34.6	10.88	3.316	Aug. 7	0600	*2570	72.8	*11.64	3.548

Minimum daily discharge, 0.10 ft³/s (0.003 m³/s) July 12.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	534	6.2	150	8.0	7.3	12	15	17	2.2	.27	16	10
2	79	5.0	51	6.2	7.0	11	13	14	2.0	1.5	19	5.9
3	31	4.5	34	5.6	6.6	10	11	11	1.8	.58	69	4.3
4	18	4.9	27	5.2	6.2	9.0	12	32	1.4	.35	9.7	3.3
5	14	5.3	534	6.5	6.0	8.4	11	21	1.2	.27	5.9	2.4
6	14	5.9	88	7.5	5.8	7.8	13	15	1.2	.22	54	1.9
7	11	9.5	40	9.2	5.6	81	12	15	1.5	.19	940	1.5
8	141	12	101	24	5.5	104	10	68	1.5	.16	43	1.3
9	42	8.4	166	16	5.4	67	10	34	1.2	.14	17	1.2
10	24	7.2	41	9.5	5.4	136	13	20	.87	.12	10	1.0
11	17	5.2	28	8.0	5.8	336	94	16	.75	.11	7.1	.94
12	13	4.0	24	7.5	6.6	449	37	71	.87	.10	88	.87
13	10	3.3	167	7.0	16	360	23	356	1.7	.23	19	.81
14	9.0	3.3	492	6.6	19	961	17	146	.81	2.2	9.8	242
15	8.0	3.2	102	6.2	17	102	14	64	.58	6.1	6.9	32
16	7.5	99	59	6.2	14	56	14	43	.53	1.8	5.1	12
17	6.5	134	38	6.2	11	37	15	32	.48	1.2	3.8	7.3
18	5.9	32	35	6.0	9.0	30	177	24	.29	.80	3.0	4.8
19	4.8	20	26	5.8	8.4	26	76	19	.28	.52	2.5	3.4
20	3.9	18	21	5.6	7.0	22	70	15	5.4	.40	2.0	2.4
21	3.5	778	17	5.4	6.6	53	40	12	9.0	.31	1.7	2.0
22	3.2	79	14	5.4	6.4	38	29	9.8	3.8	.25	1.5	1.7
23	2.8	39	12	7.0	6.2	28	41	9.0	2.5	.20	1.4	1.5
24	2.6	27	11	12	7.0	22	108	18	2.2	4.3	1.3	1.5
25	5.2	21	9.0	18	7.6	53	84	11	1.5	.46	1.2	1.4
26	14	16	8.0	16	8.6	39	60	7.7	1.0	2.8	1.1	1.2
27	8.3	15	7.0	13	10	32	35	6.0	.69	1.1	1.0	1.0
28	7.1	13	6.4	11	11	26	25	4.8	.44	.63	3.5	.90
29	6.5	17	6.0	9.5	---	21	21	3.9	.31	.44	7.7	.78
30	6.0	194	6.2	8.6	---	17	21	3.2	.35	138	42	40
31	5.6	---	7.0	7.8	---	16	---	2.6	---	307	40	---
TOTAL	1058.4	1589.9	2327.6	276.5	238.0	3170.2	1121	1121.0	104.78	541.06	1433.2	391.30
MEAN	34.1	53.0	75.1	8.92	8.50	102	37.4	36.2	3.49	17.5	46.2	13.0
MAX	534	778	534	24	19	961	177	356	29	307	940	242
MIN	2.6	3.2	6.0	5.2	5.4	7.8	10	2.6	.31	.10	1.0	.78
CFSM	1.56	2.43	3.45	.41	.39	4.68	1.72	1.66	.16	.80	2.12	.60
IN.	1.81	2.71	3.97	.47	.41	5.41	1.91	1.91	.18	.92	2.45	.67
CAL YR 1977	TOTAL	13979.97	MEAN	38.3	MAX	958	MIN	.00	CFSM	1.76	IN	23.85
WTR YR 1978	TOTAL	13372.94	MEAN	36.6	MAX	961	MIN	.10	CFSM	1.68	IN	22.82

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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--14 years, 21.2 ft³/s (0.600 m³/s), 13.52 in/yr (343 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s (47.6 m³/s) May 12, 1978, gage height, 12.34 ft (3.761 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).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 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)	
Dec. 14	0600	1170	33.1	11.59	3.533	May 12	2300	*1680	47.6	*12.34	3.761
Mar. 14	0400	1590	45.0	12.21	3.722						

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) Sept. 30.

DISCHARGE IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	4.2	120	7.2	7.0	11	13	9.3	3.6	.15	3.5	2.8
2	42	3.9	50	6.8	6.7	11	11	6.1	3.1	.84	68	2.5
3	12	3.4	35	5.1	6.4	10	11	5.5	2.9	.58	187	2.6
4	5.0	3.7	27	5.1	6.0	9.0	9.9	67	2.3	.41	21	2.1
5	2.8	3.6	520	6.0	5.8	8.2	8.7	27	2.4	.30	9.7	2.2
6	4.9	4.6	86	9.0	5.6	9.4	11	15	2.4	.22	6.4	1.5
7	4.3	9.5	40	14	5.4	80	10	16	2.4	.16	6.3	1.0
8	97	18	90	22	5.3	100	8.7	79	2.1	.11	4.3	.51
9	20	13	170	13	5.3	60	9.7	60	1.8	.08	2.8	.42
10	7.7	11	40	9.0	5.4	150	10	18	1.4	8.5	2.0	.38
11	5.3	7.6	20	8.0	5.6	300	42	11	1.4	4.6	1.6	.18
12	3.9	5.4	14	7.0	6.4	450	13	303	2.0	2.1	1.5	.87
13	2.6	4.7	187	6.5	14	183	7.7	647	2.2	2.7	1.9	.51
14	2.2	4.6	792	6.2	19	943	5.8	104	1.5	2.1	2.5	.79
15	2.3	5.4	76	6.0	17	86	5.3	56	1.1	6.0	1.9	.1
16	4.6	80	42	6.0	12	52	7.2	41	.96	4.3	1.5	.51
17	5.0	51	35	6.0	9.4	38	9.7	25	.84	2.7	1.3	.76
18	5.0	22	27	5.8	8.0	31	107	20	1.2	1.6	1.0	1.1
19	4.3	15	21	5.6	7.0	30	39	15	4.6	.90	.84	1.2
20	3.5	15	18	5.4	6.7	25	31	12	2.6	.61	.96	.10
21	3.0	129	14	5.3	6.4	81	15	10	2.0	.38	1.5	1.1
22	3.4	33	12	5.4	6.2	37	11	9.9	1.7	.28	1.5	1.1
23	3.6	20	10	7.2	6.0	26	45	9.3	1.2	.20	1.0	1.2
24	4.2	17	9.0	13	6.8	57	68	10	1.0	7.3	.67	.74
25	14	15	8.0	18	7.6	184	41	8.3	.80	2.3	.61	.35
26	31	14	7.0	15	8.8	44	35	6.6	.64	.90	.46	.12
27	8.9	13	6.2	13	10	34	14	5.6	.47	.67	.56	.44
28	7.0	13	5.6	11	11	25	10	4.8	.35	.46	.38	.21
29	5.4	20	5.6	9.2	---	18	9.9	5.2	.27	.34	.56	.29
30	4.2	140	6.2	8.3	---	15	14	5.8	.20	44	11	.05
31	3.4	---	7.2	7.4	---	14	---	4.6	---	24	6.6	---
TOTAL	744.2	699.6	2500.8	272.5	226.8	3121.6	633.6	1617.0	51.43	119.79	350.84	30.39
MEAN	24.0	23.3	80.7	8.79	8.10	101	21.1	52.2	1.71	3.86	11.3	1.01
MAX	383	140	792	22	19	943	107	647	4.6	44	187	2.4
MIN	2.2	3.4	5.6	5.1	5.3	8.2	5.3	4.6	.20	.08	.38	.05
CFSM	1.13	1.09	3.79	.41	.38	4.74	.99	2.45	.08	.18	.53	.07
IN.	1.30	1.22	4.37	.48	.40	5.45	1.11	2.82	.09	.21	.61	.05

CAL YR 1977 TOTAL 9108.42 MEAN 25.0 MAX 1040 MIN .00 CFSM 1.17 IN 15.91
WTR YR 1978 TOTAL 10368.55 MEAN 28.4 MAX 943 MIN .05 CFSM 1.33 IN 18.11

WABASH RIVER BASIN

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Regulation by coal-washing operation and strip-mining above gage.

AVERAGE DISCHARGE.--14 years, 46.3 ft³/s (1.311 m³/s), 14.69 in/yr (373 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 14	0400	*2460	69.7	*11.83	3.606

Minimum daily discharge, 3.9 ft³/s (0.110 m³/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	13	131	27	24	38	47	44	16	17	8.0	7.9
2	74	11	58	24	23	40	42	35	17	23	17	6.7
3	36	12	42	23	22	36	40	31	22	11	43	6.6
4	26	12	35	22	21	32	43	167	19	8.1	8.1	7.1
5	19	9.9	307	23	20	28	40	76	18	8.2	7.5	5.8
6	22	11	102	25	20	25	42	49	16	9.6	7.7	4.2
7	20	12	131	30	19	110	41	56	16	8.3	7.1	4.5
8	121	18	163	50	19	220	35	138	13	8.2	7.0	5.7
9	44	13	196	84	18	141	43	69	11	8.5	7.0	5.2
10	30	11	232	47	18	163	51	44	9.8	9.6	5.6	5.7
11	23	8.6	136	32	18	265	175	36	10	6.8	5.7	5.8
12	20	7.5	73	27	18	389	76	123	12	7.4	6.4	4.7
13	18	8.3	177	24	31	385	58	359	9.9	25	5.7	7.4
14	17	8.8	653	23	48	995	48	181	9.4	12	5.8	191
15	14	8.7	170	22	45	202	41	107	7.9	82	5.2	28
16	16	185	103	22	40	134	42	90	8.4	18	6.2	13
17	14	144	81	22	35	101	44	63	10	11	5.6	9.7
18	14	44	64	21	30	86	247	50	22	7.4	4.8	9.1
19	13	28	53	21	28	83	124	39	24	5.7	5.2	8.3
20	11	31	50	20	27	75	93	34	24	7.4	6.0	6.6
21	9.4	278	43	20	25	118	67	32	22	7.7	4.9	5.4
22	10	82	37	19	23	89	53	29	12	7.3	4.3	6.1
23	14	54	35	19	22	69	74	27	11	26	4.8	6.4
24	12	40	30	30	22	64	128	44	11	47	6.0	4.7
25	17	35	29	45	23	125	105	31	10	27	6.2	4.6
26	21	25	28	42	25	89	94	24	7.6	10	5.5	4.3
27	15	26	25	38	30	80	57	20	7.7	8.1	6.2	4.2
28	14	26	23	35	37	64	45	21	8.4	5.5	8.4	3.9
29	13	30	21	30	---	55	43	31	7.7	4.4	12	4.6
30	14	205	20	28	---	50	52	26	7.4	17	45	9.8
31	14	---	24	26	---	48	---	20	---	9.6	16	---
TOTAL	996.4	1397.8	3272	921	731	4399	2090	2096	400.2	463.8	293.9	397.0
MEAN	32.1	46.6	106	29.7	26.1	142	69.7	67.6	13.3	15.0	9.48	13.2
MAX	291	278	653	84	48	995	247	359	24	82	45	191
MIN	9.4	7.5	20	19	18	25	35	20	7.4	4.4	4.3	3.9
CFSM	.75	1.09	2.48	.69	.61	3.32	1.63	1.58	.31	.35	.22	.31
IN.	.87	1.21	2.84	.80	.64	3.82	1.82	1.82	.35	.40	.26	.35
CAL YR 1977	TOTAL	18913.10	MEAN	51.8	MAX	1320	MIN	.00	CFSM	1.21	IN	16.44
WTR YR 1978	TOTAL	17458.10	MEAN	47.8	MAX	995	MIN	3.9	CFSM	1.12	IN	15.17

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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (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. Flow regulated by Patoka Lake (See sta 03374498).

AVERAGE DISCHARGE.--44 years, 988 ft³/s (27.98 m³/s), 16.32 in/yr (414 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, 6,580 ft³/s (186.3 m³/s) Mar. 19, gage height, 17.33 ft (5.282 m); minimum daily, 34 ft³/s (0.96 m³/s) Sept. 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	700	216	1870	2280	790	620	2720	1690	682	110	465	591
2	1060	205	1930	2020	760	670	2530	1650	514	476	727	692
3	1060	191	1990	1720	730	720	2370	1590	354	230	1090	710
4	1090	179	2030	1310	680	760	2210	1610	243	174	959	601
5	1130	172	2260	870	640	790	2050	1550	189	172	929	347
6	1170	165	2340	689	610	820	1880	1470	161	143	936	217
7	1200	162	2390	675	580	871	1660	1380	141	101	886	177
8	1350	169	2440	680	570	1250	1390	1320	124	76	691	153
9	1370	178	2560	700	550	1360	1080	1320	111	63	693	139
10	1390	183	2640	770	540	1420	882	1310	101	60	776	122
11	1390	183	2650	920	530	1640	958	1300	96	92	798	115
12	1360	175	2650	835	540	2000	1030	1350	86	62	664	113
13	1310	175	2760	805	560	2420	1070	1590	91	118	386	95
14	1250	177	3420	780	580	3660	1100	1770	82	177	394	98
15	1130	170	3660	720	600	3900	1140	1970	77	539	637	512
16	953	355	3860	665	610	4260	1160	2180	77	825	636	659
17	734	842	4010	638	620	5020	1160	2310	77	547	447	715
18	576	993	4110	600	620	6040	1330	2390	74	291	229	658
19	398	1050	4200	570	610	6550	1350	2410	181	175	152	505
20	253	1090	4210	550	590	6450	1400	2410	611	135	117	312
21	199	1200	4160	520	570	6070	1440	2370	708	109	101	198
22	171	1290	4100	500	540	5540	1470	2330	716	54	88	147
23	154	1380	4000	480	520	4970	1510	2280	567	85	79	115
24	143	1460	3780	470	510	4500	1580	2210	267	196	73	92
25	376	1500	3480	500	500	4910	1640	2140	171	278	65	79
26	461	1530	3260	580	510	4530	1690	2060	130	315	56	58
27	327	1560	3110	680	550	4160	1710	1970	112	470	49	56
28	319	1590	3000	770	590	3780	1720	1860	103	305	64	46
29	272	1610	2800	820	---	3440	1720	1720	97	161	100	39
30	241	1730	2600	840	---	3130	1720	1490	91	190	294	34
31	225	---	2400	810	---	2910	---	1080	---	206	513	---
TOTAL	23762	21880	94670	25767	16600	99161	46670	56080	7034	6975	14094	8407
MEAN	767	729	3054	831	593	3199	1556	1809	234	225	455	280
MAX	1390	1730	4210	2280	790	6550	2720	2410	716	825	1090	715
MIN	143	162	1870	470	500	620	882	1080	74	60	49	34
CFSM	.93	.89	3.72	1.01	.72	3.89	1.89	2.20	.29	.27	.55	.34
IN.	1.08	.99	4.28	1.17	.75	4.49	2.11	2.54	.32	.32	.64	.38
CAL YR 1977	TOTAL	423194	MEAN	1159	MAX	4210	MIN	33	CFSM	1.41	IN	19.15
WTR YR 1978	TOTAL	421100	MEAN	1154	MAX	6550	MIN	34	CFSM	1.40	IN	19.06

03376500 PATOKA RIVER NEAR PRINCETON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: November 1963 to April 1975, October 1977 to current year (partial-record station).

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
DEC 14...	1640	3350	45	407	1.0

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) National Geodetic Vertical Datum of 1929. 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.--51 years, 26,880 ft³/s (761.2 m³/s), 12.75 in/yr (324 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, 179,000 ft³/s (5,069 m³/s) Mar. 26, gage height, 29.61 ft (9.025 m); minimum daily, 6,500 ft³/s (184.1 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12500	15300	19000	40700	12600	10900	134000	52900	36400	30700	21800	30200
2	17100	14400	22500	38900	12200	11300	122000	51800	33100	28300	21100	32900
3	25600	13600	26400	37300	12200	11800	109000	49000	30800	25400	20700	33400
4	33100	13100	30500	35400	12000	12000	95300	47300	28900	22600	27700	32600
5	38300	13200	36800	33100	11800	12000	83800	47900	26800	25100	32300	30700
6	40700	13200	46700	31700	11800	11900	75800	47600	24700	30200	31500	28600
7	42100	12900	54200	31700	11600	12000	70000	47100	23000	32100	27500	26500
8	43400	12600	55700	32700	11400	13500	65700	48400	21300	31700	25300	23300
9	42300	12400	54100	34300	11300	15500	62700	51200	19900	29600	24500	18900
10	38000	12300	50100	34300	11200	16000	61000	52100	19000	27500	23800	15000
11	34700	12200	48100	30000	11100	17100	61400	50000	18100	28000	22700	12300
12	33000	12200	45600	28000	11100	20900	63300	46400	17600	27900	19700	10900
13	30500	12000	41400	26000	11000	28100	65400	47200	17600	24500	17800	10100
14	27300	11800	48000	24000	11000	45700	66200	55800	17700	22500	17000	10000
15	24500	11800	60900	22000	11000	65100	64800	62900	17200	25200	16800	9460
16	22000	12300	69000	20000	10900	77900	62800	68000	16800	28200	16000	9400
17	19800	16600	74900	19000	10900	88300	60800	71500	16100	29400	14900	9370
18	18000	19700	79800	18000	10800	98800	59600	73900	15100	27700	13200	9220
19	16400	20100	83900	17500	10800	110000	59200	75500	14400	22900	11700	8860
20	15300	19700	87400	16500	10700	124000	58700	76200	14600	18300	10700	8700
21	14300	18800	91500	16000	10600	139000	58000	74900	15900	15400	10100	8400
22	13600	19300	95500	15500	10500	151000	56400	69600	16100	13600	10700	8100
23	12900	20400	98000	15000	10400	160000	53700	61000	15500	12300	13200	8000
24	12400	21600	99300	14900	10300	166000	51200	56900	15300	11900	14900	8000
25	12000	22200	99000	14100	10400	173000	50500	58400	14800	13100	15700	7700
26	15800	22000	94900	14100	10400	178000	50900	59300	14000	14800	15200	7500
27	20700	21500	85000	16000	10500	177000	51800	57600	12900	15700	12900	7200
28	20600	20800	68900	16100	10600	170000	52100	53900	13100	16200	10800	6780
29	19700	19500	57900	15200	---	162000	52400	49900	22600	16300	10100	6610
30	18500	18200	49300	15000	---	154000	52900	45500	29900	16000	16000	6500
31	16800	---	43600	13500	---	144000	---	40800	---	18600	25500	---
TOTAL	751900	485700	1917900	736500	311100	2576800	2031400	1750500	599200	701700	571800	445200
MEAN	24250	16190	61870	23760	11110	83120	67710	56470	19970	22640	18450	14840
MAX	43400	22200	99300	40700	12600	178000	134000	76200	36400	32100	32300	33400
MIN	12000	11800	19000	13500	10300	10900	50500	40800	12900	11900	10100	6500
CFSM	.85	.57	2.16	.83	.39	2.90	2.37	1.97	.70	.79	.64	.52
IN.	.98	.63	2.49	.96	.40	3.35	2.64	2.27	.78	.91	.74	.58
CAL YR 1977	TOTAL	8206130	MEAN	22480	MAX	99300	MIN	2500	CFSM	.79	IN	10.66
WTR YR 1978	TOTAL	12879700	MEAN	35290	MAX	178000	MIN	6500	CFSM	1.23	IN	16.73

WABASH RIVER BASIN

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, Illinois, 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) National Geodetic Vertical Datum of 1929. 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.--Water-discharge records fair except those for winter periods and those for period of no gage-height record, Feb. 7 to Mar. 16, which are poor.

AVERAGE DISCHARGE.--38 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, 4,690 ft³/s (133 m³/s) Mar. 17, gage height, 20.90 ft (6.370 m); minimum daily, 0.06 ft³/s (0.002 m³/s) July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	32	812	31	15	6.0	61	82	9.5	.20	70	132
2	430	28	837	29	14	6.0	46	50	8.2	.20	16	21
3	214	26	764	29	14	6.0	52	34	8.0	.22	8.7	7.3
4	58	23	346	22	14	6.0	49	486	7.6	.17	5.3	3.6
5	28	20	884	19	13	6.0	40	859	7.0	.15	4.0	1.9
6	23	20	1110	19	12	6.0	33	849	6.5	.13	3.0	1.2
7	26	19	1110	21	12	6.0	30	599	6.4	.11	2.0	.83
8	533	19	1120	25	10	6.0	35	594	6.2	.09	1.0	.62
9	698	20	800	28	10	6.0	40	644	5.9	.08	.87	.50
10	487	27	600	23	10	6.0	36	503	4.5	.07	.71	.42
11	126	24	400	18	9.0	6.0	349	167	3.5	.07	.41	.35
12	45	19	300	11	9.0	6.0	385	124	3.0	.06	.35	.33
13	28	15	796	11	8.0	6.0	143	658	2.5	.09	.35	.29
14	22	13	2240	11	8.0	6.0	61	1110	2.2	.27	11	214
15	18	12	2630	12	8.0	15	42	1290	2.0	80	11	115
16	15	144	2700	13	8.0	1500	38	1350	2.0	53	5.5	8.6
17	15	569	2490	15	8.0	2380	72	1170	1.8	5.2	2.5	2.9
18	14	633	2080	17	7.0	3830	306	633	1.8	1.7	1.1	1.4
19	12	391	1550	18	7.0	3140	454	134	1.7	.78	.67	.82
20	11	102	930	17	7.0	2490	495	45	2.0	.43	.52	.53
21	10	86	261	17	7.0	2240	454	28	15	.22	.45	.34
22	9.8	167	117	15	7.0	1480	188	19	4.5	.13	.35	.23
23	9.9	108	87	15	7.0	1100	96	27	1.6	.11	.24	.18
24	9.7	59	76	15	7.0	535	175	149	.86	11	.24	.14
25	79	44	67	15	7.0	930	269	418	.65	13	.33	.11
26	664	35	60	15	6.0	1160	270	324	.48	1.7	4.9	.09
27	718	30	50	15	6.0	1240	142	70	.36	.55	11	.10
28	558	32	40	15	6.0	1110	72	26	.27	.23	17	.10
29	180	31	35	15	---	606	52	18	.22	.11	12	.10
30	68	231	28	15	---	174	78	14	.21	233	367	.10
31	43	---	27	15	---	83	---	11	---	389	466	---
TOTAL	5457.4	2979	25347	556	256.0	24097.0	4563	12485	116.45	792.07	1024.49	515.08
MEAN	176	99.3	818	17.9	9.14	777	152	403	3.88	25.6	33.0	17.2
MAX	718	633	2700	31	15	3830	495	1350	15	389	466	214
MIN	9.7	12	27	11	6.0	6.0	30	11	.21	.06	.24	.09
CFSM	.77	.44	3.59	.08	.04	3.41	.67	1.77	.02	.11	.15	.08
IN.	.89	.49	4.14	.09	.04	3.93	.74	2.04	.02	.13	.17	.08
CAL YR 1977	TOTAL	96023.33	MEAN 263	MAX 3230	MIN .00	CFSM 1.15	IN 15.67					
WTR YR 1978	TOTAL	78188.49	MEAN 214	MAX 3830	MIN .06	CFSM .94	IN 12.76					

03378500 WABASH RIVER AT NEW HARMONY, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", in SE¼Sec. 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, 260 micromhos Mar. 17, 20, 22, 1978.
WATER TEMPERATURE: Maximum, 32.0°C June 28, 1978; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum conductance, 700 micromhos, Feb. 10-25, Feb. 27 to Mar. 1; minimum 260 micromhos Mar. 17, 20, 22.
WATER TEMPERATURE: Maximum, 32.0°C June 28; minimum, freezing point on many days during winter period.

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TEMPERATURE (DEG C)	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAM-FLOW, INSTANTANEOUS (CFS)	TURBIDITY (JTU)	TURBIDITY (NTU)	SPECIFIC CONDUCTANCE (MICROMHOS)	OXYGEN, DISSOLVED (MG/L)	PH (UNITS)	CARBON DIOXIDE, DISSOLVED (MG/L AS CO2)	ALKALINITY (MG/L AS CaCO3)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
OCT 04...	19.5	--	33700	50	--	785	7.3	7.2	19	160	190	0
NOV 04...	16.5	--	13100	20	--	655	20.7	8.2	2.7	220	270	0
DEC 07...	1.0	--	53600	30	--	440	--	7.1	23	150	180	0
JAN 05...	1.0	--	33300	15	--	490	12.8	8.6	.7	150	180	0
MAR 11...	3.0	--	17200	25	--	595	13.1	8.0	3.0	160	190	0
APR 14...	16.0	--	66400	40	--	450	10.7	8.1	2.2	140	170	0
MAY 05...	13.5	--	47800	30	--	480	9.8	8.1	2.0	130	160	0
JUN 24...	25.5	--	15300	--	17	590	11.2	8.4	--	210	--	--
JUL 25...	28.5	80010	13600	--	35	--	7.2	7.6	--	170	--	--
AUG 16...	27.5	80010	16200	--	60	530	--	8.3	--	170	--	--

DATE	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, ORGANIC (MG/L AS N)	NITROGEN, AMMONIA (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC (MG/L AS N)	NITROGEN, NO2+NO3 (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DISSOLVED (MG/L AS Ca)
OCT 04...	3.7	--	--	1.4	2.3	.31	--	--	--	240	83	61
NOV 04...	--	--	.07	--	2.7	.19	.00	11	5.2	310	85	80
DEC 07...	--	--	.22	--	2.9	.45	--	--	--	200	57	54
JAN 05...	--	--	.17	--	2.2	.13	--	--	--	270	120	72
MAR 11...	3.2	.47	.53	1.0	2.2	.15	.06	5.1	--	230	76	60
APR 14...	4.4	.78	.08	.86	3.5	.14	.07	--	--	210	70	56
MAY 05...	3.9	.77	.08	.85	3.0	.16	.03	6.1	--	210	83	56
JUN 24...	3.2	1.2	.12	1.3	1.9	.18	.06	--	--	290	83	76
JUL 25...	3.0	1.1	.06	1.2	1.8	.15	.04	--	--	260	89	64
AUG 16...	2.5	.77	.10	.87	1.6	.24	.05	7.6	--	230	64	59

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	SODIUM PERCENT	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)
OCT 04...	21	16	.5	12	4.5	31	68	.2	8.8	--	--	--
NOV 04...	26	17	.4	11	3.2	30	72	.2	7.4	0	2	2
DEC 07...	17	14	.4	13	4.2	25	49	.2	6.8	--	--	--
JAN 05...	21	11	.3	8	2.8	24	63	.1	8.1	--	--	--
MAR 11...	20	21	.6	16	3.7	30	75	.2	6.4	0	0	0
APR 14...	17	9.3	.3	9	2.7	17	50	.1	4.0	--	--	--
MAY 05...	18	11	.3	10	2.2	21	60	.1	5.0	1	0	1
JUN 24...	25	16	.4	11	2.8	27	63	.2	3.2	--	--	--
JUL 25...	24	16	.4	12	2.7	27	63	.2	3.2	--	--	--
AUG 16...	21	16	.5	13	2.8	23	61	.2	4.1	1	--	1

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, SUS- PENDED RECOV. (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 04...	0	0	0	0	1	1	0	<10	<10	0	0	0
DEC 07...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 05...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	0	0	0	1	1	2	2	<8	<10	0	0	0
APR 14...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	0	0	0	0	0	0	0	--	--	0	0	0
JUN 24...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	100	0	100	2	0	2	2	<8	<10	5	0	3

DATE	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 04...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 04...	2	9	11	--	1700	10	0	27	27	140	140	0
DEC 07...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 05...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	0	7	7	--	1500	280	0	0	0	0	90	90
APR 14...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	2	2	4	--	3200	30	0	16	16	150	160	10
JUN 24...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	2	7	9	6100	6100	30	8	0	8	240	250	10

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, SUS-PENDED RECOVERABLE (UG/L AS AG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, SUS-PENDED RECOVERABLE (UG/L AS ZN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SELENIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELENIUM, TOTAL (UG/L AS SE)	COLIFORM, TOTAL IMMEDIATE (COLS. PER 100 ML)	COLIFORM, FECALECUM (0.45 UM-F (COLS./ 100 ML)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML)
OCT 04...	--	--	--	--	--	--	--	--	--	K67500	K5300	2350
NOV 04...	0	0	0	10	10	20	0	0	0	2600	K1000	568
DEC 07...	--	--	--	--	--	--	--	--	--	K57500	K5450	K13600
JAN 05...	--	--	--	--	--	--	--	--	--	14300	321	257
MAR 11...	0	--	--	10	30	40	0	0	0	23000	143	1960
APR 14...	--	--	--	--	--	--	--	--	--	6400	K121	143
MAY 05...	0	0	0	0	50	50	0	0	0	13400	740	1030
JUN 24...	--	--	--	--	--	--	--	--	--	4040	336	K50
JUL 25...	--	--	--	--	--	--	--	--	--	1700	780	K24
AUG 16...	0	0	0	10	60	70	0	0	0	4000	840	K43

DATE	PHYTOPLANKTON, TOTAL (CELLS PER ML)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, TOTAL (MG/L AS NO3)	MERCURY, DIS-SOLVED (UG/L AS HG)	MERCURY, SUS-PENDED RECOVERABLE (UG/L AS HG)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	POTASSIUM, TOTAL (PCI/L)	SEDIMENT, SUS-PENDED (MG/L)	SEDIMENT, DISCHARGE, SUS-PENDED (T/DAY)
OCT 04...	--	290	304	26400	.39	16	--	--	--	--	399	36300
NOV 04...	18000	413	369	14600	.56	--	<.5	.0	<.5	--	78	2760
DEC 07...	--	274	259	39700	.37	--	--	--	--	--	360	52100
JAN 05...	--	362	291	32500	.49	--	--	--	--	--	79	7100
MAR 11...	1800	363	310	16900	.49	14	<.5	.0	<.5	--	42	1950
APR 14...	--	328	240	58800	.45	19	--	--	--	--	93	16700
MAY 05...	6600	268	252	34600	.36	17	<.5	.0	<.5	--	106	13700
JUN 24...	58000	388	339	16000	.53	14	--	--	--	2.1	116	4790
JUL 25...	120000	338	302	12400	.46	13	--	--	--	2.0	106	3800
AUG 16...	--	286	289	12500	.39	11	<.5	.0	<.5	--	167	7300

WARASH RIVER BASIN

03378500 WARASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	600	450	535	605	700	760	470	540	425	475	330
2	560	625	495	515	605	650	775	475	540	450	425	340
3	535	625	470	515	605	675	450	490	555	445	420	340
4	560	625	515	515	605	675	450	490	565	440	385	340
5	720	605	410	515	605	650	450	485	565	480	430	370
6	380	390	430	515	605	675	450	475	565	510	340	370
7	430	605	430	535	605	675	465	475	565	510	340	450
8	430	560	450	515	685	650	460	475	600	475	340	450
9	510	605	470	535	695	650	455	475	590	490	385	445
10	490	580	470	535	700	630	450	450	590	490	410	450
11	510	630	470	535	700	585	450	450	595	490	410	440
12	560	560	470	560	700	540	455	450	590	500	410	465
13	535	580	470	515	700	475	465	400	610	465	440	465
14	560	580	390	535	700	400	450	410	590	470	435	500
15	580	495	345	630	700	295	460	410	600	475	465	500
16	600	605	365	630	700	295	475	360	610	465	500	525
17	600	560	365	650	700	260	470	360	600	475	450	525
18	580	450	345	630	700	295	475	410	600	440	450	550
19	630	515	390	630	700	270	475	420	590	500	500	545
20	630	450	345	630	700	260	470	270	590	495	500	545
21	630	515	410	630	700	270	465	465	555	500	525	550
22	630	535	410	630	700	260	450	510	575	520	500	545
23	630	515	410	630	700	270	430	510	555	520	490	555
24	650	535	410	630	700	330	450	510	540	485	445	555
25	630	495	495	675	700	330	475	510	550	510	475	560
26	580	365	515	675	675	310	475	450	555	520	445	570
27	580	430	515	675	700	310	490	475	540	510	445	570
28	580	430	515	675	700	325	475	475	540	500	440	550
29	580	430	515	675	---	330	470	465	555	495	440	550
30	580	430	515	605	---	350	470	520	575	465	475	595
31	600	---	535	605	---	340	---	520	---	470	460	---
MEAN	559	531	445	590	675	443	455	455	573	483	440	495
MAX	650	630	535	675	700	700	490	520	610	520	525	595
MIN	380	365	345	515	605	260	360	270	540	425	340	330

WTR YR 1978	MEAN	510	MAX	700	MIN	260						
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	16.0	6.0	2.0	1.0	5.0	12.0	14.0	25.0	29.0	28.0	24.5
2	22.0	17.0	6.0	2.0	1.0	5.0	13.0	14.0	25.0	29.0	27.0	25.0
3	21.0	17.0	6.0	2.0	1.0	4.0	13.0	15.0	24.0	28.5	27.0	25.0
4	20.0	18.0	6.0	2.0	1.0	4.0	14.0	15.0	24.0	28.0	27.0	24.0
5	19.0	18.0	5.0	2.0	1.0	4.0	14.0	15.0	24.0	28.0	26.0	24.0
6	18.0	18.0	5.0	3.0	1.0	4.0	15.0	15.0	24.0	29.0	25.0	24.0
7	18.0	19.0	5.0	4.0	1.0	5.0	15.0	15.0	24.0	29.0	25.0	25.0
8	18.0	18.0	4.0	3.0	1.0	4.0	15.5	15.0	24.0	29.0	25.0	26.0
9	17.0	18.0	3.0	2.0	.5	4.0	15.5	15.0	24.0	29.0	25.0	27.0
10	16.0	16.0	2.0	1.0	.0	5.0	15.0	16.0	25.0	28.0	25.0	27.0
11	15.0	15.0	1.0	1.0	.0	5.0	15.0	16.0	24.0	27.0	26.0	27.0
12	15.0	14.0	1.0	1.0	.0	5.0	15.0	16.0	24.0	27.5	26.0	27.0
13	15.0	13.0	2.0	1.0	.5	5.0	15.0	16.0	24.0	28.0	26.0	27.0
14	15.0	12.0	2.0	1.0	1.0	5.0	13.0	15.0	24.0	28.0	27.0	27.0
15	14.0	14.0	3.0	1.0	1.0	4.0	14.0	16.0	25.0	28.0	28.0	26.0
16	14.0	14.0	3.0	1.0	1.0	4.0	15.0	16.0	24.0	28.0	28.0	26.5
17	14.0	13.5	3.0	1.0	1.0	4.0	14.0	16.0	24.0	27.5	28.0	27.0
18	14.0	13.0	5.0	1.0	1.0	3.0	15.0	16.0	25.0	27.0	29.0	27.0
19	15.0	12.0	4.5	1.0	1.0	3.0	15.0	17.0	25.0	27.0	28.0	27.0
20	15.0	11.0	4.0	1.0	1.0	5.0	15.0	18.0	26.0	28.0	27.0	28.0
21	15.0	10.0	3.0	2.0	2.0	6.0	14.0	19.0	26.0	29.0	27.0	27.0
22	15.0	10.0	4.0	2.0	3.0	8.0	13.0	19.0	26.0	29.0	27.0	25.0
23	15.0	10.0	4.0	2.0	4.0	8.0	13.5	20.0	26.0	29.0	27.0	24.0
24	16.0	10.0	4.0	2.0	4.0	7.0	13.0	21.0	26.0	29.0	27.0	24.0
25	16.0	10.0	3.0	1.0	4.0	7.0	13.0	21.0	26.5	28.0	27.0	24.0
26	17.0	10.0	1.0	1.0	4.0	8.0	13.0	23.0	27.0	28.0	27.0	24.0
27	17.0	10.0	1.0	1.0	4.0	7.0	14.0	23.0	29.0	28.0	27.0	24.0
28	17.0	9.0	.0	1.0	5.0	6.0	15.0	23.0	31.0	28.0	27.5	23.0
29	17.0	8.0	1.0	1.0	---	8.0	14.0	24.0	32.0	28.0	28.0	22.0
30	17.0	7.0	2.0	1.0	---	9.0	14.0	24.0	31.0	28.0	26.0	23.0
31	17.0	---	2.0	1.0	---	9.0	---	24.0	---	28.0	24.0	---
MEAN	16.5	13.5	3.5	1.5	1.5	5.5	14.0	18.0	25.5	28.0	26.5	25.5
MAX	23.0	19.0	6.0	4.0	5.0	9.0	15.5	24.0	32.0	29.0	29.0	28.0
MIN	14.0	7.0	.0	1.0	.0	3.0	12.0	14.0	24.0	27.0	24.0	22.0
WTR YR 1978	MEAN	15.0	MAX	32.0	MIN	.0						

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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft (112.776 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--13 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)	
Dec. 14	1500	2580	73.1	17.90	5.456	Mar. 25	1000	2730	77.3	17.99	5.483
Mar. 14	0900	*3860	109	*18.61	5.762						

Minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Aug. 24, Sept. 11-13.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	21	650	30	22	37	66	37	19	171	.70	3.5
2	904	20	222	25	21	35	54	36	17	355	.64	1.1
3	166	18	136	25	20	30	48	36	16	15	7.5	.26
4	82	17	98	23	19	29	46	79	14	5.6	4.3	.10
5	58	18	1050	22	18	26	42	71	12	3.2	.90	.07
6	50	18	380	24	18	24	44	41	11	2.3	.20	.05
7	48	19	139	28	17	190	39	35	12	1.7	.10	.05
8	663	17	132	35	17	617	34	37	11	1.4	.09	.04
9	228	15	594	27	17	514	33	44	8.7	1.1	.07	.04
10	97	13	136	19	17	368	35	33	7.0	.90	.07	.03
11	69	10	75	15	18	690	156	27	5.9	.76	.06	.02
12	51	8.7	66	18	20	1680	70	28	5.4	.70	.05	.02
13	41	7.8	277	20	35	1600	46	218	4.4	.76	.05	.02
14	37	8.5	2310	18	56	3300	34	363	3.7	.76	.05	.871
15	34	9.7	929	17	58	1340	31	147	3.1	681	.04	284
16	31	164	318	17	46	331	31	204	2.6	214	.04	11
17	29	383	281	17	37	193	32	129	2.2	13	.03	3.0
18	28	88	179	17	30	139	478	86	31	4.2	.64	1.5
19	24	53	123	17	25	129	150	66	135	2.4	.41	.89
20	20	44	100	16	22	101	100	53	13	1.8	.07	.56
21	18	422	75	16	21	212	71	44	6.8	1.5	.05	.44
22	17	152	58	17	20	165	55	36	4.4	1.3	.04	.35
23	16	84	50	21	20	100	70	32	3.4	1.1	.03	.27
24	15	64	45	29	22	329	93	174	2.7	14	.02	.23
25	33	55	38	49	25	2340	88	397	2.3	31	.04	.20
26	66	41	31	45	28	672	97	80	1.9	6.1	4.6	.19
27	41	37	28	38	32	303	62	50	1.7	2.0	.15	.17
28	33	33	24	32	36	171	47	38	1.5	1.4	.30	.14
29	28	32	21	28	---	118	42	31	1.3	1.1	.75	.14
30	25	382	19	25	---	89	42	26	1.2	.94	46	.17
31	23	---	24	23	---	78	---	21	---	.80	19	---
TOTAL	4073	2254.7	8608	753	737	15970	2236	2699	361.2	1537.82	87.04	1179.56
MEAN	131	75.2	278	24.3	26.3	515	74.5	87.1	12.0	49.6	2.81	39.3
MAX	1100	422	2310	49	58	3300	478	397	135	681	46	871
MIN	15	7.8	19	15	17	24	31	21	1.2	.70	.02	.02
CFSM	1.24	.72	2.67	.23	.25	4.95	.72	.84	.12	.48	.03	.38
IN.	1.46	.81	3.08	.27	.26	9.71	.80	.97	.13	.55	.03	.42

CAL YR 1977 TOTAL 48096.20 MEAN 132 MAX 3600 MIN .00 CFSM 1.27 IN 17.20
WTR YR 1978 TOTAL 40496.32 MEAN 111 MAX 3300 MIN .02 CFSM 1.07 IN 14.69

WABASH RIVER BASIN

03378550 BIG CREEK NEAR WADESVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEd (MG/L)	SEDI- MFNT DIS- CHARGE, SUS- PENDEd (T/DAY)	TEMPER- ATURE (DEG C)
OCT 25...	1700	38	132	13	16.0
NOV 29...	1300	29	A	.63	3.5
JAN 03...	1555	25	6A	4.6	.5
MAR 15...	1300	1120	926	2800	--
JUN 12...	1700	5.2	62	.89	--
JUL 11...	1300	.72	71	.04	25.0
AUG 14...	1500	.40	22	.00	--
SEP 18...	1500	1.4	85	.32	--

WABASH RIVER BASIN

03381500 LITTLE WABASH RIVER AT CARMi, IL
(National stream-quality accounting network station)
(See WRD IL-78-1)

LOCATION.--Lat 38°03'40", long 88°09'35", near center of E₂ 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) National Geodetic Vertical Datum of 1929. 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.--Water-discharge records good except those for winter periods, which are poor. There was no diversion through McHenry Slough during the year.

AVERAGE DISCHARGE.--39 years, 2,474 ft³/s (70.06 m³/s), 10.83 in/yr (275 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, 18,500 ft³/s (524 m³/s) Mar. 22, maximum gage height, 31.87 ft (9.714 m); Mar. 22; minimum discharge, 47 ft³/s (1.33 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737	240	1530	1900	400	300	15000	1270	4200	157	230	718
2	1510	205	3040	903	550	400	15100	1050	3990	155	737	449
3	980	188	3740	537	600	528	14500	878	3260	175	1260	367
4	940	174	3980	448	500	587	13900	1000	1860	155	1620	285
5	1330	158	4570	433	300	596	13000	2510	871	124	1500	199
6	1230	145	5710	429	250	560	12100	3580	555	99	1030	156
7	824	138	6080	461	210	801	11200	4140	495	88	655	123
8	937	132	6230	488	190	3200	10100	3930	455	150	499	102
9	2000	129	6480	400	180	5090	9050	3930	412	200	395	96
10	2430	126	6520	327	170	5860	8020	3850	380	178	292	80
11	2400	120	6200	330	170	6670	6910	3560	345	144	227	66
12	2130	115	6000	380	170	8160	5960	3350	320	122	178	58
13	1700	112	6500	425	160	5610	4920	3850	302	133	148	51
14	1090	113	8790	474	160	12400	3870	5240	298	117	124	1220
15	612	114	9750	451	160	13300	2900	6100	262	160	139	1790
16	395	196	10100	421	180	13900	2180	6420	240	157	219	1470
17	299	550	10500	376	200	14900	1570	6500	219	110	227	617
18	232	1720	10800	305	230	16000	1820	6180	204	99	312	351
19	191	2400	11000	260	250	17200	2630	5560	188	95	290	240
20	166	2170	11100	230	250	18000	2910	5200	178	112	189	151
21	145	1810	11000	220	230	18300	2880	5030	458	162	140	119
22	130	1370	10700	210	220	18300	2680	4950	1220	214	103	98
23	114	1070	10300	200	210	18200	2400	4880	997	195	80	81
24	102	900	9940	200	200	18000	2020	4830	595	189	65	70
25	108	778	9530	200	190	17900	1960	5220	417	173	56	63
26	308	618	8680	200	190	17800	2080	5270	416	186	55	59
27	512	496	7730	200	180	17700	1620	5330	377	193	109	55
28	639	407	6580	210	200	17500	1580	5240	302	121	106	53
29	547	347	6070	220	---	17300	1560	4590	230	95	75	49
30	400	484	5300	250	---	17000	1440	4230	178	90	372	47
31	310	---	3710	300	---	16400	---	4200	---	108	884	---
TOTAL	25450	17525	228160	12388	6900	342462	174660	131868	24224	4456	12316	9283
MEAN	821	584	7360	400	246	11050	5955	4254	807	144	397	309
MAX	2430	2400	11100	1900	600	18300	15800	6500	4200	214	1620	1790
MIN	102	112	1530	200	160	300	1440	878	178	88	55	47
CFSM	.27	.19	2.37	.13	.08	3.56	1.92	1.37	.26	.05	.13	.10
IN.	.31	.21	2.74	.15	.08	4.11	2.14	1.58	.29	.05	.15	.11
CAL YR 1977 TOTAL	740971	MEAN	2030	MAX	13800	MIN	26	CFSM	.65	IN	8.89	
WTR YR 1978 TOTAL	993692	MEAN	2722	MAX	18300	MIN	47	CFSM	.88	IN	11.92	

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 1537: 1953. WSP 1507: 1956. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft (179.274 m) National Geodetic Vertical Datum of 1929 (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, Apr. 1 to May 8, which are poor. Flow occasionally regulated by Lake George Dam.

AVERAGE DISCHARGE.--31 years, 102 ft³/s (2.889 m³/s), 11.17 in/yr (284 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 21	2200	1020	28.9	9.70	2.956	May 14	2300	1200	33.9	10.36	3.158
Apr. 7	Unknown	*1320	37.4	*10.81	3.295						

Minimum daily discharge, 9.9 ft³/s (0.28 m³/s) Sept. 9, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	44	134	54	21	21	280	96	35	29	66	15
2	96	171	313	49	21	21	290	83	36	83	56	14
3	109	234	293	45	21	22	340	74	36	107	66	11
4	84	185	220	42	21	21	430	78	34	74	49	11
5	69	140	164	40	19	21	520	82	29	47	36	11
6	57	105	134	40	20	21	870	86	27	41	28	11
7	47	90	88	43	22	21	1200	84	35	33	23	11
8	59	82	80	54	22	21	920	82	84	28	21	10
9	76	77	76	52	22	23	700	86	81	25	23	9.9
10	72	77	63	43	22	28	540	77	53	21	26	10
11	62	64	52	35	22	40	580	80	40	19	26	11
12	53	56	48	29	22	48	500	68	39	17	23	10
13	46	51	53	28	23	76	420	571	40	20	20	12
14	40	52	88	28	23	201	320	1000	32	23	18	21
15	32	74	148	28	21	471	235	1080	28	19	17	19
16	33	93	180	28	21	636	200	813	64	15	19	16
17	33	93	240	27	21	680	180	587	62	13	15	19
18	33	75	281	25	21	653	215	420	67	15	16	32
19	31	62	240	24	21	536	250	315	50	14	15	34
20	29	65	227	23	21	619	220	245	30	15	13	27
21	29	66	256	22	21	940	210	191	35	23	12	19
22	28	58	214	22	21	962	200	156	37	42	11	15
23	27	57	176	21	21	784	190	138	28	72	11	14
24	28	49	154	21	21	613	210	138	25	83	13	12
25	31	51	145	21	21	487	195	127	28	70	12	9.9
26	36	46	112	21	21	397	180	105	38	94	13	11
27	35	42	89	21	21	358	160	90	48	100	15	24
28	37	43	76	21	21	397	140	84	40	82	25	57
29	32	39	69	21	---	446	120	72	30	57	28	97
30	28	36	63	21	---	415	110	64	28	50	23	89
31	28	---	57	21	---	338	---	33	---	60	18	---
TOTAL	1457	2377	4533	970	595	10317	10925	7205	1239	1391	757	662.8
MEAN	47.0	79.2	146	31.3	21.3	333	364	232	41.3	44.9	24.4	22.1
MAX	109	234	313	54	23	962	1200	1080	84	107	66	97
MIN	27	36	48	21	19	21	110	33	25	13	11	9.9
CFSM	.38	.64	1.18	.25	.17	2.69	2.94	1.87	.33	.36	.20	.18
IN.	.44	.71	1.36	.29	.18	3.10	3.28	2.16	.37	.42	.23	.20
CAL YR 1977	TOTAL	25694.7	MEAN	70.4	MAX	526	MIN	7.0	CFSM	.57	IN	7.71
WTR YR 1978	TOTAL	42428.8	MEAN	116	MAX	1200	MIN	9.9	CFSM	.94	IN	12.73

STREAMS TRIBUTARY TO LAKE MICHIGAN

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) National Geodetic Vertical Datum of 1929. Prior to July 28, 1955, nonrecording gage at same site and datum.

REMARKS.--Records fair except those affected by backwater and winter periods, 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.

AVERAGE DISCHARGE.--27 years (1943-50, 1955-73, 1977 to current year), 137 ft³/s (3.880 m³/s), 11.63 in/yr (295 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, 1,540 ft³/s (43.6 m³/s) Apr. 7, gage height, 10.49 ft (3.197 m); maximum gage height, 11.35 ft, (3.459 m) May 15 (backwater from Lake Michigan); minimum daily discharge, 12 ft³/s (0.34 m³/s) Sept. 4-10.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	79	157	71	36	33	411	116	34	43	47	18
2	171	201	374	108	36	34	382	110	44	101	72	13
3	181	297	406	89	37	36	447	102	41	152	135	13
4	140	266	300	75	35	35	624	96	41	117	111	12
5	116	211	225	64	33	34	881	104	42	92	85	12
6	106	161	190	68	35	34	975	106	35	71	57	12
7	93	138	165	95	37	34	1270	108	48	53	46	12
8	105	122	145	118	37	35	1110	110	98	49	34	12
9	119	117	130	175	37	38	848	113	83	40	34	12
10	114	117	120	97	37	40	748	114	66	46	35	12
11	101	118	115	70	36	54	775	121	57	26	37	14
12	96	117	112	57	36	90	735	287	55	23	33	13
13	84	101	130	49	37	182	583	641	62	26	26	15
14	72	94	170	48	39	383	437	890	55	32	22	29
15	72	106	195	50	37	671	335	1100	41	34	19	27
16	74	126	225	50	35	875	274	900	53	31	23	25
17	51	126	325	47	34	929	238	720	66	29	18	26
18	53	120	425	44	34	885	279	560	98	29	20	40
19	57	112	385	41	34	759	126	400	70	26	19	45
20	47	108	340	39	34	760	316	320	47	33	19	42
21	45	115	385	37	34	946	286	250	46	39	18	30
22	56	102	390	36	34	1230	246	210	38	51	17	24
23	52	94	300	35	35	1130	235	185	38	100	18	19
24	51	87	250	35	36	951	254	165	37	102	19	16
25	56	90	195	35	37	783	257	150	37	93	18	13
26	62	75	145	35	38	649	220	118	55	110	19	20
27	62	69	110	35	35	561	191	94	61	106	22	50
28	68	64	98	36	34	569	122	78	53	24	34	66
29	73	60	88	37	---	602	120	67	39	36	35	93
30	67	57	82	36	---	577	139	65	34	57	32	146
31	62	---	75	36	---	492	---	54	---	41	24	---
TOTAL	2656	3650	6752	1848	999	14430	14064	8454	1574	1802	1148	881
MEAN	85.7	122	218	59.6	35.7	465	469	273	52.5	58.1	37.0	29.4
MAX	181	297	425	175	39	1230	1270	1100	98	152	135	146
MIN	45	57	75	35	33	73	120	54	34	23	17	12
CFSM	.54	.76	1.36	.37	.22	2.91	2.93	1.71	.33	.36	.23	.18
IN.	.62	.85	1.57	.43	.23	3.35	3.27	1.97	.37	.42	.27	.20
CAL YR 1977	TOTAL	37823.0	MEAN	104	MAX	682	MIN	9.0	CFSM	.65	IN	8.79
WTR YR 1978	TOTAL	58258.0	MEAN	160	MAX	1270	MIN	12	CFSM	1.00	IN	13.54

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) National Geodetic Vertical Datum of 1929. Prior to June 26, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 71.5 ft³/s (2.025 m³/s), 14.67 in/yr (373 mm/yr).

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

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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 21	1800	*986	27.9	*8.12	2.475
May 15	0200	867	24.6	7.86	2.396

Minimum daily discharge, 23 ft³/s (0.65 m³/s) Sept. 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	60	160	51	54	45	117	57	47	37	33	26
2	78	111	290	49	54	45	103	55	45	56	33	25
3	60	96	199	48	54	45	155	54	44	64	34	24
4	51	79	115	48	53	46	165	54	43	49	32	25
5	48	69	89	48	53	46	305	63	42	42	31	25
6	45	65	79	49	53	47	345	63	41	39	31	24
7	41	63	75	55	53	47	599	59	43	37	30	24
8	55	61	76	69	53	48	336	62	60	35	31	24
9	61	61	68	54	53	49	199	60	49	34	32	23
10	53	74	66	52	52	50	143	58	44	34	32	23
11	51	67	65	50	52	52	249	63	42	33	34	23
12	51	62	67	49	51	58	221	127	53	32	34	25
13	43	63	76	49	50	72	128	290	51	36	32	33
14	43	70	117	49	50	121	97	640	44	35	31	32
15	39	88	159	49	50	158	86	734	41	33	30	38
16	40	98	164	49	51	180	79	421	41	32	34	29
17	42	85	185	49	51	202	73	254	47	31	33	30
18	42	78	192	50	51	237	86	161	61	30	31	53
19	44	68	129	50	48	260	124	112	51	30	29	40
20	32	66	142	50	50	412	123	92	45	31	30	32
21	42	68	184	50	52	800	111	82	44	36	29	31
22	43	63	132	50	49	781	97	74	41	42	28	30
23	44	60	107	49	46	570	84	73	40	92	28	28
24	45	59	97	49	44	441	89	78	37	60	28	27
25	46	58	109	48	43	303	86	70	36	44	29	27
26	48	58	98	47	44	232	80	64	44	46	29	26
27	48	55	78	46	44	223	71	60	44	82	31	26
28	48	58	67	51	45	232	65	56	38	54	56	26
29	47	55	67	52	---	224	62	54	37	43	42	25
30	46	56	64	53	---	171	59	53	36	38	31	26
31	46	---	56	54	---	133	---	49	---	35	28	---
TOTAL	1487	2074	3572	1566	1403	6330	4537	4192	1331	1322	996	850
MEAN	48.0	69.1	115	50.5	50.1	204	151	135	44.4	42.6	32.1	28.3
MAX	78	111	290	69	54	800	599	734	61	92	56	53
MIN	32	55	56	46	43	45	59	49	36	30	28	23
CFSM	.73	1.04	1.74	.76	.76	3.08	2.28	2.04	.67	.64	.49	.43
IN.	.84	1.17	2.01	.88	.79	3.56	2.55	2.36	.75	.74	.56	.48

CAL YR 1977	TOTAL	22991	MEAN	63.0	MAX	344	MIN	22	CFSM	.95	IN	12.92
WTR YR 1978	TOTAL	29660	MEAN	81.3	MAX	800	MIN	23	CFSM	1.23	IN	16.67

STREAMS TRIBUTARY TO LAKE MICHIGAN

04094500 SALT CREEK NEAR MCCOOL, IN

LOCATION: --Lat 41°35'48", long 87°08'40", in SE 1/4 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) National Geodetic Vertical Datum of 1929 (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 fair except those for winter periods and periods of no gage-height record, Feb. 24 to Mar. 14, and Apr. 1 to July 22, which are poor.

AVERAGE DISCHARGE.--33 years, 71.4 ft³/s (2.022 m³/s), 12.99 in/yr (330 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 21	1850	*606	17.2	*6.43	1.960

Minimum daily discharge, 22 ft³/s (0.623 m³/s) July 17, 18, Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	68	196	40	39	30	88	41	33	31	28	27
2	69	161	245	38	39	30	100	39	32	40	29	26
3	63	87	156	36	39	30	128	38	31	47	37	24
4	50	65	89	35	38	30	161	37	30	37	36	25
5	42	61	77	34	38	31	205	42	29	33	31	24
6	41	54	67	37	38	31	285	45	30	31	30	25
7	39	60	54	50	38	32	265	42	37	29	29	24
8	66	64	62	58	38	33	150	43	45	28	28	23
9	62	54	58	51	38	34	117	43	40	26	32	23
10	49	99	50	41	37	35	102	41	33	27	30	23
11	44	69	52	36	37	36	125	56	32	25	29	22
12	44	61	60	34	37	38	112	100	46	25	29	23
13	42	58	61	34	37	45	90	173	39	28	28	25
14	38	60	118	33	36	120	76	235	33	27	27	37
15	37	80	133	33	36	286	63	170	31	25	25	38
16	42	78	121	33	36	260	54	110	35	23	32	28
17	41	73	177	33	36	246	47	80	42	22	29	31
18	41	62	140	33	33	245	60	71	50	22	28	50
19	46	57	113	33	34	242	74	62	39	26	27	47
20	42	58	140	33	36	355	83	54	36	28	25	34
21	39	61	138	33	32	522	73	50	34	57	25	33
22	37	57	102	32	31	488	68	46	32	85	24	32
23	38	50	88	34	29	358	62	49	31	122	24	29
24	39	52	82	35	29	285	60	50	30	70	24	30
25	42	52	96	36	29	168	58	47	30	34	28	28
26	44	49	57	37	29	141	54	44	34	37	27	28
27	43	48	60	38	29	153	51	41	35	36	27	26
28	42	50	48	38	29	166	48	39	31	34	68	26
29	42	59	46	38	---	148	46	37	29	33	53	25
30	41	47	44	38	---	111	43	36	29	31	37	28
31	44	---	41	39	---	106	---	34	---	29	30	---
TOTAL	1419	1954	2971	1153	977	4835	2948	1995	1038	1158	956	864
MEAN	45.8	65.1	95.8	37.2	34.9	156	98.3	64.4	34.6	37.4	30.8	28.8
MAX	70	161	245	58	39	522	285	235	50	122	68	50
MIN	37	47	41	32	29	30	43	34	29	22	24	22
CFSM	.61	.87	1.28	.50	.47	2.09	1.32	.86	.46	.50	.41	.39
IN.	.71	.97	1.48	.57	.49	2.41	1.47	.99	.52	.58	.48	.43

CAL YR 1977 TOTAL 21269 MFAN 58.3 MAX 350 MIN 21 CFSM .78 IN 10.61
WTR YR 1978 TOTAL 22268 MEAN 61.0 MAX 522 MIN 22 CFSM .82 IN 11.10

STREAMS TRIBUTARY TO LAKE MICHIGAN

04095000 LITTLE CALUMET RIVER NEAR McCOOL, IN
(National stream-quality accounting network station)

LOCATION.--Lat 41°36'41", long 87°09'16", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, at bridge on Samuelson Road, 1200 ft (365.8 m) downstream from Salt Creek, 1.15 mi (1.85 km) upstream from Burns Waterway, and 2.3 mi (3.70 km) north of McCool.

DRAINAGE AREA.--149 mi² (385.9 km²).

PERIOD OF RECORD.--Water year 1978.

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TEMPERATURE (DEG C)	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAM-FLOW INSTANTANEOUS (CFS)	TURBIDITY (JTU)	TURBIDITY (NTU)	SPF-CIFIC CONDUCTANCE (MICRO-MHOS)	OXYGEN-DISSOLVED (MG/L)	PH (UNITS)	CARBON DIOXIDE-DISSOLVED (MG/L AS CO ₂)	ALKALINITY (MG/L AS CaCO ₃)	BICARBONATE (MG/L AS HCO ₃)	CARBONATE (MG/L AS CO ₃)
APR 18...	13.5	--	365	3	--	580	9.6	8.2	1.9	160	190	0
MAY 07...	12.5	--	239	15	--	580	10.7	8.3	1.4	150	180	0
JUN 12...	22.5	--	273	--	--	580	8.0	7.2	--	--	--	--
JUL 18...	22.5	80010	57	--	2.0	--	8.3	8.4	--	140	--	--
AUG 09...	25.5	80010	280	--	1.0	465	8.1	8.1	--	140	--	--

DATE	NITROGEN-TOTAL (MG/L AS N)	NITROGEN-ORGANIC (MG/L AS N)	NITROGEN-AMMONIA TOTAL (MG/L AS N)	NITROGEN-AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN-NO ₂ +NO ₃ TOTAL (MG/L AS N)	PHOSPHORUS-TOTAL (MG/L AS P)	PHOSPHORUS-DISSOLVED (MG/L AS P)	CARBON-ORGANIC TOTAL (MG/L AS C)	HARDNESS (MG/L AS CaCO ₃)	HARDNESS-NONCARBONATE (MG/L AS CaCO ₃)	CALCIUM-DISSOLVED (MG/L AS Ca)	MAGNESIUM-DISSOLVED (MG/L AS Mg)
APR 18...	1.8	.47	.45	.92	.85	.10	.02	--	240	86	64	20
MAY 07...	1.3	.30	.33	.63	.67	.06	.01	4.5	260	110	66	23
JUN 12...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	1.8	.52	.58	1.1	.68	.06	.02	--	220	76	57	18
AUG 09...	1.7	.61	.28	.89	.79	.09	.04	3.3	220	78	56	19

DATE	SODIUM-DISSOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO	SODIUM PERCENT	POTASSIUM-DISSOLVED (MG/L AS K)	CHLORIDE-DISSOLVED (MG/L AS Cl)	SULFATE-DISSOLVED (MG/L AS SO ₄)	FLUORIDE-DISSOLVED (MG/L AS F)	SILICA-DISSOLVED (MG/L AS SiO ₂)	ARSENIC-DISSOLVED (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM-DISSOLVED (UG/L AS Ba)
APR 18...	19	.5	14	5.7	38	70	.7	5.5	--	--	--	--
MAY 07...	20	.5	14	3.0	35	65	.4	5.1	1	0	1	0
JUN 12...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	20	.6	16	5.1	44	61	.8	5.3	--	--	--	--
AUG 09...	19	.6	16	4.2	37	54	.6	5.6	1	1	2	0

04095000 LITTLE CALUMET RIVER NEAR McCOOL, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	BARIUM, SUS-PENDED RECOVERABLE (UG/L AS BA)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CADMIUM, SUS-PENDED RECOVERABLE (UG/L AS CD)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	CHROMIUM, SUS-PENDED RECOVERABLE (UG/L AS CR)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, SUS-PENDED RECOVERABLE (UG/L AS CO)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
APR 18...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	0	0	0	0	0	0	--	--	0	0	0	2
JUN 12...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	100	100	0	0	0	80	20	100	3	0	3	1

DATE	COPPER, SUS-PENDED RECOVERABLE (UG/L AS CU)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, SUS-PENDED RECOVERABLE (UG/L AS FE)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, SUS-PENDED RECOVERABLE (UG/L AS PB)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, SUS-PENDED RECOVERABLE (UG/L AS MN)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	SILVER, DIS-SOLVED (UG/L AS AG)
APR 18...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	4	6	--	--	20	1	25	26	10	80	70	0
JUN 12...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	4	5	720	760	40	3	9	12	40	110	70	0

DATE	SILVER, SUS-PENDED RECOVERABLE (UG/L AS AG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, SUS-PENDED RECOVERABLE (UG/L AS ZN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SELENIUM, SUS-PENDED RECOVERABLE (UG/L AS SE)	SELENIUM, TOTAL RECOVERABLE (UG/L AS SE)	COLIFORM, TOTAL IMMEDIATE (COLS./100 ML)	COLIFORM, FECA, UM-MF (COLS./100 ML)	STREPTOCOCCI, FECAL KF AGAR (COLS./100 ML)	PHYTOPLANKTON, TOTAL (CELLS/PER ML)
APR 18...	--	--	--	--	--	--	--	--	34500	800	214	--
MAY 07...	0	0	0	40	40	0	0	0	11100	11770	129	1400
JUN 12...	--	--	--	--	--	--	--	--	144500	16800	1660	1000
JUL 18...	--	--	--	--	--	--	--	--	21000	1200	119	1400
AUG 09...	--	--	10	20	30	1	0	1	10000	286	229	1200

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, TOTAL (MG/L AS N03)	MERCURY, DIS-SOLVED (UG/L AS HG)	MERCURY, SUS-PENDED RECOVERABLE (UG/L AS HG)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	POTASSIUM 40 TOTAL (PCI/L)	SEDIMENT, SUS-PENDED (MG/L)	SEDIMENT, DISCHARGE, SUS-PENDED (T/DAY)
APR 18...	345	317	340	.47	7.8	--	--	--	--	5	4.9
MAY 07...	330	306	213	.45	5.8	<.5	.0	<.5	--	16	10
JUN 12...	--	--	--	--	--	--	--	--	--	63	46
JUL 18...	301	295	46.3	.41	7.9	--	--	--	3.8	13	2.0
AUG 09...	330	280	249	.45	7.4	<.5	.0	<.5	--	10	7.6

04095300 TRAIL BRIDGE 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 04010001, 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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 584.02 ft (178.009 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, Jan. 29 to Mar. 11, which are fair.

AVERAGE DISCHARGE.--9 years, 68.1 ft³/s (1.928 m³/s), 17.09 in/yr (434 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)	
Dec. 1	1600	252	7.14	4.76	1.451	May 14	1800	521	14.75	6.97	2.124
Mar. 16	2300	217	6.15	4.42	1.347	July 20	2400	284	8.04	5.05	1.540
Mar. 21	1300	*813	23.02	*8.93	2.722	July 23	0800	499	14.13	6.81	2.076
Apr. 6	2200	539	15.26	7.10	2.164						

Minimum daily discharge, 29 ft³/s (0.82 m³/s) July 18.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	60	203	54	57	44	99	59	45	45	43	36
2	71	77	163	52	57	44	102	56	43	93	43	34
3	53	60	99	50	57	44	124	55	42	76	43	33
4	45	53	76	48	57	45	164	57	42	51	41	33
5	43	50	67	49	57	47	179	72	41	44	40	32
6	41	50	63	53	57	48	347	66	40	41	40	32
7	41	52	64	60	57	48	317	61	48	38	40	31
8	69	50	90	94	56	49	156	63	71	35	40	31
9	55	51	82	80	56	49	115	60	50	35	42	30
10	48	68	114	72	56	51	109	57	44	35	41	30
11	51	54	110	61	55	53	165	69	41	32	40	31
12	49	53	79	56	55	56	111	109	67	32	41	31
13	43	58	86	53	54	84	89	276	49	40	40	37
14	41	67	137	52	54	137	79	402	43	36	40	56
15	41	80	143	52	54	163	73	253	43	34	38	52
16	43	74	134	53	54	183	69	146	44	32	57	38
17	45	64	143	53	53	202	67	111	50	30	41	42
18	45	61	118	53	48	182	92	92	47	29	40	79
19	57	53	88	53	49	186	127	81	57	30	38	45
20	48	56	126	52	52	292	105	71	48	41	38	40
21	44	55	126	52	49	711	103	65	46	203	36	40
22	47	52	103	51	46	399	87	61	42	165	36	39
23	45	51	91	46	43	285	81	65	40	370	36	36
24	45	50	88	48	43	207	86	67	39	156	42	35
25	47	51	104	52	43	149	82	61	40	101	40	34
26	49	51	96	54	44	143	73	57	48	81	38	33
27	46	49	80	55	44	152	66	53	44	102	43	32
28	46	51	72	55	44	145	63	50	41	64	73	32
29	44	49	67	56	---	133	63	48	38	49	43	32
30	43	53	65	56	---	110	62	47	37	47	40	33
31	45	---	59	57	---	103	---	46	---	43	38	---
TOTAL	1525	1703	3136	1732	1451	4544	3455	2836	1420	2210	1291	1119
MEAN	49.2	56.8	101	55.9	51.8	147	115	91.5	47.3	71.3	41.6	37.3
MAX	95	80	203	94	57	711	347	402	97	370	73	79
MIN	41	49	59	46	43	44	62	46	37	29	36	30
CFSM	.91	1.05	1.87	1.03	.96	2.72	2.13	1.69	.87	1.32	.77	.69
IN.	1.05	1.17	2.16	1.19	1.00	3.12	2.38	1.95	.98	1.52	.89	.77

CAL YR 1977 TOTAL 20847 MEAN 57.1 MAX 268 MIN 20 CFSM 1.06 IN 14.33
WTR YR 1978 TOTAL 26422 MEAN 72.4 MAX 711 MIN 29 CFSM 1.34 IN 18.17

STREAMS TRIBUTARY TO LAKE MICHIGAN

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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft (190.500 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--9 years, 24.5 ft³/s (0.693 m³/s), 19.34 in/yr (491 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 21	0800	*186	5.27	*5.82	1.77	July 23	1200	151	4.28	5.19	1.58
Apr. 6	2100	160	4.53	5.26	1.60	Aug. 28	2400	81	2.30	3.48	1.06
May 14	1600	83	2.35	3.54	1.08						

Minimum daily discharge, 10 ft³/s (0.28 m³/s) July 16, Aug. 15, 21-23.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	20	54	21	22	20	51	19	15	15	15	15
2	23	23	52	21	22	21	42	18	14	32	15	14
3	23	21	37	20	22	21	50	18	14	37	15	14
4	21	20	30	20	22	21	60	18	14	22	14	13
5	19	18	28	21	22	21	69	22	14	18	13	13
6	18	18	28	23	22	20	108	22	15	15	13	12
7	17	18	28	25	22	20	101	20	15	14	12	12
8	22	18	28	36	22	20	55	21	25	13	12	12
9	22	18	28	30	22	21	42	20	19	13	14	12
10	20	20	28	25	22	21	37	19	16	13	18	12
11	20	18	29	24	22	22	48	22	15	12	19	11
12	19	18	32	23	23	24	38	33	18	12	16	14
13	19	19	36	23	24	27	31	64	18	16	12	17
14	17	20	43	23	24	46	29	75	16	14	11	25
15	16	22	44	23	24	54	28	60	15	13	10	29
16	20	21	42	23	23	57	25	41	15	10	16	17
17	20	20	52	24	23	58	24	34	16	11	14	17
18	20	19	48	25	22	52	30	29	24	11	12	28
19	20	17	37	24	22	54	39	25	20	11	11	21
20	19	18	48	23	22	80	33	24	16	11	11	17
21	18	18	52	23	22	170	32	22	16	98	10	17
22	19	16	41	22	22	125	29	21	14	86	10	16
23	18	16	36	21	23	110	27	21	13	118	10	15
24	18	16	34	21	23	89	29	22	13	49	11	13
25	18	17	33	20	21	58	27	19	13	29	11	13
26	18	19	32	22	21	56	25	18	17	25	11	12
27	18	19	35	22	22	59	23	17	16	26	14	12
28	17	19	47	23	20	60	21	16	15	19	60	12
29	16	20	38	23	---	63	20	16	13	17	67	12
30	16	19	25	23	---	52	20	16	13	16	28	12
31	17	---	23	22	---	50	---	16	---	16	18	---
TOTAL	591	565	1148	719	623	1572	1193	808	477	812	523	459
MEAN	19.1	18.8	37.0	23.2	22.3	50.7	39.8	26.1	15.9	26.2	16.9	15.3
MAX	23	23	54	36	24	170	108	75	25	118	67	29
MIN	16	16	23	20	20	20	20	16	13	10	10	11
CFSM	1.11	1.09	2.15	1.35	1.30	2.95	2.31	1.52	.92	1.52	.98	.89
IN.	1.28	1.22	2.48	1.55	1.35	3.40	2.58	1.75	1.03	1.76	1.13	.99

CAL YR 1977 TOTAL 8102.0 MEAN 22.2 MAX 94 MIN 9.0 CFSM 1.29 IN 17.52
WTR YR 1978 TOTAL 9490.0 MEAN 26.0 MAX 170 MIN 10 CFSM 1.51 IN 20.52

STREAMS TRIBUTARY TO LAKE MICHIGAN

04096100 GALENA RIVER NEAR LAPORTE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
OCT 26...	1725	17	13	.62	13.5
NOV 30...	1405	18	11	.53	6.0
MAR 22...	1240	114	47	14	3.5
JUN 13...	1530	16	22	.96	16.0
JUL 25...	1605	29	74	5.9	--
AUG 30...	1030	25	40	2.7	--

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 (3m) downstream from dam for Lime Lake, 30 ft (9m) 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Occasional regulation by control structure for Lime Lake.

AVERAGE DISCHARGE.--9 years, 6.78 ft³/s (0.192 m³/s), 5.26 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, 20 ft³/s (0.57 m³/s) Apr. 12, gage height, 4.65 ft (1.417 m); minimum daily, 0.12 ft³/s (0.003 m³/s) Sept. 8.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	5.0	4.2	11	8.6	9.0	12	16	11	2.0	.21	.23
2	2.7	4.9	4.2	11	8.5	8.9	12	15	11	2.8	.41	.23
3	1.9	4.9	4.2	12	8.5	9.1	13	15	10	3.2	.31	.19
4	1.8	4.9	4.3	12	8.4	9.1	14	14	9.9	3.1	.21	.16
5	1.6	4.8	4.6	11	8.3	8.9	15	14	9.7	3.1	.16	.14
6	1.5	4.7	4.9	11	8.2	8.9	16	15	7.4	3.1	.13	.16
7	1.4	4.7	4.9	11	8.1	8.8	17	15	2.4	3.2	.41	.14
8	2.0	4.7	5.1	11	8.2	8.9	17	15	.52	2.8	.88	.12
9	1.8	4.8	5.4	11	8.3	8.8	18	15	.49	2.6	.79	.14
10	1.6	4.8	5.5	11	8.5	8.8	18	15	.59	2.4	.63	.19
11	1.6	4.4	5.5	11	8.8	8.8	19	15	.73	2.2	.57	.19
12	1.3	4.1	5.6	11	9.4	9.0	19	16	.64	2.0	.50	.34
13	1.3	4.0	5.8	11	9.8	9.0	18	17	.52	1.8	.48	.49
14	1.3	3.9	6.5	11	9.9	8.8	18	17	.52	1.7	.52	.64
15	1.2	3.9	6.8	11	9.7	7.5	18	18	.68	1.5	.55	.68
16	1.2	3.9	7.0	10	9.7	7.4	18	17	.73	1.3	.49	.60
17	1.2	3.7	7.2	10	9.7	7.3	17	17	.95	1.2	.40	.68
18	1.2	3.6	8.1	9.8	9.6	7.4	18	17	.91	1.4	.40	.91
19	1.4	3.5	8.3	9.7	9.5	7.3	18	16	.95	1.2	.37	1.2
20	1.5	4.0	8.8	9.9	9.3	7.2	19	16	1.1	1.1	.31	1.2
21	1.8	3.9	9.1	9.9	9.3	8.7	19	16	1.2	1.1	.28	1.1
22	1.9	3.6	9.6	9.7	9.3	9.0	19	15	1.2	1.2	.28	.95
23	2.1	3.6	9.4	9.5	9.3	9.3	19	15	.52	1.2	.28	.86
24	2.4	3.5	9.7	9.5	9.1	9.6	18	15	.20	1.0	.23	.80
25	2.8	3.6	9.8	9.7	9.1	10	18	15	.26	.86	.23	.69
26	4.1	3.5	9.8	12	9.3	11	17	15	1.0	.78	.25	.67
27	5.0	3.4	9.8	10	9.1	11	17	14	1.6	.54	.31	.58
28	4.8	3.4	9.8	9.5	9.1	11	17	13	1.7	.42	.40	.51
29	4.8	3.3	9.9	9.1	---	11	17	12	1.6	.32	.31	.51
30	4.7	3.4	10	8.9	---	11	16	11	1.6	.20	.28	.46
31	4.8	---	11	8.6	---	12	---	11	---	.13	.25	---
TOTAL	70.5	122.4	224.8	322.8	252.6	282.5	511	467	81.61	51.45	11.83	15.76
MEAN	2.27	4.08	7.25	10.4	9.02	9.11	17.0	15.1	2.72	1.66	.38	.53
MAX	5.0	5.0	11	12	9.9	12	19	18	11	3.2	.88	1.2
MIN	1.2	3.3	4.2	8.6	8.1	7.2	12	11	.20	.13	.13	.12
CFSM	.13	.23	.41	.59	.52	.52	.97	.86	.16	.10	.02	.03
IN.	.15	.26	.48	.69	.54	.60	1.09	.99	.17	.11	.03	.03
CAL YR 1977	TOTAL	1745.25	MEAN	4.78	MAX	23	MIN	.45	CFSM	.27	IN	3.71
WTR YR 1978	TOTAL	2414.25	MEAN	6.61	MAX	19	MIN	.12	CFSM	.38	IN	5.13

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099000 ST. JOSEPH RIVER AT MOTTVILLE, MI

LOCATION.--Lat 41°48'03", long 85°45'22", in SW₄ 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) Michigan Power Co. datum. Prior to Oct. 1, 1951, at site 0.4 mi (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. National Weather Service gage-height telemark at station.

AVERAGE DISCHARGE.--55 years, 1,537 ft³/s (43.53 m³/s), 11.19 in/yr (284 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) Apr. 27, 1950, gage height, 10.76 ft (3.280 m), present datum; minimum daily, 39 ft³/s (1.10 m³/s) Oct. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,380 ft³/s (152 m³/s) Mar. 29, gage height, 6.95 ft (2.118 m); minimum, 205 ft³/s (5.81 m³/s) July 19, gage height, 1.35 ft (0.411 m); minimum daily, 536 ft³/s (15.2 m³/s) Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2000	953	1300	1700	1400	1460	5090	2530	1640	5200	1060	989
2	1720	1050	1570	1800	1400	1470	5020	2390	1540	5130	1040	732
3	1520	1030	1390	1750	1400	1430	4840	2450	1390	4840	975	797
4	1410	1110	1660	1700	1400	1440	4760	2390	1430	4470	1080	815
5	1470	890	1970	1750	1400	1450	4840	2120	1340	4060	814	947
6	1340	897	1780	1750	1450	1370	4920	2010	928	3480	863	840
7	1320	1100	1630	1800	1450	1360	5110	2190	1020	3510	1110	761
8	670	1050	1320	1750	1450	1410	5180	2180	1370	3090	736	583
9	985	1080	1400	1400	1450	1370	5270	2160	1510	2910	803	579
10	1230	1090	1180	1300	1450	1320	5200	2030	1210	2750	849	595
11	1510	1100	987	1400	1450	1400	5130	2040	1120	2810	920	775
12	1320	1100	1250	1600	1450	1370	5020	2080	1260	1930	786	616
13	1340	916	1490	1800	1450	1430	4750	2180	1230	2090	771	1120
14	1440	1090	1750	1750	1460	1660	4640	2340	1150	2040	983	1360
15	1320	1320	1730	1600	1470	1720	4550	2690	1130	1590	928	1150
16	536	1230	1740	1500	1480	1580	4210	2700	1310	1730	462	1170
17	1280	1260	1780	1550	1490	1830	3910	2830	1180	1780	987	1240
18	1190	1220	2040	1550	1500	1900	3670	2740	1120	1340	1090	1640
19	1050	1100	2100	1500	1500	1950	3740	2610	1100	1180	717	2360
20	1030	1370	2330	1500	1500	2300	3520	2530	1050	1440	945	1850
21	1470	1070	2640	1550	1500	2480	3410	2510	1100	1090	1140	1730
22	936	1530	2650	1550	1500	3150	3360	2440	1120	1170	737	1760
23	630	1510	2720	1550	1450	3600	3320	2210	1120	1500	654	1680
24	1190	1260	2680	1450	1450	4340	3690	2150	760	1570	633	1580
25	1170	1100	2590	1300	1450	4900	3000	2160	794	1470	647	1550
26	1170	1090	2160	1300	1400	5010	2970	2060	1430	1400	625	1130
27	1120	1280	1630	1300	1450	5050	2970	1790	1680	1480	630	1340
28	1050	1500	1960	1300	1490	5080	2950	1780	3380	1410	770	922
29	862	1260	2190	1200	---	5290	2850	1650	4690	1320	1100	1060
30	882	1140	1700	1000	---	5250	2790	1810	5040	1140	1070	1200
31	1020	---	1700	1350	---	5230	---	1600	---	1040	1060	---
TOTAL	37181	34645	56457	47300	40690	40600	124280	69350	46162	71760	27485	34911
MEAN	1199	1157	1837	1526	1453	2600	4143	2237	1539	2315	887	1164
MAX	2000	1530	2720	1800	1500	5290	5270	2830	5040	5200	1140	2360
MIN	536	890	487	1000	1400	1320	2790	1600	760	1040	625	579
CFSM	.64	.62	.98	.82	.74	1.39	2.22	1.20	.83	1.24	.48	.62
IN.	.74	.69	1.14	.94	.81	1.61	2.48	1.38	.92	1.43	.55	.70
CAL YR 1977 TOTAL	471190		MEAN	1221	MAX	3330	MIN	450	CFSM	.69	IN	9.39
WTR YR 1978 TOTAL	671372		MEAN	1439	MAX	5290	MIN	536	CFSM	.99	IN	13.38

04099510 PIGEON CREEK NEAR ANGOLA, IN

LOCATION.--Lat 41°38'04", long 85°06'35", in NW¼SE¼ 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.

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929. 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.--33 years, 75.4 ft³/s (2.135 m³/s), 9.66 in/yr (245 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, 700 ft³/s (19.8 m³/s) Mar. 27, gage height, 12.50 ft (3.810 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	29	45	126	43	41	604	153	75	83	42	27
2	56	28	50	117	42	41	586	145	73	88	41	27
3	54	29	60	108	42	41	567	136	71	103	39	26
4	52	29	70	100	42	41	549	129	68	124	38	26
5	50	29	78	95	41	41	548	124	67	140	36	25
6	48	30	81	90	41	41	565	120	65	144	36	25
7	45	30	80	85	41	42	589	117	65	136	36	24
8	45	30	78	82	41	42	599	113	64	124	37	24
9	44	31	78	74	40	42	593	110	63	113	39	23
10	44	31	75	62	40	42	575	108	62	102	39	23
11	43	31	73	64	40	42	548	106	61	92	39	23
12	43	31	73	65	41	43	520	105	60	84	38	23
13	42	31	73	64	42	44	489	109	60	79	37	25
14	41	32	77	61	42	46	457	114	59	75	35	26
15	40	32	89	59	42	56	422	122	59	70	35	27
16	38	32	107	57	42	76	385	130	58	66	34	28
17	37	33	126	55	42	94	347	136	57	63	32	29
18	36	33	156	54	42	119	314	137	56	60	32	30
19	35	34	199	53	42	141	292	133	56	57	31	30
20	34	35	248	52	42	160	276	129	55	55	30	29
21	33	36	291	51	42	219	267	123	55	53	29	28
22	32	37	296	50	42	355	256	117	54	53	29	26
23	31	38	294	50	41	475	245	111	53	54	28	25
24	29	39	280	50	41	547	234	106	53	55	28	22
25	28	40	259	50	41	603	222	102	52	54	27	19
26	28	40	235	49	41	651	208	97	55	53	27	18
27	28	41	208	48	41	679	195	92	61	51	27	17
28	28	41	186	47	41	679	183	87	71	49	29	16
29	28	41	168	46	---	665	173	83	79	47	29	15
30	28	42	152	44	---	664	164	81	82	45	29	14
31	28	---	136	44	---	622	---	77	---	43	29	---
TOTAL	1206	1015	4411	2052	1160	7394	11974	3552	1869	2415	1037	720
MEAN	38.9	33.8	142	66.2	41.4	239	399	115	62.3	77.9	33.5	24.0
MAX	58	42	296	126	43	679	604	153	82	144	42	30
MIN	28	28	45	44	40	41	164	77	52	43	27	14
CFSM	.37	.32	1.34	.63	.39	2.26	3.76	1.09	.59	.74	.32	.23
IN.	.42	.36	1.55	.72	.41	2.59	4.20	1.25	.66	.85	.36	.25
CAL YR 1977 TOTAL	27109			74.3		330		.70		9.51		
WTR YR 1978 TOTAL	38805			106		679		1.00		13.62		

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099510 PIGEON CREEK NEAR ANGOLA, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	TEMPER-ATURE (DEG C)
MAR						OCT					
14...	1420	39	14	1.4	--	25...	1500	28	15	1.1	--
23...	1400	472	22	28	2.0	NOV					
JUN						01...	1230	27	7	.52	--
07...	1230	62	98	16	22.0	08...	1200	28	22	1.6	--
13...	1230	57	111	17	21.0	15...	1200	29	12	.94	--
20...	1230	54	74	10	25.0	22...	1230	37	21	2.1	--
27...	1230	59	68	10	25.0	28...	1500	40	19	2.0	--
JUL						DEC					
05...	1230	140	50	18	25.0	06...	1230	105	6	1.7	3.0
11...	1030	92	16	4.0	--	13...	1230	63	28	4.7	3.0
11...	1630	92	18	4.5	23.0	20...	1230	251	15	10	3.0
18...	1230	30	102	8.2	23.0	27...	1230	198	12	6.4	3.0
25...	1230	32	92	7.9	26.0	JAN					
AUG						03...	1645	106	13	3.7	--
01...	1230	20	33	1.7	25.0	04...	1300	99	63	16	3.0
06...	1230	21	16	.91	25.0	10...	1230	80	57	12	3.0
15...	1230	33	70	6.3	27.0	17...	1230	69	26	4.8	2.5
22...	1230	23	72	4.5	25.0	24...	1230	64	6	1.0	3.0
29...	1230	15	50	2.1	24.0	FFR					
SEP						07...	1300	57	11	1.7	2.0
05...	1230	21	37	2.1	24.0						
18...	1230	24	22	1.4	23.0						

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099610 PRETTY LAKE INLET NEAR STROH, IN

LOCATION.--41°34'49", long 85°14'59", in SW¼NW¼ 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--15 years, 0.49 ft³/s (0.014 m³/s), 3.37 in/yr (86 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, 20 ft³/s (0.56 m³/s) Mar. 21, gage height, 7.97 ft (2.429 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) Jan. 26, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
1	.57	.12	.70	.25	.15	.05	2.4	.86	.41	.67	.23	.10
2	.41	.11	.64	.23	.15	.05	1.9	.77	.46	1.1	.23	.09
3	.31	.11	.60	.20	.15	.05	2.1	.56	.38	1.3	.20	.08
4	.25	.10	.56	.18	.15	.05	3.1	.56	.33	.91	.18	.08
5	.20	.09	.52	.15	.15	.05	2.4	.57	.32	.57	.18	.09
6	.17	.08	.49	.16	.13	.05	4.0	.60	.29	.42	.18	.08
7	.16	.09	.46	.16	.11	.05	3.2	.56	.57	.37	.28	.08
8	.45	.09	.43	.16	.10	.05	2.0	.62	.47	.33	.24	.08
9	.36	.12	.40	.16	.09	.05	1.7	.69	.36	.29	.16	.07
10	.29	.17	.37	.16	.08	.05	1.7	.65	.29	.48	.15	.07
11	.24	.14	.35	.15	.07	.05	1.8	.60	.27	.33	.15	.08
12	.21	.15	.39	.14	.07	.15	1.6	.60	.29	.28	.15	.16
13	.18	.12	.43	.13	.07	.38	1.6	.60	.29	.29	.12	.38
14	.15	.12	.48	.13	.07	.86	1.4	.80	.28	.29	.12	.20
15	.18	.15	.54	.12	.06	.96	1.2	1.1	.28	.26	.12	.15
16	.31	.16	.62	.12	.06	.86	1.1	1.0	.28	.24	.11	.12
17	.24	.18	.75	.11	.06	.86	1.1	.94	.28	.24	.10	.15
18	.22	.16	.90	.11	.06	.81	1.4	.86	.31	.23	.16	.15
19	.21	.12	.81	.10	.06	.90	1.3	.80	.28	.23	.13	.13
20	.18	.24	.74	.10	.06	1.7	1.3	.73	.29	.21	.13	.13
21	.14	.30	.69	.10	.06	1.4	1.3	.67	.29	.23	.11	.12
22	.12	.24	.63	.09	.06	7.7	1.1	.62	.28	.36	.11	.12
23	.12	.21	.58	.09	.06	6.6	1.1	.57	.24	.33	.10	.12
24	.10	.18	.53	.09	.06	5.0	1.2	.45	.24	.33	.11	.12
25	.11	.15	.49	.04	.06	3.1	1.1	.43	.25	.28	.11	.11
26	.15	.13	.45	.01	.05	2.9	1.1	.42	1.1	.31	.11	.11
27	.21	.11	.42	.02	.05	2.7	1.1	.40	.71	.29	.20	.10
28	.20	.12	.38	.04	.05	3.7	1.0	.39	.54	.29	.16	.10
29	.15	.29	.34	.06	---	3.3	.97	.39	.40	.28	.12	.10
30	.16	.45	.31	.09	---	2.4	.89	.38	.33	.24	.12	.13
31	.17	---	.28	.15	---	2.6	---	.38	---	.24	.11	---
TOTAL	6.92	4.80	16.28	3.80	2.35	62.03	49.16	19.57	11.11	12.22	4.68	3.60
MEAN	.22	.16	.53	.12	.084	2.00	1.64	.63	.37	.39	.15	.12
MAX	.57	.45	.90	.25	.15	14	4.0	1.1	1.1	1.3	.28	.38
MIN	.10	.08	.28	.01	.05	.05	.89	.38	.24	.21	.10	.07
CFSM	.11	.08	.27	.06	.04	1.02	.84	.32	.19	.20	.08	.06
IN.	.13	.09	.31	.07	.04	1.18	.93	.37	.21	.23	.09	.07
CAL YR 1977	TOTAL	144.53	MFAN .40	MAX 3.0	MIN .08	CFSM .20	IN 2.74					
WTR YR 1978	TOTAL	196.52	MEAN .54	MAX 14	MIN .01	CFSM .28	IN 3.73					

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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--10 years, 337 ft³/s (9.544 m³/s), 12.68 in/yr (322 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, 1,550 ft³/s (43.9 m³/s) Apr. 8, gage height, 6.59 ft (2.009 m); minimum daily, 128 ft³/s (3.62 m³/s) Aug. 22.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	197	280	540	245	250	1400	523	328	295	171	148
2	323	212	363	520	250	245	1380	499	341	381	157	148
3	297	207	355	500	255	240	1360	480	345	447	149	149
4	276	202	329	480	260	240	1370	465	324	435	151	157
5	265	196	322	460	265	235	1430	465	312	399	172	169
6	250	193	305	445	265	230	1490	461	282	381	168	192
7	296	193	270	400	265	230	1500	457	295	377	162	290
8	250	194	260	365	270	225	1530	449	329	373	161	258
9	268	191	280	330	270	225	1470	443	311	359	154	196
10	255	184	300	300	270	220	1400	433	294	354	148	185
11	245	192	320	320	270	220	1370	426	282	327	148	184
12	237	197	340	330	270	218	1340	435	280	304	148	184
13	230	192	360	320	275	226	1290	473	280	296	149	210
14	225	187	380	300	275	265	1220	509	266	292	149	200
15	220	193	400	285	270	323	1150	528	259	277	149	196
16	230	199	425	275	270	346	1100	532	253	262	149	187
17	230	203	458	265	270	366	1040	513	252	245	146	180
18	222	198	487	260	270	385	987	498	247	231	144	175
19	222	194	521	250	270	402	952	485	241	226	141	168
20	217	200	547	245	270	449	911	479	230	221	131	168
21	215	219	566	245	265	729	861	479	225	222	129	166
22	210	217	577	240	265	1150	809	464	217	228	128	158
23	205	212	614	235	260	1300	772	446	209	241	133	151
24	202	212	629	230	260	1350	745	435	205	232	146	148
25	202	215	644	215	255	1370	715	423	202	223	205	144
26	196	216	626	200	255	1360	677	407	241	212	178	140
27	195	208	637	170	250	1370	643	391	328	199	158	136
28	192	212	630	190	250	1400	611	375	288	187	151	133
29	189	209	610	210	---	1420	581	361	266	184	149	130
30	187	210	590	220	---	1440	553	349	263	177	148	130
31	188	---	560	235	---	1420	---	338	---	172	147	---
TOTAL	7247	6054	13985	9580	7385	19849	32657	14021	8195	8759	4719	5180
MEAN	234	202	451	309	264	640	1089	452	273	283	152	173
MAX	323	219	644	540	275	1440	1530	532	345	447	205	290
MIN	187	184	260	170	245	218	553	338	202	172	128	130
CFSM	.65	.56	1.25	.86	.73	1.77	3.02	1.25	.76	.78	.42	.48
IN.	.75	.62	1.44	.99	.76	2.05	3.37	1.44	.84	.90	.49	.53
CAL YR 1977	TOTAL	109798	MEAN	301	MAX	926	MIN	102	CFSM	.83	IN	11.31
WTR YR 1978	TOTAL	137631	MEAN	377	MAX	1530	MIN	128	CFSM	1.04	IN	14.18

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.8 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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated at times by dam at Waldron Lake.

AVERAGE DISCHARGE.--7 years, 129 ft³/s (3.653 m³/s), 12.34 in/yr (313 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 682 ft³/s (19.3 m³/s) Apr. 7, 1978, gage height, 7.41 ft (2.258 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Nov. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 682 ft³/s (19.3 m³/s) Apr. 7, gage height, 7.41 ft (2.258 m); minimum daily, 3.0 ft³/s (0.08 m³/s) Aug. 24.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	62	170	199	98	80	643	235	126	47	24	18
2	105	66	191	192	107	77	635	220	117	62	23	16
3	101	66	199	189	112	75	627	205	109	77	23	14
4	92	66	195	176	119	70	632	197	100	76	29	13
5	84	64	192	155	129	66	643	192	92	66	25	12
6	79	62	180	160	130	62	656	188	85	54	22	11
7	75	62	160	153	129	60	677	184	91	48	23	10
8	86	61	138	146	134	60	675	179	97	42	25	9.2
9	91	60	138	132	138	60	662	171	94	40	25	9.3
10	92	58	148	100	137	61	645	166	89	37	25	9.6
11	86	59	153	110	140	65	635	163	81	33	24	8.5
12	77	65	158	120	138	73	614	163	78	30	24	9.6
13	75	63	169	119	134	80	588	180	79	31	25	16
14	73	64	170	116	134	102	561	199	75	32	24	22
15	71	68	193	113	126	135	532	224	71	30	22	26
16	68	90	223	105	120	171	502	241	66	28	21	26
17	68	119	241	102	113	198	476	249	63	25	21	30
18	68	137	253	97	113	215	457	248	63	23	20	38
19	72	146	262	96	115	226	436	247	62	21	17	42
20	71	155	267	94	117	257	416	239	59	20	4.5	40
21	70	156	266	94	118	454	401	236	52	21	7.0	37
22	70	156	257	94	119	562	382	231	48	51	7.6	33
23	70	152	260	93	119	614	367	223	45	62	6.8	38
24	66	148	265	91	119	623	351	214	42	61	3.0	64
25	65	149	262	90	101	623	335	203	41	54	4.8	88
26	64	149	262	159	88	629	318	192	45	47	8.1	97
27	62	149	255	151	85	642	300	179	53	41	11	106
28	60	145	252	118	82	650	282	167	53	37	17	111
29	57	142	242	102	---	661	266	156	49	31	19	110
30	55	143	216	93	---	661	251	147	45	29	19	107
31	55	---	206	93	---	654	---	138	---	26	19	---
TOTAL	2327	3082	6543	3852	3314	8966	14965	6176	2170	1282	568.8	1171.2
MEAN	75.1	103	211	124	118	289	499	199	72.3	41.4	18.3	39.0
MAX	105	156	267	199	140	661	677	249	126	77	29	111
MIN	55	58	138	90	82	60	251	138	41	20	3.0	8.5
CFSM	.53	.73	1.49	.87	.83	2.04	3.51	1.40	.51	.29	.13	.28
IN.	.61	.81	1.71	1.01	.87	2.35	3.92	1.62	.57	.34	.15	.31
CAL YR 1977 TOTAL	41822.0	MFXN 115	MAX 366	MIN 10	CFSM .81	IN 10.96						
WTR YR 1978 TOTAL	54417.0	MFXN 149	MAX 677	MIN 3.0	CFSM 1.05	IN 14.26						

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEFD (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEFD (T/DAY)	TEMPER- ATURE (DEG C)
MAR					
23...	1745	648	12	21	--
30...	1900	661	18	32	2.0
MAY					
19...	1120	247	4	2.6	16.0
JUN					
21...	1545	51	16	2.2	27.0

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100252 FORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE&NE¼ 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) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records good. Occasional regulation at Miller Lake outlet.

AVERAGE DISCHARGE.--9 years, 16.4 ft³/s (0.464 m³/s), 11.62 in/yr (295 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 238 ft³/s (6.74 m³/s) Mar. 23, 1978, gage height, 5.67 ft (1.728 m); minimum daily, 0.13 ft³/s (0.004 m³/s) Sept. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 238 ft³/s (6.74 m³/s) Mar. 23, gage height, 5.67 ft (1.728 m); minimum daily, 0.16 ft³/s (0.004 m³/s) Sept. 8-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	5.9	30	17	6.6	5.4	86	15	12	6.1	1.2	.25
2	25	5.9	53	16	6.5	5.1	82	13	12	8.3	1.2	.21
3	25	5.9	73	13	6.4	5.0	81	13	10	15	1.2	.20
4	24	5.9	72	12	6.3	5.0	90	12	10	19	.88	.21
5	25	5.9	64	11	6.2	5.0	113	13	9.8	22	.79	.20
6	27	5.9	54	11	6.3	4.7	129	12	9.4	22	.82	.17
7	23	5.9	43	10	6.4	4.7	144	13	11	20	1.1	.17
8	23	5.9	35	11	6.5	4.7	132	13	12	17	1.1	.16
9	21	6.1	30	11	6.6	4.7	107	12	12	15	1.1	.16
10	20	6.2	25	11	6.7	4.7	86	12	11	13	.99	.16
11	19	6.2	22	9.8	6.7	4.7	74	12	10	9.4	.85	.18
12	18	6.5	19	9.2	6.7	5.0	66	12	10	7.7	.87	.18
13	16	6.6	19	9.1	6.4	5.6	58	16	10	7.1	.80	.17
14	15	6.7	39	8.9	5.9	9.0	50	26	9.2	6.6	.77	.18
15	14	7.4	71	8.6	5.7	25	43	50	8.4	5.7	.62	.19
16	13	9.2	97	8.3	5.9	51	37	70	8.0	4.7	.71	.20
17	12	12	104	8.3	5.9	77	33	72	7.5	3.9	.68	.20
18	7.1	14	104	8.0	5.9	81	31	64	7.0	3.3	.67	.32
19	6.3	16	102	7.7	5.6	76	31	54	6.1	2.9	.57	.39
20	5.7	19	93	7.7	5.4	79	37	45	5.4	2.8	.50	.40
21	5.7	21	82	7.8	5.4	156	43	37	4.6	2.9	.46	.38
22	5.7	22	71	7.7	5.6	222	43	32	3.9	3.3	.38	.33
23	5.7	23	60	7.5	5.4	230	41	28	3.5	2.9	.36	.29
24	5.4	22	51	7.4	5.0	206	37	25	3.0	2.6	.31	.29
25	5.6	22	46	7.8	5.1	165	32	23	3.2	2.4	.26	.26
26	5.6	21	41	12	5.2	129	28	21	4.6	2.2	.23	.23
27	5.6	20	35	9.6	5.1	111	24	19	5.5	1.9	.23	.23
28	5.7	18	29	7.7	5.1	104	21	17	5.7	1.7	.25	.20
29	5.7	17	24	7.3	---	107	20	16	5.8	1.5	.23	.20
30	5.7	17	21	6.8	---	104	17	15	5.9	1.4	.24	.19
31	5.7	---	18	6.7	---	93	---	13	---	1.3	.25	---
TOTAL	424.4	366.1	1627	296.9	166.5	2089.3	1816	795	236.5	235.6	20.62	6.98
MEAN	13.7	12.2	52.5	9.58	5.95	67.4	60.5	25.6	7.88	7.60	.67	.23
MAX	27	23	104	17	6.7	230	144	72	12	22	1.2	.40
MIN	5.6	5.9	18	6.7	5.0	4.7	17	12	3.0	1.3	.23	.16
CFSM	.71	.64	2.73	.50	.31	3.51	3.15	1.33	.41	.40	.04	.01
IN.	.82	.71	3.15	.58	.32	4.05	3.52	1.54	.46	.46	.04	.01
CAL YR 1977	TOTAL	7325.51	MEAN	20.1	MAX	112	MIN	.87	CFSM	1.05	IN	14.19
WTR YR 1978	TOTAL	8080.82	MEAN	22.1	MAX	230	MIN	.16	CFSM	1.15	IN	15.66

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100465 TURNKEY CREEK AT SYRACUSE, IN

LOCATION.--Lat 41°25'35", long 85°45'16", in NE¼SF¼ 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow occasionally regulated by dam on Syracuse Lake.

AVERAGE DISCHARGE.--9 years, 34.4 ft³/s (0.974 m³/s), 10.60 in/yr (268 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 151 ft³/s (4.28 m³/s) Apr. 7, 1978, gage height, 5.07 ft (1.545 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Oct. 17, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 151 ft³/s (4.28 m³/s) Apr. 7, gage height, 5.07 ft (1.545 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 24, 30.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	16	29	42	16	40	108	104	27	4.3	7.5	12
2	60	15	32	39	15	41	110	102	26	5.9	7.5	11
3	60	15	29	36	15	42	112	101	26	6.5	7.0	11
4	59	14	27	34	14	43	122	97	25	8.4	7.0	11
5	58	14	26	31	14	44	127	96	25	8.3	6.7	11
6	58	13	33	29	14	45	135	94	24	8.3	6.5	12
7	49	15	48	28	14	46	150	94	26	8.2	9.0	11
8	44	14	47	26	14	47	147	86	25	6.9	8.2	11
9	47	14	47	25	14	48	144	73	23	6.9	11	10
10	53	15	47	23	14	49	142	70	22	7.5	15	2.3
11	52	15	47	22	14	50	143	71	20	7.8	15	2.8
12	51	14	47	21	14	51	144	71	6.9	7.8	15	2.8
13	51	14	47	21	14	53	140	73	5.9	8.9	14	4.6
14	50	16	53	20	14	57	140	73	6.1	7.7	15	3.3
15	49	29	56	20	14	60	139	75	5.3	7.1	15	2.9
16	48	30	56	19	14	64	137	80	4.8	6.7	15	2.1
17	48	30	54	19	14	67	135	82	4.3	7.2	15	2.9
18	48	29	54	19	14	68	135	80	5.2	6.8	15	4.0
19	47	29	54	19	16	67	136	79	5.3	7.0	14	3.1
20	47	29	55	18	23	74	134	79	5.2	7.1	13	2.7
21	46	31	54	18	28	93	133	77	5.6	12	14	2.5
22	38	31	53	18	31	109	130	77	5.0	21	13	2.3
23	25	31	61	18	34	110	127	76	4.0	19	13	2.1
24	25	28	71	19	35	96	127	75	3.4	16	13	1.5
25	20	22	71	19	36	96	126	75	3.2	14	13	2.1
26	13	22	68	23	36	94	122	74	4.3	11	13	2.0
27	13	22	62	34	38	93	119	73	3.9	9.5	14	2.0
28	13	22	58	23	40	98	116	56	4.1	8.5	13	1.9
29	14	23	54	19	---	99	113	39	4.1	7.8	12	1.9
30	14	24	50	17	---	98	107	28	4.4	7.3	12	1.5
31	15	---	46	16	---	106	---	27	---	8.0	12	---
TOTAL	1277	636	1536	735	573	2148	3900	2357	360.0	279.4	373.4	153.3
MEAN	41.2	21.2	49.5	23.7	20.5	69.3	130	76.0	12.0	9.01	12.0	5.11
MAX	62	31	71	42	40	110	150	104	27	21	15	12
MIN	13	13	26	16	14	40	107	27	3.2	4.3	6.5	1.5
CFSM	.94	.48	1.13	.54	.47	1.58	2.97	1.74	.27	.21	.27	.12
IN.	1.08	.54	1.30	.62	.49	1.82	3.31	2.00	.31	.24	.32	.13
CAL YR 1977	TOTAL	11846.8	MEAN	32.5	MAX	102	MIN	3.8	CFSM	.74	IN	10.06
WTR YR 1978	TOTAL	14328.1	MEAN	39.3	MAX	150	MIN	1.5	CFSM	.90	IN	12.17

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE1/4 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) National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--47 years, 503 ft³/s (14.24 m³/s), 11.50 in/yr (292 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 23	0200	*4,410	125	*9.76	2.975
Apr. 7	2400	3,210	90.9	7.83	2.387

Minimum daily discharge, 115 ft³/s (3.26 m³/s) Aug. 26.

WATER QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1963 to September 1977 (partial-record station).

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	265	566	750	260	332	2400	812	449	228	183	146
2	550	272	976	684	270	330	2280	771	435	291	175	142
3	541	291	946	571	280	324	2230	736	405	332	174	138
4	488	278	758	635	290	315	2420	713	381	318	169	133
5	459	272	652	640	304	310	2740	709	359	293	164	129
6	436	269	624	607	320	312	2740	686	338	273	163	124
7	419	284	521	575	330	295	3150	652	345	257	166	125
8	421	254	384	566	350	305	2890	637	366	249	183	123
9	427	247	419	498	350	310	2490	620	349	235	180	122
10	421	245	460	352	350	320	2260	586	328	230	170	120
11	413	243	532	429	350	330	2170	570	312	217	166	118
12	394	251	515	500	336	350	2120	576	305	205	166	119
13	381	249	585	520	345	384	1960	668	300	214	166	162
14	366	255	745	510	340	471	1820	789	284	224	164	129
15	358	273	1090	480	335	689	1700	809	275	214	157	128
16	346	300	1230	460	325	880	1590	844	272	199	155	129
17	335	326	1180	430	325	1020	1490	830	266	195	145	153
18	329	339	1210	410	330	1060	1440	808	263	185	138	200
19	332	342	1220	392	335	1050	1390	796	258	180	138	207
20	331	365	1190	388	340	1180	1330	793	247	171	135	205
21	323	396	1220	388	345	2550	1270	795	239	171	132	198
22	317	405	1130	380	350	4150	1220	767	223	261	132	192
23	311	400	1020	370	345	4310	1170	743	212	334	126	183
24	304	395	990	356	332	3940	1130	731	204	299	125	175
25	298	397	1010	352	332	3440	1070	703	199	278	120	182
26	293	399	950	316	328	3020	1030	665	225	257	115	193
27	279	384	850	199	330	2840	978	624	220	241	135	198
28	270	373	850	276	336	2780	933	587	214	223	130	200
29	260	376	740	241	---	2850	891	545	210	205	137	198
30	258	391	799	268	---	2760	855	503	202	199	145	200
31	261	---	824	256	---	2540	---	459	---	197	130	---
TOTAL	11401	9536	26186	13749	9163	45747	53157	21527	8685	7375	4684	4771
MEAN	368	318	845	444	327	1476	1772	694	290	238	151	159
MAX	550	405	1230	750	350	4310	3150	844	449	334	183	207
MIN	258	243	384	199	260	295	855	459	199	171	115	118
CFSM	.62	.54	1.42	.75	.55	2.49	2.98	1.17	.49	.40	.25	.27
IN.	.71	.60	1.64	.86	.57	2.86	3.33	1.35	.54	.46	.29	.30

CAL YR 1977 TOTAL 176143 MEAN 483 MAX 2490 MIN 140 CFSM .81 IN 11.03
WTR YR 1978 TOTAL 215981 MEAN 592 MAX 4310 MIN 115 CFSM 1.00 IN 13.53

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, 200 ft (61 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. The flow is regulated by Elkhart Hydroelectric Plant.

AVERAGE DISCHARGE.--31 years, 3,075 ft³/s (87.08 m³/s), 12.39 in/yr (315 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, 13,000 ft³/s (368 m³/s) Apr. 7, gage height, 25.13 ft (7.660 m); minimum daily, 1,010 ft³/s (28.6 m³/s) Sept. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND+ WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2870	1730	2580	4490	3110	2360	10500	4840	2910	6480	1650	
2	3680	1870	3590	4550	3010	2460	10100	4430	2860	6780	1670	
3	2620	1850	3360	4570	2930	2350	9910	4550	2650	6650	1550	
4	2190	1940	3370	5200	2870	2320	9920	4340	2640	6270	1660	
5	2760	1640	3700	4760	2870	2280	10700	4290	2720	5710	1370	
6	2520	1820	3470	4090	3030	2340	10900	3810	2090	5020	1420	1310
7	2410	1820	2590	3900	3090	2370	12000	4090	2150	4800	1680	1200
8	1960	1870	2740	3840	2980	2300	11700	4030	2500	4500	1320	1290
9	2010	1820	3240	3050	2900	2320	11000	4000	2740	4030	1400	1010
10	2420	1860	3570	3110	2910	2450	10500	3830	2380	3870	1400	1010
11	2610	1930	2800	3890	2870	2470	10300	3760	2370	3690	1430	1120
12	2400	1830	2950	3890	2870	2550	9940	3820	2280	3140	1360	1150
13	2410	1910	3040	4010	2890	2970	9550	4010	2350	2910	1290	1000
14	2380	1880	4640	4100	2830	3570	9080	4500	2320	2950	1510	1140
15	2550	2050	3590	3800	2840	3700	8730	4830	2170	2500	1460	1040
16	1570	2320	4710	3330	2820	3800	8400	5000	2240	2540	1600	1730
17	2070	2070	4300	3130	2810	3940	7610	4980	2240	2620	1430	1800
18	2260	2350	4520	3090	2730	4140	7540	4960	2140	2150	1590	2150
19	1980	1830	4590	3030	2670	4200	7320	4750	2040	1890	1260	1990
20	1860	2660	4800	3010	2760	4730	6980	4570	2060	2030	1330	2570
21	2400	2140	5100	2800	2870	6490	6740	4570	1920	2020	1670	2330
22	2040	2320	5080	2890	2770	5900	6540	4400	1830	1630	1240	2380
23	1490	2760	4960	2850	2680	11100	6400	4250	1990	2490	1100	2270
24	1990	2320	4890	2760	2590	11800	6130	3970	1540	2470	1060	2130
25	2050	2280	4800	2600	2560	11500	5830	3930	1550	2330	1100	2050
26	2030	1990	4110	2760	2450	11300	5700	3770	2040	2250	1090	1830
27	1910	2410	4310	2950	2490	11000	5590	3440	2570	2220	1210	1750
28	1870	2390	5370	2920	2470	10800	5520	3330	3810	2010	1330	1680
29	1760	2510	5970	2730	---	11100	5300	3170	5490	2040	1720	1600
30	1600	2240	5930	2500	---	11100	5140	3230	6130	1810	1600	1600
31	1870	---	4940	2830	---	10800	---	2940	---	1790	1580	1600
TOTAL	68540	62410	127610	107430	78670	176510	251570	128390	76660	103590	44080	2530
MEAN	2211	2080	4116	3465	2810	5694	8386	4142	2555	3342	1422	121
MAX	3680	2760	5970	5200	3110	11800	12000	5000	6130	6780	1720	1800
MIN	1490	1640	2580	2500	2450	2280	5140	2940	1540	1630	1060	1010
CFSM	.66	.62	1.22	1.03	.83	1.69	2.49	1.23	.76	.99	.42	.51
IN.	.76	.69	1.41	1.19	.87	1.95	2.78	1.42	.85	1.14	.49	.58
CAL YR 1977 TOTAL		911840	MEAN 2498	MAX 6930	MIN 927	CFSM .74	IN 10.07					
WTR YR 1978 TOTAL		1276490	MEAN 3497	MAX 12000	MIN 1010	CFSM 1.04	IN 14.09					

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) National Geodetic Vertical Datum of 1929. 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 NGVD). 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.--48 years, 3,162 ft³/s (89.55 m³/s), 11.71 in/yr (297 mm/yr). The figure published in the 1977 report was in error; the correct figure is 47 years, 3,149 ft³/s (89.18 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, 13,600 ft³/s (385 m³/s) Mar. 24, gage height, 12.01 ft (3.661 m); minimum daily, 1,210 ft³/s (34.3 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3070	2080	3140	3500	2350	2820	10900	5320	3060	6560	1990	1850
2	4710	1950	3500	3600	2730	2740	10700	4780	3180	7450	2120	1970
3	3180	2160	3200	3600	2650	2660	10400	4740	3190	6960	1960	1500
4	3370	2250	3500	3600	2680	2710	10400	4800	3010	6690	1730	1540
5	2530	2340	4300	3600	2620	2540	11100	4620	2990	6080	2210	1730
6	2160	1920	4320	3700	2610	2860	11800	4310	2890	5530	1520	1840
7	2850	2280	3310	3700	2700	2570	12700	4510	2560	4990	1870	1610
8	2940	2200	2950	3700	2710	2690	12800	4300	2890	5030	1960	1570
9	2190	2680	2430	3370	2750	2830	11500	4340	2870	4450	1790	1390
10	2770	2140	2340	2570	2810	2770	11000	4280	2870	4160	1790	1440
11	2740	1840	2630	2660	2790	2690	10700	4130	2660	4060	1700	1390
12	3030	2340	2390	3000	2870	2960	10200	4200	2640	3840	1820	1510
13	2710	2480	3070	3500	2810	3060	10000	4710	2920	3500	1810	1850
14	2780	2040	3500	4090	2740	3320	9370	5040	2520	2870	1540	2480
15	3000	2330	3900	3530	2830	4130	9030	5370	2390	3310	1870	2540
16	2510	2820	3900	3350	2810	4130	8660	5490	2520	2620	2110	1870
17	1880	2490	4000	3080	2810	4370	7730	5200	2730	2880	2150	2110
18	2770	2640	4500	3010	2710	5030	7900	5280	2680	2700	1710	2560
19	2610	2490	4700	3250	2730	4720	7840	5110	2470	2520	2000	2790
20	2350	2760	5000	3200	2760	5320	7360	4850	2870	2370	1610	3350
21	2440	2520	5640	3170	2520	7680	6790	4880	2810	2650	1660	2760
22	2630	2620	5620	2780	2920	11600	6740	4730	2390	2290	2020	2580
23	2090	3230	5490	3130	2800	12800	6610	4560	2390	2380	1620	2740
24	1840	2840	5340	2930	2720	13000	6550	4290	2210	2800	1620	2490
25	2320	2660	5150	3000	2880	12600	6080	4890	2120	2620	1530	2530
26	2380	2450	3750	2770	2630	11800	6000	3500	2260	2840	1210	2400
27	2430	2870	3400	2150	2790	11200	5860	4010	2520	2490	1600	1910
28	2210	2950	3500	2470	2610	11200	5770	3850	3090	2610	1920	2310
29	2130	2990	3700	2780	---	11500	5640	3410	5530	2470	1860	1640
30	1920	2610	4100	2410	---	11700	5380	1530	6090	2140	2000	2180
31	2140	---	3600	2170	---	11100	---	3860	---	2100	2000	---
TOTAL	81680	73970	119870	97370	76340	193100	263510	140890	87320	115910	56300	62430
MEAN	2635	2466	3867	3141	2726	6229	8784	4545	2911	3739	1816	2081
MAX	4710	3230	5640	4090	2920	13000	12800	5490	6090	7450	2210	3350
MIN	1840	1840	2340	2150	2350	2540	5380	3410	2120	2100	1210	1390
CFSM	.72	.67	1.06	.86	.74	1.70	2.40	1.24	.79	1.02	.50	.57
IN.	.83	.75	1.22	.99	.77	1.96	2.67	1.43	.89	1.18	.57	.63

CAL YR 1977 TOTAL 1060800 MEAN 2906 MAX 8960 MIN 1010 CFSM .79 IN 10.74
WTR YR 1978 TOTAL 1368690 MEAN 3750 MAX 13000 MIN 1210 CFSM 1.02 IN 13.89

STREAMS TRIBUTARY TO LAKE ERIE

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE&SW¼ 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) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--9 years, 29.7 ft³/s (0.841 m³/s), 10.76 in/yr (273 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 497 ft³/s (14.1 m³/s) Mar. 23, 1978, gage height, 10.79 ft (3.289 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)
Dec. 19	0400	280 7.93	8.38 2.554	Apr. 7	0400	318 9.01	8.86 2.701
Mar. 23	0300	*497 14.1	*10.79 3.289	July 3	0300	141 3.99	6.33 1.929

Minimum daily discharge, 3.3 ft³/s (0.093 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	8.4	69	30	11	11	176	23	9.9	48	4.4	5.7
2	21	8.3	89	28	11	11	153	20	9.8	112	4.3	5.3
3	16	8.2	75	25	10	11	143	19	8.9	135	4.4	5.0
4	14	8.2	59	25	10	11	169	19	8.0	105	4.0	4.6
5	12	7.2	52	22	10	11	256	24	7.0	72	3.8	4.3
6	10	6.8	44	21	10	11	266	26	6.3	54	3.7	4.1
7	9.0	7.5	34	21	10	11	310	24	14	41	7.0	4.0
8	15	7.4	31	21	10	11	256	27	16	32	9.5	3.8
9	16	7.2	28	19	10	11	192	33	12	18	7.8	3.7
10	13	8.6	25	15	10	11	156	30	9.3	16	6.7	3.6
11	12	8.0	24	16	11	11	154	27	7.7	12	6.0	3.5
12	11	7.4	22	16	12	15	128	27	8.9	9.9	5.7	4.5
13	10	6.0	22	16	13	19	101	47	8.4	11	5.6	9.7
14	12	6.0	75	15	13	3A	81	59	6.4	11	5.3	16
15	11	7.1	114	14	13	77	68	72	6.0	11	5.1	16
16	10	9.6	112	14	12	100	57	75	6.1	15	5.8	12
17	8.8	12	116	14	12	110	49	65	6.7	7.5	5.3	13
18	8.6	11	208	13	12	107	53	53	7.0	6.4	5.1	13
19	8.2	9.5	273	13	11	100	60	43	6.9	5.8	5.1	15
20	7.4	13	250	13	11	127	75	38	6.7	5.0	4.6	12
21	6.8	17	213	12	11	364	74	33	7.1	5.5	4.2	9.6
22	6.8	15	157	12	11	491	64	29	6.0	11	4.0	6.7
23	7.2	14	113	12	11	486	56	27	5.9	7.9	3.9	5.2
24	7.4	14	88	12	11	426	51	26	5.8	6.4	3.8	4.6
25	7.4	15	88	13	11	326	45	19	5.7	5.9	3.7	4.4
26	7.6	14	61	12	11	262	41	18	33	5.7	3.7	4.2
27	7.3	12	56	12	11	233	36	17	63	5.3	6.8	4.1
28	6.9	13	43	11	11	228	32	17	56	4.8	12	3.8
29	6.5	11	37	11	---	240	32	15	41	4.8	9.5	3.3
30	6.1	14	32	11	---	215	27	14	31	4.6	7.6	3.4
31	5.9	---	29	11	---	185	---	12	---	4.6	6.6	---
TOTAL	324.9	306.4	2639	500	310	4270	3361	978	426.5	794.1	175.0	208.1
MEAN	10.5	10.2	85.1	16.1	11.1	138	112	31.5	14.2	25.6	5.65	6.94
MAX	24	17	273	30	13	491	310	75	63	135	12	16
MIN	5.9	6.0	22	11	10	11	27	12	5.7	4.6	3.7	3.3
CFSM	.28	.27	2.27	.43	.30	3.68	2.99	.84	.38	.68	.15	.19
IN.	.32	.30	2.62	.50	.31	4.24	3.33	.97	.42	.79	.17	.21
CAL YR 1977	TOTAL	11500.6	MFAN 31.5	MAX 304	MIN 2.3	CFSM .84	IN 11.41					
WTR YR 1978	TOTAL	14293.0	MFAN 39.2	MAX 491	MIN 3.3	CFSM 1.05	IN 14.18					

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) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--32 years, 507 ft³/s (14.4 m³/s), 11.29 in/yr (287 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, 8,330 ft³/s (236 m³/s) Mar. 24, gage height, 16.61 ft (5.063 m); minimum daily, 50 ft³/s (1.42 m³/s) Sept. 8.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	93	772	410	160	150	3430	470	205	2370	98	65
2	331	100	1500	370	160	150	3140	440	192	2510	98	60
3	241	103	1570	340	155	150	2920	400	181	2500	90	58
4	191	103	1470	320	155	150	2440	390	172	2340	86	55
5	162	101	1140	290	150	150	2090	370	164	2090	83	54
6	139	101	754	300	150	150	3290	360	158	1850	81	53
7	124	100	460	340	145	150	3960	370	164	1590	87	51
8	130	98	380	380	140	150	3900	370	182	1200	126	50
9	185	98	350	380	140	150	3640	344	170	802	171	52
10	192	110	320	340	140	150	3250	401	164	585	163	54
11	186	124	315	300	140	160	3130	409	160	469	123	53
12	169	129	310	270	140	170	2970	391	153	387	104	52
13	152	134	310	260	145	180	2590	449	148	336	93	54
14	137	130	914	270	150	514	2230	596	147	302	91	73
15	126	129	1440	270	155	1140	1440	745	136	277	86	100
16	115	146	2050	260	155	1750	1620	970	125	252	86	104
17	110	142	2200	240	150	1700	1320	1020	122	234	86	109
18	107	191	2400	240	145	1700	1090	938	115	206	91	114
19	104	177	3410	240	145	1900	1050	785	114	183	87	114
20	102	178	3690	240	145	2200	1200	635	111	168	80	122
21	105	219	3890	230	150	3200	1300	531	110	162	78	119
22	103	241	3710	220	155	5500	1250	465	127	193	74	101
23	107	231	3230	210	160	7590	1150	424	140	196	71	87
24	102	216	2740	200	165	8040	1050	392	105	191	68	77
25	98	210	2200	190	165	6650	950	364	97	162	66	70
26	94	214	1800	190	160	5310	850	374	124	145	64	66
27	92	206	1300	185	155	4610	750	307	506	131	65	69
28	89	174	1000	180	150	4510	650	281	1040	124	87	100
29	84	180	700	175	---	4510	550	260	1350	120	78	70
30	87	185	540	170	---	4270	500	244	1850	109	72	52
31	85	---	460	165	---	3890	---	224	---	101	69	---
TOTAL	4307	4603	48127	8175	4225	70994	61600	14709	8532	22285	2802	2258
MEAN	139	153	1552	264	151	2290	2053	474	284	719	90.4	75.3
MAX	331	241	3890	410	165	4040	3960	1020	1850	2510	171	122
MIN	85	93	310	165	140	150	500	224	47	101	64	50
CFSM	.23	.25	2.54	.43	.25	3.75	3.37	.78	.47	1.18	.15	.12
IN.	.26	.28	2.93	.50	.25	4.33	3.76	.90	.52	1.36	.17	.14

CAL YR 1977 TOTAL 182751 MEAN 501 MAX 3890 MIN 33 CFSM .82 IN 11.14
WTR YR 1978 TOTAL 252617 MEAN 692 MAX 4040 MIN 50 CFSM 1.13 IN 15.41

STREAMS TRIBUTARY TO LAKE ERIE

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) National Geodetic Vertical Datum of 1929. Jan. 1, 1931, to May 31, 1932, nonrecording 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 except those for winter periods, which are poor. 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.--23 years (1955 to current year), 613 ft³/s (17.36 m³/s), 10.91 in/yr (277 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; maximum gage height, 18.62 ft (5.675 m) Mar. 24, 1978; minimum daily discharge, 1.6 ft³/s (0.045 m³/s) May 22, 27, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,960 ft³/s (254 m³/s) Mar. 25, maximum gage height, 18.62 ft (5.675 m) Mar. 24; minimum daily discharge, 70 ft³/s (1.98 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	138	1110	450	210	170	4740	550	293	2070	120	90
2	532	146	1970	410	200	170	4340	500	210	2460	120	77
3	439	150	1830	380	190	170	3920	440	255	2610	110	79
4	265	167	1570	340	190	170	3650	430	221	2630	110	79
5	257	148	1400	310	180	170	3910	430	221	2350	105	78
6	205	140	1100	300	170	165	4220	430	251	2060	100	77
7	208	142	570	280	170	165	4970	430	192	1850	110	76
8	210	140	540	320	160	160	5110	450	269	1430	150	74
9	246	173	500	350	155	165	4630	500	219	1000	210	74
10	293	102	470	370	155	170	4430	500	219	700	200	74
11	265	142	430	300	155	180	4370	490	212	500	160	70
12	237	206	410	280	160	190	3860	500	237	384	130	73
13	229	134	420	280	165	210	3330	550	191	476	120	78
14	192	196	1360	290	170	610	3040	700	156	317	110	82
15	180	171	2180	310	180	1270	2470	880	213	281	110	108
16	161	191	2510	290	185	2180	1950	1000	172	341	105	125
17	171	240	2760	270	180	2190	1600	1200	143	266	105	142
18	125	257	3900	280	170	2160	1350	1100	162	209	110	180
19	178	251	4220	290	170	2310	1420	900	183	237	110	172
20	111	244	4340	290	170	2820	1790	750	165	225	100	223
21	158	295	4390	280	180	4280	1260	620	136	165	96	109
22	156	369	4350	270	190	5330	1760	550	102	198	93	101
23	136	283	4060	260	190	7250	1340	510	156	283	97	102
24	127	301	3400	250	185	8140	1230	400	188	255	98	102
25	136	269	2600	260	180	8780	1300	450	145	186	97	100
26	150	275	2000	250	175	7740	1100	420	170	209	94	92
27	136	281	1400	240	170	6670	900	369	430	190	107	89
28	109	259	1100	230	170	6060	600	358	820	124	244	87
29	102	205	800	220	---	5800	800	265	1010	120	179	95
30	113	235	600	210	---	5540	650	427	1410	135	110	97
31	134	---	500	210	---	5250	---	210	---	125	110	---
TOTAL	6280	6250	58790	9070	4925	86635	80040	17309	8751	24386	3820	3005
MEAN	203	208	1896	293	176	2795	2668	558	292	787	123	100
MAX	532	369	4390	450	210	8780	5110	1200	1410	2630	244	223
MIN	102	102	410	210	155	160	600	210	102	120	93	70
CFSM	.27	.27	2.49	.38	.23	3.66	3.50	.73	.38	1.03	.16	.13
IN.	.31	.30	2.87	.44	.24	4.22	3.90	.84	.43	1.19	.19	.15

CAL YR 1977 TOTAL 232444 MEAN 637 MAX 4390 MIN 49 CFSM .84 IN 11.33
WTR YR 1978 TOTAL 309261 MEAN 847 MAX 8780 MIN 70 CFSM 1.11 IN 15.08

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.--NSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.09 ft (237.771 m) National Geodetic Vertical Datum of 1929. 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.--32 years, 236 ft³/s (6.684 m³/s), 11.87 in/yr (301 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 22	1800	*3860	109	*10.35	3.155
Apr. 7	1100	2430	68.8	7.67	2.338

Minimum daily discharge, 28 ft³/s (0.79 m³/s) Sept. 27-30.

DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	68	824	175	89	78	1060	224	105	97	48	46
2	271	78	1260	160	88	75	860	210	103	192	46	44
3	185	78	793	160	85	72	998	197	101	384	46	40
4	142	76	531	150	84	72	1230	190	93	259	43	38
5	116	74	350	145	82	72	1890	202	89	180	41	37
6	101	72	270	140	80	71	1720	202	85	142	40	37
7	89	70	230	140	78	71	2110	187	122	118	72	37
8	105	72	200	160	75	71	1750	187	154	101	242	36
9	175	70	190	145	74	72	1060	205	120	87	131	35
10	147	72	185	135	72	75	785	187	99	81	107	34
11	125	74	180	125	74	80	1030	178	87	76	81	33
12	110	74	180	125	76	97	789	175	89	68	68	34
13	97	72	224	130	80	136	597	324	93	72	60	41
14	87	74	914	140	84	451	494	467	81	70	54	53
15	81	81	1730	125	84	1120	430	629	78	67	51	62
16	81	103	1420	110	82	1440	381	633	76	61	57	49
17	81	142	1210	110	80	1600	346	470	72	56	55	48
18	78	152	1380	110	78	1500	355	371	68	54	207	53
19	80	129	1680	110	76	1300	524	294	68	53	226	67
20	76	140	1330	110	73	1600	1180	268	67	51	124	53
21	72	221	994	110	72	2700	1080	257	67	51	86	42
22	68	202	698	100	73	3710	728	213	63	150	72	37
23	67	168	545	99	76	3640	541	195	58	119	62	33
24	68	159	474	98	80	3050	461	197	56	89	57	30
25	68	145	410	100	84	2220	397	183	59	76	54	29
26	67	149	350	99	86	1630	346	161	163	67	52	29
27	65	133	300	98	84	1530	306	149	271	60	50	28
28	63	127	260	96	82	1600	277	136	161	54	61	28
29	61	114	230	94	---	1710	257	127	127	51	63	28
30	58	127	200	92	---	1430	240	120	103	49	52	28
31	56	---	190	90	---	1090	---	112	---	48	49	---
TOTAL	3103	3316	19732	3781	2231	34363	24422	7650	2978	3083	2457	1189
MEAN	100	111	637	122	79.7	1108	814	247	99.3	99.5	79.3	39.6
MAX	271	221	1730	175	89	3710	2310	633	271	384	242	67
MIN	56	68	180	90	72	71	240	112	56	48	40	28
CFSM	.37	.41	2.36	.45	.30	4.10	3.02	.92	.37	.37	.29	.15
IN.	.43	.46	2.72	.52	.31	4.73	3.36	1.05	.41	.42	.34	.16
CAL YR 1977	TOTAL	86074	MEAN 236	MAX 2180	MIN 29	CFSM .87	IN 11.86					
WTR YR 1978	TOTAL	108305	MEAN 297	MAX 3710	MIN 28	CFSM 1.10	IN 14.92					

STREAMS TRIBUTARY TO LAKE ERIE

04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW 1/4 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 Holthouse 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) National Geodetic Vertical Datum of 1929. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

AVERAGE DISCHARGE.--32 years, 492 ft³/s (13.93 m³/s), 10.76 in/yr (273 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 19	1100	8160	231	22.32	6.803	Apr. 7	2300	4160	118	18.45	5.624
Mar. 23	0200	*10100	286	*23.55	7.178						

Minimum daily discharge, 16 ft³/s (0.45 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	37	709	325	74	77	2210	322	127	33	21	41
2	40	56	895	210	75	75	1570	241	105	72	21	39
3	39	55	472	180	74	74	1330	196	90	495	20	33
4	35	42	421	160	74	74	1260	170	77	455	20	30
5	61	35	378	145	73	74	1180	155	69	238	20	28
6	83	31	274	128	72	74	1930	140	65	277	21	25
7	46	38	218	120	72	74	3900	119	114	262	31	23
8	70	76	200	209	71	74	3910	115	171	178	34	21
9	113	70	180	260	70	74	3260	128	111	114	33	20
10	104	66	170	210	70	77	2690	128	75	79	36	18
11	65	69	170	170	71	80	1810	112	61	60	28	18
12	66	54	170	150	72	99	1200	117	62	48	28	20
13	95	46	170	135	75	136	789	352	93	46	28	36
14	87	45	1550	135	78	1150	564	667	68	41	26	30
15	67	50	2980	135	78	2880	408	642	95	39	25	35
16	53	55	3050	135	76	3740	291	625	119	38	29	29
17	43	117	3250	135	74	4380	223	565	95	32	25	34
18	36	104	5800	130	72	6190	235	494	70	29	122	32
19	33	67	8030	120	72	8280	488	397	56	28	73	30
20	30	54	7320	110	72	8640	1840	389	45	26	36	28
21	27	54	5840	100	72	9390	2250	638	42	25	27	27
22	26	56	4310	95	73	10000	2000	341	37	23	22	25
23	29	53	3000	90	75	9710	2210	349	33	23	21	22
24	35	51	1870	90	80	8030	2370	412	32	24	19	21
25	39	50	1720	90	87	5710	2040	322	33	25	20	19
26	39	50	944	88	87	4090	1600	439	53	23	20	18
27	34	35	644	86	81	3730	1100	494	70	23	25	17
28	32	46	719	84	80	3740	804	470	50	22	52	17
29	30	40	760	82	---	3890	622	352	37	22	57	16
30	27	49	683	80	---	3640	461	229	30	21	40	18
31	25	---	489	78	---	2900	---	166	---	21	36	---
TOTAL	1564	1651	57388	4265	2102	101152	46445	10286	2185	2842	1016	770
MEAN	50.5	55.0	1851	138	75.1	3263	1548	332	72.8	91.7	32.8	25.7
MAX	113	117	8030	325	87	10000	3910	667	171	495	122	41
MIN	25	31	170	78	70	74	223	112	30	21	19	16
CFSM	.08	.09	2.98	.22	.12	5.25	2.49	.54	.12	.15	.05	.04
IN.	.09	.10	3.44	.26	.13	6.05	2.78	.62	.13	.17	.06	.05
CAL YR 1977	TOTAL	141714	MEAN 388	MAX 8030	MIN 17	CFSM .63	IN 8.49					
WTR YR 1978	TOTAL	231666	MEAN 635	MAX 10000	MIN 16	CFSM 1.02	IN 13.88					

STREAMS TRIBUTARY TO LAKE ERIE

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION (revised).--Lat 40°59'16", long 85°06'03", in A. LaFontaine Reserve, T.22 N., R.10 E., Allen County, Hydrologic Unit 04100004, on left bank 130 ft (40 m) downstream from Anthony Boulevard Extension, 0.8 mile (1.3 km) downstream from Houk ditch, 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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1959, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for winter periods, which are poor. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canals. During extreme floods, some water bypasses gage and flows through Houk ditch and Paul Trier ditch into the Maumee River.

AVERAGE DISCHARGE.--48 years, 570 ft³/s (16.14 m³/s), 10.16 in/yr (258 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 20	1800	8600 244	15.57 4.746	Apr. 6	1000	4970 138	11.61 3.539
Mar. 21	1700	*13300 377	*18.39 5.675				

Minimum daily discharge, 17 ft³/s (0.48 m³/s) Sept. 30.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	42	1040	350	95	94	3230	406	177	48	32	36
2	60	53	1410	250	95	96	2200	326	143	58	32	39
3	65	70	770	210	94	95	1420	251	120	281	32	39
4	62	65	541	200	93	94	1460	218	105	628	30	34
5	57	51	491	180	92	94	1540	199	92	355	30	31
6	80	44	377	160	91	94	2610	183	86	272	31	30
7	92	42	270	150	90	94	4560	161	103	304	35	28
8	92	54	250	250	88	95	4830	148	224	249	50	26
9	146	88	240	300	88	94	4780	156	201	163	51	24
10	183	82	230	250	87	100	3470	165	128	113	50	23
11	130	80	220	240	89	105	2760	152	95	86	52	22
12	90	77	210	220	90	120	1460	144	84	70	42	21
13	90	62	210	180	95	170	1240	240	89	63	40	25
14	107	54	2330	165	98	1870	719	869	107	59	39	39
15	97	54	4100	160	98	4510	519	920	84	55	37	36
16	81	60	4370	160	97	5730	381	839	123	50	36	38
17	70	73	4460	155	96	6310	294	721	125	49	40	34
18	60	119	5550	150	93	6650	345	606	102	43	39	38
19	54	93	7100	145	90	8450	844	495	83	39	131	38
20	44	70	8420	135	90	10700	2770	729	70	39	73	34
21	45	68	7890	130	89	12800	3310	1350	63	37	42	32
22	40	67	6430	110	90	12800	2740	647	58	36	31	29
23	43	66	4790	105	95	12500	2440	498	54	34	24	28
24	49	64	3030	100	100	11400	2940	717	50	35	23	26
25	52	65	2580	110	110	9170	2450	76	49	35	21	23
26	55	60	1300	105	110	6620	2030	451	53	37	22	21
27	57	52	800	105	105	5220	1380	534	75	37	25	19
28	49	50	900	100	100	4880	971	538	83	34	32	18
29	45	50	950	99	---	4860	747	457	64	34	55	18
30	40	60	900	94	---	4700	561	334	53	32	56	17
31	36	---	650	97	---	4150	---	235	---	32	41	---
TOTAL	2223	1935	72809	5169	2648	134673	61401	14185	2943	3407	1274	866
MEAN	71.7	64.5	2349	167	94.6	4344	2947	458	98.1	110	41.1	28.9
MAX	183	119	8420	350	110	12800	4830	1350	224	628	131	39
MIN	36	42	210	97	87	94	294	144	49	32	21	17
CFSM	.09	.09	3.08	.22	.12	5.70	2.69	.63	.13	.14	.05	.04
IN.	.11	.09	3.55	.25	.13	6.57	3.00	.59	.14	.17	.06	.04
CAL YR 1977 TOTAL	189108		MEAN 518	MAX 8420	MIN 18	CFSM .68	IN 9.23					
WTR YR 1978 TOTAL	303533		MEAN 832	MAX 12800	MIN 17	CFSM 1.09	IN 14.52					

STREAMS TRIBUTARY TO LAKE ERIE

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: May 1953 to December 1967. Partial-record station October 1977 to September 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
MAR 22...	1725	12700	93	3190

STREAMS TRIBUTARY TO LAKE ERIE

279

04182590 HARBER DITCH AT FORT WAYNE, IN

LOCATION.--Lat 41°00'27", long 85°10'58", in NE1/4 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--14 years, 18.4 ft³/s (0.521 m³/s), 11.41 in/yr (290 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 755 ft³/s (21.4 m³/s) Mar. 21, 1978, gage height, 9.88 ft (3.011 m); maximum gage height, 11.55 (3.520 m) Feb. 20, 1971; minimum daily discharge, 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)	
Dec. 14	2300	635	18.0	9.20	2.804	Apr. 6	1300	488	13.8	8.30	2.530
Dec. 18	1000	308	8.72	7.02	2.140	Apr. 11	0300	267	7.56	6.67	2.033
Mar. 15	Unknown	350	9.91	ice jam		May 20	2000	499	14.1	8.37	2.551
Mar. 21	1030	*755	21.4	*9.88	3.011						

Minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	150	4.3	1.5	1.2	42	7.7	3.5	2.2	.89	.37
2	5.1	8.1	90	3.9	1.4	1.2	30	6.9	3.5	4.5	.82	.31
3	3.7	7.7	60	3.4	1.4	1.2	55	6.2	3.0	9.6	.59	.39
4	2.5	4.6	35	3.0	1.4	1.2	44	6.0	2.8	5.5	.42	.30
5	2.4	4.9	27	2.8	1.3	1.2	33	7.0	2.7	3.0	.55	.29
6	2.2	4.9	20	2.6	1.3	1.2	264	5.0	2.4	1.7	.42	.34
7	2.1	7.3	16	15	1.3	1.2	118	4.2	7.3	1.5	11	.31
8	9.1	7.3	14	25	1.2	1.2	47	4.4	6.2	1.3	1.4	.47
9	8.1	6.9	12	12	1.2	1.3	26	4.2	3.5	1.2	1.1	.31
10	5.1	6.1	10	7.0	1.2	1.4	75	3.5	2.7	1.1	.72	.25
11	4.4	5.5	9.5	4.7	1.2	2.0	120	3.3	2.4	1.2	.37	.26
12	3.5	5.5	8.5	4.6	1.2	3.0	35	3.5	3.5	1.4	.37	.45
13	3.0	5.7	30	4.4	1.2	7.0	18	35	2.6	1.7	.27	4.5
14	2.5	6.9	390	3.5	1.2	30	12	103	1.8	1.5	.28	8.4
15	2.7	7.7	300	3.0	1.2	300	10	78	1.7	1.3	.36	1.6
16	2.3	9.8	130	2.8	1.2	200	9.5	47	1.6	1.2	.31	.74
17	2.3	9.4	166	2.5	1.2	150	8.1	28	1.7	1.1	.42	2.7
18	2.2	8.3	204	2.3	1.2	100	51	18	1.7	1.0	.85	6.9
19	2.3	7.3	97	2.1	1.2	128	124	13	1.7	.80	.27	1.4
20	2.2	6.8	65	2.0	1.2	180	147	108	1.7	.58	.27	.75
21	1.7	6.5	35	1.9	1.2	588	104	110	1.7	.53	.20	.47
22	2.1	6.4	20	1.8	1.2	246	50	38	1.7	.56	.23	.35
23	7.7	6.2	12	1.8	1.2	190	42	34	1.5	.92	.39	.39
24	8.6	6.0	15	1.7	1.3	86	38	34	1.4	.91	.23	.29
25	4.9	5.8	20	2.3	1.4	43	26	20	1.3	.73	.22	.38
26	4.0	5.4	14	2.0	1.4	49	17	14	2.5	.65	.24	.35
27	3.7	4.5	11	1.8	1.3	76	14	9.1	2.1	.61	8.4	.45
28	3.2	4.6	9.0	1.8	1.3	91	11	6.9	1.7	.47	4.1	.58
29	3.3	5.0	7.0	1.6	---	73	9.6	5.9	1.4	.60	.79	.51
30	3.2	50	6.0	1.6	---	47	8.6	4.9	1.1	.49	.77	.97
31	2.7	---	5.0	1.5	---	44	---	4.0	---	.48	.49	---
TOTAL	124.8	244.1	1988.0	130.7	35.5	2645.3	1588.8	772.7	74.4	50.33	37.74	35.78
MEAN	4.03	8.14	64.1	4.22	1.27	85.3	53.0	24.9	2.48	1.62	1.22	1.19
MAX	12	50	390	25	1.5	588	264	110	7.3	9.6	11	8.4
MIN	1.7	4.5	5.0	1.5	1.2	1.2	8.1	3.3	1.1	.47	.20	.25
CFSM	.18	.37	2.93	.19	.06	3.90	2.42	1.14	.11	.07	.06	.05
IN.	.21	.41	3.38	.22	.06	4.49	2.70	1.31	.13	.09	.06	.06

CAL YR 1977 TOTAL 6254.39 MEAN 17.1 MAX 390 MIN .10 CFSM .78 IN 10.62
WTR YR 1978 TOTAL 7728.15 MEAN 21.2 MAX 588 MIN .20 CFSM .97 IN 13.13

STREAMS TRIBUTARY TO LAKE ERIE

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) National Geodetic Vertical Datum of 1929. 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 except those for winter periods, which are poor. 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.--22 years (1956 to current year), 1,595 ft³/s (45.2 m³/s), 11.01 in/yr (280 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s (634 m³/s) Mar. 24, 1978, gage height, 23.58 ft (7.187 m); 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)
Dec. 21	0200	13900 394	18.85 5.745	Apr. 8	----	12200 346	Unknown
Mar. 24	1500	*22400 634	*23.58 7.187				

Minimum daily discharge, 125 ft³/s (3.54 m³/s) Sept. 27.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	607	472	1570	1500	435	370	10000	1570	659	2190	232	207
2	750	332	4980	1000	425	370	8500	1380	661	2720	240	159
3	756	326	4910	850	415	370	7400	1140	588	3300	187	183
4	532	354	3660	750	405	370	7200	1050	514	3590	143	171
5	455	302	2920	838	400	370	7300	1060	534	3140	149	179
6	419	312	2480	880	390	370	8500	1010	444	2690	190	191
7	373	290	1820	873	380	370	11500	970	703	2410	588	154
8	554	292	967	1350	370	375	12000	986	655	2020	598	141
9	511	314	898	1080	370	380	11000	1010	803	1500	471	151
10	643	385	880	840	370	390	9800	990	578	1200	461	141
11	629	262	850	750	370	460	9500	952	534	1000	401	141
12	482	385	840	700	370	540	7400	879	453	700	378	147
13	433	357	840	660	380	773	5500	1710	545	800	263	392
14	422	336	5170	620	390	3140	4700	2810	447	580	211	356
15	374	350	8770	600	390	6600	3600	3440	428	430	190	341
16	344	363	9100	580	390	8240	3400	3180	439	580	194	222
17	301	413	9100	560	385	9260	2700	2850	398	430	249	271
18	392	514	10700	540	380	9260	2700	2490	385	390	412	308
19	240	552	12500	520	375	9790	3920	2060	350	288	663	332
20	347	517	13500	510	370	12900	5700	2140	390	376	548	308
21	159	564	13700	490	370	17000	7180	3260	324	292	293	270
22	287	626	12500	450	380	20700	5960	1940	284	267	233	200
23	358	670	10600	430	390	21800	5060	1620	280	399	186	185
24	298	564	8070	398	395	22400	5080	1740	308	488	193	190
25	275	565	7140	473	400	21300	4720	1430	311	340	202	160
26	351	583	5270	490	436	17800	3990	1260	402	322	169	185
27	437	550	2770	490	390	15000	3060	1290	659	300	372	125
28	226	516	2850	480	370	13500	2540	1190	1110	251	548	140
29	235	486	1960	460	---	13000	1850	1060	1250	193	372	170
30	227	396	2000	450	---	12500	2020	1010	1550	213	263	160
31	268	---	1890	440	---	11500	---	795	---	236	265	---
TOTAL	12685	12948	165205	21052	10891	251198	183780	50272	16986	33635	9864	6280
MEAN	409	432	5329	679	349	8103	6126	1622	566	1085	318	209
MAX	756	670	13700	1500	436	22400	12000	3440	1550	3590	663	392
MIN	159	262	840	398	370	370	1850	795	280	193	143	125
CFSM	.21	.22	2.71	.35	.20	4.12	3.11	.83	.29	.55	.16	.11
IN.	.24	.24	3.12	.40	.21	4.75	3.48	.95	.32	.64	.19	.12
CAL YR 1977	TOTAL	574874	MEAN	1575	MAX	13700	MIN	87	CFSM	.80	IN	10.87
WTR YR 1978	TOTAL	774796	MEAN	2123	MAX	22400	MIN	125	CFSM	1.08	IN	14.65

STREAMS TRIBUTARY TO LAKE ERIE

281

04183500 MALMEE RIVER AT ANTWERP, OH

LOCATION.--Lat 41°11'56", long 84°44'40", in sec.22, T.3 N., R.1 E., Paulding County, Ohio, 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.--September 1921 to December 1935, April 1939 to current year.

REVISED RECORDS.--WSP 1174: 1927, 1933, 1940. WSP 1387: 1922-23, 1925-27, 1934. WRD OH-70-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 694.90 ft (211.805 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1925, nonrecording gage at site 400 ft (122 m) upstream at same datum.

REMARKS.--Records good except those for winter period, 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. Water quality data collected at this site 1969 to 1977.

AVERAGE DISCHARGE.--53 years, 1,684 ft³/s (47.69 m³/s), 10.75 in/yr (273 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)	
Dec. 21	1100	14400	408	16.03	4.886	Apr. 8	0200	13000	368	15.12	4.609
Mar. 23	0400	*21300	603	*19.55	5.959						

Minimum daily discharge, 108 ft³/s (3.06 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	565	343	2200	1000	540	400	11500	1660	667	1570	218	242
2	704	600	5550	850	520	400	9500	1420	639	2290	223	208
3	866	424	5040	700	500	400	8180	1220	581	2830	226	140
4	787	392	3720	580	490	400	7600	1010	560	3310	204	154
5	551	397	2980	920	480	400	7630	982	456	3250	131	161
6	474	369	2480	1000	480	400	8680	984	485	2780	135	153
7	447	353	1860	920	470	400	12500	927	444	2360	183	187
8	444	353	1140	980	476	390	12900	904	705	2170	613	135
9	649	350	1070	1100	460	390	12300	930	691	1740	531	129
10	616	388	1000	980	460	390	10800	925	698	1310	418	121
11	715	406	980	880	460	390	10800	902	512	971	403	132
12	670	323	1500	820	460	400	9170	851	500	777	366	108
13	510	448	2280	760	450	540	6470	1070	440	581	337	137
14	466	381	4370	720	440	1500	4980	2010	492	660	249	324
15	445	377	10300	700	440	8200	4010	2940	408	490	212	366
16	409	403	10600	650	440	12400	3620	3400	406	389	172	344
17	392	410	10400	600	430	14800	2730	2940	418	468	193	234
18	345	491	12200	580	430	15500	2430	2320	381	386	213	274
19	408	572	13800	550	430	15000	3620	2270	369	365	373	309
20	301	582	14000	520	430	14100	5490	1780	343	285	599	319
21	371	570	14400	490	420	17100	7580	2850	365	343	456	286
22	212	652	14000	470	426	20900	6580	2510	317	275	271	267
23	337	734	12500	430	420	21200	5440	1590	276	256	209	177
24	409	654	9990	420	410	21000	4910	1770	277	376	197	177
25	349	612	8050	480	410	20600	4740	1480	296	427	165	186
26	329	635	6470	540	410	19700	4270	1350	316	316	184	146
27	414	624	4190	600	420	17800	3170	1200	417	298	170	181
28	463	572	2700	600	410	16000	2720	1210	720	282	376	117
29	279	559	2000	580	---	14800	1870	1140	1070	239	455	158
30	284	457	1600	560	---	13800	1920	949	1290	205	340	158
31	277	---	1300	540	---	12800	---	969	---	186	251	---
TOTAL	14488	14431	184670	21520	12612	282500	198110	48463	15539	32185	9073	6030
MEAN	467	481	5957	694	450	9113	6604	1563	518	1038	293	201
MAX	866	734	14400	1100	540	21200	12900	3400	1290	3310	613	366
MIN	212	323	980	420	410	390	1870	851	276	186	131	108
CFSM	.22	.23	2.80	.33	.21	4.28	3.10	.73	.24	.49	.14	.09
IN.	.25	.25	3.23	.38	.22	4.94	3.46	.85	.27	.56	.16	.11

CAL YR 1977 TOTAL 618898 MEAN 1696 MAX 14400 MIN 130 CFSM .80 IN 10.81
WTR YR 1978 TOTAL 839621 MEAN 2300 MAX 21200 MIN 108 CFSM 1.08 IN 14.67

ILLINOIS RIVER BASIN

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN

LOCATION.--Lat 41°33'50", long 86°29'50", in NW¼ 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.

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (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.--27 years, 147 ft³/s (4.163 m³/s), 11.47 in/yr (291 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, 616 ft³/s (17.4 m³/s) Mar. 24, gage height, 7.92 ft (2.414 m); minimum daily, 68 ft³/s (1.92 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	108	183	167	127	122	425	177	135	129	88	91
2	192	108	241	160	127	121	388	168	133	162	92	87
3	172	107	222	159	127	123	394	164	133	223	89	84
4	160	105	198	156	126	121	386	165	135	191	82	81
5	152	103	182	154	128	120	413	171	130	167	85	79
6	145	102	170	151	127	120	445	165	122	155	88	75
7	140	101	158	151	127	118	544	163	133	146	85	74
8	150	99	140	150	126	119	489	164	143	134	83	72
9	152	98	139	148	126	120	435	161	137	127	86	72
10	143	100	135	145	125	121	392	156	129	119	82	71
11	140	99	135	143	124	122	385	157	126	112	77	69
12	136	99	139	141	125	124	356	167	139	109	77	68
13	131	98	144	140	125	127	318	217	138	121	80	79
14	129	101	170	139	122	169	286	287	130	118	78	88
15	126	106	199	138	121	221	265	316	124	116	76	96
16	126	108	214	139	121	236	248	283	120	111	123	91
17	131	108	291	138	121	233	238	248	133	101	118	89
18	130	107	353	136	121	218	236	220	148	99	103	94
19	128	104	309	135	121	216	244	205	140	96	97	95
20	126	106	307	135	121	261	236	200	134	99	93	89
21	124	107	325	134	120	457	226	198	125	111	89	89
22	120	106	279	132	120	548	214	186	117	135	86	88
23	118	106	252	131	121	588	211	181	114	128	83	86
24	117	104	239	132	122	600	208	178	114	123	82	84
25	116	106	240	132	125	540	210	170	116	117	80	82
26	116	102	225	117	123	484	199	163	140	112	78	81
27	113	109	203	100	122	453	185	152	140	111	88	80
28	111	106	189	112	122	444	184	150	127	105	122	79
29	109	107	181	120	---	469	179	148	120	102	116	80
30	108	113	174	125	---	443	177	149	118	98	104	79
31	107	---	167	127	---	420	---	140	---	92	97	---
TOTAL	4142	3133	6503	4287	3463	8578	9116	5769	3893	3869	2807	2472
MEAN	134	104	210	138	124	277	304	186	130	125	90.5	82.4
MAX	192	113	353	167	128	600	544	316	148	223	123	96
MIN	107	98	135	100	120	118	177	140	114	92	76	68
CFSM	.77	.60	1.21	.79	.71	1.59	1.75	1.07	.75	.72	.52	.47
IN.	.89	.67	1.39	.92	.74	1.83	1.95	1.23	.83	.83	.60	.53

CAL YR 1977 TOTAL 50991 MEAN 140 MAX 495 MIN 64 CFSM .81 IN 10.90
WTR YR 1978 TOTAL 58032 MEAN 159 MAX 600 MIN 68 CFSM .91 IN 12.41

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
OCT					
26...	1220	117	22	6.9	13.0
NOV					
29...	1300	109	30	8.8	3.0
JAN					
17...	1200	138	31	11	.5
MAR					
21...	1230	510	80	110	--
28...	1600	420	48	54	--
JUN					
13...	1050	139	24	9.0	15.0
JUL					
25...	1045	120	58	18	20.0
AUG					
03...	1800	81	42	9.2	22.0
10...	1900	77	50	10	21.0
18...	1200	104	50	14	20.0
23...	1530	81	51	11	23.0
29...	1230	116	24	7.5	--
31...	1800	96	43	11	21.0
SEP					
15...	1900	96	36	9.3	19.0
21...	1900	91	31	7.6	17.0
27...	1830	81	38	8.3	15.0

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 Statehighway 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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--8 years, 4.12 ft³/s (0.117 m³/s), 7.90 in/yr (201 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 21	0300	15	0.42	4.19	1.28	Aug. 28	0100	*34	0.96	*5.07	1.55
Mar. 23	1900	15	0.42	4.19	1.28						

Minimum daily discharge, 1.3 ft³/s (0.037 m³/s) Jan. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.0	3.8	1.6	1.5	1.5	6.2	3.8	4.9	3.8	2.3	3.5
2	1.8	2.4	3.4	1.6	1.5	1.5	6.7	3.7	4.8	5.1	2.6	3.2
3	1.7	2.2	3.0	1.5	1.5	1.6	7.0	3.7	4.8	4.4	2.7	3.0
4	1.6	2.0	2.6	1.5	1.5	1.6	7.5	4.0	4.8	3.7	2.5	2.8
5	1.5	2.0	2.6	1.6	1.5	1.5	6.6	4.3	4.6	3.4	2.5	2.6
6	1.5	2.1	2.4	1.7	1.5	1.6	10	3.9	4.6	3.2	2.5	2.5
7	1.5	2.1	2.2	1.9	1.5	1.5	7.3	3.9	4.9	3.1	2.6	2.5
8	2.3	1.9	2.3	2.5	1.5	1.6	6.1	4.1	5.0	2.9	2.6	2.4
9	1.8	1.9	2.1	2.3	1.5	1.6	5.9	4.0	4.7	3.0	2.7	2.2
10	1.6	1.8	2.1	2.0	1.5	1.7	6.4	3.7	4.5	2.9	2.6	2.1
11	1.6	1.7	2.1	1.8	1.5	1.7	6.6	4.3	4.3	2.8	2.7	2.0
12	1.5	1.6	2.2	1.7	1.5	1.8	5.7	5.2	4.5	2.9	2.7	1.9
13	1.4	1.6	2.4	1.7	1.6	1.9	5.2	11	4.3	3.3	2.6	2.6
14	1.4	1.6	3.0	1.7	1.5	3.5	5.1	12	4.1	3.3	2.5	2.6
15	1.5	2.1	3.2	1.7	1.5	3.8	5.0	11	4.0	3.2	2.5	2.3
16	1.6	2.0	3.2	1.6	1.5	3.8	4.9	9.9	4.1	3.1	2.9	2.0
17	1.7	1.9	4.1	1.6	1.5	3.9	5.0	9.1	4.2	3.1	2.4	2.3
18	1.7	1.7	4.5	1.6	1.5	3.9	6.0	8.5	5.4	3.0	2.4	3.2
19	1.9	1.7	3.6	1.7	1.5	4.1	5.9	7.8	4.3	3.0	2.3	2.6
20	1.6	2.0	4.0	1.8	1.5	6.0	5.3	7.5	4.1	2.9	2.2	2.2
21	1.6	1.9	4.2	1.7	1.5	12	5.1	6.9	4.0	3.6	2.1	2.4
22	1.5	1.7	3.6	1.7	1.5	9.3	4.7	6.6	3.7	4.1	2.2	2.3
23	1.6	1.8	3.4	1.7	1.6	11	4.8	6.8	3.7	3.9	2.1	2.1
24	1.6	1.7	3.4	1.5	1.6	8.2	4.8	6.7	3.7	3.3	2.2	2.0
25	1.8	1.9	3.5	1.3	1.5	6.6	4.8	6.2	3.8	3.0	2.1	1.9
26	1.9	1.7	3.1	1.4	1.6	6.4	4.4	5.8	4.5	2.8	2.1	1.9
27	1.7	1.8	2.6	1.5	1.6	6.5	4.2	5.6	4.1	2.7	5.8	1.9
28	1.7	1.7	2.3	1.5	1.6	7.1	4.2	5.4	3.8	2.4	14	1.8
29	1.7	1.6	2.1	1.6	---	6.8	4.0	5.3	3.6	2.5	3.8	1.8
30	1.7	1.8	2.0	1.5	---	6.4	3.9	5.2	3.6	2.4	4.8	1.9
31	1.7	---	1.8	1.5	---	6.6	---	5.0	---	2.3	4.0	---
TOTAL	52.2	56.1	90.8	52.0	42.6	137.0	169.3	190.9	129.4	99.1	96.0	70.5
MEAN	1.68	1.87	2.93	1.68	1.52	4.42	5.64	6.16	4.31	3.20	3.10	2.35
MAX	2.5	2.4	4.5	2.5	1.6	12	10	12	5.4	5.1	14	3.5
MIN	1.4	1.6	1.8	1.3	1.5	1.5	3.9	3.7	3.6	2.3	2.1	1.8
CFSM	.24	.26	.41	.24	.22	.62	.80	.87	.61	.45	.44	.33
IN.	.27	.29	.48	.27	.22	.72	.89	1.00	.68	.52	.50	.37

CAL YR 1977 TOTAL 1046.5 MEAN 2.87 MAX 10 MIN 1.1 CFSM .41 IN 5.50
WTR YR 1978 TOTAL 1185.9 MEAN 3.25 MAX 14 MIN 1.3 CFSM .46 IN 6.23

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 Lianna, 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) National Geodetic Vertical Datum of 1929. 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 poor.

ATTRACT DISCHARGE.--54 years, 1924 to current year, 493 ft³/s (13.96 m³/s), 12.47 in/yr (317 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, 12.47 ft (3.801 m) Apr. 8, 9, 1978; minimum daily discharge, 154 ft³/s (4.36 m³/s) Aug. 30 to Sept. 3, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft³/s (44.5 m³/s) Apr. 8, 9, gage height, 12.47 ft (3.801 m); minimum daily, 260 ft³/s (7.36 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	410	525	567	440	412	1420	707	556	420	318	336
2	598	420	704	543	440	407	1400	688	544	453	316	311
3	570	414	730	540	435	400	1390	668	531	529	324	299
4	532	405	684	530	430	395	1390	660	524	533	308	290
5	517	397	637	520	430	390	1410	670	518	494	301	283
6	509	396	599	517	425	390	1450	664	503	469	301	278
7	497	400	547	512	420	390	1530	646	503	450	299	273
8	522	397	510	500	415	395	1560	644	520	434	299	269
9	538	391	490	486	415	385	1560	635	515	416	296	265
10	520	389	490	480	415	390	1530	619	500	405	296	263
11	505	389	500	480	420	400	1510	605	484	384	288	260
12	484	389	520	470	420	410	1470	625	488	372	287	265
13	459	387	545	470	425	434	1420	726	498	383	287	320
14	444	389	607	460	430	513	1360	955	480	395	285	354
15	436	402	704	460	428	657	1300	1070	468	385	274	375
16	436	420	730	450	422	714	1240	1070	462	376	306	360
17	444	421	801	450	411	745	1170	979	466	360	336	360
18	450	416	940	440	410	745	1130	880	489	347	316	383
19	455	410	943	440	410	736	1120	791	493	341	304	382
20	453	412	894	440	408	816	1100	754	477	341	293	361
21	443	421	958	440	406	1210	1060	771	466	348	285	354
22	431	417	904	437	405	1440	1010	734	448	393	280	348
23	422	414	824	444	410	1510	970	704	437	408	274	336
24	418	407	770	444	411	1520	940	717	430	391	272	326
25	417	402	745	449	417	1530	917	713	427	376	276	311
26	424	399	762	400	415	1540	884	681	442	366	275	301
27	421	398	700	360	412	1520	830	644	477	368	286	296
28	423	406	660	390	413	1500	791	616	463	349	297	288
29	415	405	630	420	---	1480	750	598	442	336	461	280
30	409	410	600	430	---	1470	722	584	427	333	452	277
31	404	---	580	435	---	1440	---	573	---	328	390	---
TOTAL	14554	12133	21277	14404	11738	26274	36334	22391	14478	12283	9682	9404
MEAN	470	404	684	465	419	848	1211	722	483	396	312	313
MAX	598	421	960	567	440	1540	1560	1070	556	533	461	383
MIN	404	387	490	360	405	385	722	573	427	328	272	260
CFSM	.88	.75	1.28	.87	.79	1.54	2.24	1.35	.90	.74	.58	.58
IN.	1.01	.86	1.47	1.00	.81	1.82	2.52	1.55	1.00	.85	.67	.65
CAL YR 1977	TOTAL	185200	MEAN	507	MAX	1360	MIN	244	CFSM	.94	IN	12.83
WTR YR 1978	TOTAL	204958	MEAN	562	MAX	1560	MIN	260	CFSM	1.05	IN	14.20

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 Seltentright (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) National Geodetic Vertical Datum of 1929 (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.--30 years, 251 ft³/s (7.108 m³/s), 11.59 in/yr (294 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, 3,380 ft³/s (95.7 m³/s) Mar. 24, gage height, 15.01 ft (4.575 m); minimum daily, 33 ft³/s (0.93 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	115	506	189	89	100	1360	220	151	89	59	41
2	478	114	924	171	87	98	1180	204	152	114	57	40
3	340	110	1040	167	87	99	1070	142	157	140	59	39
4	227	106	842	165	87	99	1220	189	144	138	54	39
5	185	98	523	163	89	100	1340	199	139	116	53	38
6	165	96	393	158	93	100	1580	202	127	106	53	37
7	150	98	306	148	96	99	1790	184	137	101	53	37
8	162	101	298	135	98	97	1910	185	145	93	56	37
9	204	104	271	119	100	96	1900	183	137	89	56	37
10	187	104	252	138	102	99	1570	174	124	85	54	37
11	163	102	243	155	102	105	1220	163	114	83	53	37
12	147	100	241	144	103	116	1030	174	112	79	52	37
13	134	101	256	141	104	132	821	409	107	89	53	60
14	125	108	511	138	107	268	616	756	98	91	52	65
15	123	137	893	132	102	646	509	933	96	87	50	58
16	119	179	902	127	102	878	446	878	96	82	48	50
17	115	202	1050	124	103	985	401	652	100	74	45	62
18	114	188	1130	122	103	965	395	484	100	71	45	60
19	119	163	1110	119	102	890	467	390	96	69	46	60
20	132	157	950	117	103	999	476	330	94	67	44	57
21	126	185	926	116	102	1710	435	350	89	166	42	47
22	117	192	833	114	102	2330	411	310	87	109	41	42
23	114	179	587	114	101	2930	371	268	85	109	43	39
24	112	166	482	113	101	3330	360	362	85	85	43	39
25	115	154	400	117	101	3300	386	302	85	79	41	38
26	125	154	450	114	101	2960	385	259	93	71	41	37
27	140	152	558	91	100	2560	320	224	104	68	53	35
28	132	156	507	67	100	2180	282	208	97	63	48	34
29	121	160	399	76	---	1880	258	195	87	62	46	33
30	116	174	261	82	---	1730	240	178	84	59	45	34
31	114	---	199	87	---	1560	---	165	---	61	43	---
TOTAL	4965	4155	18243	3963	2767	33441	24749	9872	3322	2795	1528	1306
MEAN	160	139	588	128	98.8	1079	825	318	111	90.2	49.3	43.5
MAX	478	202	1130	189	107	3330	1910	933	157	166	59	65
MIN	112	96	199	67	87	96	240	142	84	59	41	33
CFSM	.54	.47	2.00	.44	.34	3.67	2.81	1.08	.38	.31	.17	.15
IN.	.63	.53	2.31	.50	.35	4.23	3.13	1.25	.42	.35	.19	.17
CAL YR 1977	TOTAL	98390	MEAN 270	MAX 2140	MIN 35	CFSM .92	IN 12.45					
WTR YR 1978	TOTAL	111106	MEAN 304	MAX 3330	MIN 33	CFSM 1.03	IN 14.06					

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.--MSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft (207.243 m) National Geodetic Vertical Datum of 1929 (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, which are fair.

AVERAGE DISCHARGE.--35 years (1943 to current year), 387 ft³/s (10.96 m³/s), 12.08 in/yr (307 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, 3,900 ft³/s (110 m³/s) Mar. 26, gage height, 11.48 ft (3.499 m); minimum daily, 91 ft³/s (2.58 m³/s) Sept. 8, 10, 11.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	192	322	352	170	185	2050	403	331	183	136	104
2	360	192	555	343	170	185	1750	384	321	203	134	101
3	489	191	773	330	170	184	1520	367	318	229	135	98
4	416	187	894	320	175	186	1360	357	311	241	135	97
5	132	183	869	300	185	185	1470	368	296	234	129	95
6	293	180	636	291	190	183	1660	376	284	212	128	93
7	271	180	515	284	194	181	2050	369	280	193	125	92
8	264	180	457	275	207	177	2260	363	290	184	125	91
9	272	181	430	255	210	175	2310	359	285	176	123	92
10	297	182	410	240	206	176	2360	349	273	169	121	91
11	282	180	395	250	208	186	2190	336	265	162	120	91
12	258	180	385	255	212	198	1700	340	256	158	121	92
13	244	176	385	250	213	207	1330	447	246	165	122	110
14	231	180	465	245	206	271	1080	716	241	171	118	127
15	221	187	667	240	210	477	846	935	231	171	116	131
16	216	209	897	240	211	735	716	1030	225	162	114	122
17	212	245	973	235	201	883	642	1000	221	154	110	118
18	206	262	1040	225	195	962	606	814	222	149	109	128
19	205	257	1060	223	203	983	621	649	222	145	109	133
20	207	245	1090	217	201	1010	652	564	217	142	110	125
21	214	244	1050	217	202	1380	645	531	211	151	106	121
22	208	260	963	200	200	2110	608	519	204	201	105	113
23	202	265	907	207	199	2650	581	484	196	204	102	108
24	198	255	724	214	198	3250	559	505	191	195	99	106
25	194	247	646	212	203	3690	556	540	191	175	99	103
26	194	241	692	151	199	3880	563	482	197	163	99	99
27	197	266	780	118	192	3780	536	439	201	154	107	96
28	210	271	850	145	189	3410	483	406	203	146	118	95
29	204	270	690	155	---	2970	450	384	194	140	122	93
30	197	253	510	165	---	2520	426	366	183	137	115	94
31	192	---	400	170	---	2250	---	347	---	137	108	---
TOTAL	7788	6541	21430	7324	5519	39619	34580	15529	7306	5406	3620	3159
MEAN	251	218	691	236	197	1278	1153	501	244	174	117	105
MAX	489	271	1090	352	213	3880	2360	1030	331	241	136	133
MIN	192	176	322	118	170	175	426	336	183	137	99	91
CFSM	.58	.50	1.59	.54	.45	2.94	2.65	1.15	.56	.40	.27	.24
IN.	.67	.56	1.83	.63	.47	3.39	2.96	1.33	.62	.46	.31	.27
CAL YR 1977	TOTAL	142845	MEAN 391	MAX 2180	MIN 92	CFSM .90	IN 12.22					
WTR YR 1978	TOTAL	157821	MEAN 432	MAX 3880	MIN 91	CFSM .99	IN 13.50					

ILLINOIS RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 17, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--30 years, 1,288 ft³/s (36.47 m³/s), 12.94 in/yr (329 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, 4,540 ft³/s (128 m³/s) Apr. 12, gage height, 12.14 ft (3.700 m); minimum daily, 403 ft³/s (11.4 m³/s) Sept. 10.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	895	1110	1300	720	700	4420	2270	1530	930	657	579
2	1530	909	1460	1220	720	700	4440	2130	1480	969	641	529
3	1580	927	1750	1120	710	700	4460	2010	1440	1090	633	501
4	1590	926	1930	1050	720	700	4440	1910	1410	1150	617	485
5	1470	895	2010	1000	720	700	4420	1850	1370	1140	585	475
6	1370	879	1700	940	720	700	4380	1800	1320	1080	575	424
7	1280	888	1380	890	720	700	4380	1750	1270	1030	567	414
8	1280	893	1220	850	710	700	4360	1730	1280	979	568	408
9	1290	884	1150	810	710	700	4410	1710	1280	933	552	405
10	1280	877	1100	790	710	700	4440	1660	1240	902	547	403
11	1260	863	1100	770	710	710	4480	1600	1190	860	531	404
12	1220	855	1150	770	710	720	4500	1610	1180	827	523	404
13	1160	840	1210	760	700	843	4490	1760	1160	829	525	447
14	1110	836	1360	750	700	969	4440	2060	1140	848	515	569
15	1080	861	1600	740	700	1280	4340	2380	1110	844	493	620
16	1040	905	2010	730	690	1650	4200	2590	1110	824	490	615
17	1030	942	2220	730	690	1920	4020	2690	1110	797	524	589
18	1020	962	2380	720	690	2100	3840	2710	1110	740	530	619
19	1020	960	2460	720	690	2180	3650	2590	1120	738	515	653
20	1020	954	2520	720	690	2310	3470	2410	1100	721	504	640
21	1010	953	2570	720	690	2710	3310	2320	1070	729	484	630
22	988	961	2560	720	690	3120	3150	2220	1030	777	462	610
23	955	977	2490	730	700	3540	3020	2120	997	867	461	588
24	927	978	2400	720	700	3750	2950	2070	957	845	453	569
25	915	969	2230	710	700	3950	2460	2060	942	811	451	556
26	924	946	2000	670	700	4170	2780	2020	983	783	455	529
27	929	919	1830	570	700	4300	2690	1890	1030	760	466	520
28	924	899	1700	600	700	4270	2580	1790	1030	730	537	512
29	923	903	1600	660	---	4220	2480	1710	997	684	646	501
30	931	949	1500	690	---	4330	2380	1650	950	667	688	494
31	905	---	1400	710	---	4370	---	1580	---	659	658	---
TOTAL	35421	27405	55100	24880	19710	64412	113780	62650	34936	26563	16853	15692
MEAN	1143	914	1777	803	704	2078	3793	2021	1165	857	544	523
MAX	1590	978	2570	1300	720	4370	4500	2710	1530	1150	688	653
MIN	905	836	1100	570	690	700	2380	1580	942	659	451	403
CFSM	.85	.68	1.31	.59	.52	1.54	2.81	1.50	.86	.63	.40	.39
IN.	.97	.75	1.52	.68	.54	1.77	3.13	1.72	.96	.73	.46	.43
CAL YR 1977	TOTAL	458089	MEAN	1255	MAX	3670	MIN	486	CFSM	.93	IN	12.60
WTR YR 1978	TOTAL	497402	MEAN	1363	MAX	4500	MIN	403	CFSM	1.01	IN	13.69

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.--WDR IN-77-1: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 645.00 ft (196.596 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,590 ft³/s (130 m³/s) Apr. 11, 1978, gage height, 12.66 ft (3.859 m); maximum gage height, 13.29 ft (4.051 m) Jan. 13, 1978 (backwater from ice jam); minimum daily, 335 ft³/s (9.49 m³/s) Sept. 12, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,590 ft³/s (130 m³/s) Apr. 11, gage height, 12.66 ft (3.859 m); maximum gage height, 13.29 ft (4.051 m) Jan. 13, 1978 (backwater from ice jam); minimum daily, 335 ft³/s (9.49 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1540	918	1110	1300	710	710	4430	2510	1580	940	656	560
2	1590	921	1430	1250	730	710	4420	2350	1540	967	641	504
3	1650	937	1730	1150	730	710	4460	2210	1510	1090	664	476
4	1650	940	1420	1100	730	710	4480	2110	1440	1170	634	447
5	1570	918	2020	1050	730	710	4480	2060	1370	1170	582	429
6	1440	910	1980	970	720	710	4510	1950	1320	1080	568	382
7	1320	922	1730	920	720	720	4570	1870	1290	1010	559	418
8	1310	930	1200	880	720	720	4580	1850	1300	971	555	397
9	1310	937	1200	840	720	720	4570	1820	1280	930	544	346
10	1310	942	1200	800	710	720	4570	1750	1240	900	565	343
11	1310	947	1200	790	710	720	4570	1690	1210	873	541	343
12	1280	931	1200	770	710	740	4580	1730	1200	844	502	335
13	1190	925	1350	770	720	800	4570	1920	1170	891	497	383
14	1140	914	1400	760	720	1020	4550	2290	1150	878	490	526
15	1110	965	1880	760	720	1320	4500	2640	1140	860	471	589
16	1070	1000	2140	760	720	1670	4410	2870	1120	853	463	573
17	1050	1010	2280	750	720	1770	4310	2980	1110	877	531	519
18	1040	1010	2470	750	720	1920	4200	3030	1150	816	513	531
19	1070	1010	2530	750	720	2270	4060	2880	1170	776	502	558
20	1080	1010	2600	740	720	2440	3900	2670	1140	773	504	554
21	1030	1010	2690	740	720	3040	3750	2560	1070	759	488	574
22	999	1010	2720	740	720	3520	3590	2450	1040	793	470	591
23	979	1060	2640	740	720	3890	3480	2360	1010	867	459	525
24	942	1050	2540	730	710	3990	3400	2300	981	855	466	511
25	935	1030	2360	700	710	4150	3270	2300	968	849	437	507
26	942	1000	2130	660	710	4240	3150	2260	1040	841	432	495
27	951	987	1930	620	710	4400	3020	2100	1070	792	446	481
28	984	961	1800	570	710	4350	2880	1960	1010	752	503	500
29	963	934	1650	630	---	4300	2760	1840	995	714	596	507
30	943	992	1500	660	---	4350	2640	1750	953	678	659	462
31	924	---	1400	690	---	4400	---	1650	---	661	646	---
TOTAL	36615	29031	58070	25340	20110	66440	120660	68710	35567	27230	16584	14366
MEAN	1181	968	1873	817	718	2143	4022	2216	1186	878	535	479
MAX	1650	1060	2720	1300	730	4400	4580	3030	1580	1170	664	591
MIN	924	910	1110	570	710	710	2640	1650	953	661	432	335
CFSM	.86	.70	1.36	.59	.52	1.56	2.92	1.61	.86	.64	.39	.35
IN.	.99	.78	1.57	.69	.54	1.80	3.26	1.86	.96	.74	.45	.39

CAL YR 1977 TOTAL 473402 MEAN 1297 MAX 3650 MIN 485 CFSM .94 IN 12.80
WTR YR 1978 TOTAL 518723 MEAN 1421 MAX 4580 MIN 335 CFSM 1.03 IN 14.02

ILLINOIS RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (State Highway Commission bench mark).

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

AVERAGE DISCHARGE.--10 years, 32.9 ft³/s (0.932 m³/s), 14.09 in/yr (358 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, 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)	
Mar. 17	0100	162	4.59	4.84	1.475	May 13	1400	184	5.21	5.23	1.594
Mar. 21	1100	*498	14.10	*8.95	2.728	Aug. 28	0400	181	5.12	5.00	1.524
Apr. 6	2100	360	10.20	6.93	2.112						

Minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Jan. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	15	29	18	11	9.7	51	21	20	20	20	14
2	18	18	34	17	11	9.7	47	20	19	20	14	14
3	16	17	27	16	11	9.7	76	20	19	20	16	13
4	15	15	22	15	11	10	92	20	19	20	14	13
5	15	15	20	15	11	10	146	21	19	19	13	13
6	14	15	19	15	11	10	204	21	19	19	13	13
7	14	15	19	14	11	10	208	20	20	19	13	13
8	17	15	18	14	11	11	97	21	19	18	13	12
9	16	14	19	14	11	11	73	22	19	18	13	12
10	15	16	20	14	11	11	60	22	18	18	13	12
11	15	15	22	14	11	11	78	21	18	16	13	12
12	15	14	25	13	11	13	59	30	17	16	12	12
13	15	14	31	13	11	19	46	125	17	16	12	12
14	15	15	37	12	11	41	39	129	17	16	12	13
15	15	15	47	12	11	97	34	118	17	16	12	13
16	15	15	36	12	11	131	31	80	17	16	12	12
17	15	15	74	12	11	142	29	63	19	15	12	13
18	15	14	60	12	11	116	32	52	19	15	12	17
19	15	14	40	12	10	96	41	45	18	14	12	14
20	14	15	49	12	11	181	36	41	18	14	11	13
21	14	15	51	12	11	427	31	36	18	14	11	13
22	14	14	42	11	11	219	28	34	18	14	11	13
23	14	14	34	11	10	149	27	33	18	15	12	13
24	15	14	32	11	9.2	121	27	32	18	14	12	13
25	15	15	30	11	9.2	81	26	30	19	14	12	12
26	14	20	27	10	9.2	69	24	29	20	14	12	12
27	14	18	25	9.0	9.5	66	23	27	20	14	12	12
28	14	16	23	10	9.7	91	22	26	19	13	88	12
29	14	15	22	11	---	96	22	26	19	13	22	12
30	14	15	20	11	---	67	21	25	19	13	17	12
31	14	---	19	11	---	58	---	21	---	14	15	---
TOTAL	464	457	973	794.0	297.8	2393.1	1730	1231	556	497	486	384
MEAN	15.0	15.2	31.4	12.7	10.6	77.2	57.7	39.7	18.5	16.0	15.7	12.8
MAX	19	20	74	18	11	427	208	129	20	20	88	17
MIN	14	14	18	9.0	9.2	9.7	21	20	17	13	11	12
CFSM	.47	.48	.99	.40	.33	2.44	1.82	1.25	.58	.51	.50	.40
IN.	.54	.54	1.14	.46	.35	2.81	2.03	1.44	.65	.58	.57	.45
CAL YR 1977 TOTAL	7527.3		MFAN 20.6	MAX 201	MIN 8.9	CFSM .65	IN 8.83					
WTR YR 1978 TOTAL	9862.9		MFAN 27.0	MAX 427	MIN 9.0	CFSM .85	IN 11.57					

ILLINOIS RIVER BASIN

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05518000 KANKAKEE RIVER AT SHELBY, IN

LOCATION.--Lat 41°10'58", long 87°20'33", in SW¼ sec.33, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, 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) National Geodetic Vertical Datum of 1929. 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 winter periods, which are fair.

AVERAGE DISCHARGE.--56 years, 1,581 ft³/s (44.77 m³/s), 12.07 in/yr (307 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; maximum gage height, 11.48 ft (3.499 m) Apr. 11, 1978; minimum daily, 260 ft³/s (7.36 m³/s) Jan. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,490 ft³/s (155 m³/s) Apr. 9, gage height, 11.24 ft (3.426 m) (occurred during levee breach); maximum gage height, 11.48 ft (3.499 m) Apr. 11 (after levee repaired); minimum daily discharge, 506 ft³/s (14.3 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2240	1220	1440	1700	860	880	4860	3330	2100	1130	849	833
2	2280	1270	1770	1600	880	880	5150	3150	2010	1150	839	738
3	2280	1280	2050	1500	880	880	5080	3100	1930	1220	846	684
4	2270	1270	2240	1400	880	880	5100	2840	1870	1360	860	648
5	2200	1240	2410	1300	880	880	5170	2800	1780	1410	795	621
6	2070	1220	2530	1250	880	880	5240	2720	1690	1350	763	593
7	1920	1220	2000	1200	880	890	5350	2620	1690	1260	751	568
8	1880	1220	1500	1150	880	890	5430	2580	1690	1180	745	584
9	1890	1220	1500	1100	880	890	5430	2550	1660	1140	734	536
10	1840	1210	1500	1000	880	890	5300	2480	1610	1100	739	513
11	1820	1200	1500	980	880	890	5300	2370	1550	1060	769	507
12	1790	1190	1500	940	890	900	5280	2420	1490	1020	725	506
13	1700	1170	1800	940	880	1050	5260	2700	1460	1030	713	518
14	1600	1170	2200	930	880	1360	5240	3130	1420	1050	703	607
15	1520	1190	2500	930	880	1700	5100	3430	1400	1020	685	734
16	1460	1240	2750	920	880	2140	4980	3580	1410	993	672	763
17	1410	1270	3000	920	880	2490	4920	3620	1420	993	682	731
18	1390	1260	3150	920	880	2750	4880	3640	1450	961	729	757
19	1390	1260	3230	910	880	2910	4840	3600	1470	899	690	786
20	1400	1260	3250	900	890	3150	4770	3460	1460	881	677	780
21	1370	1250	3320	900	890	3670	4740	3330	1400	873	661	790
22	1320	1240	3370	890	890	4260	4640	3210	1320	899	641	815
23	1280	1270	3350	880	890	4520	4500	3120	1270	965	626	782
24	1250	1300	3300	880	890	4630	4390	3040	1220	1010	611	717
25	1220	1270	3190	880	880	4670	4290	2970	1210	980	616	689
26	1220	1220	2990	830	880	4690	4140	2910	1290	990	598	683
27	1220	1200	2670	760	880	4730	3980	2790	1330	972	602	657
28	1240	1200	2350	710	880	4780	3820	2630	1280	897	709	651
29	1250	1230	2100	760	---	4830	3660	2500	1220	861	830	681
30	1220	1250	1950	800	---	4840	3490	2350	1180	842	862	671
31	1210	---	1800	840	---	4850	---	2220	---	829	879	---
TOTAL	50150	37010	74210	31620	24680	78650	144330	91190	45280	32325	22601	20143
MEAN	1618	1234	2394	1020	881	2537	4811	2942	1509	1043	729	671
MAX	2280	1300	3370	1700	890	4850	5430	3640	2100	1410	879	833
MIN	1210	1170	1440	710	860	880	3490	2220	1180	829	598	506
CFSM	.91	.69	1.35	.57	.50	1.43	2.70	1.65	.85	.59	.41	.38
IN.	1.05	.77	1.55	.66	.52	1.64	3.02	1.91	.95	.68	.47	.42
CAL YR 1977 TOTAL	594022		MFAN 1627	MAX 4240	MIN 543	CFSM .92	IN 12.42					
WTR YR 1978 TOTAL	652189		MFAN 1787	MAX 5430	MIN 506	CFSM 1.00	IN 13.64					

ILLINOIS RIVER BASIN

005518000 KANKAKEE RIVER AT SHELBY, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1963 to current year (partial-record station).

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
APR 11...	1540	5080	19	261	8.0

05519000 SINGLETON DITCH AT SCHNEIDER, IN

LOCATION.--Lat 41°12'44", long 87°26'44", in SW¼ 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.--NSP 1915: 1956-59. NSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 623.67 ft (190.095 m) National Geodetic Vertical Datum of 1929. 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 fair except those for winter period and those for period of no gage-height record, Dec. 16 to Feb. 7 and June 26 to Aug. 16, which are poor.

AVERAGE DISCHARGE.--30 years, 104 ft³/s (2.945 m³/s), 11.48 in/yr (291 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 discharge, 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 21	1100	1160	32.8	6.86	2.09	May 13	1500	1190	33.7	6.04	1.841
Apr. 6	2000	*1630	46.2	*7.16	2.182	June 26	Unknown	1000	28.3	Unknown	

Minimum daily discharge, 17 ft³/s (0.48 m³/s) Jan 27.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	62	159	77	23	30	298	93	81	170	30	25
2	138	229	282	73	24	30	269	86	75	200	29	24
3	124	193	219	69	25	30	380	81	69	164	32	24
4	107	147	173	65	25	30	697	79	67	138	30	23
5	93	123	148	61	26	29	1010	84	72	116	29	23
6	83	110	137	59	26	29	1130	80	58	100	28	22
7	75	102	120	57	26	30	1180	74	66	84	26	22
8	100	96	110	55	27	32	691	93	63	70	25	21
9	114	92	102	53	27	34	489	93	58	63	26	21
10	96	93	100	51	29	37	393	85	54	56	28	20
11	87	85	116	48	29	40	493	81	53	52	31	19
12	80	77	125	47	29	43	412	172	51	47	35	19
13	73	73	134	43	29	59	318	1050	46	42	34	20
14	69	73	167	41	29	220	256	952	45	38	32	21
15	66	77	233	39	28	548	222	649	44	35	28	24
16	78	78	229	38	28	514	195	448	44	32	26	22
17	74	77	350	37	29	495	177	339	50	29	29	22
18	69	74	290	36	30	399	191	273	55	27	28	36
19	64	68	230	34	31	374	223	226	49	27	29	33
20	60	68	225	34	31	518	200	199	47	27	28	28
21	57	67	200	33	30	940	183	171	47	27	27	27
22	54	64	180	33	29	725	164	148	47	30	27	26
23	51	64	160	34	31	596	156	145	46	31	26	26
24	52	62	144	35	29	469	165	150	46	29	25	24
25	53	62	129	35	29	352	160	138	49	27	26	24
26	55	64	120	24	29	304	149	124	800	27	25	23
27	54	67	110	17	30	288	132	114	600	27	25	23
28	52	64	103	19	30	440	120	105	390	26	31	22
29	50	50	96	20	---	506	111	97	260	26	30	22
30	48	50	89	21	---	382	102	92	144	29	27	22
31	48	---	81	22	---	334	---	86	---	28	25	---
TOTAL	2339	2611	5061	1310	788	8857	10666	6607	3576	1824	877	708
MEAN	75.5	87.0	163	42.3	28.1	286	356	213	119	58.8	28.3	23.6
MAX	138	229	350	77	31	940	1180	1050	800	200	35	36
MIN	48	50	81	17	23	29	102	74	44	26	25	19
CFSM	.61	.71	1.33	.34	.23	2.33	2.89	1.73	.97	.48	.23	.19
IN.	.71	.79	1.53	.40	.24	2.68	3.23	2.00	1.08	.55	.27	.21
CAL YR 1977	TOTAL	25376	MEAN	69.5	MAX	360	MIN	11	CFSM	.57	IN	7.67
WTR YR 1978	TOTAL	45224	MEAN	124	MAX	1180	MIN	17	CFSM	1.01	IN	13.68

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, Illinois, 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) National Geodetic Vertical Datum of 1929. 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.--63 years (water years 1916-78), 1,925 ft³/s (54.52 m³/s), 11.40 in/yr (290 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, 7,760 ft³/s (220 m³/s) Apr. 6, gage height, 5.12 ft (1.561 m); maximum gage height, 6.25 ft (1.905 m) Jan. 2, ice jam; minimum daily discharge, 478 ft³/s (13.5 m³/s) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3110	1600	1840	2600	940	1300	5630	4090	2790	1610	895	807
2	3130	2120	2360	2500	940	1300	5590	3960	2600	1710	913	751
3	3000	2170	2520	2400	940	1250	5700	3810	2450	1790	956	697
4	2920	2030	2660	2400	960	1250	5890	3680	2320	1690	931	658
5	2840	1900	2790	2300	980	1200	6770	3630	2220	1660	877	629
6	2720	1820	2880	2200	1000	1150	7030	3530	2130	1610	788	601
7	2600	1770	2900	2100	1050	1100	7410	3480	2140	1530	757	565
8	2580	1740	2700	1900	1100	1100	6710	3490	2170	1420	737	547
9	2570	1720	2500	1700	1100	1100	6260	3420	2100	1330	727	538
10	2490	1690	2300	1500	1150	1150	6180	3310	2050	1260	717	495
11	2420	1650	2100	1400	1150	1300	6780	3240	1960	1190	717	486
12	2350	1600	2000	1300	1200	1500	6740	3550	1870	1130	737	478
13	2290	1550	1900	1200	1200	1800	6430	5220	1760	1120	717	478
14	2210	1530	2200	1200	1250	2100	6140	5250	1690	1140	697	521
15	2100	1530	2800	1150	1250	2400	5940	5050	1640	1130	677	611
16	2000	1570	3300	1150	1200	2800	5760	4890	1610	1090	677	687
17	1930	1620	3800	1150	1200	3100	5580	4810	1610	1050	648	727
18	1900	1630	4410	1150	1150	3300	5630	4730	1660	1040	668	767
19	1880	1620	4250	1100	1150	3660	5710	4630	1660	987	677	798
20	1860	1600	4280	1100	1100	4140	5640	4530	1630	936	648	798
21	1790	1600	4120	1100	1100	5390	5560	4380	1600	917	629	788
22	1690	1590	4050	1100	1100	5380	5390	4220	1530	921	620	809
23	1620	1570	4050	1100	1100	5350	5230	4120	1450	1020	601	841
24	1590	1590	3990	1100	1100	5330	5160	4070	1410	1040	592	788
25	1560	1590	3800	1050	1150	5320	5100	3940	1640	1020	574	737
26	1570	1500	3600	1050	1200	5350	4950	3780	2710	1010	565	717
27	1570	1470	3400	1000	1300	5320	4780	3650	2240	1020	565	687
28	1560	1500	3200	960	1300	5640	4600	3510	1970	965	601	668
29	1580	1480	3000	940	---	5860	4420	3340	1760	901	707	677
30	1570	1500	2900	940	---	5730	4270	3170	1640	872	781	697
31	1550	---	2800	940	---	5680	---	2970	---	855	804	---
TOTAL	66550	49850	95400	44780	31360	98350	172980	123450	58010	36964	22200	20048
MEAN	2147	1662	3077	1445	1120	3173	5766	3982	1934	1192	716	668
MAX	3130	2170	4410	2600	1300	5860	7410	5250	2790	1790	956	841
MIN	1550	1470	1840	940	940	1100	4270	2970	1410	855	565	478
CFSM	.94	.72	1.34	.63	.49	1.38	2.51	1.74	.84	.52	.31	.29
IN.	1.08	.81	1.55	.73	.51	1.59	2.81	2.00	.94	.60	.36	.33
CAL YR 1977	TOTAL	685413	MEAN	1878	MAX	4700	MIN	612	CFSM	.82	IN	11.11
WTR YR 1978	TOTAL	819942	MEAN	2246	MAX	7410	MIN	478	CFSM	.98	IN	13.30

ILLINOIS RIVER BASIN

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).

WATER-DISCHARGE RECORDS

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) National Geodetic Vertical Datum of 1929 (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.--30 years, 26.0 ft³/s (0.736 m³/s), 9.92 in/yr (252 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 21	1500	*222	6.29	*6.03	1.84	May 13	1700	197	5.58	5.43	1.66
Apr. 4	2300	177	5.01	5.27	1.61	June 26	1100	205	5.80	5.43	1.66

Minimum daily discharge, 4.2 ft³/s (0.119 m³/s) Sept. 12, 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	25	77	21	6.1	8.4	60	32	30	57	10	5.2
2	67	40	89	20	6.4	8.5	60	30	29	74	9.0	5.2
3	46	33	71	19	6.6	8.4	83	30	25	66	11	4.9
4	36	27	54	18	6.8	8.2	115	31	23	49	9.4	5.2
5	30	24	48	17	7.2	8.1	153	37	22	39	8.4	5.0
6	26	23	40	16	7.3	8.3	140	38	21	33	8.1	4.8
7	24	22	35	16	7.4	8.5	157	39	21	29	7.8	4.6
8	60	23	29	15	7.5	9.0	106	54	20	26	7.4	4.6
9	56	23	26	14	7.6	9.7	83	46	18	24	7.2	4.4
10	40	20	24	14	7.7	10	72	36	17	22	7.9	4.3
11	35	17	27	13	7.8	12	87	36	16	20	7.8	4.3
12	30	15	31	11	7.8	15	70	48	16	19	17	4.2
13	26	14	42	11	7.8	29	57	178	15	19	15	5.2
14	25	16	84	11	7.8	90	49	178	14	16	9.5	6.4
15	22	14	82	10	7.8	143	45	140	14	15	8.0	5.5
16	20	14	78	9.8	7.9	135	41	108	14	14	7.1	5.0
17	18	18	107	9.3	8.3	122	38	88	16	13	6.9	5.3
18	18	17	45	9.0	8.5	96	50	73	16	12	6.9	6.0
19	15	15	62	8.8	8.6	86	64	63	14	11	6.7	6.3
20	14	16	63	8.8	8.4	108	58	77	14	11	6.1	5.1
21	13	16	56	4.0	8.2	212	52	79	13	11	5.6	5.8
22	13	15	50	8.7	8.2	178	45	63	12	9.9	5.5	5.4
23	12	15	45	8.6	8.3	139	45	69	12	12	5.3	4.8
24	12	14	41	9.0	8.0	105	51	70	11	11	5.3	4.6
25	15	16	37	9.5	8.0	81	68	60	65	9.8	5.5	4.5
26	25	14	33	5.6	8.0	76	64	52	195	9.5	5.1	4.5
27	21	17	31	4.6	8.1	84	48	45	146	9.8	7.8	4.2
28	18	16	29	4.9	8.2	111	41	41	91	8.4	11	4.2
29	16	15	27	5.2	---	94	37	38	64	8.3	8.5	4.2
30	15	16	24	5.4	---	75	35	35	52	13	6.2	4.8
31	15	---	22	5.8	---	68	---	32	---	9.3	5.6	---
TOTAL	866	583	1550	748.0	216.7	2146.1	2074	1946	1036	681.0	248.6	148.5
MEAN	27.3	19.4	50.0	11.2	7.73	69.2	69.1	62.8	34.5	22.0	8.02	4.95
MAX	67	40	107	21	8.6	212	157	178	195	74	17	6.4
MIN	12	14	22	4.6	8.1	8.1	35	30	11	8.3	5.1	4.2
CFSM	.77	.55	1.40	.32	.22	1.94	1.94	1.76	.97	.62	.23	.14
IN.	.48	.61	1.42	.36	.23	2.24	2.17	2.03	1.08	.71	.26	.16
CAL YR 1977 TOTAL	10284.8			MEAN 28.2	MAX 219	MIN 3.3	CFSM .79	IN 10.75				
ATQ YR 1978 TOTAL	11823.5			MEAN 32.4	MAX 212	MIN 4.2	CFSM .91	IN 12.35				

ILLINOIS RIVER BASIN
 05521000 IROQUOIS RIVER AT ROSEBUD, IN
 WATER-QUALITY RECORDS

PERIOD OF RECORD. --
 SEDIMENT DISCHARGE: October 1977 to current year (partial-record station).

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW. INSTAN- TANEOUS (CFS)	SECI- MENT. SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE. SUS- PENDEO (T/DAY)	TEMPER- ATURE (DEG C)
OCT 27...	1455	20	21	1.1	13.0
NOV 30...	1420	16	20	.87	1.0
MAR 17...	1705	120	21	6.8	1.0
JUN 08...	1645	19	20	1.0	19.0

05522000 IROQUOIS RIVER NEAR NORTH MARION, IN

LOCATION.--Lat 40°58'12", long 87°06'50", in NE¼ 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) National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and Aug. 5 to Sept. 30 when the discharge is below about 20 ft³/s, 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.--29 years (1949 to current year), 126 ft³/s (3.568 m³/s), 11.88 in/yr (302 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)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 18	1500	483	13.7	7.82	2.384	Apr. 8	0900	748	21.2	9.93	3.027
Mar. 18	0100	672	19.0	9.38	2.859	May 16	1400	723	20.5	9.75	2.972
Mar. 23	2000	*976	27.6	*11.59	3.533	June 27	0400	516	14.6	7.61	2.320

Minimum daily discharge, 9.9 ft³/s (0.28 m³/s) Sept. 11.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	78	151	98	35	39	353	138	138	149	72	17
2	203	99	282	91	35	40	297	125	131	215	68	16
3	201	104	334	85	36	40	398	115	126	282	50	27
4	161	96	308	80	36	40	349	110	116	225	37	15
5	134	88	251	78	36	39	468	119	107	158	32	13
6	114	83	212	74	36	39	575	131	90	114	29	11
7	102	81	180	71	36	40	682	135	90	92	26	10
8	157	83	150	68	36	41	744	160	94	80	24	12
9	219	83	130	65	35	43	675	184	91	68	22	11
10	207	82	115	62	36	47	529	176	83	68	23	10
11	177	78	110	60	36	52	428	152	74	52	23	9.9
12	152	71	120	57	36	58	477	154	72	47	31	11
13	131	66	167	55	37	157	326	325	62	52	37	14
14	116	65	240	52	37	236	260	563	54	58	27	18
15	108	71	362	49	37	437	221	680	51	51	24	25
16	100	81	396	47	37	589	196	720	49	39	21	20
17	95	83	422	45	38	657	177	683	49	46	15	16
18	92	82	476	44	39	665	169	552	54	33	18	19
19	88	77	444	43	40	605	202	422	57	32	21	26
20	83	75	383	42	40	565	235	339	52	30	20	24
21	79	78	346	42	40	736	237	320	50	29	17	21
22	75	75	310	42	39	914	225	326	43	30	15	22
23	74	74	281	42	38	968	200	301	37	44	15	20
24	72	74	258	40	38	957	194	295	36	45	15	17
25	73	73	235	42	39	845	209	309	63	32	16	14
26	91	74	187	44	39	690	247	298	427	31	14	15
27	94	78	160	29	38	572	242	247	505	49	15	14
28	90	75	140	25	38	538	200	210	426	27	43	13
29	85	73	125	30	---	532	171	185	279	26	34	13
30	79	72	115	32	---	475	153	165	172	30	25	12
31	77	---	105	33	---	406	---	146	---	29	19	---
TOTAL	3657	2372	7495	1667	1043	12062	9839	8785	3678	2263	848	485.9
MEAN	118	79.1	242	53.8	37.3	389	328	283	123	73.0	27.4	16.2
MAX	219	104	476	98	40	968	744	720	505	282	72	27
MIN	72	65	105	25	35	39	153	110	36	26	14	9.9
CFSM	.82	.55	1.68	.37	.26	2.70	2.28	1.97	.85	.51	.19	.11
IN.	.94	.61	1.94	.43	.27	3.12	2.54	2.27	.95	.58	.22	.13
CAL YR 1977	TOTAL	42611.7	MEAN 117	MAX 786	MIN 8.3	CFSM .81	IN 11.01					
WTR YR 1978	TOTAL	54194.9	MEAN 148	MAX 968	MIN 9.9	CFSM 1.03	IN 14.00					

ILLINOIS RIVER BASIN

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) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 8, 1949, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--30 years, 163 ft³/s (4.616 m³/s), 10.90 in/yr (277 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, 1,360 ft³/s (38.5 m³/s) Mar. 23, gage height, 12.52 ft (3.816 m); minimum daily, 11 ft³/s (0.31 m³/s) Sept. 6, 7, 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	93	235	126	35	45	470	167	153	150	63	18
2	279	111	405	115	36	46	403	153	144	228	69	18
3	236	114	431	110	37	46	455	143	136	309	52	27
4	179	104	376	100	38	46	513	143	124	242	39	14
5	148	97	310	95	39	45	711	170	114	164	34	15
6	129	94	245	90	39	45	824	180	101	119	31	11
7	117	96	161	85	40	45	1010	184	105	98	30	11
8	216	98	148	80	40	45	993	251	109	87	27	13
9	274	97	144	76	41	48	851	257	96	74	24	12
10	234	94	128	72	41	52	689	217	81	74	26	11
11	191	86	133	68	41	57	587	184	84	60	26	11
12	162	78	143	60	42	62	513	214	80	56	41	12
13	138	74	165	63	42	110	425	596	69	62	47	15
14	125	76	349	60	42	236	341	891	63	65	30	21
15	119	83	492	57	42	548	293	961	64	59	27	25
16	112	94	537	55	43	722	257	925	64	48	22	19
17	107	94	617	52	43	815	229	812	68	53	17	17
18	106	92	645	50	44	830	242	672	78	40	20	18
19	99	85	560	49	45	790	315	527	69	36	24	26
20	93	86	481	49	46	799	337	416	60	35	23	25
21	88	89	426	49	45	1180	321	420	61	33	18	24
22	86	84	369	49	44	1320	287	408	51	34	17	25
23	86	84	334	47	44	1350	257	365	47	48	16	20
24	84	84	313	48	44	1270	280	410	47	49	17	18
25	88	84	287	49	43	1060	330	414	112	38	17	15
26	109	73	230	50	43	869	371	361	568	36	16	17
27	107	83	200	28	44	755	315	297	591	51	17	16
28	101	77	180	36	44	757	252	248	473	30	49	15
29	96	76	162	33	---	732	212	213	304	27	37	15
30	90	72	139	34	---	645	189	185	180	32	24	13
31	90	---	129	35	---	553	---	162	---	32	20	---
TOTAL	4292	2652	9474	1970	1167	15923	13272	11546	4296	2469	920	517
MEAN	138	88.4	306	63.5	41.7	514	442	372	143	79.6	29.7	17.2
MAX	279	114	645	126	46	1350	1010	961	591	309	69	27
MIN	84	72	128	28	35	45	189	143	47	27	16	11
CFSM	.68	.44	1.51	.31	.21	2.53	2.18	1.83	.70	.39	.15	.09
IN.	.79	.49	1.74	.36	.21	2.92	2.43	2.12	.79	.45	.17	.09
CAL YR 1977	TOTAL	50599	MEAN 139	MAX 1000	MIN 10	CFSM .69	IN 9.27					
WTR YR 1978	TOTAL	68498	MEAN 188	MAX 1350	MIN 11	CFSM .93	IN 12.55					

ILLINOIS RIVER BASIN

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05523000 BICE DITCH NEAR SOUTH MARION, IN

LOCATION.--Lat 40°52'00", long 87°05'32", in NE1/4 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) National Geodetic Vertical Datum of 1929. 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.--29 years (1949 to current year), 16.7 ft³/s (0.473 m³/s), 10.40 in/yr (264 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 21	1000	476	13.5	7.59	2.313
June 26	0400	*769	21.8	*9.70	2.957

Minimum daily discharge, 0.47 ft³/s (0.013 m³/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	9.7	75	6.7	2.0	2.6	38	7.6	5.9	33	1.5	.70
2	84	13	84	6.4	2.0	2.6	42	6.7	16	60	1.6	.68
3	52	12	64	6.1	2.1	2.7	54	6.4	12	60	1.9	.62
4	38	10	47	5.8	2.1	2.6	45	9.0	8.7	34	1.5	.61
5	30	9.4	40	5.5	2.2	2.5	41	22	6.3	23	1.3	.59
6	24	9.4	28	5.1	2.3	2.6	89	23	5.4	16	1.3	.58
7	21	12	32	4.7	2.3	2.5	110	39	6.3	11	1.3	.59
8	77	19	27	4.3	2.4	2.6	53	61	7.6	8.6	1.3	.54
9	49	18	9.7	4.0	2.4	2.8	34	35	6.5	7.1	1.2	.53
10	33	14	16	3.4	2.4	3.2	30	23	5.5	5.5	1.2	.54
11	27	9.8	18	3.3	2.4	3.5	55	19	5.0	4.5	1.3	.57
12	21	7.7	18	3.2	2.4	3.6	32	25	5.1	4.0	3.2	.53
13	17	7.0	31	3.4	2.4	4.0	21	174	4.3	6.9	2.4	.56
14	15	8.5	141	3.3	2.4	13	15	139	3.8	5.5	1.3	.54
15	14	10	120	3.1	2.4	112	13	103	3.8	4.8	1.2	.60
16	11	9.9	106	2.9	2.4	154	11	73	3.7	3.8	1.1	.63
17	11	9.4	127	2.8	2.5	193	10	50	3.5	3.1	1.1	1.3
18	11	7.5	95	2.8	2.6	123	24	36	3.3	2.7	1.1	.72
19	8.4	6.4	61	2.7	2.7	109	30	27	3.0	2.5	1.7	.61
20	7.4	8.9	63	2.8	2.7	135	24	23	2.9	2.4	1.2	.55
21	7.4	11	46	2.8	2.6	350	21	22	3.0	2.2	.97	.50
22	7.0	9.2	33	2.6	2.5	163	16	16	2.5	2.1	.92	.54
23	9.5	10	28	2.7	2.6	111	19	21	2.4	2.9	.87	.53
24	12	9.0	24	2.8	2.5	70	24	25	2.4	2.3	.87	.50
25	13	10	18	3.0	2.5	50	42	20	70	2.1	.88	.50
26	19	7.3	17	1.3	2.5	48	31	14	568	2.0	.88	.50
27	17	6.8	11	1.4	2.5	78	20	11	169	2.2	.90	.47
28	14	6.0	8.9	1.5	2.6	104	14	9.1	65	1.8	1.3	.50
29	11	5.4	7.9	1.6	---	82	12	7.5	37	1.7	1.0	.50
30	9.4	8.3	7.5	1.8	---	58	9.5	6.5	24	1.7	.80	.50
31	9.3	---	7.3	1.9	---	49	---	5.5	---	1.6	.72	---
TOTAL	808.6	294.6	1411.3	106.2	67.4	2039.8	979.5	1059.3	1061.9	321.0	39.81	17.63
MFAN	26.1	9.82	45.5	3.43	2.41	65.8	32.7	34.2	35.4	10.4	1.28	.59
MAX	125	19	141	6.7	2.7	350	110	174	568	60	3.2	1.3
MIN	7.0	5.4	7.3	1.3	2.0	2.5	9.5	5.5	2.4	1.6	.72	.47
CFSM	1.20	.45	2.09	.16	.11	3.02	1.50	1.57	1.62	.48	.06	.03
IN.	1.38	.50	2.41	.18	.12	3.48	1.67	1.81	1.81	.55	.07	.03
CAL YR 1977	TOTAL	6378.09	MFAN	17.5	MAX	257	MIN	.19	CFSM	.80	IN	10.88
WTR YR 1978	TOTAL	8207.04	MFAN	22.5	MAX	568	MIN	.47	CFSM	1.03	IN	14.00

ILLINOIS RIVER BASIN

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) National Geodetic Vertical Datum of 1929. 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.--29 years (1948-51, 1952 to current year), 70.2 ft³/s (1.988 m³/s), 11.39 in/yr (289 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, 826 ft³/s (23.4 m³/s) Mar. 21, gage height, 14.48 ft (4.413 m); minimum daily, 2.9 ft³/s (0.082 m³/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	36	180	36	11	15	165	43	38	124	13	4.4
2	241	42	260	34	11	16	195	39	59	188	12	4.2
3	184	44	220	32	12	16	231	36	57	195	13	3.9
4	139	40	130	30	12	15	212	39	47	139	10	3.7
5	102	34	110	28	12	15	230	72	37	88	9.9	3.5
6	77	34	100	27	13	15	275	86	30	58	9.6	3.5
7	63	37	90	23	13	15	381	101	33	44	9.6	3.4
8	168	56	82	22	14	16	318	145	37	35	9.3	3.2
9	178	56	74	21	14	17	200	142	32	29	9.3	3.0
10	132	50	68	20	14	18	172	98	27	27	9.6	2.9
11	103	36	74	19	14	20	250	76	25	22	9.3	3.2
12	81	30	96	18	14	21	205	89	24	22	20	3.4
13	63	26	115	19	14	24	150	317	23	29	16	4.0
14	57	28	310	19	14	34	101	381	21	28	10	4.2
15	53	36	340	18	14	98	74	290	21	25	9.0	4.2
16	47	37	330	17	14	384	60	195	20	22	8.5	4.2
17	47	37	365	16	15	450	55	145	20	19	8.0	4.8
18	44	32	350	15	15	395	86	113	20	17	7.7	4.8
19	39	28	300	15	16	330	125	94	20	16	8.5	4.2
20	34	31	250	15	16	340	110	88	18	15	8.0	4.2
21	33	38	155	15	15	690	96	135	18	14	6.8	5.2
22	31	34	115	14	15	560	76	104	17	13	6.3	4.6
23	34	32	100	14	15	380	75	109	15	16	6.1	4.8
24	46	31	78	15	15	300	113	156	15	15	5.8	4.8
25	48	37	70	16	15	235	158	133	51	14	5.8	4.4
26	59	35	60	11	15	195	161	101	591	17	5.6	4.2
27	56	29	52	7.4	15	240	111	74	467	17	5.6	4.0
28	48	27	49	8.2	15	365	76	59	332	13	7.2	4.2
29	41	24	44	8.4	---	340	60	51	244	12	6.3	4.2
30	37	25	41	9.4	---	250	51	46	158	13	5.2	4.2
31	37	---	38	10	---	195	---	41	---	12	5.0	---
TOTAL	2497	1062	4646	572.8	392	6004	4572	3638	2517	1298	276.0	121.5
MEAN	80.5	35.4	150	18.5	14.0	194	152	117	83.9	41.9	8.90	4.05
MAX	241	56	365	36	16	690	381	381	591	195	20	5.2
MIN	31	24	38	7.4	11	15	51	36	15	12	5.0	2.9
CFSM	.96	.42	1.79	.22	.17	2.32	1.82	1.40	1.00	.50	.11	.05
IN.	1.11	.47	2.06	.25	.17	2.67	2.03	1.62	1.12	.58	.12	.05

CAL YR 1977 TOTAL 21771.5 MEAN 59.6 MAX 725 MIN 1.2 CFSM .71 IN 9.68
WTR YR 1978 TOTAL 27596.3 MEAN 75.6 MAX 690 MIN 2.9 CFSM .90 IN 12.26

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) National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--29 years, 37.6 ft³/s (1.065 m³/s), 11.40 in/yr (290 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		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Mar. 21	1500	1280	36.2	10.37	3.161
June 26	1300	*1610	45.6	*10.67	3.252

Minimum daily discharge, 0.86 ft³/s (0.024 m³/s) Sept. 22,28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	24	110	20	6.1	8.5	10A	20	20	66	4.3	1.6
2	337	23	153	14	6.4	8.6	8A	18	27	133	5.5	1.6
3	177	22	120	17	6.6	8.8	121	16	23	129	9.6	1.6
4	10A	20	86	16	6.8	8.7	103	19	20	70	7.8	1.6
5	7A	1A	77	15	7.0	8.4	101	28	1A	45	6.4	1.6
6	59	19	60	14	7.2	8.4	144	26	14	33	6.1	1.6
7	50	22	56	13	7.4	8.4	20A	42	19	26	5.5	1.6
8	169	26	50	12	7.6	8.5	116	119	21	21	5.4	1.6
9	142	26	45	12	7.7	9.1	77	76	16	17	5.3	1.5
10	83	23	41	11	7.8	10	59	48	15	15	5.3	1.5
11	65	14	46	11	7.8	11	84	39	14	13	4.2	1.4
12	49	16	60	10	7.8	12	64	51	13	13	61	1.2
13	39	15	95	11	7.8	16	44	384	13	17	115	1.4
14	36	16	284	11	7.8	100	32	295	12	15	39	1.5
15	33	1A	314	10	7.9	385	2A	230	11	13	21	1.4
16	29	1A	246	9.7	7.9	42A	25	170	10	13	15	1.9
17	26	1A	323	9.1	8.2	503	23	120	9.3	13	10	4.6
18	26	15	285	8.9	8.5	475	40	87	8.1	12	7.1	3.8
19	22	15	180	8.8	8.8	393	50	64	7.5	8.9	7.4	1.3
20	19	15	156	8.9	9.0	486	43	60	6.9	6.3	5.7	1.1
21	1A	17	110	9.0	8.8	753	3A	82	7.0	5.9	4.3	.97
22	1A	15	76	8.7	8.4	363	32	52	6.4	5.5	3.3	.86
23	21	16	63	8.5	8.4	253	33	52	5.8	6.8	2.3	.91
24	23	16	56	8.8	8.4	15A	36	53	5.7	6.2	2.7	.95
25	26	16	50	9.4	8.2	103	61	47	54	5.4	3.1	.95
26	30	17	42	5.6	8.2	84	60	36	1030	5.2	2.6	.91
27	36	15	35	4.2	8.2	11A	42	31	36A	5.4	2.8	.91
28	31	12	32	4.6	8.3	246	32	28	168	4.7	3.6	.86
29	27	8.8	29	5.0	---	266	2A	26	89	4.1	3.6	.91
30	24	15	26	5.4	---	17A	24	23	56	4.2	1.8	1.3
31	24	---	22	5.8	---	139	---	20	---	4.2	1.8	---
TOTAL	2103	532.8	332A	321.4	219.0	5557.4	1944	2362	2087.7	736.8	378.5	44.93
MEAN	67.8	17.8	107	10.4	7.82	179	64.8	76.2	69.6	23.8	12.2	1.50
MAX	337	26	323	20	9.0	753	20A	384	1030	133	115	4.6
MIN	19	8.8	22	4.2	6.1	8.4	23	16	5.7	4.1	1.8	.86
CFSM	1.51	.40	2.39	.23	.1A	4.00	1.45	1.70	1.55	.53	.27	.03
IN.	1.75	.44	2.76	.27	.1A	4.61	1.61	1.96	1.73	.61	.31	.04
CAL YR 1977	TOTAL	15071.40	MEAN	41.3	MAX	664	MIN	.15	CFSM	.92	IN	12.51
WTR YR 1978	TOTAL	19615.53	MEAN	53.7	MAX	1030	MIN	.86	CFSM	1.20	IN	16.29

ILLINOIS RIVER BASIN

05524500 IROQUOIS RIVER NEAR FORESMAN, IN

LOCATION.--Lat 40°52'14", long 87°18'24", in NE¼SE¼ sec.15, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, 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) National Geodetic Vertical Datum of 1929. 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.--29 years, 369 ft³/s (10.45 m³/s), 11.16 in/yr (283 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, 3,180 ft³/s (90.0 m³/s) Mar. 22, gage height, 19.09 ft (5.819 m); minimum daily, 27 ft³/s (0.76 m³/s) Sept. 7, 8.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499	228	170	293	77	88	1490	366	298	1120	71	35
2	881	260	471	260	80	88	1320	322	303	947	116	34
3	956	288	762	240	81	90	1240	297	304	948	101	36
4	848	278	893	221	82	94	1220	290	279	893	87	36
5	693	249	899	210	82	93	1290	337	255	719	72	31
6	529	231	827	200	82	92	1360	390	225	475	64	29
7	387	223	716	188	82	91	1580	420	218	330	59	27
8	469	232	544	172	82	90	1690	654	239	270	55	27
9	679	246	479	161	84	92	1640	753	225	275	53	28
10	691	245	449	151	84	100	1530	668	184	187	59	29
11	609	226	396	141	84	110	1410	523	170	162	57	29
12	507	196	388	134	84	130	1300	475	167	139	138	29
13	402	172	384	129	84	210	1150	1070	158	153	299	32
14	328	163	395	121	84	393	948	1500	141	170	176	35
15	297	172	656	116	84	778	737	1680	136	153	96	39
16	273	192	1060	111	84	1240	560	1730	135	132	71	38
17	254	204	1280	108	84	1690	456	1690	138	114	55	38
18	246	204	1520	103	86	2010	447	1580	148	102	48	39
19	230	192	1720	101	90	2180	574	1430	148	86	48	38
20	212	176	1710	99	93	2240	637	1250	134	60	48	41
21	201	184	1580	97	94	2840	623	1080	132	77	43	41
22	196	192	1410	96	93	3160	571	924	119	71	37	41
23	189	186	1200	96	90	3060	505	801	104	88	36	40
24	200	186	959	94	89	2820	553	759	100	98	35	39
25	213	183	778	95	90	2520	956	759	174	87	36	35
26	336	182	678	99	90	2180	1020	719	1490	77	36	32
27	379	157	569	73	89	1900	938	622	1990	86	36	32
28	337	192	540	63	88	1860	774	504	1970	86	47	32
29	293	182	513	59	---	1860	584	415	1710	68	67	32
30	254	163	430	68	---	1760	441	362	1420	69	48	31
31	234	---	344	74	---	1630	---	324	---	67	39	---
TOTAL	12824	6184	24720	4173	2396	37489	29544	24694	13214	8279	2233	1025
MEAN	414	206	797	135	85.6	1209	985	797	440	267	72.0	34.2
MAX	956	288	1720	293	94	3160	1690	1730	1990	1120	299	41
MIN	189	157	170	59	77	88	441	290	100	67	35	27
CFSM	.92	.46	1.78	.30	.19	2.69	2.19	1.78	.98	.60	.16	.08
IN.	1.06	.51	2.05	.35	.20	3.11	2.45	2.05	1.09	.69	.19	.08

CAL YR 1977 TOTAL 125318 MEAN 343 MAX 1720 MIN 22 CFSM .76 IN 10.38
WTR YR 1978 TOTAL 166775 MEAN 457 MAX 3160 MIN 27 CFSM 1.02 IN 13.82

05524500 IROQUOIS RIVER NEAR FORESMAN, IN.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to September 1978 (partial-record station) (discontinued).

WATER QUALITY DATA. WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM- FLOW, INSTAN- TANFOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	TEMPER- ATURE (DEG C)
JAN 12...	1105	135	108	79	.0
MAR 28...	1215	1810	17	83	--

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, Illinois, 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) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--34 years, 535 ft³/s (15.15 m³/s), 10.59 in/yr (269 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, 4,340 ft³/s (123 m³/s) Mar. 21, gage height, 20.49 ft (6.245 m); minimum daily, 26 ft³/s (0.74 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	487	559	420	86	120	2150	541	392	1820	68	47
2	1710	658	1170	370	86	115	1890	447	375	1430	74	42
3	1740	682	1430	320	86	110	1720	391	375	1260	109	38
4	1630	625	1490	300	86	105	1650	367	356	1160	100	38
5	1420	551	1460	280	88	100	1740	385	323	1020	85	40
6	1140	500	1250	280	94	100	1470	436	290	794	70	35
7	877	471	1150	300	100	100	2150	507	262	555	61	32
8	974	461	900	310	110	100	2220	781	263	409	56	30
9	1230	474	730	310	120	110	2200	955	264	328	52	27
10	1240	468	630	290	125	120	2090	927	242	271	51	27
11	1150	424	580	270	130	135	1950	796	211	232	66	27
12	993	368	560	250	130	170	1770	729	196	196	173	26
13	815	323	570	240	130	250	1560	1180	190	199	564	27
14	672	308	700	230	120	400	1320	1750	173	218	453	30
15	588	314	1200	220	115	600	1070	2010	156	207	263	34
16	524	331	1700	210	110	1000	829	2160	151	183	158	38
17	478	341	2250	200	105	1500	657	2190	150	155	110	43
18	454	333	2550	195	100	2200	595	2140	152	136	85	42
19	433	309	2560	185	96	2820	659	2110	158	120	70	41
20	396	294	2470	175	94	3790	755	1730	156	102	63	39
21	368	296	2290	160	94	4110	777	1490	152	93	58	41
22	355	295	2030	155	96	4270	740	1260	151	87	54	41
23	349	297	1750	145	100	4140	680	1080	128	103	46	41
24	352	291	1470	140	105	3860	652	945	112	117	44	39
25	398	283	1260	135	110	3500	1070	896	192	113	43	38
26	733	268	1050	130	115	3060	1360	866	2100	98	43	34
27	833	236	900	125	120	2750	1290	806	2720	90	45	29
28	741	228	780	110	120	2770	1120	701	2740	92	59	27
29	632	255	660	98	---	2750	896	593	2570	87	66	27
30	544	238	560	92	---	2610	685	509	2240	73	74	28
31	487	---	490	88	---	2400	---	447	---	71	60	---
TOTAL	25376	11409	19149	6733	2971	50165	40115	32125	17940	11819	3323	1048
MEAN	819	380	1263	217	106	1618	1337	1036	598	381	107	34.9
MAX	1740	682	2560	420	130	4270	2220	2190	2740	1820	564	47
MIN	349	228	490	88	86	100	595	367	112	71	43	26
CFSM	1.19	.55	1.84	.32	.16	2.36	1.95	1.51	.87	.56	.16	.05
IN.	1.38	.62	2.12	.37	.16	2.72	2.18	1.74	.97	.64	.18	.06
CAL YR 1977	TOTAL	196704	MEAN 539	MAX 2560	MIN 22	CFSM .79	IN 10.67					
WTR YR 1978	TOTAL	242173	MEAN 663	MAX 4270	MIN 26	CFSM .97	IN 13.13					

05525500 SUGAR CREEK AT MILFORD, IL

LOCATION.--Lat 40°37'50", long 87°43'25", in N½ sec.16, T.25 N., R.12 W., Iroquois County, Illinois, Hydrologic Unit 07120002, on right bank at downstream side of highway bridge, 200 ft (61 m) downstream from Mud Creek and 1 mi (2 km) west of Milford.

DRAINAGE AREA.--446 mi² (1,155 km²).

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

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-state recorder. Datum of gage is 622.00 ft (189.586 m) National Geodetic Vertical Datum of 1929. Prior to July 23, 1970, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records fair except those for winter periods and those for period of no gage-height record, Sept. 1-15, which are poor.

AVERAGE DISCHARGE.--30 years, 347 ft³/s (9.827 m³/s), 10.57 in/yr (268 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,900 ft³/s (649 m³/s) Feb. 21, 1951, gage height, 20.90 ft (6.370 m), from rating curve extended above 8,200 ft³/s (232 m³/s); maximum gage height, 23.74 ft (7.236 m) Feb. 10, 1959, ice jam; minimum discharge, 2.0 ft³/s (0.057 m³/s) Sept. 1, 2, 7, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (71 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)
Dec. 18	0615	3450 97.7	16.30 4.968	Mar. 21	2330	*3460 98.0	*16.31 4.971

Minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Sept. 11, 12.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2A20	530	556	115	21	72	1030	153	130	173	30	14
2	2000	1250	1430	105	21	70	722	130	140	275	30	12
3	1280	1340	1620	98	21	68	690	118	140	446	71	10
4	A3A	954	1420	94	21	66	772	123	130	375	67	9.0
5	957	669	1120	92	21	64	1110	154	120	238	43	8.2
6	985	520	739	90	23	62	1190	169	114	173	32	7.6
7	734	440	511	90	26	62	1360	409	119	142	29	7.0
8	586	439	400	92	29	62	1140	1520	120	123	28	6.6
9	481	445	350	94	33	62	822	1600	104	104	27	6.4
10	417	398	320	92	36	68	645	1150	98	94	43	6.2
11	351	316	300	88	40	81	645	701	92	81	34	6.0
12	312	269	300	84	44	115	641	528	92	72	232	6.0
13	303	228	637	80	47	165	465	959	86	122	159	6.2
14	245	225	1290	77	50	370	327	1110	78	541	80	6.6
15	235	226	2050	73	54	1000	267	1270	82	337	50	7.6
16	270	217	2150	70	54	2240	225	985	81	174	36	19
17	300	197	2770	66	54	2240	201	766	87	113	30	51
18	334	172	3320	64	52	2000	195	600	95	87	26	31
19	307	153	2560	62	50	1700	277	520	81	71	23	23
20	262	156	1910	60	50	1800	347	440	77	61	20	19
21	234	165	1190	58	54	2560	336	340	84	54	17	14
22	219	153	1040	56	58	3090	267	280	81	48	15	12
23	477	156	790	55	63	2240	232	230	77	50	14	10
24	1160	153	600	54	69	1630	221	190	73	68	13	8.8
25	1080	146	475	50	70	978	279	170	95	76	13	8.2
26	1480	117	380	46	73	734	556	150	1140	55	14	7.6
27	1270	110	300	40	75	758	418	130	1380	47	22	7.3
28	902	110	230	35	75	1670	279	115	760	41	29	7.1
29	675	111	190	29	---	2060	217	110	394	34	25	7.4
30	545	114	160	25	---	1670	184	110	235	31	19	8.3
31	469	---	130	22	---	1320	---	115	---	30	16	---
TOTAL	22530	10479	3123A	2156	1284	31077	16060	15345	6385	4336	1287	353.1
MEAN	727	349	100A	69.5	45.9	1002	535	495	213	140	41.5	11.8
MAX	2A20	1340	3320	115	75	3090	1360	1600	1380	541	232	51
MIN	219	110	130	22	21	62	184	110	73	30	13	6.0
CFSM	1.63	.78	2.26	.16	.10	2.25	1.20	1.11	.48	.31	.09	.03
IN.	1.88	.87	2.61	.18	.11	2.59	1.34	1.28	.53	.36	.11	.03

CAL YR 1977	TOTAL	151543.1	MEAN	415	MAX	3530	MIN	3.8	CFSM	.93	IN	12.64
WTR YR 1978	TOTAL	142530.1	MEAN	390	MAX	3320	MIN	6.0	CFSM	.87	IN	11.89

ILLINOIS RIVER BASIN

05536190 HART DITCH AT MUNSTER, IN

LOCATION.--Lat 41°33'40", long 87°28'50", in SE¼NW¼ 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) National Geodetic Vertical Datum of 1929 (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, high flow occasionally in backwater from Little Calumet River.

AVERAGE DISCHARGE.--36 years, 58.7 ft³/s (1.662 m³/s), 11.28 in/yr (286 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)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 21	2100	*1120 31.7	4.50 1.372	May 13	1200	1000 28.3	*4.98 1.518
Apr. 6	2400	842 23.8	3.72 1.134				

Minimum daily discharge, 3.6 ft³/s (0.102 m³/s) Sept. 4.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	68	194	20	9.6	10	116	30	19	25	52	6.2
2	135	81	267	19	9.4	10	135	29	16	143	62	6.2
3	81	135	163	18	9.3	10	216	28	15	86	68	5.5
4	58	84	105	17	9.0	10	704	41	14	49	38	3.6
5	44	60	77	18	8.7	10	387	44	11	33	23	5.5
6	37	49	56	19	9.0	10	686	44	8.7	25	15	5.5
7	43	48	43	23	9.4	10	715	48	39	22	12	5.5
8	52	43	40	33	9.6	11	323	74	98	18	12	4.8
9	62	38	34	29	10	14	174	72	37	18	29	4.8
10	46	34	37	28	10	17	162	52	24	14	12	5.5
11	42	30	37	23	10	20	261	90	18	12	26	5.5
12	36	25	32	20	10	43	171	502	38	10	14	7.0
13	28	24	40	12	10	59	111	920	16	19	29	7.8
14	27	24	66	11	11	253	84	820	12	8.7	16	18
15	25	24	98	11	11	415	66	493	12	8.7	12	7.8
16	30	25	132	11	11	409	56	267	16	7.8	16	6.2
17	24	29	258	10	10	387	48	180	48	12	9.6	31
18	24	24	244	10	10	351	112	116	60	8.7	9.6	36
19	22	23	146	10	10	365	113	88	30	21	9.6	16
20	23	29	144	10	10	496	98	68	29	17	8.7	9.6
21	20	23	171	10	10	1040	95	52	19	22	7.0	15
22	22	24	111	10	10	842	81	46	18	61	7.0	8.7
23	22	22	80	10	10	477	79	64	16	58	7.0	7.8
24	20	22	61	10	10	255	86	66	12	22	17	7.8
25	24	22	49	10	10	146	79	52	24	16	9.6	7.0
26	24	18	40	9.7	11	127	62	44	138	44	9.6	7.0
27	22	17	34	9.8	11	149	52	38	72	28	9.6	6.2
28	22	16	28	9.8	11	289	44	32	42	19	9.6	6.2
29	19	16	24	9.8	---	283	38	28	29	19	7.8	6.2
30	19	16	23	9.8	---	183	32	27	29	20	7.8	13
31	23	---	20	9.7	---	141	---	22	---	61	7.0	---
TOTAL	1192	1093	2854	460.6	280.0	6842	4986	4477	959.7	927.9	572.5	282.9
MEAN	38.5	36.4	92.1	14.9	10.0	221	166	144	32.0	29.9	18.5	9.43
MAX	135	135	267	33	11	1040	715	920	138	143	68	36
MIN	19	16	20	9.7	8.7	10	32	22	8.7	7.8	7.0	3.6
CFSM	.55	.52	1.30	.21	.14	3.13	2.35	2.04	.45	.42	.26	.13
IN.	.63	.58	1.50	.24	.15	3.60	2.62	2.36	.50	.49	.30	.15
CAL YR 1977	TOTAL	15049.9	MEAN	41.2	MAX	808	MIN	3.1	CFSM	.58	IN	7.92
WTR YR 1978	TOTAL	24927.6	MEAN	68.3	MAX	1040	MIN	3.6	CFSM	.97	IN	13.12

ILLINOIS RIVER BASIN

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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) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and no gage-height record, Jan. 10 to Feb. 15, which are fair. Flow from eastern portion of Little Calumet River basin is diverted to Lake Michigan by Burns ditch.

AVERAGE DISCHARGE.--20 years, 70.0 ft³/s (1.982 m³/s), 10.56 in/yr (268 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, 815 ft³/s (23.1 m³/s) May 13, gage height, 12.72 ft (3.877 m); minimum daily, 5.8 ft³/s (0.16 m³/s) Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	90	182	34	20	18	180	56	35	43	129	9.9
2	173	185	250	37	20	19	188	50	30	172	78	8.8
3	128	168	194	34	21	19	228	47	26	126	114	7.2
4	98	124	143	31	21	20	299	55	24	85	82	5.8
5	80	94	113	28	22	19	377	68	22	61	57	6.0
6	69	78	103	32	22	19	510	61	20	48	44	6.6
7	70	74	111	39	22	19	565	64	30	39	37	6.8
8	106	67	83	50	22	20	423	90	92	33	35	6.0
9	97	61	68	43	21	22	315	85	57	29	58	6.9
10	79	55	71	36	21	25	270	70	38	24	37	6.0
11	70	47	63	33	20	32	308	98	29	20	52	7.4
12	60	42	63	29	20	49	259	345	44	17	34	8.7
13	54	38	76	25	19	79	205	719	29	29	45	14
14	48	37	100	27	18	232	170	734	23	17	35	26
15	43	38	107	27	17	311	144	515	21	16	26	14
16	51	36	127	26	18	323	125	385	22	14	61	7.5
17	42	39	213	25	18	321	113	305	63	16	22	23
18	38	35	251	24	18	312	162	241	94	15	21	66
19	36	32	181	23	18	316	166	194	59	24	20	29
20	34	40	231	22	18	363	146	161	49	32	16	17
21	32	35	222	21	18	566	145	132	43	43	14	25
22	29	33	164	20	18	569	131	114	34	46	11	16
23	30	33	127	19	18	478	127	131	31	103	11	15
24	28	29	105	19	18	351	134	125	26	43	22	13
25	30	30	94	19	19	272	127	103	32	31	16	12
26	31	30	105	20	21	230	110	86	91	64	14	12
27	30	29	67	20	20	226	93	73	104	71	15	11
28	28	28	57	20	18	289	82	60	65	43	15	8.7
29	27	27	50	20	---	296	71	50	46	37	13	7.7
30	25	32	42	20	---	251	64	46	47	39	13	18
31	29	---	38	20	---	206	---	39	---	52	11	---
TOTAL	1452	1486	3801	843	546	6232	6237	5302	1331	1432	1158	421.0
MEAN	54.7	56.2	123	27.2	19.5	201	208	171	44.4	46.2	37.4	14.0
MAX	173	185	251	50	22	569	565	734	104	172	129	66
MIN	25	27	38	19	17	18	64	39	20	14	11	5.8
CFSM	.66	.62	1.37	.80	.22	2.23	2.31	1.90	.49	.51	.42	.16
IN.	.77	.70	1.57	.35	.23	2.58	2.58	2.19	.55	.59	.48	.17
CAL YR 1977	TOTAL 21767.9	MEAN 54.6	MAX 609	MIN 6.2	CFSM .66	IN 9.00						
WTR YR 1978	TOTAL 30841.0	MEAN 46.5	MAX 734	MIN 5.8	CFSM .94	IN 12.75						

ILLINOIS RIVER BASIN

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'05", long 87°34'38", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.13, T.36 N., R.14 E., Cook County, Illinois, 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) National Geodetic Vertical Datum of 1929 (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.

AVERAGE DISCHARGE.--31 years, 176 ft³/s (4.984 m³/s), 11.66 in/yr (296 mm/yr).

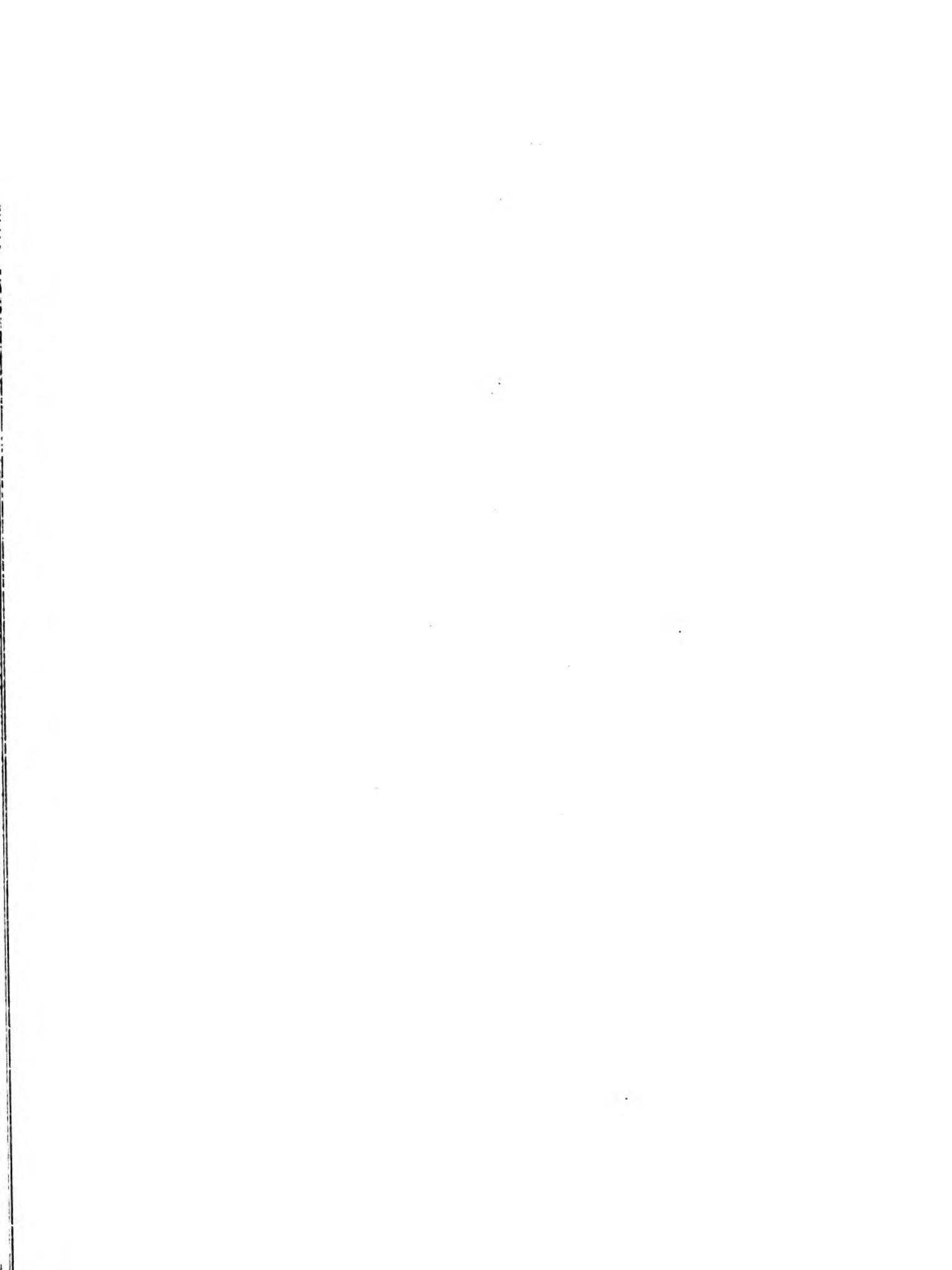
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft³/s (126 m³/s) July 14, 1957, gage height, 20.11 ft (6.130 m); minimum daily, 7.9 ft³/s (0.22 m³/s) Oct. 6, 1950.

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, 2,860 ft³/s (81.0 m³/s) May 13, gage height, 17.16 ft (5.230 m); minimum daily, 31 ft³/s (0.88 m³/s) Sept. 4.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	192	432	82	52	52	358	118	81	99	268	46
2	382	572	591	75	54	52	356	109	75	334	137	44
3	265	420	435	83	56	52	405	106	70	244	184	37
4	192	266	290	72	57	55	715	120	62	146	135	31
5	153	189	205	68	59	52	1020	187	55	105	98	34
6	130	155	172	67	61	50	1430	143	54	87	79	40
7	122	142	158	80	62	54	1690	148	65	77	68	42
8	266	131	151	120	62	54	938	227	128	65	65	42
9	220	120	128	100	62	67	603	200	113	59	112	43
10	162	110	118	101	62	104	508	163	79	56	92	38
11	151	95	112	75	58	148	644	215	63	47	107	39
12	124	83	111	65	63	164	500	907	81	45	91	50
13	107	75	131	68	61	236	371	2360	73	70	107	103
14	94	70	180	70	60	614	294	2510	62	55	81	124
15	86	76	211	69	58	780	245	1370	56	48	69	92
16	98	75	257	66	56	753	212	806	57	43	232	49
17	85	80	458	68	50	736	189	599	179	43	93	94
18	80	77	544	64	48	706	739	462	300	51	66	245
19	72	69	388	63	48	688	376	361	135	83	57	134
20	66	86	466	60	47	852	303	284	99	138	52	67
21	62	90	501	57	48	1590	297	220	101	207	46	80
22	60	72	351	54	49	1500	257	180	79	230	47	63
23	63	73	276	51	49	927	238	266	70	296	48	49
24	58	72	235	50	48	662	273	254	64	130	60	48
25	63	71	209	50	57	493	343	185	70	85	73	43
26	65	70	240	52	57	410	255	147	216	192	59	44
27	64	63	205	52	54	431	199	124	245	269	92	41
28	61	61	148	55	53	711	166	109	135	105	57	45
29	60	58	122	52	---	702	148	95	97	81	52	43
30	55	58	104	52	---	543	133	88	97	75	49	52
31	59	---	88	52	---	419	---	83	---	84	46	---
TOTAL	3888	3771	8017	2093	1551	14657	13805	13146	3061	3649	2822	1902
MEAN	125	126	259	67.5	55.4	473	460	424	102	118	91.0	63.4
MAX	382	572	591	120	63	1590	1490	2510	300	334	268	245
MIN	55	58	88	50	47	50	133	83	54	43	46	31
CFSM	.61	.62	1.26	.33	.27	2.31	2.24	2.07	.50	.58	.44	.31
IN.	.71	.68	1.45	.38	.28	2.66	2.51	2.39	.56	.66	.51	.35
CAL YR 1977	TOTAL	53251	MEAN 146	MAX 1920	MIN 28	CFSM .71	IN 9.66					
WTR YR 1978	TOTAL	72362	MEAN 198	MAX 2510	MIN 31	CFSM .97	IN 13.13					



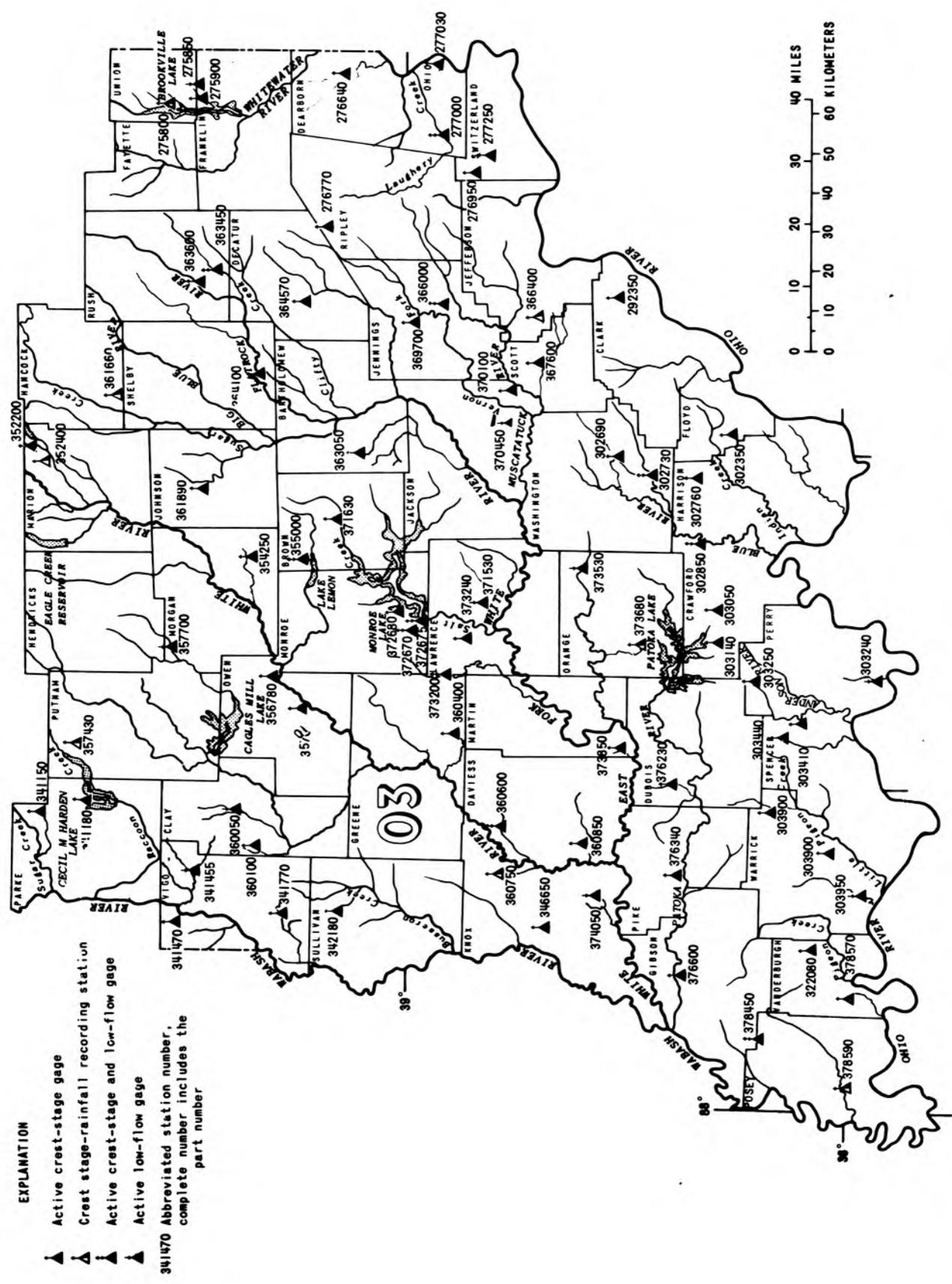


Figure 3.--Location of partial-record stations in Indiana

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 1978

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					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 ¹ sec.25, T.11 N., R.2 W., Union County, at bridge on State Highway 101, 0.5 mile south of Roseburg.	22.3	1976-78	11-03-77	2.8
					08-12-78	6.4
Blue River basin						
03302850	Whiskey Run at Milltown, Ind.	Lat 86°21'08", long 86°17'01", in SE ¹ SW ¹ 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	1975-78	11-03-77	7.6
					09-12-78	3.9
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	1975-78	11-03-77	1.4
					09-13-78	.18
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.	30.1	1974-78	11-03-77	4.8
					09-13-78	1.6
Wabash River basin						
03322980	Six Mile Creek near Bluffton, Ind.	Lat 40°42'24", long 85°08'16", in NE ¹ NE ¹ SW ¹ sec.14, T.26 N., R.12 E., Wells County, at bridge on Road 250 South, about 3 miles southeast of Bluffton.	30.8	1977-78	10-25-77	1.8
					09-12-78	.56
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., Wells County, at bridge on County Road 1120 West, about 2 miles south of Warren.	47.0	1977-78	10-25-77	2.4
					09-12-78	0
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.	19.1	1974-78	10-25-77	1.0
					06-12-78	1.4
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.	31.2	1973-78	10-26-77	26
					06-14-78	3.6
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.	22.7	1976-78	10-27-77	14.7
					09-07-78	1.4
03328470	Twelvemile Creek near Hoover, Ind.	Lat 40°48'03", long 86°13'22", in NE ¹ SW ¹ 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.	53.0	1976-78	10-27-78	34
					09-08-78	6.1
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	1969-78	10-25-77	10
					09-08-78	3.0
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.	14.8	1977-78	10-26-77	11
					09-07-78	6.7

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						
03331800	Mill Creek near Winamac, Ind.	Lat 42°01'00", long 86°34'07", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.30, T.30 N., R.1 W., Pulaski County, at bridge on County Road 175 East, about 3 miles southeast of Winamac.	79.0	1977-78	10-26-77 09-07-78	45 28
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., White County, at bridge on County Road 300 East, about 3 miles northwest of Monticello.	38.4	1977-78	10-26-77	34
03332550	Pike Creek near Norway, Ind.	Lat 40°46'51", long 86°44'42", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.22, T.27 N., R.3 W., White County, at bridge on State Highway 39, 2 miles north of U.S. Highway 24.	20.6	1974-78	10-27-77 09-08-78	29 7.1
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.	42.7	1976-78	09-12-78	1.9
03333800	Little Wildcat Creek near West Middleton, Ind.	Lat 40°26'47", long 86°13'17", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ 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	1977-78	09-12-78	.94
03335679	Indian Creek near Greenhill, Ind.	Lat 40°25'03", long 87°02'31", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.24, T.23 N., R.6 W., Tippecanoe County, at bridge on South River Road, 6.5 miles west of West Lafayette.	29.0	1962-78	09-13-78	.52
03335681	Flint Creek near West Point, Ind.	Lat 40°20'25", long 87°04'02", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	29.9	1976-78	09-13-78	.72
03335683	Kickapoo Creek near Attica, Ind.	Lat 40°19'27", long 87°14'05", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.22 N., R.7 W., Warren County, at bridge on Kickapoo Road, 0.5 mile north of Independence Road.	36.4	1976-78	09-12-78	4.0
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.	78.6	1976-78	09-13-78	7.0
03339510	Black Creek near Crawfordsville, Ind.	Lat 40°03'40", long 86°56'58", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.26, T.19 N., R.5 W., Montgomery County, at bridge on U.S. Highway 136, 2.0 miles northwest of Crawfordsville.	29.7	1976-78	09-13-78	5.5
03340200	Mill Creek near Wallace, Ind.	Lat 39°58'03", long 87°10'28", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.26, T.18 N., R.7 W., Fountain County, at bridge on State Highway 234, 1.4 miles west of State Highway 341.	39.5	1974-78	09-13-78	3.6
03341455	Sulphur Creek near Burnett, Ind.	Lat 39°31'26", long 87°17'25", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ 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.	20.4	1976-78	09-26-78	4.8
03347595	Bell Creek near Yorktown, Ind.	Lat 40°08'43", long 85°27'03", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ 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.	44.7	1976-78	11-03-77 09-12-78	12 10
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.	34.8	1976-78	09-26-78	4.3
03360050	Birch Creek near Ashboro, Ind.	Lat 39°24'14", long 87°06'41", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.7, T.11 N., R.6 W., Clay County, at bridge on State Highway 59, 0.5 mile northwest of Ashboro.	40.0	1974-78	09-26-78	4.0
03360850	Veales Creek near Washington, Ind.	Lat 38°36'15", long 87°11'39", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.16, T.2 N., R.7 W., Daviess County, at bridge on State Highway 57, 3.7 miles southwest of Washington.	29.2	1974-78	11-02-77 09-14-78 09-21-78	4.6 0 .90
03360965	Duck Creek at Greensboro, Ind.	Lat 39°52'46", long 85°28'03", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.35, T.17 N., R.9 E., Henry County, at bridge on County Road 350 South at west edge of Greensboro.	24.9	1976-78	11-03-77 09-12-78	5.0 6.2
03370450	Grassy Fork at Tampico, Ind.	Lat 38°47'48", long 85°57'12", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.10, T.4 N., R.5 E., Jackson County, at bridge on State Highway 39, 0.25 mile south of Tampico.	31.6	1976-78	11-02-77 09-26-78	12 6.8

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 SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.5 N., R.1 W., Lawrence County, at bridge on county road, 1.6 miles south-east of courthouse in Bedford.	38.3	1972-78	11-01-77 09-12-78	10 6.6
03373530	Lost River near Orleans, Ind.	Lat 38°38'11", long 86°21'54", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ 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.	35.0	1976-78	11-04-77 09-12-78	11 3.0
03374050	Upper River Deshee near Monroe City, Ind.	Lat 38°37'16", long 87°23'53", in NW $\frac{1}{4}$ 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.	14.8	1976-78	11-02-77 09-14-78 09-21-78	6.7 0 .22
STREAMS TRIBUTARY TO LAKE MICHIGAN						
Burns ditch basin						
04093900	Coffee Creek at Chesterton, Ind.	Lat 41°36'24", long 87°03'03", on line between secs.1, T.36 N. and sec.36, T.37 N., R.6 W., Porter County, at bridge on Porter Avenue, 0.5 mile east of State Highway 49 in Chesterton.	15.0	1976-78	10-25-77 09-06-78	10 5.6
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	1972-78	10-26-77 06-14-78 09-07-78	26 32 18
04100375	Solomon Creek near Syracuse, Ind.	Lat 41°27'03", long 85°42'43", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ 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.	33.9	1974-78	11-26-77 06-14-78 09-07-78	13 23 8.8
04101300	Judy Creek at Roseland, Ind.	Lat 41°43'18", long 86°15'02", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	37.3	1973-78	10-26-78 06-14-78 09-06-78	6.3 12 3.9
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.	14.8	1976-78	10-26-77 09-26-78	2.5 2.2
04179308	Dibbling ditch near Waterloo, Ind.	Lat 41°27'03", long 85°02'25", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	12.9	1976-78	10-26-77 06-12-78 09-26-78	3.0 4.1 1.0
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	1972-78	10-27-77 09-26-78	16 5.9
04179900	Willow Creek near Huntertown, Ind.	Lat 41°14'37", long 85°10'03", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	19.0	1976-78	10-27-77 09-26-78	2.7 .42
04181800	Nickelsen Creek near Poe, Ind.	Lat 40°55'36", long 85°03'57", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.33, T.29 N., R.13 E., Allen County, at bridge on Winchester Road, 1.0 mile southeast of Poe.	25.6	1976-78	10-26-77	1.2
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.	18.9	1976-78	10-26-77 09-26-78	2.1 .05
UPPER MISSISSIPPI RIVER BASIN						
Illinois River basin						
05515218	Potato Creek at North Liberty, Ind.	Lat 41°32'28", long 86°25'38", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ 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.	29.0	1973-78	10-26-77 06-13-78 09-06-78	19 15 9.3

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
UPPER MISSISSIPPI RIVER BASIN--Continued						
Illinois River basin--Continued						
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.	31.1	1976-78	10-25-77 06-13-78 09-06-78	10 14 6.1
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.	69.9	1976-78	10-25-78 09-06-78	31 32
05517880	Wolf Creek near Kouts, Ind.	Lat 41°21'44", long 87°04'59", in SW ¹ / ₄ SW ¹ / ₄ 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.	13.8	1976-78	10-25-77	3.9
05525300	Mud Creek near Earl Park, Ind.	Lat 40°38'44", long 87°29'05", in NW ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ sec.6, T.25 N., R.9 W., Benton County, at bridge on State Highway 71, about 4.5 miles southwest of Earl Park.	34.3	1977-78	09-12-78	2.9
05525650	Beaver Creek near Morocco, Ind.	Lat 41°57'57", long 87°27'00", in NW ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ sec.15, T.29 N., R.9 W., Newton County, at bridge on U.S. Highway 41, about 2 miles north of Morocco.	41.5	1977-78	10-25-77	33

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage and high-flow, low-flow partial-record stations

The following table contains annual maximum discharges for crest-stage stations. Some of these are former continuous record-gaging 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.

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
OHIO RIVER BASIN Great Miami River basin							
03274730	Whitewater River tributary near Hagerstown, IN	Lat 39°54'38", long 85°08'57", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.23, T.17 N., R.12 E., Wayne County, at culvert on State Highway 38, 0.7 mile east of Hagerstown.	0.12	1973-	11-13-72 04-03-74 11-04-74 01-26-76 02-26-77 05-23-78	5.65 6.11 5.94 5.39 5.48 6.95	8 14 10 5 6 28
03274880	Greens Fork tributary near Lynn, IN	Lat 40°01'14", long 84°56'24", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ 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.	.78	1973-	07-25-73 01-18-74 02-23-75 05-06-76 04-02-77 03-14-78	6.90 5.93 5.49 4.75 5.10 8.24	145 ^a 100 ^a 74 ^a 35 ^a 55 ^a 270
03275800	West Run near Liberty, IN	Lat 39°38'24", long 84°57'18", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ 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.	.26	1972-	08-12-73 06-22-74 04-27-75 05-30-76 04-02-77 08-03-78	6.15 10.70 8.00 5.57 5.32 7.39	57 240 ^a 135 37 30 110
03275900	Templeton Creek near Fairfield, IN	Lat 39°31'20", long 84°56'51", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	5.39	1973-	07-21-73 06-22-74 01-10-75 01-26-76 03-03-77 08-03-78	11.86 ^a 17.25 7.73 8.30 8.96 11.63	445 ^a 1020 ^a 130 ^a 160 ^a 200 ^a 460
Tanners Creek basin							
03276640	Tanners Creek tributary near Lawrenceburg, IN	Lat 39°09'18", long 84°52'20", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.27, T.6 N., R.1 W., Dearborn County, at culvert on State Highway 1, 0.25 mile east of Salt Fork Road.	.19	1973-	07-21-73 06-22-74 02-23-75 08-06-76 05-05-77 08-18-78	12.53 15.59 11.47 ^a 11.33 15.10 13.45	145 300 70 ^a 62 270 170
Laughery Creek basin							
03276770	Laughery Creek tributary near Napoleon, IN	Lat 39°13'18", long 85°20'07", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.9 N., R.11 E., Ripley County, at culvert on U.S. Highway 421, 1.1 miles north of Napoleon.	.11	1973-	03-11-73 04-08-74 02-23-75 02-17-76 03-04-77 06-19-78	6.43 6.29 6.75 5.93 6.63 7.77	26 24 32 17 30 58
03276950	Uhlman Creek tributary near Avonburg, IN	Lat 38°53'33", long 85°11'04", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ 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.	.16	1973-	07-21-73 04-01-74 02-23-75 08-06-76 04-02-77 07-24-78	6.61 7.72 6.24 5.63 7.75 7.39	28 60 20 9 63 49
03277000	Laughery Creek near Farmers Retreat IN	Lat 38°57'08", long 85°04'15", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ 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	1941 ^{b,c} 1942-73 ^c 1974-	-----	d	---

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)			
Buck Run basin										
03277030	Buck Run near Rising Sun, IN	Lat 38°59'36", long 84°51'16", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ 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.	.03	1973-	07-21-73	5.93	8			
					04-01-74	8.46	15			
					04-24-75	8.15	15			
					08-06-76	5.41	5			
					05-05-77	9.68	18			
					08-18-78	6.20	10			
Indian Creek basin										
03277250	Indian Creek tributary near Bennington, IN	Lat 38°52'25", long 85°07'24", in NE ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ 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.	.16	1973-	06-27-73	6.00	37			
					09-12-74	6.52	66			
					04-25-75	6.31	54			
					08-06-76	5.60	20			
					04-02-77	6.31	54			
					01-17-78	5.62	21			
Fourteenmile Creek basin										
03292350	Flag Run tributary near New Washington, IN	Lat 38°31'08", long 85°32'29", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.20, T.1 N., R.9 E., Clark County, at culvert on State Highway 62, 3.0 miles south of New Washington.	.16	1973-	07-21-73	7.71	51			
					08-11-74	6.01	16			
					04-24-75	6.49	24			
					06-24-76	6.14	18			
					09-30-77	5.85 ^a	14 ^a			
					06-26-78	6.61	27			
Indian Creek basin										
03302350	Georgetown Creek tributary near Georgetown, IN	Lat 38°17'30", long 85°56'26", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ sec.35, T.25 N., R.5 E., Floyd County, at culvert on State Highway 64, 1.8 miles east of Georgetown.	.56	1973-	07-21-73	9.90	100			
					11-28-74	6.02	55			
					04-24-75	11.11	200			
					06-16-76	9.83	170			
					06-28-77	11.29	192			
					03-14-78	6.63	86			
Blue River basin										
03302690	Middle Fork Blue River tributary near Farahee, IN	Lat 38°32'44", long 86°02'14", in NE ¹ / ₄ SW ¹ / ₄ SE 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.	.07	1972-	07-21-73	5.97	19			
					05-29-74	5.50	11			
					04-24-75	6.49	28			
					02-17-76	5.82 ^a	16 ^a			
					08-12-77	6.15	22			
					07-30-78	6.94	39			
03302730	South Fork Blue River near Palmyra, IN	Lat 38°28'07", long 86°04'55", in NE ¹ / ₄ NW ¹ / ₄ 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 intersection of U.S. Highway 150 and State Highway 135 in Palmyra.	64.3	1974-	03-14-78	19.39	2250			
03302760	Licking Creek near Palmyra, IN (discontinued Sept. 30, 1978)	Lat 38°23'20", long 86°04'29", in SE ¹ / ₄ SW ¹ / ₄ NW 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	1973-78	11-26-73	7.10	68			
					04-24-75	8.58	140			
					05-31-76	7.40	80 ^a			
					06-29-77 ^a	9.45 ^a	185 ^a			
					10-16-77	7.47	84			
Little Blue River basin										
03303140	Bird Hollow Creek tributary near English, IN (discontinued Sept. 30, 1978)	Lat 38°21'49", long 86°28'00", in SW ¹ / ₄ NE 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 ^h	1977-78	04-22-77	8.16	120			
					05-13-78	6.53	70			
03303150	Bird Hollow Creek at English, IN	Lat 38°21'02", long 86°28'01", in SE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ 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-	11-21-77	14.47	2200			
Anderson River basin										
03303250	Sigler Creek tributary at Uniontown, IN	Lat 38°13'21", long 86°41'50", in NW ¹ / ₄ SW ¹ / ₄ SW 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.	.15	1973-	05-30-74	9.05	34 ^a			
					04-24-75	7.19	65 ^a			
					10-18-75	5.90	18 ^a			
					08-24-77	6.32	39 ^a			
					10-02-77	7.17	64			

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
Crooked Creek basin							
03303440	East Fork Crooked Creek tributary near Fulda, IN	Lat 38°05'18", long 86°49'12", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.14, T.5 S., R.4 W., Spencer County, at culvert on State Highway 545, 1.6 miles south of Fulda.	.26	1973-	03-11-73 11-24-73 04-24-75 03-16-76 08-24-77 03-14-78	6.58 8.00 8.57 ^a 5.68 10.60 8.65	36 82 105 ^a 15 182 105
Little Pigeon Creek basin							
03303900	Little Red Creek tributary near Heilman, IN	Lat 38°11'35", long 87°05'22", in NE ¹ / ₄ SE ¹ / ₄ SE 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 ^h	1973-	08-29-74 04-24-75 10-18-75 08-24-77 12-13-77	7.21 7.92 8.23 6.86 7.50	54 77 88 44 64
Pigeon Creek basin							
03322080	Bluegrass Creek tributary near Daylight, IN	Lat 38°06'09", long 87°29'02", in NW ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ sec.12, T.5 S., R.10 W., Vanderburgh County, at culvert on State Highway 57, 0.9 mile north of Daylight.	.42	1973-	06-03-73 05-31-74 04-24-75 06-24-76 06-28-77 07-17-78	8.56 9.00 8.52 8.31 10.91 9.02	140 160 139 130 240 160
Wabash River basin							
03323150	Rock Creek near Rockford, IN	Lat 40°44'31", long 85°18'24", in NW ¹ / ₄ NE ¹ / ₄ 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 ^h	1974-	03-22-78	15.66	2700
03323750	Yarger ditch at Tocsin, IN	Lat 40°49'50", long 85°05'49", in NW ¹ / ₄ NE 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 ^h	1975-	08-22-75 01-25-76 02-26-77 03-14-78	5.83 7.56 7.67 ^e 8.70	19 144 --- 214
03323950	Little River tributary near Roanoke, IN	Lat 40°55'48", long 85°23'08", in SE ¹ / ₄ NE ¹ / ₄ NW 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.	1.04	1972-	- -78	f	--
03324050	Clear Creek near Huntington, IN	Lat 40°54'57", long 85°32'42", in NW ¹ / ₄ NW ¹ / ₄ 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 ^h	1974-	03-04-77 03-22-78	10.68 11.90	1030 ^a 1640
03324210	Blaine Run at Blaine, IN	Lat 40°24'15", long 85°03'19", in NW ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec.35, T.23 N., R.13 E., Jay County, at culvert on State Highway 67, 0.1 mile northeast of Blaine.	.45	1972-	12-06-72 04-03-74 06-20-75 02-16-76 02-27-77 04-06-78	6.14 6.41 6.37 6.09 6.72 6.33	19 ^a 28 ^a 26 ^a 17 ^a 38 ^a 26
03324260	Salamonie River tributary near Montpelier, IN	Lat 40°33'06", long 85°19'25", in NW ¹ / ₄ NW ¹ / ₄ NE 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.	.86	1972-	08-20-73 04-04-74 06-15-75 02-16-76 03-04-77 07-03-78	6.01 6.12 ^a 7.75 7.29 ^a 6.28 6.73	56 60 ^a 96 111 ^a 37 87
03324350	Brook Creek tributary near Warren, IN	Lat 40°44'35", long 85°26'42", in SW ¹ / ₄ SE ¹ / ₄ SW 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.	.52	1972-	11-14-72 04-03-74 06-15-75 02-16-76 03-04-77 03-21-78	6.32 5.82 7.75 6.20 6.28 7.93	39 23 96 35 37 105
03327510	Little Pipe Creek tributary near New Santa Fe, IN	Lat 40°41'38", long 86°00'34", in SW ¹ / ₄ SE ¹ / ₄ SW 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.	.54	1973-	08-14-73 04-02-74 06-14-75 02-16-76 08-10-77 12-14-78	6.32 5.68 ^a 7.18 7.02 5.53 ^a 6.42	32 ^a 18 ^a 56 31 ^a 14 ^a 27
03327530	Minnow Creek tributary near Logansport, IN	Lat 40°43'46", long 86°17'48", in NW ¹ / ₄ NW ¹ / ₄ SW 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.	.50	1972-	08-28-73 01-20-74 06-14-75 06-01-76 08-10-77 03-21-78	7.04 5.47 6.57 5.44 5.51 5.33	70 14 ^a 71 14 16 11

Crest-stage and high-flow, low-flow 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							
03327790	Eel River tributary near Columbia City, IN	Lat 41°07'01", long 85°31'21", Beaver Reserve, Columbia Township, Whitley County, at culvert on State Highway 205, 3.8 miles southwest of U.S. Highway 30 in Columbia City.	.17	1972-	06-15-73 01-21-74 08-14-75 02-16-76 03-03-77 05-12-78	6.09 6.86 6.89 5.59 6.30 5.70	15 31 32 8 19 9
03327930	Koontz ditch near Sidney, IN	Lat 41°07'28", long 85°44'38", in NW ¹ / ₄ SW ¹ / ₄ 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 ^h	1972-	04-23-73 01-19-74 08-14-75 02-16-76 06-30-77 05-15-78	8.07 8.46 9.81 8.73 8.45 ^a 7.25	96 ^a 120 ^a 200 ^a 130 ^a 120 ^a 60
03328020	Otter Creek tributary near North Manchester, IN	Lat 40°59'59", long 85°49'37", in SW ¹ / ₄ SE ¹ / ₄ sec.35, T.30 N., R.6 E., Wabash County, at culvert on State Highway 114, 1.7 miles west of State Highway 13.	.92	1972-	11-14-72 01-21-74 05-21-75 02-16-76 07-01-77 03-21-78	5.66 5.60 6.07 5.54 6.58 5.62	47 ^a 43 ^a 85 ^a 38 145 ^a 44
03329720	Robinson Branch near Delphi, IN	Lat 40°37'10", long 86°37'01", in NE ¹ / ₄ NW ¹ / ₄ 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.	5.62	1972-	07-21-73 01-20-74 06-14-75 02-10-76 03-17-77 10-01-77	6.83 7.07 7.59 7.01 5.31 7.48	240 305 390 295 44 380
03330290	Shanton ditch near Piercetom, IN	Lat 41°12'45", long 85°41'10", in NW ¹ / ₄ NE ¹ / ₄ 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.	.70	1972-	06-07-73 01-19-74 05-21-75 02-16-76 06-30-77 03-22-78	6.00 5.53 5.50 5.26 5.54 5.29	21 12 11 8 12 8
03331376	McMahan ditch near Rochester, IN (discontinued Sept. 30, 1978)	Lat 41°06'14", long 86°11'18", in NE ¹ / ₄ NE ¹ / ₄ 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 ^h	1972-78	- -78	7.26 ^e	---
03332300	Little Indian Creek near Royal Center, IN	Lat 40°52'53", long 86°35'26", in NE ¹ / ₄ NW ¹ / ₄ 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 ^c 1974- ^b	03-21-78	6.30	295
03332340	Weltzin ditch tributary near Francesville, IN	Lat 40°48'00", long 86°46'33", in SW ¹ / ₄ NW ¹ / ₄ sec.16, T.29 N., R.3 W., Pulaski County, at culvert on State Highway 39, 6.1 miles south of State Highway 14.	.50	1973-	07-21-73 03-05-78 ^a 01-10-75 02-16-76 03-28-77 03-21-78	6.02 5.25 ^a 4.88 ^a 5.17 4.95 7.98	22 ^a 9 ^a 5 ^a 8 ^a 6 ^a 68
03332400	Big Monon Creek near Francesville, IN	Lat 40°59'03", long 86°51'43", in NW ¹ / ₄ NE ¹ / ₄ 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 downstream from right-bank tributary, and 10.2 miles upstream from mouth.	152	1959-73 ^c 1974- ^b	03-21-78	---	2500
03332780	Big Creek near Wolcott, IN	Lat 40°41'26", long 87°02'37", in SE ¹ / ₄ NE ¹ / ₄ sec.24, T.26 N., R.6 W., White County, at culvert on U.S. Highway 231, 4.4 miles south of Wolcott.	1.35	1972-	12-31-72 06-22-74 06-14-75 06-28-76 09-02-77 04-07-78	6.62 6.96 10.47 7.59 8.30 7.61	31 39 215 56 84 58
03333420	Grassy Fork tributary at Point Isabel, IN	Lat 40°25'28", long 85°49'28", in NE ¹ / ₄ SE ¹ / ₄ 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.	.67	1973-	07-21-73 04-03-74 06-14-75 06-28-76 03-17-77 03-31-78	6.83 6.19 6.27 5.65 5.56 7.18	115 80 86 30 30 120
03333620	Scott Youngman ditch near Kokomo, IN	Lat 40°25'10", long 86°04'39", in NW ¹ / ₄ NW ¹ / ₄ sec.28, T.23 N., R.4 E., Howard County, at culvert on State Highway 26, 2.4 miles west of State Highway 19.	.86	1973-	08-15-73 01-20-74 06-14-75 02-16-76 03-17-77 03-21-78	8.01 6.44 6.78 7.85 6.13 8.25	78 ^a 21 30 ^a 70 ^a 15 74

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage and high-flow, low-flow 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							
03334000	Wildcat Creek at Owasco, IN	Lat 40°27'50", long 86°38'15", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.4, T.23 N., R.2 W., Carroll County, on left bank 500 ft downstream from bridge on State Highway 39, 0.5 mile northwest of Owasco, and 15 miles upstream from South Fork Wildcat Creek.	396	1944-73 ^c 1974-	03-21-78	9.24	4900
03334200	Prairie Creek tributary near Frankfort, IN	Lat 40°15'14", long 86°30'36", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ 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.	2.61	1972-	08-21-73 06-22-74 05-22-75 06-28-76 09-30-77 06-22-78	6.24 9.63 11.16 7.45 8.29 ^a 11.87	48 140 170 84 110 ^a 223
03334900	South Fork Wildcat Creek tributary near Monitor, IN	Lat 40°25'13", long 86°46'22", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.20, T.23 N., R.3 W., Tippecanoe County, at culvert on State Highway 26, 0.4 mile northwest of Monitor Springs.	.10	1972-	11-14-72 03-04-74 06-11-75 06-13-76 03-05-77 06-25-78	5.02 4.86 5.57 5.20 5.36 7.32	12 9 26 16 20 84
03335660	Ilgenfritz ditch near Monroe, IN (discontinued Sept. 30, 1978)	Lat 40°20'36", long 86°47'49", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ 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 ^h	1972-78	06-17-73 11-26-73 05-22-75 06-13-76 - -77 06-26-78	7.01 6.47 7.05 5.56 f 8.20	120 84 130 37 --- 150
03335685	Big Pine Creek tributary near Pine Village, IN	Lat 40°25'24", long 87°15'32", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ 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.	.21	1972-	03-11-73 05-29-74 08-29-75 02-10-76 ^a 09-13-77 03-21-78	5.46 7.61 6.48 5.80 ^a 7.01 6.87	56 200 120 78 ^a 150 140
03335790	Big Shawnee Creek tributary near Attica, IN	Lat 40°16'48", long 87°10'29", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ 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.	1.22	1973-	07-21-73 06-22-74 07-05-75 06-28-76 05-18-77 03-21-78	5.15 8.31 5.66 5.72 5.71 6.91	23 ^a 240 73 ^a 78 ^a 77 ^a 155
03339230	Woods ditch near Frankfort, IN	Lat 40°13'13", long 86°27'34", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.21 N., R.1 E., Clinton County, at culvert on State Highway 38, 2.2 miles southeast of State Highway 39.	1.12	1972-	11-13-72 06-22-74 05-22-75 02-16-76 03-03-77 06-21-78	7.66 10.54 11.13 8.12 6.82 11.59	56 ^a 230 ^a 286 82 30 350
03339250	Waddle ditch near Pike, IN (discontinued Sept. 30, 1978)	Lat 40°06'24", long 86°28'48", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	1.09	1972-78	11-13-72 06-22-74 04-24-75 01-25-76 - -77 06-26-78	7.78 ^a 8.19 6.72 ^c 7.17 f 10.40	90 ^a 110 51 ^a 66 --- 234
03339400	Sugar Creek tributary near Garfield, IN (discontinued Sept. 30, 1978)	Lat 40°05'01", long 86°48'13", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.19 N., R.3 W., Montgomery County, at culvert on State Highway 47, 1.1 miles northeast of Garfield.	1.05	1972-78	04-22-73 06-22-74 04-24-75 06-28-76 06-30-77 - -78	6.55 ^a 8.44 ^a 8.04 7.89 11.17 f	46 220 ^a 170 150 ^a 263
03341150	Demeree Creek tributary near Byron, IN	Lat 39°52'39", long 87°05'56", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.17 N., R.6 W., Parke County, at culvert on State Highway 47, 0.5 mile west of Montgomery County Line.	.15	1973-	07-21-73 03-05-74 04-24-75 02-05-76 03-12-77 07-08-78	7.37 6.21 ^a 6.68 5.63 6.06 7.80	86 43 ^a 59 26 38 105
03341180	Little Raccoon Creek tributary near Bellmore, IN (discontinued Sept. 30, 1978)	Lat 39°44'47", long 87°06'19", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ 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 ^h	1975-78	04-24-75 03-04-76 06-30-77 07-08-78	7.58 5.60 7.76 6.77	75 16 82 46
03341770	Prairie Creek tributary near Pimento, IN (discontinued Sept. 30, 1978)	Lat 39°18'49", long 87°23'17", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ 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 ^h	1974-78	05-25-75 11-30-76 08-29-77 02-27-78	6.40 6.55 7.00 6.68	35 ^a 38 ^a 53 43

Crest-stage and high-flow, low-flow 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, IN	Lat 39°10'36", long 87°22'27", in SW ¹ / ₄ SE ¹ / ₄ SE 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.	.48	1972-	07-25-73 09-12-74 02-22-75 02-17-76 02-26-77 02-27-78	9.33 ^a 8.30 6.63 6.78 6.45 8.56	310 ^a 180 ^a 59 ^a 66 ^a 50 220
03346650	River Deshee tributary near Frichton, IN	Lat 38°40'33", long 87°25'47", in SW 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 Frichton.	.82	1973-	04-23-73 04-12-74 03-12-75 09-01-76 03-28-77 03-16-78	9.24 8.67 8.07 8.98 6.78 ^a 7.98	180 145 115 160 64 ^a 111
03346840	White River tributary at Parker City, IN	Lat 40°11'35", long 85°11'34", in SW ¹ / ₄ SW ¹ / ₄ SE 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.	.20	1972-	06-26-73 01-18-74 02-23-75 02-16-76 02-26-77 03-15-78	5.95 5.46 5.64 5.71 6.20 7.00	19 9 12 14 22 ^a 34
03346865	Mud Creek tributary at Selma, IN (discontinued Sept. 30, 1978)	Lat 40°11'37", long 85°15'26", in SE ¹ / ₄ SE ¹ / ₄ SE 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.	.02	1973-78	12-16-77	6.03	9.5
03348700	White River tributary near Strawtown, IN	Lat 40°06'47", long 85°57'10", in NW ¹ / ₄ SE ¹ / ₄ NW 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.	.42	1973-	08-14-73 04-03-74 02-23-75 01-25-76 02-27-72 03-14-78	7.21 7.32 6.68 7.94 6.65 7.87	40 45 18 70 24 68
03349400	Buscher ditch near Atlanta, IN (discontinued Sept. 30, 1978)	Lat 40°13'26", long 86°02'30", in NE ¹ / ₄ NE ¹ / ₄ SW ¹ / ₄ sec.35, T.21 N., R.4 E., Tipton County, at culvert on State Highway 19, 0.5 mile north-west of Hamilton-Tipton county line.	2.50 ^h	1972-78	11-14-72 01-19-74 06-15-75 ^e 03-04-76 - -77 03-21-78	6.89 6.69 6.78 7.31 f 8.07	107 94 100 ^a 140 --- 210
03349500	Cicero Creek near Arcadia, IN	Lat 40°10'34", long 85°59'43", in NW ¹ / ₄ NW ¹ / ₄ 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	1955-76 ^c 1977- ^b	03-15-78	9.43	1890
03349700	Little Cicero Creek near Arcadia, IN	Lat 40°10'32", long 86°02'45", in NE ¹ / ₄ NW ¹ / ₄ 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	1956-76 ^c 1977- ^b	03-15-78	8.33	970
03350100	Hinkle Creek near Cicero, IN	Lat 40°06'05", long 86°05'10", in NW ¹ / ₄ NW ¹ / ₄ 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 Noblesville.	18.5	1956-76 ^c 1977- ^b	03-29-77 08-28-78	2.38 ^a 5.39	170 ^a 1250
03350650	Stony Creek tributary near Lapel, IN	Lat 40°05'18", long 85°49'22", in NE ¹ / ₄ NW ¹ / ₄ NW 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.	.46	1973-	08-14-73 06-21-74 02-24-75 07-11-76 02-26-77 03-17-78	5.30 5.68 5.26 ^a 7.30 6.50 7.55	47 67 47 ^a 170 115 ^a 180
03352200	Mud Creek at Indianapolis, IN	Lat 39°53'30", long 86°00'57", in SE ¹ / ₄ NE ¹ / ₄ 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 intersection of 75th Street and Sargent Road, 1.5 miles upstream from mouth, and 2.0 miles southeast of Castleton.	42.4	1958-76 ^c 1977- ^b	03-15-78	6.61	625

Crest-stage and high-flow, low-flow 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							
03352400	Blue Creek near Castleton, IN	Lat 39°53'23", long 86°02'46", in NW¼NE¼SE¼ 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.	.77	1972-	08-14-73 06-22-74 02-22-75 08-06-76 02-26-77 06-26-78	6.15 7.04 6.53 7.01 6.37 ^a 7.12	40 ^a 70 ^a 52 70 ^a 47 ^a 72
03353668	White Lick Creek tributary near Brownsburg, IN	Lat 39°53'54", long 86°23'34", in SE¼NE¼SE¼ 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.	.31	1972-	07-21-73 06-22-74 07-18-75 08-06-76 07-08-77 06-25-78	5.70 5.95 5.62 5.50 5.72 7.61	47 63 42 35 48 180
03354250	Sarton ditch tributary near Martinsville, IN (discontinued Sept. 30, 1978)	Lat 39°25'20", long 86°23'59", in NW¼SW¼NW¼ 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 ^h	1975-78	02-23-75 01-26-76 06-05-77 06-25-78	10.72 10.94 10.99 13.23	20 23 26 121
03355000	Bear Creek near Trevlac, IN	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 upstream from Slippery Elm Shoot Road ford, 1.1 miles northwest of Trevlac, and 1.3 miles upstream from mouth.	6.94	1952-73 ^c 1974- ^d	----- d	d	---
03356780	Limestone Creek tributary near Gosport, IN	Lat 39°21'12", long 86°40'58", in NE¼NW¼NW¼ sec.31, T.11 N., R.2 W., Owen County, at culvert on State Highway 67, 0.9 mile west of Gosport.	.72	1972-	07-21-73 05-15-74 04-24-75 06-28-76 08-06-77 05-13-78	6.18 6.53 5.83 6.08 7.73 6.83	107 140 76 100 250 165
03357010	White River tributary near Spencer, IN (discontinued Sept. 30, 1978)	Lat 39°16'09", long 86°46'45", in SE¼SE¼SE¼ 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.	.32	1973-78	03-14-78	5.31	25
03357430	Owl Creek tributary near Bainbridge, IN	Lat 39°45'46", long 86°52'53", in SW¼SE¼SW¼ sec.5, T.15 N., R.4 W., Putnam County, at culvert on U.S. Highway 36, 3.7 miles west of Bainbridge.	.58	1973-	11-02-72 05-15-74 06-01-75 08-14-76 08-19-77 05-12-78	7.91 7.37 8.81 8.36 9.48 11.21	225 160 240 ^a 185 ^a 225 ^a 500
03360100	Clear Branch at Cory, IN	Lat 39°23'20", long 87°11'58", in SE¼SW¼SW¼ sec.16, T.11 N., R.7 W., Clay County, at culvert on State Highway 46, 4.9 miles west of State Highway 59.	.27	1973-	07-21-73 05-17-74 02-22-75 11-30-76 08-07-77 07-28-78	8.21 7.64 6.32 6.55 6.08 8.07	90 70 33 39 27 84
03360400	Doans Creek tributary near Doans, IN	Lat 38°55'12", long 86°50'54", in SW¼SW¼SW¼ sec.27, T.6 N., R.4 W., Greene County, at culvert on State Highway 58 at Doans.	.20	1973-	04-22-73 08-11-74 02-22-75 03-05-76 ^a 03-28-77 07-01-78	6.55 7.53 7.81 ^a 5.73 ^a 5.96 6.35	57 ^a 92 ^a 102 ^a 29 ^a 36 ^a 50
03360600	Smothers Creek near Plainville, IN	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 ^h	1974-	03-14-78	16.05	960
03360750	Miller ditch tributary near Bicknell, IN	Lat 38°47'08", long 87°18'36", in SE¼NW¼NW¼ 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.	.50	1973-	08-12-73 11-24-74 03-11-75 05-31-76 03-27-77 05-13-78	6.13 6.69 ^a 5.51 5.10 5.25 7.61	62 ^a 82 ^a 41 29 33 120
03360850	Veales Creek tributary at Washington, IN	Lat 38°37'16", long 87°11'00", in SW¼SW¼NW¼ 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.	.27	1973-	08-22-73 06-22-74 07-19-75 05-31-76 04-20-77 03-14-78	6.23 6.35 7.15 9.14 5.55 6.28	74 80 128 270 41 76

Crest-stage and high-flow, low-flow 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							
03360970	Buck Creek tributary at Dunreith, IN (discontinued Sept. 30, 1978)	Lat 39°48'15", long 85°26'34", in NW¼SE¼SW¼ sec.29, T.16 N., R.10 E., Henry County, at culvert on State Highway 3 at northwest edge of Dunreith.	.68	1973-78	11-14-72 05-17-74 02-23-75 02-16-76 - -77 03-14-78	5.36 6.45 5.89 5.93 f 6.54	7.0 62 31 34 ----- 63
03361660	Little Sugar Creek tributary at Carrollton, IN	Lat 39°42'22", long 85°49'40", in SW¼SW¼NE¼ sec.35, T.15 N., R.6 E., Hancock County, at culvert on U.S. Highway 52, 3.4 miles southeast of New Palestine.	.70	1973-	06-04-73 06-22-74 02-23-75 03-04-76 02-27-77 ^a 06-26-78	6.56 6.60 6.01 5.52 5.17 ^a 7.30	105 ^a 114 ^a 62 ^a 31 ^a 14 ^a 175
03361890	Gilmore Creek near Bargersville, IN	Lat 39°30'44", long 86°08'26", in NE¼NE¼SE¼ 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 Bargersville.	.71	1973-	11-15-72 ^a 05-17-74 02-23-75 01-26-76 02-14-77 06-26-78	6.92 ^a 7.15 6.90 ^a 6.41 6.99 ^a 10.93	81 ^a 95 80 ^a 52 43 ^a 312
03363050	Wolf Creek tributary near Columbus, IN (discontinued Sept. 30, 1978)	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.	.90	1974-78	02-23-75 02-12-76 ^e 04-02-77 05-13-78	7.70 6.76 7.22 8.78	180 110 140 ^a 220
03363450	Little Flatrock Creek at Milroy, IN	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-	03-14-78	12.42	1600
03363600	Goddard ditch tributary near Rushville, IN (discontinued Sept. 30, 1978)	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.	.54	1973-78	03-16-78	8.73 ^e	---
03364100	Tough Creek near Norristown, IN	Lat 39°22'19", long 85°45'38", in SW¼SW¼NW¼ sec.28, T.11 N., R.7 E., Shelby County, at culvert on county road, 0.5 mile north of Norristown.	1.46	1973-	07-21-73 08-31-74 02-23-75 01-26-76 03-28-77 06-13-78	8.11 7.84 ^a 8.29 6.99 7.62 11.43	151 122 ^a 155 87 120 395
03364570	Fall Fork Clifty Creek tributary near Horace, IN	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.	.83	1973-	03-11-73 08-31-74 02-23-75 01-26-76 04-02-77 06-26-78	6.62 8.23 8.00 6.53 6.44 9.85	40 140 125 43 33 240
03366400	Lewis Creek tributary near Kent, IN	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.	.16	1973-	05-18-74 04-24-75 01-13-76 04-02-77 08-03-78	6.28 6.65 5.45 6.45 7.03	70 84 40 76 100
03367600	Flat Creek tributary at New Frankfort, IN	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.	.34	1973-	07-24-73 08-03-74 04-24-75 06-24-76 03-04-77 08-03-78	7.45 6.17 ^a 6.11 5.83 5.56 8.21	152 73 ^a 70 55 42 200
03369700	Sixmile Creek tributary near North Vernon, IN	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.	.39	1973-	07-21-73 04-03-74 02-23-75 10-18-76 03-04-77 06-26-78	7.28 ^a 6.17 7.08 6.16 6.02 ^a 7.52	48 ^a 13 ^a 42 ^a 14 ^a 13 ^a 60
03370100	Blau ditch tributary near Crothersville, IN	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.	1.31	1973-	09-12-74 02-23-75 12-31-75 05-05-77 03-16-78	7.76 6.36 5.83 5.79 6.01	40 21 12 11 15

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage and high-flow, low-flow 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							
03371630	North Fork Salt Creek tributary near Nashville, IN	Lat 39°11'38", long 86°12'11", in NE ¹ / ₄ NE ¹ / ₄ 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.	.22	1973-	11-13-72	5.69	7
					04-08-74	5.94	10
					02-23-75	6.94	30
					11-30-75	5.97	11
					04-03-77	7.56	46
					03-14-78	6.55	21
03372670	Jackson Creek near Bloomington, IN	Lat 39°07'17", long 86°30'50", in SW ¹ / ₄ SW ¹ / ₄ 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 ^c 1977- ^b	-----	d	---
03372675	Jackson Creek at Clear Creek, IN	Lat 39°06'01", long 86°32'18", in SE ¹ / ₄ NE 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-	-----	d	---
03372680	Clear Creek tributary near Bloomington, IN	Lat 39°04'24", long 86°32'39", in SW ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ sec.5, T.7 N., R.1 W., Monroe County, at culvert on Old State Highway 37, 6.5 miles south of Bloomington.	.38	1972-	06-27-73	6.62	54
					05-29-74	7.02	72
					06-11-75	6.84	65
					11-30-75	5.61	15
					03-28-77	6.81	64
					03-14-78	5.91	24
03373200	Indian Creek near Springville, IN	Lat 38°57'01", long 86°40'30", in SE ¹ / ₄ SW 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 ^c 1974- ^b	03-14-78	9.73	3600
03373240	Spring Creek tributary near Springville, IN	Lat 38°54'41", long 86°39'09", in SE ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ sec.32, T.6 N., R.2 W., Lawrence County, at culvert on State Highway 58, 2.7 miles southwest of Springville.	.54	1972-	04-28-73	5.93	33
					05-31-74	9.36	285
					02-22-75	7.82	162
					11-30-75	5.42	14
					03-28-77	5.63	20
					05-14-78	6.58	70
03373680	French Lick Creek tributary near French Lick, IN	Lat 38°30'08", long 86°36'20", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ 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.	.29	1973-	07-21-73	7.90	130 ^a
					05-31-74	6.68	105
					08-16-75 ^a	5.57 ^a	54 ^a
					05-31-76	5.23	41
					03-28-77	8.00	170
					03-15-78	5.77	63
03373850	Slate Creek tributary near Haysville, IN	Lat 38°33'30", long 86°54'10", in NE ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ 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, 8.0 miles south of intersection of U.S. Highways 231, 150, and 50 in Loogootee.	.14	1973-	09-29-74	7.25	110
					04-24-75	7.29	112
					05-03-76	5.66	32
					08-11-77	6.01	47
					06-19-78	6.04	49
03376230	Shiloh Drain near Jasper, IN	Lat 38°24'26", long 86°58'47", in NW ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ sec.28, T.15 N., R.5 W., Dubois County, at culvert on State Highway 56, at Ireland, 2.8 miles northwest of Jasper.	.57	1973-	06-04-73	8.43	170
					01-20-74	9.31	220
					04-24-75	8.99 ^a	205 ^a
					08-06-76	7.64	125
					05-06-77	8.86	190
					03-14-78	8.30	160
03376340	Patoka River tributary near Glezen, IN	Lat 38°23'41", long 87°19'05", in NE ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ 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.	.84	1973-	05-23-73	7.08	110
					05-22-74	6.61	80
					04-24-75	7.80	163
					02-17-76	6.21	58
					03-27-77	7.81	164
					03-14-78	7.04	107
03376600	Patoka River tributary near Patoka, IN	Lat 38°23'08", long 87°35'21", in SE ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ 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-	05-23-73	7.18 ^a	55
					05-22-74	11.80 ^a	162 ^a
					04-24-75	9.45	155
					09-09-76	6.98	47
					03-27-77	8.65	90
					07-15-78	7.91	55

Crest-stage and high-flow, low-flow 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							
03378450	Black River near Poseyville, IN	Lat 38°12'00", long 87°46'51", on line between SW ¹ / ₄ SW ¹ / ₄ sec.5, and SE ¹ / ₄ SE 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-	03-25-78	12.14	1250
03378570	Little Creek tributary near Kasson, IN (discontinued Sept. 30, 1978)	Lat 38°01'55", long 87°40'52", in NE ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ 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 ^h	1973-78	07-15-78	11.55 ^e	---
03378590	Olive Creek tributary near Solitude, IN	Lat 38°00'14", long 87°53'57", in NW ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ sec.17, T.6 S., R.13 W., Posey County, at culvert on State Highway 69, 0.65 mile south of Solitude.	.32	1973-	05-10-73 ^a 05-31-74 08-03-75 05-31-76 07-29-77 03-14-78	6.56 ^a 9.89 9.35 7.43 ^a 7.62 7.83	36 ^a 222 ^a 190 ^a 68 ^a 76 ^a 86
STREAMS TRIBUTARY TO LAKE MICHIGAN							
Trail Creek basin							
04095250	East Branch Trail Creek tributary near Springville, IN	Lat 41°41'22", long 86°46'42", in NE ¹ / ₄ SE ¹ / ₄ NE ¹ / ₄ 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.	.17	1972-	04-22-73 04-04-74 06-03-75 05-06-76 03-28-77 09-18-78	6.48 6.75 5.84 6.69 5.84 5.90	29 34 17 33 18 19
St. Joseph River basin							
04099060	Pigeon Creek tributary near Ellis, IN	Lat 41°37'43", long 84°54'56", in NW ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ 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.	1.22	1972-	11-16-72 01-22-74 05-30-75 03-04-76 03-28-77 03-21-78	6.30 6.68 7.01 7.39 7.16 6.35	16 ^a 25 32 38 34 62
04099745	Truesdale ditch near Shipshewana, IN (discontinued Sept. 30, 1978)	Lat 41°43'36", long 85°35'38", in NE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ sec.27, T.38 N., R.8 E., Lagrange County, at culvert on State Highway 120, 0.6 mile west of State Highway 5.	2.39	1972-78	11-14-72 03-05-74 04-19-75 05-06-76 02-24-77 - -78	5.25 5.53 5.57 5.89 6.80 f	9 ^a 12 ^a 13 ^a 21 ^a 29 ^a
04100165	Wible Lake inlet near Kendallville, IN	Lat 41°29'15", long 85°16'13", in NW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ 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.	2.47	1972-	11-16-72 03-14-74 01-10-75 06-28-76 07-27-77 03-21-78	6.67 6.40 6.16 4.25 4.51 5.90	22 20 17 28 ^a 35 ^a 31
04100700	Christophel ditch tributary near Wakarusa, IN (discontinued Sept. 30, 1978)	Lat 41°30'24", long 86°00'07", in NW ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ 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.	2.23	1972-78	03-21-78	9.00	g
04100800	Yellow Creek at Dunlap, IN	Lat 41°38'44", long 85°56'00", in NE ¹ / ₄ NE 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 ^h	1974-	03-22-78	13.19	680
STREAMS TRIBUTARY TO LAKE ERIE							
Maumee River basin							
04179500	Cedar Creek at Auburn, IN	Lat 41°21'57", long 85°03'08", in NE ¹ / ₄ NW 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 ^c 1974-	03-22-78	9.33	1240
04179510	Cecil Metcalf ditch near Auburn, IN	Lat 41°21'55", long 85°01'07", in SW ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ 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.	.78	1972-	06-04-73 03-05-74 02-23-75 11-30-75 06-25-77 03-21-78	7.24 8.34 6.40 6.57 8.57 9.12	80 150 30 38 170 200

Crest-stage and high-flow, low-flow 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 ERIE--Continued							
Maumee River basin--Continued							
04183050	Schumacher ditch near New Haven, IN (discontinued Sept. 30, 1978)	Lat 41°04'25", long 84°52'30", in SW ¹ / ₄ SW ¹ / ₄ NE ¹ / ₄ 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	1972-78	03-18-73 02-22-74 02-23-75 02-16-76 02-26-77 03-21-78	7.11 6.29 6.05 6.54 7.41 9.16	g 7 ^a 5 8 g g
04191310	Flatrock Creek tributary near Monroeville, IN	Lat 40°53'42", long 84°51'42", in NW ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ 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.	.83	1972-	11-14-72 04-03-74 06-14-75 02-16-76 02-26-77 03-21-78	7.57 8.08 5.73 7.12 6.40 9.66	42 60 52 81 30 52
UPPER MISSISSIPPI RIVER BASIN							
Illinois River basin							
05515216	Potato Creek tributary near Lakeville, IN (discontinued Sept. 30, 1978)	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 ^h	1975-78	03-04-76 09-18-77 03-23-78	8.86 7.85 9.74	270 142 380
05516000	Yellow River near Bremen, IN	Lat 41°25'11", long 86°10'14", in NW ¹ / ₄ NW 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 ^c 1974- ^b	05-15-78	17.68	2750
05516150	Walt Kimble ditch near LaPaz, IN	Lat 41°26'59", long 86°14'16", in SW ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ 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.	1.50	1972-	11-15-72 06-14-74 04-28-75 03-01-76 03-18-77 10-01-77	6.25 7.11 6.96 9.38 9.85 7.14	24 59 47 210 205 55
05516950	Eagle Creek near Grovertown, IN	Lat 41°18'44", long 86°31'27", in SE ¹ / ₄ NE 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 ^h	1973-	03-22-78	9.13	140
05517400	West Arm Payne ditch near North Judson, IN	Lat 41°12'55", long 86°52'13", in SW ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ 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.	2.58	1973-	01-01-73 05-25-74 06-14-75 02-16-76 03-29-77 04-10-78	5.31 6.05 5.56 5.44 4.95 5.28	29 60 39 34 17 28
05517780	Sievers Creek tributary near Valparaiso, IN	Lat 41°24'41", long 87°08'08", in NE ¹ / ₄ NE ¹ / ₄ SW ¹ / ₄ sec.8, T.34 N., R.6 W., Porter County, at culvert on State Highway 2, 5.7 miles southwest of Valparaiso.	.39	1972-	04-22-73 05-22-74 04-28-75 03-04-76 03-12-77 03-21-78	8.74 5.86 5.95 7.52 6.80 6.78	74 18 23 53 40 ^a 40
05518600	Bryant ditch near Dinwiddie, IN (discontinued Sept. 30, 1978)	Lat 41°17'22", long 87°18'45", in SE ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ 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 ^h	1972-78	04-22-73 05-22-74 06-25-75 02-16-76 - -77 03-21-78	6.90 6.66 6.41 ^a 6.68 f 5.34	270 230 200 ^a 235 --- 96
05524300	Yeoman ditch tributary near Rensselaer, IN	Lat 40°56'27", long 87°14'10", in SW ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ 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.	.57	1972-	04-03-73 01-22-74 06-14-75 02-16-76 06-18-77 06-26-78	6.59 6.12 8.39 7.07 8.28 ^a 8.04	51 32 150 72 142 ^a 129

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
UPPER MISSISSIPPI RIVER BASIN--Continued							
Illinois River basin--Continued							
05524650	Clark ditch tributary near Morocco, IN (discontinued Sept. 30, 1978)	Lat 40°54'16", long 87°26'04", in SW ¹ SE ¹ NE 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 ^h	1972-78	04-22-73 02-22-74 06-14-75 02-16-76 08-10-77 08-01-78	6.23 6.76 9.62 6.12 7.80 9.67	42 62 84 ^a 39 56 120
05524700	Talley ditch near Kentland, IN	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.	4.16	1972-	-----	d	---
05525400	Gretencord ditch near Free, IN (discontinued Sept. 30, 1978)	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.	.84	1972-78	02-21-73 06-22-74 06-14-75 03-04-76 08-13-77 03-21-78	6.60 8.05 ^e 7.97 7.97 6.55 ^e 8.54	45 --- 76 76 --- 185

^aRevised.^bNonrecording.^cRecording.^dInsufficient data for peaks.^eResult of backwater^fNo peak recorded.^gPeak discharge not determined.^hAbout.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at crest-stage and high-flow, low-flow partial-record stations

Station No.	Station name	Location	Drainage area (mi ²)	Date	Dis-charge (ft ³ /s)
OHIO RIVER BASIN					
Great Miami River basin					
03274880	Greens Fork tributary near Lynn, IN	Lat 40°01'14", long 84°56'24", in SW ¹ / ₄ SW ¹ / ₄ SW ¹ / ₄ 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.	.78	07-25-73	22.9
03275800	West Run near Liberty, IN	Lat 39°38'24", long 84°57'18", in SE ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ 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.	.26	04-18-73	0.88
03275900	Templeton Creek near Fairfield, IN	Lat 39°31'20", long 84°56'51", in SW ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ sec.24, T.10 N., R.2 W., Franklin County, at culvert on State Highway 101, 0.25 mile south of Franklin-Onion County line.	5.39	07-24-73 03-12-75 05-14-75	141 106 38.9
Laughery Creek basin					
03276950	Uhlman Creek tributary near Avonburg, IN	Lat 38°53'33", long 85°11'04", in NW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ 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.	.16	04-17-73	1.83
03277000	Laughery Creek near Farmers Retreat, IN	Lat 38°57'08", long 85°04'15", in NW ¹ / ₄ SE ¹ / ₄ 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	09-13-78	23.8
Indian Creek basin					
03277250	Indian Creek tributary near Bennington, IN	Lat 38°52'25", long 85°07'24", in NE ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ 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.	.16	04-17-73	1.27
Fourteenmile Creek basin					
03292350	Flag Run tributary near New Washington, IN	Lat 38°31'08", long 85°32'29", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.20, T.1 N., R.9 E., Clark County, at culvert on State Highway 62, 3.0 miles south of New Washington.	.16	03-14-78	1.57
Indian Creek basin					
03302350	Georgetown Creek tributary near Georgetown, IN	Lat 38°17'30", long 85°56'26", in SW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ sec.35, T.25 N., R.5 E., Floyd County, at culvert on State Highway 64, 1.8 miles east of Georgetown.	.56	02-27-73 05-10-73 11-27-73 01-10-75 01-11-75	295 1.90 9.50 25.6 5.66
Blue River basin					
03302730	South Fork Blue River near Palmyra, IN	Lat 38°28'07", long 86°04'55", in NE ¹ / ₄ NW ¹ / ₄ 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 intersection of U.S. Highway 150 and State Highway 135 in Palmyra.	64.3	11-04-77 09-12-78	11.4 8.40
03302760	Licking Creek near Palmyra, IN (discontinued Sept. 30, 1978)	Lat 38°23'20", long 86°04'29", in SE ¹ / ₄ SW ¹ / ₄ NW 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	11-27-73 01-10-74 05-08-75	11.7 18.7 7.51
Little Blue River basin					
03303140	Bird Hollow Creek tributary near English, IN (discontinued Sept. 30, 1978)	Lat 38°21'49", long 86°28'00", in SW ¹ / ₄ NE 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 ^a	12-14-77	1.36
03303150	Bird Hollow Creek at English, IN	Lat 38°21'02", long 86°28'01", in SE ¹ / ₄ NE ¹ / ₄ NW ¹ / ₄ 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	11-03-77 09-13-78	3.36 0.40

Discharge measurement at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Date	Dis-charge (ft ³ /s)
Crooked Creek basin					
03303440	East Fork Crooked Creek tributary near Fulda, IN	Lat 38°05'18", long 86°49'12", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.14, T.5 S., R.4 W., Spencer County, at culvert on State Highway 545, 1.6 miles south of Fulda.	.26	03-27-73 03-04-77	0.29 2.48
Little Pigeon Creek basin					
03303900	Little Red Creek tributary near Heilman, IN	Lat 38°11'35", long 87°05'22", in NE ¹ / ₄ SE ¹ / ₄ SE 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 ^a	04-20-72 03-04-77	1.61 2.44
Pigeon Creek basin					
03322080	Bluegrass Creek tributary near Daylight, IN	Lat 38°06'09", long 87°29'02", in NW ¹ / ₄ SE ¹ / ₄ NW ¹ / ₄ sec.12, T.5 S., R.10 W., Vanderburgh County, at culvert on State Highway 57, 0.9 mile north of Daylight.	.42	04-20-72 11-02-72 03-14-73 03-11-74 03-04-77 03-14-78	0.53 0.10 4.71 6.58 8.96 1.78
Wabash River basin					
03323150	Rock Creek near Rockford, IN	Lat 40°44'31", long 85°18'24", in NW ¹ / ₄ NE ¹ / ₄ 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 ^a	03-22-78 03-24-78 09-27-78	1110 475 2.75
03323750	Yarger ditch at Tocsin, IN	Lat 40°49'50", long 85°05'49", in NW ¹ / ₄ NE 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 ^a	02-12-76 02-18-76 03-04-76	0.77 1.46 4.95
03323950	Little River tributary near Roanoke, IN	Lat 40°55'48", long 85°23'08", in SE ¹ / ₄ NE ¹ / ₄ NW 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.	1.04	06-30-72 11-25-73 05-17-74 12-15-75	0.05 0.61 3.04 5.90
03324050	Clear Creek near Huntington, IN	Lat 40°54'57", long 85°32'42", in NW ¹ / ₄ NW ¹ / ₄ 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 ^a	10-27-77 03-22-78 09-27-78	9.84 582 0.30
03324210	Blaine Run at Blaine, IN	Lat 40°24'15", long 85°03'19", in NW ¹ / ₄ SW ¹ / ₄ NW ¹ / ₄ sec.35, T.23 N., R.13 E., Jay County, at culvert on State Highway 67, 0.1 mile northeast of Blaine.	.45	09-12-72 10-05-72 08-14-73 12-15-75 03-21-78	1.57 0.61 2.28 4.81 10.9
03324260	Salamonie River tributary near Montpelier, IN	Lat 40°33'06", long 85°19'25", in NW ¹ / ₄ NW ¹ / ₄ NE 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.	.86	03-30-73 06-06-73 03-15-74 05-17-74	0.06 8.04 1.50 2.19
03324350	Brook Creek tributary near Warren, IN	Lat 40°44'35", long 85°26'42", in SW ¹ / ₄ SE ¹ / ₄ SW 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.	.52	04-17-72 09-12-72 11-28-72 05-17-74	1.96 1.61 1.26 14.6
03327510	Little Pipe Creek tributary near New Santa Fe, IN	Lat 40°41'38", long 86°00'34", in SW ¹ / ₄ SE ¹ / ₄ SW 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.	.54	05-17-74	0.52
03327530	Minnow Creek tributary near Logansport, IN	Lat 40°43'46", long 86°17'48", in NW ¹ / ₄ NW ¹ / ₄ SW 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.	.50	07-06-72 11-30-72 11-25-73 06-04-75	0.03 4.33 5.08 0.18
03327790	Eel River tributary near Columbia City, IN	Lat 41°07'01", long 85°31'21", Beaver Reserve, Columbia Township, Whitley County, at culvert on State Highway 205, 3.8 miles southwest of U.S. Highway 30 in Columbia City.	.17	04-19-72 11-27-72 11-25-73 02-11-76 02-17-76	1.40 0.11 0.43 0.98 2.29
03327930	Koontz ditch near Sidney, IN	Lat 41°07'28", long 85°44'38", in NW ¹ / ₄ NW ¹ / ₄ SW ¹ / ₄ 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 ^a	04-17-72 04-24-72 03-22-73 03-05-74 12-15-75 02-17-76	13.2 0.98 7.09 21.6 20.7 24.7

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Date	Dis-charge (ft ³ /s)
Wabash River basin--Continued					
03328020	Otter Creek tributary near North Manchester, IN	Lat 40°59'59", long 85°49'37", in SW ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ sec.35, T.30 N., R.6 E., Wabash County, at culvert on State Highway 114, 1.7 miles west of State Highway 13.	.92	12-15-71	7.00
				06-30-72	0.95
				10-17-72	0.49
				11-27-72	0.44
				11-25-73	1.13
				01-21-74	8.47
02-11-76	7.33				
03329720	Robinson Branch near Delphi, IN	Lat 40°37'10", long 86°37'01", in NE ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ 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.	5.62	04-07-72	48.1
				09-14-72	43.9
				11-14-72	44.5
				03-06-73	11.6
				11-24-73	19.4
				01-11-75	27.4
06-04-75	4.98				
06-15-75	95.1				
03330290	Shanton ditch near Pierceton, IN	Lat 41°12'45", long 85°41'10", in NW ¹ / ₄ NE ¹ / ₄ SW ¹ / ₄ 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.	.70	08-24-72	0.51
				03-22-73	3.08
				03-05-74	6.67
				12-15-74	3.88
03331376	McMahan ditch near Rochester, IN (discontinued Sept. 30, 1978)	Lat 41°06'14", long 86°11'18", in NE ¹ / ₄ NE ¹ / ₄ SE ¹ / ₄ 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 ^a	03-23-73	5.39
				01-10-75	5.79
				06-04-75	6.23
				02-02-76	10.8
03332300	Little Indian Creek near Royal Center, IN	Lat 40°52'53", long 86°35'26", in NE ¹ / ₄ NW ¹ / ₄ 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	10-26-77	31.0
				09-07-78	3.33
03332340	Weltzin ditch tributary near Francesville, IN	Lat 40°48'00", long 86°46'33", in SW ¹ / ₄ NW ¹ / ₄ NW ¹ / ₄ sec.16, T.29 N., R.3 W., Pulaski County, at culvert on State Highway 39, 6.1 miles south of State Highway 14.	.50	01-10-75	1.41
03332400	Big Monon Creek near Francesville, IN	Lat 40°59'03", long 86°51'43", in NW ¹ / ₄ NE ¹ / ₄ 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 downstream from right-bank tributary, and 10.2 miles upstream from mouth.	152	10-26-77	73.7
03332780	Big Creek near Wolcott, IN	Lat 40°41'26", long 87°02'37", in SE ¹ / ₄ NE ¹ / ₄ NE ¹ / ₄ sec.24, T.26 N., R.6 W., White County, at culvert on U.S. Highway 231, 4.4 miles south of Wolcott.	1.35	09-14-72	67
				03-13-73	4.24
				01-10-75	9.22
				06-15-75	23.6
02-17-76	13.8				
03333420	Grassy Fork tributary at Point Isabel, IN	Lat 40°25'28", long 85°49'28", in NE ¹ / ₄ SE ¹ / ₄ SE ¹ / ₄ 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.	.67	11-25-73	8.50
				02-11-76	0.32
				02-17-76	5.97
03333620	Scott Youngman ditch near Kokomo, IN	Lat 40°25'10", long 86°04'39", in NW ¹ / ₄ NW ¹ / ₄ NE ¹ / ₄ sec.28, T.23 N., R.4 E., Howard County, at culvert on State Highway 26, 2.4 miles west of State Highway 19.	.86	04-20-72	11.0
				10-04-72	5.69
				03-03-73	0.22
				10-04-73	1.70
				06-03-75	0.20
				12-15-75	1.06
				02-11-76	6.10
02-12-76	6.90				
02-17-76	12.6				
03334000	Wildcat Creek at Owasco, IN	Lat 40°27'50", long 86°38'15", in SE ¹ / ₄ SE ¹ / ₄ sec.4, T.23 N., R.2 W., Carroll County, on left bank 500 ft downstream from bridge on State Highway 39, 0.5 mile northwest of Owasco, and 15 miles upstream from South Fork Wildcat Creek.	396	09-12-78	48.1
03334200	Prairie Creek tributary near Frankfort, IN	Lat 40°15'14", long 86°30'36", in NW ¹ / ₄ SE ¹ / ₄ NE ¹ / ₄ 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.	2.61	07-17-72	0.32
				09-14-72	3.92
				09-26-72	27.6
				03-03-73	0.77
				11-25-73	21.1
				01-24-74	16.5
				04-03-74	19.1
				05-17-74	35.2
				05-22-75	49.1
				04-07-78	16.4

Discharge measurements at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Date	Dis-charge (ft ³ /s)
Wabash River basin--Continued					
03334900	South Fork Wildcat Creek tributary near Monitor, IN	Lat 40°25'13", long 86°46'22", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.20, T.23 N., R.3 W., Tippecanoe County, at culvert on State Highway 26, 0.4 mile northwest of Monitor Springs.	.10	05-08-74	0.16
				01-10-75	0.38
				03-28-77	0.95
03335660	Ilgenfritz ditch near Monroe, IN (discontinued Sept. 30, 1978)	Lat 40°20'36", long 86°47'49", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ 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 ^a	03-05-73	22.7
				06-19-73	0.42
				01-23-74	4.32
				05-22-75	3.28
				08-29-75	16.4
				08-29-75	12.5
				02-17-76	2.19
03-28-77	1.67				
03335685	Big Pine Creek tributary near Pine Village, IN	Lat 40°25'24", long 87°15'32", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ 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.	.21	01-23-74	0.34
				03-28-77	5.20
03335790	Big Shawnee Creek tributary near Attica, IN	Lat 40°16'48", long 87°10'29", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ 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.	1.22	03-28-77	0.21
				10-01-77	7.10
03339230	Woods ditch near Frankfort, IN	Lat 40°13'13", long 86°27'34", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.21 N., R.1 E., Clinton County, at culvert on State Highway 38, 2.2 miles southeast of State Highway 39.	1.12	12-15-71	19.0
				09-14-72	1.82
				09-26-72	8.77
				03-03-73	0.46
				11-25-73	18.1
				05-17-74	33.6
				05-08-75	0.92
05-22-75	25.8				
02-17-76	21.8				
03339250	Waddle ditch near Pike, IN (discontinued Sept. 30, 1978)	Lat 40°06'24", long 86°28'48", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	1.09	09-26-72	12.9
				03-02-73	0.35
				11-25-73	21.0
				04-03-74	8.08
				05-17-74	23.3
				05-08-75	0.41
				05-22-75	10.7
03-17-76	15.9				
03339400	Sugar Creek tributary near Garfield, IN (discontinued Sept. 30, 1978)	Lat 40°05'01", long 86°48'13", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.19 N., R.3 W., Montgomery County, at culvert on State Highway 47, 1.1 miles northeast of Garfield.	1.05	12-13-72	6.39
				11-26-73	4.97
				01-21-74	4.75
				05-07-75	0.44
				03-04-76	6.72
				03-04-76	6.95
				10-01-77	44.0
03-14-78	17.3				
03341150	Demeree Creek tributary near Byron, IN	Lat 39°52'39", long 87°05'56", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.17 N., R.6 W., Parke County, at culvert on State Highway 47, 0.5 mile west of Montgomery County Line.	.15	07-25-73	0.13
				05-07-75	0.07
				03-28-77	2.12
				10-01-77	0.27
03341180	Little Raccoon Creek tributary near Bellmore, IN (discontinued Sept. 30, 1978)	Lat 39°44'47", long 87°06'19", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ 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 ^a	05-14-75	0.12
				03-04-76	4.92
				03-29-76	1.66
03341770	Prairie Creek tributary near Pimento, IN (discontinued Sept. 30, 1978)	Lat 39°18'49", long 87°23'17", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ 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 ^a	04-03-74	3.86
				01-10-75	3.92
				05-08-75	0.46
				03-25-78	4.76
03342180	Kettle Creek tributary near Shelburn, IN	Lat 39°10'36", long 87°22'27", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ 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.	.48	04-17-72	0.42
				06-15-72	2.54
				11-26-73	7.20
				01-18-74	6.73
				04-13-74	5.77
				03-04-76	15.3

Discharge measurements at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Date	Dis-charge (ft ³ /s)
Wabash River basin--Continued					
03346650	River Deshee tributary near Fritchton, IN	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.	.82	09-08-72	1.52
				11-02-72	4.11
				03-13-75	2.12
				02-23-79	10.7
03346865	Mud Creek tributary at Selma, IN (discontinued Sept. 30, 1978)	Lat 40°11'37", long 85°15'26", in SE $\frac{1}{4}$ 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.	.02	04-25-78	0.16
03348700	White River tributary near Strawtown, IN	Lat 40°06'47", long 85°57'10", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	.42	08-15-73	3.39
				05-17-74	3.81
				02-17-76	7.52
03349400	Buscher ditch near Atlanta, IN (discontinued Sept. 30, 1978)	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 Hamilton-Tipton county line.	2.50 ^a	04-20-72	65.5
				07-10-72	0.89
				11-24-72	3.21
				05-22-75	34.9
03349500	Cicero Creek near Arcadia, IN	Lat 40°10'34", long 85°59'43", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ 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	10-25-77	12.8
				09-14-78	7.50
03349700	Little Cicero Creek near Arcadia, IN	Lat 40°10'32", long 86°02'45", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ 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	10-25-77	1.86
				09-14-78	2.70
03350100	Hinkle Creek near Cicero, IN	Lat 40°06'05", long 86°05'10", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ 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 Noblesville.	18.5	10-25-77	1.45
				09-14-78	2.65
03350650	Stony Creek tributary near Lapel, IN	Lat 40°05'18", long 85°49'22", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ 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.	.46	04-20-72	1.30
				12-15-75	2.25
				02-17-76	4.41
				03-14-78	20.6
				03-14-78	17.1
03352200	Mud Creek near Indianapolis, IN	Lat 39°53'30", long 86°00'57", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ 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 intersection of 75th Street and Sargent Road, 1.5 miles upstream from mouth, and 2.0 miles southeast of Castleton.	42.4	10-25-77	12.2
				09-13-78	16.2
03352400	Blue Creek near Castleton, IN	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.	.77	05-16-73	0.08
				06-05-73	8.31
				08-14-73	13.7
				01-10-74	4.82
				04-03-74	7.24
				05-17-74	9.40
				12-15-75	16.8
				02-17-76	2.34
				03-14-77	48.9
				03-28-77	9.36
				10-01-77	53.2
	03-14-78	47.3			
03353668	White Lick Creek tributary near Brownsburg, IN	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.	.31	07-25-73	2.05
				02-28-74	2.60
				05-17-74	8.41
				02-16-76	1.69
				03-04-76	7.17
				03-04-76	6.10
				10-01-77	1.94

Discharge measurements at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage (mi ²)	Date	Dis- charge (ft ³ /s)
Wabash River basin--Continued					
03354250	Sarton ditch tributary near Martinsville, IN (discontinued Sept. 30, 1978)	Lat 39°25'20", long 86°23'59", in NW ¹ SW ¹ NW ¹ 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 ^a	01-10-75 12-15-75	3.90 2.47
03355000	Bear Creek near Trevlac, IN	Lat 39°16'40", long 86°20'45", in NE ¹ NE ¹ sec.30, T.10 N., R.2 E., Brown County, on left bank 15 ft west of Bear Creek Road, 100 ft upstream from Slippery Elm Shoot Road ford, 1.1 miles northwest of Trevlac, and 1.3 miles upstream from mouth.	6.94	09-14-78	0.42
03356780	Limestone Creek tributary near Gosport, IN	Lat 39°21'12", long 86°40'58", in NE ¹ NW ¹ NW ¹ sec.31, T.11 N., R.2 W., Owen County, at culvert on State Highway 67, 0.9 mile west of Gosport.	.72	07-24-73 11-26-73 06-06-74 01-10-75 05-14-75 03-04-76 03-28-77 08-30-78	0.72 5.12 0.41 10.6 0.18 5.77 9.61 9.20
03357010	White River tributary near Spencer, IN (discontinued Sept. 30, 1978)	Lat 39°16'09", long 86°46'45", in SE ¹ SE ¹ SE ¹ 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.	.32	01-10-75 05-14-75	6.64 0.00
03357430	Owl Creek tributary near Bainbridge, IN	Lat 39°45'46", long 86°52'53", in SW ¹ SE ¹ SW ¹ sec.5, T.15 N., R.4 W., Putnam County, at culvert on U.S. Highway 36, 3.7 miles west of Bainbridge.	.58	12-14-71 12-15-71 05-08-75 03-04-76 03-28-77 05-06-77 10-01-77	64.1 14.9 0.02 4.82 15.3 3.90 6.40
03360100	Clear Branch at Cory, IN	Lat 39°23'20", long 87°11'58", in SE ¹ SW ¹ SW ¹ sec.16, T.11 N., R.7 W., Clay County, at culvert on State Highway 46, 4.9 miles west of State Highway 59.	.27	11-26-73 01-18-74 04-03-74 01-10-75 03-28-77	5.72 3.19 3.60 7.83 4.50
03360400	Doans Creek tributary near Doans, IN	Lat 38°55'12", long 86°50'54", in SW ¹ SW ¹ SW ¹ sec.27, T.6 N., R.4 W., Greene County, at culvert on State Highway 58 at Doans.	.20	11-10-72 07-30-73 03-12-75 03-28-77	0.16 1.84 1.59 3.36
03360600	Smothers Creek near Plainville, IN	Lat 38°48'43", long 87°07'48", in SE ¹ NW ¹ 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 ^a	11-02-77 12-15-77 09-09-78	11.5 260 2.74
03360750	Miller ditch tributary near Bicknell, IN	Lat 38°47'08", long 87°18'36", in SE ¹ NW ¹ NW ¹ 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.	.50	11-25-73	0.20
03360850	Veales Creek tributary at Washington, IN	Lat 38°37'16", long 87°11'00", in SW ¹ SW ¹ NW ¹ 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.	.27	03-12-75	0.80
03361660	Little Sugar Creek tributary at Carrollton, IN	Lat 39°42'22", long 85°49'40", in SW ¹ SW ¹ NE ¹ sec.35, T.15 N., R.6 E., Hancock County, at culvert on U.S. Highway 52, 3.4 miles southeast of New Palestine.	.70	06-06-73 07-24-73 11-24-73 12-15-75 02-17-76	7.93 6.57 7.58 15.0 7.31
03361890	Gilmore Creek near Bargersville, IN	Lat 39°30'44", long 86°08'26", in NE ¹ NE ¹ SE ¹ 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 Bargersville.	.71	06-24-73 06-25-73 01-21-74 01-10-75 03-17-75 03-17-75 12-15-75	6.88 2.86 3.72 8.87 25.0 19.6 14.1
03363050	Wolf Creek tributary near Columbus, IN (discontinued Sept. 30, 1978)	Lat 39°11'58", long 85°58'34", in SW ¹ SW ¹ SE ¹ 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.	.90	05-31-74 03-12-75 01-10-75 12-15-75	25.2 11.8 10.2 29.0

Discharge measurements at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Date	Discharge (ft ³ /s)
Wabash River basin--Continued					
03363450	Little Flatrock Creek at Milroy, IN	Lat 39°29'49", long 85°28'24", in NE&NW¼ 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	11-03-77 09-12-78	8.76 5.50
03363600	Goddard ditch tributary near Rushville, IN (discontinued Sept. 30, 1978)	Lat 39°35'22", long 85°31'51", in NE&NE&SW¼ sec.9, T.13 N., R.9 E., Rush County, at culvert on State Highway 44, 4.3 miles west of Rushville.	.54	12-15-75 03-05-76	7.03 1.12
03364100	Tough Creek near Norristown, IN	Lat 39°22'19", long 85°45'38", in SW&SW&NW¼ sec.28, T.11 N., R.7 E., Shelby County, at culvert on county road, 0.5 mile north of Norristown.	1.46	07-25-73 08-29-74 12-15-75 03-14-78	3.72 4.40 20.7 58.6
03364570	Fall Fork Clifty Creek tributary near Horace, IN	Lat 39°16'01", long 85°34'30", in SW&SW&NW¼ 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.	.83	07-25-73 11-25-73 08-29-74 03-12-75 04-25-75	0.54 1.79 28.6 14.4 3.31
03366400	Lewis Creek tributary near Kent, IN	Lat 38°44'13", long 85°34'39", in NW&NE&NE¼ sec.2, T.3 N., R.8 E., Jefferson County, on State Highway 256, 2.8 miles west of Kent.	.16	03-14-78	4.54
03367600	Flat Creek tributary at New Frankfort, IN	Lat 38°44'18", long 85°42'50", in NE&SE&SW¼ sec.35, T.4 N., R.7 E., Scott County, at culvert on State Highway 256, 0.2 mile northwest of State Highway 203.	.34	11-27-73 06-05-75 03-14-78 03-14-78	9.68 2.40 6.40 8.13
03369700	Sixmile Creek tributary near North Vernon, IN	Lat 39°01'55", long 85°38'24", in NW&SW&SE¼ 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.	.39	04-17-73 07-25-73 06-05-75 06-05-75	4.48 0.53 4.79 6.28
03371630	North Fork Salt Creek tributary near Nashville, IN	Lat 39°11'38", long 86°12'11", in NE&NE&NW¼ 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.	.22	01-10-75 03-13-75	2.23 4.98
03372670	Jackson Creek near Bloomington, IN	Lat 39°07'17", long 86°30'50", in SW&SW¼ 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	11-01-77 12-14-77 09-26-78	0.63 63.4 0.02
03372675	Jackson Creek at Clear Creek, IN	Lat 39°06'01", long 86°32'18", in SE&NE¼ 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	11-01-77 12-14-77 09-26-78	3.16 175 0.12
03372680	Clear Creek tributary near Bloomington, IN	Lat 39°04'24", long 86°32'39", in SW&SW&NE¼ sec.5, T.7 N., R.1 W., Monroe County, at culvert on Old State Highway 37, 6.5 miles south of Bloomington.	.38	01-10-74 05-21-74 11-25-78	8.85 63.2 0.86
03373200	Indian Creek near Springville, IN	Lat 38°57'01", long 86°40'30", in SE&SW¼ 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	11-01-77 09-11-78	12.2 16.0
03373240	Spring Creek tributary near Springville, IN	Lat 38°54'41", long 86°39'09", in SE&SW&NE¼ sec.32, T.6 N., R.2 W., Lawrence County, at culvert on State Highway 58, 2.7 miles southwest of Springville.	.54	01-10-75 03-12-75	4.44 3.27
03373680	French Lick Creek tributary near French Lick, IN	Lat 38°30'08", long 86°36'20", in SW&NW&SW¼ 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.	.29	01-23-74 01-12-75 11-11-75	1.60 2.49 0.34
03373850	Slate Creek tributary near Haysville, IN	Lat 38°33'30", long 86°54'10", in NE&SW&SW¼ 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, 8.0 miles south of intersection of U.S. Highways 231, 150, and 50 in Loogootee.	.14	03-12-75 03-12-75 12-15-75 07-13-78	1.80 0.77 6.95 6.91

Discharge measurements at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Date	Dis-charge (ft ³ /s)
Wabash River basin--Continued					
03376230	Shiloh Drain near Jasper, IN	Lat 38°24'26", long 86°58'47", in NW ⁴ SW ⁴ NE ⁴ sec.28, T.15 N., R.5 W., Dubois County, at culvert on State Highway 56, at Ireland, 2.8 miles northwest of Jasper.	.57	05-12-72 03-28-73 03-12-75 03-12-75	0.23 0.86 1.71 2.29
03376340	Patoka River tributary near Glezen, IN	Lat 38°23'41", long 87°19'05", in NE ⁴ SE ⁴ SE ⁴ 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.	.84	06-06-73 01-17-74 03-04-77	3.37 1.95 9.36
03376600	Patoka River tributary near Patoka, IN	Lat 38°23'08", long 87°35'21", in SE ⁴ SW ⁴ NW ⁴ 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	01-21-72 06-27-73 06-28-73	9.47 33.5 0.38
03378450	Black River near Poseyville, IN	Lat 38°12'00", long 87°46'51", on line between SW ⁴ SW ⁴ sec.5, and SE ⁴ SE 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	11-02-77 03-15-78 09-13-78	9.11 188 0.11
03378590	Olive Creek tributary near Solitude, IN	Lat 38°00'14", long 87°53'57", in NW ⁴ SE ⁴ NW ⁴ sec.17, T.6 S., R.13 W., Posey County, at culvert on State Highway 69, 0.65 mile south of Solitude.	.32	04-20-72 03-28-77 03-25-78	0.98 4.66 3.03
STREAMS TRIBUTARY TO LAKE MICHIGAN					
Trail Creek basin					
04095250	East Branch Trail Creek tributary near Springville, IN	Lat 41°41'22", long 86°46'42", in NE ⁴ SE ⁴ NE ⁴ 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.	.17	03-07-73	0.38
St. Joseph River basin					
04099060	Pigeon Creek tributary near Ellis, IN	Lat 41°37'43", long 84°54'56", in NW ⁴ NW ⁴ NW ⁴ 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.	1.22	11-15-72 03-12-74 03-04-76 03-28-77 09-27-77 03-21-78	6.23 2.04 13.7 12.5 1.17 40.9
04099745	Truesdale ditch near Shipshewana, IN (discontinued Sept. 30, 1978)	Lat 41°43'36", long 85°35'38", in NE ⁴ NE ⁴ NW ⁴ sec.27, T.38 N., R.8 E., Lagrange County, at culvert on State Highway 120, 0.6 mile west of State Highway 5.	2.39	10-18-72 03-27-73 03-03-76 03-04-76	0.13 1.79 14.5 11.0
04100165	Wible Lake inlet near Kendallville, IN	Lat 41°29'15", long 85°16'13", in NW ⁴ NW ⁴ SW ⁴ 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.	2.47	04-19-72 10-18-72 03-29-73 06-12-75 03-21-78	5.00 1.07 3.92 4.80 39.7
04100700	Christophel ditch tributary near Wakarusa, IN (discontinued Sept. 30, 1978)	Lat 41°30'24", long 86°00'07", in NW ⁴ NW ⁴ NW ⁴ 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.	2.23	10-17-72 03-28-73 06-12-75 03-02-76 03-21-78	1.69 2.73 7.73 30.3 65.1
04100800	Yellow Creek near Dunlap, IN	Lat 41°38'44", long 85°56'00", in NE ⁴ NE ⁴ sec.27, T.37 N., R.5 E., Elkhart County, at bridge on U.S. Highway 33, at northwest edge of Dunlap.	33 ^a	10-26-77 03-22-78 06-14-78 09-07-78	7.64 618 10.4 4.00
STREAMS TRIBUTARY TO LAKE ERIE					
Maumee River basin					
04179500	Cedar Creek near Auburn, IN	Lat 41°21'57", long 85°03'08", in NE ⁴ NW 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	10-26-77	16.7

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements at crest-stage and high-flow, low-flow partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Date	Dis-charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE ERIE--Continued					
Maumee River basin--Continued					
04179510	Cecil Metcalf ditch near Auburn, IN	Lat 41°21'55", long 85°01'07", in SW ¹ NE ¹ SW 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.	.78	09-14-72 11-02-72 03-06-73 12-30-74 03-28-77	18.4 13.2 3.43 2.00 15.6
04183050	Schumacher ditch near New Haven, IN (discontinued Sept. 30, 1978)	Lat 41°04'25", long 84°52'30", 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	09-13-72 09-15-72 11-02-72 06-11-75 03-21-78 03-21-78	0.21 4.79 5.23 2.97 12.0 9.53
04191310	Flatrock Creek tributary near Monroeville, IN	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.	.83	04-13-72 11-01-72 06-05-73 06-11-75 03-05-76	9.05 1.79 3.55 1.88 15.2
UPPER MISSISSIPPI RIVER BASIN					
Illinois River basin					
05515216	Potato Creek tributary near Lakeville, IN (discontinued Sept. 30, 1978)	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 ^a	09-25-75 03-22-78 03-23-78 05-09-78	0.42 84.4 82.4 1.28
05516000	Yellow River near Bremen, IN	Lat 41°25'11", long 86°10'14", in NW ¹ SW ¹ 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	10-25-77 03-23-78 06-13-78 09-07-78	49.6 1990 33.2 8.13
05516150	Walt Kimble ditch near LaPaz, IN	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.	1.50	03-14-72 07-19-72 06-05-75	8.40 11.0 11.3
05516950	Eagle Creek near Grovertown, IN	Lat 41°18'44", long 86°31'27", in SE ¹ NE ¹ 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 ^a	10-25-77 06-13-78 09-06-78 10-04-78	16.1 24.6 8.89 9.38
05517400	West Arm Payne ditch near North Judson, IN	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.	2.58	07-18-72 03-06-73 03-24-78	4.34 4.66 7.66
05518600	Bryant ditch near Dinwiddie, IN (discontinued Sept. 30, 1978)	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 ^a	07-19-72	6.15
05524300	Yeoman ditch tributary near Rensselaer, IN	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.	.57	06-20-75	2.54
05524650	Clark ditch tributary near Morocco, IN (discontinued Sept. 30, 1978)	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 ^a	07-19-72 08-07-72 03-15-73 01-10-75 02-17-76	1.94 10.9 2.98 19.8 12.0
05525400	Gretencord ditch near Free, IN (discontinued Sept. 30, 1978)	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.	.84	03-16-73 01-10-75	1.54 36.9

^aAbout.

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 1978

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN						
Eel River	Wabash River	Lat 40°48'51", long 86°09'24", in NW ¹ / ₄ SE ¹ / ₄ sec.2, T.27 N., R.3 E., Miami County, at bridge on County Road 440 West, and 2.4 miles east of Hoover.			11/15/77	268
Eel River	Wabash River	Lat 40°47'50", long 86°11'55", in NE ¹ / ₄ SW ¹ / ₄ sec.9, T.27 N., R.3 E., Cass County, at bridge on County Road 225 North, 0.8 mile south of Hoover.			11/15/77	310
Twelvemile Creek	Eel River	Lat 40°49'51", long 86°13'53", in SW ¹ / ₄ NE ¹ / ₄ sec.31, T.28 N., R.3 E., Cass County, at bridge on County Road 450 North, 2.3 miles northwest of Hoover.			11/15/77	24
Twelvemile Creek	Eel River	Lat 40°47'52", long 86°13'57", in NW ¹ / ₄ SE ¹ / ₄ sec.7, T.27 N., R.3 E., Cass County, at mouth, and 1.8 miles southwest of Hoover.	53.1		11/15/77	33
Tick Creek	Eel River	Lat 40°46'06", long 86°19'02", in NW ¹ / ₄ SW ¹ / ₄ sec.21, T.27 N., R.2 E., Cass County, at bridge on County Road 50 North, and 0.5 mile northeast of the city limits of Logansport.			11/15/77	5.2
Eel River	Wabash River	Lat 40°45'49", long 86°20'17", in NE ¹ / ₄ NE ¹ / ₄ sec.30, T.27 N., R.2 E., Cass County, at bridge on County Road 200 East, 0.3 mile north of city limits of Logansport.			11/15/77	337
Wabash River	Ohio River	Lat 40°44'50", long 86°23'38", in NE ¹ / ₄ NE ¹ / ₄ sec.34, T.27 N., R.1 E., Cass County, at bridge on U.S. Highway 35 bypass, 0.3 mile west of the city limits of Logansport.			11/15/77	3,560
Wabash River tributary	Wabash River	Lat 40°44'49", long 86°24'51", in NE ¹ / ₄ NE ¹ / ₄ sec.33, T.27 N., R.1 E., Cass County, at bridge on County Road 125 South, 100 ft above mouth, and 0.2 mile west of intersection of County Roads 200 West and 125 South, and 1.9 miles west of the city limits of Logansport.		1976	11/15/77	.85
Wabash River tributary	Wabash River	Lat 40°45'19", long 86°25'28", in NE ¹ / ₄ SW ¹ / ₄ sec.28, T.27 N., R.1 E., Cass County, at bridge on U.S. Highway 24, 2.2 miles west of the city limits of Logansport.		1976	11/15/77	.73
Wabash River tributary	Wabash River	Lat 40°45'25", long 86°25'55", in NE ¹ / ₄ SE ¹ / ₄ sec.29, T.27 N., R.1 E., Cass County, at bridge on U.S. Highway 24, 2.6 miles west of the city limits of Logansport.		1976	11/15/77	1.8
Wabash River tributary	Wabash River	Lat 40°45'29", long 86°26'17", in SW ¹ / ₄ NE ¹ / ₄ sec.29, T.27 N., R.1 E., Cass County, at bridge on U.S. Highway 24, 0.1 mile east of County Road 350 West, and 3.0 miles west of the city limits of Logansport.		1976	11/15/77	1.7
Wabash River tributary	Wabash River	Lat 40°44'47", long 86°27'21", in NW ¹ / ₄ NE ¹ / ₄ sec.31, T.27 N., R.1 E., Cass County, at bridge on South River Road, 0.7 mile east of County Road 500 West, and 4.2 miles west of the city limits of Logansport.		1976	11/15/77	1.1
Wabash River tributary	Wabash River	Lat 40°44'50", long 86°27'51", in NW ¹ / ₄ NW ¹ / ₄ sec.31, T.27 N., R.1 E., Cass County, at bridge on Georgetown Road, 1.2 miles east of County Road 600 West, and 2.2 miles east of Georgetown.		1976	11/15/77	5.5

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
Grants Run	Wabash River	Lat 40°44'14", long 86°29'14", in NE¼SE¼ sec.35, T.27 N., R.1 W., Cass County, at bridge on South River Road, 0.8 mile east of Georgetown.			11/15/77	1.2
Wabash River	Ohio River	Lat 40°44'19", long 86°30'10", in SW¼SW¼ sec.35, T.27 N., R.1 W., Cass County, at bridge at Georgetown.		1976	11/15/77	3,160
Crooked Creek	Wabash River	Lat 40°48'43", long 86°26'51", in NW¼SW¼ sec.5, T.27 N., R.1 E., Cass County, at culverts on U.S. Highway 35, 4.5 miles southeast of Royal Center.			11/15/77	16
Crooked Creek	Wabash River	Lat 40°48'23", long 86°29'31", in NW¼ sec.11, T.27 N., R.1 W., Cass County, at culverts on Road 625 West, 4 miles south of Royal Center.	35.9	a	11/15/77	22
Galbreath ditch	Crooked Creek	Lat 40°47'58", long 86°31'44", in NW¼SE¼ sec.9, T.27 N., R.1 W., Cass County, at bridge on County Road 825 East, 2.4 miles north of Lake Cicott.			11/15/77	8.4
Crooked Creek	Wabash River	Lat 40°45'51", long 86°29'54", in NW¼ sec.26, T.27 N., R.1 W., Cass County, at bridge on U.S. Highway 24, 6.5 miles west of Logansport.	54.2	b	11/15/77	47
White River	Wabash River	Lat 40°08'32", long 85°54'44", in SW¼NW¼ sec.33, T.20 N., R.6 E., Hamilton County, 250 ft upstream from State Highway 13 bridge, and 400 ft south of Perkinsville.		1976, 1977	10/30/77	139
Pipe Creek	White River	Lat 40°09'20", long 85°51'45", in NW¼SW¼ sec.28, T.20 N., R.6 E., Hamilton County, 125 ft upstream from State Highway 13 bridge, 0.8 miles north of Perkinsville, and 1.3 miles upstream from mouth.		1976, 1977	10/30/77	24
Cedar Corner ditch	Polywog Creek	Lat 40°16'37", long 85°53'36", in NE¼NW¼ sec.18, T.21 N., R.6 E., Tipton County, 10 ft south of County Road 200 South, 0.35 mile east of County Road 600 East, and 2,000 ft upstream from Polywog Creek.			10/30/77	.09
Hobbs ditch	Polywog Creek	Lat 40°14'53", long 85°52'47", in SW¼NW¼ sec.29, T.21 N., R.6 E., Tipton County, at bridge on County Road 700 East, 100 ft west of Polywog Creek, and 0.25 mile north of County Road 450 South.			10/30/77	.05
Polywog Creek	Duck Creek	Lat 40°14'16", long 85°51'41", in NW¼SW¼ sec.28, T.21 N., R.6 E., Madison County, 10 ft east of County Road 800 East, 50 ft upstream from Duck Creek, and 0.25 mile north of County Road 900 North.			10/30/77	2.09
Duck Creek	White River	Lat 40°13'08", long 85°51'44", in SE¼SE¼ sec.32, T.21 N., R.6 E., Tipton County, 10 ft north of County Line Road, and 25 ft west of Madison County Line, and 1 mile east of Hayworth Road.			10/30/77	7.87
Lamberson ditch	Duck Creek	Lat 40°10'45", long 85°52'54", in SW¼SW¼ sec.17, T.20 N., R.6 E., Hamilton County, at bridge on Gunn Road, 10 ft east of Gunn Road, and 60 ft north of 266th Street.			10/30/77	.31
West Fork	Bear Creek	Lat 40°11'17", long 85°55'14", in NE¼NE¼ sec.14, T.20 N., R.5 E., Hamilton County, at Lower Road, 0.7 mile south of 281st Street, and 0.8 mile north of 266th Street.			10/30/77	.23
Deer Creek	Bear Creek	Lat 40°09'12", long 85°56'23", on line between secs.26 and 27, T.20 N., R.5 E., Hamilton County, at bridge on State Highway 213, 0.6 mile south of East 256th Street, and 1.6 miles north of State Highway 37.			10/30/77	.03

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
Bear Creek	Duck Creek	Lat 40°08'51", long 85°55'49", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.20 N., R.5 E., Hamilton County, at bridge on East 246th Street, and 0.5 mile east of State Highway 213.			10/30/77	.06
Duck Creek	White River	Lat 40°08'17", long 85°56'22", on line between secs.34 and 35, T.20 N., R.5 E., Hamilton County, at bridge on State Highway 213, 600 ft upstream from White River, 0.6 mile north of State Highway 37, and 0.6 mile south of East 246th Street.			10/30/77	13
Long Branch	Duck Creek	Lat 40°08'50", long 85°56'55", on line between secs.27 and 34, T.20 N., R.5 E., Hamilton County, on 246th Street bridge, 0.5 mile west of State Highway 213, and 0.6 mile east of Lacy Road.			10/30/77	.12
Christy ditch	Cox ditch	Lat 40°13'49", long 86°11'38", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.21 N., R.3 E., Tipton County, 20 ft south of County Road 500 South, 110 ft upstream from Cox ditch, and 150 ft east of County Road 975 West.			10/30/77	.57
Kigin ditch	Cicero Creek	Lat 40°15'12", long 86°08'08", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.24, T.21 N., R.3 E., Tipton County, 15 ft south of County Road 350 South, 150 ft upstream from mouth, and 225 ft west of U.S. Highway 31.			10/30/77	.32
Cicero Creek	White River	Lat 40°14'33", long 86°06'26", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.21 N., R.4 E., Tipton County, at bridge on County Road 500 West, 0.25 mile south of County Road 400 South, and 1.7 mile north of county line road.			10/30/77	2.1
McKinzie ditch	Prairie Creek	Lat 40°11'43", long 86°11'49", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.20 N., R.3 E., Hamilton County, at bridge on 281st Street, 30 ft upstream from Prairie Creek, 0.4 mile east of Lamong Road, and 0.6 mile west of Ditch Road.			10/30/77	.35
Prairie Creek	Cicero Creek	Lat 40°13'01", long 86°09'05", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.20 N., R.3 E., Hamilton County, at bridge on Tipton-Hamilton County line road, 0.25 mile west of Arthur Baker Road, and 0.6 mile east of County Road 775 West.			10/30/77	1.1
Endicott ditch	Prairie Creek	Lat 40°13'09", long 86°09'42", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.21 N., R.3 E., Tipton County, on County Road 775 West, 0.15 mile north of county line road, and 0.8 mile south of County Road 500 South.			10/30/77	.22
Dixon Creek	Cicero Creek	Lat 40°15'10", long 86°05'18", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.21, T.21 N., R.4 E., Tipton County, at bridge on County Road 400 West, 175 ft upstream from Cicero Creek, 0.6 mile north of County Road 400 south, and 2.65 miles north of county line road.			10/30/77	3.0
Cicero Creek	White River	Lat 40°16'12", long 86°03'06", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.21 N., R.4 E., Tipton County, 45 ft west of bridge on County Road 200 West, 0.55 mile west of State Highway 19 and County Home, and 1.10 miles southwest of Tipton post office.			10/30/77	9.0
Cicero Creek	White River	Lat 40°15'43", long 86°00'49", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.13, T.21 N., R.4 E., Tipton County, at bridge on County Road 300 South, and 1.45 miles east of State Highway 19.			10/30/77	15.9
Bacon Prairie Creek	Cicero Creek	Lat 40°14'24", long 86°00'09", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.30, T.21 N., R.5 E., Tipton County, at bridge on County Road 450 South, 125 ft upstream from Cicero Creek, 0.1 mile east of County Road 50 East, and 0.4 mile west of County Road 100 East.			10/30/77	.77

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
Buscher ditch	Cicero Creek	Lat 40°13'31", long 86°00'57", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.36, T.21 N., R.4 E., Tipton County, next to Summer Cemetery, 110 ft upstream from Cicero Creek, and 2,000 ft east of County Road 50 West.			10/30/77	.16
Forkner ditch	Cicero Creek	Lat 40°12'37", long 86°00'20", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.20 N., R.5 E., Hamilton County, at bridge on Whistler Road, 700 ft upstream from Cicero Creek, 0.5 mile south of county line road, and 0.85 mile north of East 281st Street.			10/30/77	.15
Cicero Creek	White River	Lat 40°10'58", long 86°00'08", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.20 N., R.5 E., Hamilton County, at bridge on Whistler Road, and 0.45 mile north of East 266th Street.			10/30/77	17.6
Little Cicero Creek	Cicero Creek	Lat 40°10'27", long 86°09'16", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.14, T.20 N., R.3 E., Hamilton County, at bridge on East 266th Street, 1.2 miles east of Six Points Road, and 1.3 miles west of U.S. Highway 31.			10/30/77	1.3
Bennett ditch	Little Cicero Creek	Lat 40°11'25", long 86°06'25", on line between secs.8 and 17, T.20 N., R.4 E., Hamilton County, on 276th Street, 0.2 mile east of Anthony Road, and 1.15 miles west of Carson Road.			10/30/77	.17
Little Cicero Creek	Cicero Creek	Lat 40°11'25", long 86°03'18", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.20 N., R.4 E., Hamilton County, at bridge on 276th Street, 0.7 mile west of Gwin Road, and 0.75 mile east of De Vaney Road.			10/30/77	2.3
Jones ditch	Hinkle Creek	Lat 40°06'58", long 86°06'04", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.19 N., R.4 E., Hamilton County, at bridge on 226th Street, 35 ft west of Deming Road, and 0.45 mile east of Anthony Road.			10/30/77	1.13
Sly Run	Cicero Creek	Lat 40°02'48", long 86°02'05", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.35, T.19 N., R.4 E., Hamilton County, 20 ft upstream of mouth, and 50 ft north of State Highway 32.			10/30/77	.42
Cicero Creek	White River	Lat 40°01'53", long 86°02'04", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.2, T.18 N., R.4 E., Hamilton County, 800 ft upstream from River Ave., 1 mile upstream from White River, and 1.4 miles southwest of post office at Noblesville.		1977	10/30/77	20
Stoney Creek	White River	Lat 40°03'58", long 85°51'47", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.28, T.19 N., R.6 E., Hamilton County, at bridge 100 ft south of State Highway 32 on Madison-Hamilton County line road.			10/30/77	.56
Lock ditch	Stoney Creek	Lat 40°03'26", long 85°55'29", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.23, T.19 N., R.5 E., Hamilton County, 10 ft north of 196th Street, and 3.7 miles west of State Highway 32.			10/30/77	2.0
Stoney Creek tributary	Stoney Creek	Lat 40°02'24", long 85°56'59", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.3, T.18 N., R.5 E., Hamilton County, 10 ft north of State Highway 38, and 1.3 miles east of intersection of State Highway 32 and 38.			10/30/77	.90
White River	Wabash River	Lat 40°00'01", long 86°01'24", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.18 N., R.4 E., Hamilton County, at State Highway 234 bridge, and 2.1 miles downstream from Stoney Creek.		1977	10/30/77	205
Shoemaker ditch	White River	Lat 39°58'20", long 86°02'04", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.26, T.18 N., R.4 E., Hamilton County, at bridge on Allisonville Road, 1 mile south of Conner Prairie Museum, and 4.9 miles north of Interstate 465.			10/30/77	.35

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
Vestal ditch	White River	Lat 39°58'23", long 86°03'05", on line between secs.26 and 27, T.18 N., R.4 E., Hamilton County, at bridge on North River Road, 0.3 mile south of 131st Street, and 0.6 mile north of 122nd Street.			10/30/77	.44
Mitchener ditch	White River	Lat 39°57'24", long 86°04'05", in NW¼NW¼ sec.3, T.17 N., R.4 E., Hamilton County, at bridge on 116th Street, 100 ft west of White River, and 0.3 mile east of River Ave.			10/30/77	.60
Cool Creek	White River	Lat 39°59'38", long 86°07'27", in SW¼NW¼ sec.19, T.18 N., R.4 E., Hamilton County, at bridge on State Highway 431, 0.25 mile southeast of State Highway 31, and 0.8 mile north of 130th Street.			10/30/77	3.0
Cool Creek	White River	Lat 39°57'14", long 86°04'24", in NE¼NE¼ sec.4, T.17 N., R.4 E., Hamilton County, 0.2 mile south of 116th Street on River Ave., and 0.8 mile north of 106th Street.			10/30/77	4.1
Cheaney Creek	White River	Lat 39°56'30", long 86°03'37", in SE¼SW¼ sec.3, T.17 N., R.4 E., Hamilton County, at bridge on Eller Road, 20 ft north of 106th Street, and 175 ft upstream from White River.			10/30/77	1.2
Carmel Creek	White River	Lat 39°55'10", long 86°05'42", in NW¼NE¼ sec.17, T.17 N., R.4 E., Hamilton County, at bridge on North River Road, 180 ft west of Ford Road, and 210 ft upstream from White River.			10/30/77	.23
Williams Creek	White River	Lat 39°55'37", long 86°10'20", in SW¼SE¼ sec.10, T.17 N., R.4 E., Hamilton County, at bridge on 96th Street, 0.6 mile east of Ditch Road, and 0.75 mile west of U.S. Highway 31.			10/30/77	2.1
Fall Creek	White River	Lat 39°53'53", long 85°59'27", in SW¼SW¼ sec.20, T.17 N., R.5 E., Marion County, at bridge on East 79th Street, 0.75 mile downstream from Geist Reservoir dam.			10/31/77	48.6
Mud Creek	Fall Creek	Lat 40°00'38", long 85°51'44", on line between secs.16 and 17, T.18 N., R.6 E., Hamilton County, at bridge on County Road 1000 West, 0.6 mile north of 146th Street, and 0.85 mile south of State Highway 38.			10/30/77	.39
Sand Creek	Mud Creek	Lat 39°56'33", long 85°59'29", in SW¼SW¼ sec.5, T.17 N., R.5 E., Hamilton County, 40 ft upstream from Mud Creek, 45 ft north of East 106th Street, and 100 ft east of Cumberland Road.			10/30/77	.96
Mud Creek	Fall Creek	Lat 39°56'23", long 85°59'42", in NE¼NE¼ sec.7, T.17 N., R.5 E., Hamilton County, at bridge on Cumberland Road, 700 ft south of East 106th Street.			10/31/77	13.0
Little Eagle Creek tributary	Little Eagle Creek	Lat 40°01'17", long 86°12'55", in SE¼NW¼ sec.8, T.18 N., R.3 E., Hamilton County, at bridge on Creek Ave., 50 ft upstream from Little Eagle Creek, and 0.25 mile north of Little Eagle Ave.			10/30/77	.19
Little Eagle Creek tributary	Little Eagle Creek	Lat 40°01'25", long 86°13'52", in SW¼NE¼ sec.7, T.18 N., R.3 E., Hamilton County, at bridge on Joliet Road, 0.25 mile south of 166th Street, and 0.7 mile north of County Road 200 South.			10/30/77	.50
Little Eagle Creek	Eagle Creek	Lat 39°59'13", long 86°14'40", in SE¼SE¼ sec.24, T.18 N., R.2 E., Boone County, at bridge on Willow Ave., 200 ft west of county line, and 0.95 mile downstream from west 146th Street.			10/31/77	2.1

Discharge measurements made at miscellaneous sites during water year 1978--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE ERIE						
Junk ditch	St. Marys River	Lat 41°02'47", long 85°12'34", in SW ¹ / ₄ SW ¹ / ₄ sec.17, T.30 N., R.12 E., Allen County, at bridge on Smith Road, 300 ft north of Engle Road, and 0.9 mile south of Covington Road.			03/22/78	186
Trier ditch	Maumee River	Lat 41°01'05", long 85°05'15", in SE ¹ / ₄ SW ¹ / ₄ sec.29, T.30 N., R.13 E., Allen County, at bridge on Tillman Ave., 0.4 mile east of Hessen Cassel Road, and 0.8 mile west of Wayne Trace.			03/22/78	18
UPPER MISSISSIPPI RIVER BASIN						
Grand Calumet River	Little Calumet River	Lat 41°37'28", long 87°31'05", in NE ¹ / ₄ 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 Ave. bridge.		1977	10/19/77 11/29/77 12/27/77 02/15/78 03/15/78 05/09/78 06/14/78 07/19/78 08/23/78 09/27/78	32 20 20 18 26 26 37 33 16 22

^aDiscontinued low-flow partial-record station, Crooked Creek near Royal Center, Ind., 03329100.

^bDiscontinued low-flow partial-record station, Crooked Creek near Logansport, Ind., 03329150.

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 in water years, 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	1941-73 ^a
03304000	Little Pigeon Creek near Tennyson	Warrick	187	1944-47 ^b
03323000	Wabash River at Bluffton	Wells	532	1931-71 ^b
03326000	Mississinewa River near Eaton	Delaware	310	1952-71 ^b
03329500	Wabash River at Delphi	Carroll	4,072	1940-71
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	1945-61
03334000	Wildcat Creek at Owasco	Carroll	396	1944-73 ^a
03339120	Coal Creek at Coal Creek	Fountain	214	1965-72
03339150	Little Vermillion River near Newport	Vermillion	237	1965-72 ^b
03340000	Sugar Creek near Byron	Parke	670	1941-71 ^b
03341000	Big Raccoon Creek at Mansfield	Parke	248	1939-58 ^c
03341200	Little Raccoon Creek near Catlin	Parke	134	1957-71 ^{c,d}
03341420	Brouillets 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 ^b
03342800	South Fork Smalls Creek at Bruceville	Knox	4.94	1972-75 ^{b,d}
03348100	Killbuck Creek near Anderson	Madison	97.8	1964-68,
03348500	White River near Noblesville	Hamilton	828	1915-26, ^b 1929-74 ^b
03349500	Cicero Creek near Arcadia	Hamilton	131	1955-76 ^a
03349700	Little Cicero Creek near Arcadia	Hamilton	40.4	1956-76 ^a
03350000	Cicero Creek near Cicero	Hamilton	196	1946-54
03350100	Hinkle Creek near Cicero	Hamilton	18.5	1956-76 ^a
03352000	Lawrence Creek at Fort Benjamin Harrison	Marion	2.74	1952-56, 1958-69
03352200	Mad Creek at Indianapolis	Marion	42.4	1958-76 ^a
03355000	Bear Creek near Trevlac	Brown	6.94	1952-73 ^a
03356500	Bean Blossom Creek near Bloomington	Monroe	112	1931-33
03357000	White River at Spencer	Owen	2,988	1925-71 ^c
03359500	Deer Creek near Putnamville	Putnam	59.0	1955-65, 1968-72
03366000	Graham Creek near Vernon	Jennings	77.2	1955-73
03367000	Muscatauck River near Austin	Jackson	359	1932-43, 1944-71 ^e
03367500	Stucker Creek near Austin	Scott	127	1932-33
03370000	Vernon Fork near Crothersville	Jackson	391	1932-33
03370500	Muscatauck River near Tampico	Washington	960	1939
03371000	Muscatauck River near Vallonia	Jackson	1,134	1932-33
03371600	South Fork Salt Creek at Kurtz	Jackson	38.2	1961-71 ^c
03371650	North Fork Salt Creek at Nashville	Brown	76.1	1962-76 ^f
03372000	North Fork Salt Creek near Belmont	Brown	120	1946-71
03372700	Clear Creek near Harrodsburg	Monroe	55.2	1960-71
03373000	Salt Creek near Peerless	Lawrence	573	1939-50, 1957-71 ^c
03373200	Indian Creek near Springville	Lawrence	60.7	1961-73 ^a
03374100	White River at Hazleton	Gibson	11,305	1928-38 ^d
03376000	Patoka River near Jasper	Dubois	348	1944-47 ^d
03376300	Patoka River at Winslow	Pike	603	1964-74
03378500	Wabash River at New Harmony	Posey	29,234	1939-47 ^b
STREAMS TRIBUTARY TO LAKE MICHIGAN				
04093200	Little Calumet River at Gary	Lake	5.82	1958-67, 1969-71
04098000	Fawn River at Orland	Steuben	86.4	1943-47
04099500	Pigeon Creek and Hogback Lake near Angola	Steuben	103	1946-74
04100000	Christiana Creek at Elkhart	Elkhart	127	1947-52
04100220	North Branch Elkhart River near Cosperville	Noble	134	1951-71
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	1948-52, 1954-72
05520000	Singleton ditch at Illinois, IL	Kankakee, IL	220	1945-77
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.

^eHigh-water records only.

^fContinued as crest-stage gage.

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 MSP 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 before 1976 were based on once-daily readings of a staff gage by a local observer and consist of daily, monthly, and yearly mean water-surface elevations. Starting in 1976, water-stage recorders were installed at many stations which had previously been non-recording gages. 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. The inclusive years that records of stage have been collected at a lake are shown in the last column. If records are still being collected on a current basis, there is no closing date shown.

Lakes in the Ohio River basin for which records are available

Lake	County	Drainage Area (square mile)	Surface Area (acres)	Established Level ^{xx}	Capacity (acre-feet)	Depth Contour Map available	Records available
LAUGHERY CREEK BASIN							
03276800	Versailles Lake near Versailles	Ripley	168.0	232	-	-	1957-
BAYOU DRAIN BASIN							
03322300	Hovey Lake near Mount Vernon	Posey	6.36	253	-	-	1950-69
WABASH RIVER BASIN							
03327550	Everett Lake at Levert	Allen	1.07	43	835.13	650	+ 1946-66
03327600	Blue Lake near Churubusco	Whitley	3.58	239	850.28	5,010	+ 1946-69, 1976-
03327650	Shriner Lake at Tri-Lakes	Whitley	.94	111	907.04	-	- 1943-75
03327700	Cedar Lake at Tri-Lakes	Whitley	.79	131	901.90	-	- 1943-49
03327750	Round Lake at Tri-Lakes	Whitley	3.36	125	901.90	-	- 1943-53
03327800	Wilson Lake near Larwill	Whitley	.46	29	865.39	390	+ 1946-52
03327850	Little Wilson Lake near Larwill	Whitley	.52	8	865.39	130	+ 1946-52
03328100	Long Lake at Laketon	Wabash	.55	48	751.19	760	+ 1946-51, 1959-
03328250	North Little Lake at Silver Lake	Kosciusko	2.89	12	861.73	170	+ 1947-
03328350	Silver Lake at Silver Lake	Kosciusko	6.31	102	861.73	1,520	+ 1947-
03328400	Lukens Lake near Disko	Wabash	1.76	46	763.60	1,010	+ 1948-49, 1959-
03330020	Crooked Lake near Wolflake	Noble	1.51	206	905.69	9,040	+ 1943-53
03330040	Big Lake near Wolflake	Noble	8.89	228	898.18	5,630	+ 1943-75, 1976-
03330060	Goose Lake near Lorane	Whitley	1.51	84	910.96	2,180	+ 1945-53
03330080	Loon Lake at Ormas	Whitley	11.1	222	895.14	5,730	+ 1943-66
03330100	New Lake near Etna	Whitley	.29	50	903.91	880	+ 1945-53
03330120	Old Lake near Etna	Whitley	2.81	32	898.07	620	+ 1949-66
03330140	Smalley Lake near Washington Center	Noble	27.1	69	-	1,520	+ 1943-
03330160	Gilbert Lake near Washington Center	Noble	.37	28	-	490	+ 1954-
03330180	Horseshoe Lake nr Washington Center	Noble	1.62	18	901.80	250	+ 1945-66
03330200	Baugher Lake near Washington Center	Noble	31.0	32	878.52	390	+ 1945-51
03330220	Wilmot Pond at Wilmot	Noble	35.2	10	-	-	- 1945-51
03330240	Webster Lake at North Webster	Kosciusko	49.2	774	852.75	-	- 1943-
03330243	James Lake at Oswego	Kosciusko	55.9	282	836.40	7,580	+ 1943-
03330260	Robinson Lake near Pierceton	Kosciusko	7.15	59	851.09	1,170	+ 1946-51
03330280	Troy Cedar Lake near Lorane	Whitley	5.33	93	905.41	2,540	+ 1945-52
03330300	Ridinger Lake near Pierceton	Kosciusko	34.6	136	843.12	2,900	+ 1943-
03330320	Kuhn Lake near North Webster	Kosciusko	3.85	137	837.50	1,290	+ 1945-
03330340	Big Barbee Lake near North Webster	Kosciusko	44.7	304	837.50	5,640	+ 1945-
03330360	Little Barbee Lake nr North Webster	Kosciusko	49.0	74	837.50	960	+ 1945-
03330380	Shoe Lake near Oswego	Kosciusko	.34	40	841.57	-	- 1946-53, 1972-74, 1976-
03330400	Banning Lake near North Webster	Kosciusko	.48	12	837.50	110	+ 1945-
03330420	Irish Lake near North Webster	Kosciusko	50.9	182	837.50	2,330	+ 1945-
03330440	Sechrist Lake near North Webster	Kosciusko	.58	105	837.50	2,490	+ 1945-
03330460	Sawmill Lake near North Webster	Kosciusko	51.8	36	837.50	370	+ 1945-
03330480	Tippecanoe Lake at Oswego	Kosciusko	113	768	836.40	28,380	+ 1943-
03330495	Oswego Lake at Oswego	Kosciusko	113	83	836.40	780	+ 1943-
03331010	Big Chapman Lake near Warsaw ^b	Kosciusko	4.17	581	827.75	6,080	+ 1945-72, 1976-
03331020	Little Chapman Lake near Warsaw	Kosciusko	7.13	177	827.75	1,990	+ 1945-72, 1976-
03331040	Pike Lake at Warsaw	Kosciusko	41.5	203	805.64	2,830	+ 1954-
03331060	Fish Lake near Warsaw	Kosciusko	4.93	15	845.52	-	- 1951-66
03331080	Muskelonge Lake near Warsaw	Kosciusko	11.8	32	842.67	300	+ 1943-53, 1959-71
03331100	Carr Lake near Claypool	Kosciusko	2.27	79	848.88	1,340	+ 1947-53
03331120	Sherburn Lake near Pierceton ^c	Kosciusko	5.51	15	881.00	230	+ 1954-
03331140	Winona Lake at Warsaw	Kosciusko	32.1	562	811.06	16,680	+ 1943-
03331160	Center Lake at Warsaw	Kosciusko	.73	120	803.86	2,060	+ 1945-
03331180	Palestine Lake at Palestine	Kosciusko	32.4	290	-	1,170	+ 1954-
03331200	Crystal Lake near Atwood	Kosciusko	.45	76	789.69	930	+ 1945-51
03331220	Hoffman Lake at Atwood	Kosciusko	8.07	180	785.85	3,160	+ 1945-53
03331240	Beaver Dam Lake near Silver Lake	Kosciusko	2.83	146	868.95	3,280	+ 1947-53
03331260	Loon Lake near Silver Lake	Kosciusko	3.59	40	865.74	670	+ 1947-53
03331280	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)	Established Level ^{xx}	Capacity (acre-feet)	Depth Contour Map available	Records available
WABASH RIVER BASIN--Continued							
03331300	Hill Lake near Silver Lake	Kosciusko	0.85	67	871.50	1,300	+ 1952-
03331320	Diamond Lake near Silver Lake	Kosciusko	3.92	79	-	1,280	+ 1954-
03331340	Yellow Creek Lake near Silver Lake	Kosciusko	11.1	151	860.50	4,730	+ 1945-53
03331360	Rock Lake near Akron	Kosciusko	2.74	56	847.29	360	+ 1946-66
03331370	Town Lake near Akron	Fulton	2.77	23	-	220	+ 1949-50
03331380	Lake Manitou at Rochester	Fulton	44.2	1,156	778.41	10,163	+ 1943-
03331390	Zink Lake near Rochester	Fulton	1.11	19	810.68	-	- 1952-55
03331400	Nyona Lake near Greenoak	Fulton	7.59	104	793.91	1,340	+ 1946-
03331420	South Mud Lake near Fulton	Fulton	4.53	94	793.42	1,020	+ 1946-66
03331438	King Lake near Delong	Fulton	1.98	18	-	180	+ 1971-
03331440	Maxinkuckee Lake at Culver	Marshall	13.7	1,864	733.12	45,600	+ 1943-
03331460	Lost Lake near Culver	Marshall	14.2	40	732.00	-	- 1954-
03331480	Langenbaum Lake near Monterey	Starke	.72	48	717.96	260	+ 1954-66
03331700	Bruce Lake at Bruce Lake	Pulaski	6.58	245	723.69	1,790	+ 1943-53
03332200	Fletcher Lake at Fletcher	Fulton	.67	45	783.20	880	+ 1946-53
03370900	Starve Hollow Lake near Vallonia	Jackson	6.67	145	-	980	+ 1946-61, 1963-71
03371700	Ogle Lake near Nashville	Brown	1.03	20	-	250	+ 1954-

Lakes in the St. Lawrence River basin for which records are available

STREAMS TRIBUTARY TO LAKE MICHIGAN

04092500	Wolf Lake at Hammond ^j	Lake	5.72	999	-	-	-	1946-49
04092990	Lake George at Hobart	Lake	124	282	602.23	-	-	1946-
04097520	Lake Pleasant near Nevada Mills	Steuben	h ₃ 3.18	424	-	3,490	+ 1954-71	
04097550	Lake George at Jamestown	Steuben	h ₁ 14.7	488	985.28	-	-	1946-
04097596	Marsh Lake near Fremont	Steuben	14.9	-	-	-	-	1967-69
04097600	Little Otter Lake near Fremont	Steuben	15.7	34	965.18	740	+ 1946-53	
04097640	Big Otter Lake near Fremont	Steuben	h ₁ 21.3	69	965.18	1,780	+ 1946-53	
04097650	Snow Lake at Lake James	Steuben	h ₁ 40.2	310	964.96	7,998	+ 1943-49	
04097660	Lake James at Lake James	Steuben	h ₁ 47.8	1,034	964.96	33,585	+ 1943-49	
04097680	Jimmerson Lake at Nevada Mills ^e	Steuben	h ₁ 51.6	434	964.66	4,394	+ 1946-	
04097780	Loon Lake near Angola	Steuben	2.13	138	1,011.98	630	+ 1954-66	
04097850	Crooked Lake at Crooked Lake	Steuben	h ₁ 10.4	828	988.17	10,557	+ 1946-	
04097950	Lake Gage at Panama	Steuben	h ₁ 17.3	332	954.25	10,140	+ 1946-	
04097960	Lime Lake at Panama	Steuben	h ₁ 17.5	57	954.25	427	+ 1946-	
04098100	Wall Lake near Orland	Lagrange	1.61	141	942.25	1,640	+ 1953-54	
04098110	Mud Lake near Orland	Steuben	1.85	25	939.01	-	-	1956-67
04098300	Cedar Lake near Ontario	Lagrange	1.60	120	871.90	1,020	+ 1948-51	
04099050	Pigeon Lake near Angola	Steuben	h ₁ 35.2	61	988.24	930	+ 1954-63	
04099100	Fox Lake near Angola	Steuben	h ₁ 1.25	142	1,018.83	3,150	+ 1946-53	
04099190	Pleasant Lake at Pleasant Lake	Steuben	h ₁ 1.12	53	963.52	1,190	+ 1946-66	
04099200	Long Lake at Moonlight	Steuben	h ₁ 67.9	92	-	1,540	+ 1946-	
04099250	Bower Lake near Pleasant Lake	Steuben	h ₁ 84.6	25	948.50	280	+ 1946-71, 1976-	
04099260	Golden Lake near Pleasant Lake	Steuben	h ₁ 88.8	119	948.50	1,810	+ 1946-71, 1976-	
04099400	Silver Lake near Angola	Steuben	h ₁ 79	238	959.40	2,540	+ 1945-53	
04099430	Bass Lake near Angola	Steuben	h ₁ 39	61	979.68	450	+ 1954-66	
04099440	Howard Lake near Angola	Steuben	h ₁ 3.90	27	977.34	130	+ 1954-63	
04099500	Hogback Lake near Angola	Steuben	h ₁ 103	146	948.50	1,450	+ 1946-	
04099520	Otter Lake near Flint	Steuben	h ₁ 6.91	118	934.15	1,960	+ 1954-66	
04099540	Story Lake near Hudson	DeKalb	3.16	77	942.20	1,020	+ 1946, 1954-66	
04099560	Big Turkey Lake at Stroh	Lagrange	35.8	450	926.61	7,300	+ 1945-66	
04099575	McClish Lake near Helmer	Lagrange	1.28	35	951.09	1,210	+ 1951-74, 1976-	
04099580	Lake of the Woods near Helmer	Lagrange	5.25	136	951.09	5,470	+ 1951-74, 1976-	
04099600	Big Long Lake near Stroh	Lagrange	4.77	388	956.21	-	-	1954-
04099620	Pretty Lake near Stroh	Lagrange	2.89	184	965.50	4,720	+ 1949-53, 1963-65	
04099640	Little Turkey Lake at Elmira	Lagrange	56.5	135	925.72	1,550	+ 1945-66	
04099660	Royer Lake near Plato	Lagrange	h ₁ 4.69	69	936.50	1,630	+ 1952-	
04099670	Fish Lake near Plato	Lagrange	h ₁ 10.6	100	936.50	4,050	+ 1945-	
04099700	North Twin Lake near Howe	Lagrange	1.54	135	843.56	2,120	+ 1953-	
04099710	South Twin Lake near Howe	Lagrange	2.22	116	843.56	3,600	+ 1953-70	
04099740	Shipshewana Lake near Shipshewana	Lagrange	h ₁ 6.74	202	852.04	1,350	+ 1951-	
04099760	Fish Lake near Scott	Lagrange	h ₁ 6.21	139	814.42	2,560	+ 1954-73, 1976-	
04099780	Stone Lake near Scott	Lagrange	1.51	152	818.76	2,060	+ 1954-73, 1976-	
04099800	Emma Lake near Emma	Lagrange	13.6	42	880.87	700	+ 1954-66	
04099810	Cass Lake near Shipshewana	Lagrange	.68	89	-	873	+ 1970-	
04099820	Hunter Lake near Middleburg	Elkhart	h ₁ .51	99	856.90	1,120	+ 1946-53	
04099840	Wolf Lake near Goshen	Elkhart	h ₁ 1.29	100	813.00	-	-	1947-57

Lakes in the St. Lawrence River basin for which records are available--Continued

Lake	County	Drainage Area (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre-feet)	Depth Contour Map available	Records available	
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued								
04099860	Heaton Lake near Elkhart	Elkhart	9.33	87	767.30	640	+	1946-53, 1969-74, 1976-
04099880	Simonton Lake near Elkhart	Elkhart	7.44	282	772.19	1,560	+	1946-
04099950	Indiana Lake near Bristol	Elkhart	.62	122	759.73	3,400	+	1946-53
04100010	Cree Lake near Kendallville	Noble	4.85	58	945.23	910	+	1949-66
04100020	Blackman Lake near Wolcottville	Lagrange	.98	67	974.20	1,210	+	1953-59
04100030	Adams Lake near Wolcottville	Lagrange	5.62	308	953.59	7,690	+	1946-
04100040	Atwood Lake near Wolcottville	Lagrange	1.23	170	899.99	1,560	+	1948-53
04100050	Witmer Lake near Wolcottville	Lagrange	36.1	204	897.36	7,040	+	1945-
04100060	Westler Lake near Wolcottville	Lagrange	37.8	88	897.36	1,770	+	1945-
04100070	Dallas Lake near Wolcottville	Lagrange	39.8	283	897.36	9,970	+	1945-
04100080	Martin Lake near Valentine	Lagrange	4.93	26	899.45	890	+	1945-
04100090	Olin Lake near Valentine	Lagrange	5.81	103	899.45	9,180	+	1945-
04100100	Oliver Lake near Valentine	Lagrange	11.1	362	899.45	-	-	1945-
04100110	Hackenburg Lake near Wolcottville	Lagrange	55.4	42	897.36	510	+	1945-
04100120	Messick Lake near Wolcottville	Lagrange	56.4	68	897.36	1,450	+	1945-
04100130	Jones Lake near Cosperville	Noble	70.3	114	885.55	960	+	1948-
04100140	Bixler Lake at Kendallville	Noble	5.28	120	963.65	2,090	+	1945-
04100150	Round Lake at Kendallville	Noble	3.47	99	954.50	2,140	+	1954-
04100160	Little Long Lake at Kendallville	Noble	4.55	71	954.50	1,750	+	1954-
04100170	Latta Lake near Rome City	Noble	2.52	42	918.71	900	+	1954-66
04100180	Sylvan Lake at Rome City	Noble	33.8	575	916.20	-	-	1943-
04100190	Sacarider Lake near Kendallville	Noble	1.43	33	-	740	+	1954-63
04100200	Tamarack Lake near Cosperville	Noble	15.9	50	885.55	880	+	1948-
04100210	Steinbarger Lake near Cosperville	Noble	24.3	73	885.55	1,590	+	1948-
04100220	Waldron Lake near Cosperville	Noble	134	216	885.55	3,120	+	1948-
04100230	Long Lake near Burr Oak	Noble	12.0	40	895.82	630	+	1954-71
04100240	Sand Lake near Burr Oak	Noble	14.9	47	893.56	1,270	+	1946-51
04100250	Rivir Lake near Burr Oak	Noble	18.6	24	-	380	+	1954-65
04100258	High Lake near Wolflake	Noble	4.43	123	896.35	1,240	+	1961-
04100260	Bear Lake near Wolflake	Noble	6.98	136	894.60	3,030	+	1943-
04100280	Muncie Lake near Burr Oak	Noble	42.8	47	-	580	+	1954-
04100290	Silver Lake near Wolflake	Noble	.28	34	-	220	+	1953-63
04100300	Skinner Lake near Albion	Noble	14.0	125	927.74	1,750	+	1945-72, 1977-
04100310	Pleasant Lake near Wolflake	Noble	.29	20	-	540	+	1952-53
04100320	Upper Long Lake near Wolflake	Noble	2.08	86	891.19	1,900	+	1956-
04100330	Lower Long Lake near Albion	Noble	4.35	66	889.81	1,560	+	1946-52
04100340	Eagle Lake near Kimmel	Noble	3.22	81	-	1,050	+	1946-48
04100350	Diamond Lake near Wawaka	Noble	4.80	105	-	2,580	+	1946-75
04100360	Sparta Lake at Kimmel	Noble	.69	31	888.50	170	+	1946-51
04100370	Engle Lake near Ligonier	Noble	4.19	48	-	670	+	1956-71
04100380	Harper Lake near Washington Center	Noble	2.76	11	878.25	160	+	1946-
04100390	Knapp Lake near Washington Center	Noble	6.02	88	878.25	3,040	+	1946-
04100400	Moss Lake near Washington Center	Noble	6.12	9	878.25	80	+	1946-
04100410	Hindman Lake near Washington Center	Noble	8.66	13	878.25	140	+	1946-
04100420	Gordy Lake near Cromwell	Noble	9.40	31	876.68	680	+	1953-66
04100425	Rider Lake near Cromwell	Noble	10.9	5	876.68	30	+	1953-66
04100430	Duely Lake near Cromwell	Noble	11.2	21	876.68	180	+	1953-66
04100440	Village Lake near Cromwell	Noble	12.0	12	876.68	160	+	1953-66
04100446	Flatbelly Lake near Syracuse	Kosciusko	4.66	326	-	-	-	1964-69
04100448	Papakeechee Lake near Syracuse	Kosciusko	5.52	300	-	-	-	1964-69
04100450	Wawasee Lake at Wawasee	Kosciusko	36.9	3,060	858.89	67,210	+	1943-66
04100460	Syracuse Lake at Syracuse	Kosciusko	38.2	414	858.87	5,360	+	1943-
04100470	Dewart Lake near Leesburg	Kosciusko	8.05	551	867.70	9,000	+	1945-
04100480	Wabee Lake near Milford	Kosciusko	14.6	187	829.79	4,750	+	1946-53

STREAMS TRIBUTARY TO LAKE ERIE

04177200	Clear Lake at Clear Lake	Steuben	6.86	800	1,037.38	24,990	+	1943-
04177210	Round Lake at Clear Lake	Steuben	7.25	30	1,037.38	340	+	1943-
04177300	Long Lake near Ray	Steuben	2.80	154	-	1,840	+	1961-63
04177680	Ball Lake near Hamilton	Steuben	11.6	87	894.76	3,520	+	1961-
04177700	Hamilton Lake at Hamilton	Steuben	16.5	802	898.83	16,600	+	1943-
04179200	Indian Lake near Corunna	DeKalb	3.76	56	-	1,220	+	1957
04179300	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

05514740	Saugany Lake near Rolling Prairie	LaPorte	h 2.34	74	781.21	2,190	+	1946-50
05514741	Hudson Lake at Hudson Lake	LaPorte	h 7.92	432	763.09	5,060	+	1946-
05514750	North Chain Lake at Lydick	St. Joseph	h 3.89	88	721.17	1,400	+	1946-53
05514760	South Chain Lake at Westfield	St. Joseph	h 6.32	90	717.04	270	-	1946-53
05514770	Wharton Lake near South Bend	St. Joseph	h 1.85	-	-	-	-	1960-
05514900	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)	Established Level ^{xx}	Capacity (acre-feet)	Depth Contour Map available	Records available	
ILLINOIS RIVER BASIN--Continued								
05515200	Upper Fish Lake near Stillwell	LaPorte	^h 9.65	139	688.22	1,040	+	1946-53
05515210	Lower Fish Lake near Stillwell	LaPorte	^h 10.4	134	688.22	870	+	1946-53
05515220	Pine Lake at LaPorte	LaPorte	^h 10.7	564	796.20	-	-	1946-75
05515230	Stone Lake at LaPorte	LaPorte	^h 10.7	140	796.20	-	-	1946-75
05515240	Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1942-49, 1952-75
05515600	Koontz Lake at Koontz Lake	Starke	^h 6.25	346	714.56	3,170	+	1943-
05515800	Riddles Lake near Lakeville	St. Joseph	^h 11.7	77	817.50	640	+	1946-73
05516200	Lake of the Woods near Bremen	Marshall	^h 9.45	416	803.85	6,810	+	1945-
05516600	Pretty Lake near Plymouth	Marshall	.85	97	787.36	2,140	+	1954-66
05516700	Myers Lake near Twin Lakes	Marshall	1.41	96	768.69	2,000	+	1945-53
05516800	Mill Pond and Kreighbaum Lake near Twin Lakes	Marshall	^h 5.34	168	767.75	1,020	+	1945-53
05516900	Eagle Lake near Ober	Starke	^h 25.5	24	713.25	160	+	1946-53
05517100	Skitz Lake near Knox	Starke	-	1,000	-	-	-	1949-53
05517200	Bass Lake at Bass Lake	Starke	5.18	1,400	713.65	-	-	1943-
05517600	Wauhob Lake near Valparaiso	Porter	.40	21	-	-	-	1946-
05517650	Long Lake near Valparaiso	Porter	1.31	65	797.66	520	+	1947-52
05517670	Spectacle Lake near Valparaiso	Porter	.53	62	812.82	540	+	1946-53
05517700	Flint Lake near Valparaiso	Porter	2.62	86	797.66	-	-	1946-
05517800	Lake Eliza near Beatrice	Porter	1.70	45	-	-	-	1954-74, 1976-
05518700	Cedar Lake at Cedar Lake	Lake	8.14	781	-	6,750	+	1943-
05518800	Dalecarlia Lake near Creston	Lake	20.1	193	-	-	-	1947-52
05521300	Ringneck Lake near Medaryville	Jasper	1.94	1,400	-	-	-	1949-55
05525700	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 Piercetown.

^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 Druely 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	Schlamm Lake	Clark	19	170
Franke 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
Eye 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

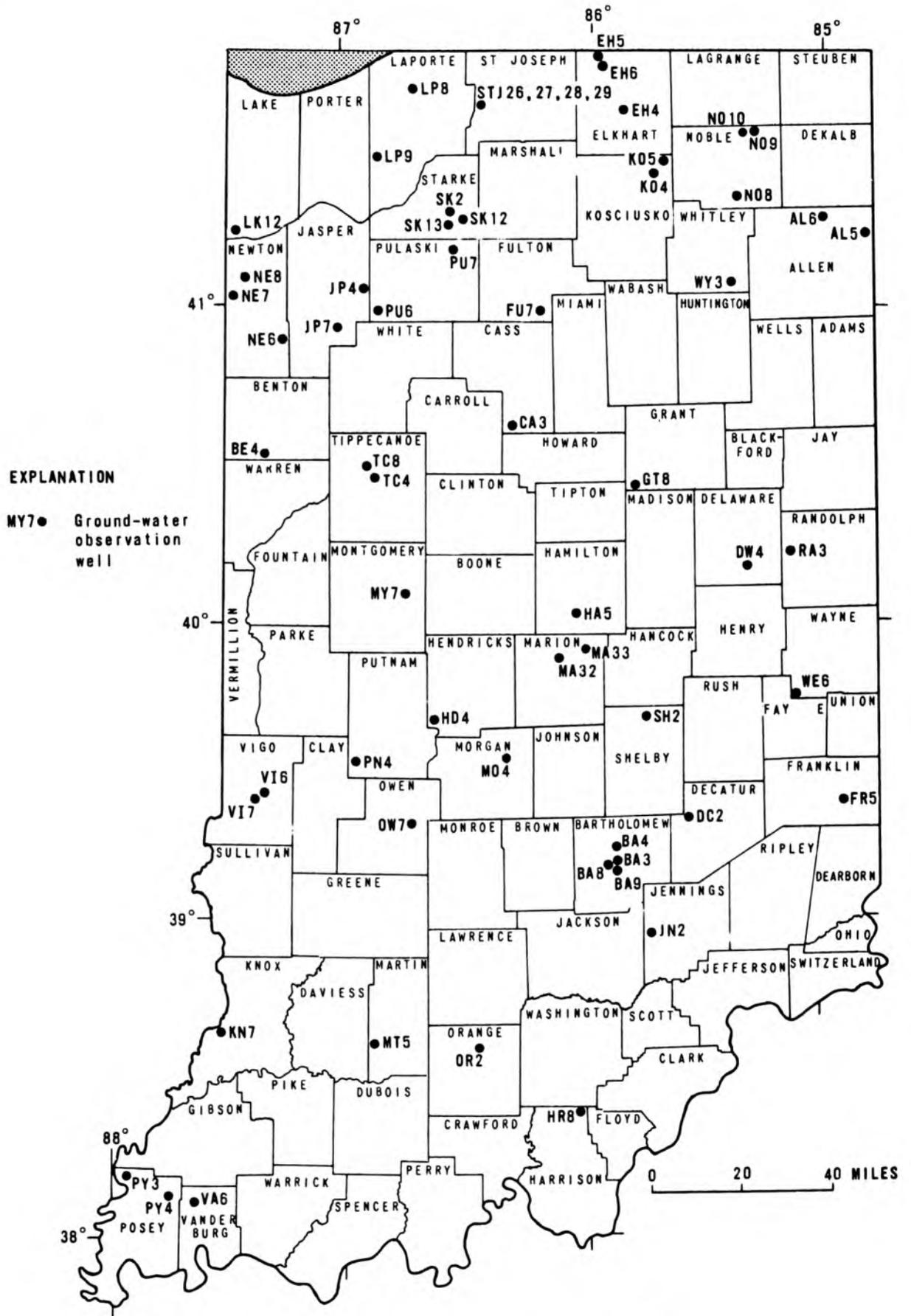


Figure 4. -- Location of ground-water observation wells.

GROUND-WATER LEVELS

351

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.37	34.98	34.25	34.43	34.11	33.75	33.30	33.11	NR	34.33	34.53	34.26
10	35.25	34.64	35.18	34.40	33.88	33.43	32.98	33.48	NR	34.08	34.32	34.11
15	35.24	34.80	34.47	34.15	33.40	33.38	33.47	33.54	34.37	33.97	34.18	34.13
20	35.34	34.97	33.38	34.07	33.63	27.40	NR	33.87	34.26	34.29	34.47	34.30
25	35.14	34.68	34.28	32.76	33.62	NR	33.15	34.04	34.07	34.23	34.23	34.38
EOY	35.02	34.42	34.66	34.13	33.63	33.16	33.32	34.57	NR	34.25	NR	34.25
WTR YEAR 1978	MAX	27.34	Mar. 17		MIN	35.68	Oct. 13					
MIN	35.68	35.51	35.31	34.84	34.47	34.01	33.83	34.27	34.93	34.63	34.66	34.75
MAX	34.90	34.42	28.40	32.75	33.38	27.34	32.96	33.04	34.07	33.97	34.11	34.02

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.12	12.05	10.84	10.34	11.39	12.03	8.76	10.09	10.94	11.94	13.00	
10	12.03	11.99	11.00	10.60	11.60	12.04	8.59	10.55	11.12	12.06	13.02	
15	12.01	12.05	9.70	10.84	11.74	11.00	9.13	10.47	11.34	12.13	13.15	
20	12.13	12.13	8.49	11.02	11.40	9.38	8.97	10.32	11.58	12.44	13.33	
25	12.17	12.11	9.11	11.02	11.85	8.59	9.19	10.40	11.81	12.62		
EOY	12.23	12.05	9.46	11.25	11.44	8.58	9.70	10.73	11.95	12.84		
MIN	12.34	12.24	11.54	11.25	11.95	12.08	9.70	10.73	12.12	13.03	13.58	
MAX	11.99	11.99	8.48	9.92	11.25	8.55	8.19	9.84	10.80	11.88	12.92	
WTR YEAR 1978	HIGH	8.19	APR 7	LOW	12.34	OCT 28 AND OTHERS						

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.59	18.94	18.49	18.18	18.42	18.65	17.66	17.90	17.68	17.50	17.75	17.50
10	18.57	18.97	18.33	18.15	18.49	18.60	17.76	17.96	17.83	17.54	17.70	17.74
15	18.68	18.98	17.54	18.24	18.55	16.90	17.49	17.12	17.94	17.77	17.88	17.90
20	18.81	18.93	17.64	18.31	18.58	17.03	17.95	17.26	17.79	17.95	17.27	18.03
25	18.85	18.76	17.83	18.26	18.60	17.15	17.91	17.25	17.97	17.78	17.65	18.15
EOM	18.89	18.76	18.03	18.37	18.61	17.42	17.86	17.51	17.61	17.81	17.33	18.24
MIN	18.89	19.01	18.66	18.39	18.65	18.65	18.00	17.96	17.98	18.03	17.92	18.24
MAX	18.55	18.76	17.53	18.03	18.39	16.87	17.44	17.12	17.36	17.38	17.27	17.32
WTR YR 1978	HIGH	16.87	MAR 17	LOW	19.01	NOV 12						

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 1977 TO SEPTEMBER 1978												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.95	19.93	20.13	18.82	18.86	19.20	17.13	17.23	16.32	16.45	16.78	16.59
10	19.79	19.98	20.10	18.77	18.91	19.26	17.07	17.32	16.41	16.28	16.73	16.56
15	19.76	20.02	19.97	18.72	18.96	18.40	17.13	17.09	16.52	16.30	16.81	16.62
20	19.78	20.08	19.67	18.71	19.01	17.94	17.15	16.81	16.60	16.43	16.62	16.74
25	19.82	20.12	19.27	18.69	19.08	17.57	17.23	16.56	16.67	16.51	16.57	16.84
EOM	19.88	20.13	18.95	18.81	19.13	17.25	17.24	16.37	16.64	16.66	16.65	16.93
MIN	19.88	20.14	20.16	18.91	19.13	19.27	17.24	17.32	16.67	16.66	16.84	16.93
MAX	19.76	19.89	18.95	18.69	18.83	17.25	17.07	16.37	16.32	16.28	16.57	16.56
WTR YR 1978	HIGH	16.28	JUL 10 AND OTHERS	LOW	20.16	DEC 4						

GROUND-WATER LEVELS

353

BARTHOLOMEW COUNTY

39095008553501. 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, 23.17 ft (7.06 m) below land-surface datum, Nov. 30, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.76	22.93	23.05	20.20	20.79	21.34	17.33	17.83	16.84	17.84	18.61	18.63
10	22.77	22.99	22.88	20.25	20.90	21.45	17.32	17.89	17.05	17.82	18.66	18.47
15	22.76	23.05	22.59	20.29	20.99	20.93	17.47	17.69	17.24	17.92	18.74	18.52
20	22.76	23.11	21.78	20.39	21.09	19.70	17.58	17.29	17.43	18.06	18.86	18.66
25	22.81	23.14	20.81	20.49	21.20	18.35	17.73	16.99	17.65	18.21	18.98	18.82
DOM	22.87	23.17	20.28	20.67	21.25	17.56	17.77	16.78	17.85	18.41	18.88	18.98
MIN	22.87	23.17	23.15	20.67	21.25	21.48	17.77	17.89	17.85	18.41	19.05	18.98
MAX	22.70	22.88	20.28	20.20	20.70	17.56	17.31	16.78	16.78	17.81	18.45	18.46
WTR YR 1978	HIGH	16.78	MAY 30	AND OTHERS	LOW	23.17	NOV 30					

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.05	36.87	36.35	---	---	34.09	30.31	30.21	30.28	31.69	31.79	31.97
10	36.90	36.90	---	---	---	34.23	30.01	30.49	30.71	31.73	32.37	32.93
15	36.85	36.79	---	---	---	33.67	29.87	30.26	30.86	31.96	32.03	32.30
20	36.83	36.79	---	34.02	---	31.96	30.04	30.52	31.24	32.95	32.53	33.16
25	36.87	36.49	---	33.86	33.84	31.12	29.97	30.21	31.47	32.11	32.77	32.34
DOM	36.75	36.57	---	33.86	34.04	30.74	30.17	30.03	32.56	31.87	32.69	32.73
MIN	37.60	37.00	36.64	34.29	34.13	34.23	30.75	30.86	32.56	33.35	32.86	33.16
MAX	36.61	36.40	36.35	33.67	33.74	30.74	29.87	29.99	30.22	31.60	31.75	31.96
WTR YR 1978	HIGH	29.87	APR 13	AND OTHERS	LOW	37.60	OCT 3					

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.10	5.90	5.47	5.18	5.56	5.82	5.16	4.99	5.19	6.04	6.12	6.25
10	5.98	5.75	5.76	5.32	5.62	5.75	4.94	5.16	5.24	6.05	6.13	6.29
15	5.88	5.74	5.34	5.45	5.67	5.54	5.13	5.12	5.37	6.04	6.15	6.26
20	5.92	5.74	5.10	5.44	5.64	5.37	5.01	5.17	5.20	6.05	6.20	6.39
25	5.84	5.65	5.12	5.17	5.65	5.27	4.92	5.17	5.82	6.10	6.21	6.51
EOM	5.86	5.55	5.16	5.59	5.77	5.12	5.05	5.26	6.09	6.09	6.22	6.41
MIN	6.14	5.93	5.76	5.63	5.81	5.95	5.16	5.26	6.09	6.11	6.22	6.54
MAX	5.77	5.55	5.04	5.08	5.49	5.12	4.80	4.97	5.16	5.16	6.06	6.21
WTR YR 1978	HIGH	4.80	APR 6	LOW	6.54	SEP 22	AND OTHERS					

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5								---	4.67	2.55	4.27	3.48
10								4.56	5.25	3.48	5.08	4.56
15								.94	5.78	4.45	5.81	5.23
20								2.07	6.07	5.13	1.43	5.84
25								2.57	4.98	5.58	4.13	6.29
EOM								4.08	4.13	5.17	.68	6.64
MIN								4.66	6.33	6.00	6.05	6.64
MAX								.94	2.79	1.56	.65	1.23
WTR YR 1978	HIGH	.65	AUG 30	LOW	6.64	SEP 30						

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5									---	47.77	48.44	47.75
10									47.84	47.96	48.47	48.07
15									47.95	48.09	48.50	48.27
20									48.05	48.23	48.49	48.38
25									47.44	48.29	48.58	48.48
FROM									47.58	48.37	47.23	48.54
MIN									48.12	48.37	48.58	48.54
MAX									47.37	47.63	46.88	47.34
WTR YR 1978	HIGH	46.88	AUG 28	LOW	48.58	AUG 25						

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, 12.04 ft (3.67 m) below land-surface datum Apr. 8, 19, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.97	15.01	14.99	14.33	14.55	14.80	12.71	12.32	12.83	13.48	14.52	15.19
10	14.80	15.04	14.97	14.30	14.80	14.84	12.26	12.43	12.92	13.59	14.63	15.24
15	14.88	15.06	14.84	14.29	14.64	14.76	12.08	12.52	13.01	13.89	14.84	15.23
20	14.90	15.07	14.69	14.33	14.68	14.42	12.06	12.59	13.09	14.03	14.98	15.23
25	14.92	15.06	14.54	14.34	14.72	13.07	12.18	12.66	13.16	14.11	15.14	15.26
FROM	14.96	15.06	14.39	14.48	14.75	12.83	12.27	12.74	13.42	14.35	15.15	15.28
MIN	14.96	15.09	15.05	14.48	14.75	14.86	12.81	12.74	13.42	14.35	15.15	15.28
MAX	14.80	14.97	14.39	14.29	14.49	12.83	12.04	12.29	12.76	13.47	14.42	15.16
WTR YR 1978	HIGH	12.04	APR 18 AND OTHERS	LOW	15.28	SEP 28 AND OTHERS						

GROUND-WATER LEVELS

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, 2.36 ft (0.72 m) below land-surface datum Apr. 7, 8, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.99		3.55	3.45	3.56	3.90	2.65	3.19	3.55	3.26	4.25	5.00
10	3.92		3.61	3.47	3.57	3.99	2.41	3.22	3.56	3.50	4.40	---
15	3.97		3.44	3.53	3.64	3.53	2.71	3.09	3.62	3.69	4.68	---
20	3.94		3.29	3.65	3.70	3.07	2.85	3.14	3.73	3.92	4.69	---
25	4.04		3.30	3.67	3.77	2.47	2.99	3.27	3.89	3.92	4.90	5.24
EOM	---		3.42	3.63	3.81	2.58	3.13	3.44	3.82	4.04	4.88	5.36
MIN	4.04		3.62	3.69	3.81	3.99	3.13	3.44	3.91	4.04	4.91	5.36
MAX	3.91		3.29	3.42	3.55	2.47	2.36	3.09	3.46	3.23	4.14	4.91
WTR YR 1978	HIGH	2.36	APR 7	AND OTHERS	LOW	5.36	SEP 24	AND OTHERS				

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, 6.25 ft (1.90 m) below land-surface datum Apr. 11, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.01	9.03	8.74	8.02	8.47	8.87	6.70	6.91	7.46	7.80	8.96	9.34
10	8.91	9.05	8.60	8.14	8.50	8.93	6.25	6.96	7.55	7.98	9.06	9.35
15	8.90	9.09	8.46	8.19	8.57	8.77	6.35	6.98	7.72	8.20	9.09	9.34
20	8.93	9.08	8.20	8.27	8.63	8.29	6.48	7.03	7.89	8.39	9.34	10.00
25	9.00	9.07	8.01	8.36	8.70	6.97	6.71	7.12	8.09	8.45	9.34	10.06
EOM	8.97	9.05	7.98	8.40	8.71	6.76	6.80	7.25	8.19	8.72	9.34	10.07
WTR YEAR 1978	MAX	6.25	Apr. 11		MIN	10.08	Sept. 28					
MIN	9.13	9.09	8.91	8.40	8.70	8.93	6.79	7.24	8.18	8.71	9.34	10.08
MAX	8.90	8.97	7.98	7.96	8.41	6.76	6.25	6.84	7.33	7.95	8.78	9.34

GROUND-WATER LEVELS

357

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.94	25.35	24.16	24.40	25.20	26.04	23.35	24.44	24.90	24.95	25.28	---
10	25.09	25.58	24.78	24.01	25.29	25.99	23.89	24.84	25.28	25.36	25.65	---
15	25.35	25.78	21.57	24.68	25.47	21.63	24.54	23.75	25.44	25.73	26.02	---
20	25.53	25.73	21.31	24.95	25.68	22.00	24.61	24.12	25.31	26.01	26.15	---
25	25.56	25.49	22.08	25.19	25.88	21.04	24.18	23.49	25.27	25.82	26.33	---
EOM	25.32	25.07	23.74	25.22	25.97	21.61	24.03	24.26	24.87	25.90	---	26.27
MIN	25.62	25.88	24.62	25.25	25.97	26.06	24.84	24.93	25.61	26.13	26.37	26.27
MAX	24.61	25.07	21.21	23.87	25.18	20.92	22.09	23.45	24.43	24.09	25.19	26.20
WTR YR 1978	HIGH	20.92	MAR 26 AND OTHERS			LOW	26.37	AUG 27				

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.88	10.11	9.36	8.87	9.75	10.35	8.23	8.39	8.32	9.35	10.46	11.35
10	9.86	10.05	9.42	9.04	9.85	10.38	7.66	8.56	8.56	9.50	10.55	11.51
15	9.90	10.10	8.83	9.19	9.93	10.15	7.77	8.23	8.78	9.65	10.69	11.59
20	10.00	10.15	8.28	9.39	10.03	9.52	7.88	8.01	8.92	9.47	10.89	11.73
25	10.00	10.12	8.31	9.36	10.13	8.69	8.04	7.90	9.09	10.10	11.03	11.84
EOM	10.02	10.04	8.66	9.64	10.24	8.30	8.22	8.10	9.33	10.28	11.19	11.88
MIN	10.06	10.25	9.94	9.64	10.25	10.41	8.34	8.63	9.33	10.28	11.19	11.89
MAX	9.76	10.02	8.27	8.65	9.69	8.30	7.57	7.90	8.19	9.28	10.28	11.23
WTR YR 1978	HIGH	7.57	APR 12		LOW	11.89	SEP 29					

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.23	4.44	2.56		---	5.01	2.33	3.33	3.68	3.66	5.50	6.46
10	3.46	4.21	3.52		---	4.90	2.20	3.76	3.96	3.95	5.52	6.66
15	3.75	4.29	1.75		---	3.03	3.17	2.72	4.15	4.25	5.77	6.85
20	4.24	4.08	---		4.75	2.12	3.27	2.61	4.25	4.58	6.13	7.04
25	4.24	3.99	---		4.76	1.97	2.23	2.35	4.33	4.81	6.24	7.18
FORM	4.24	3.87	---		4.89	1.99	2.74	3.25	4.58	5.14	6.24	---
MIN	4.39	4.51	3.52		4.96	5.05	3.39	3.79	4.58	5.14	6.31	7.19
MAX	3.04	3.87	1.34		4.73	1.68	1.63	2.32	3.40	3.51	5.21	6.31
WTR YR 1974	HIGH	1.34	DEC 14	LOW	7.19	SEP 23						

HAMILTON COUNTY

400000086023001. 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, 8.02 ft (2.44 m) below land-surface datum Mar. 21, 22, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.54	10.68	10.43	9.75	10.19	10.41	8.92	9.34		---	10.03	9.64
10	10.44	10.70	10.39	9.79	10.25	10.44	8.73	9.32		---	10.05	9.81
15	10.44	10.73	9.55	9.91	10.24	9.09	9.03	9.30		---	10.04	9.94
20	10.56	10.66	9.10	9.94	10.34	8.22	9.17	9.33		---	9.96	10.03
25	10.61	10.65	9.44	10.05	10.37	8.17	9.15	---		9.87	10.08	10.16
FORM	10.63	10.63	9.66	10.14	10.39	8.57	9.20	---		10.01	9.47	10.25
MIN	10.63	10.73	10.53	10.14	10.39	10.44	9.31	9.37		10.01	10.11	10.25
MAX	10.44	10.63	9.10	9.72	10.15	8.02	8.66	9.26		9.83	9.47	9.47
WTR YR 1974	HIGH	5.02	MAR 21 AND OTHERS	LOW	10.73	NOV 14 AND OTHERS						

GROUND-WATER LEVELS

359

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.41	7.65	3.21	5.93	4.05	7.63	5.07	5.78	7.32	11.07	11.17	11.89
10	3.58	7.78	3.20	3.80	5.93	7.64	5.69	5.19	8.24	11.57	11.20	12.16
15	4.59	7.03	3.14	3.97	6.70	7.64	6.63	7.94	9.09	11.88	11.58	12.55
20	5.91	4.43	3.11	4.00	7.28	3.30	6.90	4.21	9.32	12.29	12.08	12.81
25	6.93	3.39	4.00	4.00	7.85	3.53	6.14	5.21	9.83	12.45	12.53	13.17
EOB	6.81	3.49	5.05	4.00	7.81	4.10	5.39	6.36	10.52	12.01	12.35	13.53
MIN	6.93	7.81	5.05	6.00	7.97	7.81	7.08	6.36	10.52	12.59	12.80	13.53
MAX	3.57	3.37	3.10	3.80	4.04	2.77	4.17	2.94	6.59	10.62	11.11	11.87
WTR YR 1978	HIGH	2.77	MAR 17	LOW	13.53	SEP 30						

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.20	23.00	21.64	22.24	22.31	23.14	20.78	21.16	21.37	22.91	22.53	22.62
10	22.84	22.80	21.40	21.55	22.42	23.02	20.47	20.77	21.56	22.67	22.52	22.75
15	22.63	22.90	20.53	21.37	22.61	22.27	20.77	20.25	21.93	22.30	22.75	23.27
20	22.74	22.57	20.19	21.61	22.68	21.80	21.11	20.18	22.25	22.45	22.94	23.42
25	22.87	22.24	20.55	21.87	23.11	20.70	21.29	20.45	22.68	22.59	23.14	23.45
EOB	22.95	22.23	24.13	22.38	23.12	20.36	21.12	20.69	22.81	22.72	22.89	23.61
MIN	23.86	23.01	25.00	23.08	23.27	23.14	21.35	21.25	22.81	23.11	23.20	23.87
MAX	22.61	22.22	20.13	21.37	22.29	20.36	20.31	20.12	20.82	22.24	22.45	22.60
WTR YR 1978	HIGH	20.12	MAY 17	LOW	25.00	DEC 30						

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.11	4.60	3.67	3.17	3.39	3.14	2.33	3.36	4.89	7.85	---	10.57
10	7.92	4.48	3.92	3.25	3.21	3.00	2.17	3.32	14.51	8.14	---	15.72
15	6.70	4.29	3.47	3.28	3.18	2.92	2.05	2.80	16.88	15.50	---	12.03
20	6.01	4.23	3.08	3.22	3.01	2.70	2.33	2.50	14.19	19.96	11.48	11.13
25	5.49	4.00	3.15	2.90	3.10	2.48	2.62	2.54	18.30	18.12	17.87	10.32
FORM	5.05	3.78	3.17	3.36	3.04	2.49	---	4.40	10.60	---	12.00	16.29
MIN	9.40	5.02	3.97	3.40	3.42	3.19	2.80	4.40	22.90	20.93	17.87	16.43
MAX	5.05	3.78	2.90	2.84	2.01	2.31	2.05	2.00	4.00	7.70	11.10	10.14
WTR YR 1978	HIGH	2.00	MAY 28	AND OTHERS	LOW	22.90	JUN 24					

JASPER COUNTY

410809087580801. Local number, JP 7.

LOCATION.--Lat 41°08'09", long 87°58'08", Hydrologic Unit 07120002, in northwest corner of intersection of County Roads 850N and 400E.
 Owner: U.S. Geological Survey.

AQUIFER.--Middle Devonian dolomite.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 130 ft (39.6 m).
 Instrumentation: Water-stage recorder. Handtaped semi-annually Sept. 1971-May 1978.

DATUM.--Altitude of land-surface datum is 698 ft (213 m) from topographic map. Measuring point: Top of floor of shelter 2.75 ft (0.84 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--May 1967 to Sept. 1971, semi-annual Sept. 1971 to May 1978, continuous record May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.42 ft (1.96 m) below land-surface datum May 13, 1978; lowest, 9.25 ft (2.82 m) below land-surface datum, Oct. 11, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5								6.60	6.76	7.16	---	7.98
10								6.90	7.01	7.17	---	8.01
15								6.72	7.15	7.19	---	8.00
20								6.70	7.01	7.33	7.87	8.10
25								6.76	6.91	---	7.80	8.29
FORM								6.72	7.14	---	7.91	8.13
MIN								6.97	7.21	7.33	7.91	8.36
MAX								6.42	6.69	6.92	7.54	7.88
WTR YR 1978	HIGH	6.42	MAY 13	LOW	8.36	SEP 22						

GROUND-WATER LEVELS

561

JENNINGS COUNTY

385557085431701. Local number, JN 2.

LOCATION.--Lat 38°55'57", long 85°43'17", Hydrologic Unit 05120207, on property of Melvin Gerringe Farm.
Owner: U.S. Geological Survey.

AQUIFER.--Silurian and Devonian Carbonates.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 7 in (178 mm), depth 249 ft (79.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 569 ft (173 m) from topographic map. Measuring point: Top of floor of shelter 5.00 ft (1.52 m) above land-surface datum.

PERIOD OF RECORD.--December 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.57 ft (1.70 m) below land-surface datum, May 14, 15, 1978; lowest, 12.51 ft (3.81 m) below land-surface datum, Feb. 22, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	11.94	11.92	7.50	6.99	6.77	7.42	7.74	6.61	6.41
10			---	11.54	12.09	7.09	7.09	6.71	7.95	7.92	7.02	6.90
15			---	11.77	12.38	5.89	7.52	5.57	8.05	8.00	6.92	7.33
20			---	11.88	12.35	6.05	7.13	6.65	7.74	8.43	6.15	7.73
25			---	11.20	7.40	6.04	6.97	6.67	7.75	7.36	6.78	8.03
EOM			11.65	11.72	7.49	6.33	6.94	7.43	7.82	6.70	5.68	8.37
MIN			11.65	12.31	12.51	7.51	7.54	7.43	8.39	8.67	7.09	8.41
MAX			11.56	11.19	7.34	5.63	6.33	5.57	7.36	6.70	5.68	6.01
WTR YR 1978	HIGH	5.57	May 14, 15	LOW	12.51	FEB 22						

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.23	9.64	9.04	9.03	9.80	10.15	7.88	7.91	8.74	10.07	10.40	10.58
10	8.81	9.76	8.20	9.22	9.85	9.49	8.21	8.04	9.15	10.15	10.43	10.67
15	9.10	9.87	6.14	9.40	9.95	4.42	8.44	7.32	9.42	10.21	10.50	10.73
20	9.48	9.87	7.57	9.62	10.03	5.87	8.30	7.76	9.65	10.26	10.57	10.77
25	9.45	9.89	8.45	9.72	10.09	5.48	8.27	8.05	9.84	10.30	10.64	10.81
EOM	9.40	9.76	8.83	9.78	10.09	6.71	8.37	8.40	9.98	10.39	10.49	10.84
MIN	9.63	9.98	9.67	9.78	10.11	10.15	8.45	8.51	9.99	10.79	10.69	10.84
MAX	8.81	9.46	6.14	8.82	9.78	4.41	6.95	7.20	8.48	9.95	10.39	10.49
WTR YR 1978	HIGH	4.41	MAR 14	LOW	10.84	SEP 29 AND OTHERS						

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, 9.91 ft (3.02 m) below land-surface datum Apr. 12, 13, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.26	12.77	12.63	11.79	12.24	12.44	10.35	10.63	11.34	11.80	12.22	12.53
10	12.39	12.77	12.52	11.87	12.31	12.44	9.94	10.83	11.42	11.86	12.26	12.55
15	12.54	12.84	12.35	11.94	12.36	12.25	9.93	10.96	11.49	11.91	12.28	12.50
20	12.62	12.85	12.12	12.07	12.40	12.06	10.05	11.10	11.58	11.97	12.33	12.46
25	12.71	12.84	11.92	12.14	12.44	11.00	10.23	11.14	11.70	12.00	12.39	12.51
EOM	12.71	12.81	11.81	12.17	12.45	10.63	10.42	11.22	11.77	12.07	12.44	12.59
MIN	12.71	12.85	12.74	12.17	12.45	12.46	10.56	11.22	11.77	12.07	12.44	12.60
MAX	12.24	12.70	11.81	11.79	12.18	10.63	9.91	10.46	11.25	11.78	11.19	11.72

WTR YR 1978 HIGH 9.91 APR 12 AND OTHERS LOW 12.85 NOV 17 AND OTHERS

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, 2.06 ft (0.63 m) below land-surface datum Apr. 6, 7, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.41	5.72	5.33	4.60	---	---	2.25	2.81	3.34	3.87	4.57	5.32
10	5.42	5.77	5.31	4.67	---	---	2.15	2.85	3.43	4.06	4.68	5.51
15	5.52	5.78	5.07	4.74	---	---	2.33	2.74	3.54	4.17	4.82	5.56
20	5.57	5.77	4.59	4.81	---	---	2.40	2.85	3.66	4.36	4.98	5.58
25	5.63	5.76	4.46	---	---	---	2.52	2.93	3.84	4.04	5.11	5.64
EOM	5.68	5.74	4.50	---	---	2.38	2.68	3.16	3.96	4.31	5.18	5.72
MIN	5.68	5.80	5.50	4.84	---	2.42	2.68	3.16	3.96	4.36	5.18	5.72
MAX	5.32	5.68	4.46	4.52	---	2.38	2.06	2.72	3.22	3.83	4.36	5.21

WTR YR 1978 HIGH 2.06 APR 6 AND OTHERS LOW 5.80 NOV 14

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.80	4.30	3.42	2.91	4.02	4.07	1.97	2.12	2.52	2.61	7.47	10.29
10	5.39	4.12	3.41	2.95	4.11	4.18	1.00	2.21	2.54	2.77	8.31	10.90
15	5.17	4.03	3.21	2.88	4.06	4.01	1.45	1.97	2.73	2.89	8.91	10.17
20	5.01	3.92	3.02	2.89	4.05	3.46	1.45	1.92	2.73	3.13	9.31	8.90
25	4.79	3.82	2.94	3.30	4.03	2.96	1.64	2.05	2.61	4.77	9.62	8.12
EOM	4.59	3.67	2.90	3.90	4.06	2.46	1.91	2.29	2.67	6.98	9.77	7.48
MIN	6.06	4.47	3.65	3.90	4.13	4.19	2.46	2.29	2.83	6.98	9.77	11.02
MAX	4.59	3.67	2.86	2.80	3.99	2.46	1.00	1.90	2.35	2.61	7.22	7.48
WTR YR 1978	HIGH	1.00	APR 10	LOW	11.02	SEP 11						

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, 7.04 ft (2.15 m) below land-surface datum, Mar. 8-11, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.53	6.77	6.80	6.87	6.92	7.02		---	6.13	6.34	6.58	6.16
10	6.52	6.73	6.92	6.88	6.93	7.04		6.18	6.18	6.40	6.64	6.21
15	6.52	6.76	6.86	6.90	6.90	6.89		5.92	6.24	6.46	6.67	6.17
20	6.52	6.80	6.75	6.91	6.98	6.76		5.94	6.26	6.60	6.70	6.15
25	6.52	6.82	6.76	6.84	6.96	6.62		5.97	6.31	6.43	6.78	6.19
EOM	6.73	6.77	6.86	6.93	6.99	---		6.03	6.38	6.47	6.15	6.25
MIN	6.73	6.89	6.92	6.95	7.00	7.04		6.18	6.38	6.60	6.79	6.25
MAX	6.52	6.89	6.74	6.01	6.80	6.56		5.92	6.09	6.31	6.14	6.14
WTR YR 1978	HIGH	5.92	MAY 15 AND OTHERS	LOW	7.04	MAR 9 AND OTHERS						

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.45			---	7.00	7.36	4.20	4.83	4.98	6.02	6.75	7.37
10	6.44			---	7.07	7.41	3.69	5.09	5.21	6.16	6.86	7.46
15	6.47			---	7.13	7.16	4.09	4.03	5.41	6.29	6.98	7.53
20	6.57			6.71	7.19	6.49	4.24	4.13	5.57	6.37	7.09	7.49
25	6.66			6.76	7.26	5.02	4.50	4.46	5.73	6.47	7.20	7.58
EOM	---			6.92	7.30	4.43	4.65	4.76	5.87	6.62	7.28	7.63
MIN	6.72			6.92	7.30	7.43	4.65	5.09	5.87	6.62	7.28	7.63
MAX	6.42			6.70	6.94	4.43	3.67	4.03	4.81	5.89	6.64	7.30
WTR YR 1978	HIGH	3.67	APR 11	LOW	7.63	SEP 30						

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 June 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.98	10.30	9.90	9.65	9.91	10.10	9.14	9.37				
10	10.05	10.37	NR	9.70	9.96	10.16	8.86	9.46				
15	10.16	10.21	NR	9.79	10.02	8.01	9.29	9.18				
20	10.27	10.14	NR	10.03	10.00	7.86	9.36	9.25				
25	10.23	10.17	NR	9.76	10.05	7.46	9.15	9.19				
EOM	10.55	10.09	9.52	9.98	10.07	8.47	9.30	10.59				
WTR YEAR 1978	MAX	7.19	Mar. 23		MIN	10.86	Oct. 30					
MIN	10.86	10.54	9.65	10.14	10.13	10.27	9.59	10.59				
MAX	9.95	10.09	8.07	9.51	9.91	7.19	8.62	9.08				

MARION COUNTY

395259086030101. Local number, MA 33.

LOCATION.--Lat 39°52'59", long 86°03'01", Hydrologic Unit 05120201, in the northwest corner of Skilestest School property, 150 ft (45.7 m) south of the intersection of Johnson Road and East 71st Street, and 3 mi (4.8 km) west of Shadeland Avenue (Old State Road 100).

Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel. Till.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 94 ft (28.7 m).
Instrumentation: Analog to digital recorder.

DATUM.--Altitude of land-surface datum is 810 ft (247 m). Measuring point: Top of floor of shelter 3.90 ft (1.18 m) above land-surface datum.

PERIOD OF RECORD.--May 12, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.92 ft (21.92 m) below land-surface datum, Sept. 3, 1978; lowest, 73.65 ft (22.45 m) below land-surface datum, Sept. 23, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5											72.46	71.97
10											72.25	73.27
15											72.13	73.31
20											72.40	73.44
25											72.09	73.50
END											72.08	73.21
MIN											72.47	73.65
MAX											71.97	71.92
WTR YR 1978	HIGH	71.92	SEP 3	AND OTHERS	LOW	73.65	SEP 23					

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.57	28.30	27.27	27.74	27.62	27.24	26.74	25.97	26.06	26.25	26.70	26.79
10	28.35	28.12	28.71	27.97	27.38	26.90	26.34	26.41	26.14	26.25	26.55	26.74
15	28.34	28.10	27.94	27.60	27.36	27.00	26.85	26.04	26.26	26.18	26.57	26.78
20	28.51	28.22	27.45	27.43	27.06	26.85	26.30	26.24	26.04	26.42	26.85	26.88
25	28.31	27.99	27.65	26.58	27.00	26.79	26.52	26.22	25.92	26.39	26.68	27.11
FORM	28.34	27.60	27.73	27.69	27.06	26.66	26.30	26.09	26.13	26.39	26.72	26.95
MIN	28.66	28.64	28.71	28.05	27.78	27.24	26.87	26.52	26.34	26.51	26.85	27.18
MAX	27.90	27.60	27.27	26.58	26.66	26.42	26.05	25.77	25.87	25.86	26.46	26.64
WTR YR 1978	HIGH	25.77	MAY 13	LOW	28.71	DEC 10						

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.10	29.97	29.79	28.22	29.01	29.71	---	27.80	28.11	28.72	29.22	29.64
10	29.72	29.77	29.57	28.24	29.15	29.70	---	27.96	28.28	28.70	29.24	29.73
15	29.51	29.84	29.26	28.24	29.22	29.66	28.04	27.84	28.50	28.73	29.30	29.82
20	29.45	29.80	28.74	28.37	29.38	29.16	27.78	27.83	28.51	28.91	29.53	29.94
25	29.39	29.74	28.41	28.33	29.48	28.66	27.89	27.78	28.56	28.95	29.61	30.09
EOM	30.19	29.61	28.26	28.82	29.61	28.39	27.88	27.92	28.70	29.04	29.48	30.09
MIN	30.37	30.07	29.65	28.82	29.63	29.80	28.39	28.01	28.71	29.04	29.62	30.12
MAX	29.36	29.61	28.26	28.11	28.91	28.35	27.75	27.76	27.97	28.57	29.06	29.52
WTR YR 1978	HIGH	27.75	APR 19	LOW	30.37	OCT 30						

MORGAN COUNTY

393423086161001. Local number, MG 4.

LOCATION.--Lat 39°34'23", long 86°16'10", Hydrologic Unit 05120201, on east side of County Road 850E, 0.4 mi (0.7 km) north of State Road 144.
Owner: U.S. Geological Survey.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 60 ft (18.3 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 645 ft (197 m) from topographic map. Measuring point: Top of floor of shelter 2.90 ft (0.88 m) above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 976 ft (2.97 m) below land-surface datum, May 26-28, 1978; lowest, 13.89 ft (4.23 m) below land-surface datum, Nov. 16, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5								---	10.21	10.13	11.52	11.76
10								---	10.50	10.25	11.71	11.90
15								10.03	10.78	10.51	11.93	12.10
20								9.98	11.04	10.79	12.08	12.27
25								9.80	11.25	11.00	12.30	12.47
EOM								9.91	10.66	11.28	11.77	12.67
MIN								10.36	11.26	11.28	12.38	12.67
MAX								9.76	9.98	10.13	11.34	11.74
WTR YR 1978	HIGH	9.76	MAY 22 AND OTHERS	LOW	12.67	SEP 30						

GROUND-WATER LEVELS

367

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.01	10.91	10.49	10.73	12.07	12.66	10.02	10.54	11.17	10.72	12.83	13.81
10	10.77	10.92	10.72	11.05	12.22	12.66	9.65	10.56	11.62	11.16	12.00	14.07
15	10.93	11.08	10.17	11.24	12.32	12.52	10.18	9.72	11.00	---	12.97	14.29
20	11.20	11.25	9.47	11.48	12.38	11.50	10.43	9.82	12.23	---	13.24	14.42
25	11.21	11.30	9.82	11.46	12.47	10.44	10.15	10.21	11.92	12.34	13.43	14.54
FOUR	10.85	11.27	10.38	11.92	12.57	10.10	10.18	10.80	10.85	12.57	13.60	14.67
MIN	11.41	11.54	11.19	11.92	12.58	12.71	10.61	10.80	12.39	12.57	13.60	14.67
MAX	10.00	10.85	9.47	10.36	11.99	10.10	9.65	9.68	10.00	10.00	12.00	13.00
WTR YR 1978	HIGH	9.47	DEC 20	LOW	14.67	SEP 29	AND OTHERS					

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	55.30	50.18	46.64	---	43.09	41.92	40.82			---	45.10	45.44
10	54.26	49.45	---	---	42.82	41.66	40.50			---	46.94	44.66
15	53.41	48.81	---	44.19	42.58	41.54	40.63			---	48.97	43.87
20	52.59	49.32	---	43.87	42.29	41.28	40.27			40.44	48.61	43.42
25	51.73	47.79	---	43.31	42.10	41.19	40.24			41.44	47.57	42.96
FOUR	50.82	47.05	---	43.39	42.05	40.90	40.08			43.52	46.37	42.57
MIN	56.02	50.66	47.02	44.48	43.32	42.06	40.99			43.52	48.97	46.18
MAX	50.82	47.05	46.64	43.23	42.05	40.90	40.08			40.25	43.77	42.57
WTR YR 1978	HIGH	40.08	APR 30	LOW	56.02	OCT 1						

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FFR	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.94	17.85	15.05	13.23	11.65	10.43	9.28	8.18	7.44	6.85	10.72	10.42
10	21.05	17.27	14.97	13.06	11.37	10.16	8.95	8.11	7.36	6.83	12.27	10.30
15	20.38	16.76	14.43	12.73	11.15	9.99	9.08	7.82	7.39	6.75	11.25	10.21
20	19.75	16.37	14.03	12.43	10.87	9.75	8.70	7.73	7.17	6.76	10.98	9.98
25	19.07	15.97	13.84	11.90	10.66	9.63	8.62	7.66	6.80	6.84	10.80	9.88
EOM	18.35	15.42	13.50	11.93	10.61	9.35	8.45	7.50	6.92	10.32	10.60	9.59
MIN	22.73	18.19	15.38	13.42	11.88	10.61	9.42	8.45	7.51	10.32	12.27	10.57
MAX	18.35	15.42	13.50	11.91	10.61	9.35	8.45	7.49	6.79	6.75	10.60	9.59
WTR YR 1978	HIGH 6.75 July 2, others		LOW		22.73 OCT 1							

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, 29.07 ft (8.86 m) below land-surface datum May 13, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FFR	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.97	30.89	30.49	30.63	30.53	30.62	30.10	29.25	29.44	29.66	29.94	30.11
10	30.85	30.71	31.18	30.71	30.41	30.40	29.57	29.56	29.48	29.68	29.84	30.07
15	30.78	30.68	30.71	30.51	30.54	30.62	29.97	29.33	29.56	29.58	29.80	30.13
20	30.99	30.83	30.43	30.43	30.45	30.31	29.46	29.41	29.43	29.72	30.13	30.21
25	30.83	30.64	30.63	29.78	30.43	30.29	29.68	29.46	29.32	29.65	29.99	30.34
EOM	30.82	30.48	30.68	30.67	30.54	29.92	29.48	29.47	29.56	29.77	30.13	30.18
MIN	31.10	31.14	31.18	30.77	30.78	30.73	30.26	29.67	29.64	29.77	30.13	30.49
MAX	30.60	30.48	30.43	29.71	30.23	29.92	29.36	29.07	29.23	29.39	29.77	30.01
WTR YR 1978	HIGH 29.07 MAY 13		LOW		31.18 DEC 10							

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, 8.98 ft (2.74 m) below land-surface datum Apr. 8, 1978; 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.70	15.21	13.43	---	---	14.67	9.39	11.54	12.20	13.20	14.95	15.91
10	14.72	15.22	13.97	13.30	---	14.63	9.27	11.64	12.60	13.30	15.01	16.10
15	14.67	15.18	---	13.38	---	14.24	9.98	11.56	12.92	14.03	15.22	16.25
20	14.94	15.11	---	---	14.40	12.86	10.22	11.17	13.15	14.20	15.36	16.40
25	14.97	14.77	---	---	14.42	9.77	10.71	11.41	13.20	14.44	15.54	16.48
END	15.08	14.59	---	---	14.63	9.42	11.15	11.86	11.00	14.70	15.80	16.62
MIN	15.13	15.47	14.16	13.58	14.68	14.79	11.15	11.89	13.33	14.70	15.81	16.62
MAX	14.57	14.59	13.43	13.20	14.40	9.42	8.98	11.07	10.00	11.00	14.71	15.81
WTR YR 1978	HIGH	8.98	Apr. 8	LOW	16.62	SEP 30						

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	115.95	65.90	63.41	65.66	65.76	65.78	65.35	65.24	---	65.88	65.87	65.83
10	115.86	65.91	65.47	65.69	65.78	65.65	65.40	65.22	---	65.58	65.89	65.90
15	115.94	65.91	60.89	65.82	65.80	57.33	65.50	62.43	---	65.62	65.93	65.91
20	115.98	65.78	65.26	65.76	65.78	62.34	65.49	65.17	---	65.86	65.92	65.94
25	115.10	65.75	65.55	65.63	65.80	61.03	63.81	64.99	65.78	65.84	64.19	65.95
END	65.83	65.55	65.62	65.76	65.78	65.10	65.30	65.46	65.87	65.69	65.20	65.97
MIN	115.99	65.94	65.63	65.86	65.81	65.80	65.51	65.46	65.87	65.92	65.94	65.97
MAX	65.59	64.16	56.65	65.58	65.74	54.37	63.81	55.66	65.78	63.27	63.04	65.68
WTR YR 1978	HIGH	54.37	MAR 14	LOW	115.99	OCT 22						

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.82	17.03	17.00	13.37	15.09	16.07	8.65	10.00	11.12	13.56	15.23	16.33
10	16.49	17.17	16.43	13.73	15.25	15.47	9.27	10.36	11.74	13.82	15.36	16.41
15	16.38	17.30	15.17	13.93	15.45	13.06	9.68	10.36	12.33	14.00	15.58	16.45
20	16.54	17.32	14.33	14.19	15.60	12.08	9.50	10.21	12.80	14.22	15.87	16.70
25	16.73	17.32	13.52	14.36	15.81	9.35	9.61	10.20	13.24	14.53	16.13	16.94
EOM	16.89	17.23	13.14	14.89	15.91	7.79	9.82	10.61	13.71	14.95	16.27	17.17
MIN	16.90	17.42	17.23	14.89	15.91	16.07	9.82	10.61	13.71	14.95	16.28	17.17
MAX	16.38	16.92	13.14	13.14	14.95	7.79	7.87	9.82	10.71	13.31	15.02	16.32
WTR YR 1978	HIGH	7.79	MAR 31	LOW	17.42	NOV 28						

POSEY COUNTY

380638087471901. Local number, PY 4.

LOCATION.--Lat 38°06'38", long 87°47'19", Hydrologic Unit 05120113, 0.6 mi (1 km) north of Wadesville.
Owner: U.S. Geological Survey

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 280 ft (85.3 m), cased to 200 ft (61 m), open hole.
Instrumentation: Analog to digital recorder.

DATUM.--Altitude of land-surface datum is 458 ft (140 m) from topographic map. Measuring point: Top of floor of shelter 2.00 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 114.53 ft (34.91 m) below land-surface datum, Mar. 14, 1978; lowest, 126.40 ft (38.5 m) below land-surface datum, Aug. 17, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		116.69	115.66	115.77	115.58	115.06	116.27	117.09	117.68	NR	120.97	122.69
10		116.55	116.90	116.59	115.38	114.81	116.41	117.58	117.92	120.79	121.59	122.59
15		116.71	115.66	116.50	115.37	114.95	116.46	117.15	NR	120.22	122.40	122.01
20		116.49	115.49	115.50	114.97	115.03	116.36	117.32	NR	120.38	122.12	122.05
25		116.06	115.88	115.39	115.04	115.70	116.83	117.34	NR	120.38	122.15	121.94
EOM		116.06	115.81	116.38	115.10	116.27	117.16	117.63	NR	120.59	121.99	121.49
WTR YEAR 1978	MAX	114.53	Mar. 14			MIN	126.40	Aug. 17				
MIN		119.22	122.51	121.66	118.56	119.92	119.63	120.55	121.59	123.56	126.40	123.95
MAX		116.06	115.28	115.12	114.90	114.58	116.13	116.89	117.64	120.15	121.02	121.49

GROUND-WATER LEVELS

371

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 is 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5					---	11.83	8.08	8.94	9.17	10.28	11.97	13.81
10					---	11.67	7.54	9.39	9.61	10.59	12.25	14.22
15					---	11.41	8.35	8.60	9.96	10.81	12.41	14.49
20					10.99	9.55	8.42	9.51	10.64	11.88	13.18	15.46
25					11.21	8.28	8.81	8.52	10.41	11.42	13.39	15.34
EOM					11.57	7.75	8.93	8.99	10.23	11.65	13.47	15.52
MIN					11.60	11.89	9.01	9.39	10.64	12.51	13.52	15.54
MAX					10.99	7.75	7.54	8.49	9.17	9.99	11.71	13.54
WTR YR 1978	HIGH	7.54	APR 10	LOW	15.54	SEP 28						

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, 11.11 ft (3.39 m) below land-surface datum, Feb. 11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.41	10.44	10.33	9.35	9.83	10.20	7.60	7.66	7.97	9.08	10.05	10.74
10	10.43	10.45	10.21	9.44	9.92	10.21	7.19	7.69	8.25	9.25	10.14	10.85
15	10.46	10.44	9.98	9.50	10.01	9.99	7.34	7.22	8.45	9.39	10.25	10.93
20	10.53	10.65	9.61	9.58	10.03	9.28	7.35	7.30	8.64	9.60	10.41	10.99
25	10.55	10.61	9.39	9.54	10.10	8.13	7.36	7.41	8.81	9.74	10.50	11.05
EOM	10.61	10.54	9.31	9.78	10.13	7.84	7.50	7.75	9.00	9.90	10.63	11.11
MIN	10.61	10.71	10.54	9.78	10.15	10.24	7.92	7.75	9.00	9.90	10.63	11.11
MAX	10.33	10.54	9.22	9.27	9.82	7.84	7.16	7.20	7.84	8.99	9.90	10.66
WTR YR 1978	HIGH	7.16	APR 12	LOW	11.11	SEP 30						

ST. JOSEPH COUNTY

413255086211026. Local number, SJ 26.

LOCATION.--Lat 41°32'50", long 86°21'10", Hydrologic Unit 07120001, in Porter Cemetary 4.3 mi (6.9 km) northwest of Lakeville.
 Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 1.5 in (38 mm).
 Instrumentation: Water-stage recorder.

DATUM.--Datum is 770.71 ft (234.912 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water level may be affected by Potato Creek Reservoir.

PERIOD OF RECORD.--Sept. 1975 to current year. Fragmentary record prior to May 1976 available in district files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 769.20 ft (234.452 m) National Geodetic Vertical Datum of 1929, May 10, 1976; lowest, 764.69 ft (233.078 m) National Geodetic Vertical Datum of 1929, Feb. 8-11, 1977.

HIGHEST WATER LEVEL, IN FEET NATIONAL GEODETIC VERTICAL DATUM OF 1929, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	766.61	765.95	767.15	767.40	NR	NR	768.99	768.18	NR	766.78	766.14	765.80
10	766.48	765.95	767.05	767.47	NR	NR	769.14	768.08	NR	766.65	766.13	767.75
15	766.30	765.91	767.49	767.27	NR	NR	768.90	768.61	767.24	766.56	766.06	765.74
20	766.21	766.05	768.03	766.97	NR	NR	768.89	768.45	767.10	766.44	765.99	765.70
25	766.13	766.17	768.01	NR	NR	768.84	768.63	768.36	766.95	766.37	765.93	765.58
DOM	766.03	766.42	767.50	NR	NR	768.86	768.42	767.96	766.81	766.27	765.88	765.46
WTR YEAR 1978	MAX 769.30	Apr. 7		MIN 765.46	Sept. 30							
MIN	766.65	766.42	768.03	767.47	NR	768.86	769.30	768.61	767.81	766.80	766.24	765.86
MAX	766.03	765.87	766.45	766.91	NR	768.52	768.36	767.87	766.80	766.24	765.86	765.46

ST. JOSEPH COUNTY

413257086211027. Local number, SJ 27.

LOCATION.--Lat 41°32'57", long 86°21'10", Hydrologic Unit 07120001, in Porter Cemetary, 4.3 mi (6.9 km) northwest of Lakeville.
 Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian water-table well, diameter 1.5 in (38 mm).
 Instrumentation: Water-stage recorder.

DATUM.--Datum is 766.22 ft (233.544 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water level may be affected by Potato Creek Reservoir.

PERIOD OF RECORD.--Sept. 1975 to current year. Fragmentary record prior to May 1976 available in district files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 765.40 ft (233.294 m) National Geodetic Vertical Datum of 1929, May 10, 1976; lowest, 759.26 ft (231.422 m) National Geodetic Vertical Datum of 1929, Aug. 28, 1977.

HIGHEST WATER LEVEL, IN FEET NATIONAL GEODETIC VERTICAL DATUM OF 1929, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	760.25	759.98	760.87	760.88	760.63	760.48	762.69	761.16	760.65	760.06	759.58	759.35
10	760.21	759.97	760.66	760.86	760.58	760.47	762.75	761.04	760.49	760.01	759.51	759.30
15	760.15	759.99	761.15	760.74	760.54	761.17	762.06	761.95	760.35	759.93	759.45	759.38
20	760.12	760.04	761.94	760.65	760.52	762.02	761.98	761.24	760.26	759.84	759.40	759.41
25	760.08	760.14	761.36	760.57	760.51	762.36	761.73	761.13	760.18	759.80	759.35	759.38
DOM	760.01	760.18	761.01	760.65	760.49	762.84	761.37	760.83	760.07	759.69	759.43	759.34
WTR YEAR 1978	MAX 763.15	Apr. 6		MIN 759.27	Sept. 9							
MIN	760.28	760.18	761.94	761.01	760.65	762.84	763.15	761.96	760.78	760.11	759.67	759.41
MAX	760.01	759.95	760.66	760.57	760.49	760.35	761.37	761.00	760.07	759.67	759.32	759.27

GROUND-WATER LEVELS

ST. JOSEPH COUNTY

413255086211228. Local number, SJ 28.

LOCATION.--Lat 41°32'55", long 86°21'12", Hydrologic Unit 07120001, in Porter Cemetary, 4.3 mi (6.9 km) northwest of Lakeville.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian water-table well, diameter 1.5 in (38 mm).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 770.51 ft (234.851 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water level may be affected by Potato Creek Reservoir.

PERIOD OF RECORD.--Sept. 1975 to current year. Fragmentary record prior to May 1976 available in district files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 760.01 ft (231.651 m) National Geodetic Vertical Datum of 1929, Apr. 6, 1978; lowest, 755.30 ft (230.215 m) National Geodetic Vertical Datum of 1929, Aug. 25, 1976.

HIGHEST WATER LEVEL, IN FEET NATIONAL GEODETIC VERTICAL DATUM OF 1929, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	758.90	758.23	758.90	759.67	759.41	759.11	760.72	760.06	759.69	759.37	758.79	758.55
10	758.60	758.24	758.80	759.65	759.35	759.12	760.85	759.99	759.61	759.13	758.74	758.47
15	758.40	758.27	759.23	759.61	759.23	759.64	760.53	760.33	759.48	759.09	758.68	758.54
20	758.35	758.32	759.79	759.48	759.22	760.25	760.50	760.17	759.47	758.94	758.54	758.41
25	758.35	758.28	759.90	759.54	759.19	760.70	760.35	760.08	759.30	759.02	758.54	758.03
EOM	758.27	758.77	759.72	759.42	759.16	760.63	760.17	759.79	759.19	758.92	758.70	757.91
WTR YEAR 1978	MAX 760.97 Apr. 8			MIN 757.90 Sept. 27								
MIN	758.95	758.77	759.92	759.75	759.42	760.74	760.96	760.33	759.75	759.43	758.89	758.67
MAX	758.25	758.13	758.77	759.42	759.13	759.06	760.13	759.75	759.19	758.89	758.51	757.90

ST. JOSEPH COUNTY

413257086211229. Local number, SJ 29.

LOCATION.--Lat 41°32'57", long 86°21'12", Hydrologic Unit 07120001, in Porter Cemetary, 4.3 mi (6.9 km) northwest of Lakeville.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian water-table well, diameter 1.5 in (38 mm).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 767.41 ft (233.907 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water level may be affected by Potato Creek Reservoir.

PERIOD OF RECORD.--Sept. 1975 to current year. Fragmentary record prior to May 1976 available in district files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 762.02 ft (232.264 m) National Geodetic Vertical Datum of 1929, Apr. 9, 1978; lowest, 754.31 ft (229.914 m) National Vertical Geodetic Datum of 1929, Oct. 1, 14, 15, 17, 18, Nov. 16, 20, 23, 1977.

HIGHEST WATER LEVEL, IN FEET NATIONAL VERTICAL GEODETIC DATUM OF 1929, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	758.52	757.95	758.37	760.12	759.59	759.01	761.74	761.03	760.26	759.20	758.26	757.74
10	758.36	757.88	758.29	760.06	759.53	759.02	762.06	760.83	760.09	759.03	758.16	757.64
15	758.23	757.86	758.75	760.02	759.30	759.30	761.72	761.16	759.87	758.93	758.07	757.60
20	758.11	757.83	759.47	759.94	759.28	759.93	761.62	761.00	759.71	758.71	757.89	757.46
25	758.09	757.82	759.93	759.95	759.25	761.20	761.37	760.87	759.52	758.60	757.85	757.21
EOM	758.03	758.05	760.17	759.62	759.12	761.53	761.17	760.50	759.25	758.45	757.82	757.10
WTR YEAR 1978	MAX 762.06 Apr. 9			MIN 757.07 Sept. 28								
MIN	758.61	758.05	760.17	760.24	759.61	761.53	762.06	761.16	760.45	759.33	758.41	757.80
MAX	758.00	757.59	757.99	759.61	759.11	758.92	761.11	760.45	759.23	758.41	757.80	757.07

GROUND-WATER LEVELS

375

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.69	21.06	19.46	19.27	19.87	20.54	18.34	18.17	18.30	18.02		---
10	20.40	21.08	19.34	19.37	20.02	20.48	18.09	18.28	18.55	18.12		18.73
15	20.47	21.12	18.00	19.45	20.19	18.62	18.51	17.54	18.81	18.58		19.11
20	20.75	20.56	17.95	19.60	20.23	17.95	18.57	17.68	18.91	19.02		19.39
25	20.81	20.37	18.50	19.40	20.31	17.45	18.27	17.07	18.91	19.01		19.60
EOM	20.96	20.27	18.99	19.74	20.41	17.71	17.87	17.78	18.25	19.24		19.74
MIN	20.96	21.28	20.07	19.83	20.44	20.56	18.75	18.33	19.12	19.24		19.74
MAX	20.40	20.27	17.81	18.97	19.81	17.35	17.73	17.07	17.94	17.84		18.34
WTR YR 1978	HIGH	17.07	MAY 25	LOW	21.28	NOV 12						

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. Cragmille.

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.47	5.88	5.00	5.04	5.37	5.45	3.43	4.37	4.69	5.24	5.72	6.45
10	5.46	5.65	5.16	5.12	5.46	5.46	3.40	4.46	4.84	5.37	5.87	6.52
15	5.44	5.61	4.85	5.23	5.52	4.80	3.88	3.80	4.99	5.40	6.01	6.25
20	5.57	5.55	4.49	5.31	5.54	3.92	3.84	4.06	5.10	5.54	6.45	6.35
25	5.61	5.55	4.49	5.30	5.59	3.73	3.89	4.13	5.18	5.56	6.27	6.41
EOM	5.46	5.44	4.92	5.19	5.61	3.82	4.25	4.53	5.29	5.64	6.34	6.45
MIN	5.66	5.70	5.16	5.37	5.62	5.67	4.25	4.53	5.29	5.67	6.35	6.56
MAX	5.42	5.44	4.49	4.89	5.24	3.53	3.12	3.80	4.58	5.16	5.67	6.25
WTR YR 1978	HIGH	3.12	APR 6	LOW	6.56	SEP 12						

GROUND-WATER LEVELS

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, 1.16 ft (0.35 m) below land surface datum Sept. 18, 19, 1978; lowest, 3.31 ft (1.01 m) below land-surface datum Jan. 12, 13, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.25	2.71	2.91	2.72	2.93	2.77	1.77	2.17	1.60	1.55	1.68	1.59
10	2.23	2.45	2.92	2.96	3.01	2.54	1.44	2.02	1.72	1.73	1.71	1.50
15	2.41	2.49	2.10	3.13	2.67	1.68	1.95	1.28	1.82	1.47	1.81	1.20
20	2.20	2.93	2.22	3.04	2.45	1.44	2.04	1.18	1.57	1.46	1.82	1.17
25	2.24	2.98	2.65	2.87	2.69	1.50	1.86	1.19	1.55	1.36	1.81	1.23
FORM	2.60	2.60	3.04	2.86	2.53	1.84	2.42	1.48	1.63	1.55	1.79	1.27
MIN	2.60	2.49	3.22	3.33	3.01	2.87	2.42	2.66	1.82	1.80	1.82	1.81
MAX	2.11	2.80	1.96	2.72	2.53	1.29	1.46	1.17	1.52	1.36	1.60	1.16
WTR YR 1978	HIGH	1.16	SEP 18 AND OTHERS	LOW	3.33	JAN 12, 13						

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, 3.40 ft (1.03 m) below land-surface datum Sept. 11, 12, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.54	2.66	2.30	2.52	2.64	2.66		---	2.45	2.56	2.87	3.25
10	2.42	2.61	2.44	2.57	2.64	2.64		---	2.44	2.70	2.85	3.33
15	2.60	2.58	2.05	2.67	2.66	1.94		1.74	2.60	2.70	2.93	2.90
20	2.56	2.44	2.11	2.88	2.66	1.53		2.09	2.60	2.83	3.01	2.00
25	2.63	2.61	2.16	2.63	2.66	2.03		2.05	2.48	---	3.12	3.08
FORM	2.71	2.70	2.49	2.64	2.66	---		2.37	2.66	2.76	3.09	3.19
MIN	2.71	2.66	2.49	2.68	2.66	2.69		2.37	2.68	2.83	3.12	3.40
MAX	2.24	2.20	2.04	2.44	2.64	1.48		1.74	2.38	2.32	2.78	2.82
WTR YR 1978	HIGH	1.48	MAR 21	LOW	3.40	SEP 12						

GROUND-WATER LEVELS

377

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.26	20.86	17.20	15.04	20.83	21.91	11.47	14.89	19.87	19.34	19.71	19.05
10	18.00	20.22	17.16	17.89	19.85	23.28	5.14	18.56	20.28	20.37	19.81	25.02
15	17.45	19.25	18.50	16.61	21.39	18.85	8.77	16.12	22.65	20.52	19.17	23.43
20	19.90	17.53	9.78	19.94	19.08	10.51	10.63	17.43	21.46	21.27	21.77	22.00
25	19.18	16.90	11.29	19.99	21.25	11.02	12.38	17.74	19.06	23.07	22.60	25.62
EOM	19.33	21.02	12.32	21.33	21.59	8.52	11.81	18.43	22.03	24.15	20.70	21.66
MIN	20.06	21.77	20.31	21.33	24.45	23.49	14.14	19.05	23.64	24.15	25.24	25.65
MAX	14.22	16.90	9.78	12.30	14.68	7.01	5.14	12.74	15.94	17.42	18.67	18.68
WTR YR 1978	HIGH	5.14	APR 10	LOW	25.65	SEP 29						

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 DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.25	22.16	20.41	17.21	21.30	22.20	12.75	15.61	18.83	18.42	22.29	23.43
10	20.83	22.30	21.42	18.35	21.56	21.93	11.74	17.22	19.39	19.37	22.37	24.23
15	21.39	22.16	18.33	19.71	21.93	20.08	13.50	16.23	19.94	20.11	22.07	24.03
20	21.84	21.91	15.19	20.50	22.26	15.31	14.55	16.44	20.16	20.86	22.45	23.82
25	22.18	21.13	16.73	21.15	22.33	10.68	15.11	17.29	21.02	21.37	23.06	24.11
EOM	22.19	22.38	17.21	20.99	22.28	12.11	14.52	17.89	19.74	21.80	22.95	24.20
MIN	22.34	22.50	22.28	21.30	22.41	22.32	15.26	17.93	21.02	21.83	23.25	24.57
MAX	19.66	21.13	15.18	17.04	20.98	10.58	11.22	14.94	17.98	18.36	21.78	22.99
WTR YR 1978	HIGH	10.58	MAY 24	LOW	24.57	SEP 11						

GROUND-WATER LEVELS

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.02	30.80	30.03	30.35	30.58	30.52	30.14	29.89	30.34	31.01	31.27	31.96
10	30.81	30.84	30.45	30.45	30.54	30.29	30.04	30.05	30.58	31.01	31.34	32.12
15	30.79	30.93	30.16	30.37	30.58	30.37	30.22	29.82	30.76	30.93	31.59	32.04
20	30.91	30.86	30.03	30.18	30.44	30.28	30.02	30.05	30.81	31.02	31.72	32.10
25	30.72	30.67	30.20	29.92	30.55	30.04	30.01	30.06	30.90	31.05	31.86	32.21
EOM	30.69	30.36	30.25	30.43	30.45	30.09	30.04	30.29	31.23	31.19	31.73	32.18
MIN	31.06	31.10	30.47	30.48	30.65	30.52	30.27	30.29	31.23	31.19	31.92	32.27
MAX	30.67	30.36	29.94	29.92	30.25	30.04	29.92	29.79	30.31	31.08	31.21	31.79
WTR YR 1978	HIGH	29.79	May-13	LOW	32.27	SEP 28						

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.13	50.21	50.28	48.72	48.56	49.67	46.48	45.43	45.85	47.01	47.81	48.19
10	51.06	50.18	50.29	48.71	48.76	49.76	46.07	45.48	45.97	47.15	47.81	48.26
15	50.82	50.19	50.29	48.61	49.02	49.80	45.77	45.53	46.15	47.39	47.85	48.34
20	50.53	50.22	50.17	48.55	49.29	49.50	45.60	45.57	46.42	47.50	47.94	48.45
25	50.33	50.25	49.68	48.54	49.48	48.59	45.45	45.62	46.73	47.68	48.02	48.60
EOM	50.26	50.26	49.11	48.54	49.56	47.25	45.43	45.69	46.89	47.80	48.17	48.68
WTR YEAR	MAX	45.43	Apr. 28-30, May 1-5			MIN	51.16	Oct. 3, 4				
MIN	51.16	50.26	50.29	49.10	49.58	49.80	47.07	45.69	46.89	47.80	48.17	48.68
MAX	50.26	50.18	49.11	48.54	48.54	47.25	45.43	45.43	45.73	46.92	47.80	48.17

GROUND-WATER LEVELS

379

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.64	49.93	49.94	48.33	48.77	49.91	47.79	46.10	46.08	47.47	48.03	---
10	50.31	49.97	49.86	48.25	48.96	50.07	47.29	46.04	46.34	47.56	---	48.54
15	50.11	50.01	49.74	48.17	49.17	50.21	46.94	45.98	46.63	47.61	---	48.62
20	50.05	50.05	49.55	48.22	49.40	50.04	46.53	45.89	46.84	47.67	---	48.73
25	50.01	50.04	49.04	48.35	49.61	49.53	46.29	45.79	47.15	47.77	---	48.83
NOV	49.95	49.05	48.48	48.57	49.73	48.48	46.19	45.89	47.37	47.91	---	48.90
MAR	50.75	50.06	49.97	48.57	49.73	50.22	48.33	46.18	47.37	47.91	48.04	48.90
MAY	49.95	49.93	48.48	48.17	48.61	48.48	46.19	45.79	45.92	47.40	47.94	48.51
WTY YR 1978	HIGH	45.79	MAY 23	AND OTHERS	LOW	50.75	OCT 1					

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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.21	19.86	19.54	15.05	16.02	16.88	12.96	12.69				
10	20.06	19.91	19.25	15.15	16.17	16.99	13.17	---				
15	19.94	19.43	18.00	15.31	16.34	14.76	13.42	---				
20	19.86	19.94	15.21	15.48	16.49	13.12	13.17	---				
25	19.83	19.90	14.70	15.63	16.65	12.35	12.91	---				
NOV	19.83	19.84	14.82	15.88	16.73	12.53	12.51	---				
MAR	20.41	19.44	19.31	15.88	16.73	17.00	13.50	12.84				
MAY	19.42	19.43	14.70	14.85	15.91	12.33	12.51	12.52				
WTW YR 1978	HIGH	12.33	MAY 26	LOW	20.41	OCT 1						

GROUND-WATER LEVELS

WHITLEY COUNTY

410357085264201. Local number, NY 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 1977 TO SEPTEMBER 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.03	52.05	51.61	51.62	51.67	51.74	51.47	50.87	51.07	51.26	51.79	51.84
10	51.97	51.90	52.14	51.69	51.63	51.70	51.08	51.01	51.03	51.39	51.54	51.83
15	51.97	51.69	51.81	51.56	51.74	51.80	51.24	50.81	51.13	51.38	51.58	51.89
20	52.04	51.99	51.56	51.51	51.61	51.68	50.94	51.01	51.11	51.61	51.78	51.94
25	52.04	51.84	51.62	51.01	51.63	51.67	51.05	50.98	51.07	51.56	51.72	52.04
END	52.02	51.69	51.62	51.66	51.66	51.41	50.97	51.01	51.25	51.63	51.79	51.96
MIN	52.14	52.17	52.14	51.75	51.78	51.88	51.57	51.09	51.25	51.65	51.79	52.15
MAX	51.87	51.69	51.55	51.01	51.44	51.41	50.89	50.68	50.89	51.07	51.57	51.76
HT- YR 1978	HIGH	50.68	MAY 13	LOW	52.17	NOV 12	AND OTHERS					

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound 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

