CALENDAR FOR WATER YEAR 1985

1984

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1985

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Water Resources Data
Indiana
Water Year 1985

by Dale R. Glatfelter, Ronald E. Thompson, Jr., and Graham E. Nell

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-85-1
Prepared in cooperation with the State of Indiana
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information, write to
District Chief, Water Resources Division
U.S. Geological Survey
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Indianapolis, Indiana 46254

1986

PREFACE

This volume of the annual hydrologic data report of Indiana is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Water resources data for the 1985 water year for Indiana consists of records of stage, discharge, and water quality of streams; stage and contents of 1 reservoir; and water levels in wells. This report contains discharge records for 185 gaging stations, stage and contents for 1 reservoir, water temperature for 1 gaging station, water quality for 5 gaging stations, and water levels for 84 observation wells. Also included are 25 crest-stage 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.

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(d-discharge, c-chemical, t-temperature, s-sediment, v-contents)

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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Indiana each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Indiana."

Water-resources data for the 1985 water year for Indiana consist of record of stage, discharge, and water quality of streams, and water levels of ground-water wells. This volume contains records for water discharge at 185 gaging stations, stage and contents at 1 reservoir, water quality at 5 gaging stations, and water levels at 84 observation wells. Also included are data for 25 crest-stage partial-record stations. Locations of these sites are shown on figures 6, 7, and 8. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. A systematic collection of stages on selected lakes was begun in 1943 in cooperation with the State of Indiana, Department of Natural Resources. The data collected since the beginning of record have not been published in the annual water data reports for Indiana. They are available in the Indiana District Office. A selected amount of lake data was published in Water-Supply Paper 1363, "Hydrology of Indiana Lakes," by J. I. Perrey and D. M. Corbett (1956). These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Indiana.

This series of annual reports for Indiana began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities and quality of surface water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Indiana were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." Stream discharge and stage data were published in four compilation reports (through 1950, 1951-60, 1961-65, and 1966-70 water years). Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above-mentioned Water-Supply Papers may be consulted in the libraries of

the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have 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 volume is identified as "U.S. Geological Survey Water-Data Report IN-85-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (317) 927-8640.

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, for lake stages since 1943, and for water-quality records since 1951. Organizations that supplied data are acknowledged in station manuscripts. Organizations that assisted in collecting data in this report through cooperative agreement with the Survey are:

State of Indiana, Department of Natural Resources, James M. Ridenour, Director, through the Bureau of Water and Mineral Resources, W. J. Andrews, Deputy Director

Indiana State Board of Health, W. A. Myers, Jr., M.D., Commissioner, and Ralph C. Pickard, Assistant Commissioner for Environmental Health

Indiana Department of Highways, John P. Isenbarger, Director

Assistance in the form of funds or services was given by the U.S. Army Corps of Engineers 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 Carmel, Columbus, Elkhart, Fort Wayne, and Indianapolis; Indianapolis Water Co., Indianapolis Power and Light Co., Public Service Company of Indiana, Container Corporation of America, Prudential Insurance Co., Northern Indiana Public Service Co., Hoosier Energy, and Sheller-Globe Corporation.

SUMMARY OF HYDROLOGIC CONDITIONS

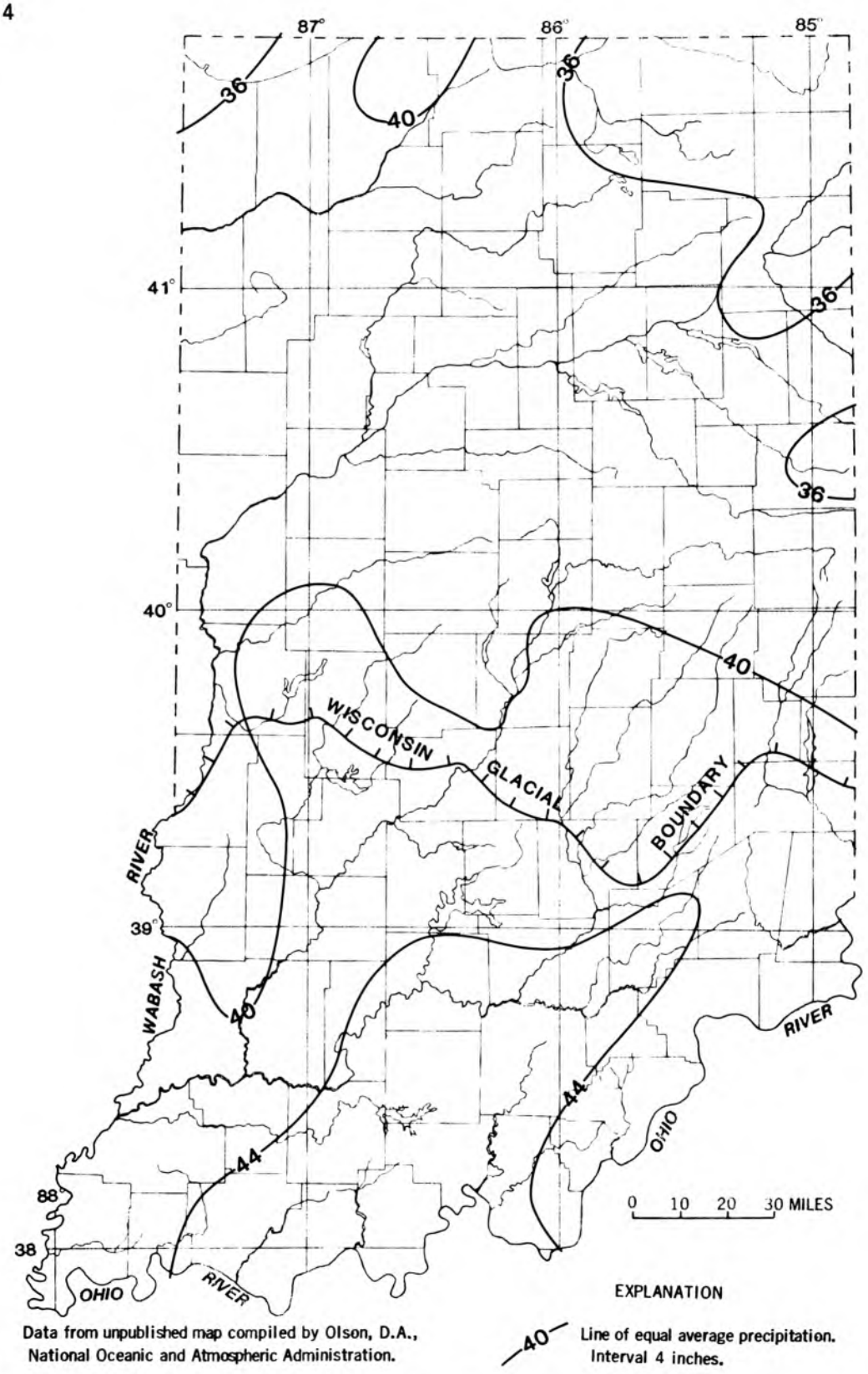
General Setting

The Wisconsinan glacial boundary is the most important geologic and physiographic feature in Indiana (fig. 1). North of this boundary, the area is characterized by landforms of glacial origin and closely related post-glacial features. The glacial drift in this area ranges in thickness from 50 to 200 ft. South of this boundary, the area covered only by pre-Wisconsinan glaciations, the glacial deposits range in thickness from 0 to 50 ft, with the bedrock exposed in some areas.

Precipitation patterns vary gradually both geographically and seasonally in Indiana. Precipitation is available in each month of the year but is highest from March through July. Average annual precipitation across Indiana (fig. 1) ranges from less than 36 in. in the northeast to more than 44 in. in the south-central part of the State (National Oceanic and Atmospheric Administration, 1951-80) and averages 38 in. Losses from evaporation and transpiration are relatively uniform across the State and average 26 in/yr (Clark, 1980).

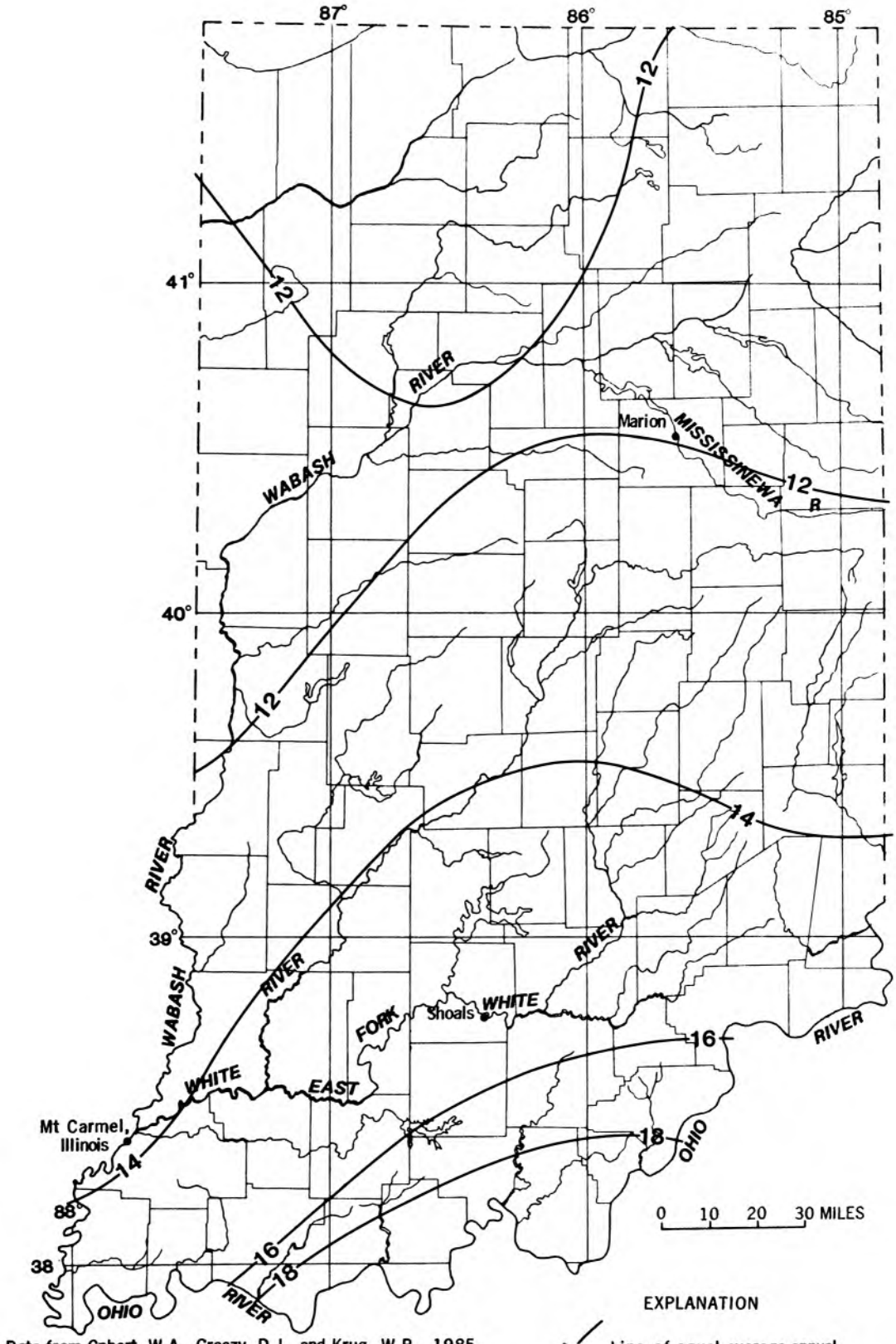
Precipitation, evapotranspiration, and physiography influence stream runoff and ground-water recharge. The highest average monthly streamflows are in March or April and are the result of high precipitation, low evapotranspiration and, in some cases, snowmelt. Annual surface runoff in Indiana varies from less than 12 in. in the northern and central parts of the State to more than 18 in. in southern Indiana (fig. 2). Monthly ground-water levels are the highest in April and May. Clark (1980) estimates that 3 to 3.5 in of the annual precipitation contributes to recharging the ground-water system.

In southern Indiana, a thin soil layer over bedrock is largely responsible for the high variability of stream discharge. The aquifers in this part of the State are carbonate bedrock. Water is stored and transmitted through fractures and solution features. Depending on the geologic period of these bedrock aquifers and the location of the wells, they may be capable of producing anything from only small supplies to relatively large supplies of water. The central third of the State has a thicker soil layer, which provides better sustained streamflow throughout the year. The glacial material is a good aquifer. Isolated sand and gravel lenses within the glacial deposits commonly produce up to 100 gal/min. In the northern third of the State, the glacial material is thick and is mostly sand and gravel. Stream runoff is well sustained throughout the year. Aquifers in this area commonly yield 100 to 500 gal/min.



Data from unpublished map compiled by Olson, D.A., National Oceanic and Atmospheric Administration.

Figure 1.-- Average annual precipitation in Indiana, 1951-80.



Data from Gebert, W.A., Graczy, D.J., and Krug, W.R., 1985, Average annual runoff in the United States, 1951-80: U.S. Geological Survey Open-File Report 85-627, scale 1:2,000,000.

Figure 2.– Average annual runoff in Indiana, 1951-80.

Surface-Water Conditions

In Indiana, the 1985 water year began with normal to above-normal streamflow conditions at the three representative index stations (Mississinewa River at Marion, Wabash River at Mount Carmel, Ill., and East Fork White River at Shoals), as shown by the comparison of monthly mean and annual discharges with the median discharges for 1951-80 (fig. 3). (By using the median, the weighting caused by extreme high or low flows is excluded.) Near- to above-normal precipitation continued through November 1984, which kept streamflows around the State near to above normal for the month. Rains on November 27 caused several streams to reach the bankfull stage. For example, the Muscatatuck River near Deputy (03366500) crested several feet above bankfull stage.

In December, precipitation was above normal; most of the rain fell after the 13th, which caused streams across the State to peak near the bankfull stage. Rainfall of from 0.5 to 2.5 in across the State on December 31 caused general flooding. Crests were from 1 to 2.5 ft above flood stage on the Maumee, St. Marys, St. Joseph, Tippecanoe, Yellow, and Kankakee Rivers in northern Indiana. In the southern half of the State, the lower part of the East Fork White River and White River were from 2 to 4 ft above flood stage, and the Wabash River was above flood stage downstream from Lafayette (03335500).

The above-normal precipitation pattern of the past 3 months ended in January 1985. By January 12, all streams were below flood stage. Below-normal temperatures and above-normal snowfall were recorded for the remainder of the month. Monthly totals for snowfall ranged from 10 in at Evansville to 40 in at South Bend.

Streamflows continued to decline during the first 2 weeks of February. By February 19, the water equivalent of the snow pack was 4.5 in along Lake Michigan to 2.5 in at Fort Wayne. In north-central Indiana, the water equivalent was 1.5 in, and, in the central and southern parts of the State, it was less than 0.5 in. Above-freezing temperatures after the 20th and rainfall from February 21 to 23 caused flooding statewide. The most significant flooding occurred in northern Indiana. The highest recurrence intervals (greater than 100 years) were along the Eel and Tippecanoe Rivers. The stage and discharge on the Eel River at Logansport (03328500) was the highest in 41 years of record, and, on the Tippecanoe River near Ora (0331500), it was the second highest in 40 years of record. The flood on the Elkhart River at Goshen (04100500) has a recurrence interval of 100 years. The peak stage at Goshen was the second highest in 53 years of record, and flooding occurred in residential areas of the city. In the Maumee River basin the recurrence interval was about 50 years. The peak stage on the Maumee River at New Haven (04183000) was the second highest in 28 years of record. Most other streams in northern Indiana had floods with recurrence intervals of from 10 to 20 years. In central Indiana, the flood peaks generally had less than a 10-year recurrence interval. On the White River at Anderson (03348000) and at

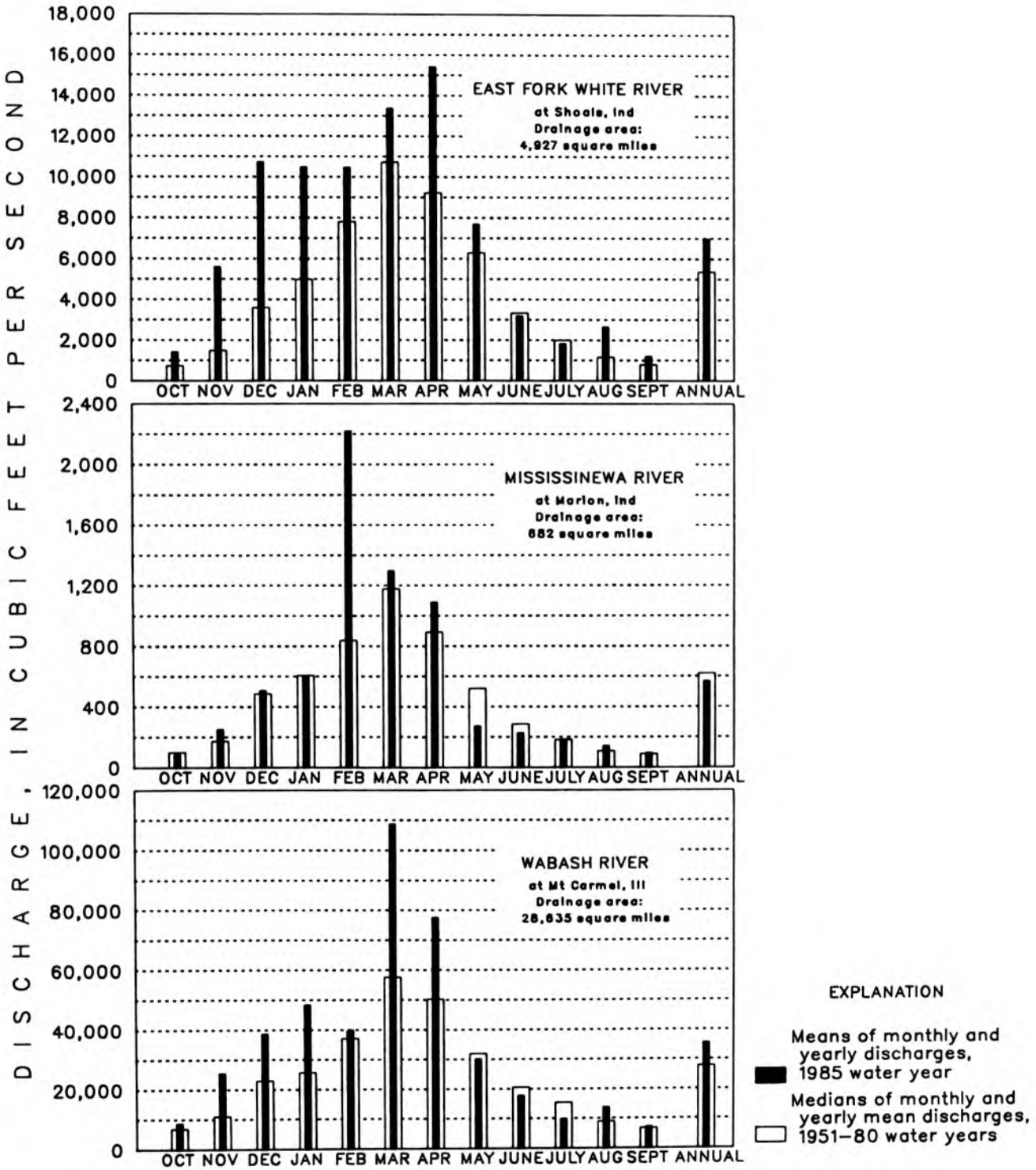


Figure 3. -- Mean discharges at Indiana index stations during 1985 water year and median discharges for period 1951–80.

Indianapolis (03353000), the peak was the highest since 1964 but only the tenth highest peak in the 53 years of record at Anderson. In southern Indiana, flood peaks were generally less than those having a 2-year recurrence interval.

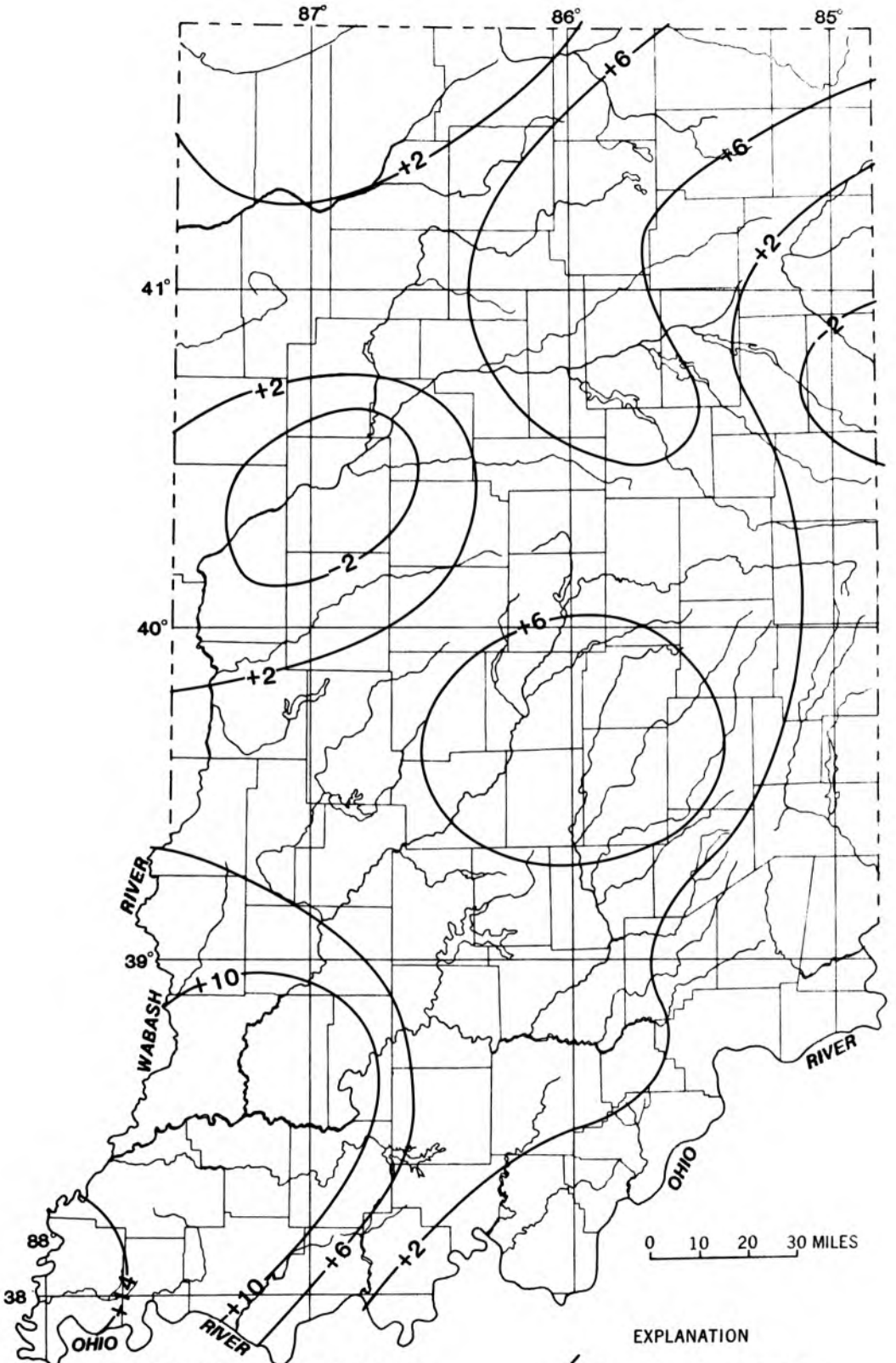
The larger streams were above flood stage at the beginning of March. These streams include the Wabash, White, Kankakee, St. Joseph, and Elkhart Rivers. On March 4, 1985, a new maximum mean daily discharge of 196,000 ft^3/s was recorded on the Wabash River at Mt. Carmel, Ill. (03377500). The previous record was 180,000 ft^3/s set in 1939. By March 20, all streams across the State were below flood stage. New monthly mean discharge records were set on the Wabash River at Mt. Carmel (03377500) and the Kankakee River at Shelby (05518000).

During April, streamflows continued to decline but were still above normal. The highest stages were in the southern third of the State. In May, flooding was confined to bottomlands along the East Fork White and White Rivers. By May 9, all streams were below flood stage and continued to decline throughout the month. This general decline in streamflows continued through June and July. In August, streamflows were near normal in the northern and central parts of the State and above normal in the southern third of the State (fig. 3).

During the 1985 water year, the above-normal streamflows from December 1984 through April 1985 caused most stations on Indiana streams to record normal to above-normal annual discharges (fig. 3). Precipitation for water year 1985 was compared to that for the 30-year period 1951-80 (fig. 1). Departure from normal is shown in figure 4. In general, the precipitation was above normal over most of the State, with the southwestern corner of Indiana having the greatest departure. Inches of runoff for water year 1985 was compared to that for the 30-year period 1951-80 (fig. 2). Departure from normal is shown in figure 5. In general, streamflow was above normal statewide.

Ground-Water Conditions

Ground-water levels were near normal at the beginning of the water year. Throughout the year the water levels generally reflected precipitation patterns. Record water levels were established from February to May 1985 at many wells in northern Indiana. Among these were Allen 6 (records since 1966) and Elkhart 4 (records since 1966). By the end of the water year, ground-water levels generally were higher than they were at the start of the water year.



Data from the National Oceanic and Atmospheric Administration, 1984-85, Climatological data, Indiana: Asheville, N.C., National Climatic Center, v.89, nos 10-12, and v. 90, nos. 1-9.

Figure 4.-- Departure of precipitation from normal in Indiana, October 1984 to September 1985.

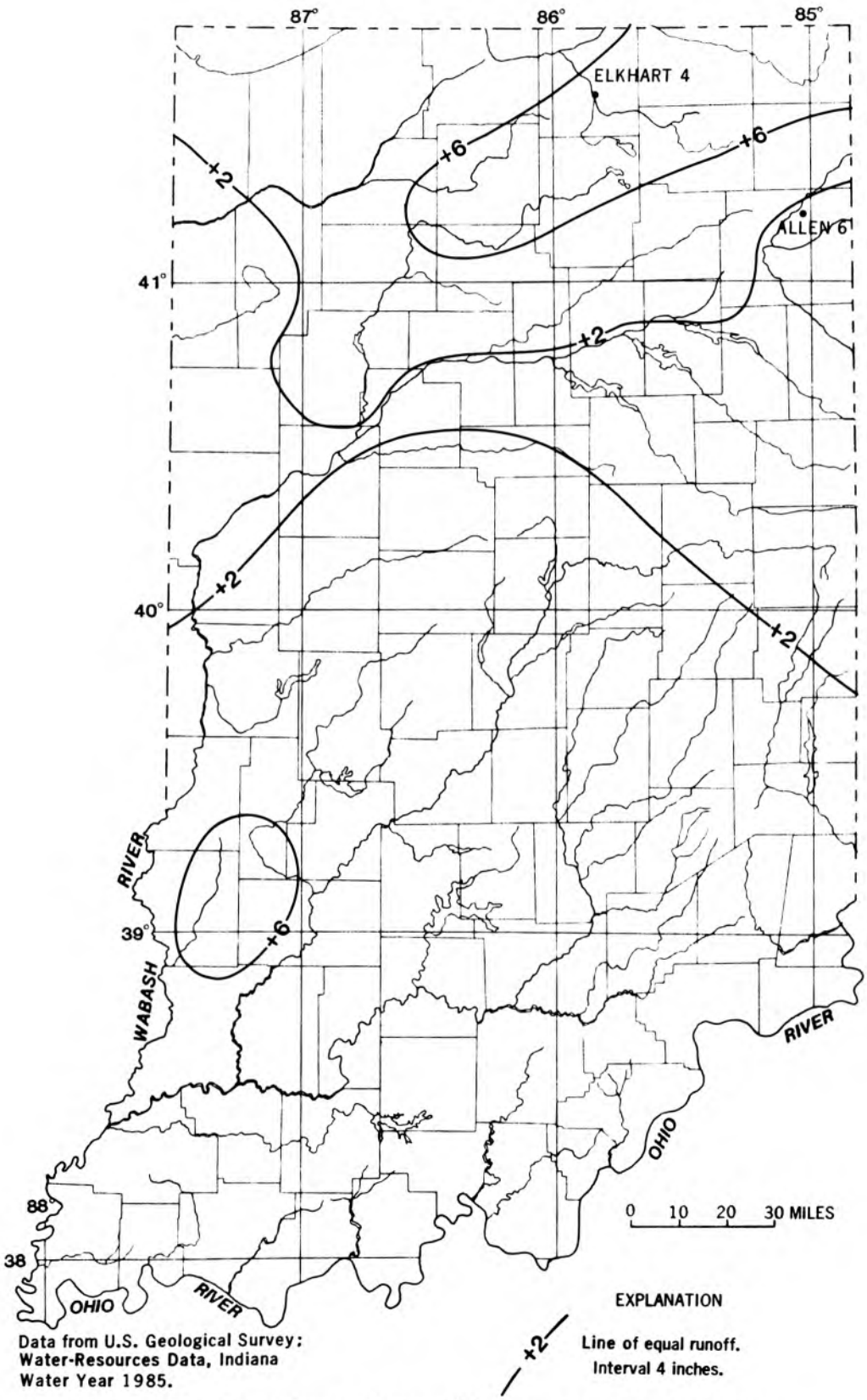


Figure 5.-- Departure of runoff from normal in Indiana, October 1984 to September 1985.

Water-Quality Conditions

A study was recently completed documenting changes in water quality of the White River in and downstream from Indianapolis before and after implementation of advanced wastewater-treatment plants (AWT). Analysis of data from the AWT and downstream from the plants indicated statistically significant decreases in ammonia concentrations, 5-day biochemical oxygen demand, fecal coliform bacteria, total solids, and phosphate. Because of in-plant nitrification, nitrate concentrations increased at statistically significant rates in the plants and in the White River. The decrease in ammonia concentrations and 5-day biochemical oxygen demand in the White River resulted in statistically significant increases in dissolved-oxygen concentration because of reduced oxygen demand for nitrification and biochemical oxidation processes. Following implementation of AWT, the number of times that river-quality samples exceeded the water-quality standards that apply to the White River for fecal coliform bacteria, ammonia, and dissolved oxygen decreased substantially (Wangsness and Crawford, 1986).

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for; (2) describing the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detecting changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1985 water year that began October 1, 1984, and ended September 30, 1985. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for a reservoir, water-quality data for surface water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and for surface-water stations where only miscellaneous measurements are made; the "latitude-longitude" system is used for wells.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries.

The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the 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." The Part number designates the major river basin; for example, Part "03" is the Ohio River basin.

Records in this report are in Part 03 (Ohio River basin), Part 04 (St. Lawrence River basin), and Part 5 (Upper Mississippi River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description.

In addition, each well in Indiana carries dual-identification numbers. The second system is by 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.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record.

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records" or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relations between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the instantaneous stages (gage heights) to the stage-discharge curves or tables and then assigning the arithmetic mean. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the 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.

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 from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages were determined by methods given in "River Mileage Measurement," Bulletin 14, revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at

least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

EXTREMES FOR PERIOD OF RECORD.--Extremes include maximum stages and maximum instantaneous discharges and minimum daily discharge. The maximum discharge is the instantaneous maximum corresponding to the highest stage that occurred. The higher stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because for these stations there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

The daily table for stream-gaging stations gives 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 is usually 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 or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. 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.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15

percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Indiana District Office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the Indiana District Office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records," as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 6.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that

measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey Indiana office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

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

Water Temperature

Water temperatures are measured at most of the water-quality stations. Large streams have a small diurnal temperature change; 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 recording instruments are used, mean, maximum, and minimum temperatures for each day are published.

Table 1.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5 °C)

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

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

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 subdivided-day method

(time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were 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 were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

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

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See "Data Presentation" under "Records of Stage and Water Discharge."

DRAINAGE AREA.--See "Data Presentation" under "Records of Stage and Water Discharge."

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (nonideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Only water-level data from a representative network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the State's most important aquifers. Locations of the observation wells in this network in Indiana are shown in figure 8.

Data Collection and Computation

Measurements of water levels 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 ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the

15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum 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 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 to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments that follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds), a landline location designation, the hydrologic-unit number, the distance and direction from a geographic point of reference, and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to

better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available but are not published by the Geological Survey may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level highs are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

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

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

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

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

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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 that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 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 that produce blue colonies within 24 hours when incubated at 44.5 °C ± 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of 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 ± 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

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

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

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

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

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

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

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloro-platinate 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.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic foot per second-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, about 646,000 gallons, or 2,445 cubic meters.

Cubic feet per second per square mile [$(ft^3/s)/mi^2$] 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.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micron (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.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct 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.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (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 mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) 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.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

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

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

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

Parameter code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/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 a particle 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 the recommendation 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 matter 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.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of micro-organisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second (dpm). A picocurie yields 2.22 dpm.

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 per milliliter (cells/mL) of sample.

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

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

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m^2.time)] for periphyton and macrophytes and [mg C/(m^3.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O/(m^2.time)] for periphyton and macrophytes and [mg O/(m^3.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

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

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

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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).

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total-sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (7 Q_{10}) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

Solute is any substance that is dissolved in water.

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

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff," as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

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

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

Surface area of a lake is that area outlined on the latest U.S. Geological Survey topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-µm filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-µm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

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

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	*Hexagenia*
Species.....	*Hexagenia limbata*

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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

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

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1985, is called the "1985 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

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

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

Table 2.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
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 3.--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 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide 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.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting 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) pertains to 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 Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for 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 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

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. S. 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-A9. *Measurement of time of travel and dispersion in streams by dye tracing,* by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. *Discharge ratings at gaging stations,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 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-A13. *Computation of continuous records of streamflow,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge,* by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels* by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

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 programed text for self-instruction,* by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J. E. Reed: USGS-TWRI Book 3, Chapter B3. 1980. 106 pages.

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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.

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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.

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5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 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.

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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.

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7-C3. *A model for simulation of flow in singular and interconnected channels* by R. W. Schaffrannek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 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

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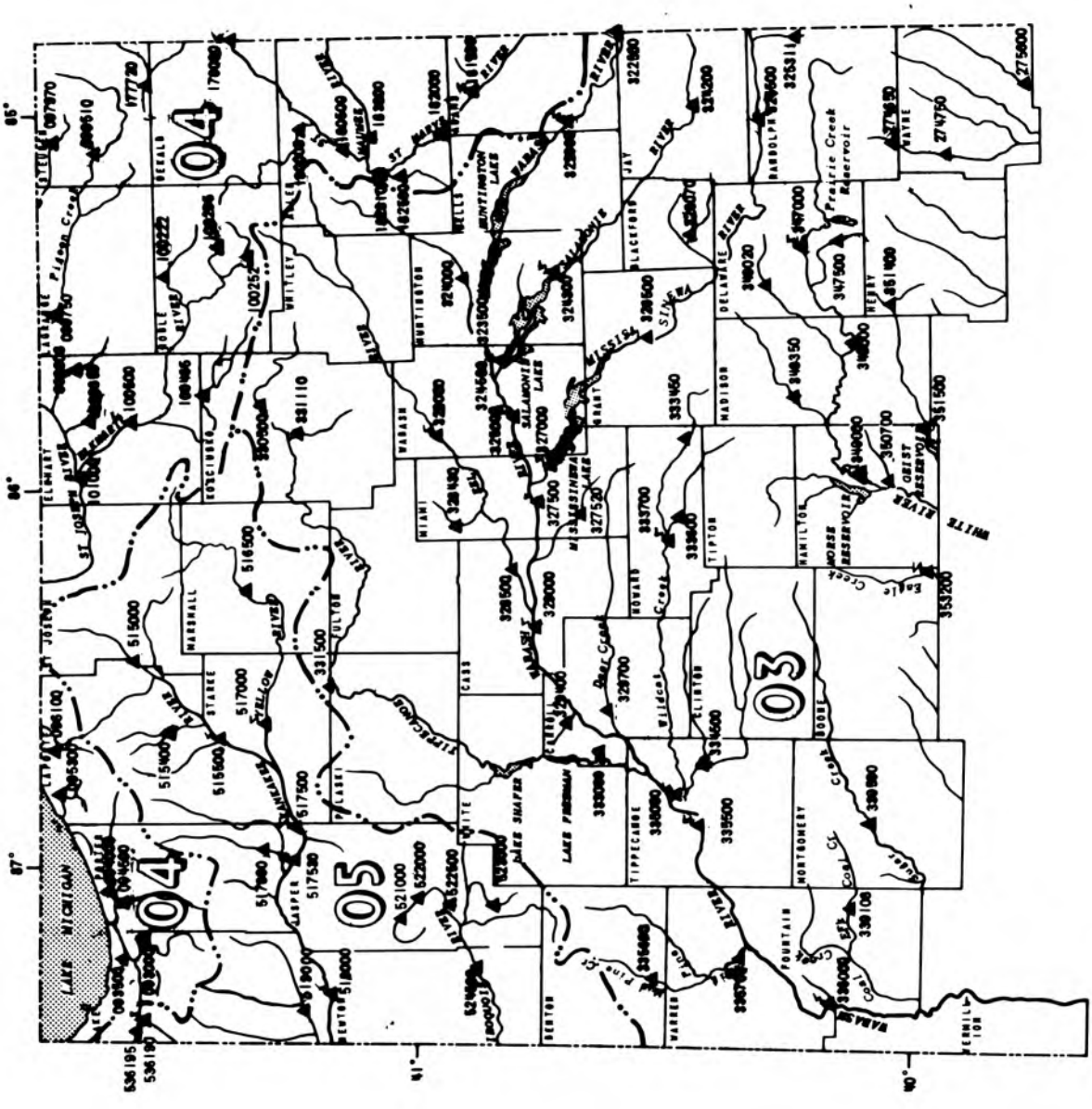
04
05
03
LAKE MICHIGAN
LAKE SHAFER
LAKE FREEMAN
MUNTINGTON LAKE
SALAMONIE LAKE
MISSISSINEWA LAKE
Prairie Creek Reservoir
MORSE RESERVOIR
GEIST RESERVOIR
WHITE RIVER
Eagle Creek
Wildcat Creek
Deer Creek
Pigeon Creek
ST JOSEPH RIVER
TIPPECANOE RIVER
YELLOW RIVER
KANKAKEE RIVER
WABASH RIVER
MISSISSINEWA RIVER
SALAMONIE RIVER
MUNCIE
ELKHART
LAPORTE
PORTER
LAKE
JASPER
NEWTON
BENTON
WARREN
FOUNTAIN
MONTGOMERY
TIPPECANOE
CLINTON
BOONE
HAMILTON
TIPTON
HOWARD
CASS
MIAMI
WABASH
HUNTINGTON
WHITLEY
ALLEN
DEKALB
STEUBEN
LAGRANGE
NOBLE
KOSCIUSKO
MARSHALL
STARKE
PULASKI
FULTON
WELLS
ADAMS
JAY
BLACKFORD
DELAWARE
MADISON
HENRY
RANDOLPH
WAYNE
FAYETTE
UNION
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VERMILLION
Coal Cr
Fork
Pine Cr
Mud
Sugar
Creek
Coal Cr
86°
87°
41°
40°

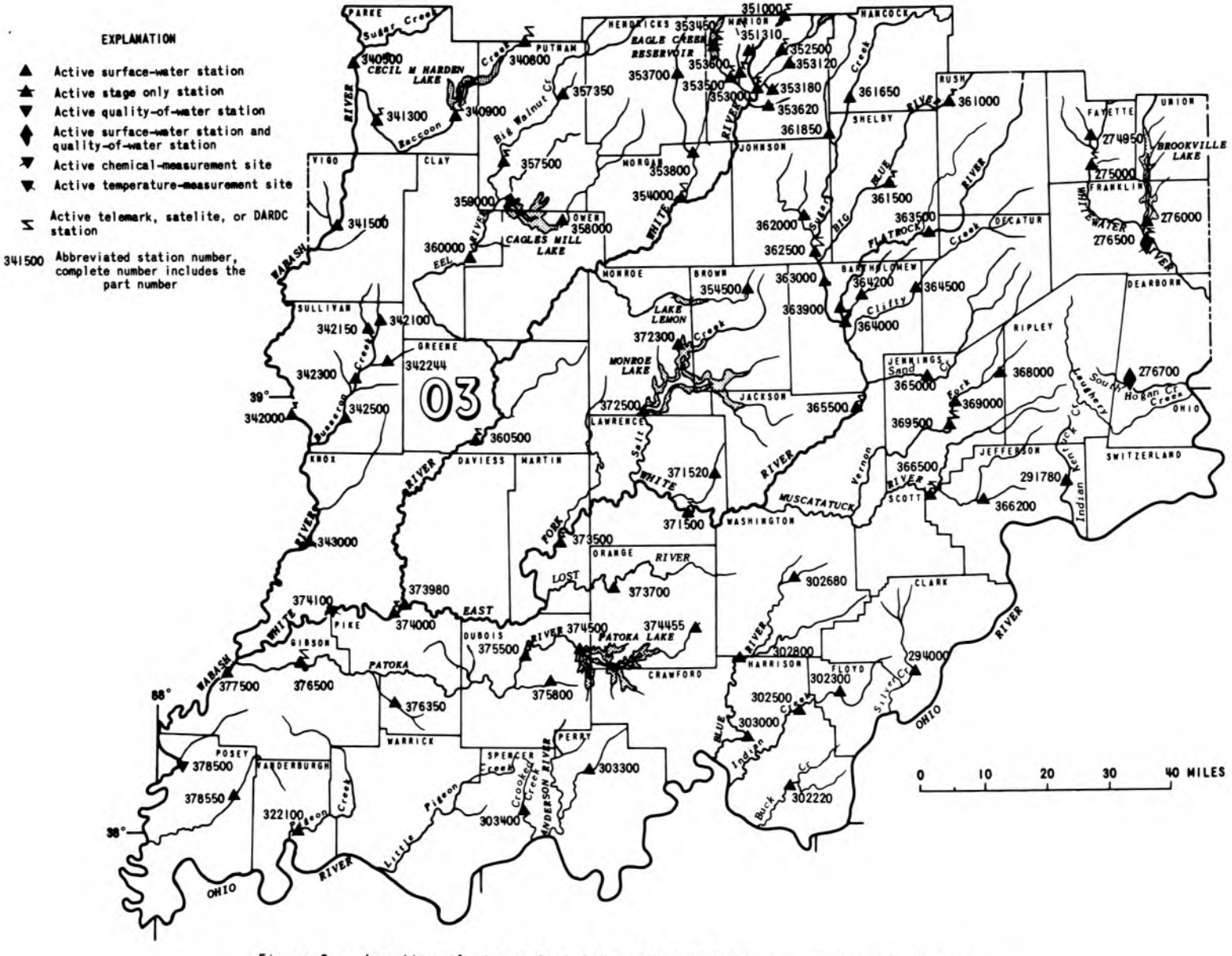


Figure 6.-- Location of stream-flow and water-quality gaging stations in Indiana.

03274650 WHITEWATER 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 downstream from bridge on Wayne County Line Road, 1.7 miles upstream from Little Creek, 2.4 miles northwest of Economy, and at mile 91.9.

DRAINAGE AREA.--10.4 mi^2.

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

REVISED RECORDS.--WRD IN 83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 1,066.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 15-28, Feb. 2-16, and Sept. 3-30. Records good except those for periods of ice effect, Jan. 15-28, Feb. 2-16, and those for period of indefinite stage-discharge relation, Sept. 3-30, which are fair.

AVERAGE DISCHARGE.--15 years, 11.0 ft^3/s, 14.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s Aug. 20, 1979, gage height, 8.85 ft; minimum daily, 0.28 ft^3/s Jan. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Feb. 23	1600	*704	*7.53	Mar. 31	0900	528	6.84

Minimum daily discharge, 0.52 ft^3/s Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	21	9.0	113	2.6	36	105	20	3.1	1.6	1.3	.95
2	.52	29	7.3	48	2.5	28	55	103	3.1	1.8	1.2	.94
3	.54	14	9.2	26	2.3	19	40	57	2.9	1.6	1.1	1.1
4	.58	8.2	7.2	17	2.3	23	28	23	2.7	1.5	1.2	.94
5	.57	5.9	6.2	12	2.4	29	27	12	2.6	1.7	1.2	.92
6	.57	4.3	5.5	10	2.4	13	42	8.3	2.4	1.8	1.2	.88
7	1.6	3.5	4.4	9.3	2.2	18	20	6.7	2.6	1.5	1.2	.85
8	2.6	3.2	4.3	7.7	2.0	97	14	5.6	2.6	1.4	1.1	.86
9	2.0	3.0	4.0	6.6	1.9	35	11	4.9	2.4	1.3	1.0	1.1
10	1.7	3.1	6.8	6.5	1.9	19	9.4	4.6	2.2	1.3	1.0	1.5
11	1.6	33	9.2	6.0	4.0	77	8.6	4.4	10	1.2	1.1	1.0
12	1.5	16	9.6	5.4	25	78	7.7	4.4	45	1.1	1.0	.87
13	1.6	8.7	19	5.3	15	30	7.3	3.8	19	1.2	.98	.79
14	2.1	6.4	80	5.3	10	18	6.9	3.5	7.5	1.2	.98	.78
15	2.5	5.6	36	4.5	8.3	12	6.5	31	5.8	1.6	1.2	.80
16	3.1	4.5	19	4.2	7.2	10	8.8	21	4.8	1.4	1.2	.82
17	2.7	3.8	13	4.5	6.2	8.8	6.9	8.9	4.0	1.3	1.2	.78
18	2.4	3.6	9.6	4.3	5.7	7.9	6.5	6.9	3.6	1.3	1.0	.76
19	2.4	3.5	10	4.0	5.6	7.5	5.9	5.9	2.9	1.3	1.0	.73
20	2.6	3.0	9.2	3.0	5.7	7.1	5.4	4.9	2.6	1.3	1.0	.70
21	3.3	2.6	39	3.2	6.2	6.5	5.0	4.6	2.4	1.3	.98	.68
22	3.3	2.4	51	3.3	239	6.2	4.7	4.1	2.5	1.3	.96	.66
23	3.3	2.4	19	3.3	569	6.2	4.6	3.7	2.3	1.2	.91	.68
24	2.8	2.4	13	3.2	329	6.1	4.5	3.4	2.1	1.2	1.0	.70
25	2.4	2.2	8.7	2.9	140	5.6	4.3	3.2	1.9	1.2	.98	.72
26	2.3	2.2	7.3	2.6	75	5.3	4.0	2.9	1.9	1.3	.96	.72
27	2.2	2.3	7.1	2.7	53	5.5	4.4	3.4	1.7	1.2	.90	.70
28	2.2	38	7.1	2.7	41	5.5	4.1	8.7	1.6	1.2	.89	.64
29	2.0	22	25	2.7	---	7.9	3.5	4.7	1.5	1.1	.96	.61
30	1.9	14	124	2.7	---	92	3.3	4.0	1.4	1.1	1.3	.64
31	1.8	---	50	2.7	---	309	---	3.7	---	1.4	.98	---
TOTAL	61.20	273.8	629.7	334.6	1567.4	1029.1	464.3	386.2	151.1	41.9	32.98	24.82
MEAN	1.97	9.13	20.3	10.8	56.0	33.2	15.5	12.5	5.04	1.35	1.06	.83
MAX	3.3	38	124	113	569	309	105	103	45	1.8	1.3	1.5
MIN	.52	2.2	4.0	2.6	1.9	5.3	3.3	2.9	1.4	1.1	.89	.61
CFSM	.19	.88	1.95	1.04	5.38	3.19	1.49	1.20	.48	.13	.10	.08
IN.	.22	.98	2.25	1.20	5.61	3.68	1.66	1.38	.54	.15	.12	.09

CAL YR 1984	TOTAL	3999.65	MEAN	10.9	MAX	249	MIN	.50	CFSM	1.05	IN.	14.31
WTR YR 1985	TOTAL	4997.10	MEAN	13.7	MAX	569	MIN	.52	CFSM	1.32	IN.	17.87

03274750 WHITEWATER RIVER NEAR HAGERSTOWN, IN

LOCATION.--Lat 39°52'25", long 85°09'47", in NE¼NE¼ 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 upstream from Pronghorn Run, 1.5 miles north of Interstate 70, 2.0 miles downstream from Nettle Creek, 2.6 miles south of Hagerstown, and at mile 84.9.

DRAINAGE AREA.--58.7 mi^2.

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

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

REMARKS.--Estimated daily discharges: Feb. 14-16. Records good.

AVERAGE DISCHARGE.--15 years, 68.1 ft^3/s, 15.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft^3/s Jan. 26, 1976, gage height, 10.89 ft; maximum gage height, 11.24 ft Aug. 1, 1979; minimum daily discharge, 5.3 ft^3/s Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Feb. 23	0900	1700	9.83	Mar. 31	1200	*1800	*10.10

Minimum daily discharge, 12 ft^3/s Sept. 21, 22, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	132	54	441	33	132	344	148	40	31	28	16
2	18	185	47	213	32	119	209	464	40	31	22	15
3	17	69	52	130	29	103	167	186	40	27	20	16
4	16	55	45	105	29	110	142	109	39	25	22	15
5	16	47	41	86	30	136	149	86	38	25	22	15
6	16	43	39	76	29	93	196	76	38	24	21	15
7	32	40	34	72	27	93	130	68	41	25	21	14
8	57	37	34	65	26	343	113	62	38	24	21	14
9	35	35	32	57	24	147	103	60	36	23	19	14
10	29	35	40	56	24	107	97	57	33	22	18	22
11	25	77	49	53	35	232	92	55	63	22	18	16
12	24	68	49	49	96	246	85	54	103	21	18	15
13	21	49	126	48	50	133	81	52	68	23	17	14
14	26	42	329	48	48	107	78	50	51	22	17	13
15	30	40	145	45	45	91	76	115	47	25	26	13
16	37	36	100	42	43	82	80	82	44	21	28	14
17	30	33	81	45	41	76	71	65	42	20	21	13
18	27	33	68	44	39	70	68	60	40	20	19	13
19	26	32	67	42	38	67	66	55	38	19	18	13
20	28	30	65	34	38	63	63	51	38	19	18	13
21	34	28	98	36	41	60	61	51	34	25	17	12
22	33	26	284	36	731	59	60	48	37	24	17	12
23	30	26	106	36	1640	58	59	47	33	20	16	14
24	28	25	83	37	911	58	58	44	32	19	17	16
25	27	24	67	37	377	54	56	43	31	18	17	14
26	26	24	58	33	233	51	54	42	30	37	16	14
27	24	26	56	35	181	51	60	43	29	22	16	13
28	25	152	55	35	146	51	56	53	28	19	15	13
29	24	97	72	35	---	107	52	45	27	18	15	12
30	23	69	564	35	---	466	50	43	26	18	25	14
31	22	---	191	35	---	1170	---	46	---	47	17	---
TOTAL	824	1615	3131	2141	5016	4735	2976	2460	1224	736	602	427
MEAN	26.6	53.8	101	69.1	179	153	99.2	79.4	40.8	23.7	19.4	14.2
MAX	57	185	564	441	1640	1170	344	464	103	47	28	22
MIN	16	24	32	33	24	51	50	42	26	18	15	12
CFSM	.45	.92	1.72	1.18	3.05	2.61	1.69	1.35	.70	.40	.33	.24
IN.	.52	1.02	1.98	1.36	3.18	3.00	1.89	1.56	.78	.47	.38	.27

CAL YR 1984	TOTAL	24129	MEAN	65.9	MAX	947	MIN	11	CFSM	1.12	IN.	15.29
WTR YR 1985	TOTAL	25887	MEAN	70.9	MAX	1640	MIN	12	CFSM	1.21	IN.	16.41

03274950 LITTLE WILLIAMS CREEK AT CONNERSVILLE, IN

LOCATION.--Lat 39°38'16", long 85°10'20", in SW¼NE¼ sec.27, T.14 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on downstream left bank wingwall of bridge on State Highway 44, 1 mile west of Connersville, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--9.16 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 842.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 8 thru Feb. 22. Records fair. Peak flows affected by ponding at abandoned railroad culvert 0.5 mile upstream.

AVERAGE DISCHARGE.--17 years, 10.3 ft^3/s, 15.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,560 ft^3/s June 22, 1974, gage height, 10.13 ft; minimum daily, 0.25 ft^3/s Sept. 10, 11, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	1700	*596	*5.50	Mar. 31	0600	458	5.09

Minimum daily discharge, 0.98 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	17	6.6	96	5.2	19	54	19	6.6	5.8	4.5	1.6
2	1.1	17	5.5	31	5.0	17	40	152	7.3	8.3	2.6	1.5
3	1.1	7.4	6.7	18	4.5	15	33	39	8.0	6.8	2.3	1.5
4	.99	8.1	5.1	16	4.5	22	29	23	6.8	4.0	2.2	1.6
5	1.1	6.6	4.7	12	4.7	26	43	16	6.7	9.6	2.3	1.5
6	1.1	5.0	4.4	11	5.0	17	42	13	6.3	4.1	2.2	1.4
7	5.1	4.2	4.2	10	4.7	20	31	11	9.3	3.2	17	1.4
8	5.0	3.8	4.2	9.0	4.3	54	25	10	7.0	2.9	3.5	1.5
9	2.4	3.7	4.1	8.2	4.0	30	20	9.6	6.0	2.6	2.6	1.7
10	2.0	6.3	11	8.2	4.0	23	17	9.4	5.8	2.5	2.4	1.6
11	1.7	6.8	10	8.0	6.0	55	15	8.9	8.4	2.4	2.3	1.5
12	1.6	5.4	8.4	7.8	20	96	14	9.4	9.3	2.4	2.2	1.4
13	1.6	4.5	17	7.2	14	29	13	7.7	11	2.5	2.1	1.4
14	1.8	4.2	41	7.0	10	24	13	7.9	8.1	2.5	2.0	1.3
15	1.7	4.3	17	6.7	8.7	18	12	64	7.3	3.0	30	1.3
16	1.9	3.8	14	6.5	7.8	16	12	25	6.2	2.3	15	1.2
17	1.6	3.7	10	7.0	6.8	14	10	30	5.9	2.2	4.8	1.2
18	1.5	4.0	8.3	7.0	6.4	11	9.6	17	5.5	2.2	3.6	1.1
19	1.5	4.4	8.8	6.5	6.0	11	9.4	14	4.9	2.1	2.8	1.0
20	2.0	4.2	7.5	5.0	5.8	10	9.4	11	4.5	2.1	2.5	1.0
21	4.3	3.8	69	6.0	9.6	9.9	9.1	12	4.3	3.8	2.1	1.0
22	2.9	3.7	42	6.2	300	10	8.6	10	5.3	2.7	1.9	1.2
23	2.5	3.7	18	6.2	169	10	8.1	9.6	4.1	2.1	1.8	1.6
24	2.2	3.6	14	6.2	75	10	7.9	8.7	5.2	2.1	2.2	2.1
25	2.2	3.4	10	6.3	43	8.9	6.9	7.9	4.0	2.0	2.3	1.4
26	2.2	3.4	9.3	5.7	33	8.2	6.0	6.9	3.7	7.0	2.0	1.2
27	2.1	3.9	9.3	5.4	27	8.2	10	8.2	3.6	2.5	1.8	1.1
28	7.2	37	8.7	5.4	21	8.1	7.8	10	3.3	2.2	1.6	1.1
29	7.9	14	32	5.4	---	15	5.1	8.2	2.9	2.1	1.6	.98
30	4.0	9.3	165	5.1	---	114	4.5	7.6	2.8	2.0	2.0	1.0
31	3.0	---	40	5.2	---	203	---	7.1	---	16	1.7	---
TOTAL	78.39	210.2	615.8	351.2	815.0	932.3	525.4	593.1	180.1	118.0	129.9	40.38
MEAN	2.53	7.01	19.9	11.3	29.1	30.1	17.5	19.1	6.00	3.81	4.19	1.35
MAX	7.9	37	165	96	300	203	54	152	11	16	30	2.1
MIN	.99	3.4	4.1	5.0	4.0	8.1	4.5	6.9	2.8	2.0	1.6	.98
CFSM	.28	.77	2.17	1.23	3.18	3.29	1.91	2.09	.66	.42	.46	.15
IN.	.32	.85	2.50	1.43	3.31	3.79	2.13	2.41	.73	.48	.53	.16

CAL YR 1984	TOTAL	3632.19	MEAN	9.92	MAX	165	MIN	.70	CFSM	1.08	IN.	14.75
WTR YR 1985	TOTAL	4589.77	MEAN	12.6	MAX	300	MIN	.98	CFSM	1.38	IN.	18.64

03275000 WHITEWATER RIVER NEAR ALPINE, IN

LOCATION.--Lat 39°34'46", long 85°09'29", in SW¼SE¼ sec.14, T.13 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on right bank at Nulltown, 400 ft upstream from Wilson Creek, 0.4 mile upstream from bridge on County Road 480 South, 2.0 miles northeast of Alpine, 5.1 miles upstream from Bear Creek, and at mile 54.8.

DRAINAGE AREA.--522 mi^2.

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. WDR IN-79-1: 1975 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 750.19 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 9, 1928, nonrecording gage and Nov. 10, 1928, to Sept. 30, 1982, at site 0.5 mile downstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 22, Dec. 4-7, 9, 22, Jan. 19-22, and Feb. 2-4, 7, 8, 15-21. Records good.

AVERAGE DISCHARGE.--57 years, 554 ft^3/s, 14.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft^3/s Jan. 14, 1937, gage height, 16.61 ft; minimum daily, 6.0 ft^3/s Sept. 8, 9, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	1000	*14,300	a*17.27	Apr. 1	0300	10,900	16.00

a--from high water mark.

Minimum daily discharge, 88 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	328	604	4080	304	1300	6560	628	361	289	488	132
2	129	1550	501	3450	280	1190	2590	4500	338	381	271	127
3	126	1090	473	1760	250	1060	1900	2960	343	352	215	126
4	119	772	450	1260	270	1060	1580	1500	323	261	192	124
5	116	649	375	991	276	1230	1530	1090	312	362	189	122
6	112	516	345	822	288	1030	2060	883	302	283	191	125
7	153	426	320	744	270	945	1500	749	432	236	261	123
8	266	376	291	612	250	2490	1250	661	355	224	217	123
9	290	354	280	559	226	1840	1110	602	313	208	188	126
10	233	368	375	535	261	1280	1010	561	291	195	173	129
11	201	387	447	508	324	1650	961	533	306	186	168	124
12	183	634	470	468	1010	3120	895	531	617	183	165	109
13	172	497	760	473	844	1590	847	492	619	186	164	103
14	169	410	2510	468	596	1200	818	472	520	192	158	96
15	170	375	2200	421	460	997	798	917	432	196	178	95
16	183	341	1330	402	430	877	790	788	405	190	486	97
17	201	306	1000	430	390	799	740	771	366	175	255	96
18	195	302	767	421	380	725	709	627	345	168	205	95
19	183	303	684	400	380	685	678	556	321	164	185	93
20	178	276	654	350	380	645	651	510	303	163	170	91
21	215	274	1130	365	410	599	624	492	286	321	155	89
22	271	264	2720	370	4040	580	603	456	311	394	148	88
23	269	254	1460	354	10200	576	581	429	308	224	143	89
24	242	249	1000	354	11500	567	560	408	339	190	147	98
25	228	243	758	345	4720	537	551	385	295	174	144	97
26	215	241	634	333	2620	500	535	367	264	289	142	96
27	200	246	585	328	1900	498	568	367	248	235	139	95
28	266	850	561	316	1480	499	668	429	235	186	135	95
29	325	1260	648	296	---	651	562	387	224	168	132	95
30	257	795	5480	288	---	3630	523	364	217	161	139	97
31	229	---	3220	304	---	8780	---	357	---	611	142	---
TOTAL	6231	14936	33032	22807	44739	43130	34752	24772	10331	7547	6085	3195
MEAN	201	498	1066	736	1598	1391	1158	799	344	243	196	107
MAX	325	1550	5480	4080	11500	8780	6560	4500	619	611	488	132
MIN	112	241	280	288	226	498	523	357	217	161	132	88
CFSM	.38	.94	2.02	1.39	3.02	2.63	2.19	1.51	.65	.46	.37	.20
IN.	.44	1.05	2.32	1.60	3.15	3.03	2.44	1.74	.73	.53	.43	.22

CAL YR 1984	TOTAL	223526	MEAN	611	MAX	6290	MIN	88	CFSM	1.16	IN.	15.72
WTR YR 1985	TOTAL	251557	MEAN	689	MAX	11500	MIN	88	CFSM	1.30	IN.	17.69

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., Wayne County, Hydrologic Unit 05080003, at downstream side of center pier of bridge on county road at Abington, 3 miles downstream from Elkhorn Creek, 8 miles southwest of Richmond, and at mile 26.7.

DRAINAGE AREA.--200 mi^2.

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6,7, Jan. 21-23, and Feb. 3, 4, 8, 9. Records Good.

AVERAGE DISCHARGE.--20 years, 231 ft^3/s, 15.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft^3/s July 20, 1969, gage height, 16.18 ft; minimum daily, 14 ft^3/s Sept. 11, 15, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	0900	3380	9.72	Mar. 31	1200	4330	10.88
Feb. 23	0300	*4580	*11.15				

Minimum daily discharge, 25 ft^3/s Sept. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	291	228	1880	98	412	1310	276	101	83	216	39
2	47	645	184	1120	93	388	754	1750	104	175	98	37
3	46	313	195	610	91	347	566	939	101	112	72	36
4	43	310	166	458	92	383	482	486	96	81	61	35
5	42	295	148	348	99	478	488	357	93	84	60	33
6	41	207	135	289	97	364	599	296	90	89	59	34
7	136	166	120	266	92	357	446	249	120	71	66	33
8	233	143	131	232	86	1130	389	216	132	63	66	31
9	126	135	125	197	85	648	350	191	105	56	54	31
10	90	166	202	194	90	457	321	176	91	53	50	31
11	75	229	272	186	165	805	305	168	148	50	48	30
12	68	235	239	164	553	1200	278	170	389	47	46	29
13	63	179	574	159	321	595	260	155	249	48	45	28
14	70	151	1510	164	252	464	251	143	174	48	44	28
15	99	142	808	151	219	394	243	437	150	146	159	27
16	108	128	495	148	200	353	247	402	145	68	198	27
17	85	114	353	148	180	332	207	299	122	50	81	28
18	74	122	268	145	165	303	196	245	113	44	63	27
19	68	130	258	133	167	283	189	233	100	41	57	26
20	78	116	236	105	169	270	178	199	100	40	53	27
21	113	108	652	122	198	251	168	198	87	95	48	25
22	104	101	1390	125	2300	248	161	167	108	115	45	25
23	92	100	564	128	4250	261	153	151	94	62	42	25
24	84	98	381	126	2240	264	150	135	83	48	50	35
25	82	94	270	120	1140	243	148	125	76	43	52	29
26	81	93	219	113	741	222	140	117	71	112	46	29
27	77	93	208	117	569	222	175	117	65	72	44	29
28	190	792	203	109	454	222	149	162	60	49	41	28
29	300	566	383	104	---	500	132	122	57	42	40	27
30	181	322	2520	101	---	2460	123	109	55	40	60	27
31	138	---	1020	103	---	3520	---	117	---	331	45	---
TOTAL	3082	6584	14457	8365	15206	18376	9558	8907	3479	2458	2109	896
MEAN	99.4	219	466	270	543	593	319	287	116	79.3	68.0	29.9
MAX	300	792	2520	1880	4250	3520	1310	1750	389	331	216	39
MIN	41	93	120	101	85	222	123	109	55	40	40	25
CFSM	.50	1.09	2.33	1.35	2.71	2.96	1.59	1.43	.58	.40	.34	.15
IN.	.57	1.22	2.69	1.56	2.83	3.42	1.78	1.66	.65	.46	.39	.17

CAL YR 1984	TOTAL	86809	MEAN	237	MAX	2610	MIN	30	CFSM	1.18	IN.	16.15
WTR YR 1985	TOTAL	93477	MEAN	256	MAX	4250	MIN	25	CFSM	1.28	IN.	17.39

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 upstream from bridge on State Highway 101, at Brookville, 0.4 mile downstream from Brookville Lake, and 1.8 miles upstream from mouth.

DRAINAGE AREA.--380 mi^2.

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

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

GAGE.--None. Datum of gage was 621.76 ft above National Geodetic Vertical Datum of 1929. Prior to May 22, 1954, nonrecording gage at site 100 ft downstream at datum 2.00 ft higher. May 22, 1954 to Aug. 20, 1965, water-stage recorder at site 165 ft downstream at datum 2.00 ft higher. Aug. 21, 1965 to Sept. 30, 1981, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Brookville Lake since January 1974.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--31 years, 400 ft^3/s, 14.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,100 ft^3/s Jan. 21, 1959: maximum gage height, 17.35 ft May 24, 1968; no flow, July 27, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,600 ft^3/s May 7; minimum daily, 42 ft^3/s Oct. 3-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	1010	991	1490	371	2530	967	57	97	57	294	57
2	46	1280	789	1500	371	2520	1510	405	97	277	494	57
3	42	1510	480	2140	370	2510	806	1150	97	387	493	57
4	42	1510	480	2520	370	2510	382	1540	158	387	346	57
5	42	1190	416	2510	370	2500	382	869	201	263	259	57
6	42	1010	370	2510	370	2110	383	1680	100	201	133	57
7	42	1010	370	2500	370	1150	383	2600	206	201	57	57
8	278	1000	370	1280	370	992	383	1240	388	200	57	57
9	386	1000	370	480	251	993	384	494	388	147	57	57
10	386	1000	370	480	191	993	384	494	717	57	57	57
11	386	1000	440	480	191	1580	384	494	675	57	57	57
12	262	1000	481	398	304	2010	384	493	552	57	57	57
13	200	1000	481	370	435	2010	383	493	842	57	57	57
14	200	1000	801	370	481	2010	383	493	683	57	57	57
15	342	999	995	370	481	1500	204	830	387	57	57	57
16	490	998	990	370	481	799	97	717	387	57	57	57
17	490	996	1190	370	481	480	97	493	387	57	57	57
18	490	995	1480	370	481	480	97	492	270	57	57	57
19	490	994	1470	370	481	480	97	492	200	57	57	57
20	490	736	852	370	481	330	97	346	200	57	57	57
21	490	482	480	370	481	55	97	259	200	57	57	57
22	490	481	482	225	781	55	97	259	200	147	57	57
23	846	481	804	138	1620	55	97	259	200	201	57	57
24	1020	481	1320	138	2040	55	97	318	201	201	57	57
25	1020	481	1480	138	2040	55	72	387	396	105	57	57
26	1020	480	1480	138	2330	55	57	387	298	153	57	57
27	1020	480	1230	138	2540	55	57	387	200	201	57	50
28	1010	758	991	171	2530	55	105	1790	200	201	57	57
29	1320	992	990	191	---	55	57	1950	200	160	57	57
30	1300	992	610	191	---	55	57	218	105	72	57	57
31	758	---	1130	266	---	56	---	97	---	57	57	---
TOTAL	15488	27346	25183	23352	22063	31093	8980	22183	9232	4302	3444	1703
MEAN	500	912	812	753	788	1003	299	716	308	139	111	56.8
MAX	1320	1510	1480	2520	2540	2530	1510	2600	842	387	494	57
MIN	42	480	370	138	191	55	57	57	97	57	57	50

CAL YR 1984	TOTAL	183923	MEAN	503	MAX	3940	MIN	35
WTR YR 1985	TOTAL	194369	MEAN	533	MAX	2600	MIN	42

03276500 WHITEWATER 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 downstream from East Fork Whitewater River, 1.1 miles south of Brookville, and at mile 29.3.

DRAINAGE AREA.--1,224 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges during water year. Records good. Flow regulated by Brookville Lake since January 1974.

AVERAGE DISCHARGE.--64 years (water years 1916-17, 1924 to current year), 1,276 ft^3/s, 14.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,800 ft^3/s Jan. 21, 1959, gage height, 27.78 ft, from rating curve extended above 45,000 ft^3/s on basis of contracted-opening measurement of peak flow; minimum daily, 60 ft^3/s July 27, 1934.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,200 ft^3/s Feb. 23, gage height, 12.20 ft; minimum daily, 137 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	2460	1790	8160	682	3670	9990	688	561	341	958	236
2	216	3680	1480	6410	664	3520	4940	9280	556	606	879	227
3	202	2770	1180	4260	623	3370	3320	5640	572	667	783	222
4	192	2700	1120	3870	604	3400	2550	3600	630	575	553	220
5	187	2360	973	3470	656	4150	2570	2470	636	491	402	216
6	195	1770	842	3250	650	3280	3800	2650	588	535	354	212
7	236	1590	757	3120	626	2410	2830	3220	1320	440	646	209
8	730	1490	766	2340	605	3700	2550	2230	1100	415	486	205
9	640	1470	751	1490	544	3560	2230	1370	798	382	340	205
10	573	2260	1770	1410	530	2830	2030	1260	957	314	300	198
11	516	2020	1610	1290	693	4490	1920	1210	930	304	283	189
12	442	1800	1470	1050	3150	7030	1790	1180	924	298	274	159
13	364	1670	1630	1000	2020	4370	1700	1170	1300	429	262	158
14	351	1530	3980	1020	1740	3700	1640	1230	1310	512	258	159
15	483	1450	3650	930	1500	2930	1360	2160	830	344	265	156
16	683	1390	2610	891	1410	2330	1130	1950	795	314	479	152
17	693	1340	2360	905	1400	1930	1080	1770	727	293	396	147
18	696	1330	2370	893	1320	1790	992	1530	663	281	318	146
19	681	1350	2270	854	1350	1710	947	1360	570	271	291	144
20	667	1230	1810	659	1420	1480	900	1080	532	265	274	142
21	698	909	4000	575	1840	1050	855	877	505	266	262	138
22	750	870	5080	648	9700	992	818	846	494	518	253	137
23	1010	851	2860	671	15500	987	787	811	504	436	248	143
24	1150	834	2590	685	15600	980	760	799	522	374	352	144
25	1130	817	2440	684	8910	948	736	799	723	317	355	145
26	1120	801	2220	619	5340	947	692	760	639	369	277	149
27	1110	805	1980	613	4550	837	684	739	435	457	254	145
28	1130	3280	1710	624	3960	832	895	1000	440	386	245	141
29	1160	2630	1490	618	---	963	770	1020	420	328	237	140
30	1190	2070	9330	607	---	9410	680	691	372	278	242	146
31	1190	---	5650	643	---	11700	---	571	---	462	243	---
TOTAL	20620	51527	74539	54259	87587	95296	57946	55961	21353	12268	11769	5130
MEAN	665	1718	2404	1750	3128	3074	1932	1805	712	396	380	171
MAX	1190	3680	9330	8160	15600	11700	9990	9280	1320	667	958	236
MIN	187	801	751	575	530	832	680	571	372	265	237	137
CFSM	.54	1.40	1.96	1.43	2.56	2.51	1.58	1.47	.58	.32	.31	.14
IN.	.63	1.57	2.27	1.65	2.66	2.90	1.76	1.70	.65	.37	.36	.16

CAL YR 1984	TOTAL	482412	MEAN	1318	MAX	11000	MIN	157	CFSM	1.08	IN.	14.66
WTR YR 1985	TOTAL	548255	MEAN	1502	MAX	15600	MIN	137	CFSM	1.23	IN.	16.66

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1981.
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1981.
SEDIMENT DISCHARGE: October 1974 to current year (Partial-record station).

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 630 microsiemens Feb. 9, 19, 1980, July 27, 1981; minimum, 95 microsiemens Nov. 25, 1978.
WATER TEMPERATURE: Maximum, 28.0 °C July 31, Aug. 21, 1975; minimum, 0.0 °C on many days during 1976-77 winter periods, Feb. 8, 1979, Jan. 9-11, Feb 4, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM, DIS-SOLVED (MG/L AS CA)
DEC												
11...	1715	1600	460	7.40	9.0	5.5	8.5	12.7	745	6000	K2100	61
MAR												
25...	1330	881	600	7.60	10.0	9.5	1.0	--	773	880	320	78
JUN												
18...	1500	631	552	8.20	22.0	21.0	2.5	10.9	753	--	--	69
SEP												
16...	1530	136	602	8.30	27.5	19.5	7.5	11.5	787	4200	410	72

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L-CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
DEC												
11...	23	9.3	2.5	178	217	.000	184	39	20	.20	4.6	328
MAR												
25...	28	7.5	1.6	239	292	.000	238	40	17	.20	5.6	319
JUN												
18...	27	8.8	2.1	248	302	.000	248	39	21	.20	4.4	346
SEP												
16...	29	14	2.3	228	279	.000	222	43	25	.20	3.6	319

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM, DIS-SOLVED (UG/L AS CD)
DEC												
11...	2.8	.060	.50	.080	--	.020	.020	<10	1	58	<.5	<1
MAR												
25...	4.1	.040	.50	.030	--	.040	<.010	<10	1	70	<.5	<1
JUN												
18...	4.0	.040	.30	.040	.12	.020	.030	10	<1	69	2.4	2
SEP												
16...	2.4	.110	.40	.070	.21	.050	<.010	10	<1	76	1.5	<1

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)
DEC											
11...	6	<3	1	20	1	4	25	3.1	<10	<1	<1
MAR											
25...	<1	<3	3	13	<1	9	7	.1	<10	<1	<1
JUN											
18...	<1	<3	3	7	2	5	8	.3	<10	<1	<1
SEP											
16...	<1	<3	4	14	4	6	10	.3	<10	<1	<1

DATE	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC						
11...	230	<6	5	33	143	87
MAR						
25...	300	<6	7	19	45	85
JUN						
18...	270	<6	7	54	92	80
SEP						
16...	260	<6	5	33	12	87

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 north-east of Dillsboro, and 1.5 miles downstream from Whitaker Creek.

DRAINAGE AREA.--38.1 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 571.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6, 7, 27-29, Jan. 11 to Feb. 20. Records good except those below 1 ft^3/s, which are poor.

AVERAGE DISCHARGE.--24 years, 43.1 ft^3/s, 15.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s Apr. 29, 1970, maximum gage height, 12.7 ft, from floodmarks Apr. 29, 1970 and from crest-stage gage June 10, 1981; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 14.00 ft, discharge, 16,300 ft^3/s on basis of contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 8	0100	2,620	6.54[a]	Mar. 30	1545	2,720	6.65
Mar. 29	2400	*4,240	*8.10				

Minimum daily discharge. 0.03 Sept. 13, 14, 29, 30.

[a] Obtained from crest-stage gage

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	243	39	368	10	29	117	6.8	2.4	.54	2.7	.95
2	.86	226	30	244	9.8	27	68	93	10	3.1	2.5	.71
3	.68	43	28	88	9.4	22	50	62	30	3.6	1.4	.40
4	.69	128	28	69	9.0	55	42	27	119	1.6	.81	.24
5	.60	91	24	70	8.8	150	60	18	56	.86	1.2	.18
6	.57	36	23	67	9.0	50	111	14	30	.59	.85	.25
7	.90	23	21	66	9.2	38	84	9.8	20	.40	.52	.21
8	52	17	22	56	9.2	83	89	7.6	17	.29	.35	.11
9	20	28	23	44	9.0	73	57	5.4	12	.22	.30	.10
10	6.7	370	382	35	9.4	46	45	4.1	7.8	.27	.36	.07
11	3.0	265	121	26	120	487	44	3.6	11	.25	.30	.07
12	2.3	83	68	24	475	274	39	40	66	1.1	.26	.04
13	1.9	44	118	22	143	84	34	28	41	1.2	.22	.03
14	1.7	30	250	20	97	57	31	27	20	1.1	.14	.03
15	1.4	25	101	18	74	40	29	96	14	1.3	.28	.14
16	.89	23	64	20	60	31	28	53	11	1.1	3.6	.40
17	1.0	17	47	16	49	27	23	41	10	.60	5.9	.44
18	1.5	15	36	16	46	23	20	27	8.9	.33	1.8	.39
19	1.5	52	35	15	66	20	18	17	4.8	.19	.89	.42
20	1.4	85	58	10	120	18	15	11	2.7	.13	.55	.42
21	3.2	36	1050	11	292	16	13	8.4	1.9	.11	.41	.47
22	44	25	536	12	1150	15	11	8.0	1.8	.10	.28	.32
23	47	21	102	12	474	15	9.8	8.0	6.1	.08	.19	.13
24	19	19	66	11	158	36	9.2	7.6	4.1	.05	.57	.12
25	16	17	48	10	86	38	8.9	5.4	7.6	.04	36	.07
26	43	15	35	10	57	27	6.9	3.5	2.6	17	7.8	.06
27	28	30	31	9.6	42	24	6.6	2.4	1.6	14	2.3	.05
28	20	784	28	9.4	31	21	6.1	6.2	1.1	3.0	1.4	.04
29	82	102	27	9.8	---	356	5.3	8.2	.72	1.3	.65	.03
30	29	57	813	10	---	1900	4.0	4.6	.51	.66	1.0	.03
31	15	---	212	10	---	510	---	3.3	---	.75	.96	---
TOTAL	446.79	2950	4466	1408.8	3632.8	4592	1084.8	656.9	521.63	55.86	76.49	6.92
MEAN	14.4	98.3	144	45.4	130	148	36.2	21.2	17.4	1.80	2.47	.23
MAX	82	704	1050	368	1150	1900	117	96	119	17	36	.95
MIN	.57	15	21	9.4	8.8	15	4.0	2.4	.51	.04	.14	.03
CFSM	.38	2.58	3.78	1.19	3.41	3.88	.95	.56	.46	.05	.06	.01
IN.	.44	2.88	4.36	1.38	3.55	4.48	1.06	.64	.51	.05	.07	.01

CAL YR 1984	TOTAL	20400.27	MEAN	55.7	MAX	1050	MIN	.01	CFSM	1.46	IN.	19.92
WTR YR 1985	TOTAL	19898.99	MEAN	54.5	MAX	1900	MIN	.03	CFSM	1.43	IN.	19.43

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 (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM DIS-SOLVED (MG/L AS CA)
DEC												
11...	0920	116	295	7.00	6.5	4.5	15	13.0	750	3700	4000	49
MAR												
26...	0930	27	447	8.20	--	5.5	25	12.4	771	560	200	62
JUN												
19...	0845	5.0	494	8.00	14.0	19.5	15	7.7	755	--	--	66
SEP												
17...	0835	.43	428	7.30	14.5	16.0	10	7.2	767	K160	--	56

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
DEC												
11...	8.0	7.2	4.1	134	163	.000	134	31	12	<.10	6.8	225
MAR												
26...	12	9.6	2.2	150	183	.000	150	48	13	.20	3.3	222
JUN												
19...	14	15	3.7	178	217	.000	178	34	16	.10	3.3	293
SEP												
17...	11	17	4.9	139	170	.000	134	37	26	.10	6.0	259

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM, DIS-SOLVED (UG/L AS CD)
DEC												
11...	.76	.040	.50	.090	--	.06	.020	--	--	--	--	--
MAR												
26...	.55	.020	.50	.020	--	--	<.010	--	--	--	--	--
JUN												
19...	.10	.020	.20	.020	.06	.03	.010	<10	1	52	1.9	2
SEP												
17...	<.10	<.010	.60	.060	.18	--	<.010	10	<1	46	<.5	<1

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)
DEC													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
19...	8	<3	3	12	5	5	12	.2	<10	1	<1	<1	210
SEP													
17...	<1	<3	3	13	1	10	12	.3	<10	2	<1	<1	210

DATE	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC												
11...	--	--	--	--	--	--	--	--	--	42	13	99
MAR												
26...	--	--	--	--	--	--	--	--	--	14	1.0	99
JUN												
19...	<6	6	--	--	--	--	--	--	--	59	.80	84
SEP												
17...	<6	<3	1.1	<.5	8.3	.5	5.9	.5	.11	--	--	--

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 upstream from Wilson Fork, 2.0 miles northeast of Canaan, and at mile 16.7.

DRAINAGE AREA.--27.5 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 590 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 6-9, and Jan. 13 to Mar. 14. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--16 years, 35.3 ft^3/s, 17.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,240 ft^3/s June 10, 1981, maximum gage height, 11.27 ft Aug. 1 1979; no flow for many days in many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s (revised) and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	1430	2,460	7.77	Mar. 29	2315	*4,400	*9.32

Minimum daily discharge, no flow on many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	303	33	257	9.4	36	129	7.5	.81	50	92	1.0
2	.29	142	24	89	9.0	32	79	139	4.1	81	22	.32
3	.23	49	22	48	8.7	26	58	76	24	34	9.7	.02
4	.15	132	17	46	8.6	49	44	34	13	30	5.9	.00
5	.09	69	15	39	8.7	81	59	22	8.2	14	4.8	.00
6	.06	36	14	42	9.0	40	81	16	5.1	9.5	5.6	.00
7	4.3	26	12	33	9.0	35	56	10	12	6.2	5.3	.00
8	25	21	12	27	8.7	83	46	7.0	7.4	3.9	5.4	.00
9	6.1	20	15	21	8.6	71	34	4.6	3.2	2.5	3.0	.00
10	2.4	291	201	19	8.9	50	27	3.3	1.9	2.0	1.9	.00
11	1.4	136	77	17	70	296	34	2.6	126	1.4	1.3	.00
12	1.0	54	45	15	220	189	27	2.2	122	1.1	.85	.00
13	.85	33	62	14	80	79	24	4.1	50	.90	.54	.00
14	.80	25	102	13	45	49	23	5.2	25	1.3	.35	.00
15	1.2	21	51	13	32	36	23	53	16	1.2	.25	.00
16	2.8	17	38	13	24	32	19	68	12	.52	.25	.00
17	1.4	13	30	12	22	24	14	83	11	.23	.58	.00
18	.99	27	24	12	20	18	13	43	9.1	.04	.42	.00
19	.81	93	36	11	30	16	11	27	9.0	.00	.26	.00
20	.69	41	30	8.0	70	14	10	18	4.1	.00	.36	.00
21	15	27	789	9.8	230	13	8.8	13	1.6	.00	.12	.00
22	43	21	193	10	843	13	8.0	11	2.8	.00	.00	.00
23	30	18	72	10	337	13	7.0	11	3.2	.00	.00	.00
24	14	15	44	9.7	171	12	7.0	8.8	78	.00	.55	.00
25	15	13	29	9.3	107	14	6.1	5.6	50	.00	4.2	.00
26	24	12	24	8.8	74	13	5.4	3.7	13	161	.85	.00
27	17	25	20	8.9	52	11	5.0	2.5	5.6	27	.06	.00
28	19	427	18	9.2	38	11	4.5	7.6	2.3	6.0	.00	.00
29	67	85	16	9.4	---	377	3.6	3.7	.93	2.3	.00	.00
30	24	47	500	9.6	---	1430	3.5	1.7	.40	1.2	15	.00
31	14	---	109	9.6	---	384	---	1.2	---	5.8	6.5	---
TOTAL	332.96	2239	2674	853.3	2553.6	3547	869.9	695.3	621.74	443.09	188.04	1.34
MEAN	10.7	74.6	86.3	27.5	91.2	114	29.0	22.4	20.7	14.3	6.07	.04
MAX	67	427	789	257	843	1430	129	139	126	161	92	1.0
MIN	.06	12	12	8.0	8.6	11	3.5	1.2	.40	.00	.00	.00
CFSM	.39	2.71	3.14	1.00	3.32	4.15	1.05	.81	.75	.52	.22	.00
IN.	.45	3.03	3.62	1.15	3.45	4.80	1.18	.94	.84	.60	.25	.00

CAL YR 1984	TOTAL	15095.22	MEAN	41.2	MAX	789	MIN	.00	CFSM	1.50	IN.	20.42
WTR YR 1985	TOTAL	15019.27	MEAN	41.1	MAX	1430	MIN	.00	CFSM	1.49	IN.	20.32

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 downstream side of Straws Mill bridge on Watson Road, 0.3 mile downstream from Pleasant Run, 2.4 miles southeast of Sellersburg, and 12.2 miles upstream from mouth.

DRAINAGE AREA.--189 mi^2.

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

REVISED RECORDS.--WSP 1705: 1955-58. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 429.78 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1976, and Feb. 15 to Sept. 20, 1984 nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 6-9, Jan. 2 to Feb. 17, and Sept. 8-30. Records fair. Some regulation by Deam Lake.

AVERAGE DISCHARGE.--31 years, 225 ft^3/s, 16.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft^3/s Jan. 22, 1959, gage height, 30.89 ft, from floodmarks, from rating curve extended above 6,300 ft^3/s on basis of contracted-opening measurements of peak flow, at site 5.2 miles upstream, drainage area, 165 mi^2, adjusted to gage site; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 22	1600	5,330	20.95	Mar. 31	1400	*6,230	*22.14

Minimum daily discharge, 1.2 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	31	185	1450	37	207	2820	37	22	142	78	34
2	2.8	148	147	900	34	187	661	53	293	272	92	19
3	3.3	72	127	450	33	162	468	135	314	118	22	14
4	6.3	40	108	600	33	154	352	76	779	147	14	12
5	6.6	56	93	450	33	248	317	50	707	83	8.6	20
6	6.6	37	80	400	34	189	600	41	324	63	15	16
7	7.4	19	70	360	35	159	370	34	316	43	18	13
8	25	12	70	330	34	161	304	29	580	33	11	12
9	13	15	90	290	32	198	238	23	220	27	8.3	10
10	9.4	297	499	250	30	168	202	19	184	24	6.9	8.4
11	9.2	381	530	238	500	288	189	18	367	20	5.9	7.0
12	7.2	163	282	195	2000	1010	168	17	1970	21	6.1	5.8
13	4.9	100	378	150	1000	557	148	17	569	26	6.3	5.0
14	4.0	72	670	130	500	453	134	22	282	18	6.1	4.3
15	4.9	66	508	120	250	322	213	196	186	11	5.8	3.6
16	6.4	59	332	110	230	257	217	139	167	12	24	3.0
17	5.3	41	252	95	220	209	155	70	119	16	171	2.5
18	5.3	106	204	88	300	173	127	55	95	12	45	2.2
19	6.6	448	235	80	350	152	111	43	72	8.8	23	1.9
20	8.9	220	283	30	540	140	105	34	57	8.3	17	1.6
21	21	136	1980	35	745	125	88	25	46	28	15	1.3
22	43	101	5080	38	1590	123	78	26	44	279	12	1.2
23	48	82	2090	39	1940	135	68	103	39	58	9.8	2.0
24	33	73	573	39	816	171	62	133	32	27	12	4.0
25	21	67	408	40	537	226	56	85	116	19	24	2.5
26	15	53	317	38	391	175	51	51	93	17	24	3.0
27	11	46	283	36	299	154	47	38	58	12	12	2.5
28	15	993	252	35	232	146	47	33	46	9.1	8.9	2.1
29	16	492	217	35	---	337	42	38	40	7.8	7.1	1.9
30	10	262	1160	38	---	2890	37	32	33	7.0	47	2.5
31	15	---	1060	38	---	5750	---	24	---	6.7	153	---
TOTAL	395.5	4688	18563	7127	12775	15626	8475	1696	8170	1575.7	908.8	218.3
MEAN	12.8	156	599	230	456	504	283	54.7	272	50.8	29.3	7.28
MAX	48	993	5080	1450	2000	5750	2820	196	1970	279	171	34
MIN	2.8	12	70	30	30	123	37	17	22	6.7	5.8	1.2
CFSM	.07	.83	3.17	1.22	2.41	2.67	1.50	.29	1.44	.27	.16	.04
IN.	.08	.92	3.65	1.40	2.51	3.08	1.67	.33	1.61	.31	.18	.04

CAL YR 1984	TOTAL	89940.8	MEAN	246	MAX	5170	MIN	1.5	CFSM	1.30	IN.	17.70
WTR YR 1985	TOTAL	80218.3	MEAN	220	MAX	5750	MIN	1.2	CFSM	1.16	IN.	15.79

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 downstream from South Fork Buck Creek, 3.6 miles southwest of New Middletown, and 14.4 miles upstream from mouth.

DRAINAGE AREA.--65.2 mi^2, of which 28.1 mi^2 does not contribute directly to surface runoff.

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

REVISED RECORDS.--WDR IN-72-1: 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 501.63 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 19 to Feb. 11, Aug. 4 to Sept. 12, and Sept. 25-30. Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--16 years, 81.8 ft^3/s, 17.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft^3/s Apr. 2, 1970, gage height, 14.40 ft; minimum daily, 0.90 ft^3/s Sept. 13, 1972, and Sept. 29, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1930	*4,500	*9.57	July 2	0230	2,080	6.91
Feb. 11	1915	1,920	6.66				

Minimum daily discharge, 0.90 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	25	87	597	21	92	321	21	14	21	4.6	2.3
2	6.1	86	68	344	19	84	214	41	17	499	4.6	1.6
3	5.8	35	58	229	17	77	155	29	15	140	4.3	1.6
4	5.8	30	49	232	18	82	102	20	15	65	4.2	1.5
5	5.8	31	46	182	18	97	105	17	14	44	5.0	1.5
6	5.9	24	44	159	17	82	122	15	13	34	6.0	1.4
7	7.5	20	40	146	16	81	89	13	16	27	4.9	1.4
8	12	18	39	124	14	93	76	12	15	23	4.6	1.3
9	9.9	33	40	109	13	108	67	11	13	20	4.5	1.3
10	7.9	192	85	105	16	101	62	11	263	20	3.9	1.2
11	7.2	177	75	93	740	116	59	11	125	18	3.3	1.2
12	7.2	81	70	84	537	185	53	12	196	15	3.2	1.2
13	7.3	56	94	82	252	152	50	12	91	14	3.1	1.1
14	7.3	44	138	79	181	171	49	43	58	13	3.0	1.0
15	7.7	45	137	68	140	141	51	131	43	11	4.5	1.1
16	7.7	39	114	70	120	120	44	37	35	9.9	9.0	1.2
17	10	35	90	63	117	99	30	32	29	8.9	4.5	1.1
18	12	172	135	57	119	83	28	26	26	8.0	3.5	1.0
19	13	238	361	42	121	76	27	21	22	7.7	2.6	1.1
20	13	121	244	35	152	71	25	19	20	7.1	4.0	1.1
21	19	81	1780	30	170	65	24	17	18	11	3.2	.99
22	29	63	914	32	260	67	22	23	19	11	2.7	1.3
23	33	53	379	32	241	65	21	28	17	8.2	2.2	1.9
24	19	49	244	31	185	90	20	27	17	6.9	3.7	4.1
25	15	42	175	29	146	109	20	22	36	5.9	3.9	2.0
26	13	38	141	27	129	92	19	20	21	5.9	2.8	2.5
27	11	42	119	22	107	89	22	18	18	6.2	2.2	1.7
28	10	485	104	23	94	84	20	18	15	5.2	2.0	1.2
29	15	205	95	23	---	82	17	16	14	4.7	1.8	.90
30	13	129	143	23	---	482	16	15	13	4.7	2.1	1.1
31	11	---	276	22	---	661	---	15	---	4.7	3.4	---
TOTAL	353.9	2689	6384	3194	3980	3997	1930	753	1229	1080.0	117.3	43.89
MEAN	11.4	89.6	206	103	142	129	64.3	24.3	41.0	34.8	3.78	1.46
MAX	33	485	1780	597	740	661	321	131	263	499	9.0	4.1
MIN	5.8	18	39	22	13	65	16	11	13	4.7	1.8	.90
CFSM	.17	1.37	3.16	1.58	2.18	1.98	.99	.37	.63	.53	.06	.02
IN.	.20	1.53	3.64	1.82	2.27	2.28	1.10	.43	.70	.62	.07	.03

CAL YR 1984	TOTAL	30903.8	MEAN	84.4	MAX	1780	MIN	4.4	CFSM	1.29	IN.	17.63
WTR YR 1985	TOTAL	25751.09	MEAN	70.6	MAX	1780	MIN	.90	CFSM	1.08	IN.	14.69

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 south of Galena, 3.6 miles upstream from mouth, and 7.0 miles northwest of New Albany.

DRAINAGE AREA.--16.1 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 703.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-8, Jan. 15 to Feb. 15, and Apr. 21 to May 8. Records good except those for period of no gage-height record, Jan. 21 to Feb. 15, which are poor.

AVERAGE DISCHARGE.--17 years, 24.1 ft^3/s, 20.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft^3/s July 21, 1973, gage height, 9.30 ft; from rating curve extended above 3,100 ft^3/s on basis of contracted-opening measurement at 7.34 ft; no flow for many days in 1969, 1975, 1976, 1983, 1984, and 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1745	*3,890	*7.92	July 3	0530	1,550	5.95
Mar. 30	1330	1,620	6.04				

Minimum daily discharge, no flow Sept. 13-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.43	8.1	18	176	4.9	19	81	3.1	1.0	3.4	.25	.74
2	.31	18	15	71	4.2	17	48	7.2	3.5	4.0	.14	.36
3	.30	7.0	13	45	3.4	16	33	4.5	2.5	152	.11	.16
4	.28	9.3	11	55	3.4	21	25	2.8	2.2	30	.06	.09
5	.23	8.8	10	40	3.3	22	37	2.3	2.4	12	.10	.07
6	.30	6.1	9.7	34	3.2	18	40	1.8	1.9	7.3	.64	.07
7	1.6	5.1	9.4	31	2.9	17	29	1.8	2.5	4.7	.32	.06
8	4.1	4.5	9.0	30	2.3	23	24	1.6	3.1	3.4	.20	.03
9	1.7	9.1	8.7	26	2.1	22	21	1.4	1.8	2.6	.14	.03
10	1.2	54	30	22	2.6	20	18	1.3	2.9	2.0	.06	.03
11	.90	32	24	22	150	56	17	1.2	14	1.5	.03	.03
12	.90	17	21	20	230	71	14	2.7	22	1.2	.04	.03
13	.90	13	50	19	80	53	13	2.2	9.7	1.1	.03	.00
14	.90	10	68	14	45	46	12	3.1	5.8	1.1	.02	.00
15	.83	9.5	42	12	29	34	15	8.1	4.1	.86	.06	.00
16	.76	8.2	30	12	24	28	13	3.2	3.3	.65	3.0	.00
17	.72	6.9	23	12	19	24	11	3.0	2.4	.53	.94	.00
18	.64	34	22	12	22	20	9.9	2.5	2.3	.40	.49	.00
19	.64	40	42	10	32	17	9.1	1.9	1.9	.32	.25	.00
20	.64	22	34	7.5	53	15	8.0	1.6	1.6	.24	1.2	.00
21	3.8	16	1260	7.0	70	13	7.0	1.3	1.4	1.3	.86	.00
22	9.1	12	195	7.5	178	16	6.4	6.7	1.5	1.9	.37	.00
23	7.9	11	62	7.6	83	17	5.8	6.3	1.4	.78	.19	.00
24	4.5	9.4	41	7.6	55	23	5.2	5.8	5.5	.51	2.1	1.6
25	3.4	8.3	29	7.4	39	22	4.7	3.1	16	.39	1.3	.47
26	2.9	7.6	24	6.8	30	20	4.3	2.1	3.5	.35	.63	.25
27	2.5	12	22	6.0	25	19	4.2	1.7	2.3	.48	.37	.20
28	2.5	127	19	5.5	21	17	3.9	1.8	1.7	.32	.21	.06
29	2.6	35	18	5.5	---	28	3.7	1.5	1.4	.17	.17	.06
30	2.6	24	74	5.4	---	477	3.1	1.3	1.2	.20	.19	.18
31	2.3	---	84	5.3	---	351	---	1.2	---	.19	2.9	---
TOTAL	62.38	584.9	2317.8	742.1	1217.3	1562	526.3	90.1	126.8	235.89	17.37	4.52
MEAN	2.01	19.5	74.8	23.9	43.5	50.4	17.5	2.91	4.23	7.61	.56	.15
MAX	9.1	127	1260	176	230	477	81	8.1	22	152	3.0	1.6
MIN	.23	4.5	8.7	5.3	2.1	13	3.1	1.2	1.0	.17	.02	.00
CFSM	.12	1.21	4.65	1.48	2.70	3.13	1.09	.18	.26	.47	.03	.01
IN.	.14	1.35	5.36	1.71	2.81	3.61	1.22	.21	.29	.55	.04	.01

CAL YR 1984	TOTAL	9650.92	MEAN	26.4	MAX	1260	MIN	.03	CFSM	1.64	IN.	22.30
WTR YR 1985	TOTAL	7487.46	MEAN	20.5	MAX	1260	MIN	.00	CFSM	1.27	IN.	17.30

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 upstream from Raccoon Branch, 4.5 miles north of Corydon, and at mile 33.7.

DRAINAGE AREA.--129 mi^2, of which 10.6 mi^2 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 above 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 at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 6-8, Jan. 21 to Feb. 11, July 17-20, and July 25 to Sept. 30. Records good except for periods of estimated record, which are poor.

AVERAGE DISCHARGE.--42 years, 172 ft^3/s, 18.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft^3/s Mar. 5, 1964, gage height, 22.64 ft; no flow at times during 1943-44, 1951-54, 1959, 1965, 1972-73, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Dec. 22	0600	*7660	*16.44	Mar. 31	0100	5800	14.90

Minimum daily discharge, 0.45 cfs Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	73	201	1220	53	157	919	37	23	29	10	2.2
2	5.3	220	158	769	48	143	500	44	26	67	7.0	1.2
3	4.9	101	138	452	38	123	347	44	54	592	5.8	1.0
4	4.3	67	114	486	41	118	266	37	94	467	5.0	.90
5	4.1	77	102	395	42	179	231	31	102	160	8.0	.83
6	4.6	61	87	333	41	144	346	28	64	106	6.0	.78
7	6.0	47	77	301	31	131	234	25	53	79	4.5	.74
8	10	40	80	260	28	133	201	23	121	61	6.0	.72
9	23	48	92	225	27	161	172	21	64	54	4.5	.69
10	21	476	240	208	30	144	150	19	49	43	3.8	.66
11	18	338	278	189	1000	196	138	18	216	40	3.3	.64
12	16	173	221	161	1830	654	121	20	909	34	3.1	.63
13	15	119	342	134	598	405	109	21	258	27	2.9	.61
14	16	91	589	146	397	367	100	49	158	23	2.7	.60
15	18	77	463	116	283	286	105	159	109	20	6.0	.59
16	18	69	319	109	233	231	101	90	83	18	11	.58
17	17	57	247	116	229	198	87	59	63	16	6.4	.56
18	17	96	204	106	299	164	78	51	57	15	4.5	.55
19	23	451	248	95	332	141	72	40	43	14	3.0	.52
20	25	214	294	65	426	125	66	33	33	14	6.3	.55
21	37	145	2810	56	551	110	60	30	27	18	5.0	.58
22	56	111	4110	60	1130	105	56	33	24	29	2.5	.46
23	94	92	739	64	974	111	52	67	23	29	2.4	.98
24	73	79	461	64	514	127	49	98	24	19	6.0	2.5
25	56	68	323	63	336	142	45	71	98	12	6.4	.80
26	52	60	246	57	260	127	42	51	58	11	2.9	1.0
27	49	61	214	50	210	122	43	40	32	15	1.5	.70
28	49	956	187	53	173	118	42	38	28	11	1.1	.50
29	54	461	167	54	---	328	38	39	27	8.7	1.0	.45
30	61	280	544	54	---	2850	33	33	23	7.3	5.4	.55
31	62	---	671	54	---	3050	---	26	---	17	4.6	---
TOTAL	915.6	5208	14966	6515	10154	11390	4803	1375	2943	2056.0	148.6	24.07
MEAN	29.5	174	483	210	363	367	160	44.4	98.1	66.3	4.79	.80
MAX	94	956	4110	1220	1830	3050	919	159	909	592	11	2.5
MIN	4.1	40	77	50	27	105	33	18	23	7.3	1.0	.45
CFSM	.23	1.35	3.74	1.63	2.81	2.84	1.24	.34	.76	.51	.04	.01
IN.	.26	1.50	4.32	1.88	2.93	3.28	1.39	.40	.85	.59	.04	.01

CAL YR 1984	TOTAL	68785.9	MEAN	188	MAX	4110	MIN	4.1	CFSM	1.46	IN.	19.84
WTR YR 1985	TOTAL	60498.27	MEAN	166	MAX	4110	MIN	.45	CFSM	1.29	IN.	17.45

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 east of County Court House in Salem, 6.0 miles upstream from Hoggatt Branch, and 6.9 miles upstream from mouth.

DRAINAGE AREA.--19.0 mi^2.

PERIOD OF RECORD.--July 1970 to current year. Prior to December 10, 1970, nonrecording gage at site 0.55 mile downstream at datum 5.04 ft 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 is 713.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6-9, Jan. 10 to Feb. 11, Feb. 15-17, Apr. 25 to May 6, and July 11-29. Records good except those for estimated daily discharge, which are poor.

AVERAGE DISCHARGE.--15 years, 25.0 ft^3/s, 17.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s May 1, 1983, gage height, 13.14 ft from rating curve extended above 900 ft^3/s by a step-backwater analysis; minimum daily, 0.02 ft^3/s Sept. 24, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1715	1,460	7.85	June 24	2000	1,990	9.00
Jan. 1	1100	1,310	7.51	July 30	1815	1,490	7.92
Mar. 30	0045	*2,890	*10.46	Aug. 16	1245	1,600	8.18
Mar. 30	1545	2,090	9.21				

Minimum daily discharge, 0.10 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	31	14	307	3.2	22	95	3.5	.83	107	36	8.0
2	.12	22	10	109	2.8	19	57	8.0	33	40	15	6.8
3	.11	7.9	8.3	66	2.8	17	42	6.0	16	68	11	5.7
4	.11	5.5	5.9	54	3.0	19	32	4.5	55	27	8.5	4.6
5	.11	4.2	5.0	42	3.1	21	41	4.0	39	18	33	3.9
6	.10	2.8	4.2	40	3.1	17	35	3.7	22	13	25	3.8
7	.63	2.1	3.7	38	2.8	16	27	3.2	25	9.2	17	3.2
8	3.1	1.7	3.3	31	2.4	18	23	2.7	21	6.7	14	2.4
9	1.5	1.9	4.0	24	2.3	18	18	2.3	15	6.2	11	2.0
10	.62	34	45	20	2.5	18	16	2.0	21	6.0	7.3	1.6
11	.35	20	32	16	260	52	15	2.0	194	4.8	4.6	1.4
12	.32	11	24	13	175	109	12	3.5	125	4.3	3.8	1.2
13	.33	7.4	24	12	71	56	11	2.9	52	3.9	3.1	.93
14	.35	5.4	38	10	45	39	10	15	29	3.5	55	.71
15	.35	5.0	33	9.0	30	29	10	48	20	3.1	135	.73
16	.32	4.0	26	8.5	25	23	8.1	15	16	2.9	332	.72
17	.28	3.3	20	7.6	23	19	6.5	12	14	2.6	62	.55
18	.27	8.9	15	7.0	31	16	5.5	8.5	11	2.3	29	.59
19	.25	20	17	6.3	47	14	5.0	6.1	9.0	2.1	18	.54
20	.23	14	16	4.2	79	13	4.3	4.3	7.8	1.9	16	.50
21	.39	9.4	545	5.0	96	11	3.7	3.3	6.7	20	11	.46
22	.51	7.0	196	5.4	286	11	3.4	3.9	7.2	13	8.5	.45
23	.67	5.4	96	5.4	157	11	3.0	3.6	5.4	7.5	7.1	1.2
24	.84	4.3	66	5.2	84	10	2.7	2.6	233	3.5	9.3	2.3
25	.91	3.5	43	4.8	53	9.7	2.5	1.8	86	2.5	11	1.1
26	.94	2.8	33	4.4	40	9.6	2.3	1.3	31	2.1	9.4	.90
27	.90	3.8	28	4.3	31	8.6	2.1	1.8	18	2.0	7.6	.82
28	1.2	88	24	4.2	25	8.5	1.9	5.7	12	1.9	6.6	.55
29	5.0	36	22	4.1	---	222	1.8	2.5	8.6	1.7	5.5	.55
30	3.1	21	216	3.8	---	964	1.7	1.6	5.8	127	21	.70
31	1.5	---	105	3.5	---	319	---	1.3	---	18	13	---
TOTAL	25.57	393.3	1722.4	874.7	1586.0	2139.4	498.5	186.6	1139.33	531.7	946.3	58.90
MEAN	.82	13.1	55.6	28.2	56.6	69.0	16.6	6.02	38.0	17.2	30.5	1.96
MAX	5.0	88	545	307	286	964	95	48	233	127	332	8.0
MIN	.10	1.7	3.3	3.5	2.3	8.5	1.7	1.3	.83	1.7	3.1	.45
CFSM	.04	.69	2.93	1.48	2.98	3.63	.87	.32	2.00	.91	1.61	.10
IN.	.05	.77	3.37	1.71	3.11	4.19	.98	.37	2.23	1.04	1.85	.12

CAL YR 1984	TOTAL	9684.07	MEAN	26.5	MAX	650	MIN	.04	CFSM	1.39	IN.	18.96
WTR YR 1985	TOTAL	10102.70	MEAN	27.7	MAX	964	MIN	.10	CFSM	1.46	IN.	19.78

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 downstream from South Fork Blue River, and at mile 57.1.

DRAINAGE AREA.--283 mi^2, of which 76.9 mi^2 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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20 to Feb. 10, Feb. 12, 13, and Sept. 7-24. Records good except those for period Jan. 20 to Feb. 10, which are poor and periods Feb. 12, 13 and Sept. 7-24, which are fair.

AVERAGE DISCHARGE.--17 years, 342 ft^3/s, 16.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s May 2, 1983, gage height, 24.37 ft; minimum daily, 6.1 ft^3/s Oct. 18, 1968.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 22	0600	8,870	19.51	Mar. 31	0500	*11,100	*21.92
Feb. 22	2300	5,430	14.56	Jun. 12	0600	5,000	13.84

Minimum daily discharge, 8.7 ft^3/s Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	35	319	2710	82	412	2230	71	56	194	60	71
2	11	435	235	1980	78	362	1130	86	529	426	91	47
3	9.8	196	191	1040	70	298	803	86	448	1170	46	39
4	9.5	103	149	856	71	285	628	82	875	505	38	35
5	9.5	72	126	696	74	396	543	72	1070	306	38	33
6	9.8	53	125	622	75	319	767	64	572	241	191	30
7	12	42	109	597	70	284	540	59	430	175	73	28
8	19	34	101	524	60	291	459	53	466	137	49	25
9	26	34	100	452	55	332	391	49	322	112	40	24
10	21	224	434	410	60	308	342	47	272	95	35	23
11	19	451	666	362	1190	389	318	45	546	82	33	21
12	17	243	450	298	3300	1540	279	46	3220	72	31	20
13	17	149	428	242	1340	955	241	53	1010	66	28	19
14	15	107	658	273	823	724	223	435	612	64	26	18
15	13	89	628	214	571	559	219	1300	436	55	517	16
16	12	78	487	182	452	457	213	455	344	50	887	14
17	12	62	387	194	417	394	185	301	274	46	642	12
18	12	73	307	179	457	325	164	227	244	42	245	11
19	11	368	285	162	567	280	150	177	194	38	138	11
20	10	302	350	120	808	248	139	139	158	35	97	10
21	13	200	2840	115	1280	215	128	115	131	196	76	9.8
22	20	147	6300	120	2840	201	118	106	117	345	58	9.2
23	39	119	1540	120	2980	201	112	123	110	94	48	8.7
24	31	102	958	115	1450	196	103	128	167	56	186	9.6
25	22	86	672	110	933	193	93	108	1510	42	204	25
26	21	75	505	96	713	175	86	89	464	36	165	20
27	16	70	435	94	569	167	82	78	293	32	89	18
28	15	968	380	94	457	165	78	84	207	29	64	14
29	26	743	337	91	---	165	74	85	159	27	52	12
30	40	451	1550	88	---	7300	69	74	129	24	49	16
31	31	---	1460	82	---	8870	---	67	---	205	93	---
TOTAL	551.6	6111	23512	13238	21842	27006	10907	4904	15365	4997	4389	649.3
MEAN	17.8	204	758	427	780	871	364	158	512	161	142	21.6
MAX	40	968	6300	2710	3300	8870	2230	1300	3220	1170	887	71
MIN	9.5	34	100	82	55	165	69	45	56	24	26	8.7
CFSM	.06	.72	2.68	1.51	2.76	3.08	1.29	.56	1.81	.57	.50	.08
IN.	.07	.80	3.09	1.74	2.87	3.55	1.43	.64	2.02	.66	.58	.09

CAL YR 1984	TOTAL	114675.9	MEAN	313	MAX	8580	MIN	7.3	CFSM	1.11	IN.	15.07
WTR YR 1985	TOTAL	133471.9	MEAN	366	MAX	8870	MIN	8.7	CFSM	1.29	IN.	17.54

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 downstream from Spring Creek, 600 ft upstream from bridge on Interstate 64, 0.2 mile upstream from bridge on State Highway 62, 0.8 mile north of White Cloud, and at mile 14.7 .

DRAINAGE AREA.--476 mi^2, of which 192 mi^2 does not contribute directly to surface runoff. Also, part of flow from Indian Creek, downstream from Corydon, IN, enters Blue River via solution channel in Karst area through Harrison Spring.

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 above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 22, and Feb. 3-10. Records good.

AVERAGE DISCHARGE.--55 years, 638 ft^3/s, 18.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,500 ft^3/s Jan. 22, 1959, gage height, 23.07 ft; minimum daily, 9.6 ft^3/s Oct. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 22	1600	11,000	13.27	Mar. 31	1000	*16,400	*16.52

Minimum daily discharge, 46 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	167	750	3370	359	959	7410	280	235	417	243	184
2	67	648	578	4540	330	880	3050	417	225	628	153	178
3	61	729	479	2360	280	777	2160	499	940	1060	166	138
4	75	417	408	1850	260	723	1670	367	786	1690	123	114
5	66	308	362	1610	270	861	1410	318	1710	774	103	101
6	51	252	341	1380	270	868	1560	278	1200	565	102	92
7	57	215	311	1340	260	747	1370	250	853	470	254	85
8	81	192	278	1240	230	724	1130	227	754	387	183	79
9	85	197	292	1120	220	747	997	208	723	333	130	76
10	84	445	488	1020	230	753	884	195	612	287	109	70
11	88	781	1080	948	1950	810	813	187	852	251	95	67
12	75	705	909	843	6010	2020	754	187	3830	225	86	62
13	68	475	901	761	3060	2220	684	185	2520	204	80	57
14	67	366	1320	710	1830	1730	633	336	1440	190	75	55
15	66	314	1410	688	1350	1410	641	2320	994	180	355	54
16	64	277	1110	591	1060	1170	634	1580	766	165	1190	53
17	57	249	882	573	936	1020	582	973	625	149	1320	52
18	51	321	718	568	994	888	530	753	521	139	609	50
19	49	707	671	538	1120	773	500	585	458	130	362	50
20	49	795	734	458	1440	704	472	482	390	123	277	49
21	55	581	3870	368	2070	640	444	403	333	135	217	47
22	92	449	10600	400	3360	600	420	389	293	662	183	46
23	163	377	4290	410	5600	582	397	490	265	464	153	49
24	163	334	2240	407	3080	594	382	478	259	257	178	71
25	171	302	1600	397	2110	589	361	439	1350	186	742	70
26	138	274	1210	367	1590	555	336	384	1230	153	475	72
27	107	263	1020	345	1310	530	331	347	692	133	345	73
28	93	1280	900	348	1080	520	322	320	498	117	238	59
29	104	1910	807	333	---	820	299	292	391	107	189	52
30	99	1060	1470	327	---	7470	275	284	326	100	198	51
31	112	---	3060	352	---	16000	---	258	---	116	210	---
TOTAL	2632	15390	45089	30562	42659	49684	31451	14711	26071	10797	9143	2255
MEAN	84.9	513	1454	986	1524	1603	1048	475	869	348	295	75.2
MAX	171	1910	10600	4540	6010	16000	7410	2320	3830	1690	1320	184
MIN	49	167	278	327	220	520	275	185	225	100	75	46
CFSM	.18	1.08	3.05	2.07	3.20	3.37	2.20	1.00	1.83	.73	.62	.16
IN.	.21	1.20	3.52	2.39	3.33	3.88	2.46	1.15	2.04	.84	.71	.18

CAL YR 1984	TOTAL	259746	MEAN	710	MAX	10600	MIN	49	CFSM	1.49	IN.	20.30
WTR YR 1985	TOTAL	280445	MEAN	768	MAX	16000	MIN	46	CFSM	1.61	IN.	21.92

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 downstream from Coon Branch, 5.8 miles upstream from Sulphur Fork Creek, and at mile 14.1.

DRAINAGE AREA.--39.8 mi^2.

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

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 395.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 21 to Feb. 11, and Aug. 9-20. Records good except for period with ice effect, Jan. 21 to Feb. 11, and period of no gage-height record, Aug. 9-20, which are poor. Flow regulated by Forest Service and Middle Fork Anderson River Conservancy District control structures beginning June 1967.

AVERAGE DISCHARGE.--24 years, 59.6 ft^3/s, 20.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft^3/s Mar. 9, 1964; maximum gage height, 19.33 ft 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, from floodmark, discharge, 15,000 ft^3/s, from rating curve extended above 7,000 ft^3/s. This is the maximum flood since 1905, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,260 ft^3/s Dec. 21, gage height, 15.04 ft; minimum daily, 1.7 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	48	78	458	15	57	441	30	8.0	19	2.1	31
2	4.2	139	54	391	13	52	414	132	6.8	20	2.0	21
3	4.0	85	41	305	12	47	387	136	6.9	9.8	1.8	13
4	3.7	54	32	189	11	56	305	86	6.8	7.8	1.7	8.5
5	3.3	37	28	128	12	104	149	56	6.7	62	1.9	5.9
6	3.0	27	28	104	12	87	105	38	6.1	266	2.2	4.6
7	3.1	20	24	94	11	70	82	29	6.4	154	13	3.9
8	4.2	16	23	83	10	77	70	23	8.4	64	17	3.3
9	4.4	16	30	71	8.5	94	57	19	9.2	33	9.0	3.0
10	3.3	48	73	65	10	78	47	15	41	22	5.0	2.8
11	3.5	76	72	56	600	93	43	13	178	15	3.1	2.5
12	4.3	56	63	47	540	165	38	13	305	11	2.3	2.2
13	5.1	38	131	40	408	153	34	13	169	8.3	2.0	1.9
14	11	28	227	37	343	171	35	16	79	6.7	2.0	1.8
15	21	25	183	31	196	129	79	24	45	5.3	20	2.0
16	18	23	121	27	81	95	87	23	29	4.5	60	2.4
17	13	19	85	29	75	75	70	19	23	3.8	100	2.1
18	9.5	72	69	28	90	60	55	16	19	3.3	70	1.9
19	7.5	150	99	26	104	50	45	13	14	3.1	40	2.2
20	6.0	100	110	24	135	43	38	10	11	3.1	29	2.1
21	9.8	63	670	16	158	38	33	7.8	8.5	3.4	18	2.4
22	19	42	586	17	303	38	28	13	13	15	11	2.6
23	26	31	463	18	324	38	25	18	11	18	7.1	6.4
24	21	26	436	18	251	47	24	15	9.4	11	15	11
25	17	21	390	17	169	52	21	11	47	6.6	20	7.6
26	14	19	250	15	113	48	20	8.5	42	4.9	18	5.2
27	11	44	97	14	84	43	38	9.9	25	3.9	15	3.7
28	10	388	64	13	66	39	37	21	16	3.1	11	2.8
29	24	272	52	12	---	91	29	19	11	2.7	7.9	1.8
30	24	135	144	13	---	618	23	14	7.3	2.4	6.8	1.8
31	20	---	234	15	---	577	---	11	---	2.3	29	---
TOTAL	332.2	2118	4957	2401	4154.5	3385	2859	872.2	1168.5	795.0	542.9	163.4
MEAN	10.7	70.6	160	77.5	148	109	95.3	28.1	38.9	25.6	17.5	5.45
MAX	26	388	670	458	600	618	441	136	305	266	100	31
MIN	3.0	16	23	12	8.5	38	20	7.8	6.1	2.3	1.7	1.8
CFSM	.27	1.77	4.02	1.95	3.72	2.74	2.39	.71	.98	.64	.44	.14
IN.	.31	1.98	4.63	2.24	3.88	3.16	2.67	.82	1.09	.74	.51	.15

CAL YR 1984	TOTAL	22634.66	MEAN	61.8	MAX	670	MIN	.00	CFSM	1.55	IN.	21.16
WTR YR 1985	TOTAL	23748.7	MEAN	65.1	MAX	670	MIN	1.7	CFSM	1.64	IN.	22.20

03303400 CROOKED CREEK NEAR 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 east of Santa Claus Post Office, and 1.8 miles upstream from unnamed right-bank tributary.

DRAINAGE AREA.--7.86 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 404.34 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 14-24 and Jan. 10 to Feb. 16. Records good except for periods of estimated discharges, which are fair.

AVERAGE DISCHARGE.--16 years, 11.5 ft^3/s, 19.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft^3/s Apr. 28, 1970, gage height, 9.74 ft, from rating curve extended above 450 ft^3/s on basis of two indirect measurements of peak flow at site 1.6 miles downstream, drainage area, 16.0 mi^2, adjusted to gage site; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1630	*1130	*9.21	June 10	1345	500	8.14
Jan. 1	0930	826	8.88	June 11	1845	913	8.99
Mar. 30	1200	694	8.69				

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	30	5.3	169	.88	9.4	25	7.6	.08	5.5	.14	.05
2	.06	17	3.9	31	.87	8.7	16	21	.08	.86	.09	.04
3	.05	4.2	3.0	18	.87	7.9	12	7.1	.09	.31	.08	.03
4	.04	2.2	1.8	18	.87	15	9.2	3.0	.72	.12	.06	.03
5	.03	1.3	2.1	16	.88	15	20	1.4	.28	.10	.06	.03
6	.03	.85	2.2	18	.88	9.6	17	.92	2.3	.10	1.5	.03
7	.03	.80	1.7	17	.85	8.2	12	.65	15	.08	7.5	.03
8	1.7	.59	3.0	14	.82	19	11	.42	4.4	.08	1.4	.02
9	.44	.65	12	12	.81	16	7.3	.41	1.1	.08	4.1	.02
10	.14	7.2	20	9.0	.80	11	6.1	.34	128	.18	.10	.02
11	.22	4.0	9.2	6.7	272	23	5.5	.31	227	.10	.08	.01
12	.30	2.0	7.8	5.6	150	19	4.3	.43	65	.09	.07	.01
13	3.0	1.4	48	4.3	83	28	3.6	.42	17	.07	.06	.00
14	2.2	.93	42	3.0	42	24	15	9.4	7.9	.07	.05	.00
15	1.5	1.0	17	2.4	25	14	28	6.3	3.8	.06	37	.00
16	1.1	.82	11	2.2	22	11	15	1.3	1.4	.05	20	.00
17	.72	.77	7.2	2.0	19	8.3	10	1.7	.94	.05	.69	.00
18	.50	40	6.7	2.4	22	6.0	6.7	.77	.93	.13	.14	.00
19	.35	21	33	2.0	28	5.0	4.5	.41	.50	.19	.08	.00
20	.25	6.6	17	1.7	43	4.5	2.8	.37	.27	.08	4.0	.00
21	.40	3.4	462	1.4	41	3.6	2.3	.63	.17	5.0	.10	.00
22	.50	2.1	67	1.2	137	6.0	1.2	16	1.3	1.2	.06	.00
23	2.7	1.7	21	1.2	45	7.8	.79	6.4	.15	.22	.05	3.1
24	.73	1.4	15	1.1	35	13	1.3	2.2	.93	.23	4.9	.42
25	.57	1.2	9.6	1.1	18	9.6	.84	1.0	.62	.23	3.1	.04
26	.49	1.0	7.4	1.1	14	7.3	1.3	.66	.29	1.3	.31	.04
27	.37	20	6.8	1.1	11	6.4	2.3	.90	.28	.13	.11	.03
28	.53	143	6.3	.98	9.4	6.0	.82	1.2	.27	.09	.09	.02
29	2.5	18	5.9	.96	---	102	.45	1.2	.15	.07	.08	.02
30	.81	9.7	57	.92	---	270	.30	1.0	.10	.09	.15	.03
31	.54	---	78	.88	---	128	---	.44	---	1.7	.07	---
TOTAL	22.86	344.81	989.9	366.24	1024.93	822.3	242.60	95.88	481.05	18.56	86.22	4.02
MEAN	.74	11.5	31.9	11.8	36.6	26.5	8.09	3.09	16.0	.60	2.78	.13
MAX	3.0	143	462	169	272	270	28	21	227	5.5	37	3.1
MIN	.03	.59	1.7	.88	.80	3.6	.30	.31	.08	.05	.05	.00
CFSM	.09	1.46	4.06	1.50	4.66	3.37	1.03	.39	2.04	.08	.35	.02
IN.	.11	1.63	4.69	1.73	4.85	3.89	1.15	.45	2.28	.09	.41	.02

CAL YR 1984	TOTAL	4126.51	MEAN	11.3	MAX	462	MIN	.00	CFSM	1.44	IN.	19.53
WTR YR 1985	TOTAL	4499.37	MEAN	12.3	MAX	462	MIN	.00	CFSM	1.56	IN.	21.29

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. Highway 41, between two steel truss bridges, at Evansville, and at mile 6.0.

DRAINAGE AREA.--323 mi^2.

PERIOD OF RECORD.--October 1960 to July 1985 (discontinued).

REVISED RECORDS.--WSP 2109: 1960. WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 352.24 ft above National Geodetic Vertical Datum of 1929. Nonrecording auxiliary gage at site 1.2 miles upstream at same datum. Prior to October 1, 1968, water-stage recorder, and October 1, 1968, to September 30, 1971, nonrecording gage used at site 1.2 miles upstream, as base gage, and present base gage was used as auxiliary gage.

REMARKS.--Estimated daily discharges: Nov. 22-23, Dec. 19-30, Jan. 2-11, Jan. 14 to Mar. 8, Mar. 13-20, Mar. 31 to Apr. 11, and June 9-13. Records poor. Backwater or reverse flow from the Ohio River generally occurs when the stage of the Ohio River at Evansville (Sta. 03322000) exceeds a gage height of about 24 ft.

AVERAGE DISCHARGE.--24 years, 368 ft^3/s, 15.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft^3/s May 10, 1961, gage height, 27.94 ft; minimum daily (unaffected by backwater), 1.0 ft^3/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, 4,200 ft^3/s Apr. 1; maximum gage height (affected by backwater), 17.29 ft Apr. 3; minimum daily discharge (unaffected by backwater), 16 ft^3/s July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	358	755	3260	85	446	4200	385	45	80		
2	47	1080	294	2480	82	203	4100	1970	44	148		
3	37	514	354	2340	73	341	3950	1720	84	86		
4	30	179	293	2300	70	616	3750	1660	181	65		
5	27	119	187	1560	80	1010	2160	805	646	43		
6	26	86	173	564	86	645	1170	309	231	39		
7	34	61	130	363	81	448	891	211	285	41		
8	113	46	156	311	62	501	183	141	725	32		
9	131	42	272	356	70	974	144	103	250	31		
10	67	311	628	378	350	647	209	82	630	29		
11	43	757	443	392	1500	613	280	73	800	25		
12	38	281	270	316	1300	962	274	74	1500	23		
13	56	126	771	245	1150	619	237	73	780	22		
14	253	93	1560	210	600	667	298	388	299	47		
15	158	83	1370	185	520	116	1440	270	196	31		
16	86	72	765	180	460	.00	1390	114	146	24		
17	58	60	388	160	420	.00	648	71	128	21		
18	45	452	318	135	560	146	331	58	173	18		
19	39	1160	750	120	700	405	239	46	101	16		
20	40	535	850	130	1000	396	182	40	72	23		
21	148	224	2500	110	1600	382	142	33	63	54		
22	170	126	2350	94	3000	246	130	161	55	782		
23	110	81	2290	85	3200	267	118	1110	46	538		
24	70	109	2130	92	3100	322	401	530	49	88		
25	56	100	1940	100	2900	320	327	197	211	31		
26	51	89	1490	64	2700	243	176	121	215	24		
27	42	251	809	70	2400	210	148	95	68	25		
28	169	2080	542	80	1600	210	143	78	190	25		
29	733	1620	449	62	---	557	117	65	210	20		
30	371	1440	1480	67	---	3200	98	55	91	20		
31	145	---	2490	76	---	4000	---	50	---	320		
TOTAL	3446	12535	29197	16885	29749	19712.00	27876	11088	8514	2771		
MEAN	111	418	942	545	1062	636	929	358	284	89.4		
MAX	733	2080	2500	3260	3200	4000	4200	1970	1500	782		
MIN	26	42	130	62	62	.00	98	33	44	16		
CFSM	.34	1.29	2.92	1.69	3.29	1.97	2.88	1.11	.88	.28		
IN.	.40	1.44	3.36	1.94	3.43	2.27	3.21	1.28	.98	.32		

CAL YR 1984 TOTAL 168802.50 MEAN 461 MAX 3360 MIN .00 CFSM 1.43 IN. 19.44

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 downstream from county bridge on Indiana-Ohio State line road, 2 miles east of New Corydon, 2.8 miles downstream from Beaver Creek, and at mile 466.0.

DRAINAGE AREA.--262 mi^2.

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

REMARKS.--Estimated daily discharges; Dec. 6-9, Jan. 10 to Feb. 22, Feb. 24 to Mar. 5, and Aug. 1 to Sept. 30. Records good except those for periods with ice effect, Dec. 6-9, and Jan 10 to Feb. 22, and those for indefinite stage-discharge relation Aug. 1 to Sept. 30, which are poor. Occasional regulation by Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--34 years, 202 ft^3/s, 10.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft^3/s Jan. 22, 1959; gage height, 20.47 ft, from floodmarks; minimum daily, 0.8 ft^3/s Dec. 22, 23, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	0600	*6840	*19.44	Mar. 31	2100	3160	17.14

Minimum daily discharge, 6.0 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	34	269	1690	41	600	2260	57	48	19	12	10
2	13	320	236	1400	40	420	1100	104	34	119	10	9.5
3	12	231	242	643	39	300	564	193	37	41	9.8	8.7
4	12	120	246	387	39	460	398	104	34	32	11	8.2
5	13	95	217	312	38	860	399	82	57	58	14	9.5
6	13	84	190	272	37	900	965	71	34	54	12	8.4
7	15	73	160	262	37	580	530	67	28	25	10	7.7
8	52	66	220	247	37	580	394	65	27	18	8.5	7.5
9	61	65	230	198	36	344	339	63	25	15	20	12
10	36	67	218	170	36	216	312	62	23	15	14	10
11	27	329	264	140	40	722	296	54	48	15	10	9.0
12	20	533	280	120	56	1330	277	53	466	14	9.0	8.2
13	17	226	397	110	66	523	263	51	213	15	7.6	7.6
14	20	133	796	94	65	322	258	50	105	16	9.2	7.2
15	34	108	748	86	63	335	252	52	71	20	13	6.8
16	33	108	426	77	58	310	244	65	753	28	17	6.6
17	66	93	326	73	55	287	233	65	238	21	18	6.5
18	42	82	273	67	53	266	214	70	102	15	15	6.3
19	30	77	257	63	51	254	111	71	68	14	12	6.3
20	26	72	253	46	49	270	90	63	56	13	10	6.2
21	28	67	262	48	52	279	87	152	47	13	9.8	6.1
22	62	64	549	51	800	253	82	152	41	12	8.0	6.0
23	55	63	373	52	5120	286	77	90	36	9.9	7.5	12
24	40	64	281	50	6400	355	75	70	30	11	15	10
25	31	62	207	48	4100	298	71	61	27	11	30	9.0
26	28	65	180	47	3300	258	69	55	26	13	20	10
27	27	148	187	45	1200	249	66	63	25	18	14	9.0
28	23	403	228	44	800	246	64	282	19	12	11	8.2
29	21	558	245	43	---	238	59	133	20	9.3	13	7.8
30	22	339	1210	42	---	313	57	82	19	9.9	18	7.2
31	23	---	925	41	---	2140	---	68	---	12	12	---
TOTAL	918	4749	10895	6968	22708	14794	10206	2670	2757	698.1	399.4	247.5
MEAN	29.6	158	351	225	811	477	340	86.1	91.9	22.5	12.9	8.25
MAX	66	558	1210	1690	6400	2140	2260	282	753	119	30	12
MIN	12	34	160	41	36	216	57	50	19	9.3	7.5	6.0
CFSM	.11	.60	1.34	.86	3.10	1.82	1.30	.33	.35	.09	.05	.03
IN.	.13	.67	1.55	.99	3.22	2.10	1.45	.38	.39	.10	.06	.04

CAL YR 1984	TOTAL	94076.5	MEAN	257	MAX	3000	MIN	6.9	CFSM	.98	IN.	13.36
WTR YR 1985	TOTAL	78010.0	MEAN	214	MAX	6400	MIN	6.0	CFSM	.82	IN.	11.08

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 downstream from bridge on State Highway 218, 800 ft downstream from Shoemaker ditch, 0.8 mile north of Linn Grove, and 2.2 miles upstream from Rice ditch.

DRAINAGE AREA.--453 mi^2.

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 808.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 11 to Feb. 22. Records good except those for period with ice effect, Jan.11 to Feb. 22, which are poor. Occasional regulation of Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--21 years, 376 ft^3/s, 11.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft^3/s Mar. 17, 1978, gage height, 13.87 ft; minimum daily, 5.1 ft^3/s Oct. 8, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1964 reached a stage of 13.13 ft, from floodmark, discharge, 6,900 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	2100	2860	9.81	Apr. 2	0400	3490	10.61
Feb. 24	1700	*7820	*13.23	June 16	2300	1940	8.40
Mar. 13	0700	1960	8.43				

Minimum daily discharge, 7.7 ft^3/s Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	28	424	2290	59	1640	2700	65	59	27	17	20
2	20	182	335	2720	58	1050	3330	92	37	37	17	17
3	16	434	330	2640	57	739	2440	200	154	152	17	13
4	15	246	343	1770	56	820	1340	187	68	64	14	11
5	14	148	302	956	56	1740	939	108	262	46	15	13
6	14	115	267	610	55	1620	1660	85	165	92	17	11
7	16	97	214	430	54	835	1630	72	57	85	17	11
8	23	83	320	376	54	779	1060	66	33	41	17	10
9	46	76	324	322	53	818	697	60	24	28	18	11
10	62	76	302	265	53	537	500	57	19	26	28	15
11	37	501	333	210	58	708	432	53	98	21	27	14
12	26	995	381	180	78	1760	390	49	1050	19	19	16
13	21	640	516	160	94	1900	355	47	938	18	16	12
14	20	313	941	140	95	1200	333	45	471	19	15	11
15	22	207	1300	130	90	682	320	49	253	22	15	9.6
16	42	189	990	120	85	516	308	54	1550	23	16	9.3
17	35	158	627	110	80	442	284	68	1720	29	17	8.9
18	52	129	445	98	76	391	275	67	783	25	21	9.1
19	39	112	373	93	74	360	216	69	339	21	25	9.2
20	27	99	374	66	72	353	126	66	183	18	19	8.0
21	24	90	362	70	74	382	106	69	117	17	15	7.7
22	21	81	745	73	1000	354	101	213	87	17	13	8.3
23	39	77	735	74	4430	347	94	140	69	16	12	9.4
24	47	76	479	73	7390	438	90	81	56	16	12	14
25	34	77	355	70	7060	430	88	58	47	15	15	13
26	26	75	269	68	5660	357	81	46	41	16	39	12
27	23	89	250	65	4250	327	75	42	40	16	29	14
28	21	349	305	63	2760	327	71	313	37	16	18	12
29	20	838	409	62	---	329	66	367	31	17	16	11
30	18	634	1230	61	---	330	63	142	28	15	16	10
31	18	---	1620	60	---	1420	---	83	---	15	15	---
TOTAL	859	7214	16200	14425	33981	23931	20170	3113	8816	989	567	350.5
MEAN	27.7	240	523	465	1214	772	672	100	294	31.9	18.3	11.7
MAX	62	995	1620	2720	7390	1900	3330	367	1720	152	39	20
MIN	14	28	214	60	53	327	63	42	19	15	12	7.7
CFSM	.06	.53	1.15	1.03	2.68	1.70	1.48	.22	.65	.07	.04	.03
IN.	.07	.59	1.33	1.18	2.79	1.97	1.66	.26	.72	.08	.05	.03

CAL YR 1984	TOTAL	161209	MEAN	440	MAX	4420	MIN	12	CFSM	.97	IN.	13.24
WTR YR 1985	TOTAL	130615.5	MEAN	358	MAX	7390	MIN	7.7	CFSM	.79	IN.	10.73

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 south of Huntington, 2.4 miles downstream from Huntington Lake, 3.2 miles upstream from Little River, and at mile 409.0.

DRAINAGE AREA.--721 mi^2.

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 above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). July 5, 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. Daily discharge computed from relation between discharge, head, and gate openings for Huntington Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--34 years, 603 ft^3/s, 11.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft^3/s Feb. 10, 1959; maximum gage height, 23.20 ft Feb. 10, 1959 (backwater from ice); minimum daily discharge, 2.4 ft^3/s Oct. 28, 29, 1964.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,020 ft^3/s Mar. 1; minimum daily discharge, 20 ft^3/s May 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	89	468	2640	75	6020	3150	20	162	75	21	43
2	70	133	440	2880	62	5920	4210	20	119	81	21	43
3	60	152	291	4120	75	5460	3390	20	200	83	21	43
4	66	240	240	4620	89	4840	3410	21	242	80	21	43
5	74	248	200	3090	94	4880	1670	53	306	79	21	43
6	84	174	216	1340	79	5950	1840	102	332	83	21	43
7	86	154	105	595	57	4690	2540	128	331	83	21	43
8	85	153	98	375	53	3730	2690	136	247	83	21	43
9	112	151	172	285	54	3490	2010	136	113	83	21	43
10	122	130	222	219	54	2430	1200	136	94	83	205	92
11	88	209	232	201	72	1330	635	136	94	72	21	113
12	80	360	247	208	95	1930	468	126	204	37	21	113
13	83	922	266	210	108	2900	536	100	631	27	21	65
14	109	572	306	264	110	2540	411	94	1250	27	21	75
15	120	244	915	241	205	1390	365	87	506	38	49	106
16	119	199	1170	219	196	774	313	83	699	43	62	99
17	125	198	982	199	211	585	403	83	2190	43	61	80
18	116	196	757	233	209	427	348	91	1990	43	61	65
19	116	192	334	227	187	367	177	94	817	43	61	60
20	115	152	331	162	177	348	103	108	285	39	61	60
21	115	134	330	148	178	332	105	129	222	35	49	59
22	114	132	332	159	740	319	106	135	231	35	32	59
23	113	124	681	159	1860	347	78	119	185	35	23	59
24	101	115	641	188	3100	333	33	124	138	35	21	69
25	93	114	376	201	3320	361	24	155	67	30	24	85
26	92	112	247	163	4470	374	25	163	43	21	27	90
27	92	111	198	123	5700	324	25	152	43	21	38	83
28	91	110	249	101	6010	335	25	192	56	21	43	79
29	91	199	300	87	---	545	25	289	61	21	43	75
30	90	484	859	82	---	626	22	372	69	21	43	62
31	90	---	2020	90	---	1360	---	292	---	21	43	---
TOTAL	2990	6503	14225	23829	27640	65257	30327	3886	11927	1521	1219	2035
MEAN	96.5	217	459	769	987	2105	1011	125	398	49.1	39.3	67.8
MAX	125	922	2020	4620	6010	6020	4210	372	2190	83	205	113
MIN	60	89	98	82	53	319	22	20	43	21	21	43

CAL YR 1984	TOTAL	219536	MEAN	600	MAX	5940	MIN	21
WTR YR 1985	TOTAL	191359	MEAN	524	MAX	6020	MIN	20

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 east of Huntington, and at mile 7.5.

DRAINAGE AREA.--263 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, nonrecording gage 4 miles downstream at datum 8.79 ft lower, and Oct. 1, 1948, to Sept. 5, 1950, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-8, 25-27, Jan 10 to Feb. 23 and Apr. 28 to May 7. Records good except those for periods with ice effect, Jan 10 to Feb. 23, which are poor. During periods of extreme high water in St. Marys River, some water leaves the St. Marys River basin through Junk ditch and flows into Little River basin via Graham McCulloch ditch.

AVERAGE DISCHARGE.--42 years, 227 ft^3/s, 11.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,990 ft^3/s Jan. 4, 1950; maximum gage height, 19.50 ft Feb. 25, 1985; minimum daily discharge, 1.1 ft^3/s Oct. 8, 1946, site then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1400	3,200	14.02	Mar. 4	2200	2,980	13.49
Feb. 25	0100	*5,750	*19.50				

Minimum daily discharge, 15 ft^3/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	42	93	2610	48	1360	2050	64	69	34	23	36
2	16	77	74	2880	44	1210	907	63	65	33	19	27
3	17	79	86	1590	41	970	508	55	99	32	17	25
4	15	65	86	686	40	1780	344	48	92	29	17	24
5	16	55	75	405	41	2650	685	43	68	46	22	25
6	20	47	70	298	41	1420	2460	41	58	44	28	24
7	21	41	65	246	40	828	1370	40	50	32	33	23
8	69	36	63	195	39	991	675	38	45	28	52	22
9	64	44	61	146	37	692	464	37	43	24	25	52
10	41	129	58	130	35	462	349	36	42	24	19	411
11	29	1580	56	120	40	696	288	35	41	23	18	160
12	25	1030	61	110	55	1050	234	35	103	22	17	78
13	25	407	219	90	68	509	204	35	101	22	39	50
14	38	238	556	84	72	372	186	34	80	22	479	35
15	95	184	579	78	65	293	171	34	61	21	770	29
16	73	167	326	74	58	245	149	34	1130	20	298	26
17	55	128	235	70	55	215	123	34	651	19	115	23
18	40	101	173	72	52	179	114	35	383	18	136	22
19	36	83	144	72	51	162	108	36	199	18	141	23
20	42	71	141	65	50	150	98	36	121	18	79	19
21	301	60	160	54	50	128	91	34	91	19	56	19
22	225	52	809	50	1000	121	85	34	74	19	44	20
23	114	50	400	51	3000	121	81	33	62	17	37	23
24	77	50	238	55	5410	117	81	31	53	17	32	46
25	59	47	150	58	5500	101	83	30	46	17	31	37
26	58	43	110	59	4460	88	81	29	41	20	34	28
27	53	42	100	58	3030	91	74	29	38	20	30	25
28	46	102	282	55	1860	195	68	352	35	20	27	22
29	42	166	642	54	---	424	64	234	40	20	25	21
30	38	120	1580	53	---	307	60	110	36	18	36	21
31	36	---	800	50	---	1860	---	82	---	20	61	---
TOTAL	1803	5336	8492	10618	25282	19787	12255	1811	4017	736	2760	1396
MEAN	58.2	178	274	343	903	638	409	58.4	134	23.7	89.0	46.5
MAX	301	1580	1580	2880	5500	2650	2460	352	1130	46	770	411
MIN	15	36	56	50	35	88	60	29	35	17	17	19
CFSM	.22	.68	1.04	1.30	3.43	2.43	1.56	.22	.51	.09	.34	.18
IN.	.26	.75	1.20	1.50	3.58	2.80	1.73	.26	.57	.10	.39	.20

CAL YR 1984	TOTAL	98674	MEAN	270	MAX	3490	MIN	15	CFSM	1.03	IN.	13.96
WTR YR 1985	TOTAL	94293	MEAN	258	MAX	5500	MIN	15	CFSM	.98	IN.	13.34

03324200 SALAMONIE RIVER AT PORTLAND, IN

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

DRAINAGE AREA.--85.6 mi^2.

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

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 877.59 ft above 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 upstream at datum 6.43 ft higher.

REMARKS.--Estimated daily discharges: Dec. 6, 7, 19, Jan. 9 to Feb. 20, Sept. 2-7 and 11-30. Records good except those for estimated daily discharges, which are fair. Natural flow partially affected by sewage effluent.

AVERAGE DISCHARGE.--26 years, 73.1 ft^3/s, 11.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft^3/s Mar. 5, 1963, gage height, 16.96 ft; minimum daily, 0.4 ft^3/s Sept. 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1700	*3,080	*15.85	Mar. 31	1800	2,170	12.99

Minimum daily discharge, 1.9 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	15	31	954	11	88	667	18	7.3	4.5	4.5	3.7
2	2.8	65	21	341	10	117	154	47	6.0	5.6	3.2	3.0
3	2.8	27	30	110	10	79	93	57	5.8	4.6	3.1	2.7
4	2.7	14	32	64	10	287	64	23	5.3	4.0	2.7	2.5
5	2.3	10	18	44	10	449	124	16	5.2	5.3	3.2	3.4
6	1.9	8.5	15	34	10	112	467	13	5.2	11	3.7	3.4
7	8.1	7.1	14	31	10	84	128	11	5.0	5.0	3.3	3.4
8	10	6.7	13	25	9.5	378	83	8.5	4.9	3.7	3.0	4.8
9	7.4	6.9	12	17	9.2	151	61	7.7	4.6	3.1	3.0	8.3
10	5.0	7.9	16	16	9.4	84	50	6.9	4.5	3.3	2.9	12
11	3.6	202	44	16	12	655	44	6.5	21	2.8	3.1	5.2
12	2.9	123	44	16	17	665	37	6.3	178	2.8	2.6	3.6
13	2.8	47	125	15	20	167	33	6.3	78	2.9	2.9	3.1
14	3.7	25	383	16	18	112	31	5.8	31	3.1	7.5	3.0
15	2.9	21	192	13	15	76	30	7.4	16	17	5.5	3.0
16	3.1	20	92	13	14	57	25	7.0	51	15	5.4	3.0
17	2.7	16	59	13	14	46	20	7.8	30	5.9	3.8	3.0
18	2.4	12	39	13	15	37	18	8.0	15	4.0	3.6	3.0
19	2.9	10	32	12	19	33	18	7.0	10	3.2	2.9	3.1
20	3.5	9.0	33	12	32	97	17	6.5	7.7	3.1	2.7	3.1
21	5.0	7.9	47	12	121	72	15	52	6.5	2.8	2.4	3.5
22	4.3	6.9	181	12	1270	48	14	33	6.0	2.9	2.4	4.5
23	4.0	6.6	64	12	2950	63	13	14	5.3	2.8	2.4	10
24	3.6	6.6	40	13	2290	86	13	9.5	5.0	2.7	13	19
25	3.8	6.4	27	11	556	56	13	7.6	4.6	2.9	10	9.0
26	3.4	6.1	22	11	238	40	12	6.5	4.2	5.7	4.8	5.6
27	3.4	6.2	19	10	164	37	11	11	3.7	4.1	3.5	4.3
28	3.2	137	21	10	102	36	9.7	37	3.7	3.2	3.1	3.3
29	2.9	124	28	10	---	33	9.1	22	3.7	2.8	3.1	2.8
30	2.7	50	565	10	---	95	8.6	12	3.4	2.9	8.9	2.7
31	2.9	---	211	11	---	1570	---	8.8	---	10	4.9	---
TOTAL	115.7	1010.8	2470	1897	7966.1	5910	2282.4	490.1	537.6	152.7	131.1	145.0
MEAN	3.73	33.7	79.7	61.2	285	191	76.1	15.8	17.9	4.93	4.23	4.83
MAX	10	202	565	954	2950	1570	667	57	178	17	13	19
MIN	1.9	6.1	12	10	9.2	33	8.6	5.8	3.4	2.7	2.4	2.5
CFSM	.04	.39	.93	.71	3.33	2.23	.89	.18	.21	.06	.05	.06
IN.	.05	.44	1.07	.82	3.46	2.57	.99	.21	.23	.07	.06	.06

CAL YR 1984	TOTAL	26468.2	MEAN	72.3	MAX	1950	MIN	1.9	CFSM	.84	IN.	11.50
WTR YR 1985	TOTAL	23108.5	MEAN	63.3	MAX	2950	MIN	1.9	CFSM	.74	IN.	10.04

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 downstream from Detamore ditch, 0.4 mile downstream from Interstate 69, 0.8 mile upstream from concrete and stone dam, 2.4 miles northwest of Warren, and at mile 30.0.

DRAINAGE AREA.--425 mi^2.

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete and stone control. Datum of gage is 784.65 ft above 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.--Estimated daily discharges: Oct. 1 to Oct. 6, Dec. 20, Jan. 11 to Feb. 21, Jun. 27 to July 2, July 20 to July 27, Aug. 12, Sept. 18 to Sept. 22. Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--28 years, 386 ft^3/s, 12.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft^3/s Feb. 10, 1959, gage height, 17.05 ft; minimum daily, 5.1 ft^3/s Jan. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	2400	4,090	10.50	Mar. 12	0800	3,600	9.85
Feb. 24	0700	*10,800	*15.35	Apr. 1	0200	4,090	10.50
Mar. 5	1100	3,370	9.67	Apr. 6	1200	3,630	10.11

Minimum daily discharge, 11 ft^3/s Sept. 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	191	223	3270	58	849	3770	67	73	18	37	24
2	46	259	160	3660	58	766	3230	87	67	21	43	38
3	45	391	135	2050	57	670	1010	121	452	33	50	32
4	43	295	170	698	56	1230	538	153	250	38	32	23
5	44	209	163	441	55	3180	907	108	129	52	32	18
6	47	162	125	319	55	1890	3360	88	105	51	29	15
7	57	131	90	262	56	727	2090	78	68	41	36	13
8	76	112	102	219	56	1290	853	80	50	39	32	13
9	99	99	102	171	54	1280	587	73	44	43	28	29
10	93	126	103	132	52	652	423	69	37	31	25	195
11	37	397	108	122	51	1310	346	67	70	24	18	159
12	30	699	159	120	54	3480	288	67	640	23	13	100
13	28	438	206	120	72	2530	245	67	712	25	13	45
14	34	229	561	108	120	810	220	67	357	59	41	28
15	33	175	1160	100	140	551	203	81	192	128	45	21
16	38	170	608	96	130	405	186	93	803	146	73	16
17	56	154	356	92	112	333	164	113	591	89	57	14
18	74	109	250	88	102	271	142	88	279	48	41	13
19	126	87	186	88	98	230	131	67	159	27	33	12
20	121	69	168	88	110	220	121	52	106	22	28	11
21	207	58	180	84	162	327	108	46	76	18	21	11
22	180	49	466	78	2030	266	101	96	61	17	20	12
23	143	46	573	72	7920	223	94	163	51	16	22	16
24	146	45	285	67	10700	216	95	106	48	15	33	29
25	160	45	198	65	9850	225	90	83	38	16	37	47
26	163	43	132	62	7500	181	85	67	29	20	90	38
27	151	42	145	58	3750	159	81	71	22	18	61	38
28	144	62	180	58	1290	185	76	98	19	15	32	28
29	138	479	383	58	---	191	70	239	19	15	26	24
30	135	388	1550	58	---	202	63	140	17	18	34	21
31	141	---	1930	58	---	2410	---	93	---	24	26	---
TOTAL	2881	5759	11157	12962	44748	27259	19677	2888	5564	1150	1108	1083
MEAN	92.9	192	360	418	1598	879	656	93.2	185	37.1	35.7	36.1
MAX	207	699	1930	3660	10700	3480	3770	239	803	146	90	195
MIN	28	42	90	58	51	159	63	46	17	15	13	11
CFSM	.22	.45	.85	.98	3.76	2.07	1.54	.22	.44	.09	.08	.08
IN.	.25	.50	.98	1.13	3.92	2.39	1.72	.25	.49	.10	.10	.09

CAL YR 1984	TOTAL	141920	MEAN	388	MAX	4530	MIN	28	CFSM	.91	IN.	12.42
WTR YR 1985	TOTAL	136236	MEAN	373	MAX	10700	MIN	11	CFSM	.88	IN.	11.92

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 downstream from Salamonie Lake, 1.5 miles northwest of Dora, and 3.0 miles upstream from mouth.

DRAINAGE AREA.--557 mi^2.

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 above 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 upstream at datum 688.59 ft National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers) and Oct. 1, 1951, to Oct. 8, 1961, water-stage recorder located on left bank 2,000 ft upstream at datum 679.77 ft National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

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

COOPERATION.-Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--61 years (1924 to current year), 511 ft^3/s, 12.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s May 18, 1943, gage height, 14.75 ft, from graph based on gage readings, site and datum then in use; minimum daily, 0.70 ft^3/s Oct. 30, 1968, result of abnormal regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,110 ft^3/s Mar. 15; minimum daily, 18 ft^3/s Dec. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	432	303	103	113	1750	1160	24	25	26	26	26
2	343	429	139	109	112	2110	1940	24	25	26	26	26
3	380	426	138	112	112	2100	891	25	25	26	26	215
4	344	424	92	1450	99	845	556	25	25	26	26	126
5	348	500	93	2340	90	1400	198	25	25	26	26	26
6	347	398	122	2440	90	2140	361	25	25	26	26	26
7	362	297	217	2900	90	2910	514	25	25	26	26	26
8	397	296	258	3090	90	4630	1030	25	25	26	26	26
9	393	294	184	2420	81	3500	941	25	25	26	26	215
10	384	292	77	1200	71	4770	615	25	25	26	26	536
11	383	291	18	504	71	4690	496	25	25	26	26	648
12	382	291	18	298	60	4940	451	25	26	26	26	628
13	381	524	18	199	80	5040	372	25	26	26	73	716
14	380	683	248	169	91	4960	347	25	26	26	26	711
15	442	675	536	169	238	5110	277	25	26	26	347	707
16	473	665	812	144	359	5090	254	25	89	26	232	702
17	546	640	645	117	356	4930	105	25	121	26	64	698
18	598	518	288	146	257	4990	96	25	421	41	48	631
19	787	460	184	165	268	4870	24	25	818	48	33	711
20	886	455	148	130	272	4260	24	25	639	124	26	571
21	877	450	149	112	221	3550	24	25	179	94	26	499
22	867	444	175	112	154	2580	24	25	72	26	26	497
23	596	383	431	112	106	884	24	25	48	26	26	396
24	456	345	442	112	117	513	24	25	48	26	26	345
25	454	340	315	112	124	379	24	25	48	26	120	385
26	451	336	164	113	128	279	24	25	48	26	26	404
27	448	331	108	113	131	186	24	25	48	26	26	403
28	445	326	191	113	784	238	24	25	33	26	26	401
29	442	323	192	113	---	305	24	25	26	26	26	399
30	439	668	198	113	---	287	24	25	26	26	26	357
31	435	---	266	113	---	305	---	25	---	26	26	---
TOTAL	14819	12936	7169	19443	4765	84541	10892	773	3043	1009	1541	12057
MEAN	478	431	231	627	170	2727	363	24.9	101	32.5	49.7	402
MAX	886	683	812	3090	784	5110	1940	25	818	124	347	716
MIN	343	291	18	103	60	186	24	24	25	26	26	26

CAL YR 1984	TOTAL	179795	MEAN	491	MAX	5450	MIN	18
WTR YR 1985	TOTAL	172988	MEAN	474	MAX	5110	MIN	18

03325000 WABASH RIVER AT WABASH, IN

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

DRAINAGE AREA.--1,768 mi^2.

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. WRD IN-84-1: 1983.

GAGE.--Water-stage recorder. Datum of gage is 642.66 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1954, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 6, 7, Jan. 1-4, and Jan. 11 to Feb. 22. Records good except those for periods with ice effect, Jan. 11 to Feb. 22, which are fair. Flow regulated by Huntington Lake and Salamonie Lake.

AVERAGE DISCHARGE.--62 years, 1,495 ft^3/s, 11.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,600 ft^3/s May 18, 1943; maximum gage height, 24.44 ft Feb. 11, 1959 (ice jam); minimum daily discharge, 19 ft^3/s July 21, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.7 ft Mar. 26, 1913, from floodmark, determined by Corps of Engineers, discharge, 90,000 ft^3/s, from rating curve extended above 49,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,500 ft^3/s Feb. 23, gage height, 16.51 ft; minimum daily, 59 ft^3/s July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	567	599	1410	6900	290	9400	6640	126	385	150	78	130
2	434	606	907	6300	280	9660	7280	130	252	161	67	120
3	457	698	739	3800	280	9080	6140	128	309	160	67	195
4	429	710	619	6300	270	9680	4890	120	428	161	63	278
5	420	903	551	6490	260	9720	3230	110	385	167	77	97
6	435	827	520	4430	260	10400	5930	129	431	165	101	97
7	475	588	480	3830	240	8980	5060	185	416	171	82	98
8	533	554	530	3880	220	9310	4450	207	411	160	78	95
9	555	558	508	3320	220	8860	3980	209	267	153	96	208
10	564	608	510	2020	210	7580	2600	205	185	144	94	1140
11	548	1660	445	1000	210	6760	1900	203	185	142	260	1170
12	514	2570	461	700	270	7420	1500	203	267	131	78	881
13	489	2040	541	600	310	7750	1470	193	520	106	125	890
14	499	1960	1200	530	320	7670	1340	165	1330	84	394	791
15	576	1370	2200	510	500	6540	1130	168	723	87	1480	795
16	691	1170	2430	500	600	5710	1080	160	2100	87	1100	825
17	713	1130	2300	500	660	5510	933	150	2510	87	436	799
18	764	995	1480	490	660	5270	871	150	3100	91	263	703
19	860	848	943	490	580	5150	641	158	1940	107	338	760
20	1020	828	855	490	520	4720	345	159	1410	118	257	676
21	1120	756	832	400	500	4140	307	183	604	219	190	557
22	1320	717	1550	370	2300	3710	284	191	525	81	152	552
23	1020	675	1650	360	12400	1900	275	193	413	76	126	512
24	726	629	1800	390	14200	1300	221	174	349	75	123	448
25	668	615	1260	390	12400	1170	185	182	293	76	174	473
26	630	608	861	370	10500	1070	170	192	201	86	106	535
27	621	603	626	350	10100	922	154	217	167	73	119	531
28	611	640	712	330	9620	1200	144	431	151	69	107	518
29	597	746	1250	310	---	1720	136	749	137	60	108	505
30	593	1280	3080	300	---	1630	129	595	142	59	124	474
31	582	---	3020	300	---	4240	---	562	---	74	112	---
TOTAL	20031	28491	36270	56950	79180	178172	63415	6927	20536	3580	6975	15953
MEAN	646	950	1170	1837	2828	5747	2114	223	685	115	225	528
MAX	1320	2570	3080	6900	14200	10400	7280	749	3100	219	1480	1170
MIN	420	554	445	300	210	922	129	110	137	59	63	95
CFSM	.37	.54	.66	1.04	1.60	3.25	1.20	.13	.39	.07	.13	.30
IN.	.42	.60	.76	1.20	1.67	3.75	1.33	.15	.43	.08	.15	.33

CAL YR 1984	TOTAL	556381	MEAN	1520	MAX	10900	MIN	67	CFSM	.86	IN.	11.71
WTR YR 1985	TOTAL	516380	MEAN	1415	MAX	14200	MIN	59	CFSM	.80	IN.	10.87

03325311 LITTLE MISSISSINEWA RIVER AT UNION CITY, IN

LOCATION.--Lat 40°11'46", long 84°49'45", in SE¼NW¼ sec.26, T.18 N., R.1 W., Randolph County, Hydrologic Unit 05120103, on right bank, 85 ft downstream from Westinghouse Road, 0.5 mile downstream from Little ditch, 0.8 mile upstream from City Drain, and 1.2 miles west of the Post Office in Union City.

DRAINAGE AREA.--9.67 mi^2.

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1075.50 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-8, 19, 25-27, Jan 12-15, 17, 18, 20-24, 26-29, Feb 2, 3, 5-22. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 234 ft^3/s Feb. 23, 1985 gage height, 7.22 ft; no flow at times for most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 140 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1600	*234	*7.22	Mar. 31	1200	178	6.15

Minimum daily discharge, 0.07 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	12	8.2	109	1.4	27	84	9.2	1.9	.62	8.3	.42
2	.10	47	6.0	81	1.4	22	52	62	1.9	.65	.83	.34
3	.09	22	7.2	49	1.3	18	35	39	1.9	.54	.36	.30
4	.09	11	5.3	33	1.3	19	24	20	1.7	.49	.26	.28
5	.08	6.6	3.5	17	1.3	19	23	12	1.6	.82	.26	.27
6	.07	3.9	2.7	13	1.1	11	33	8.5	1.3	2.6	.24	.27
7	.28	2.6	2.3	10	1.0	11	20	6.0	1.6	.69	5.6	.26
8	2.8	2.2	2.1	6.7	.95	37	14	4.7	1.5	.51	16	.27
9	1.8	2.2	2.5	5.0	.92	22	10	4.2	1.3	.44	2.3	.32
10	.90	2.4	5.5	5.3	1.1	14	9.2	3.8	1.1	.38	.80	.28
11	.60	40	7.6	4.0	2.5	46	7.7	3.5	5.7	.33	.48	.25
12	.53	30	8.9	3.4	8.1	49	6.4	3.1	30	.30	.38	.23
13	.49	14	31	3.0	4.6	26	6.1	2.5	16	.30	.34	.21
14	.69	8.3	76	2.9	3.4	18	5.9	2.4	7.1	.30	.32	.20
15	1.7	6.9	53	2.7	2.9	12	5.5	9.1	4.9	2.2	8.8	.19
16	3.6	4.5	35	2.4	2.6	11	6.4	8.2	3.5	.61	18	.19
17	2.0	3.2	22	2.3	2.4	8.8	4.7	5.7	2.6	.37	5.6	.18
18	1.2	3.2	14	2.2	2.2	7.1	4.7	5.0	2.3	.30	1.9	.17
19	1.2	2.7	7.6	2.1	2.3	6.6	4.2	5.7	1.7	.28	1.1	.17
20	1.1	2.0	8.4	1.3	2.5	5.5	3.7	4.3	1.4	.26	.73	.16
21	10	1.7	23	1.1	3.3	4.6	3.3	3.6	1.2	.25	.50	.14
22	5.4	1.6	55	1.1	100	4.9	3.2	3.0	1.2	.24	.42	.14
23	2.6	1.9	28	1.2	218	4.7	3.0	2.9	1.0	.21	.36	.17
24	1.5	1.6	18	1.3	141	4.4	3.2	2.6	.90	.18	.59	.24
25	1.1	1.4	6.8	1.3	89	3.1	2.5	2.4	.79	.18	.61	.17
26	.94	1.3	5.2	1.4	64	3.0	2.3	2.4	.78	.23	.43	.15
27	.72	1.5	5.5	1.3	46	3.9	2.2	2.6	.70	.18	.35	.14
28	.73	43	6.7	1.3	34	3.9	2.0	2.7	.65	.15	.30	.12
29	.60	31	17	1.2	---	24	1.7	2.2	.60	.12	.32	.09
30	.53	17	96	1.2	---	72	1.8	2.3	.53	.12	2.1	.09
31	.48	---	67	1.3	---	140	---	2.4	---	5.8	.67	---
TOTAL	44.04	328.7	637.0	369.0	740.57	658.5	384.7	248.0	99.35	20.65	79.25	6.41
MEAN	1.42	11.0	20.5	11.9	26.4	21.2	12.8	8.00	3.31	.67	2.56	.21
MAX	10	47	96	109	218	140	84	62	30	5.8	18	.42
MIN	.07	1.3	2.1	1.1	.92	3.0	1.7	2.2	.53	.12	.24	.09
CFSM	.15	1.14	2.12	1.23	2.73	2.19	1.32	.83	.34	.07	.26	.02
IN.	.17	1.26	2.45	1.42	2.85	2.53	1.48	.95	.38	.08	.30	.02

CAL YR 1984	TOTAL	3477.67	MEAN	9.50	MAX	96	MIN	.00	CFSM	.98	IN.	13.38
WTR YR 1985	TOTAL	3616.17	MEAN	9.91	MAX	218	MIN	.07	CFSM	1.02	IN.	13.91

03325500 MISSISSINEWA 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 30 ft downstream from highway bridge, 0.8 mile downstream from Mud Creek, 2 miles east of Ridgeville, and at mile 99.5.

DRAINAGE AREA.--133 mi^2.

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 above 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.-Estimated daily discharge: Dec. 5, 6, and 8, Jan. 10, 11, 13, 14, 17, 18, 21-25, 28-31, Feb. 2-10, 14-21. Records fair.

AVERAGE DISCHARGE.--39 years, 126 ft^3/s, 12.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft^3/s June 10, 1958, gage height, 16.25 ft, from rating curve extended above 5,000 ft^3/s on basis of contracted-opening measurement of peak flow; minimum daily, 0.1 ft^3/s Oct. 24, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharges, greater than base discharge of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Feb. 23	0600	*4,640	*13.00	Mar. 31	1400	3,310	12.16

Minimum daily discharge, 2.6 ft^3/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	102	94	1290	14	233	1070	28	22	11	63	8.9
2	6.2	353	72	486	15	237	401	285	22	53	15	7.9
3	9.4	155	94	231	15	176	264	222	21	20	8.7	7.1
4	8.9	112	74	141	15	292	193	105	20	12	7.2	7.6
5	10	97	51	89	14	377	254	70	19	11	6.9	7.7
6	11	79	47	76	13	160	506	54	18	12	7.6	7.4
7	12	68	41	73	12	154	228	45	18	10	8.0	6.9
8	78	62	38	63	11	617	172	38	22	9.0	121	6.4
9	77	64	39	48	11	288	133	35	19	8.6	25	7.8
10	33	115	64	36	13	180	109	34	16	8.4	11	8.0
11	12	540	116	34	23	860	94	34	31	8.2	8.1	6.1
12	9.4	316	118	40	113	833	74	32	247	8.0	7.0	5.4
13	7.9	161	240	35	79	318	67	29	114	8.1	7.0	5.0
14	15	91	707	32	51	220	64	27	52	9.0	7.4	4.7
15	39	80	373	28	42	149	61	58	36	189	11	4.4
16	62	73	213	25	34	116	55	82	31	52	200	4.0
17	35	60	126	23	31	90	46	52	24	17	52	3.9
18	17	54	80	25	28	79	44	56	23	11	25	3.9
19	13	50	72	25	29	76	41	50	20	9.7	17	3.8
20	14	37	65	16	31	78	39	39	18	8.9	13	3.6
21	65	30	109	12	88	74	36	42	16	8.5	11	3.5
22	69	27	407	13	723	73	34	36	15	8.1	10	3.4
23	40	28	143	14	4120	78	32	31	15	8.2	9.8	3.4
24	23	27	86	14	3630	82	32	28	13	8.0	13	4.3
25	16	23	60	14	1720	73	30	26	12	7.7	28	3.8
26	14	21	48	14	587	65	27	24	12	9.5	13	3.3
27	12	22	47	15	420	69	26	25	11	9.8	11	3.1
28	15	435	48	15	283	68	25	34	11	7.6	9.6	3.0
29	14	302	112	14	---	83	22	26	11	6.8	9.4	2.7
30	15	164	1400	14	---	704	21	24	10	7.1	14	2.6
31	20	---	468	14	---	2540	---	24	---	21	12	---
TOTAL	780.9	3748	5652	2969	12165	9442	4200	1695	919	578.2	761.7	153.6
MEAN	25.2	125	182	95.8	434	305	140	54.7	30.6	18.7	24.6	5.12
MAX	78	540	1400	1290	4120	2540	1070	285	247	189	200	8.9
MIN	6.2	21	38	12	11	65	21	24	10	6.8	6.9	2.6
CFSM	.19	.94	1.37	.72	3.26	2.29	1.05	.41	.23	.14	.18	.04
IN.	.22	1.05	1.58	.83	3.40	2.64	1.17	.47	.26	.16	.21	.04

CAL YR 1984	TOTAL	44456.5	MEAN	121	MAX	1530	MIN	2.3	CFSM	.91	IN.	12.43
WTR YR 1985	TOTAL	43064.4	MEAN	118	MAX	4120	MIN	2.6	CFSM	.89	IN.	12.05

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 downstream from bridge on County Road 100 East, and 2.0 miles southeast of Hartford City.

DRAINAGE AREA.--29.2 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 3 to Oct. 6 and Jan. 12 to Feb. 20. Records fair.

AVERAGE DISCHARGE.--14 years, 27.5 ft^3/s, 12.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1940 ft^3/s June 6, 1981, gage height, 16.14 ft; minimum daily, 0.19 ft^3/s Oct. 4, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1300	453	10.64	Mar. 31	1100	651	*12.25
Feb. 23	0800	*1220	11.49	Apr. 5	2400	480	10.90
Mar. 11	1500	509	11.17				

Minimum daily discharge, 0.78 ft^3/s Aug. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	8.8	9.1	363	2.5	42	165	7.3	2.9	1.6	13	1.3
2	1.9	18	7.2	140	2.4	48	60	22	3.2	3.6	3.8	1.2
3	1.8	6.3	14	46	2.4	30	37	14	3.4	2.1	1.6	1.1
4	1.8	4.5	11	27	2.4	145	25	8.7	2.8	1.6	1.2	.92
5	1.9	3.5	7.3	17	2.4	179	113	7.0	2.7	1.5	1.7	1.3
6	2.0	2.7	6.6	13	2.3	51	240	6.1	2.5	1.7	1.7	1.3
7	3.9	2.2	5.4	11	2.3	54	69	5.3	2.6	1.4	2.0	1.3
8	9.6	2.2	5.3	8.5	2.3	179	39	4.5	2.9	1.3	1.4	1.3
9	3.7	2.2	5.1	6.8	2.7	64	24	4.2	3.0	1.2	.97	2.6
10	1.8	19	7.0	6.2	2.9	33	19	4.2	2.7	1.3	.78	23
11	1.5	73	10	5.7	3.6	262	16	4.2	18	1.2	.78	5.3
12	1.6	26	11	5.0	9.0	169	14	4.3	79	1.1	.93	1.9
13	1.9	10	28	4.7	7.2	60	12	4.0	38	1.4	1.1	1.3
14	2.5	6.4	108	4.5	5.0	40	11	3.8	13	1.3	1.5	1.1
15	4.0	8.2	63	4.2	3.6	26	10	9.6	8.3	13	2.2	1.2
16	3.1	9.3	27	4.1	3.4	19	8.7	7.4	7.8	6.4	2.2	1.1
17	3.2	5.4	17	4.2	3.2	15	7.1	6.1	5.4	2.5	1.7	1.2
18	2.5	4.4	12	4.0	3.3	13	7.0	5.3	4.5	1.6	1.2	1.2
19	1.9	3.7	13	3.7	3.3	12	6.8	4.2	3.6	1.3	1.9	1.2
20	2.1	3.1	14	3.7	5.2	24	6.7	3.7	3.2	1.2	1.4	1.2
21	4.2	2.8	26	3.5	15	18	6.2	22	2.8	1.3	1.2	1.3
22	3.9	2.6	64	3.4	469	14	6.0	11	2.6	1.2	1.1	1.3
23	2.2	2.5	21	3.3	1100	12	5.8	6.3	2.5	1.2	1.0	1.6
24	1.8	2.4	13	3.3	618	11	5.9	4.3	2.2	1.1	1.6	3.3
25	1.8	2.2	9.5	3.4	220	8.9	5.6	3.8	2.1	1.1	5.0	1.9
26	2.1	2.1	7.9	3.2	116	8.0	5.1	3.2	1.9	3.2	2.4	1.3
27	2.8	2.3	8.2	3.1	80	8.5	5.3	3.2	1.7	2.0	1.5	1.3
28	3.2	45	10	3.1	49	8.7	5.2	28	1.7	1.2	1.2	1.0
29	4.1	27	13	2.9	---	8.3	4.4	8.8	1.6	1.0	1.2	.96
30	4.2	13	154	2.8	---	19	4.2	4.3	1.5	1.4	3.5	.94
31	4.8	---	79	2.6	---	424	---	3.5	---	5.2	2.3	---
TOTAL	89.8	320.8	786.6	716.9	2738.4	2005.4	944.0	234.3	230.1	68.2	65.06	66.92
MEAN	2.90	10.7	25.4	23.1	97.8	64.7	31.5	7.56	7.67	2.20	2.10	2.23
MAX	9.6	73	154	363	1100	424	240	28	79	13	13	23
MIN	1.5	2.1	5.1	2.6	2.3	8.0	4.2	3.2	1.5	1.0	.78	.92
CFSM	.10	.37	.87	.79	3.35	2.22	1.08	.26	.26	.08	.07	.08
IN.	.11	.41	1.00	.91	3.49	2.55	1.20	.30	.29	.09	.08	.09

CAL YR 1984	TOTAL	9641.2	MEAN	26.3	MAX	605	MIN	1.5	CFSM	.90	IN.	12.28
WTR YR 1985	TOTAL	8266.48	MEAN	22.6	MAX	1100	MIN	.78	CFSM	.77	IN.	10.53

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 downstream from Highland Avenue bridge in Marion, 0.1 mile downstream from old mill dam, 1.0 mile upstream from Hummel Creek, 4.6 miles downstream from Lugar Creek, and at mile 35.8.

DRAINAGE AREA.--682 mi^2.

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

REMARKS.--Estimated daily discharges: Dec. 6-8 and Jan. 12 to Feb. 20. Records good. Flow periodically regulated by dam above station.

AVERAGE DISCHARGE.--62 years, 626 ft^3/s, 12.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s Mar. 21, 1927, gage height, 17.40 ft from graph based on gage readings, from rating curve extended above 18,000 ft^3/s; minimum daily, 3.4 ft^3/s Oct. 25, 1968.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	1700	*19400	*15.16	Apr. 1	1900	6530	8.62

Minimum daily discharge, 16 ft^3/s Oct. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	185	417	4610	118	1390	6360	265	160	86	181	89
2	59	46	302	4120	110	1250	4460	451	153	83	136	81
3	57	281	248	2620	101	1140	1620	582	165	86	168	73
4	52	378	249	1160	100	1380	1070	740	136	89	129	72
5	51	227	257	750	102	2970	1390	483	127	136	205	67
6	50	170	170	554	102	1860	3910	378	119	120	121	63
7	68	142	140	448	100	1100	2570	319	114	99	119	60
8	72	128	152	383	94	2090	1390	274	113	87	124	60
9	83	115	173	317	92	2440	998	242	113	80	100	122
10	96	154	171	264	99	1400	802	219	119	76	87	467
11	121	422	164	246	112	2160	685	204	240	73	132	274
12	117	673	205	230	140	4540	596	194	597	66	103	148
13	102	737	306	220	172	3430	531	186	1090	115	88	102
14	95	398	642	210	320	1590	493	178	693	111	116	84
15	86	295	1490	200	370	1090	471	226	452	1680	356	75
16	81	252	1280	198	250	840	821	232	340	603	242	65
17	73	226	677	195	152	688	559	228	300	548	161	58
18	71	199	487	190	148	577	460	261	247	267	218	53
19	116	170	380	188	152	505	272	214	204	165	175	51
20	125	153	338	170	180	504	362	202	175	125	125	50
21	145	142	324	140	291	498	337	229	157	108	106	50
22	100	130	472	132	2190	459	321	281	145	96	96	52
23	90	120	873	133	11900	427	307	243	130	87	84	67
24	88	112	562	140	18500	400	301	201	121	79	91	113
25	118	109	394	149	14800	383	292	170	114	77	145	89
26	108	109	298	151	6750	232	277	155	107	82	156	78
27	94	114	265	149	2840	319	270	164	101	81	167	69
28	86	149	273	145	1830	333	260	195	95	74	123	63
29	80	455	357	138	---	334	245	296	95	67	103	60
30	51	749	1160	130	---	407	234	239	91	68	116	58
31	16	---	2510	124	---	3500	---	190	---	169	104	---
TOTAL	2616	7540	15736	18804	62115	40236	32664	8441	6813	5683	4377	2813
MEAN	84.4	251	508	607	2218	1298	1089	272	227	183	141	93.8
MAX	145	749	2510	4610	18500	4540	6360	740	1090	1680	356	467
MIN	16	46	140	124	92	232	234	155	91	66	84	50
CFSM	.12	.37	.74	.89	3.25	1.90	1.60	.40	.33	.27	.21	.14
IN.	.14	.41	.86	1.03	3.39	2.19	1.78	.46	.37	.31	.24	.15

CAL YR 1984	TOTAL	220379	MEAN	602	MAX	7760	MIN	16	CFSM	.88	IN.	12.02
WTR YR 1985	TOTAL	207838	MEAN	569	MAX	18500	MIN	16	CFSM	.83	IN.	11.34

03327000 MISSISSINEWA RIVER AT PEORIA, IN

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

DRAINAGE AREA.--808 mi^2.

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

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

GAGE.--None. Datum of gage was 660.00 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1962, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 7, 1954, nonrecording gage and crest-stage gage on highway bridge 2,500 ft upstream, and Oct. 7, 1954, to Sept. 30, 1962, water-stage recorder on right bank at site 2,500 ft upstream at same datum.

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

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--33 years, 713 ft^3/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft^3/s June 11, 1958, gage height, 19.26 ft, site then in use; minimum daily, .00 ft^3/s Sept. 11-30, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,130 ft^3/s Mar. 11-13; minimum daily, .00 ft^3/s Sept. 11-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	669	1000	456	161	5030	823	26	137	110	176	132
2	80	551	406	87	161	4990	1740	108	110	110	261	742
3	57	650	362	1110	161	5090	3110	296	135	110	203	948
4	47	648	271	2600	145	3910	3480	550	180	110	173	130
5	47	736	746	3290	132	4010	1950	476	213	110	174	33
6	59	634	719	3800	132	4980	1000	391	118	110	202	7.8
7	80	496	167	4000	144	4950	1020	371	203	140	223	25
8	128	494	42	3650	154	4900	1290	322	170	154	223	25
9	172	492	43	2770	154	4960	1440	264	110	154	223	21
10	192	490	44	1550	154	5100	916	239	110	154	206	12
11	192	490	44	518	154	5130	693	225	249	103	166	.00
12	192	570	45	308	155	5130	693	222	524	56	129	.00
13	192	842	45	307	155	5130	693	222	723	47	110	.00
14	192	1010	46	336	156	5100	692	223	837	90	140	.00
15	426	1010	679	361	368	5040	492	241	836	957	513	.00
16	749	1000	1600	289	675	4960	378	300	555	1060	632	.00
17	824	997	944	183	673	4880	468	298	390	517	520	.00
18	866	742	533	226	442	4920	482	279	257	507	192	.00
19	897	615	481	248	328	4920	312	257	217	195	228	.00
20	899	612	402	212	329	4020	202	224	217	83	208	.00
21	890	610	317	151	370	2010	202	207	192	231	132	.00
22	1000	607	399	132	246	1130	202	208	133	68	110	.00
23	1090	604	817	132	118	942	202	208	110	68	82	.00
24	970	665	800	210	132	485	129	231	110	68	68	.00
25	675	707	592	173	143	364	96	240	110	68	140	.00
26	519	661	477	132	845	409	96	240	110	108	240	.00
27	901	626	317	169	2370	439	96	240	110	123	232	.00
28	1060	623	317	191	4390	381	91	302	110	110	157	.00
29	1060	620	390	190	---	393	45	333	110	101	111	.00
30	1050	1130	1090	174	---	436	26	313	110	89	114	.00
31	1050	---	1200	161	---	515	---	241	---	89	132	---
TOTAL	16672	20601	15335	28116	13547	104654	23059	8297	7496	6000	6420	2075.80
MEAN	538	687	495	907	484	3376	769	268	250	194	207	69.2
MAX	1090	1130	1600	4000	4390	5130	3480	550	837	1060	632	948
MIN	47	490	42	87	118	364	26	26	110	47	68	.00
CFSM	.67	.85	.61	1.12	.60	4.18	.95	.33	.31	.24	.26	.09
IN.	.77	.95	.71	1.29	.62	4.82	1.06	.38	.35	.28	.30	.10

CAL YR 1984	TOTAL	249966	MEAN	683	MAX	5370	MIN	26	CFSM	.85	IN.	11.51
WTR YR 1985	TOTAL	252272.80	MEAN	691	MAX	5130	MIN	.00	CFSM	.86	IN.	11.61

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 southwest of Peru, 4.4 miles downstream from Mississinewa River, and at mile 370.5.

DRAINAGE AREA.--2,686 mi^2.

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

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 617.94 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 20, 1961, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-7, Jan. 12 to Feb. 22, May 15- 30, and July 19-29. Records good except for period of ice effect, Jan. 12 to Feb. 22, and for periods of no gage-height record, May 15-30, and July 19-29, which are fair. Flow regulated by Huntington Lake, Salamonie Lake, and Mississinewa Lake.

AVERAGE DISCHARGE.--42 years, 2,366 ft^3/s, 11.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,000 ft^3/s May 18, 1943, gage height, 24.46 ft, from floodmark; minimum daily, 72 ft^3/s Oct. 5, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 28.1 ft, discharge, 115,000 ft^3/s, from rating curve extended above 63,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,800 ft^3/s Feb.24, gage height, 12.77 ft; minimum daily, 189 ft^3/s Sept. 6,7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	557	1520	3130	8550	480	15000	7880	348	714	313	255	278
2	518	1150	1460	8970	460	15200	9470	352	516	324	392	472
3	466	1380	1350	7460	460	14700	9970	527	466	321	359	1570
4	467	1440	1040	9600	450	14700	9200	761	546	314	291	455
5	436	1600	940	11000	420	14600	6470	839	610	330	307	320
6	452	1740	850	9290	410	16000	7890	695	734	329	331	189
7	520	1190	750	8460	400	14900	7030	663	795	336	355	189
8	612	1120	676	8340	430	14900	6340	691	735	338	324	206
9	681	1110	667	7050	400	14800	6260	617	569	339	310	238
10	710	1160	579	4600	400	13800	4330	585	416	346	343	799
11	712	1730	563	2170	410	13000	3080	543	428	334	409	1470
12	697	3570	526	1200	470	13300	2540	533	882	271	313	1070
13	671	2980	569	960	500	13600	2340	524	1170	351	273	952
14	660	3400	1000	890	510	13500	2300	498	1990	251	415	912
15	785	2760	2690	900	800	12400	1960	480	2250	714	1660	840
16	1440	2440	4550	900	1300	11500	1600	480	2500	1590	2480	872
17	1460	2320	4060	800	1400	11000	1510	480	3230	668	1130	844
18	1690	2080	2550	770	1400	10600	1540	460	4080	809	612	775
19	1780	1620	1830	770	1100	10500	1300	450	2720	500	548	722
20	2020	1590	1510	760	920	9540	866	430	2200	350	712	761
21	2090	1510	1340	640	880	7020	736	410	1190	700	459	581
22	2410	1470	1910	530	1200	5690	716	430	738	250	370	558
23	2340	1430	2670	520	7970	3240	702	440	624	200	332	576
24	1850	1430	3090	550	16100	2120	646	400	541	190	288	480
25	1510	1480	2220	630	14000	1830	498	440	475	200	294	456
26	1220	1420	1790	580	12400	1650	472	450	425	210	415	526
27	1450	1350	1140	560	13100	1690	454	480	353	210	449	540
28	1750	1420	1160	540	14500	1610	435	700	337	220	337	533
29	1730	1470	1680	520	---	2430	404	1100	324	230	298	520
30	1720	2100	4090	510	---	2460	351	1040	313	216	285	513
31	1710	---	5070	490	---	4880	---	978	---	260	299	---
TOTAL	37114	52980	57450	99510	93270	302160	99290	17824	32871	12014	15645	19217
MEAN	1197	1766	1853	3210	3331	9747	3310	575	1096	388	505	641
MAX	2410	3570	5070	11000	16100	16000	9970	1100	4080	1590	2480	1570
MIN	436	1110	526	490	400	1610	351	348	313	190	255	189
CFSM	.45	.66	.69	1.20	1.24	3.63	1.23	.21	.41	.14	.19	.24
IN.	.51	.73	.80	1.38	1.29	4.18	1.38	.25	.46	.17	.22	.27

CAL YR 1984	TOTAL	886339	MEAN	2422	MAX	13200	MIN	184	CFSM	.90	IN.	12.28
WTR YR 1985	TOTAL	839345	MEAN	2300	MAX	16100	MIN	189	CFSM	.86	IN.	11.62

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 downstream from bridge on County Road 125 West, 0.5 mile northeast of Bunker Hill, and at mile 11.4.

DRAINAGE AREA.--159 mi^2.

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6-8, and Jan. 12 to Feb. 22. Records good except for period with ice effect, Jan. 12 to Feb. 22, which are fair.

AVERAGE DISCHARGE.--17 years, 148 ft^3/s, 12.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,390 ft^3/s Feb. 24, 1985, gage height, 16.59 ft; minimum daily, 3.3 ft^3/s Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1200	1800	10.25	Mar. 31	2300	1050	7.78
Feb. 24	0800	*4390	*16.59	Apr. 6	1000	1130	8.08
Mar. 4	2100	1280	8.56	July 16	1400	1190	8.29
Mar. 12	0300	1220	8.38				

Minimum daily discharge, 8.0 ft^3/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	23	83	1420	35	511	860	56	34	20	38	53
2	8.2	96	65	1420	34	480	497	62	32	21	26	34
3	8.4	55	60	688	32	416	343	57	69	20	22	25
4	8.2	38	51	398	31	825	254	52	68	19	19	20
5	8.0	30	45	275	32	1110	426	49	47	19	28	18
6	8.1	24	42	207	32	578	1040	49	39	17	85	17
7	9.6	21	42	177	32	445	697	47	34	17	63	16
8	13	19	60	142	30	703	412	43	31	19	41	15
9	24	18	52	112	28	543	288	41	29	16	33	15
10	14	20	42	103	28	383	222	40	27	14	25	164
11	12	296	43	97	64	704	186	40	73	14	21	85
12	10	261	48	88	65	1080	153	40	211	13	19	52
13	11	138	75	79	58	628	136	39	238	22	19	33
14	12	90	220	81	52	410	131	36	141	21	22	25
15	12	83	308	70	48	302	130	39	99	448	260	21
16	14	113	213	66	44	243	205	62	92	1120	316	19
17	20	85	159	65	43	204	300	72	88	827	175	17
18	15	68	121	65	44	161	194	56	73	293	98	16
19	13	59	104	57	45	142	151	47	61	164	62	15
20	12	48	95	47	48	133	122	41	51	105	45	14
21	28	40	96	43	75	117	104	40	44	72	36	14
22	39	37	170	40	600	110	94	55	40	54	30	13
23	21	35	141	42	2750	108	87	50	36	42	25	15
24	17	34	122	43	4210	101	84	42	33	34	49	30
25	15	33	95	45	3160	87	77	38	30	29	33	41
26	13	31	86	40	1810	75	69	35	27	29	25	29
27	13	31	75	35	942	78	65	42	25	24	22	25
28	12	113	89	33	632	104	62	62	23	21	20	21
29	11	156	173	33	---	117	57	49	22	20	18	18
30	11	114	596	34	---	131	55	42	20	19	20	17
31	10	---	530	35	---	731	---	38	---	48	55	---
TOTAL	431.0	2209	4101	6080	15004	11760	7501	1461	1837	3601	1750	897
MEAN	13.9	73.6	132	196	536	379	250	47.1	61.2	116	56.5	29.9
MAX	39	296	596	1420	4210	1110	1040	72	238	1120	316	164
MIN	8.0	18	42	33	28	75	55	35	20	13	18	13
CFSM	.09	.46	.83	1.23	3.37	2.38	1.57	.30	.38	.73	.36	.19
IN.	.10	.52	.96	1.42	3.51	2.75	1.75	.34	.43	.84	.41	.21

CAL YR 1984	TOTAL	50300.3	MEAN	137	MAX	1940	MIN	8.0	CFSM	.86	IN.	11.77
WTR YR 1985	TOTAL	56632.0	MEAN	155	MAX	4210	MIN	8.0	CFSM	.97	IN.	13.25

03328000 EEL RIVER AT NORTH MANCHESTER, IN

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

DRAINAGE AREA.--417 mi^2, 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 from 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 above National Geodetic Vertical Datum of 1929. Prior to July 24, 1953, nonrecording gage on downstream side of Second Street bridge, 700 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 7, 8, and Jan. 11 to Feb. 22. Records good except for period with ice effect, which are fair. Records include flow of Pony Creek.

AVERAGE DISCHARGE.--56 years, 364 ft^3/s, 11.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,240 ft^3/s Feb. 24, 1985, gage height, 13.76 ft; maximum gage height, 14.00 ft Feb. 27, 1936; minimum daily discharge, 16 ft^3/s Oct. 19, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	2200	3,760	9.50	Mar. 31	2100	2,680	7.96
Feb. 24	0500	*8,240	*13.76	Apr. 6	0800	3,130	8.65
Mar. 5	0500	3,460	9.11				

Minimum daily discharge, 66 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	162	264	2690	140	2620	2300	206	189	105	79	86
2	86	244	223	3140	130	2080	1830	213	169	111	73	82
3	75	255	216	2370	125	1740	1400	204	233	107	69	82
4	72	222	203	2430	120	2140	975	192	171	100	66	80
5	72	201	185	1140	120	3150	1160	185	155	113	80	79
6	72	178	180	784	120	2440	2920	181	147	114	87	79
7	85	164	175	638	120	1980	2320	178	140	109	86	79
8	144	158	170	545	115	1740	1900	173	133	106	95	80
9	310	170	190	457	110	1380	1390	162	125	95	82	168
10	293	313	160	408	110	1090	943	158	117	94	75	680
11	212	1100	176	350	120	1270	783	157	127	92	72	292
12	165	1240	192	310	150	1600	667	156	163	92	68	168
13	149	718	539	280	200	1210	588	150	151	92	125	126
14	265	468	948	260	190	971	537	145	138	90	478	106
15	392	378	1080	240	170	837	502	144	141	89	470	93
16	322	339	730	220	155	746	460	147	622	86	378	86
17	260	278	539	210	150	672	412	148	404	81	223	80
18	209	249	427	220	145	607	382	148	631	80	159	75
19	222	224	378	210	140	561	359	148	396	79	144	73
20	268	199	380	180	135	523	332	146	267	79	136	71
21	421	184	366	160	135	486	308	141	214	79	118	70
22	523	174	792	150	1500	462	292	141	183	77	106	69
23	366	169	629	160	5250	446	280	135	162	73	99	77
24	273	165	458	165	7730	431	276	127	150	71	103	88
25	229	159	361	170	6340	408	279	122	140	72	100	78
26	212	150	335	170	5390	386	260	118	128	77	102	76
27	197	149	290	170	4620	379	241	176	120	75	106	74
28	186	311	391	165	3580	662	231	964	115	71	92	71
29	174	406	1060	160	---	1450	222	506	113	69	87	68
30	164	320	1780	155	---	1560	212	291	108	67	100	68
31	158	---	1260	150	---	2230	---	228	---	80	94	---
TOTAL	6656	9447	15077	18857	37310	38257	24761	6290	6052	2725	4152	3404
MEAN	215	315	486	608	1333	1234	825	203	202	87.9	134	113
MAX	523	1240	1780	3140	7730	3150	2920	964	631	114	478	680
MIN	72	149	160	150	110	379	212	118	108	67	66	68
CFSM	.52	.76	1.17	1.46	3.20	2.96	1.98	.49	.48	.21	.32	.27
IN.	.59	.84	1.34	1.68	3.33	3.41	2.21	.56	.54	.24	.37	.30

CAL YR 1984	TOTAL	158997	MEAN	434	MAX	3450	MIN	72	CFSM	1.04	IN.	14.18
WTR YR 1985	TOTAL	172988	MEAN	474	MAX	7730	MIN	66	CFSM	1.14	IN.	15.43

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 downstream from bridge on County Road 1000 North, and 1.5 miles west of Deedsville.

DRAINAGE AREA.--8.87 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 785.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 13 - Feb. 9. Records good except those for period with ice effect, Jan. 13 - Feb. 9, which are fair.

AVERAGE DISCHARGE.--15 years, 9.85 ft^3/s, 15.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 471 ft^3/s Feb. 23, 1985, gage height, 7.01 ft; maximum gage height, 7.37 ft Mar. 13, 1982; minimum daily discharge, 0.26 ft^3/s Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s (revised) and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 11	0900	170	4.45	Mar. 4	1900	224	4.99
Jan. 1	0900	277	5.47	Mar. 28	1400	290	5.59
Feb. 23	2000	*471	*7.01	Apr. 5	2000	307	5.73

Minimum daily discharge, 0.78 ft^3/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	7.8	8.9	188	2.7	61	51	6.2	3.9	1.6	1.9	1.7
2	.78	19	7.4	91	2.5	55	32	6.3	3.8	2.3	1.5	1.5
3	.78	7.9	7.9	48	2.3	48	23	5.9	17	2.2	1.4	1.5
4	.81	4.9	6.6	30	2.2	133	18	5.7	6.4	1.6	2.6	1.4
5	.82	3.8	5.7	22	2.3	107	114	5.3	4.0	17	13	1.5
6	.82	3.2	5.3	18	2.4	57	118	5.1	3.2	5.7	8.5	1.5
7	1.4	2.8	4.8	15	2.4	45	57	5.1	2.8	3.0	4.2	1.4
8	2.6	2.6	4.5	11	2.3	58	37	5.0	2.6	2.2	2.8	1.3
9	3.5	2.8	4.2	8.7	2.5	45	26	5.0	2.4	2.0	2.1	1.9
10	1.9	3.4	4.3	7.7	3.0	35	21	4.8	2.3	1.8	1.8	2.4
11	1.4	116	4.3	6.8	3.7	58	18	4.6	2.7	1.6	1.6	1.8
12	1.3	60	5.4	6.2	5.2	57	15	4.5	2.8	1.5	1.5	1.6
13	1.6	28	13	5.6	2.5	38	14	4.4	2.6	57	55	1.4
14	4.0	15	44	5.1	2.9	33	13	4.2	2.3	42	50	1.4
15	4.6	11	31	4.5	3.5	28	13	4.7	3.8	14	38	1.4
16	3.1	8.7	16	4.2	3.3	25	12	4.5	27	6.0	26	1.3
17	2.5	7.1	10	4.0	3.5	22	11	4.4	9.6	4.0	9.9	1.2
18	2.0	6.4	8.0	4.0	4.1	19	10	4.2	5.6	3.0	5.8	1.2
19	5.9	5.7	7.4	3.8	4.1	17	9.6	3.9	4.2	2.6	4.3	1.1
20	5.8	5.0	6.7	3.5	4.0	15	9.3	3.8	3.5	2.2	3.6	1.1
21	42	4.6	8.4	3.3	5.0	14	8.9	3.8	3.0	2.1	2.9	1.1
22	23	4.3	25	3.4	170	14	8.5	3.5	2.8	2.0	2.5	1.2
23	7.7	4.2	11	3.3	381	13	8.4	3.5	2.2	1.8	2.2	1.7
24	4.6	4.0	7.8	3.3	289	13	8.3	3.4	2.2	1.7	2.2	1.8
25	3.6	3.8	6.1	3.1	160	12	8.0	3.3	2.0	1.7	2.1	1.5
26	3.4	3.7	5.4	3.0	106	10	7.7	3.3	1.9	1.8	2.0	1.5
27	3.3	4.0	5.3	2.8	90	9.4	7.5	5.8	1.8	1.6	1.8	1.5
28	3.1	50	6.6	2.6	69	126	7.1	13	1.7	1.5	1.7	1.4
29	2.8	27	27	2.7	---	82	6.6	6.4	1.7	1.5	1.6	1.3
30	2.6	13	77	2.7	---	53	6.2	5.0	1.6	1.4	2.2	1.5
31	2.4	---	37	2.7	---	94	---	4.4	---	3.5	1.8	---
TOTAL	144.89	439.7	422.0	520.0	1331.4	1396.4	699.1	153.0	133.4	193.9	258.5	44.1
MEAN	4.67	14.7	13.6	16.8	47.5	45.0	23.3	4.94	4.45	6.25	8.34	1.47
MAX	42	116	77	188	381	133	118	13	27	57	55	2.4
MIN	.78	2.6	4.2	2.6	2.2	9.4	6.2	3.3	1.6	1.4	1.4	1.1
CFSM	.53	1.66	1.53	1.89	5.36	5.07	2.63	.56	.50	.70	.94	.17
IN.	.61	1.84	1.77	2.18	5.58	5.86	2.93	.64	.56	.81	1.08	.18

CAL YR 1984	TOTAL	4447.57	MEAN	12.2	MAX	163	MIN	.72	CFSM	1.38	IN.	18.65
WTR YR 1985	TOTAL	5736.39	MEAN	15.7	MAX	381	MIN	.78	CFSM	1.77	IN.	24.06

03328500 EEL RIVER NEAR LOGANSPORT, IN

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

DRAINAGE AREA.--789 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Aug. 16, 1956, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 11 to Feb. 22, and June 13 to Aug. 20. Records good except for period with ice effect, Jan. 11-30, period of no gage height record, Jan. 31 to Feb. 22, and period of indefinite stage-discharge relation, June 13 to Aug. 20, which are poor.

AVERAGE DISCHARGE.--42 years, 747 ft^3/s, 12.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,700 ft^3/s Feb. 24, 1985, gage height, 12.68 ft; minimum daily, 70 ft^3/s Mar. 15, 1960, results of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1943, reached a stage of 13.2 ft, from floodmark, discharge, 17,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	1300	6290	8.41	Apr. 1	0500	5030	7.64
Feb. 24	1800	*17,700	*12.68	Apr. 6	2000	6270	8.30
Mar. 5	1600	6290	8.41				

Minimum daily discharge, 160 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	309	632	4270	260	4820	4630	508	506	260	200	222
2	172	387	545	6030	240	3700	3410	515	442	270	180	209
3	174	447	498	4470	230	3040	2680	505	527	250	170	202
4	173	457	469	3100	210	3880	2050	485	725	250	160	196
5	166	407	430	2310	220	6100	2290	473	474	270	190	191
6	165	365	380	1570	220	4710	5720	467	387	270	210	189
7	187	334	360	1230	220	3520	5080	460	340	260	210	187
8	224	311	360	1030	210	3420	3610	450	317	250	230	184
9	277	305	400	881	200	2890	2830	441	302	240	200	186
10	421	328	402	770	200	2200	2090	431	279	230	180	357
11	420	1030	374	670	210	2170	1630	426	287	220	175	988
12	343	2260	394	600	260	3030	1400	419	333	216	170	519
13	296	1560	492	540	360	2420	1240	410	420	300	250	331
14	283	1010	1190	480	370	1910	1140	399	360	380	900	270
15	443	775	1810	430	340	1610	1280	410	350	300	1200	240
16	607	660	1460	400	310	1400	1110	419	810	240	900	223
17	499	595	1060	390	290	1270	976	419	1550	210	700	209
18	421	526	843	400	270	1140	881	407	1050	190	450	198
19	406	481	718	390	260	1040	824	391	1100	180	380	190
20	448	444	658	330	250	977	770	375	750	190	320	181
21	671	408	651	290	250	901	725	364	550	190	282	175
22	882	381	881	280	3000	840	682	360	470	185	259	173
23	788	365	1240	280	9050	812	655	357	400	180	240	183
24	595	354	921	300	16600	789	638	342	360	170	233	199
25	485	346	723	310	15900	750	637	329	330	175	232	216
26	429	340	601	310	11200	703	611	317	310	180	234	203
27	393	340	576	310	8380	685	575	328	290	180	280	192
28	365	563	553	300	6600	1490	548	786	280	175	249	186
29	340	881	872	290	---	2910	528	1410	270	170	225	179
30	321	773	2770	280	---	2630	510	832	260	165	224	178
31	304	---	2640	270	---	3670	---	620	---	180	223	---
TOTAL	11876	17742	25903	33511	76110	71427	51750	14855	14829	6926	10056	7356
MEAN	383	591	836	1081	2718	2304	1725	479	494	223	324	245
MAX	882	2260	2770	6030	16600	6100	5720	1410	1550	380	1200	988
MIN	165	305	360	270	200	685	510	317	260	165	160	173
CFSM	.49	.75	1.06	1.37	3.44	2.92	2.19	.61	.63	.28	.41	.31
IN.	.56	.84	1.22	1.58	3.59	3.37	2.44	.70	.70	.33	.47	.35

CAL YR 1984	TOTAL	302813	MEAN	827	MAX	7060	MIN	165	CFSM	1.05	IN.	14.28
WTR YR 1985	TOTAL	342341	MEAN	938	MAX	16600	MIN	160	CFSM	1.19	IN.	16.14

03329000 WABASH RIVER AT LOGANSPORT, 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 downstream from Cicott Street bridge in Logansport, 1,000 ft downstream from Eel River, and at mile 353.7.

DRAINAGE AREA.--3,779 mi^2.

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. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 573.28 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1705 for history of changes prior to Oct. 1, 1927.

REMARKS.--Estimated daily discharges: Dec. 6, 7, and Jan. 12 to Feb. 22. Records good except for periods of ice effect, Jan. 12 to Feb. 22, which are fair. Flow partially regulated by Huntington Lake, Salamonie Lake, and Mississinewa Lake.

AVERAGE DISCHARGE.--62 years (wateryears 1924 to current year), 3,320 ft^3/s, 11.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,800 ft^3/s May 18, 1943, gage height, 21.32 ft; minimum daily, 135 ft^3/s Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 25.3 ft Mar. 26, 1913, from floodmarks, discharge, 140,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,300 ft^3/s Feb.24, gage height, 14.02 ft; minimum daily, 412 ft^3/s Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	718	1790	3910	13500	800	22100	13300	912	1370	687	659	642
2	696	1320	2200	17300	760	21000	13200	929	1100	750	664	621
3	646	1570	1890	13100	750	19600	13200	985	999	755	727	1690
4	644	1660	1540	13000	720	20800	11700	1160	1340	696	629	960
5	601	1660	1350	14000	700	23400	9810	1400	1250	758	693	745
6	614	1950	1250	11500	690	22600	14800	1220	1180	778	766	498
7	686	1380	1180	10000	680	20000	13400	1150	1230	746	851	414
8	804	1200	1120	9760	700	19900	10600	1150	1200	751	736	412
9	881	1190	1080	8340	650	19200	9740	1080	1050	713	673	423
10	1020	1240	1010	6030	650	17000	7110	1020	877	713	684	670
11	1020	2200	976	3310	740	16200	5110	978	853	682	679	2390
12	967	5490	938	2000	850	17900	4220	969	1250	620	763	1690
13	898	4300	1040	1600	970	17100	3740	932	1760	771	620	1280
14	865	4030	1930	1500	980	16100	3580	897	2350	889	1220	1190
15	931	3300	4000	1450	1200	14500	3520	944	3070	758	2390	1060
16	1610	2810	5790	1400	1700	13300	2880	968	2940	3260	4150	1040
17	1800	2590	5360	1300	1800	12500	2780	1050	4920	2200	2500	1040
18	1800	2380	3620	1400	1750	11900	2640	1000	5030	1490	1390	988
19	2020	1810	2690	1350	1400	11800	2360	969	4340	1080	1070	903
20	2220	1690	2160	1300	1250	10900	1820	920	3270	777	1100	942
21	2600	1590	1950	1000	1300	8310	1550	875	2160	750	956	845
22	2960	1490	2450	900	5300	6870	1460	862	1390	876	783	762
23	3030	1450	3860	880	24000	4570	1410	888	1230	545	689	818
24	2360	1400	4010	930	39100	3160	1380	873	1080	496	639	779
25	1890	1450	3080	1000	35200	2740	1240	870	992	490	651	727
26	1490	1430	2440	960	27100	2400	1150	880	920	493	711	753
27	1460	1380	1770	940	23800	2460	1090	947	817	536	828	779
28	1880	1710	1620	900	23300	2990	1040	1250	752	549	756	765
29	1820	2070	2190	870	---	5410	993	2430	727	510	634	745
30	1790	2220	6370	850	---	5250	929	1990	691	575	622	739
31	1760	---	8510	830	---	8230	---	1670	---	594	602	---
TOTAL	44481	61750	83284	143200	198840	400190	161752	34168	52138	26288	30835	27310
MEAN	1435	2058	2687	4619	7101	12910	5392	1102	1738	848	995	910
MAX	3030	5490	8510	17300	39100	23400	14800	2430	5030	3260	4150	2390
MIN	601	1190	938	830	650	2400	929	862	691	490	602	412
CFSM	.38	.54	.71	1.22	1.88	3.42	1.43	.29	.46	.22	.26	.24
IN.	.44	.61	.82	1.41	1.96	3.94	1.59	.34	.51	.26	.30	.27

CAL YR 1984	TOTAL	1230106	MEAN	3361	MAX	20200	MIN	323	CFSM	.89	IN.	12.11
WTR YR 1985	TOTAL	1264236	MEAN	3464	MAX	39100	MIN	412	CFSM	.92	IN.	12.44

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 downstream from bridge on County Road 900 West, and 2.5 miles northeast of Patton.

DRAINAGE AREA.--6.83 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 644.97 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 28, 1979, at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 10 to Feb. 20, Mar. 28, 29 and 31 to Apr. 2, and June 9-12. Records fair except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--17 years, 6.93 ft^3/s, 13.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 456 ft^3/s June 5, 1981, gage height, 5.12 ft; maximum gage height, 5.30 ft June 14, 1975; minimum daily discharge, 0.10 ft^3/s Sept. 8-10, 13, 14, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 65 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	0600	*303	*4.76	Mar. 4	1600	69	3.39
Feb. 23	2000	294	4.74	Apr. 5	1800	180	4.34

Minimum daily discharge, 0.19 ft^3/s Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	7.3	4.1	152	1.8	17	28	3.5	2.0	1.0	.51	.27
2	.23	7.9	3.7	38	1.8	17	20	3.3	2.0	1.1	.46	.26
3	.24	4.1	5.1	22	1.7	16	15	3.0	1.6	.98	.44	.25
4	.27	2.8	3.5	16	1.6	45	11	3.0	1.6	.94	.44	.25
5	.28	2.0	3.0	12	1.6	23	62	3.0	1.4	.96	1.0	.26
6	.29	1.5	2.6	10	1.7	16	52	2.9	1.4	.89	.90	.26
7	.44	1.3	2.2	8.6	1.7	17	23	2.7	1.3	.84	.60	.25
8	1.7	1.3	2.1	7.2	1.6	19	16	2.7	1.3	.82	.42	.23
9	1.3	1.4	1.9	6.5	1.5	16	14	2.6	1.2	.80	.38	.23
10	.57	2.7	1.8	6.0	1.4	14	11	2.6	.98	.80	.33	.25
11	.56	19	1.7	5.4	1.9	31	9.5	2.6	1.5	.73	.31	.22
12	.56	9.8	2.2	5.0	3.5	20	8.5	2.6	1.6	.76	.31	.21
13	.67	5.4	5.0	4.3	3.3	16	8.0	2.5	1.4	1.0	.39	.21
14	1.4	4.0	24	3.8	2.9	15	7.6	2.2	1.4	.85	.42	.22
15	1.2	3.4	14	4.2	2.6	12	7.2	2.8	2.1	.91	.52	.21
16	1.3	2.4	11	3.5	2.3	11	6.5	2.3	3.2	.77	.46	.22
17	.93	2.1	8.6	3.4	2.2	9.5	6.1	2.2	2.2	.67	.37	.20
18	.76	2.0	6.9	3.5	2.2	8.0	5.9	2.1	1.9	.66	.33	.20
19	3.3	1.7	6.8	3.2	2.4	7.5	5.5	2.0	1.7	.64	.32	.20
20	1.9	1.4	5.8	2.8	2.7	7.1	5.2	2.0	1.5	.66	.34	.19
21	30	1.3	7.4	2.3	3.4	6.8	4.9	1.8	1.4	.66	.31	.23
22	9.5	1.3	9.4	2.1	192	6.6	4.7	1.7	1.4	.64	.30	.23
23	3.5	1.3	7.5	2.1	234	6.4	4.6	1.7	1.3	.59	.28	.29
24	2.1	1.3	6.5	2.2	115	6.3	4.4	1.6	1.3	.58	.30	.28
25	1.8	1.2	4.9	2.3	39	6.1	4.0	1.6	1.2	.58	.30	.28
26	1.7	1.2	4.7	2.0	26	5.9	3.9	1.6	1.2	.58	.28	.34
27	1.5	2.4	4.8	1.9	22	6.1	3.7	3.6	1.1	.54	.27	.36
28	1.3	21	5.2	1.7	17	42	3.5	2.7	1.1	.52	.27	.35
29	1.1	10	13	1.7	---	30	3.3	1.9	1.1	.49	.27	.36
30	1.0	6.4	30	1.8	---	16	3.4	1.7	1.0	.51	.29	.40
31	.96	---	27	1.8	---	38	---	2.2	---	.69	.28	---
TOTAL	72.58	130.9	236.4	339.3	690.8	507.3	362.4	74.7	45.38	23.16	12.40	7.71
MEAN	2.34	4.36	7.63	10.9	24.7	16.4	12.1	2.41	1.51	.75	.40	.26
MAX	30	21	30	152	234	45	62	3.6	3.2	1.1	1.0	.40
MIN	.22	1.2	1.7	1.7	1.4	5.9	3.3	1.6	.98	.49	.27	.19
CFSM	.34	.64	1.12	1.60	3.62	2.40	1.77	.35	.22	.11	.06	.04
IN.	.40	.71	1.29	1.85	3.76	2.76	1.97	.41	.25	.13	.07	.04

CAL YR 1984	TOTAL	2530.78	MEAN	6.91	MAX	138	MIN	.18	CFSM	1.01	IN.	13.78
WTR YR 1985	TOTAL	2503.03	MEAN	6.86	MAX	234	MIN	.19	CFSM	1.00	IN.	13.63

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 northeast of Delphi Post Office, and 4.8 miles upstream from mouth.

DRAINAGE AREA.--274 mi^2.

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 above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark, levels by State of Indiana, Department of Natural Resources).

REMARKS.--Estimated daily discharges: Dec. 5-9, and Jan. 11-Feb. 22. Records good except those for Dec. 5-9, and Jan. 11- Feb. 22, which are fair.

AVERAGE DISCHARGE.--42 years, 242 ft^3/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft^3/s June 10, 1958, gage height, 18.26 ft; minimum daily, 6.2 ft^3/s Sept. 25-28, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 19.8 ft, from floodmarks, discharge, 18,000 ft^3/s, from rating curve extended above 8,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak dischargesgreater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	0930	2220	6.61	Mar. 5	0500	2020	6.35
Feb. 24	0245	*8850	*13.20	Mar. 12	0130	2260	6.66

Minimum daily discharge, 21 ft^3/s Sept. 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	81	198	1370	70	1020	1040	119	96	52	37	34
2	26	293	169	1990	68	919	681	124	76	54	44	33
3	26	198	158	1050	67	783	507	117	134	56	33	33
4	25	138	142	652	62	1180	388	110	113	55	30	31
5	25	110	133	464	62	1830	478	107	114	58	45	30
6	25	91	124	347	64	1070	1730	107	91	51	50	29
7	27	79	112	306	64	792	1200	104	81	48	93	28
8	32	72	118	262	63	1260	756	97	73	45	62	28
9	31	71	122	218	60	1060	551	93	67	42	46	26
10	32	77	118	197	57	768	414	91	61	41	38	26
11	29	267	118	190	100	1320	347	89	77	39	34	26
12	28	379	124	170	130	1940	295	90	282	37	31	25
13	28	241	144	160	120	1180	261	88	239	47	41	25
14	30	183	340	160	108	821	255	85	161	50	101	24
15	30	160	404	150	96	627	256	86	140	88	151	24
16	34	154	319	140	92	509	242	89	187	143	139	24
17	30	152	270	135	88	424	212	89	156	130	127	23
18	30	138	224	130	88	337	204	88	130	83	88	22
19	58	127	198	120	90	297	192	84	113	60	65	22
20	63	116	188	100	98	279	180	79	100	48	52	21
21	190	105	180	90	150	247	170	76	91	43	45	21
22	123	99	207	82	1180	230	162	72	84	39	39	21
23	88	97	230	84	5850	224	158	70	79	36	36	24
24	72	97	215	86	7770	216	153	69	75	34	59	31
25	64	94	204	92	4370	196	149	66	70	32	118	25
26	60	94	207	80	2060	174	140	64	67	31	71	26
27	58	112	163	74	1550	173	132	77	63	30	52	25
28	56	278	160	66	1200	185	128	86	59	27	42	25
29	53	329	192	68	---	196	122	81	57	26	38	24
30	51	248	506	69	---	212	118	71	54	26	41	25
31	50	---	641	70	---	489	---	120	---	30	37	---
TOTAL	1501	4680	6628	9172	25777	20958	11621	2788	3190	1581	1885	781
MEAN	48.4	156	214	296	921	676	387	89.9	106	51.0	60.8	26.0
MAX	190	379	641	1990	7770	1940	1730	124	282	143	151	34
MIN	25	71	112	66	57	173	118	64	54	26	30	21
CFSM	.18	.57	.78	1.08	3.36	2.47	1.41	.33	.39	.19	.22	.09
IN.	.20	.64	.90	1.25	3.50	2.85	1.58	.38	.43	.21	.26	.11

CAL YR 1984	TOTAL	88717	MEAN	242	MAX	3530	MIN	25	CFSM	.88	IN.	12.04
WTR YR 1985	TOTAL	90562	MEAN	248	MAX	7770	MIN	21	CFSM	.91	IN.	12.30

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 downstream from dam at Tippecanoe Lake Outlet in Oswego, 3 miles east of Leesburg, and at mile 158.9.

DRAINAGE AREA.--113 mi^2.

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

REMARKS.--No estimated daily discharges during water year. Records good. Occasional regulation by flashboards at lake outlet.

AVERAGE DISCHARGE.--36 years, 103 ft^3/s, 12.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 950 ft^3/s Mar. 21, 1982, gage height, 9.25 ft; minimum daily, 0.08 ft^3/s Aug. 4, 5, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 758 ft^3/s Mar. 4, gage height, 8.89 ft; minimum daily, 12 ft^3/s Oct. 5-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	92	94	182	85	747	467	114	73	26	22	24
2	14	94	96	246	82	748	499	110	72	26	21	21
3	14	93	96	318	79	733	516	102	70	26	20	20
4	13	91	97	374	77	748	520	95	68	25	20	20
5	12	90	97	411	75	747	535	84	51	26	21	20
6	12	88	95	418	73	735	562	72	42	26	20	20
7	12	87	95	412	71	713	577	49	29	26	20	22
8	18	85	94	398	69	685	585	30	29	26	20	24
9	24	85	93	373	67	640	582	30	29	26	20	27
10	25	87	93	352	66	596	564	31	29	26	21	28
11	26	93	93	328	68	568	545	32	32	26	22	28
12	27	95	93	295	71	539	514	33	32	25	22	28
13	29	97	95	265	73	522	482	34	32	25	22	28
14	63	98	99	246	75	486	456	34	33	25	22	27
15	93	98	102	229	78	454	426	42	37	25	23	27
16	88	102	105	213	82	425	385	65	74	27	23	26
17	85	105	109	200	83	396	348	64	91	26	24	26
18	86	108	111	191	85	361	311	62	93	25	25	26
19	88	109	114	180	86	332	288	52	88	24	25	25
20	89	110	115	168	88	310	258	42	83	24	26	24
21	103	110	116	158	88	281	230	52	81	24	26	23
22	107	109	117	148	96	250	208	54	73	23	26	24
23	105	106	117	137	133	228	190	52	47	23	26	24
24	103	102	117	123	281	212	177	46	47	23	27	24
25	101	97	115	116	446	199	167	32	41	22	42	23
26	100	94	116	110	559	186	154	31	27	23	58	22
27	98	92	116	105	664	177	143	35	27	22	50	22
28	97	94	116	100	721	202	129	58	27	22	29	22
29	95	93	119	96	---	261	122	69	26	22	28	22
30	92	94	124	92	---	319	118	81	26	22	28	22
31	91	---	130	88	---	415	---	76	---	22	28	---
TOTAL	1925	2898	3289	7072	4521	14215	11058	1763	1509	759	807	719
MEAN	62.1	96.6	106	228	161	459	369	56.9	50.3	24.5	26.0	24.0
MAX	107	110	130	418	721	748	585	114	93	27	58	28
MIN	12	85	93	88	66	177	118	30	26	22	20	20
CFSM	.55	.85	.94	2.02	1.42	4.06	3.27	.50	.45	.22	.23	.21
IN.	.63	.95	1.08	2.33	1.49	4.68	3.64	.58	.50	.25	.27	.24

CAL YR 1984	TOTAL	42422	MEAN	116	MAX	442	MIN	12	CFSM	1.03	IN.	13.97
WTR YR 1985	TOTAL	50535	MEAN	138	MAX	748	MIN	12	CFSM	1.22	IN.	16.64

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 upstream from bridge on County Road 200 South, 0.3 mile downstream from small right-bank tributary, and 2.5 miles south of court house in Warsaw.

DRAINAGE AREA.--19.6 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 823.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges during water year: Dec. 6, 7, Jan. 18-26, Feb. 1-9, 11-24. Records good. Flow occasionally regulated by lakes upstream.

AVERAGE DISCHARGE.--16 years, 18.0 ft^3/s, 12.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 561 ft^3/s June 13, 1981, gage height, 5.38 ft; minimum daily, 0.44 ft^3/s Sept. 8, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 348 ft^3/s Feb. 24, gage height, 4.52 ft; minimum daily, 0.72 ft^3/s July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	7.3	22	139	11	99	72	13	5.7	3.1	1.3	1.1
2	1.9	22	19	137	10	86	63	13	5.3	3.3	1.1	1.1
3	1.9	26	18	106	10	75	53	13	4.8	3.3	.97	.97
4	1.8	20	17	80	9.9	103	47	12	4.5	3.2	.97	.94
5	1.7	14	14	62	9.3	129	67	11	4.4	4.9	1.5	1.0
6	1.7	9.5	12	50	8.8	104	112	11	4.4	5.8	1.4	1.1
7	4.2	7.6	10	45	8.6	84	100	11	4.2	4.9	1.5	1.1
8	15	7.3	9.3	39	8.5	77	78	10	4.0	4.0	1.4	1.1
9	21	9.5	8.7	34	8.1	69	64	9.3	3.8	3.5	1.3	2.6
10	18	23	8.6	30	7.5	61	55	8.8	3.6	2.9	2.3	7.7
11	12	34	9.3	27	8.1	66	48	8.3	3.7	2.5	4.8	6.0
12	8.8	42	12	24	11	74	44	8.1	3.9	2.1	2.5	3.8
13	8.7	38	27	22	10	67	40	7.8	4.1	1.9	1.8	2.7
14	16	31	42	20	9.8	60	37	7.1	3.9	1.6	1.8	2.1
15	27	26	45	19	10	53	38	7.1	4.1	1.3	2.2	1.7
16	28	22	39	17	11	48	37	7.8	8.3	1.2	3.1	1.5
17	23	18	33	16	10	45	35	7.6	12	1.1	2.5	1.5
18	15	15	28	16	9.8	41	31	6.8	16	1.1	2.0	1.3
19	12	13	25	16	9.4	37	28	6.5	14	1.0	1.8	1.2
20	13	11	24	15	9.4	35	26	6.1	11	1.0	1.6	1.4
21	27	9.8	23	14	10	32	24	6.0	9.7	1.0	1.5	1.2
22	33	9.0	28	13	64	30	23	5.8	8.1	.94	1.4	1.0
23	29	8.7	28	12	244	28	22	5.6	6.5	.81	1.2	1.3
24	22	8.1	25	12	342	27	22	5.4	5.4	.81	1.3	2.1
25	14	7.8	20	12	318	26	22	5.1	4.7	.86	1.2	3.4
26	11	7.3	16	11	236	25	21	4.7	3.9	.95	1.2	4.1
27	9.5	7.4	14	12	171	24	20	5.3	3.6	.86	1.1	3.7
28	8.8	18	17	12	121	40	18	7.7	3.5	.82	1.0	3.1
29	7.4	25	27	11	---	57	16	7.7	3.3	.76	1.1	2.4
30	6.1	25	43	11	---	55	14	7.1	3.2	.72	1.1	2.1
31	5.1	---	47	11	---	67	---	6.5	---	1.0	1.0	---
TOTAL	405.5	522.3	710.9	1045	1696.2	1824	1277	252.2	177.6	63.23	50.94	66.31
MEAN	13.1	17.4	22.9	33.7	60.6	58.8	42.6	8.14	5.92	2.04	1.64	2.21
MAX	33	42	47	139	342	129	112	13	16	5.8	4.8	7.7
MIN	1.7	7.3	8.6	11	7.5	24	14	4.7	3.2	.72	.97	.94
CFSM	.67	.89	1.17	1.72	3.09	3.00	2.17	.42	.30	.10	.08	.11
IN.	.77	.99	1.35	1.98	3.22	3.46	2.42	.48	.34	.12	.10	.13

CAL YR 1984	TOTAL	7921.5	MEAN	21.6	MAX	195	MIN	1.7	CFSM	1.10	IN.	15.03
WTR YR 1985	TOTAL	8091.18	MEAN	22.2	MAX	342	MIN	.72	CFSM	1.13	IN.	15.36

03331500 TIPPECANOE RIVER NEAR ORA, IN

LOCATION.--Lat 41°09'26", long 86°33'49", in SE¼SE¼ sec.6, T.31 N., R.1 W., Pulaski County, Hydrologic Unit 05120106, on right bank at downstream side of bridge on County Road 700 East, 1.0 mile upstream from Bartee ditch, 1.3 miles southwest of Ora, and at mile 78.5.

DRAINAGE AREA.--856 mi^2.

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. Datum of gage is 692.91 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to July 30, 1956, nonrecording gage on upstream side of old highway bridge, 120 ft downstream. 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 downstream. All gages at same datum.

REMARKS.--Estimated daily discharges: Jan. 13 to Feb. 22 and June 4, 5. Records good except those for periods of no gage-height record, Jan. 20-30, and periods with ice effect, Jan. 13-19, and Jan. 31 to Feb. 22, which are poor.

AVERAGE DISCHARGE.--42 years, 839 ft^3/s, 13.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,660 ft^3/s June 15, 1981, gage height, 15.08 ft; minimum daily, 87 ft^3/s Sept. 13, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 12	2400	2,480	10.55	Apr. 2	0400	3,380	11.57
Jan. 3	1400	4,060	12.18	Apr. 7	2000	4,470	12.52
Feb. 25	2200	*8,640	*15.05				

Minimum daily discharge, 189 ft^3/s July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	554	1140	2070	760	6030	3190	1030	583	300	255	243
2	230	760	1050	3160	740	5340	3350	990	555	296	238	239
3	226	886	1020	3980	730	4830	3150	941	558	326	225	231
4	222	837	959	3760	730	4630	2910	892	552	330	211	220
5	221	781	873	3330	730	4930	2890	850	514	309	227	212
6	219	713	807	3000	720	5330	3560	814	496	301	255	208
7	229	659	773	2660	690	5080	4320	778	475	300	259	208
8	257	619	732	2360	670	4640	4350	733	447	295	262	210
9	285	593	700	2080	660	4360	3990	696	420	278	248	227
10	315	742	705	1870	650	4060	3660	658	390	261	227	266
11	337	1440	702	1680	650	3840	3390	621	391	252	209	325
12	341	2250	706	1530	680	3830	3170	603	431	244	195	319
13	340	2340	809	1400	690	3810	2960	584	432	250	221	292
14	347	1880	1060	1300	680	3550	2760	564	424	327	471	265
15	393	1580	1360	1220	670	3270	2580	568	419	306	495	253
16	416	1400	1350	1160	650	3060	2450	566	537	280	495	238
17	416	1250	1290	1120	640	2860	2280	569	738	256	456	231
18	428	1110	1240	1100	630	2650	2100	573	649	235	400	226
19	489	1010	1210	1000	620	2440	1950	575	622	228	353	218
20	547	916	1170	800	620	2260	1830	559	579	220	328	217
21	709	844	1150	870	800	2120	1710	548	559	221	311	211
22	1110	793	1320	900	1200	2010	1610	528	552	223	292	209
23	1020	755	1370	890	3450	1870	1520	504	507	210	278	208
24	892	736	1290	880	5970	1780	1450	488	463	200	275	216
25	808	707	1200	870	8250	1710	1380	473	426	196	272	223
26	752	687	1080	860	8420	1620	1310	465	400	216	263	238
27	690	684	985	850	7750	1550	1250	471	374	224	259	238
28	639	885	1010	840	6870	1640	1200	713	352	216	256	228
29	591	1260	1140	830	---	2060	1150	752	332	201	256	222
30	553	1230	1390	820	---	2400	1080	657	311	189	258	221
31	526	---	1620	800	---	2740	---	623	---	236	253	---
TOTAL	14781	30901	33211	49990	56320	102300	74500	20386	14488	7926	9003	7062
MEAN	477	1030	1071	1613	2011	3300	2483	658	483	256	290	235
MAX	1110	2340	1620	3980	8420	6030	4350	1030	738	330	495	325
MIN	219	554	700	800	620	1550	1080	465	311	189	195	208
CFSM	.56	1.20	1.25	1.88	2.35	3.86	2.90	.77	.56	.30	.34	.27
IN.	.64	1.34	1.44	2.17	2.45	4.45	3.24	.89	.63	.34	.39	.31

CAL YR 1984	TOTAL	354518	MEAN	969	MAX	3840	MIN	219	CFSM	1.13	IN.	15.41
WTR YR 1985	TOTAL	420868	MEAN	1153	MAX	8420	MIN	189	CFSM	1.35	IN.	18.29

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 northeast of Springboro, 1.7 miles downstream from Big Creek, 5 miles northwest of Delphi, and at mile 15.1.

DRAINAGE AREA.--1,865 mi^2.

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" 1903-08.

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

GAGE.--Water-stage recorder. Datum of gage is 552.01 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Mar. 14, 1903, to July 20, 1906, and Nov. 2 to Dec. 31, 1908, nonrecording gage at site 5.5 miles downstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 31 to Feb. 11. Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--46 years (water years 1940 to current year), 1,677 ft^3/s, 12.21 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,600 ft^3/s Feb. 10, 1959, gage height, 15.10 ft; minimum daily, 1.0 ft^3/s Nov. 2, 3, 1954, caused by repair work at Oakdale Dam, 6.5 miles upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,900 ft^3/s Feb 24, gage height, 14.86 ft; minimum daily, 249 ft^3/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	483	1120	2060	9060	1350	11100	6880	1810	1120	556	583	446
2	435	1230	1820	9470	1300	9810	5530	1750	1120	611	441	541
3	351	1070	963	6760	1250	8140	5680	1610	1150	555	603	435
4	249	1440	278	6110	1250	9190	4810	1490	1210	609	443	437
5	332	1340	279	5510	1250	10400	6780	1580	1000	617	775	437
6	475	1130	286	4640	1300	8070	12600	1520	1050	637	701	439
7	485	1020	283	4300	1150	7670	9480	1410	896	473	716	443
8	489	1030	1210	3920	1100	8240	7630	1500	967	664	610	443
9	491	1090	1390	3440	1100	7610	7020	1180	919	583	603	452
10	490	1440	1590	3200	1150	6350	6140	1360	732	444	661	470
11	488	3980	1270	2890	1200	7100	5600	1250	1000	444	442	381
12	485	4830	1360	2100	756	7680	4940	1350	891	443	343	395
13	542	3340	1770	1950	704	6240	4520	1210	893	472	875	490
14	691	3400	2270	2130	972	5930	4240	1200	844	771	733	464
15	633	2800	2630	2050	1000	5330	4190	1350	916	663	1120	544
16	616	1860	2470	1860	1240	4740	3960	1280	1330	607	1090	390
17	550	1780	2490	2020	1080	4420	3440	1170	1190	443	953	492
18	558	1760	2260	2060	1140	4020	3380	1310	1290	441	821	437
19	947	1880	2140	1870	1110	3720	3180	1150	1190	437	680	437
20	986	1530	2000	1480	1160	3700	2850	1140	1090	443	706	345
21	1530	1440	2130	1120	1130	3130	2780	1130	988	443	569	401
22	1880	1440	2530	1230	5110	3210	2260	1120	987	441	542	543
23	2050	1360	2590	1270	13600	2880	2710	1110	932	403	597	271
24	1800	1330	2400	1590	19600	3010	2270	841	879	315	575	312
25	1370	1310	2280	1390	17500	2860	2280	1110	854	439	596	378
26	1420	1100	1740	1410	15900	2810	2070	779	878	440	541	443
27	1030	1350	1940	1420	15400	2680	1990	1140	697	437	549	440
28	951	2100	1670	1510	13000	5860	1940	1180	612	437	509	437
29	1020	2050	2270	1450	---	7900	1860	1370	611	401	528	357
30	923	2300	3370	1390	---	5970	1830	1350	665	319	518	376
31	832	---	3360	1350	---	6690	---	1350	---	469	554	---
TOTAL	25582	54850	57099	91950	123802	186460	134840	40100	28901	15457	19977	12876
MEAN	825	1828	1842	2966	4422	6015	4495	1294	963	499	644	429
MAX	2050	4830	3370	9470	19600	11100	12600	1810	1330	771	1120	544
MIN	249	1020	278	1120	704	2680	1830	779	611	315	343	271
CFSM	.44	.98	.99	1.59	2.37	3.23	2.41	.69	.52	.27	.35	.23
IN.	.51	1.09	1.14	1.83	2.47	3.72	2.69	.80	.58	.31	.40	.26

CAL YR 1984	TOTAL	710487	MEAN	1941	MAX	13000	MIN	215	CFSM	1.04	IN.	14.17
WTR YR 1985	TOTAL	791894	MEAN	2170	MAX	19600	MIN	249	CFSM	1.16	IN.	15.80

03333450 WILDCAT CREEK NEAR JEROME, IN

LOCATION.--Lat 40°26'29", long 85°55'08", in NE¼SE¼ 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 downstream from Mud Creek, 1.5 miles southeast of Jerome, and at mile 79.9.

DRAINAGE AREA.--146 mi^2.

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-21, Dec. 6, Jan. 10-16, 20, 22-25, and Jan. 27-Feb. 20. Records good except for those period of indefinite stage-discharge relation, Oct. 1-21, and period of ice effect, Jan. 27 to Feb. 20, which are poor.

AVERAGE DISCHARGE.--24 years, 131 ft^3/s, 12.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,140 ft^3/s June 3, 1980, gage height, 13.34 ft; minimum daily, 0.89 ft^3/s Jan. 24-26, 1977.

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

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 1,200 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	2230	1490	7.70	Mar. 12	0230	1590	7.96
Feb. 23	2045	*4590	*12.23	Apr. 6	0830	1280	7.09

Minimum daily discharge, 3.5 ft^3/s Oct. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	15	111	1050	35	592	823	48	32	19	11	16
2	3.8	71	83	1170	34	564	468	62	29	20	7.3	12
3	3.7	78	75	624	32	475	328	63	31	19	5.7	10
4	3.6	57	61	400	31	576	240	55	28	17	5.1	9.8
5	3.5	44	52	274	32	973	346	51	26	17	18	9.9
6	3.5	32	48	205	32	561	1150	49	24	16	20	9.8
7	5.0	26	42	177	31	416	702	45	23	14	23	8.9
8	13	21	44	141	30	756	428	40	22	13	22	8.2
9	6.4	20	43	110	28	631	296	36	21	12	13	8.6
10	5.0	39	45	97	28	430	223	36	20	11	8.7	39
11	4.5	283	47	86	50	782	183	36	39	9.7	7.3	23
12	3.8	353	50	76	65	1350	149	37	283	9.0	5.9	12
13	3.7	209	65	74	60	746	133	35	217	11	9.5	7.9
14	10	139	191	73	54	493	125	32	126	15	61	5.9
15	7.0	116	337	68	47	349	134	80	92	68	133	5.2
16	5.8	128	236	64	44	272	142	133	224	42	131	5.0
17	4.7	105	179	61	43	221	121	91	166	22	75	4.9
18	4.4	86	136	61	44	171	108	69	108	14	43	4.8
19	4.1	74	117	57	46	148	97	56	79	11	27	4.6
20	4.0	59	108	47	53	137	88	49	61	9.0	20	4.2
21	60	48	104	34	67	118	80	80	51	8.3	16	4.1
22	120	43	173	36	713	112	75	61	45	7.7	13	4.0
23	71	41	166	40	3590	105	71	49	40	6.6	11	6.7
24	45	40	142	42	4340	96	70	42	35	5.9	18	14
25	31	37	107	42	2600	81	64	38	31	5.8	47	13
26	25	34	83	28	1330	68	57	35	29	8.0	33	12
27	19	34	81	28	996	72	56	37	27	6.6	21	10
28	16	106	83	31	727	77	52	49	24	5.5	15	8.5
29	13	221	111	33	---	75	45	41	22	4.9	13	7.8
30	10	156	575	33	---	79	43	35	20	4.7	28	8.0
31	10	---	621	35	---	555	---	34	---	16	24	---
TOTAL	523.5	2715	4316	5297	15182	12081	6897	1604	1975	448.7	885.5	297.8
MEAN	16.9	90.5	139	171	542	390	230	51.7	65.8	14.5	28.6	9.93
MAX	120	353	621	1170	4340	1350	1150	133	283	68	133	39
MIN	3.5	15	42	28	28	68	43	32	20	4.7	5.1	4.0
CFSM	.12	.62	.95	1.17	3.71	2.67	1.58	.35	.45	.10	.20	.07
IN.	.13	.69	1.10	1.35	3.87	3.08	1.76	.41	.50	.11	.23	.08

CAL YR 1984	TOTAL	44740.2	MEAN	122	MAX	1610	MIN	3.5	CFSM	.84	IN.	11.40
WTR YR 1985	TOTAL	52222.5	MEAN	143	MAX	4340	MIN	3.5	CFSM	.98	IN.	13.31

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 southeast of intersection of U.S. Highways 31 and 35 in Kokomo, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--24.7 mi^2.

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

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-72-1: 1970-71(P).

GAGE.--Water-stage recorder. Datum of gage is 807.68 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 9, Jan. 10, 13, and 14, April 9, and Sept. 19-30. Records fair except those for periods of estimated record, which are poor.

AVERAGE DISCHARGE.--26 years, 21.8 ft^3/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft^3/s Apr. 20, 1964, gage height, 9.88 ft; minimum daily, 0.08 ft^3/s Aug. 20, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1200	356	5.39	Mar. 4	2145	269	4.47
Feb. 23	1615	*732	*8.73	Mar. 11	1430	339	5.16

Minimum daily discharge, 0.70 ft^3/s Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	14	18	284	5.0	73	110	8.4	6.8	3.0	2.6	2.5
2	1.3	6.0	14	177	4.7	70	60	8.7	6.8	2.9	1.4	1.4
3	1.2	10	13	80	4.3	55	45	6.8	17	2.4	1.2	.90
4	1.2	9.0	10	53	4.2	147	35	5.7	9.3	2.2	1.0	.71
5	1.2	7.6	9.4	37	4.5	170	34	5.9	7.0	2.4	5.2	1.1
6	1.2	6.8	9.1	30	4.7	80	174	6.2	5.7	2.2	3.9	.87
7	5.0	6.0	8.2	26	4.3	76	89	6.0	5.2	1.9	2.4	.75
8	3.8	5.2	8.3	21	3.8	128	56	5.7	5.0	1.8	1.7	.70
9	2.2	4.9	8.3	17	3.7	84	44	4.6	4.7	1.7	1.3	1.2
10	1.6	20	9.6	15	3.8	61	33	4.6	4.2	1.9	1.2	2.1
11	1.5	38	9.5	14	6.5	216	29	4.8	17	1.8	1.0	1.5
12	1.5	33	11	12	9.0	201	25	5.1	64	1.7	.95	1.2
13	1.6	20	21	12	5.3	99	23	4.8	33	3.4	2.9	1.1
14	2.5	15	52	11	6.6	70	22	4.6	21	3.6	11	.92
15	3.5	17	52	9.2	6.6	54	23	5.9	18	14	18	.86
16	2.5	19	37	8.8	6.2	45	26	5.7	50	5.1	11	.85
17	1.6	15	29	10	6.0	38	21	6.0	34	3.2	5.7	.92
18	1.2	13	22	9.7	5.9	31	19	5.4	22	2.4	3.5	.89
19	2.2	11	20	7.8	5.9	28	17	4.6	16	2.0	2.6	.85
20	1.9	8.8	18	5.6	6.1	27	15	7.6	12	2.0	2.2	.83
21	5.0	7.4	20	5.2	7.5	24	14	19	10	2.0	1.9	.81
22	2.5	6.7	27	5.8	227	22	16	12	8.7	1.8	1.7	.80
23	1.7	6.6	23	6.1	674	21	14	9.1	7.3	1.6	1.6	4.5
24	2.2	6.6	21	6.5	687	21	14	8.1	6.5	1.4	2.5	2.5
25	3.2	6.2	15	5.6	353	17	12	7.4	5.5	1.5	2.0	.88
26	2.8	5.9	13	3.7	166	15	11	6.5	4.9	2.0	1.7	1.1
27	2.4	6.1	13	4.0	122	15	11	7.5	4.4	1.7	1.6	.83
28	2.0	29	14	4.5	84	16	9.5	16	3.8	1.4	1.4	.82
29	1.9	33	22	5.0	---	15	8.2	9.7	3.4	1.3	2.1	.80
30	2.0	24	101	5.1	---	14	7.7	7.9	3.1	1.4	14	.85
31	2.0	---	68	5.2	---	54	---	7.7	---	6.0	5.5	---
TOTAL	67.8	410.8	716.4	896.8	2427.6	1987	1017.4	228.0	416.3	83.7	116.75	36.04
MEAN	2.19	13.7	23.1	28.9	86.7	64.1	33.9	7.35	13.9	2.70	3.77	1.20
MAX	5.0	38	101	284	687	216	174	19	64	14	18	4.5
MIN	1.2	4.9	8.2	3.7	3.7	14	7.7	4.6	3.1	1.3	.95	.70
CFSM	.09	.55	.94	1.17	3.51	2.60	1.37	.30	.56	.11	.15	.05
IN.	.10	.62	1.08	1.35	3.66	2.99	1.53	.34	.63	.13	.18	.05

CAL YR 1984	TOTAL	7479.7	MEAN	20.4	MAX	249	MIN	1.2	CFSM	.83	IN.	11.26
WTR YR 1985	TOTAL	8404.59	MEAN	23.0	MAX	687	MIN	.70	CFSM	.93	IN.	12.66

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 downstream from Kokomo Creek, 0.4 mile upstream from Dixon Road bridge, and at mile 62.5.

DRAINAGE AREA.--242 mi^2.

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

REVISED RECORDS.--WSP 2109: Drainage area. WRD-IN-83: 1980, 1981, (p), 1982.

GAGE.--Water-stage recorder. Datum of gage is 775.62 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--No estimated daily discharges. Records good. Some regulation of Kokomo Reservoirs No. 1 and No. 2, combined capacity, 4,170 acre-ft, for municipal water supply and by Kokomo Sewage Treatment Plant.

AVERAGE DISCHARGE.--30 years, 230 ft^3/s, 12.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft^3/s Feb. 10, 1959; maximum gage height, 12.59 ft Feb. 24, 1985; minimum daily discharge, 7.2 ft^3/s Sept. 30, 1956.

EXTREMES FOR 1984 WATER YEAR (Corrected).--Peak discharges greater than base discharge of 2,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 17	1200	2140	6.60	Mar. 21	0730	*2770	*7.49

Minimum daily discharge, 21 ft^3/s Oct. 10, 16.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	1400	*7240	*12.59	Mar. 12	1345	2140	6.60

Minimum daily discharge, 23 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	127	190	1670	60	981	1270	110	68	64	45	184
2	27	71	151	1910	58	898	849	121	126	64	36	82
3	28	88	118	1200	53	814	598	89	162	59	32	39
4	28	90	108	758	52	1050	461	85	98	54	33	32
5	31	77	95	540	54	1500	572	84	87	56	119	33
6	29	68	89	385	54	1090	1520	83	75	50	57	30
7	61	57	80	311	53	815	1230	83	70	45	50	29
8	94	51	75	272	51	1070	761	81	66	46	42	27
9	40	47	75	212	48	1090	559	77	64	45	40	51
10	35	91	87	182	48	792	414	78	58	45	40	37
11	33	252	83	172	111	1240	338	75	172	42	41	32
12	34	491	97	146	112	2010	277	74	195	41	39	34
13	36	356	130	132	98	1430	243	73	366	87	57	32
14	43	227	263	142	90	891	230	75	260	58	169	32
15	58	211	486	121	79	666	241	96	237	319	214	27
16	40	178	414	114	74	507	253	80	272	199	175	27
17	33	178	314	111	73	422	224	107	285	88	178	29
18	31	140	234	113	75	340	184	108	179	62	114	29
19	40	119	201	101	78	285	173	97	156	56	140	27
20	38	99	182	79	83	245	157	132	124	53	78	27
21	57	86	191	71	134	107	141	141	104	50	71	27
22	37	73	213	69	1240	109	131	125	91	48	68	24
23	37	67	265	70	4400	113	126	96	83	46	65	66
24	40	65	230	74	6970	131	134	84	81	43	88	32
25	52	62	186	77	5430	166	119	76	78	44	61	27
26	51	60	148	67	2590	144	108	74	74	49	57	30
27	46	85	137	58	1640	142	124	92	71	36	57	26
28	40	167	143	55	1220	163	97	86	69	33	56	27
29	38	261	221	58	---	159	92	76	64	34	129	23
30	39	254	677	58	---	197	86	74	61	34	179	24
31	35	---	972	60	---	684	---	76	---	104	201	---
TOTAL	1257	4198	6855	9388	25028	20251	11712	2808	3896	2054	2731	1146
MEAN	40.5	140	221	303	894	653	390	90.6	130	66.3	88.1	38.2
MAX	94	491	972	1910	6970	2010	1520	141	366	319	214	184
MIN	26	47	75	55	48	107	86	73	58	33	32	23
CFSM	.17	.58	.91	1.25	3.69	2.70	1.61	.37	.54	.27	.36	.16
IN.	.19	.65	1.05	1.44	3.85	3.11	1.80	.43	.60	.32	.42	.18

CAL YR 1984	TOTAL	79152	MEAN	216	MAX	2600	MIN	26	CFSM	.89	IN.	12.17
WTR YR 1985	TOTAL	91324	MEAN	250	MAX	6970	MIN	23	CFSM	1.03	IN.	14.04

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 upstream from bridge on State Highway 26, 0.5 mile upstream from Middle Fork, 4.4 miles upstream from mouth, and 5 miles east of Lafayette.

DRAINAGE AREA.--243 mi^2.

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 above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to July 29, 1954, nonrecording gage at site 40 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 1, 2, Jan. 10-Feb. 24. Records good except those for periods of backwater effect from downstream tributary, Jan. 1, 2, and Feb. 23, 24, and those for period of ice effect, Jan. 10 to Feb. 22, which are poor.

AVERAGE DISCHARGE.--42 years, 240 ft^3/s, 13.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft^3/s May 2, 1983, gage height, 15.68 ft, from rating curve extended above 6,000 ft^3/s on basis of contracted-opening measurement at 16.8 ft; minimum daily, 15 ft^3/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, from floodmarks, discharge, 17,900 ft^3/s by contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1200	*6700	----	Feb. 24	0100	(a)	*13.55

(a) Backwater from Middle Fork Wildcat Creek

Minimum daily discharge, 27 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	63	253	1700	72	900	860	132	77	45	30	39
2	38	148	201	1900	70	785	544	184	73	45	31	36
3	36	167	187	1130	65	672	419	162	73	44	28	35
4	35	125	165	709	64	802	347	141	71	43	28	35
5	36	108	146	502	65	1390	425	131	70	45	35	35
6	35	91	141	392	65	839	1270	126	68	43	48	36
7	37	81	127	341	63	630	856	121	67	42	65	35
8	42	75	136	294	61	1550	527	114	67	40	56	33
9	54	71	127	250	58	1140	406	109	65	39	41	37
10	56	84	121	220	60	724	335	105	63	39	37	39
11	52	201	124	200	70	1350	299	104	79	38	35	35
12	49	350	125	170	90	1950	263	102	133	36	32	33
13	48	248	136	155	93	1140	238	98	128	36	37	32
14	58	182	254	160	92	716	229	97	116	36	137	31
15	53	155	456	140	88	548	229	105	102	55	300	31
16	50	157	349	135	78	465	217	110	178	68	373	30
17	52	152	285	120	75	410	196	105	176	45	201	30
18	51	131	234	100	75	355	185	99	144	40	124	29
19	70	119	205	90	78	319	180	94	116	37	89	29
20	62	109	194	72	82	301	170	90	100	36	72	29
21	126	97	183	65	120	266	163	90	88	35	60	28
22	144	90	222	80	3000	251	156	87	77	34	54	27
23	108	86	242	83	6500	244	152	83	68	32	49	31
24	87	85	216	84	5600	235	149	81	60	32	48	32
25	78	84	187	84	4850	218	148	79	57	31	59	35
26	73	80	159	80	1930	200	137	76	55	31	55	34
27	69	84	165	74	1420	195	138	75	53	30	49	33
28	63	323	160	67	1130	199	134	83	51	29	45	34
29	59	514	171	69	---	211	122	90	49	28	43	31
30	58	339	640	71	---	222	116	83	46	28	42	31
31	57	---	787	72	---	505	---	81	---	29	42	---
TOTAL	1875	4599	7098	9609	26014	19732	9610	3237	2570	1191	2345	985
MEAN	60.5	153	229	310	929	637	320	104	85.7	38.4	75.6	32.8
MAX	144	514	787	1900	6500	1950	1270	184	178	68	373	39
MIN	35	63	121	65	58	195	116	75	46	28	28	27
CFSM	.25	.63	.94	1.28	3.82	2.62	1.32	.43	.35	.16	.31	.13
IN.	.29	.70	1.09	1.47	3.98	3.02	1.47	.50	.39	.18	.36	.15

CAL YR 1984	TOTAL	85973	MEAN	235	MAX	2490	MIN	32	CFSM	.97	IN.	13.16
WTR YR 1985	TOTAL	88865	MEAN	243	MAX	6500	MIN	27	CFSM	1.00	IN.	13.60

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN

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

DRAINAGE AREA.--794 mi^2.

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 above National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark). Nonrecording gage prior to June 13, 1957, and August 31, 1974, to May 20, 1976, at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 6-9 and Jan. 11 to Feb. 22. Records good except those for period of ice effect, Jan. 11 to Feb. 15, and period of no gage-height record, Feb. 16-22, which are poor.

AVERAGE DISCHARGE.--31 years, 766 ft^3/s, 13.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s June 10, 1958, gage height, 21.52 ft, from rating curve extended above 18,000 ft^3/s; minimum daily, 46 ft^3/s Sept. 28, 29, 1954.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	2000	7,590	12.28	Feb. 24	1500	*17,300	*19.09

Minimum daily discharge, 78 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	182	769	3730	240	3370	2490	370	209	128	79	304
2	107	374	614	5340	230	2820	2430	440	192	125	136	298
3	101	548	543	4140	220	2440	1820	442	184	136	99	253
4	98	391	473	2750	210	2670	1440	379	339	126	83	182
5	97	356	414	1790	220	4220	1530	346	244	131	122	146
6	97	308	370	1350	220	3500	3550	336	213	116	167	124
7	104	270	350	1150	210	2620	3470	322	188	111	258	116
8	118	245	330	1020	200	3800	2580	311	172	107	196	111
9	167	227	330	861	190	3420	1820	298	160	96	139	120
10	212	235	332	751	190	2700	1460	288	147	94	113	115
11	156	412	321	640	230	3460	1250	283	181	89	101	106
12	139	856	332	570	310	5490	1090	276	515	88	97	121
13	133	932	376	510	320	4510	966	265	566	88	219	106
14	154	765	815	520	310	3330	892	256	565	89	392	100
15	164	609	1170	470	280	2250	865	273	504	174	574	97
16	148	568	1100	440	260	1820	839	285	577	376	954	97
17	151	546	918	420	250	1550	786	290	648	351	596	94
18	163	501	764	350	250	1340	748	269	567	252	482	89
19	212	449	670	300	260	1180	697	274	408	182	369	86
20	194	394	619	250	270	1080	653	260	342	155	302	83
21	390	354	587	220	400	985	613	242	289	145	279	80
22	382	319	660	260	3500	801	564	333	245	141	217	78
23	310	289	697	270	12500	769	538	282	217	127	195	87
24	235	270	692	280	17100	747	514	252	194	120	190	103
25	210	261	589	280	14600	714	511	225	181	116	197	118
26	196	250	532	270	11200	696	472	205	175	113	223	129
27	195	258	540	230	7610	670	447	205	164	106	179	107
28	192	610	503	220	4460	668	449	210	157	105	160	102
29	178	1180	586	230	---	691	410	243	147	103	154	96
30	170	908	1800	240	---	736	374	220	140	90	178	91
31	160	---	2080	240	---	1130	---	217	---	84	305	---
TOTAL	5446	13867	20876	30092	76240	66177	36268	8897	8830	4264	7755	3739
MEAN	176	462	673	971	2723	2135	1209	287	294	138	250	125
MAX	390	1180	2080	5340	17100	5490	3550	442	648	376	954	304
MIN	97	182	321	220	190	668	374	205	140	84	79	78
CFSM	.22	.58	.85	1.22	3.43	2.69	1.52	.36	.37	.17	.31	.16
IN.	.26	.65	.98	1.41	3.57	3.10	1.70	.42	.41	.20	.36	.18

CAL YR 1984	TOTAL	265469	MEAN	725	MAX	7430	MIN	95	CFSM	.91	IN.	12.44
WTR YR 1985	TOTAL	282451	MEAN	774	MAX	17100	MIN	78	CFSM	.97	IN.	13.23

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 downstream from Brown Street in Lafayette, 0.2 mile upstream from Main Street bridge, 0.3 mile downstream from Harrison Memorial Bridge, 5.1 miles downstream from Wildcat Creek, and at mile 311.9.

DRAINAGE AREA.--7,267 mi^2.

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. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 504.14 ft above National Geodetic Vertical Datum of 1929. Prior to May 2, 1903, nonrecording gage 0.5 mile upstream at different datum. Oct. 7, 1923, to Nov. 20, 1933, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 7, and Jan. 10 to Feb. 23. Records good except for period of no gage-height record, Jan. 10 to Feb. 23, which are poor. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--62 years (1923 to current year), 6,484 ft^3/s, 12.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft^3/s May 19, 1943, gage height, 28.47 ft; minimum daily, 399 ft^3/s Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 32.9 ft, from floodmark determined by National Weather Service, discharge, 190,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 80,400 ft^3/s Feb. 25, gage height, 24.32 ft; minimum daily, 1100 ft^3/s July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	3580	6430	20400	2600	41900	22400	4040	3820	1840	1570	1750
2	1750	4240	6510	32900	2500	38100	23800	4060	3320	1840	1490	1650
3	1620	3980	4810	31900	2400	34900	22700	3820	3020	1840	1430	1720
4	1500	4050	3380	25200	2300	33100	21100	3870	3170	1710	1670	2450
5	1350	4220	2890	22900	2300	38900	19900	3860	3240	1950	1720	1900
6	1500	4000	2820	20500	2300	39100	28700	4160	3130	1860	2130	1640
7	1630	3890	2800	17200	2200	35400	33000	3820	2800	1760	2580	1400
8	1800	3380	2880	15400	2200	34300	27400	3580	3050	1710	1950	1260
9	1930	3200	3560	14400	2100	34600	22200	3640	2700	1780	1830	1350
10	2060	3530	3370	10000	2100	31500	18700	3450	2620	1720	1710	1180
11	2150	5060	3350	7000	2300	29700	14400	3300	2440	1530	1730	1520
12	2130	9730	3140	5000	2400	34500	12100	3180	2940	1500	1490	3040
13	2100	10600	3450	4400	2400	33700	10800	3290	3440	1490	1530	2570
14	2200	8990	4360	4500	2600	30200	9980	3050	3840	1760	2410	2140
15	2230	8360	7330	4300	2800	26800	9810	3330	4420	2120	3050	2220
16	2220	6490	8970	4000	3200	23900	9270	3180	5030	2280	5150	1980
17	2990	5700	9690	4100	3400	21600	8410	3250	5670	4180	5530	1980
18	3060	5540	8310	4200	3400	20000	7970	3190	6630	3090	3770	1980
19	3410	5120	6450	3800	3000	18700	7640	3280	6790	2450	2980	1920
20	3880	4730	5660	3300	3000	18200	7040	3070	5700	2000	2290	1810
21	4890	4260	5290	2600	3300	16000	6300	2980	4770	1660	2410	1700
22	5670	4120	5500	2600	15000	13200	5800	2950	3800	1630	2080	1680
23	5790	3920	6890	2700	40000	11600	5700	2910	3160	1500	1880	1750
24	5710	3910	7310	2900	69200	9210	5440	2670	2930	1380	1890	1590
25	4490	3760	7090	2900	79200	8230	5220	2820	2620	1100	1840	1550
26	4200	3710	5700	2800	70900	7510	5000	2560	2410	1250	1840	1650
27	3620	3660	5050	2800	57700	7160	4680	2660	2210	1230	1780	1650
28	3350	4920	4700	2800	47400	7970	4510	3170	2090	1210	1880	1670
29	3710	6070	4660	2700	---	14300	4210	3390	1900	1270	1780	1650
30	3670	6090	7750	2600	---	14100	4160	4870	1840	1140	1780	1490
31	3480	---	14400	2600	---	14500	---	4120	---	1280	1650	---
TOTAL	91860	152810	174500	285400	434200	742880	388340	105520	105500	55060	68820	53840
MEAN	2963	5094	5629	9206	15510	23960	12940	3404	3517	1776	2220	1795
MAX	5790	10600	14400	32900	79200	41900	33000	4870	6790	4180	5530	3040
MIN	1350	3200	2800	2600	2100	7160	4160	2560	1840	1100	1430	1180
CFSM	.41	.70	.77	1.27	2.13	3.30	1.78	.47	.48	.24	.31	.25
IN.	.47	.78	.89	1.46	2.22	3.80	1.99	.54	.54	.28	.35	.28

CAL YR 1984	TOTAL	2508430	MEAN	6854	MAX	40000	MIN	952	CFSM	.94	IN.	12.84
WTR YR 1985	TOTAL	2658730	MEAN	7284	MAX	79200	MIN	1100	CFSM	1.00	IN.	13.61

03335690 MUD PINE CREEK NEAR OXFORD, IN

LOCATION.--Lat 40°31'24", long 87°20'30", in NE¼SE¼ sec.17, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on right bank 5 ft downstream from county road bridge, 0.3 mile north of Chase, 2 miles east of Boswell, and 5 miles west of Oxford.

DRAINAGE AREA.--39.4 mi^2.

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

REVISED RECORD.--WDR IN-80-1: 1971-79 (P).

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-12, Oct. 15-19, Oct. 25-30, Nov. 6-8, Dec. 4, 5, 7-9, 24, 25, and Jan. 12 to Feb. 22. Records fair except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--14 years (1972 to current year), 39.5 ft^3/s, 13.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft^3/s June 2, 1980, gage height, 11.67 ft; minimum daily, 0.16 ft^3/s Sept. 14, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	1400	*2,030	*10.40	Feb. 23	1815	1,560	9.82

Minimum daily discharge, 0.44 ft^3/s Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	1.8	3.7	393	7.0	100	55	15	12	2.3	.68	1.1
2	.87	5.6	3.4	168	6.9	98	44	14	8.3	2.2	.59	.92
3	.88	2.0	7.8	101	7.0	88	40	12	6.8	2.2	.44	.83
4	.80	1.5	6.7	76	6.8	227	36	11	6.2	2.0	.52	.85
5	.80	1.4	5.0	53	6.7	149	217	12	6.4	1.9	4.6	.87
6	.80	1.4	4.5	46	6.6	92	231	11	5.7	1.7	6.7	.93
7	1.1	1.3	4.2	38	6.5	88	136	9.8	5.8	1.4	26	.84
8	1.8	1.3	3.9	29	6.5	114	100	9.1	5.9	1.1	4.9	.76
9	2.3	1.4	3.9	26	6.4	92	79	8.6	5.3	1.0	2.2	.93
10	1.5	1.7	4.4	24	6.3	76	66	9.0	4.3	1.6	1.7	1.6
11	1.0	27	4.3	23	6.2	340	53	9.2	6.2	1.5	1.4	.91
12	1.0	9.3	4.0	22	14	176	46	9.3	7.0	.92	1.2	.74
13	3.1	5.2	7.4	19	13	124	42	7.7	5.4	.95	1.3	.73
14	2.4	3.7	24	18	11	104	38	8.2	5.1	1.1	9.1	.70
15	2.0	2.9	20	17	11	84	36	16	14	2.3	30	.75
16	1.7	2.4	14	16	9.8	75	30	12	43	2.0	15	.70
17	1.4	2.1	11	14	9.3	66	27	12	20	.86	5.3	.66
18	1.2	2.0	9.2	13	9.2	58	27	11	14	.69	3.0	.66
19	1.1	2.1	8.6	13	9.3	47	25	10	11	.66	2.2	.66
20	2.0	1.9	8.1	11	10	44	23	9.3	8.9	.66	2.1	.63
21	6.6	1.7	11	9.0	40	37	22	9.0	8.1	.76	1.7	.60
22	3.1	1.7	28	8.7	1040	33	21	7.9	7.0	.82	1.5	.71
23	1.7	1.6	18	8.3	1290	32	20	8.2	5.9	.65	1.3	.85
24	1.4	1.6	15	8.1	616	27	20	8.0	5.4	.54	8.2	.87
25	1.4	1.6	13	7.9	220	27	18	7.8	4.7	.60	8.1	.86
26	1.3	1.6	11	7.7	156	25	17	7.7	4.3	.74	2.6	.90
27	1.3	2.5	11	7.6	130	27	16	8.3	4.1	.99	1.7	.87
28	1.2	11	10	7.4	102	25	15	8.1	3.4	.56	1.4	.78
29	1.2	7.0	15	7.4	---	21	14	6.7	3.0	.47	1.2	.62
30	1.2	4.7	91	7.2	---	27	14	7.2	2.6	.47	1.5	.80
31	1.2	---	62	7.2	---	61	---	18	---	.58	1.5	---
TOTAL	50.22	113.0	443.1	1206.5	3763.5	2584	1528	313.1	249.8	36.22	149.63	24.63
MEAN	1.62	3.77	14.3	38.9	134	83.4	50.9	10.1	8.33	1.17	4.83	.82
MAX	6.6	27	91	393	1290	340	231	18	43	2.3	30	1.6
MIN	.80	1.3	3.4	7.2	6.2	21	14	6.7	2.6	.47	.44	.60
CFSM	.04	.10	.36	.99	3.40	2.12	1.29	.26	.21	.03	.12	.02
IN.	.05	.11	.42	1.14	3.55	2.44	1.44	.30	.24	.03	.14	.02

CAL YR 1984	TOTAL	13228.11	MEAN	36.1	MAX	969	MIN	.67	CFSM	.92	IN.	12.49
WTR YR 1985	TOTAL	10461.70	MEAN	28.7	MAX	1290	MIN	.44	CFSM	.73	IN.	9.88

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 north of city limits of Williamsport, and 3.7 miles upstream from mouth.

DRAINAGE AREA.--323 mi^2.

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 above 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.--Estimated daily discharges: Dec. 5, 6, 8, 9, Jan. 10 to Feb. 12, and Feb. 16-22. Records good except those for periods of estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--30 years, 271 ft^3/s, 11.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft^3/s Feb. 10, 1959, from rating curve extended above 8,000 ft^3/s on basis of contracted-opening measurement, gage height, 16.00 ft, from floodmark; minimum daily, 6.5 ft^3/s Oct. 6-8, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 2,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	0600	2,900	8.64	Mar. 11	1200	3,220	9.02
Feb. 23	1900	*7,460	*12.82	Apr. 5	1800	3,730	9.58

Minimum daily discharge, 11 ft^3/s Oct. 4-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	47	106	2060	64	896	671	186	96	30	18	29
2	12	72	88	2070	64	866	522	189	92	28	16	26
3	12	140	84	1350	60	778	439	158	117	27	15	23
4	11	97	92	790	58	1210	379	145	79	27	15	21
5	11	73	78	495	58	1420	1500	142	75	26	85	21
6	11	59	70	392	58	964	2250	140	71	24	90	21
7	11	48	70	351	58	715	1750	130	68	23	164	21
8	13	43	69	297	56	825	1180	120	64	21	111	21
9	41	39	68	253	54	782	780	116	61	20	76	21
10	60	43	73	210	54	646	633	115	54	20	52	20
11	37	99	66	190	100	2020	539	115	50	20	39	19
12	28	294	62	160	120	1930	451	115	50	18	32	19
13	23	175	66	140	114	1290	406	108	50	17	55	17
14	22	120	154	148	90	924	395	102	50	17	53	16
15	23	96	342	130	88	726	377	128	50	86	117	16
16	23	83	280	122	86	620	338	143	66	67	148	16
17	23	72	221	126	85	529	295	133	129	45	98	16
18	22	63	175	120	84	437	284	124	92	35	68	15
19	50	57	147	90	84	395	267	109	80	30	52	15
20	45	52	136	68	94	363	251	97	76	26	45	14
21	162	47	130	78	350	313	236	91	72	24	38	14
22	154	42	196	74	2500	298	222	85	66	23	33	13
23	124	41	273	74	6540	286	215	83	60	22	30	14
24	79	40	224	78	6390	272	211	80	54	21	47	15
25	59	40	172	82	3470	254	198	79	50	20	47	15
26	49	39	141	76	2170	231	182	77	45	38	43	18
27	45	47	145	66	1580	245	177	96	42	26	42	18
28	39	101	134	62	1110	250	171	89	38	19	36	18
29	37	149	137	62	---	244	157	80	34	17	31	17
30	35	137	432	64	---	273	152	78	32	16	41	18
31	32	---	598	66	---	522	---	77	---	17	32	---
TOTAL	1305	2455	5029	10344	25639	21524	15628	3530	1963	850	1769	547
MEAN	42.1	81.8	162	334	916	694	521	114	65.4	27.4	57.1	18.2
MAX	162	294	598	2070	6540	2020	2250	189	129	86	164	29
MIN	11	39	62	62	54	231	152	77	32	16	15	13
CFSM	.13	.25	.50	1.03	2.84	2.15	1.61	.35	.20	.08	.18	.06
IN.	.15	.28	.58	1.19	2.95	2.48	1.80	.41	.23	.10	.20	.06

CAL YR 1984	TOTAL	111577	MEAN	305	MAX	4560	MIN	10	CFSM	.94	IN.	12.85
WTR YR 1985	TOTAL	90583	MEAN	248	MAX	6540	MIN	11	CFSM	.77	IN.	10.43

03336000 WABASH RIVER AT COVINGTON, IN

LOCATION.--Lat 40°08'24", long 87°24'24", in NE¼NW¼ sec.35, T.20 N., R.9 W., Warren County, Hydrologic Unit 05120108, on right approach to old U.S. Highway 136 bridge at Covington, 2.9 miles downstream from Oppossum Run, 3.6 miles upstream from Spring Creek, and at mile 271.1.

DRAINAGE AREA.--8,218 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at site 0.4 mile downstream January 1927 to December 1930, and at present site since January 1931 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 473.97 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1979, nonrecording gage on old bridge.

REMARKS.--Estimated daily discharges: Jan. 12 to Feb. 22, and June 24 to July 11. Records good except for period with ice effect, Jan. 12 to Feb. 22, which are poor. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--46 years, 7,416 ft^3/s, 12.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 147,000 ft^3/s May 20, 1943, gage height, 32.44 ft; minimum daily, 487 ft^3/s Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 35.1 ft, from floodmark determined by National Weather Service, discharge, 200,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 93,900 ft^3/s Feb. 25, gage height, 28.39 ft; minimum daily, 1,240 ft^3/s July 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1920	3930	6740	20900	3600	52700	18700	4500	4400	1900	1280	1830
2	2000	4300	7190	25500	3400	45600	23000	4520	4020	1900	1490	1870
3	1990	4870	6500	29900	3300	41300	24600	4390	3620	1900	1450	1780
4	1880	4600	4960	31700	3200	39300	24500	4110	3330	2300	1430	1800
5	1760	4690	3710	29700	3100	38500	24100	4080	3330	2400	1880	2510
6	1650	4690	3240	26700	2900	40800	26400	4190	3280	2200	1910	1960
7	1770	4550	3210	23700	2800	42800	29600	4240	3180	2000	2630	1690
8	1920	4300	3440	19800	2800	41200	32100	3930	2920	1900	2720	1500
9	2020	3830	3430	17200	2700	39300	30800	3760	3070	1800	2100	1420
10	2150	3630	3780	15200	2700	38600	27300	3620	2760	1700	1870	1410
11	2240	4080	3730	12700	2800	38100	23400	3530	2660	1600	1750	1320
12	2320	7000	3560	9000	2800	38200	18400	3370	2710	1530	1720	1700
13	2320	11200	3370	6500	2800	39500	15000	3280	3140	1540	1580	2790
14	2320	10600	4050	5800	2800	38500	13100	3300	3620	1520	1980	2490
15	2410	9460	5950	5400	2800	34800	12300	3290	4050	2000	2510	2170
16	2410	8310	8940	5200	3100	31200	11900	3430	4980	2050	3520	2210
17	2470	6640	10500	5100	3400	27900	10900	3340	5410	2600	5510	2040
18	3110	5930	10400	5100	3600	25300	9920	3340	6620	3770	5270	2030
19	3330	5630	8720	4800	3700	23300	9450	3320	7030	2930	3760	1980
20	3890	5190	7260	4100	3800	21600	8820	3260	6900	2380	2990	1900
21	5140	4690	6520	3100	3900	20300	7930	3090	5730	1960	2430	1810
22	6360	4310	6290	3200	17000	17400	7170	2980	4760	1680	2500	1730
23	6510	4160	6870	3300	29500	14900	6480	2940	3850	1610	2210	1710
24	6570	3970	8160	3600	47700	12700	6460	2900	3400	1610	2070	1730
25	6080	3900	8290	3700	82500	10800	5990	2690	3100	1360	2050	1630
26	4960	3810	7670	3700	91100	9720	5730	2800	2900	1260	1920	1610
27	4610	3770	6500	3800	81600	9060	5340	2560	2600	1310	1860	1670
28	3960	4230	6010	3800	64900	8800	5000	2850	2400	1280	1820	1700
29	3810	6060	5510	3700	---	11300	4750	3250	2200	1280	1970	1710
30	4060	6820	6510	3700	---	15900	4450	3960	2000	1300	2420	1670
31	4010	---	12200	3600	---	15800	---	4750	---	1240	1930	---
TOTAL	101950	163150	193210	343200	480300	885180	453590	109570	113970	57810	72530	55370
MEAN	3289	5438	6233	11070	17150	28550	15120	3535	3799	1865	2340	1846
MAX	6570	11200	12200	31700	91100	52700	32100	4750	7030	3770	5510	2790
MIN	1650	3630	3210	3100	2700	8800	4450	2560	2000	1240	1280	1320
CFSM	.40	.66	.76	1.35	2.09	3.47	1.84	.43	.46	.23	.28	.22
IN.	.46	.74	.87	1.55	2.17	4.01	2.05	.50	.52	.26	.33	.25

CAL YR 1984	TOTAL	2975410	MEAN	8130	MAX	40200	MIN	1390	CFSM	.99	IN.	13.47
WTR YR 1985	TOTAL	3029830	MEAN	8301	MAX	91100	MIN	1240	CFSM	1.01	IN.	13.7

03339000 VERMILION RIVER NEAR DANVILLE, IL

LOCATION.--Lat 40°06'03", long 87°35'52", in NW¼NW¼ sec.22, T.19 N., R.11 W., Vermilion County, Hydrologic Unit 05120109, on right bank at Danville sewage-treatment plant, 1.7 mi upstream from Stony Creek, 2.2 mi southeast of Danville, and at mile 19.5.

DRAINAGE AREA.--1,290 mi^2.

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-75-1: Drainage area. WDR IL-84-1: 1983.

GAGE.--Water-stage recorder. Datum of gage is 503.33 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 9, 1935, nonrecording gage at site and datum. Jan. 9, 1935, to Aug. 30, 1982, at site 0.3 mi downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 7-15, and Jan. 8 to Feb. 19. Water-discharge records good except those for estimated discharges, which are poor. Flow regulated at times by storage at Lake Vermilion on North Fork Vermilion River, 4.5 mi above station, usable capacity, 7,440 acre-ft, and by Danville sewage-treatment plant. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--64 years, 978 ft^3/s, 10.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft^3/s Mar. 13, 1939, gage height, 28.59 ft; minimum daily, 2 ft^3/s Oct. 9-14, 1920, Aug. 10, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1915	10,800	14.88	Mar. 12	0145	10,400	14.62
Feb. 24	1000	*27,600	*24.75	Apr. 6	0430	7,950	12.40
Mar. 5	0315	8,590	12.99				

Minimum daily discharge, 26 ft^3/s Nov. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	103	390	8190	86	3720	2600	465	354	299	145	1170
2	39	143	270	8900	80	3790	2430	697	332	252	185	747
3	38	372	190	6540	76	3560	1900	1050	341	2600	138	519
4	35	184	140	2980	72	5220	1550	840	463	3850	111	408
5	34	160	100	2210	68	8330	3240	662	425	2460	323	340
6	40	124	74	1630	64	6630	7690	640	350	1220	526	256
7	45	108	58	1380	60	3730	6700	612	315	869	509	220
8	46	90	50	1100	56	4160	4110	574	275	623	1170	194
9	49	88	55	900	52	4070	2430	517	238	463	857	204
10	57	92	60	780	56	3250	2160	497	220	1140	554	303
11	69	94	65	660	70	6190	1940	477	231	814	423	198
12	48	517	82	560	110	10300	1730	477	247	563	500	138
13	54	230	101	500	150	8580	1480	449	303	449	344	112
14	54	174	184	600	180	4790	1430	435	303	372	467	104
15	70	144	697	500	160	3590	1430	507	299	757	1020	91
16	69	113	963	410	145	2760	1370	542	299	1480	3210	91
17	63	92	640	340	135	2320	1240	553	487	1090	3190	84
18	48	46	405	270	130	1880	1040	568	487	657	1610	141
19	94	38	350	235	140	1610	921	512	377	463	1070	79
20	86	36	315	190	208	1400	880	454	320	372	814	79
21	181	37	320	180	721	1320	840	420	287	320	667	80
22	181	52	512	170	12000	1010	782	384	264	283	514	70
23	174	44	1110	160	22700	857	733	351	249	227	422	80
24	105	31	1000	150	27300	827	709	328	217	190	443	84
25	86	26	595	140	21900	782	709	287	190	163	363	96
26	84	27	430	135	14400	927	617	217	203	148	305	108
27	92	55	542	125	6950	880	574	217	178	149	261	80
28	84	230	458	115	4930	898	527	238	307	148	234	80
29	72	685	434	105	---	869	472	458	727	119	230	80
30	65	551	1370	98	---	852	440	444	463	105	1080	76
31	63	---	3290	92	---	1630	---	396	---	113	1720	---
TOTAL	2267	4686	15250	40345	112999	100732	54674	15268	9751	22758	23405	6312
MEAN	73.1	156	492	1301	4036	3249	1822	493	325	734	755	210
MAX	181	685	3290	8900	27300	10300	7690	1050	727	3850	3210	1170
MIN	34	26	50	92	52	782	440	217	178	105	111	70
CFSM	.06	.12	.38	1.01	3.13	2.52	1.41	.38	.25	.57	.59	.16
IN.	.07	.14	.44	1.16	3.26	2.90	1.58	.44	.28	.66	.67	.18

CAL YR 1984	TOTAL	482477	MEAN	1318	MAX	14300	MIN	16	CFSM	1.02	IN.	13.91
WTR YR 1985	TOTAL	408447	MEAN	1119	MAX	27300	MIN	26	CFSM	.87	IN.	11.78

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 east of Hillsboro, 3.7 miles northwest of Waynetown, and 9.6 miles upstream from mouth.

DRAINAGE AREA.--33.4 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 673.76 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 21 to Jan. 3, Jan. 10 to Mar. 7, Mar. 18 to May 6. Records poor prior to May 7, fair thereafter.

AVERAGE DISCHARGE.--17 years, 38.1 ft^3/s, 15.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,680 ft^3/s May 1, 1983, gage height, 10.47 ft; minimum daily, 3.5 ft^3/s Jan. 16, 17, Feb. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	0915	*1,630	----	Feb. 23	1445	1,500	7.87

Minimum daily discharge, 4.5 ft^3/s July 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	104	36	350	8.3	86	49	25	13	11	6.0	17
2	5.2	97	28	180	8.0	81	38	92	13	11	5.2	11
3	5.2	50	24	82	7.7	76	33	72	13	11	4.8	9.1
4	4.8	37	21	52	7.8	192	31	41	12	10	4.8	7.9
5	5.1	27	19	39	8.0	130	152	31	12	9.9	13	7.6
6	5.3	23	18	35	7.7	90	161	25	12	9.5	7.6	7.3
7	6.5	20	17	32	7.5	320	95	22	12	9.1	53	6.7
8	27	19	16	27	7.4	189	70	21	12	8.6	12	6.4
9	17	19	15	24	7.3	101	53	20	12	8.3	8.5	6.9
10	11	33	16	22	8.4	70	47	20	11	12	7.2	7.9
11	9.5	67	17	20	17	287	43	17	17	8.1	6.5	6.9
12	9.0	42	17	19	29	154	40	16	23	8.1	5.9	6.3
13	15	30	19	19	21	89	37	15	21	8.5	16	5.9
14	21	25	35	18	17	66	35	16	20	8.8	45	5.9
15	16	27	61	18	15	51	33	21	20	11	65	5.9
16	13	25	48	18	14	44	32	22	21	7.8	23	5.9
17	11	21	39	17	13	40	30	21	20	6.7	14	5.5
18	11	20	32	17	13	37	28	21	19	6.7	11	5.2
19	161	19	28	16	14	33	27	20	18	6.3	9.1	5.2
20	61	17	26	10	19	31	25	20	18	7.3	9.0	5.2
21	353	15	25	11	47	28	24	19	18	7.1	8.1	5.2
22	102	14	30	13	1220	26	23	18	17	6.7	7.2	5.2
23	57	12	33	13	1080	25	23	18	16	6.0	7.1	8.0
24	39	12	29	11	415	24	22	17	16	5.5	7.6	8.9
25	31	11	25	10	225	22	22	16	16	5.2	7.5	6.9
26	28	13	22	9.7	148	21	20	15	15	5.1	7.1	8.5
27	25	15	20	8.5	113	20	21	13	14	4.8	7.0	7.3
28	23	72	21	8.2	93	21	20	13	13	4.5	6.7	7.1
29	20	64	24	8.4	---	23	18	13	13	4.5	19	6.7
30	18	46	190	8.8	---	40	18	13	12	4.5	215	7.3
31	16	---	132	9.4	---	107	---	13	---	6.5	34	---
TOTAL	1131.9	996	1083	1126.0	3591.1	2524	1270	726	469	240.1	652.9	216.8
MEAN	36.5	33.2	34.9	36.3	128	81.4	42.3	23.4	15.6	7.75	21.1	7.23
MAX	353	104	190	350	1220	320	161	92	23	12	215	17
MIN	4.8	11	15	8.2	7.3	20	18	13	11	4.5	4.8	5.2
CFSM	1.09	.99	1.04	1.09	3.83	2.44	1.27	.70	.47	.23	.63	.22
IN.	1.26	1.11	1.21	1.25	4.00	2.81	1.41	.81	.52	.27	.73	.24

CAL YR 1984	TOTAL	12279.7	MEAN	33.6	MAX	423	MIN	4.8	CFSM	1.01	IN.	13.68
WTR YR 1985	TOTAL	14026.8	MEAN	38.4	MAX	1220	MIN	4.5	CFSM	1.15	IN.	15.62

03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN

LOCATION.--Lat 40°02'56", long 86°53'58", in SW¼NW¼ sec.32, T.19 N., R.4 W., Montgomery County, Hydrologic Unit 05120110, on left bank 327 ft upstream from Crawfordsville Electric Light and Power Co.'s dam at Crawfordsville, 0.5 mile upstream from bridge on U.S. Highway 231, 1.0 mile downstream from Walnut Fork Sugar Creek, and at mile 40.4.

DRAINAGE AREA.--509 mi^2.

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 and concrete control. Datum of gage is 657.77 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 11 to Feb. 19. Records good except those for period of no gage-height record, Jan. 11 to Feb. 19, which are poor.

AVERAGE DISCHARGE.--47 years, 490 ft^3/s, 13.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft^3/s June 28, 1957, gage height, 14.48 ft; minimum daily, 2.4 ft^3/s Sept. 24-27, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 17.3 ft from information by local resident, discharge, about 36,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1200	6,550	5.63	Mar. 8	1000	4,350	4.45
Feb. 24	0300	*18,800	*12.44	Mar. 11	2300	6,470	5.58
Mar. 5	0400	4,190	4.37	Apr. 6	1000	4,470	4.51

Minimum daily discharge, 21 ft^3/s July 30, Sept. 19-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	173	713	5060	120	1750	2490	265	136	69	28	54
2	36	954	522	4700	120	1740	1330	1100	127	70	29	41
3	34	696	467	2170	120	1420	967	1050	117	74	24	36
4	31	436	380	1320	120	1880	737	635	109	72	22	34
5	30	314	321	920	120	3610	1250	474	106	74	34	32
6	28	236	300	695	120	1760	4150	385	102	66	51	32
7	29	190	279	597	110	1510	2280	327	100	60	70	32
8	78	164	285	492	110	4080	1330	286	97	57	79	30
9	208	153	292	396	110	2670	941	258	94	51	55	34
10	144	883	272	359	110	1620	732	240	87	51	41	47
11	99	1610	265	311	210	3850	617	228	116	48	34	37
12	79	1410	281	270	250	5430	517	220	705	42	30	32
13	69	843	337	290	200	2630	461	206	526	43	30	27
14	63	569	1280	250	180	1690	435	198	317	44	162	25
15	58	484	1640	250	160	1240	444	218	252	54	482	25
16	56	578	1050	250	160	992	425	225	275	86	314	23
17	54	453	788	230	170	834	362	223	352	69	168	23
18	56	364	586	190	170	675	333	205	257	49	107	22
19	64	327	508	170	170	592	318	184	207	41	77	21
20	61	271	480	150	183	539	299	173	177	41	62	21
21	263	227	501	150	304	461	280	178	151	38	55	21
22	455	204	952	150	8800	415	267	170	136	36	48	21
23	273	196	744	160	15500	390	257	153	129	33	43	27
24	188	197	575	160	16400	362	253	145	127	31	46	30
25	150	184	450	150	9100	323	247	137	122	28	51	38
26	136	176	385	140	4260	288	225	132	110	26	72	36
27	128	193	347	120	2930	289	217	138	99	28	66	32
28	120	1910	346	130	2110	308	209	141	91	28	51	27
29	110	1880	417	130	---	298	193	133	84	23	47	25
30	99	1070	2680	130	---	353	186	125	77	21	155	24
31	91	---	2370	130	---	2080	---	133	---	28	78	---
TOTAL	3331	17345	20813	20620	62417	46079	22752	8685	5385	1481	2611	909
MEAN	107	578	671	665	2229	1486	758	280	180	47.8	84.2	30.3
MAX	455	1910	2680	5060	16400	5430	4150	1100	705	86	482	54
MIN	28	153	265	120	110	288	186	125	77	21	22	21
CFSM	.21	1.14	1.32	1.31	4.38	2.92	1.49	.55	.35	.09	.17	.06
IN.	.24	1.27	1.52	1.51	4.56	3.37	1.66	.63	.39	.11	.19	.07

CAL YR 1984	TOTAL	183920	MEAN	503	MAX	5630	MIN	23	CFSM	.99	IN.	13.44
WTR YR 1985	TOTAL	212428	MEAN	582	MAX	16400	MIN	21	CFSM	1.14	IN.	15.53

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 upstream from Raccoon Creek, 4.9 miles downstream from Sugar Creek, and at mile 240.0.

DRAINAGE AREA.--11,118 mi^2.

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. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 457.75 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Oct. 1, 1927, to July 12, 1950, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 14 to Feb. 21. Records good except those for period of no gage-height record, Jan. 14 to Feb. 21, which are fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--58 years, 9,842 ft^3/s , 12.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 184,000 ft^3/s May 20, 1943, gage height, 32.83 ft; minimum daily, 571 ft^3/s Sept. 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 34.0 ft, from floodmarks, discharge, 230,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 115,000 ft^3/s Feb. 26, gage height, 30.89 ft; minimum daily, 1,670 ft^3/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	6310	9440	27300	5200	77200	24600	6420	5090	3120	1860	3900
2	1970	8420	9030	36500	5000	67400	25700	8040	4880	2930	1960	3280
3	2030	8270	9090	37600	4800	61600	26600	8180	4560	3170	2080	2840
4	1960	7490	7640	37900	4500	56500	26800	7460	4320	5250	1990	2570
5	1840	6840	6100	36600	4400	55700	28200	6760	4270	5480	2610	2680
6	1720	6620	5100	33500	4200	54400	35700	6430	4340	4630	3470	2970
7	1670	6190	4200	30000	4100	52800	37800	6400	4220	3710	3800	2400
8	1950	5890	4260	26500	4000	54300	38700	6140	4090	3300	4130	2170
9	2180	5340	4610	22400	3800	53900	38800	5750	3960	2960	3970	2190
10	2370	7040	5080	19300	3800	50300	36700	5620	3890	3900	3290	2140
11	2420	7700	5030	16600	3900	49600	33000	5390	3930	3930	2740	2030
12	2450	8350	5050	13700	3900	56100	28300	5270	4060	3120	2550	1930
13	2480	11800	4840	9960	3900	56500	22900	5090	4420	2750	2490	2530
14	2480	13100	6400	8000	3900	53800	18600	5110	4590	2600	2710	2980
15	2530	11800	9070	7400	3900	49700	16400	5330	4850	2670	4240	2660
16	2620	10800	11200	7200	3800	44900	15200	5380	6000	3610	5170	2450
17	2570	9250	12500	7000	4000	40000	14100	5540	6340	3790	7170	2410
18	3020	7860	12700	6900	4200	35400	12500	5470	6670	4360	7280	2240
19	4480	7230	11500	6800	4500	31300	11300	5200	7150	4210	5680	2240
20	5570	6700	9610	5800	5000	28400	10800	5070	7100	3620	4530	2200
21	10700	6210	8530	4100	5600	26400	10100	4860	6530	3160	3810	2110
22	10400	5460	8650	4300	27400	24000	9330	4690	5690	2730	3460	2020
23	9390	5250	8820	4600	54900	20200	8760	4560	4930	2460	3190	2010
24	8870	5100	9770	4800	75200	17300	8350	4470	4360	2370	2920	1980
25	8530	4970	10200	5200	104000	14400	8200	4340	4040	2260	2980	1930
26	7560	4820	9580	5400	114000	12300	7830	4180	3810	1990	2720	1910
27	6850	5010	8520	5500	107000	11200	7340	4130	3610	1920	2570	1870
28	6320	10800	7570	5500	91600	10600	6960	4020	3440	1920	2440	1900
29	5740	11300	7170	5300	---	10800	6650	4220	3350	1880	2410	1910
30	5790	10400	11700	5300	---	16400	6340	4460	3420	1860	4620	1910
31	5830	---	16700	5300	---	21800	---	5110	---	1900	4750	---
TOTAL	136240	232320	259660	452260	664500	1215200	582560	169090	141910	97560	109590	70360
MEAN	4395	7744	8376	14590	23730	39200	19420	5455	4730	3147	3535	2345
MAX	10700	13100	16700	37900	114000	77200	38800	8180	7150	5480	7280	3900
MIN	1670	4820	4200	4100	3800	10600	6340	4020	3350	1860	1860	1870
CFSM	.40	.70	.75	1.31	2.13	3.53	1.75	.49	.43	.28	.32	.21
IN.	.46	.78	.87	1.51	2.22	4.07	1.95	.57	.47	.33	.37	.24

CAL YR 1984	TOTAL	4014620	MEAN	10970	MAX	51100	MIN	1670	CFSM	.99	IN.	13.43
WTR YR 1985	TOTAL	4131250	MEAN	11320	MAX	114000	MIN	1670	CFSM	1.02	IN.	13.82

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 upstream from Ramp Creek, 3.1 miles west of Fincastle, and at mile 48.8.

DRAINAGE AREA.--139 mi^2.

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. WDR IN-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 686.03 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6-8, Jan. 13 to Feb. 19. Records good except those for periods of ice effect, Dec. 6-8 and Jan. 13 to Feb. 19, which are poor.

AVERAGE DISCHARGE.--28 years, 143 ft^3/s, 13.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft^3/s Jan. 26, 1962; maximum gage height, 15.68 ft Jan. 26, 1962 (ice jam); minimum daily discharge, 1.8 ft^3/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, discharge, 39,900 ft^3/s, from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1800	2,170	8.76	Mar. 11	2200	2,460	9.32
Feb. 23	0500	*7,350	*13.65	Apr. 6	0300	2,470	9.34

Minimum daily discharge, 6.5 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	246	264	1580	39	371	722	97	31	20	18	39
2	33	667	204	933	37	425	411	606	31	20	11	24
3	29	314	188	423	36	336	307	455	32	21	8.4	18
4	26	209	151	291	36	492	248	256	30	19	7.9	14
5	24	152	128	220	36	766	750	182	29	18	28	13
6	23	112	110	180	36	372	1550	144	28	17	29	12
7	23	90	100	162	35	347	565	121	28	16	20	11
8	161	78	95	135	34	1030	356	104	27	15	19	11
9	226	77	88	108	33	534	267	93	26	13	15	11
10	116	1090	95	99	34	358	220	86	23	49	11	14
11	74	1210	101	91	60	1280	196	82	72	19	9.4	11
12	58	584	108	86	78	1290	171	78	187	15	8.3	12
13	50	339	112	84	70	522	157	71	127	13	7.9	10
14	46	241	486	82	60	358	149	69	88	13	15	8.8
15	43	236	455	78	54	273	147	77	85	13	19	8.4
16	40	229	296	78	52	225	138	78	161	12	19	8.0
17	37	174	223	72	50	195	122	80	116	11	13	7.8
18	33	149	175	64	54	168	116	74	90	10	10	7.5
19	33	133	156	54	62	153	109	64	73	9.7	9.4	7.2
20	34	108	142	49	70	143	103	57	60	11	9.4	7.0
21	303	92	195	46	176	135	96	57	51	11	8.7	6.6
22	254	84	351	46	3570	129	92	52	45	10	7.9	6.5
23	147	81	222	48	6910	126	89	48	41	9.5	7.4	9.2
24	102	77	181	50	4910	121	87	45	37	9.0	8.6	12
25	84	72	135	49	1280	113	84	42	35	8.6	31	9.5
26	83	68	113	44	684	103	77	40	31	9.3	22	9.8
27	78	95	108	40	521	106	75	39	29	9.1	13	8.8
28	73	1440	107	39	406	112	72	39	26	7.9	9.6	7.7
29	64	695	111	40	---	116	65	37	23	7.3	8.7	7.3
30	56	395	1010	40	---	244	61	34	22	7.0	339	7.3
31	51	---	627	40	---	1310	---	33	---	10	88	---
TOTAL	2443	9537	6837	5351	19423	12253	7602	3340	1684	433.4	831.6	339.4
MEAN	78.8	318	221	173	694	395	253	108	56.1	14.0	26.8	11.3
MAX	303	1440	1010	1580	6910	1310	1550	606	187	49	339	39
MIN	23	68	88	39	33	103	61	33	22	7.0	7.4	6.5
CFSM	.57	2.29	1.59	1.24	4.99	2.84	1.82	.78	.40	.10	.19	.08
IN.	.65	2.55	1.83	1.43	5.20	3.28	2.03	.89	.45	.12	.22	.09

CAL YR 1984	TOTAL	58846.3	MEAN	161	MAX	2440	MIN	7.3	CFSM	1.16	IN.	15.75
WTR YR 1985	TOTAL	70074.4	MEAN	192	MAX	6910	MIN	6.5	CFSM	1.38	IN.	18.75

03340900 BIG RACCOON CREEK AT FERNDALE, 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 southwest of Ferndale, 1.8 miles northeast of Mansfield, 2.0 miles upstream from Rocky Fork Creek, 2.2 miles downstream from Cecil M. Harden Lake, and at mile 31.6.

DRAINAGE AREA.--222 mi^2.

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 above 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. 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 provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--29 years, 231 ft^3/s, 14.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft^3/s June 28, 1957, gage height, 19.87 ft, from rating curve extended above 5,000 ft^3/s on basis of records for station at Big Raccoon Creek at Mansfield; minimum daily, 2.7 ft^3/s Oct. 11, 1956; no flow Aug. 23, 24, 1977, due to regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,310 ft^3/s, Mar. 21; minimum daily, 14 ft^3/s, July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	573	507	195	94	89	216	134	48	48	17	82
2	80	368	607	116	108	90	427	322	48	48	17	82
3	74	113	605	119	107	90	428	492	48	43	17	109
4	71	416	721	121	107	90	590	492	48	29	17	122
5	57	576	805	121	81	91	511	491	48	17	17	122
6	48	574	847	122	54	183	92	490	48	17	17	122
7	48	571	838	123	54	435	93	489	48	17	17	121
8	66	568	829	123	54	513	93	299	48	17	60	121
9	158	565	820	123	54	515	93	148	48	17	81	121
10	236	230	811	288	54	515	94	138	48	49	81	149
11	235	75	801	672	54	518	94	138	48	81	81	162
12	235	77	792	795	54	524	328	110	48	81	52	135
13	157	391	783	784	54	526	847	81	317	81	40	121
14	79	589	777	899	82	527	1030	81	489	58	40	121
15	79	588	778	958	279	527	1100	81	289	48	40	93
16	98	662	774	939	340	527	1220	81	366	48	40	81
17	126	720	768	920	198	526	1210	103	489	48	40	80
18	96	716	760	899	91	525	1200	139	351	43	40	80
19	79	712	751	656	53	856	1190	139	158	40	40	80
20	354	760	703	307	53	1240	1180	152	128	40	40	68
21	273	474	315	80	70	1310	1180	163	99	40	40	56
22	145	544	341	53	107	1300	1160	163	61	40	40	56
23	459	800	375	53	109	1290	1240	122	48	29	32	56
24	595	792	617	53	82	1280	1260	81	48	17	17	56
25	592	786	768	54	86	1270	1220	81	48	17	17	56
26	590	638	756	54	88	1260	575	56	48	14	17	56
27	587	456	404	54	88	1000	240	48	48	17	17	67
28	584	260	263	54	89	749	240	48	48	17	17	72
29	581	110	345	54	---	747	240	48	48	17	17	72
30	578	230	351	67	---	581	240	48	48	17	58	56
31	575	---	435	80	---	213	---	48	---	17	82	---
TOTAL	8119	14934	20047	9936	2744	19907	19631	5506	3707	1112	1148	2775
MEAN	262	498	647	321	98.0	642	654	178	124	35.9	37.0	92.5
MAX	595	800	847	958	340	1310	1260	492	489	81	82	162
MIN	48	75	263	53	53	89	92	48	48	14	17	56

CAL YR 1984	TOTAL	92466	MEAN	253	MAX	1000	MIN	28
WTR YR 1985	TOTAL	109566	MEAN	300	MAX	1310	MIN	14

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 upstream from Rock Run, 1.5 miles downstream from Little Raccoon Creek, 2.1 miles northwest of Rosedale, and at mile 13.1.

DRAINAGE AREA.--448 mi^2.

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Coxville.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 494.00 ft above National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Estimated daily discharges: Jan. 20 to Feb. 4, and Feb. 7-12. Records good. Flow regulated by Cecil M. Harden Lake.

AVERAGE DISCHARGE.--29 years, 494 ft^3/s, 14.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108,000 ft^3/s June 28, 1957, gage height, 21.23 ft, from rating curve extended above 35,000 ft^3/s on basis of an estimate made by slope-area study; minimum daily, 6.5 ft^3/s Oct. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,530 ft^3/s Feb. 24, gage height, 13.54 ft; minimum daily, 70 ft^3/s July 29, Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	848	947	3030	250	1100	1570	736	189	190	94	202
2	196	1130	1060	1870	260	1100	1320	1520	188	189	77	172
3	165	572	1080	1140	280	900	1140	1300	191	195	72	158
4	142	501	1020	883	290	1070	1090	1060	186	176	70	166
5	132	769	1240	725	274	1370	2590	942	184	167	232	164
6	112	745	1230	635	234	855	3230	873	180	155	138	161
7	105	749	1190	583	220	1050	1440	823	199	149	227	155
8	160	736	1180	530	210	2110	1050	739	187	143	178	153
9	235	738	1170	481	205	1480	842	456	173	138	154	152
10	269	2540	1180	490	200	1230	728	425	166	500	140	191
11	302	1410	1160	850	230	2440	671	393	459	285	130	198
12	301	960	1150	1050	270	2520	630	377	703	204	123	185
13	302	766	1170	1060	321	1630	972	328	459	179	99	150
14	204	1030	1760	1110	287	1360	1380	331	668	163	121	145
15	164	1050	1530	1270	330	1180	1480	418	695	137	158	131
16	158	1040	1390	1270	589	1080	1630	382	1100	125	123	122
17	181	1120	1300	1270	423	1010	1620	570	976	117	102	119
18	191	1100	1230	1250	357	946	1600	468	836	112	94	117
19	179	1070	1210	1130	304	988	1580	413	519	101	91	115
20	229	1050	1110	700	292	1570	1560	383	437	100	95	114
21	1030	1090	906	400	470	1710	1540	405	372	99	88	102
22	499	582	1010	350	3090	1720	1520	376	321	96	83	92
23	476	1040	843	310	6700	1720	1510	358	275	92	81	99
24	702	1040	859	290	6160	1710	1600	293	263	84	105	125
25	711	1030	1150	280	2750	1700	1590	272	249	77	124	97
26	717	1020	1130	270	1870	1660	1330	259	233	74	92	100
27	704	1020	1110	260	1470	1600	591	235	220	72	84	94
28	696	3360	593	250	1210	1150	533	222	209	74	78	100
29	685	1390	695	240	---	1170	492	211	202	70	74	104
30	674	944	1980	230	---	1970	470	204	197	71	420	104
31	668	---	1440	230	---	3170	---	198	---	87	260	---
TOTAL	11699	32440	36023	24437	29546	46269	39299	15970	11236	4421	4007	4087
MEAN	377	1081	1162	788	1055	1493	1310	515	375	143	129	136
MAX	1030	3360	1980	3030	6700	3170	3230	1520	1100	500	420	202
MIN	105	501	593	230	200	855	470	198	166	70	70	92
CFSM	.84	2.41	2.59	1.76	2.35	3.33	2.92	1.15	.84	.32	.29	.30
IN.	.97	2.69	2.99	2.03	2.45	3.84	3.26	1.33	.93	.37	.33	.34

CAL YR 1984	TOTAL	198994	MEAN	544	MAX	3360	MIN	52	CFSM	1.21	IN.	16.52
WTR YR 1985	TOTAL	259434	MEAN	711	MAX	6700	MIN	70	CFSM	1.59	IN.	21.54

03341500 WABASH RIVER AT TERRE HAUTE, IN

LOCATION.--Lat 39°28'33", long 87°25'07", in NE¼NW¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on left bank at Indiana America Water Company, Inc., 1st and Elm Streets in Terre Haute, Indiana, 3.2 miles upstream from Sugar Creek, and 3.4 miles downstream from Lost Creek.

DRAINAGE AREA.--12,263 mi^2.

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 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. WDR IN-73-1: Drainage area. WDR IN-84-1: 1983.

GAGE.--Water-stage recorder. Datum of gage is 442.90 ft above National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 27, 1928.

REMARKS.--No estimated daily discharges. Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--58 years, 10,870 ft^3/s, 12.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft^3/s May 20, 1943, gage height, 30.50 ft; minimum daily, 701 ft^3/s Aug. 3, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 31.1 ft, present site and datum, discharge, 245,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 114,000 ft^3/s Feb. 26, gage height, 26.60 ft; minimum daily, 1,980 ft^3/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2390	5030	10700	24900	5470	88000	28500	8200	6170	3970	2570	5110
2	2340	7810	9930	34100	5260	75200	28000	12100	5930	3740	2470	4340
3	2260	8190	10000	38200	4940	66500	28800	12000	5600	4320	2720	3780
4	2260	7120	9250	39500	4690	60400	29300	10900	5190	5710	2710	3420
5	2170	6470	7810	39800	4560	57100	31100	10000	5000	6630	3590	3270
6	2060	6420	6740	38900	4420	55300	37700	8980	5070	6560	4740	3650
7	1980	6030	5780	36800	4330	54000	40100	8420	5070	5040	4470	3390
8	2100	5710	5310	33300	4190	54000	40500	8230	5000	4180	5080	2990
9	2400	5430	5630	27900	4030	54600	41100	7670	4720	3780	4970	2860
10	2510	8780	5860	22300	4000	53600	41100	7190	4660	3730	4380	2940
11	2620	9180	6130	19000	4100	52100	39900	6930	4940	5140	3720	2800
12	2670	8570	6030	16100	4140	54500	37000	6690	6530	4170	3350	2720
13	2700	10100	5990	12800	4140	56400	31300	6440	5930	3590	3260	2770
14	2710	12300	7520	10400	4320	55600	24700	6380	5930	3360	3160	3580
15	2660	12000	9790	9630	4150	53000	21200	7080	6170	3200	4410	3510
16	2690	11200	11000	9090	4070	50600	19600	7060	7660	3540	6110	2880
17	2760	10200	12500	8930	4400	47200	18300	7250	8430	4090	8000	2820
18	2650	8900	13000	8910	4590	43900	16700	7470	8390	4330	9590	2730
19	3450	8160	12400	8620	5060	40000	15300	6940	8820	4930	8070	2660
20	4560	7740	11000	6980	5680	36800	14400	6530	8770	4320	6060	2660
21	8560	7250	9910	4370	6770	33000	13400	6300	8400	3830	5010	2610
22	10200	6640	10100	4750	21200	30300	12400	5970	7420	3500	4300	2550
23	8580	6040	9820	4950	47200	25800	11700	5690	6460	3090	4030	2540
24	7930	6070	10100	5120	68700	21400	11100	5520	5570	2890	3820	2550
25	7690	5870	10800	5660	80300	19200	10900	5330	5270	2810	3890	2510
26	7210	5760	10500	5860	110000	17100	10500	5070	4770	2660	3660	2460
27	6300	6030	9840	5900	106000	15600	9800	4990	4420	2460	3380	2420
28	5740	12300	8830	5790	101000	14600	9090	4820	4230	2410	3240	2400
29	5130	13300	8140	5670	---	14000	8600	4910	4110	2400	3100	2410
30	4810	11800	12100	5660	---	18500	8300	5160	4150	2360	3860	2450
31	4870	---	16700	5630	---	26500	---	5660	---	2450	6470	---
TOTAL	128960	246400	289210	505520	631710	1344800	690390	221880	178780	119190	138190	89780
MEAN	4160	8213	9329	16310	22560	43380	23010	7157	5959	3845	4458	2993
MAX	10200	13300	16700	39800	110000	88000	41100	12100	8820	6630	9590	5110
MIN	1980	5030	5310	4370	4000	14000	8300	4820	4110	2360	2470	2400
CFSM	.34	.67	.76	1.33	1.84	3.54	1.88	.58	.49	.31	.36	.24
IN.	.39	.75	.88	1.53	1.92	4.08	2.09	.67	.54	.36	.42	.27

CAL YR 1984	TOTAL	4312650	MEAN	11780	MAX	49300	MIN	1970	CFSM	.96	IN.	13.08
WTR YR 1985	TOTAL	4584810	MEAN	12560	MAX	110000	MIN	1980	CFSM	1.02	IN.	13.91

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE¼SW¼ sec.30, T.7 N., R.10 W., Sullivan County, Hydrologic Unit 05120111, on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mile downstream from Turtle Creek, and at mile 162.0.

DRAINAGE AREA.--13,161 mi^2.

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 U.S. Army Corps of Engineers office, Louisville, Ky.

REVISED RECORDS.--WSP 1335: 1939, 1950. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.65 ft above National Geodetic Vertical Datum of 1929. Prior to July 17, 1951, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--47 years, 11,920 ft^3/s, 12.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 201,000 ft^3/s May 21, 1943, gage height, 29.36 ft; minimum daily, 858 ft^3/s Sept. 27-30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 28, 1913, reached a stage of 26.4 ft, from graph based on once-daily readings by Illinois Central Railroad Co., discharge, 250,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 118,000 ft^3/s Mar. 1, gage height, 24.46 ft; minimum daily, 2,080 ft^3/s Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2560	6090	13000	24400	6580	115000	31700	8790	6130	4650	2730	5800
2	2520	8260	11800	29500	6420	113000	30900	12400	6460	4410	2860	4950
3	2460	8680	11200	31300	6180	101000	30200	15900	6300	4370	2750	4290
4	2380	8480	11100	33900	5900	87100	29800	14000	6020	5120	2790	3810
5	2360	7780	10000	36800	5710	76000	30000	12100	5700	6220	5680	3480
6	2260	7120	8640	39300	5580	67200	32500	10600	5500	6790	7410	3330
7	2170	6850	7480	40800	5440	60700	34500	9680	5540	6500	5520	3580
8	2080	6560	6620	41600	5340	59200	36800	9230	5530	5260	4820	3410
9	2170	6330	6330	40600	5220	56900	38100	8840	5400	4550	5020	3080
10	2490	8490	6590	37700	5100	56000	38800	8250	5120	4160	4860	2960
11	2620	11800	6890	32300	5260	55600	39500	7850	5100	4290	4330	2980
12	2730	10500	6980	25500	5370	55600	39600	7540	6100	5140	3770	2880
13	2790	9740	7060	19900	5330	55100	38600	7310	6800	4450	3430	2770
14	2830	11400	9710	15100	5390	55600	36100	7170	6320	3940	3320	2800
15	2810	13000	11400	12400	5430	55600	32700	7970	6320	3710	3650	3390
16	2770	12600	11700	11300	5220	54300	28600	8360	6720	3580	9330	3410
17	2790	11800	12700	10700	5170	52200	24500	8390	8120	3950	9310	3170
18	2800	10700	13800	10500	5460	50500	21300	8750	8490	4400	8800	3070
19	2880	9600	14000	10300	5750	47700	18500	8190	8560	4710	9000	2950
20	3640	8890	13300	9680	6450	44200	16700	7560	8860	5030	7650	2860
21	6910	8360	13200	7390	8070	40800	15400	7200	8790	4590	6130	2830
22	10600	7850	13900	5790	17200	37300	14300	6950	8290	4220	5100	2770
23	10300	7200	12400	6250	33100	33900	13300	6640	7430	3870	4440	2740
24	9000	6780	11500	6240	42900	30800	12500	6370	6630	3460	4190	2740
25	8460	6710	11600	6400	55300	27400	11900	6160	6380	3260	4410	2750
26	8270	6550	11900	6740	70600	23400	11500	5950	5820	3200	4070	2700
27	7650	6760	11500	6860	90500	19800	11000	5700	5240	3030	3790	2600
28	6850	13800	10800	6870	105000	17500	10300	5630	5740	2810	3520	2540
29	6310	16600	9850	6770	---	16100	9620	5480	5120	2720	3360	2500
30	5770	14900	15200	6690	---	21900	9100	5490	4730	2680	3320	2520
31	5510	---	20200	6680	---	29900	---	5660	---	2650	4400	---
TOTAL	137740	280180	342350	586260	534970	1617300	748320	256110	193260	131720	153760	95660
MEAN	4443	9339	11040	18910	19110	52170	24940	8262	6442	4249	4960	3189
MAX	10600	16600	20200	41600	105000	115000	39600	15900	8860	6790	9330	5800
MIN	2080	6090	6330	5790	5100	16100	9100	5480	4730	2650	2730	2500
CFSM	.34	.71	.84	1.44	1.45	3.96	1.89	.63	.49	.32	.38	.24
IN.	.39	.79	.97	1.66	1.51	4.57	2.12	.72	.55	.37	.43	.27

CAL YR 1984	TOTAL	4990020	MEAN	13630	MAX	59100	MIN	2070	CFSM	1.04	IN.	14.10
WTR YR 1985	TOTAL	5077630	MEAN	13910	MAX	115000	MIN	2080	CFSM	1.06	IN.	14.35

03342100 BUSSERON 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 upstream from East Fork Busseron Creek, 1.9 miles northwest of Hymera, 4.1 miles upstream from West Fork Busseron Creek, and at mile 30.3.

DRAINAGE AREA.--16.7 mi^2.

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

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Concrete control since Sept. 12, 1969. Datum of gage is 480.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service benchmark).

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 9 to Feb. 24. Records good except for periods of estimated daily record which are fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--19 years, 19.4 ft^3/s, 15.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft^3/s Sept. 12, 1974, gage height, 18.58 ft; maximum gage height, 19.16 ft July 8, 1982; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,150 ft^3/s Mar. 31, gage height, 17.84 ft; minimum daily, 0.12 ft^3/s Sept. 8, 21 and 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	109	39	71	2.3	36	112	41	3.9	2.1	.72	.42
2	.41	54	27	58	2.2	31	58	504	4.1	2.0	.66	.27
3	.32	26	20	44	2.1	24	43	109	4.9	20	.60	.64
4	.30	13	12	32	1.9	56	35	62	4.4	6.1	.58	1.2
5	.34	7.5	8.0	24	1.8	41	61	34	4.0	3.7	196	.78
6	.34	4.9	4.5	18	1.7	26	106	24	3.7	2.7	55	.23
7	.44	2.4	3.5	13	1.7	73	67	16	3.6	2.2	41	.15
8	.64	1.5	3.0	10	1.6	101	44	11	3.3	1.6	39	.12
9	.66	1.1	3.6	8.0	1.6	49	30	8.9	3.0	1.3	27	.21
10	.52	44	6.3	6.7	2.5	35	24	9.5	2.8	1.1	18	3.9
11	.47	18	4.9	5.4	10	163	29	12	6.2	1.0	14	3.8
12	.44	10	4.9	4.8	23	75	22	7.5	4.8	.96	13	2.3
13	.56	6.2	23	4.3	25	48	18	8.0	3.5	.93	11	1.2
14	.63	3.8	119	3.8	20	38	15	13	3.1	.90	15	.49
15	.64	4.2	49	3.5	16	27	16	38	3.8	.80	58	.24
16	.58	2.9	33	3.3	12	21	14	23	3.3	.71	97	.15
17	.52	1.9	24	3.1	9.0	17	12	47	2.9	1.4	43	.15
18	.54	2.3	17	3.0	10	20	10	20	2.8	2.0	30	.15
19	.99	3.6	13	2.8	14	15	9.4	13	2.5	.87	21	.14
20	2.2	2.0	42	2.7	25	12	8.4	9.5	2.2	.75	18	.13
21	17	1.5	76	2.6	80	8.9	7.7	15	2.1	.79	16	.12
22	3.8	1.4	42	2.6	180	7.8	7.1	11	2.1	.95	12	.12
23	2.2	1.3	30	2.5	270	6.6	6.5	9.6	1.9	.74	8.1	.27
24	1.7	1.2	17	2.5	320	5.8	6.3	6.5	2.0	.65	5.8	1.0
25	12	1.1	13	2.4	97	5.0	5.6	5.4	2.8	.57	3.9	2.3
26	4.0	1.0	11	2.3	72	4.8	5.1	4.7	1.9	.57	3.0	1.2
27	1.6	36	9.7	2.3	58	5.0	4.7	7.8	1.7	.57	3.0	.42
28	1.0	218	16	2.3	43	5.0	4.0	14	1.7	.91	2.5	.28
29	.79	80	312	2.4	---	39	3.3	7.0	4.5	.45	1.1	.16
30	.71	57	178	2.4	---	360	2.9	5.4	2.9	.34	.62	.17
31	.57	---	82	2.3	---	629	---	4.5	---	.52	.82	---
TOTAL	57.44	716.8	1243.4	348.0	1303.4	1984.9	787.0	1101.3	96.4	60.18	755.40	22.71
MEAN	1.85	23.9	40.1	11.2	46.5	64.0	26.2	35.5	3.21	1.94	24.4	.76
MAX	17	218	312	71	320	629	112	504	6.2	20	196	3.9
MIN	.30	1.0	3.0	2.3	1.6	4.8	2.9	4.5	1.7	.34	.58	.12
CFSM	.11	1.43	2.40	.67	2.78	3.83	1.57	2.13	.19	.12	1.46	.05
IN.	.13	1.60	2.77	.78	2.90	4.42	1.75	2.45	.21	.13	1.68	.05

CAL YR 1984	TOTAL	7168.38	MEAN	19.6	MAX	486	MIN	.00	CFSM	1.17	IN.	15.97
WTR YR 1985	TOTAL	8476.93	MEAN	23.2	MAX	629	MIN	.12	CFSM	1.39	IN.	18.88

03342150 WEST FORK BUSSERON 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 upstream from mouth, 1.5 miles west of Hymera, and 3.7 miles east of U.S. Highway 41.

DRAINAGE AREA.--14.4 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 476.00 ft above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Estimated daily discharges: Oct. 1-18, 22-24, 29-31, Dec. 5-9, Jan. 4 to Feb. 20 and Aug. 22 to Sept. 24. Records are fair except for periods of estimated daily record which are poor.

AVERAGE DISCHARGE.--19 years, 14.0 ft^3/s, 13.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft^3/s July 26, 1973, gage height, 13.23 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 28	0200	503	10.72	May 2	0345	*990	*11.88
Feb. 24	0400	606	11.08	Aug. 16	0245	501	10.71

Minimum daily discharge, 0.01 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	94	6.3	141	2.1	22	35	59	1.3	.18	.07	.17
2	.09	25	5.3	26	1.9	24	18	363	2.1	.22	.06	.12
3	.07	5.5	7.1	15	1.7	14	13	38	5.5	13	.04	.08
4	.06	2.9	4.2	12	1.6	59	12	17	3.3	6.8	.12	.06
5	.05	2.0	3.1	9.8	1.5	33	32	12	3.9	2.2	141	.05
6	.12	1.5	2.1	8.4	1.4	14	45	8.6	2.9	1.3	13	.04
7	.30	1.3	2.3	7.3	1.4	53	49	6.7	3.0	.83	4.7	.03
8	.72	1.2	2.5	6.3	1.4	104	21	5.6	2.2	.60	2.5	.02
9	.52	1.2	3.0	5.7	1.3	27	13	4.8	1.6	.52	1.6	.10
10	.38	39	7.3	5.3	1.7	17	11	4.3	1.2	.40	1.2	5.0
11	.28	9.0	5.5	4.8	8.0	153	22	3.9	5.1	.29	.78	.70
12	.20	4.6	4.9	4.3	15	44	12	4.8	5.1	.19	.56	.30
13	.27	2.5	20	4.1	14	23	9.0	5.3	2.3	.15	.30	.18
14	.40	2.1	132	3.8	10	21	9.3	19	1.3	.16	12	.12
15	.50	3.9	22	3.6	7.6	13	21	43	2.3	.05	100	.08
16	.44	2.3	13	3.3	6.2	11	10	13	2.9	.05	117	.06
17	.39	1.5	8.7	3.1	5.5	9.1	5.9	75	1.6	.05	9.6	.04
18	1.0	2.0	6.3	3.0	6.7	7.6	4.6	16	1.4	.05	4.5	.03
19	3.1	3.8	5.7	2.9	9.4	7.2	3.6	8.2	.94	.04	2.9	.03
20	10	2.2	5.4	2.8	25	6.5	2.9	5.4	.72	.04	2.4	.02
21	23	1.5	126	2.8	85	6.0	2.3	10	.45	.04	1.6	.02
22	9.0	1.0	39	2.7	158	5.8	1.9	6.0	.37	.04	.66	.01
23	3.4	.97	14	2.7	211	5.6	1.6	6.6	.40	.05	.41	.10
24	1.2	.90	9.7	2.6	230	5.6	1.4	3.7	.82	.06	.29	3.0
25	7.0	.82	6.0	2.5	37	5.5	1.3	2.6	3.3	.65	.33	.37
26	6.3	.83	4.9	2.4	23	5.0	.97	2.2	.99	.91	.25	.62
27	2.2	48	5.6	2.3	22	5.4	.89	5.1	.44	.08	.13	.35
28	1.5	182	5.7	2.3	15	5.7	.78	20	.29	.04	.11	.38
29	.90	19	31	2.4	---	18	.47	4.1	.31	.05	.10	.28
30	.56	11	194	2.4	---	57	.30	2.5	.29	.04	.40	.36
31	.35	---	52	2.3	---	78	---	2.0	---	.24	.25	---
TOTAL	74.42	473.52	754.6	299.9	904.4	860.0	361.21	777.4	58.32	29.32	418.86	12.72
MEAN	2.40	15.8	24.3	9.67	32.3	27.7	12.0	25.1	1.94	.95	13.5	.42
MAX	23	182	194	141	230	153	49	363	5.5	13	141	5.0
MIN	.05	.82	2.1	2.3	1.3	5.0	.30	2.0	.29	.04	.04	.01
CFSM	.17	1.10	1.69	.67	2.24	1.92	.83	1.74	.13	.07	.94	.03
IN.	.19	1.22	1.95	.77	2.34	2.22	.93	2.01	.15	.08	1.08	.03

CAL YR 1984	TOTAL	4908.52	MEAN	13.4	MAX	240	MIN	.00	CFSM	.93	IN.	12.68
WTR YR 1985	TOTAL	5024.67	MEAN	13.8	MAX	363	MIN	.01	CFSM	.96	IN.	12.98

03342244 MUD CREEK NEAR CASS, IN

LOCATION.--Lat 39°05'55", long 87°15'46", in NE¼NE¼ sec.35, T.8 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on left upstream wingwall of bridge on County Road 100 North, 1.0 mile northeast of Cass, and 2.9 miles above mouth.

DRAINAGE AREA.--9.16 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 474.73 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 4-6, 9-19, 31, Nov. 5-9, 28, Dec. 6-9, 26-28, Jan. 4 to Feb. 21, May 28, 29, June 9, 10, 20-23, June 27 to July 2, July 5-11, 13-20, 22-24, 28-30, Aug. 2-4, Aug. 16 to Sept. 8, Sept. 14-22, and Sept. 26-30. Records poor. Flow affected by surface-mined areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft^3/s Dec. 25, 1982, gage height, 10.89 ft; minimum daily, 0.64 ft^3/s Sept. 22, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 384 ft^3/s Mar. 31, gage height, 10.21 ft; minimum daily, 0.64 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	112	11	85	5.7	9.3	51	31	7.2	4.3	2.1	2.2
2	3.0	42	10	36	5.4	8.7	32	236	8.2	4.0	1.7	1.9
3	2.6	15	12	23	5.2	7.0	24	48	8.9	24	1.5	1.7
4	2.4	9.4	11	18	4.9	16	23	27	8.4	10	1.4	1.6
5	2.2	8.0	9.1	15	4.8	11	59	19	8.4	6.3	42	1.6
6	2.0	6.6	7.6	13	4.7	6.0	47	16	8.2	5.7	7.8	1.7
7	5.1	6.0	6.9	12	4.5	33	42	13	15	4.6	5.2	2.4
8	6.7	5.4	6.0	10	4.4	58	25	12	9.2	3.7	4.2	2.3
9	3.5	5.0	7.6	9.2	4.4	21	19	11	7.5	3.1	3.4	21
10	2.1	34	10	8.5	4.8	11	17	10	6.0	2.6	2.9	32
11	1.8	12	7.6	8.2	30	91	20	9.7	18	2.4	2.7	7.6
12	1.7	8.2	6.9	7.9	18	38	17	9.7	15	2.1	2.4	2.9
13	1.7	6.8	28	7.6	13	20	16	8.8	10	2.0	3.0	1.5
14	1.8	6.6	66	7.4	11	14	15	39	8.1	1.9	11	1.2
15	1.8	9.9	21	7.3	9.2	9.1	19	95	11	1.8	33	1.1
16	1.7	7.1	13	7.1	8.0	7.7	15	36	16	1.7	9.0	1.1
17	1.6	5.4	8.8	7.0	7.0	6.8	13	81	12	1.6	6.7	1.0
18	1.5	5.3	7.5	6.9	7.4	5.8	12	30	9.5	1.5	5.4	.86
19	2.8	9.0	9.5	6.8	9.0	5.9	11	19	7.8	1.3	4.7	.77
20	14	6.6	7.7	6.4	15	5.4	11	16	6.6	1.4	4.1	.72
21	12	5.3	120	6.3	50	4.9	9.5	15	5.8	2.2	3.7	.68
22	4.7	4.7	53	6.2	209	4.6	8.9	16	5.0	1.8	3.3	.64
23	5.3	5.0	28	6.2	122	4.7	8.8	16	4.0	1.4	3.0	12
24	6.1	5.1	20	6.2	84	4.8	8.7	13	48	1.4	3.1	3.3
25	21	4.8	13	6.2	34	4.2	8.2	12	36	4.1	3.5	2.1
26	7.3	4.8	11	6.1	21	3.7	7.5	11	15	4.9	3.0	1.9
27	5.3	43	9.2	6.1	14	4.0	7.4	20	8.0	1.7	2.6	1.6
28	9.4	100	8.4	6.1	9.0	4.0	6.9	16	5.6	1.6	2.2	1.4
29	7.7	25	58	6.0	---	48	5.8	8.7	5.0	1.4	2.0	1.2
30	5.8	16	151	6.0	---	166	6.1	8.5	4.7	1.3	3.8	1.3
31	3.0	---	53	5.9	---	189	---	8.2	---	6.0	2.6	---
TOTAL	150.8	534.0	791.8	369.6	719.4	822.6	565.8	911.6	338.1	113.8	187.0	113.27
MEAN	4.86	17.8	25.5	11.9	25.7	26.5	18.9	29.4	11.3	3.67	6.03	3.78
MAX	21	112	151	85	209	189	59	236	48	24	42	32
MIN	1.5	4.7	6.0	5.9	4.4	3.7	5.8	8.2	4.0	1.3	1.4	.64
CFSM	.53	1.94	2.78	1.30	2.81	2.89	2.06	3.21	1.23	.40	.66	.41
IN.	.61	2.17	3.22	1.50	2.92	3.34	2.30	3.70	1.37	.46	.76	.46

CAL YR 1984	TOTAL	5004.01	MEAN	13.7	MAX	173	MIN	.68	CFSM	1.50	IN.	20.32
WTR YR 1985	TOTAL	5617.77	MEAN	15.4	MAX	236	MIN	.64	CFSM	1.68	IN.	22.81

03342300 BUSSERON 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 southeast of Sullivan, 1.6 miles east of intersection of U.S. Highway 41 and State Highway 54, 1.7 miles upstream from Buttermilk Creek, and at mile 16.7.

DRAINAGE AREA.--138 mi^2.

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

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 440.00 ft above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Estimated daily discharges: Dec. 4-9, Jan. 9 to Feb. 21, Apr. 26-30, May 4-12, May 15-18 and July 1 to Aug 14. Records good except for periods of estimated daily record which are fair and periods of ice effect, Dec. 4-9 and Jan. 9 to Feb. 21 which are poor. Flow affected by surface-mined areas and U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--19 years, 152 ft^3/s, 14.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,050 ft^3/s July 29, 1979, gage height, 16.28 ft; minimum daily, 0.9 ft^3/s Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 3,540 ft^3/s May 3, gage height, 14.77 ft; minimum daily, 6.9 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	204	190	1270	31	343	2620	56	52	24	13	18
2	7.6	544	145	1080	29	303	1620	1420	53	23	9.7	16
3	7.5	173	160	589	27	241	891	3100	59	40	8.4	14
4	7.5	101	123	411	26	252	557	2200	62	60	7.9	13
5	7.3	74	98	323	25	446	550	1560	59	43	250	14
6	6.9	56	80	266	24	242	1170	1050	54	39	400	14
7	8.2	45	64	202	24	220	838	529	58	24	145	17
8	17	38	56	148	23	867	545	266	55	19	82	17
9	14	35	65	121	23	568	318	164	45	17	63	16
10	9.9	127	80	94	37	333	245	131	38	15	46	83
11	8.9	127	80	77	90	651	256	113	50	14	35	40
12	8.6	80	74	67	300	1040	220	107	128	12	27	25
13	8.7	64	101	58	270	523	183	99	73	11	24	19
14	9.0	54	553	52	230	354	162	114	53	11	74	15
15	8.9	51	409	48	185	259	205	374	51	10	508	13
16	8.1	53	222	45	150	204	189	403	86	9.7	431	12
17	8.2	44	166	42	130	168	145	341	70	8.4	189	11
18	7.4	42	131	40	135	141	122	375	61	7.9	115	9.4
19	9.2	51	114	38	140	126	107	211	47	7.3	82	8.5
20	11	52	102	36	151	111	93	152	40	7.9	65	8.0
21	45	42	484	35	310	97	84	132	34	13	54	7.3
22	38	38	932	34	1150	88	76	122	30	10	45	7.2
23	19	37	410	34	2030	83	69	125	27	7.9	38	13
24	15	37	247	33	2480	82	65	102	35	7.9	39	24
25	21	34	173	33	2010	76	61	80	175	7.9	42	14
26	33	34	136	32	1230	68	58	69	67	13	33	13
27	24	58	123	32	747	66	55	63	45	17	28	11
28	17	920	112	32	486	69	52	110	34	9.7	24	8.8
29	16	642	145	33	---	101	49	79	30	7.9	20	8.2
30	14	285	1170	33	---	1110	45	64	30	7.3	22	8.4
31	13	---	1450	32	---	1960	---	60	---	8.4	23	---
TOTAL	437.5	4142	8395	5370	12493	11192	11650	13771	1701	513.2	2943.0	497.8
MEAN	14.1	138	271	173	446	361	388	444	56.7	16.6	94.9	16.6
MAX	45	920	1450	1270	2480	1960	2620	3100	175	60	508	83
MIN	6.9	34	56	32	23	66	45	56	27	7.3	7.9	7.2
CFSM	.10	1.00	1.96	1.25	3.23	2.62	2.81	3.22	.41	.12	.69	.12
IN.	.12	1.12	2.26	1.45	3.37	3.02	3.14	3.71	.46	.14	.79	.13

CAL YR 1984	TOTAL	53749.8	MEAN	147	MAX	2680	MIN	2.6	CFSM	1.07	IN.	14.49
WTR YR 1985	TOTAL	73105.5	MEAN	200	MAX	3100	MIN	6.9	CFSM	1.45	IN.	19.71

03342500 BUSSERON 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 downstream from bridge on State Highway 58, 1.5 miles northwest of Carlisle, and 7.2 miles upstream from mouth.

DRAINAGE AREA.--228 mi^2.

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 above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways 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 upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 10 to Feb. 22 and Feb. 28 to Mar. 7. Records good except for periods of ice effect, Dec. 5-9 and Jan. 10 to Feb. 22 or backwater, Feb. 28 to Mar. 7, which are fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures and surface-mined areas.

AVERAGE DISCHARGE.--42 years, 231 ft^3/s, 13.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft^3/s Jan. 5, 1950, gage height, 20.05 ft; maximum gage height, 20.30 ft May 9, 1961; no flow many days in 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	0700	3330	15.79	May 04	1900	2890	15.14
Mar. 31	1300	*3610	*16.17				

Minimum daily discharge, 9.3 ft^3/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	493	358	2090	55	850	2990	74	73	39	22	24
2	11	1240	260	1910	52	650	2870	1840	72	36	16	21
3	9.9	505	372	1450	47	500	2340	2340	82	57	14	20
4	9.7	207	231	901	45	450	1460	2770	86	79	13	19
5	9.3	136	170	585	44	750	1040	2580	86	52	330	20
6	11	100	132	466	43	430	1270	1720	83	48	560	21
7	11	78	114	384	42	400	1240	852	109	35	214	22
8	15	65	102	286	41	1090	1060	423	94	28	126	22
9	19	55	112	232	40	1110	634	260	74	25	97	23
10	14	297	167	192	50	740	420	208	62	23	71	110
11	12	257	145	150	550	965	392	181	172	20	54	58
12	11	141	130	120	600	1320	354	159	290	18	43	34
13	11	99	290	102	500	1170	290	141	136	18	36	26
14	12	82	922	92	400	764	267	161	90	18	98	23
15	12	76	861	84	350	526	420	598	84	17	720	22
16	12	76	465	77	280	421	363	644	113	16	566	20
17	12	64	316	70	240	350	255	545	107	14	320	18
18	12	61	233	67	250	287	205	611	89	13	153	17
19	13	99	203	64	300	250	174	312	70	12	102	15
20	19	86	184	62	400	212	151	219	60	13	78	14
21	105	68	1000	61	800	179	131	181	50	21	63	13
22	55	59	1540	60	2000	153	116	173	42	17	53	13
23	32	56	1120	59	3160	139	104	175	38	13	46	15
24	23	53	570	59	3110	131	97	142	42	13	47	38
25	46	51	339	58	3030	117	92	117	188	13	52	24
26	58	48	249	58	2630	104	82	99	98	21	41	20
27	41	124	219	58	1980	101	77	91	61	28	34	20
28	28	1170	199	57	1250	105	73	133	91	16	30	17
29	26	1130	251	58	---	380	66	118	49	13	26	15
30	24	686	1890	58	---	2120	59	91	41	12	28	15
31	22	---	1860	58	---	3260	---	82	---	14	29	---
TOTAL	707.9	7662	15004	10028	22289	20024	19092	18040	2732	762	4082	739
MEAN	22.8	255	484	323	796	646	636	582	91.1	24.6	132	24.6
MAX	105	1240	1890	2090	3160	3260	2990	2770	290	79	720	110
MIN	9.3	48	102	57	40	101	59	74	38	12	13	13
CFSM	.10	1.12	2.12	1.42	3.49	2.83	2.79	2.55	.40	.11	.58	.11
IN.	.12	1.25	2.45	1.64	3.64	3.27	3.12	2.94	.45	.12	.67	.12

CAL YR 1984	TOTAL	93815.3	MEAN	256	MAX	3040	MIN	4.5	CFSM	1.12	IN.	15.31
WTR YR 1985	TOTAL	121161.9	MEAN	332	MAX	3260	MIN	9.3	CFSM	1.46	IN.	19.77

03343000 WABASH RIVER AT VINCENNES, IN

LOCATION.--Lat 38°42'19", long 87°31'14", T.3 N., R.10 W., Lawrence County, IL, Hydrologic Unit 05120111, on right bank 30 ft east of Illinois State Highway 33, 300 ft upstream from Kelso Creek, 570 ft downstream from U.S. Highway 50 bridge, 5.1 miles downstream from Maria Creek, 7.5 miles upstream from Embarras River and at mile 129.6 .

DRAINAGE AREA.--13,706 mi^2 .

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 1.8 miles 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. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.43 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1968, to June 19, 1979, recording gage at site 570 ft upstream at same datum. Oct. 1, 1960, to September 30, 1968, nonrecording gage at site 1.8 miles downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water-stage recorder at site 2.8 miles upstream from base gage at datum 0.80 ft lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

REMARKS.--Estimated daily discharges: Dec. 16 to Dec 19, Dec. 23 to Jan. 2, Jan. 23, 24, Mar. 20 to 27, Aug. 5 to 21, and Aug. 30 to Sept. 17. Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--56 years, 12,060 ft^3/s, 11.95 in/yr .

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft^3/s May 22, 23, 1943, gage height, 29.33 ft, at former site 1.8 miles downstream and at present datum; minimum daily, 770 ft^3/s Aug. 4, 5, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1913, reached a stage of 26.3 ft, at former site 1.8 miles downstream and at present datum, from floodmarks, determined by U.S. Army Corps of Engineers, discharge, 255,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104,000 ft^3/s Mar. 2, gage height, 29.26 ft; minimum daily, 2,420 ft^3/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2890	6770	16800	24000	6480	96200	38800	10800	5990	4750	2580	4500
2	2820	10300	14000	26000	6290	100000	38700	15700	6990	4520	2690	5600
3	2760	10800	12800	30000	6070	98100	38100	21600	6840	4310	2740	5000
4	2710	10500	12600	32000	5740	92300	37100	20700	6650	4700	2650	4400
5	2660	8940	11700	33800	5520	84700	35800	18200	6240	5750	3200	3900
6	2620	7790	10300	35700	5330	75300	35400	15600	5860	6860	6200	3600
7	2560	7230	8720	37100	5190	67300	35900	13200	5820	7090	10000	3300
8	2490	6940	7610	37000	5010	63200	37400	11600	5940	6190	9200	3400
9	2420	6670	7280	36100	4870	60400	39200	10700	5750	5000	7100	3300
10	2600	7320	7150	34800	4800	57600	40900	9990	5420	4380	5800	3100
11	2840	12000	7320	32400	6310	56400	41200	9270	5310	4010	4700	3000
12	2980	12600	7700	28500	6470	57000	42300	8810	6390	4820	3800	2900
13	3110	11600	8320	23800	5700	56500	41900	8350	7560	4910	3200	2900
14	3200	11300	10700	19100	5650	56000	39700	8190	7370	4200	3200	2800
15	3210	13100	14600	15300	5490	55800	37200	8820	6820	3780	3600	2900
16	3170	13500	14600	13100	5330	55200	34300	10100	6990	3560	4900	3200
17	3140	12800	14600	12200	5160	53700	29600	9640	8000	3550	8400	3400
18	3170	12000	14700	11700	5510	51800	25700	10200	9290	4120	10400	3130
19	3260	10900	15400	11400	6040	48700	22600	9800	9340	4440	10200	3020
20	3630	10000	15000	10500	6800	45000	20200	8790	9610	4970	8600	2890
21	5410	9250	16400	9540	9380	42000	18800	8040	9720	4930	7400	2830
22	9740	8670	19900	6750	17000	39000	17600	7700	9420	4450	6000	2800
23	11700	8020	19000	6000	28900	36000	16400	7350	8500	4070	5040	2820
24	9950	7270	17000	6200	35300	32000	15400	6970	7500	3610	4510	2770
25	9140	7060	14500	6300	41600	29000	14300	6710	7020	3260	4460	2760
26	8660	6940	13500	6570	53700	26000	13800	6430	6660	3150	4420	2750
27	8140	7080	13000	6850	70900	24000	13200	6090	5850	3030	4070	2650
28	7340	13600	12500	6870	86700	21100	12500	5830	5880	2800	3740	2580
29	6620	18800	12000	6720	---	19500	11700	5730	5840	2660	3510	2540
30	6050	19000	16000	6600	---	25000	11300	5570	5050	2620	3300	2560
31	5550	---	20000	6600	---	34400	---	5710	---	2620	3300	---
TOTAL	146540	308750	405700	579500	457240	1659200	857000	312190	209620	133110	162910	97300
MEAN	4727	10290	13090	18690	16330	53520	28570	10070	6987	4294	5255	3243
MAX	11700	19000	20000	37100	86700	100000	42300	21600	9720	7090	10400	5600
MIN	2420	6670	7150	6000	4800	19500	11300	5570	5050	2620	2580	2540
CFSM	.34	.75	.96	1.36	1.19	3.90	2.08	.73	.51	.31	.38	.24
IN.	.40	.84	1.10	1.57	1.24	4.50	2.33	.85	.57	.36	.44	.26

CAL YR 1984	TOTAL	5049820	MEAN	13800	MAX	54300	MIN	2380	CFSM	1.01	IN.	13.71
WTR YR 1985	TOTAL	5329060	MEAN	14600	MAX	100000	MIN	2420	CFSM	1.07	IN.	14.46

03345500 EMBARRAS RIVER AT STE. MARIE, IL

LOCATION.--Lat 38°56'10", long 88°01'10", in NW¼NW¼ sec.30, T.6 N., R.14 W., Jasper County, Hydrologic Unit 05120112, on right bank at upstream side of highway bridge at Ste. Marie and at mile 48.2.

DRAINAGE AREA.--1,516 mi^2.

PERIOD OF RECORD.--October 1909 to December 1912, August 1914 to current year.

REVISED RECORDS.--WSP 1083: 1934. WSP 1113: 1910-31, 1933, 1939-40, 1945(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 445.75 ft above National Geodetic Vertical Datum of 1929. (levels by U.S. Army Corps of Engineers). Prior to June 29, 1940, nonrecording gage and June 29, 1940, to Jan. 24, 1967, water-stage recorder at same site at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 16 to Feb. 20 and Mar. 30 to Apr. 1. Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--74 years, 1,236 ft^3/s, 11.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,800 ft^3/s Jan. 4, 1950, gage height, 25.95 ft, present datum, from rating curve extended above 29,000 ft^3/s; maximum gage height, 26.54 ft, present datum, June 30, 1957; minimum discharge, 1 ft^3/s Oct. 5-9, 1914.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 3	2130	8,100	18.25	Apr. 1	unknown	9,730	19.1
Feb. 25	0745	*28,200	*24.38	Apr. 8	0045	9,030	18.79
Mar. 13	0800	6,570	16.14	Aug. 6	0230	8,530	18.56

Minimum daily discharge, 50 ft^3/s Oct. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	1120	1080	7710	180	11100	9000	780	358	1110	110	359
2	82	4490	888	7640	170	8960	8500	3230	545	829	109	249
3	74	2240	824	7820	160	5770	3700	3400	413	1020	109	202
4	68	756	798	7390	160	4370	2810	2270	443	859	109	171
5	63	540	648	5010	150	5900	3490	1950	417	714	5400	164
6	59	446	559	3530	150	5700	7090	1610	366	561	7020	151
7	57	385	491	2570	140	4340	8260	1310	395	570	2760	137
8	57	332	451	1980	140	5570	8210	1090	342	621	842	128
9	55	295	470	1630	130	5600	5890	944	322	609	619	121
10	53	1770	589	1390	130	4140	3990	835	295	499	541	113
11	50	5250	658	1210	150	4570	3070	759	295	404	591	119
12	50	3150	603	1080	150	6270	2660	712	2310	347	488	117
13	61	1210	891	938	140	6440	2140	673	3070	304	387	108
14	62	840	3280	848	140	5220	1910	772	1570	272	321	101
15	66	703	3740	730	130	4440	2260	827	1230	248	414	95
16	76	749	1620	650	130	3620	2200	744	1030	226	1800	90
17	62	597	1150	600	150	2870	1740	689	987	207	1600	87
18	55	502	983	550	170	2330	1490	706	1080	193	1140	83
19	55	551	843	500	200	1960	1320	929	1010	177	1060	78
20	529	595	764	450	300	1690	1190	961	840	163	888	79
21	2800	462	2310	400	1620	1490	1090	857	710	175	660	79
22	3080	387	3710	360	5100	1330	995	721	617	155	492	75
23	834	351	1830	330	8820	1190	913	681	551	133	409	73
24	439	330	1160	300	20500	1100	857	601	581	158	387	70
25	371	312	1000	280	26700	1020	805	543	524	143	2000	68
26	707	299	834	260	19600	946	756	501	813	136	1020	68
27	624	848	738	240	15400	870	705	467	788	130	509	65
28	384	4480	695	220	13100	828	659	439	1210	135	372	64
29	279	3740	753	210	---	993	612	419	2810	130	306	64
30	223	1610	5230	200	---	6000	567	399	1890	113	290	64
31	194	---	7190	190	---	8000	---	379	---	110	415	---
TOTAL	11659	39340	46780	57216	114010	124627	88879	31198	27812	11451	33168	3442
MEAN	376	1311	1509	1846	4072	4020	2963	1006	927	369	1070	115
MAX	3080	5250	7190	7820	26700	11100	9000	3400	3070	1110	7020	359
MIN	50	295	451	190	130	828	567	379	295	110	109	64
CFSM	.25	.86	1.00	1.22	2.69	2.65	1.95	.66	.61	.24	.71	.08
IN.	.29	.97	1.15	1.40	2.80	3.06	2.18	.77	.68	.28	.81	.08

CAL YR 1984	TOTAL	590151	MEAN	1612	MAX	25900	MIN	50	CFSM	1.06	IN.	14.48
WTR YR 1985	TOTAL	589582	MEAN	1615	MAX	26700	MIN	50	CFSM	1.07	IN.	14.47

03346000 NORTH FORK EMBARRAS RIVER NEAR OBLONG, IL

LOCATION.--Lat 39°00'37", long 87°56'47", in NW¼NW¼ sec.35, T.7 N., R.14 W., Crawford County, Hydrologic Unit 05120112, on left bank at downstream side of bridge on State Highway 33, 0.8 mi upstream from Illinois Central Gulf Railroad bridge, 2 mi west of Oblong, and at mile 10.5.

DRAINAGE AREA.--318 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 456.19 ft above 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 same site at datum 2.00 ft higher. Oct. 8, 1971, to May 15, 1979, water-stage recorder at site 0.8 mi downstream at present datum.

REMARKS.--Estimated daily discharges: Jan. 14 to Feb. 20. Water-discharge records good except those for estimated discharges, which are poor.

AVERAGE DISCHARGE.--45 years, 262 ft^3/s, 11.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,100 ft^3/s Jan. 4, 1950, gage height, 24.38 ft, present datum, from rating curve extended above 16,000 ft^3/s; no flow for many days in 1953-54, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 31	0500	4,580	17.83	Mar. 31	1530	5,670	18.42
Feb. 23	2200	*12,900	*20.79	Aug. 6	0745	4,350	17.67

Minimum daily discharge, 3.2 ft^3/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	517	241	3300	12	403	4180	135	49	100	4.6	47
2	6.2	1980	163	3160	11	655	1830	1310	57	66	4.4	30
3	5.7	1470	240	2040	10	446	478	1720	52	54	4.9	22
4	4.8	217	268	446	9.5	728	356	519	52	44	6.1	18
5	4.3	114	136	260	9.0	1820	768	256	52	38	2840	17
6	3.7	69	98	213	8.5	1050	2920	194	53	35	3990	16
7	3.5	45	66	187	8.0	420	3670	156	56	27	1620	19
8	3.7	33	73	169	7.5	1510	1700	134	50	24	157	17
9	3.5	26	82	138	7.5	1210	548	118	49	22	70	13
10	3.4	607	168	112	7.5	422	369	106	46	20	46	11
11	3.2	1680	241	99	8.0	1060	376	100	45	17	35	9.8
12	3.9	1460	185	81	10	2340	481	97	237	16	28	9.2
13	3.7	339	345	68	25	1710	338	93	284	14	23	8.5
14	4.1	182	1630	55	25	669	296	151	117	14	22	7.8
15	3.7	155	2320	45	20	436	666	218	81	13	97	7.3
16	5.7	272	692	40	15	275	577	211	75	11	1430	6.8
17	5.5	160	278	36	13	219	334	127	88	10	2500	6.1
18	4.1	105	189	32	15	179	246	125	69	9.5	534	6.4
19	4.3	130	140	28	20	149	214	115	50	8.6	111	6.0
20	18	158	137	25	30	131	187	96	42	8.1	77	7.4
21	1170	103	974	22	518	115	166	92	36	8.0	58	8.0
22	1550	65	1930	20	2840	105	151	82	31	8.2	43	7.3
23	356	50	832	18	8770	103	140	79	28	10	34	7.5
24	135	44	239	17	10900	89	132	72	44	9.2	91	6.2
25	99	39	160	16	6000	84	129	67	153	8.3	438	5.5
26	222	36	102	15	2100	75	122	63	575	7.5	155	4.8
27	202	422	85	14	734	70	113	59	141	6.5	67	4.2
28	119	2490	98	15	534	79	109	55	96	5.7	41	4.0
29	78	3180	184	16	---	129	104	53	271	5.4	31	3.7
30	55	855	2620	14	---	2350	98	52	238	5.0	29	3.7
31	40	---	4180	13	---	5360	---	51	---	5.0	27	---
TOTAL	4129.2	17003	19096	10714	32667.5	24391	21798	6706	3217	630.0	14614.0	340.2
MEAN	133	567	616	346	1167	787	727	216	107	20.3	471	11.3
MAX	1550	3180	4180	3300	10900	5360	4180	1720	575	100	3990	47
MIN	3.2	26	66	13	7.5	70	98	51	28	5.0	4.4	3.7
CFSM	.42	1.78	1.94	1.09	3.67	2.47	2.29	.68	.34	.06	1.48	.04
IN.	.48	1.99	2.23	1.25	3.82	2.85	2.55	.78	.38	.07	1.71	.04

CAL YR 1984	TOTAL	150211.9	MEAN	410	MAX	12100	MIN	2.8	CFSM	1.29	IN.	17.57
WTR YR 1985	TOTAL	155305.9	MEAN	425	MAX	10900	MIN	3.2	CFSM	1.34	IN.	18.17

03347000 WHITE RIVER AT MUNCIE, IN

LOCATION.--Lat 40°12'15", long 85°23'14", in SE¼NW¼ Hackley Reserve, Delaware County, Hydrologic Unit 05120201, on right bank 200 ft downstream from Walnut Street bridge in Muncie, 6 miles upstream from Bell Creek, and at mile 315.8.

DRAINAGE AREA.--241 mi^2.

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 above 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 higher.

REMARKS.--Estimated daily discharges: Dec. 6-8, and Jan. 10 to Feb. 22. Records good except those for period of ice effect, Jan. 10 to Feb. 22, which are poor. Natural flow affected by regulation of Prairie Creek Reservoir and by diversion of municipal water supply by Muncie Water Works Co. above gage. Records of diversion available since October 1937.

AVERAGE DISCHARGE.--54 years (1931 to current year), 208 ft^3/s, 11.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft^3/s Apr. 21, 1964, gage height, 14.98 ft present datum; maximum gage height, 21.07 ft Jan. 15, 1937, present datum; minimum daily discharge, 1.1 ft^3/s Sept. 16, 17, 23-25, 1954, and Oct. 10, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 22.6 ft in March 1913, present datum, discharge, 20,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	2100	4770	9.47	Apr. 1	0300	3320	8.36
Feb. 23	2100	*7170	*11.09				

Minimum daily discharge, 11 ft^3/s Sept. 5-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	75	215	1360	61	503	2650	93	54	31	25	24
2	25	345	160	1270	59	462	1110	269	59	35	25	17
3	22	320	157	686	58	391	616	558	53	35	20	13
4	22	239	153	428	55	407	454	348	48	33	21	12
5	28	160	131	323	56	563	461	237	46	33	19	11
6	34	121	110	261	57	391	838	182	44	30	19	11
7	58	101	94	226	57	342	545	146	52	32	19	11
8	86	82	90	197	55	901	393	125	60	29	17	11
9	93	73	106	161	52	704	322	111	55	25	18	52
10	69	88	97	140	55	456	282	101	44	20	17	136
11	66	259	128	125	70	842	252	97	109	17	18	216
12	54	446	147	110	100	1430	221	93	355	15	14	195
13	48	279	238	100	115	757	202	82	338	23	12	188
14	47	186	705	90	100	498	190	76	238	29	24	187
15	46	146	755	80	90	386	177	95	171	49	24	184
16	54	126	472	82	82	318	178	115	135	36	75	140
17	61	109	323	83	76	276	184	133	109	26	66	69
18	80	97	237	82	75	235	167	108	91	20	34	68
19	65	88	199	78	76	211	150	101	76	18	23	67
20	56	83	182	62	80	203	140	92	66	17	20	59
21	59	74	188	66	85	182	130	87	60	19	17	24
22	66	70	553	73	1500	166	119	79	58	17	17	23
23	84	69	435	74	5440	164	114	73	51	14	18	28
24	76	64	288	74	5840	164	110	67	44	13	19	30
25	62	65	209	73	3050	144	105	63	40	13	23	32
26	63	62	159	72	1380	133	92	60	37	22	29	31
27	53	66	141	70	874	132	87	76	34	22	20	26
28	49	216	142	68	615	137	81	82	32	22	17	27
29	42	449	164	66	---	203	73	79	31	17	15	26
30	41	307	1160	64	---	551	69	71	29	14	16	27
31	39	---	1090	62	---	2400	---	65	---	26	18	---
TOTAL	1676	4865	9228	6706	20213	14652	10512	3964	2619	752	719	1945
MEAN	54.1	162	298	216	722	473	350	128	87.3	24.3	23.2	64.8
MAX	93	449	1160	1360	5840	2400	2650	558	355	49	75	216
MIN	22	62	90	62	52	132	69	60	29	13	12	11
CFSM	.22	.67	1.24	.90	3.00	1.96	1.45	.53	.36	.10	.10	.27
IN.	.26	.75	1.42	1.04	3.12	2.26	1.62	.61	.40	.12	.11	.30

CAL YR 1984	TOTAL	84240	MEAN	230	MAX	2720	MIN	12	CFSM	.95	IN.	13.00
WTR YR 1985	TOTAL	77851	MEAN	213	MAX	5840	MIN	11	CFSM	.88	IN.	12.02

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 upstream from Muncie Water Works Co. pumping station, 4.2 miles southeast of court house in Muncie, and at mile 10.6.

DRAINAGE AREA.--35.5 mi^2.

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

REMARKS.--Estimated daily discharges: Nov. 7 to Nov. 28, Jan. 20 to Jan. 27, Feb. 2 to Feb. 16 and Feb. 26 to Mar. 5. Records good.

AVERAGE DISCHARGE.--31 years, 36.1 ft^3/s, 13.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft^3/s Apr. 21, 1964, gage height, 13.96 ft; minimum daily, 4.7 ft^3/s Jan. 17, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 15 ft, from information by local residents. Date unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1000	*1040	*11.35	Mar. 31	1300	464	8.11

Minimum daily discharge, 11 ft^3/s Sept. 15-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	53	23	213	19	84	146	47	24	19	15	14
2	16	100	20	119	18	79	98	126	24	20	15	14
3	15	45	29	76	17	69	78	90	23	19	14	14
4	15	34	24	61	17	84	66	59	23	18	14	14
5	15	27	20	48	17	93	92	48	23	18	15	13
6	15	23	19	43	17	67	133	42	22	18	15	14
7	30	20	19	39	16	75	83	39	24	18	16	13
8	54	18	16	35	15	156	68	36	22	17	15	13
9	30	17	16	32	14	93	61	34	22	17	14	21
10	22	20	19	33	17	73	57	33	21	17	14	36
11	20	120	20	32	30	149	53	32	34	17	13	17
12	18	100	21	30	50	146	50	32	73	17	13	14
13	17	62	50	29	33	90	46	30	45	19	13	12
14	19	42	125	28	29	75	44	30	33	18	15	12
15	18	37	73	29	28	64	43	35	31	19	21	11
16	18	33	48	26	26	58	63	32	29	17	24	11
17	18	29	37	27	25	53	48	32	26	16	16	11
18	17	25	30	26	23	49	43	30	25	16	14	11
19	17	22	29	25	23	47	41	29	24	16	14	11
20	18	21	27	20	22	45	39	28	23	16	14	11
21	23	20	40	21	27	42	37	28	22	16	13	11
22	22	19	85	22	374	42	36	27	22	16	14	11
23	21	19	45	22	884	41	35	26	21	15	14	14
24	19	18	36	22	343	40	35	25	20	15	15	17
25	18	17	29	22	183	37	33	25	19	15	15	14
26	18	18	26	20	131	36	33	24	19	17	14	13
27	18	110	25	21	109	36	33	27	18	15	14	13
28	18	84	25	21	93	36	32	31	18	15	13	13
29	17	43	38	21	---	38	30	26	18	14	13	12
30	16	30	206	21	---	85	30	25	17	14	16	13
31	16	---	112	21	---	314	---	25	---	16	14	---
TOTAL	614	1226	1332	1205	2600	2396	1686	1153	765	520	459	418
MEAN	19.8	40.9	43.0	38.9	92.9	77.3	56.2	37.2	25.5	16.8	14.8	13.9
MAX	54	120	206	213	884	314	146	126	73	20	24	36
MIN	15	17	16	20	14	36	30	24	17	14	13	11
CFSM	.56	1.15	1.21	1.10	2.62	2.18	1.58	1.05	.72	.47	.42	.39
IN.	.64	1.28	1.40	1.26	2.72	2.51	1.77	1.21	.80	.54	.48	.44

CAL YR 1984	TOTAL	14863	MEAN	40.6	MAX	379	MIN	13	CFSM	1.14	IN.	15.57
WTR YR 1985	TOTAL	14374	MEAN	39.4	MAX	884	MIN	11	CFSM	1.11	IN.	15.06

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 abandoned Twelfth Street bridge abutment, 250 ft upstream from municipal water-supply plant in Anderson, 1 mile upstream from Killbuck Creek, and at mile 293.3.

DRAINAGE AREA.--406 mi^2.

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 downstream December 1910 to February 1918, 250 ft 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 1725: 1956 (P). WSP 1909: 1956. WSP 2109: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 825.02 ft above 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 downstream at same datum. Sept. 15, 1973, to Sept. 23, 1976, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 7, 8, Jan. 11 to Feb. 22, and Apr. 21-29. Records good except those for periods of ice effect, Dec. 7, 8, and Jan. 11 to Feb. 22, which are fair. Prior to Sept. 15, 1973, the City of Anderson diverted water for its municipal supply above the gage then in use.

AVERAGE DISCHARGE.--55 years, 381 ft^3/s, 12.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft^3/s Apr. 21, 1964, gage height, 19.41 ft; maximum gage height, 19.96 ft June 14, 1958; minimum daily discharge, 9.1 ft^3/s Sept. 24, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23.6 ft Mar. 25, 1913, at site 250 ft downstream and at present datum, based on determination of National Weather Service at site then in use, discharge, 28,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	1200	*13,000	*16.19	Apr. 1	0100	4,540	11.01
Mar. 12	0700	2,780	9.38				

Minimum daily discharge, 58 ft^3/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	155	395	1920	180	1170	4090	328	196	138	120	82
2	67	588	323	2020	180	1070	2210	637	203	164	96	85
3	63	570	328	1300	175	940	1420	1030	186	159	91	77
4	59	439	323	836	165	943	1080	685	175	141	87	73
5	58	322	297	621	170	1290	1040	474	167	138	97	67
6	69	255	283	494	170	988	1860	391	165	136	101	67
7	101	210	270	442	170	840	1400	342	187	138	105	68
8	262	189	250	397	165	1710	1020	310	207	138	100	65
9	249	180	258	350	160	1630	828	286	188	123	91	83
10	171	278	236	317	170	1160	721	274	173	115	89	276
11	149	471	251	290	210	1500	664	263	301	103	84	273
12	133	722	286	270	320	2560	615	259	634	100	82	274
13	118	520	334	250	380	1690	572	250	621	104	78	264
14	116	381	862	240	310	1210	543	233	451	137	81	262
15	125	334	1300	235	280	953	521	306	350	205	145	261
16	116	304	820	240	250	797	605	265	313	154	183	257
17	126	273	556	240	235	708	578	291	280	122	220	196
18	133	259	425	230	230	635	521	273	253	93	162	158
19	154	247	364	220	230	584	485	253	221	83	128	154
20	134	227	336	190	250	574	452	246	197	85	114	151
21	151	217	335	200	280	523	420	253	182	82	110	127
22	135	207	688	220	1300	491	400	221	176	86	102	79
23	142	201	752	230	6310	481	375	209	171	86	101	83
24	159	198	504	230	12100	471	350	195	165	79	101	125
25	141	188	390	220	6910	451	330	186	152	79	106	96
26	133	187	322	215	2780	425	310	181	144	109	115	103
27	128	189	299	210	1800	421	290	231	139	108	109	92
28	111	311	290	200	1390	427	275	389	136	90	86	80
29	108	660	305	195	---	482	252	269	132	81	80	79
30	100	536	1280	190	---	760	241	233	129	75	99	86
31	99	---	1790	185	---	2980	---	217	---	104	86	---
TOTAL	3880	9818	15452	13397	37270	30864	24468	9980	6994	3555	3349	4143
MEAN	125	327	498	432	1331	996	816	322	233	115	108	138
MAX	262	722	1790	2020	12100	2980	4090	1030	634	205	220	276
MIN	58	155	236	185	160	421	241	181	129	75	78	65
CFSM	.31	.81	1.23	1.06	3.28	2.45	2.01	.79	.57	.28	.27	.34
IN.	.36	.90	1.42	1.23	3.41	2.83	2.24	.91	.64	.33	.31	.38

CAL YR 1984	TOTAL	162253	MEAN	443	MAX	4740	MIN	58	CFSM	1.09	IN.	14.87
WTR YR 1985	TOTAL	163170	MEAN	447	MAX	12100	MIN	58	CFSM	1.10	IN.	14.95

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 upstream from bridge on County Road 500 North, 3.6 miles southwest of Gaston, and at mile 15.6.

DRAINAGE AREA.--25.5 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 873.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 13 to Feb. 20. Records poor.

AVERAGE DISCHARGE.--17 years, 25.1 ft^3/s, 13.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1200 ft^3/s June 2, 1980, gage height, 12.70 ft; minimum daily, 0.76 ft^3/s Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1800	*939	*11.81	Apr. 01	0300	383	10.30
Mar. 08	1200	265	9.54	Apr. 06	0700	255	9.46
Mar. 12	0600	331	10.04				

Minimum daily discharge, 0.85 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.6	12	186	6.4	70	310	15	12	5.4	5.3	2.0
2	1.0	10	10	146	6.0	67	118	53	10	5.8	3.7	1.7
3	.99	10	11	66	5.8	57	73	41	9.5	6.3	3.1	1.4
4	1.0	7.8	12	43	5.8	82	54	26	8.6	5.8	2.8	1.4
5	.99	6.6	11	32	5.8	148	78	21	8.3	5.5	3.0	1.4
6	.85	5.9	9.9	27	5.9	74	213	18	7.8	5.4	3.2	1.5
7	.92	5.6	8.5	24	5.9	76	96	16	7.5	5.2	3.9	1.3
8	2.8	5.2	8.5	20	5.8	244	63	14	8.8	5.2	3.3	1.4
9	7.0	5.0	8.4	17	5.8	137	49	13	7.6	4.9	2.9	1.6
10	3.2	6.7	9.1	16	6.4	78	42	12	6.9	4.7	2.6	12
11	1.5	17	11	15	8.0	178	38	12	12	4.4	2.7	7.8
12	1.3	17	11	13	15	305	34	12	66	3.9	2.5	3.8
13	1.3	12	13	12	18	145	31	11	37	3.9	2.4	2.4
14	1.5	9.8	38	12	12	88	30	10	23	4.2	3.0	2.1
15	1.9	9.3	41	11	9.4	65	28	20	17	5.2	3.6	2.0
16	2.6	9.6	26	11	8.6	54	25	22	15	6.8	3.6	1.8
17	2.4	8.8	21	11	8.4	46	22	17	12	4.6	3.4	1.9
18	1.9	8.1	17	11	8.6	39	21	15	11	3.9	2.8	1.7
19	1.9	7.7	15	10	9.0	36	20	13	9.7	3.5	2.5	1.6
20	2.3	7.1	15	7.0	11	33	18	12	8.8	3.4	2.5	1.5
21	2.6	6.7	15	7.0	17	30	17	21	8.1	3.3	2.4	1.4
22	3.3	6.3	29	7.8	201	28	16	17	7.5	3.3	2.3	1.3
23	3.1	6.3	22	7.8	717	26	15	13	7.3	3.2	2.1	1.6
24	2.6	6.2	19	8.4	619	24	15	11	6.9	2.9	3.2	2.1
25	2.3	6.1	16	8.8	309	22	15	10	6.5	3.0	6.0	2.5
26	2.8	5.9	14	8.6	159	20	14	9.2	6.0	3.1	3.9	2.6
27	3.1	5.7	14	8.4	110	20	13	8.9	5.7	3.3	2.8	2.3
28	2.9	10	14	7.8	81	19	12	45	5.5	3.0	2.4	2.1
29	2.8	18	14	7.4	---	28	11	26	5.5	2.8	1.9	1.5
30	2.8	14	69	7.0	---	57	11	17	5.3	2.6	2.3	1.6
31	2.9	---	62	6.6	---	299	---	14	---	3.1	2.3	---
TOTAL	69.65	258.0	596.4	775.6	2380.6	2595	1502	565.1	362.8	131.6	94.4	71.3
MEAN	2.25	8.60	19.2	25.0	85.0	83.7	50.1	18.2	12.1	4.25	3.05	2.38
MAX	7.0	18	69	186	717	305	310	53	66	6.8	6.0	12
MIN	.85	3.6	8.4	6.6	5.8	19	11	8.9	5.3	2.6	1.9	1.3
CFSM	.09	.34	.75	.98	3.33	3.28	1.96	.71	.47	.17	.12	.09
IN.	.10	.38	.87	1.13	3.47	3.79	2.19	.82	.53	.19	.14	.10

CAL YR 1984	TOTAL	7965.35	MEAN	21.8	MAX	326	MIN	.85	CFSM	.85	IN.	11.62
WTR YR 1985	TOTAL	9402.45	MEAN	25.8	MAX	717	MIN	.85	CFSM	1.01	IN.	13.72

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 downstream from bridge on County Road 500 West, at northeast edge of Frankton.

DRAINAGE AREA.--113 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6-9, Jan. 10-15, 20-31, and Feb. 1-22. Records good except those for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--17 years, 103 ft^3/s, 12.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft^3/s June 3, 1980, gage height, 14.78 ft; minimum daily, 3.6 ft^3/s Oct. 3, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1958, reached a stage of 15.5 ft, from floodmark determined by State of Indiana, Department of Natural Resources, discharge, 4,900 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	0300	771	8.00	Mar. 12	0300	1,270	9.13
Feb. 23	1300	*2,860	*11.97	Mar. 31	2200	1,380	9.36
Mar. 8	1300	917	8.34	Apr. 6	1000	1,100	8.76

Minimum daily discharge, 6.1 ft^3/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	13	58	567	26	362	923	54	33	15	9.4	7.9
2	6.4	24	45	655	25	345	473	140	32	17	8.9	7.5
3	6.4	18	47	336	24	289	317	145	30	14	7.1	7.2
4	6.1	14	47	208	23	342	225	97	29	11	6.6	7.0
5	6.2	12	40	149	23	580	281	78	27	12	8.7	6.8
6	6.3	9.5	35	117	23	355	894	67	26	11	8.8	6.9
7	7.7	8.5	31	105	23	308	511	58	26	10	18	6.9
8	16	8.2	30	90	23	790	307	51	25	9.7	13	6.5
9	13	8.2	29	73	22	559	215	46	24	9.8	9.3	8.3
10	11	25	31	68	21	344	165	43	22	9.0	7.8	35
11	9.8	224	33	63	36	580	140	41	29	8.6	7.1	22
12	8.4	212	36	58	67	1040	119	40	52	8.5	6.8	14
13	8.4	113	56	55	54	539	106	38	53	9.1	8.0	10
14	8.4	75	184	53	44	352	99	36	40	9.1	7.8	8.2
15	8.4	66	233	51	35	260	96	45	35	15	12	7.6
16	8.9	68	146	49	33	207	88	45	33	12	11	6.9
17	8.6	56	107	51	30	171	75	46	30	11	8.8	6.7
18	7.9	46	81	52	29	139	70	41	28	8.9	8.0	7.1
19	8.9	40	72	46	30	123	65	37	26	7.9	7.4	7.3
20	11	34	71	34	32	116	61	35	24	7.6	7.5	7.5
21	15	29	74	27	40	103	57	64	22	7.6	6.8	7.3
22	12	26	147	28	700	96	55	72	21	7.8	6.6	7.1
23	10	25	116	29	2690	91	52	55	20	7.5	6.3	10
24	9.3	24	90	30	2380	86	52	44	20	6.9	10	22
25	8.9	24	67	31	1400	76	49	38	19	6.9	13	14
26	8.0	22	52	28	861	68	45	35	18	9.6	12	12
27	7.8	22	49	27	603	68	45	36	17	7.5	9.7	9.4
28	8.1	62	49	25	437	70	42	68	16	6.9	8.2	7.6
29	7.9	104	52	24	---	119	39	54	16	6.4	7.6	8.2
30	8.0	78	270	24	---	175	37	41	15	6.3	8.7	7.9
31	8.3	---	324	26	---	845	---	37	---	8.6	7.9	---
TOTAL	277.8	1490.4	2702	3179	9734	9598	5703	1727	808	298.2	278.8	302.8
MEAN	8.96	49.7	87.2	103	348	310	190	55.7	26.9	9.62	8.99	10.1
MAX	16	224	324	655	2690	1040	923	145	53	17	18	35
MIN	6.1	8.2	29	24	21	68	37	35	15	6.3	6.3	6.5
CFSM	.08	.44	.77	.91	3.08	2.74	1.68	.49	.24	.09	.08	.09
IN.	.09	.49	.89	1.05	3.20	3.16	1.88	.57	.27	.10	.09	.10

CAL YR 1984	TOTAL	34458.9	MEAN	94.1	MAX	1250	MIN	5.6	CFSM	.83	IN.	11.34
WTR YR 1985	TOTAL	36099.0	MEAN	98.9	MAX	2690	MIN	6.1	CFSM	.88	IN.	11.88

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 upstream from Cicero Creek, 5.1 miles downstream from dam at Clare, and at mile 263.5.

DRAINAGE AREA.--858 mi^2.

PERIOD OF RECORD.--October 1946 to current year. Gage-height records collected at present site from December 1913 to December 1935, and at site 400 ft 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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharge: Jan. 14-27 and Jan. 30 to Feb. 21. Records fair. Flow slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--39 years, 836 ft^3/s, 13.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,800 ft^3/s Apr. 22, 1964, gage height, 21.31 ft; minimum daily, 44 ft^3/s Sept. 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 25	0400	*17,600	*19.14	Apr. 1	2000	7,120	13.15
Mar. 12	2300	6,360	12.40				

Minimum daily discharge, 133 ft^3/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	232	834	3770	345	2890	6720	564	435	240	181	163
2	155	764	626	4830	326	2630	5840	1070	396	306	175	156
3	150	991	563	3330	299	2280	3190	1570	394	287	159	156
4	145	756	547	1990	279	2200	2190	1430	371	264	150	151
5	142	576	504	1410	290	3380	2050	1030	355	258	170	146
6	139	429	460	1070	300	2930	4670	824	342	252	193	144
7	158	357	375	885	305	2020	4300	721	340	242	186	142
8	331	315	351	829	309	3910	2670	639	372	241	193	140
9	443	290	402	757	306	4530	1910	581	347	237	179	144
10	362	653	378	647	326	3150	1540	545	331	230	170	311
11	275	1980	378	589	375	2950	1360	518	381	220	161	340
12	249	2120	420	544	790	5830	1200	501	891	211	153	292
13	230	1550	495	458	740	5590	1080	479	1100	214	155	243
14	210	1000	1060	450	610	3480	1020	461	877	221	163	222
15	205	814	2110	445	540	2400	1060	584	703	246	230	214
16	215	772	1640	460	480	1850	1010	679	610	303	258	210
17	206	619	1130	465	420	1550	1010	603	535	213	249	207
18	209	522	829	450	410	1290	904	582	477	196	255	178
19	226	463	721	420	400	1100	833	515	421	175	206	175
20	238	411	681	280	440	1000	779	466	393	169	183	172
21	326	372	662	350	500	921	729	552	363	163	169	169
22	305	344	927	430	2820	816	693	564	341	158	162	153
23	261	323	1330	440	8630	763	668	504	328	158	157	148
24	251	313	1010	450	13700	726	650	448	318	157	156	193
25	254	303	756	455	15700	669	633	414	303	154	183	181
26	242	290	572	450	9380	603	602	389	286	184	168	165
27	230	295	475	440	5070	576	578	378	273	180	171	157
28	222	617	452	427	3610	586	555	768	260	160	171	144
29	206	1080	454	416	---	665	527	737	252	146	159	133
30	204	1170	1260	395	---	1020	507	559	244	144	181	133
31	196	---	3060	370	---	3730	---	487	---	155	179	---
TOTAL	7149	20721	25462	28702	67700	68035	51478	20162	13039	6484	5625	5482
MEAN	231	691	821	926	2418	2195	1716	650	435	209	181	183
MAX	443	2120	3060	4830	15700	5830	6720	1570	1100	306	258	340
MIN	139	232	351	280	279	576	507	378	244	144	150	133
CFSM	.27	.81	.96	1.08	2.82	2.56	2.00	.76	.51	.24	.21	.21
IN.	.31	.90	1.10	1.24	2.94	2.95	2.23	.87	.57	.28	.24	.24

CAL YR 1984	TOTAL	308228	MEAN	842	MAX	7470	MIN	139	CFSM	.98	IN.	13.36
WTR YR 1985	TOTAL	320039	MEAN	877	MAX	15700	MIN	133	CFSM	1.02	IN.	13.88

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 upstream from mouth, and 1.4 miles southeast of Noblesville.

DRAINAGE AREA.--50.8 mi^2.

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

REVISED RECORDS.--WDR IN-82-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 749.00 ft above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Estimated daily discharges: Dec. 5-8, Jan. 12-27, 31 and Feb. 1-26. Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--18 years, 47.6 ft^3/s, 12.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft^3/s Feb. 23, 1979; maximum gage height, 7.60 ft Jan. 30, 1982; minimum daily discharge, 2.3 ft^3/s Aug. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1615	327	4.14	Mar. 11	2145	412	4.56
Feb. 23	0830	*908	*6.67	Mar. 31	1515	652	5.66
Mar. 8	0730	377	4.39	Apr. 6	0400	373	4.37

Minimum daily discharge, 3.9 ft^3/s Aug. 9, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	21	45	280	15	141	309	55	35	11	5.4	6.1
2	9.9	117	35	211	14	139	184	149	27	11	4.8	5.7
3	9.4	65	42	138	13	120	145	124	25	11	4.7	5.4
4	8.8	43	37	102	11	139	116	84	23	9.7	4.5	5.2
5	8.8	29	30	78	11	182	140	67	21	9.7	4.5	5.1
6	8.4	20	27	66	11	120	299	57	20	9.3	4.4	5.3
7	9.2	16	24	60	11	124	175	48	20	9.2	4.3	5.2
8	21	15	21	50	10	321	132	41	20	9.1	4.2	5.2
9	48	13	22	40	10	200	107	38	18	7.9	3.9	5.2
10	23	95	24	38	10	147	91	36	16	7.5	4.0	8.9
11	16	219	26	35	14	262	74	35	52	7.1	3.9	7.2
12	13	152	27	30	40	315	66	34	118	7.2	4.2	5.9
13	12	99	28	27	32	181	62	31	76	7.8	11	5.5
14	11	71	92	26	27	142	60	31	55	7.9	8.0	5.2
15	10	69	105	25	24	114	65	63	41	8.1	6.1	5.1
16	10	68	79	24	21	97	108	57	37	7.4	5.7	5.0
17	9.0	47	63	25	19	83	84	55	29	6.6	5.5	4.9
18	8.9	40	49	25	17	67	67	47	27	5.1	5.3	4.8
19	8.5	36	44	21	16	59	57	38	23	4.5	5.0	4.6
20	8.3	27	38	18	18	53	50	33	21	6.3	5.3	4.5
21	12	24	44	20	25	45	44	33	18	5.5	5.2	4.6
22	13	21	89	21	519	43	40	28	17	4.8	5.2	4.2
23	10	21	66	21	847	39	37	28	16	4.4	5.3	7.4
24	9.1	20	55	19	660	36	37	26	19	4.4	5.3	11
25	8.8	19	39	18	446	31	34	24	16	4.3	5.5	7.3
26	8.8	18	31	18	251	28	31	24	14	4.3	5.4	6.3
27	8.6	18	31	17	191	29	32	37	13	4.4	4.9	6.0
28	8.0	93	31	16	154	29	30	110	12	4.3	5.4	5.8
29	7.7	91	33	16	---	28	28	64	11	4.4	5.6	5.5
30	7.3	64	162	16	---	45	28	45	11	5.2	7.2	5.3
31	7.3	---	149	16	---	468	---	39	---	7.8	7.2	---
TOTAL	364.8	1651	1588	1517	3437	3827	2732	1581	851	217.2	166.9	173.4
MEAN	11.8	55.0	51.2	48.9	123	123	91.1	51.0	28.4	7.01	5.38	5.78
MAX	48	219	162	280	847	468	309	149	118	11	11	11
MIN	7.3	13	21	16	10	28	28	24	11	4.3	3.9	4.2
CFSM	.23	1.08	1.01	.96	2.42	2.42	1.79	1.00	.56	.14	.11	.11
IN.	.27	1.21	1.16	1.11	2.52	2.80	2.00	1.16	.62	.16	.12	.13

CAL YR 1984	TOTAL	17267.1	MEAN	47.2	MAX	632	MIN	5.6	CFSM	.93	IN.	12.64
WTR YR 1985	TOTAL	18106.3	MEAN	49.6	MAX	847	MIN	3.9	CFSM	.98	IN.	13.26

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 82nd Street, 2 miles east of Nora, 14 miles upstream from Fall Creek, and at mile 247.9.

DRAINAGE AREA.--1,219 mi².

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 above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Oct. 26, 1929 to July 29, 1942, at site 200 ft downstream at same datum. Supplemental water- stage recorder 4.5 miles downstream.

REMARKS.--Estimated daily discharges: Jan. 14, 15, 19-25, 29-31, Feb. 1-22, and June 11-21. Records good. Flow slightly regulated by Morse Reservoir.

AVERAGE DISCHARGE.--56 years, 1,100 ft³/s, 12.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s May 19, 1943; maximum gage height, 18.65 ft Apr. 23, 1964; minimum daily discharge, 49 ft³/s Sept. 17, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 22.4 ft, from floodmark, determined by Indiana Department of Highways, discharge, 58,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 25	1600	*24,500	*17.24	Apr. 2	0200	9,340	10.96
Mar. 13	0100	8,740	10.55	Apr. 7	0200	7,090	9.37

Minimum daily discharge, 151 ft³/s Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	438	1550	4980	500	4110	8580	824	621	280	233	198
2	224	1300	1140	6510	480	3750	8530	1630	538	273	242	185
3	205	1740	997	5210	455	3350	4750	2150	511	315	207	182
4	200	1320	913	3210	460	3190	3230	2050	477	307	203	166
5	193	978	838	2340	475	4520	2900	1490	449	303	256	160
6	189	747	801	1880	490	4270	5970	1170	431	294	253	156
7	218	592	672	1630	495	3120	6460	1000	418	287	252	151
8	318	502	613	1380	475	5270	4130	867	434	274	287	153
9	608	452	669	1110	460	6230	2980	775	441	262	248	172
10	547	1030	666	977	470	4460	2370	714	408	250	223	269
11	420	2720	667	904	600	4290	2030	680	495	247	211	434
12	351	3130	690	818	1550	7900	1770	657	1290	230	202	375
13	322	2430	825	749	1280	7900	1560	632	1400	234	183	360
14	295	1790	1610	710	1030	4880	1460	616	1180	241	206	328
15	282	1450	2960	680	870	3470	1590	804	960	265	361	314
16	284	1470	2720	664	790	2770	1620	1050	810	300	369	309
17	280	1210	2080	699	720	2360	1500	917	700	314	332	305
18	269	1010	1680	688	675	2000	1300	817	625	257	322	277
19	276	906	1350	640	650	1740	1170	718	555	236	285	221
20	297	788	1210	460	680	1610	1070	635	475	220	231	210
21	396	696	1180	530	780	1480	992	681	475	226	213	206
22	704	637	1610	595	3000	1350	921	811	449	215	200	199
23	607	590	1970	635	10200	1260	872	715	430	201	189	208
24	466	565	1780	670	17400	1200	844	620	425	200	186	274
25	414	545	1400	665	23100	1130	826	565	397	196	196	248
26	383	523	1060	654	18200	1020	765	518	370	268	227	229
27	354	526	925	617	8890	965	742	512	346	257	198	202
28	331	1110	880	613	5270	981	721	930	318	230	204	193
29	315	1890	903	598	---	1040	664	1110	307	205	198	179
30	289	1940	1910	585	---	1540	620	791	293	189	222	175
31	281	---	3860	555	---	5000	---	682	---	208	219	---
TOTAL	10561	35025	42129	42956	100445	98156	72937	28131	17028	7784	7358	7038
MEAN	341	1168	1359	1386	3587	3166	2431	907	568	251	237	235
MAX	704	3130	3860	6510	23100	7900	8580	2150	1400	315	369	434
MIN	189	438	613	460	455	965	620	512	293	189	183	151
CFSM	.28	.96	1.11	1.14	2.94	2.60	1.99	.74	.47	.21	.19	.19
IN.	.32	1.07	1.29	1.31	3.07	3.00	2.23	.86	.52	.24	.22	.21

CAL YR 1984	TOTAL	430112	MEAN	1175	MAX	10200	MIN	175	CFSM	.96	IN.	13.13
WTR YR 1985	TOTAL	469548	MEAN	1286	MAX	23100	MIN	151	CFSM	1.05	IN.	14.33

03351310 CROOKED CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'47", long 86°12'22", in NW¼SE¼ sec.16, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank 150 ft downstream from 42nd Street bridge in Indianapolis, and at mile 1.6.

DRAINAGE AREA.--17.9 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Estimated daily discharges during the water year: Dec. 5-7, Jan. 10, 13, 15, 16, 19-21, 24-26, Feb. 1, 4, 5, 7, 11-20, 22, 23. Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--16 years, 18.3 ft^3/s, 13.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft^3/s June 26, 1978, gage height, 13.31 ft; minimum daily, 0.47 ft^3/s Dec. 2, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1545	404	4.75	Feb. 23	0530	452	4.92
Feb. 22	1215	554	5.28	Mar. 31	0915	*1010	*7.08

Minimum daily discharge, 1.4 ft^3/s July 19, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	117	14	141	4.9	23	62	44	3.2	2.8	10	4.2
2	3.0	34	12	41	4.4	23	32	59	7.3	2.6	2.5	3.3
3	2.7	14	18	25	4.4	19	25	23	3.7	2.0	1.7	2.8
4	2.6	10	11	19	4.5	45	22	14	3.2	1.8	1.5	2.6
5	2.5	8.7	9.2	16	4.5	39	106	11	3.3	2.3	35	2.6
6	2.2	7.3	8.6	14	4.4	20	82	9.5	3.3	2.5	9.6	2.3
7	21	6.3	8.3	13	4.2	48	32	8.2	5.0	2.4	15	2.1
8	20	5.9	8.5	12	3.9	86	24	7.1	4.0	2.0	35	2.2
9	7.9	5.4	9.0	10	3.7	31	20	6.3	3.4	1.8	5.0	10
10	5.0	69	12	8.5	3.9	22	17	6.1	3.1	1.6	2.9	25
11	4.4	103	11	9.2	5.4	92	16	6.0	48	1.5	2.3	5.7
12	3.8	28	11	8.9	19	62	15	8.0	27	1.5	2.0	3.3
13	3.5	17	16	8.2	16	27	13	6.5	12	1.6	1.9	3.3
14	3.5	13	80	7.5	13	22	14	13	8.2	1.5	32	2.4
15	3.7	22	29	7.1	11	17	34	66	14	3.8	54	2.0
16	3.1	15	21	6.4	9.8	15	22	19	11	2.3	19	1.8
17	3.0	11	17	7.0	9.1	13	15	19	6.4	1.6	8.2	1.7
18	3.0	12	14	7.4	8.7	11	14	11	6.0	1.5	5.5	1.6
19	7.2	11	16	7.1	8.2	11	12	8.3	4.8	1.4	4.4	1.6
20	8.3	9.5	14	4.5	8.4	10	11	6.5	4.0	1.5	5.2	1.7
21	27	8.2	33	4.6	34	9.0	10	6.5	3.4	1.8	3.7	1.8
22	6.0	7.6	31	4.9	371	8.8	9.7	5.4	3.1	1.8	3.1	1.7
23	3.6	7.0	18	5.0	267	8.8	9.3	4.6	2.7	1.5	2.8	20
24	2.8	6.7	15	5.2	114	8.7	9.2	4.2	2.6	1.4	2.6	21
25	8.3	6.4	12	5.1	52	7.9	8.8	3.9	2.6	1.8	4.3	7.0
26	9.8	6.2	11	4.9	33	7.7	7.8	3.7	2.4	27	3.0	9.2
27	6.1	15	11	4.7	27	8.2	7.6	4.2	2.4	3.3	2.5	5.6
28	5.2	113	11	4.9	22	8.4	12	5.0	2.3	2.0	2.5	4.2
29	4.6	29	24	4.8	---	30	8.2	3.7	1.9	1.7	2.6	3.6
30	4.2	19	145	4.9	---	94	6.9	3.5	1.8	1.6	30	3.8
31	3.6	---	44	5.4	---	495	---	3.2	---	4.8	6.7	---
TOTAL	195.0	737.2	694.6	427.2	1071.4	1322.5	677.5	399.4	206.1	88.7	316.5	160.1
MEAN	6.29	24.6	22.4	13.8	38.3	42.7	22.6	12.9	6.87	2.86	10.2	5.34
MAX	27	117	145	141	371	495	106	66	48	27	54	25
MIN	2.2	5.4	8.3	4.5	3.7	7.7	6.9	3.2	1.8	1.4	1.5	1.6
CFSM	.35	1.37	1.25	.77	2.14	2.39	1.26	.72	.38	.16	.57	.30
IN.	.41	1.53	1.44	.89	2.23	2.75	1.41	.83	.43	.18	.66	.33

CAL YR 1984	TOTAL	6327.88	MEAN	17.3	MAX	289	MIN	.99	CFSM	.97	IN.	13.15
WTR YR 1985	TOTAL	6296.2	MEAN	17.2	MAX	495	MIN	1.4	CFSM	.96	IN.	13.08

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 upstream from bridge on County Road 750 North, 1 mile southeast of Middletown.

DRAINAGE AREA.--5.80 mi^2.

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-8 and Jan. 5-Feb. 21. Records good except those for Dec. 5-8 and Jan. 5-Feb. 21, which are fair.

AVERAGE DISCHARGE.--17 years, 5.83 ft^3/s, 13.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s April 28, 1975, gage height, 7.72 ft; minimum daily, 0.02 ft^3/s Aug. 30 to Sept. 2, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	1400	*372	*6.45	Mar. 31	0830	150	5.33

Minimum daily discharge 0.08 ft^3/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	4.9	2.9	55	.98	15	34	16	1.3	.76	.37	.18
2	.20	11	2.3	25	1.0	13	18	53	1.1	.99	.30	.18
3	.22	4.5	5.5	13	1.1	11	11	27	.94	.89	.26	.14
4	.22	2.5	3.8	9.0	1.2	15	8.2	13	.85	.66	.24	.13
5	.25	1.3	3.0	5.2	.98	15	19	8.1	.79	.56	.33	.13
6	.25	.89	1.7	4.7	.92	8.5	29	5.5	.66	.54	.28	.15
7	.66	.66	1.4	4.0	.88	13	13	4.2	.83	.38	.28	.17
8	1.1	.55	1.3	3.5	.78	37	8.7	3.4	.81	.30	.25	.25
9	1.0	.53	1.1	3.9	.74	15	6.6	3.0	.64	.22	.15	.39
10	.83	3.7	3.1	3.6	1.3	9.2	5.8	2.7	.55	.19	.12	.34
11	.75	14	4.1	2.4	10	32	5.0	2.5	3.3	.15	.11	.21
12	.67	6.9	4.0	2.4	7.0	26	4.4	2.2	9.7	.15	.11	.19
13	.71	4.0	17	2.2	5.0	12	4.2	1.8	5.0	.15	.15	.19
14	.88	2.8	35	1.8	4.0	8.2	4.0	1.7	2.8	.15	.21	.17
15	.89	2.7	19	1.7	3.5	6.2	4.0	2.7	2.3	.20	1.2	.18
16	.89	1.8	12	1.7	3.1	5.6	15	2.1	1.9	.15	.75	.18
17	.89	1.3	7.1	1.8	2.7	4.7	7.2	2.1	1.4	.15	.21	.18
18	.82	1.2	4.4	1.7	2.5	3.9	5.4	1.7	1.3	.08	.14	.17
19	.81	1.2	4.3	1.5	2.5	3.8	4.4	1.5	1.1	.10	.12	.18
20	.81	1.0	3.6	1.3	2.5	3.3	3.7	1.4	1.0	.11	.11	.17
21	.89	.91	12	1.3	2.9	2.9	3.2	1.3	.86	.12	.10	.16
22	.89	.89	20	1.3	204	3.0	3.0	1.2	.91	.13	.10	.16
23	.85	.89	9.0	1.3	174	2.8	2.7	1.3	.82	.13	.10	.24
24	.76	.86	5.7	1.2	95	2.6	2.5	1.2	.81	.13	.12	.26
25	.69	.79	3.2	1.2	52	2.0	2.1	1.1	.83	.14	.13	.25
26	.69	.73	2.8	1.1	33	1.8	1.9	1.1	.81	.29	.12	.28
27	.69	.75	2.7	1.1	23	2.2	1.9	1.4	.69	.25	.12	.28
28	.69	10	2.6	1.0	16	2.2	1.7	1.9	.65	.25	.12	.27
29	.64	7.2	8.7	.92	---	2.1	1.4	1.2	.70	.22	.16	.25
30	.63	4.7	59	.90	---	12	1.3	1.1	.51	.19	.23	.30
31	.59	---	29	.93	---	93	---	2.1	---	.44	.19	---
TOTAL	21.09	95.15	291.3	157.65	652.58	384.0	232.3	170.5	45.86	9.17	7.18	6.33
MEAN	.68	3.17	9.40	5.09	23.3	12.4	7.74	5.50	1.53	.30	.23	.21
MAX	1.1	14	59	55	204	93	34	53	9.7	.99	1.2	.39
MIN	.20	.53	1.1	.90	.74	1.8	1.3	1.1	.51	.08	.10	.13
CFSM	.12	.55	1.62	.88	4.02	2.14	1.33	.95	.26	.05	.04	.04
IN.	.14	.61	1.87	1.01	4.19	2.46	1.49	1.09	.29	.06	.05	.04

CAL YR 1984	TOTAL	1820.03	MEAN	4.97	MAX	87	MIN	.13	CFSM	.86	IN.	11.67
WTR YR 1985	TOTAL	2073.11	MEAN	5.68	MAX	204	MIN	.08	CFSM	.98	IN.	13.30

03351500 FALL CREEK NEAR FORTVILLE, IN

LOCATION.--Lat 39°57'15", long 85°52'05", in NW¼NE¼ sec.5, T.17 N., R.6 E., Hamilton County, Hydrologic Unit 05120201, on right bank 100 ft downstream from bridge on State Highway 238, 0.2 mile downstream from Lick Creek, 2 miles northwest of Fortville, and at mile 26.1.

DRAINAGE AREA.--169 mi^2.

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 above National Geodetic Vertical Datum of 1929 (levels by Indianapolis Water Co.). Prior to June 27, 1942, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 6-8, Jan. 10 to Feb. 20. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--44 years, 166 ft^3/s, 13.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft^3/s Apr. 21, 1964, gage height, 9.88 ft; minimum daily, 5.0 ft^3/s Sept. 23, 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 12 ft March 1913 (information by local resident).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	0600	*3,550	*8.11	Apr. 1	0700	1,910	6.71

Minimum daily discharge, 24 ft^3/s Sept. 18, 19, and 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	71	168	977	83	419	1550	195	137	58	64	34
2	45	325	139	873	80	399	665	536	120	93	42	30
3	43	286	162	504	78	351	460	590	113	106	37	29
4	41	190	171	371	78	343	357	359	105	80	35	28
5	40	139	142	295	78	440	417	271	103	69	40	27
6	39	107	130	250	78	341	844	227	95	66	43	27
7	41	99	115	226	76	297	560	193	94	61	43	27
8	80	89	110	196	76	298	404	171	96	57	43	26
9	100	82	106	170	78	304	336	156	87	54	39	32
10	87	142	111	150	90	356	292	146	79	52	34	46
11	74	581	127	140	120	518	269	141	118	48	33	44
12	66	411	133	130	200	808	242	136	232	48	31	31
13	60	272	196	125	170	530	225	129	203	53	30	28
14	57	208	479	120	140	408	217	123	156	52	33	27
15	56	181	484	115	120	334	219	175	135	52	69	27
16	54	171	329	110	110	286	332	169	132	52	173	27
17	54	145	258	105	100	259	326	180	114	47	86	26
18	52	136	207	100	100	232	254	163	108	44	59	24
19	52	130	190	90	110	219	219	140	98	44	49	24
20	52	121	179	80	120	209	198	125	92	43	47	25
21	55	108	190	90	124	192	181	120	86	42	41	25
22	61	101	367	100	991	183	173	114	79	44	38	24
23	61	98	294	100	2800	181	166	108	77	43	36	27
24	60	96	232	100	3060	173	163	104	77	38	34	38
25	58	95	188	100	1570	162	156	99	73	38	35	36
26	58	90	156	95	855	150	148	95	68	56	34	33
27	60	89	147	93	618	148	150	115	65	51	33	31
28	60	194	147	90	479	152	156	281	62	42	31	30
29	58	272	167	90	---	152	139	186	60	38	31	29
30	56	208	787	88	---	223	134	163	58	35	46	29
31	53	---	768	85	---	1210	---	172	---	41	41	---
TOTAL	1782	5237	7379	6158	12582	10277	9952	5882	3122	1647	1430	891
MEAN	57.5	175	238	199	449	332	332	190	104	53.1	46.1	29.7
MAX	100	581	787	977	3060	1210	1550	590	232	106	173	46
MIN	39	71	106	80	76	148	134	95	58	35	30	24
CFSM	.34	1.04	1.41	1.18	2.66	1.96	1.96	1.12	.62	.31	.27	.18
IN.	.39	1.15	1.62	1.36	2.77	2.26	2.19	1.29	.69	.36	.31	.20

CAL YR 1984	TOTAL	64866	MEAN	177	MAX	1400	MIN	27	CFSM	1.05	IN.	14.28
WTR YR 1985	TOTAL	66339	MEAN	182	MAX	3060	MIN	24	CFSM	1.08	IN.	14.60

03352500 FALL CREEK AT MILLERSVILLE, IN

LOCATION.--Lat 39°51'07", long 86°05'15", in NE¼NE¼ sec.9, T.16 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Emerson Way bridge at Millersville, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--298 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1961, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 14 to Feb. 21. Records good except those for estimated daily discharges, which are fair. Flow regulated by Geist Reservoir.

AVERAGE DISCHARGE.--56 years, 284 ft^3/s, 12.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft^3/s May 28, 1956, gage height, 13.53 ft; minimum daily, 7.8 ft^3/s Sept. 28, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.3 ft Mar. 26, 1913, from floodmarks, discharge, 22,000 ft^3/s by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,870 ft^3/s Feb. 24, gage height, 10.75 ft; minimum daily, 44 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	232	318	2000	115	874	3200	482	266	82	79	59
2	52	618	256	1890	110	807	2010	1220	224	95	70	58
3	53	513	283	1170	105	722	1130	1270	191	94	61	53
4	52	361	278	768	110	725	842	880	168	99	59	51
5	48	271	253	588	120	923	1020	601	149	84	82	58
6	44	199	222	474	120	781	1860	468	139	81	74	58
7	71	154	187	410	110	674	1380	398	149	76	73	57
8	102	123	176	369	100	1210	930	328	144	65	91	57
9	78	108	172	314	120	1200	718	281	126	67	55	76
10	62	297	178	286	130	896	587	253	117	62	57	127
11	51	726	189	263	160	1010	529	241	219	58	55	76
12	51	781	205	237	200	1450	471	227	399	58	54	55
13	47	551	337	216	270	1190	431	225	368	65	55	58
14	46	386	869	200	245	873	409	217	290	74	71	51
15	54	338	958	190	210	704	480	294	260	70	165	48
16	59	309	705	180	200	584	585	297	239	64	161	48
17	60	256	544	170	180	527	634	294	196	64	96	58
18	58	233	415	160	170	461	511	275	168	62	88	58
19	57	217	350	150	170	412	445	243	150	62	71	58
20	61	171	324	120	180	406	390	207	129	62	63	58
21	68	156	370	140	220	389	349	215	117	74	54	57
22	58	138	610	135	1760	351	321	203	105	71	47	57
23	55	130	590	130	4270	335	300	172	101	67	48	87
24	51	128	472	130	5680	330	298	141	101	62	49	80
25	55	123	372	125	4280	329	294	138	108	63	54	66
26	60	117	301	125	2260	290	268	133	98	202	49	64
27	57	128	267	120	1420	282	264	174	90	84	49	47
28	57	446	248	120	1060	289	271	475	79	68	49	51
29	62	496	320	120	---	525	244	420	72	63	51	50
30	52	407	1500	115	---	942	217	297	69	60	70	53
31	53	---	1560	115	---	2890	---	287	---	68	67	---
TOTAL	1784	9113	13829	11530	24075	23381	21388	11356	5031	2326	2167	1834
MEAN	57.5	304	446	372	860	754	713	366	168	75.0	69.9	61.1
MAX	102	781	1560	2000	5680	2890	3200	1270	399	202	165	127
MIN	44	108	172	115	100	282	217	133	69	58	47	47
CFSM	.19	1.02	1.50	1.25	2.89	2.53	2.39	1.23	.56	.25	.23	.21
IN.	.22	1.14	1.73	1.44	3.01	2.92	2.67	1.42	.63	.29	.27	.23

CAL YR 1984	TOTAL	109413	MEAN	299	MAX	2400	MIN	44	CFSM	1.00	IN.	13.66
WTR YR 1985	TOTAL	127814	MEAN	350	MAX	5680	MIN	44	CFSM	1.17	IN.	15.96

03353000 WHITE RIVER AT INDIANAPOLIS, IN

LOCATION.--Lat 39°45'05", long 86°10'30", in NW¼NW¼ 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 downstream from Fall Creek, 3.4 miles upstream from Eagle Creek, and at mile 230.3.

DRAINAGE AREA.--1,635 mi^2.

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 upstream Feb. 8, 1911, to Mar. 25, 1913, and at site 2.3 miles 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 above National Geodetic Vertical Datum of 1929. March 1904 to July 1906, nonrecording gage at railroad bridge 0.8 mile upstream at datum approximately 2.9 ft higher. April 1930 to July 20, 1931, nonrecording gage at Indianapolis sanitation plant, 2.5 miles downstream at datum 660.00 ft lower. July 21, 1931 to Mar. 2, 1932, nonrecording gage and March 3, 1932, to September 30, 1960, water-stage recorder at present site at datum 660.00 ft lower.

REMARKS.--Estimated daily discharges: Dec. 5, 7, 30 to Jan 4, Jan. 12-18, 23-17, Jan. 31 to Feb. 7, May 1-4, and August 20, 21. Records fair. Natural flow affected by regulation of Morse Reservoir and Geist Reservoir, and by diversion of municipal water supply by the Indianapolis Water Company. Stage-discharge relation affected at times by releases from Eagle Creek Reservoir.

AVERAGE DISCHARGE.--56 years (water years 1905, 1931 to current year), 1,398 ft^3/s, 11.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft^3/s May 18, 1943; maximum gage height, 21.57 ft Jan. 16, 1937; minimum daily discharge, 8.0 ft^3/s Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 30.0 ft, from floodmarks determined by Indianapolis Water Company, discharge, 70,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	1700	8,800	10.28	Apr. 2	0600	11,900	11.73
Feb. 25	1900	*27,700	*17.49	Apr. 7	0400	8,650	10.13
Mar. 13	0400	10,100	10.86				

Minimum daily discharge, 139 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	1350	2080	7200	450	5370	11500	1450	798	416	621	267
2	201	1730	1560	8200	425	4700	10900	2900	770	520	237	238
3	183	2440	1440	7200	415	4150	6480	3200	648	271	212	217
4	168	2130	1170	4500	410	4260	4240	2900	591	272	189	199
5	160	1560	1060	3270	415	5440	4300	2240	529	268	468	185
6	160	1150	990	2560	435	5390	7680	1690	494	249	369	183
7	457	831	900	2150	435	4120	8070	1440	550	257	264	170
8	571	707	805	1860	432	6480	5410	1190	492	232	387	149
9	501	570	801	1620	403	7710	3760	1030	481	204	270	225
10	606	1820	898	1370	417	5990	2970	918	429	194	224	702
11	475	4120	951	1290	984	5640	2530	844	708	184	202	426
12	350	4560	975	1120	1260	9130	2240	823	1250	178	189	450
13	311	3580	1360	1010	1420	9420	2000	780	1570	169	177	372
14	285	2510	2890	940	1430	6170	1870	784	1460	187	293	332
15	266	2150	4180	890	1230	4180	2230	1590	1210	209	1230	316
16	252	1970	4090	860	1140	3220	2160	1410	1010	200	1010	316
17	256	1710	3060	840	1040	2740	2110	1420	820	217	516	316
18	248	1420	2370	825	1040	2310	1850	1160	752	203	409	312
19	251	1240	2020	817	1010	2020	1570	1030	614	171	359	278
20	289	1050	1750	606	1010	1840	1430	887	557	178	270	241
21	514	849	1960	452	1200	1700	1270	884	457	178	240	221
22	539	796	2470	574	5390	1520	1230	908	402	202	225	220
23	667	685	2700	595	15500	1450	1080	810	373	160	216	578
24	519	641	2560	610	22800	1340	1020	691	359	164	214	540
25	492	658	2040	600	27000	1310	1020	613	341	152	213	259
26	464	580	1600	575	23500	1140	942	566	302	686	228	275
27	378	757	1320	540	12500	1060	1010	616	275	268	229	185
28	333	2390	1260	550	6920	1110	991	983	249	203	207	146
29	308	2740	1520	555	---	1840	835	1420	227	168	226	139
30	283	2660	4000	541	---	3030	732	1070	220	153	779	147
31	248	---	5400	485	---	9590	---	849	---	329	317	---
TOTAL	10960	51354	62180	55205	130611	125370	95430	39096	18938	7442	10990	8604
MEAN	354	1712	2006	1781	4665	4044	3181	1261	631	240	355	287
MAX	667	4560	5400	8200	27000	9590	11500	3200	1570	686	1230	702
MIN	160	570	801	452	403	1060	732	566	220	152	177	139
CFSM	.22	1.05	1.23	1.09	2.85	2.47	1.95	.77	.39	.15	.22	.18
IN.	.25	1.17	1.41	1.26	2.97	2.85	2.17	.89	.43	.17	.25	.20

CAL YR 1984	TOTAL	558600	MEAN	1526	MAX	12100	MIN	152	CFSM	.93	IN.	12.71
WTR YR 1985	TOTAL	616180	MEAN	1688	MAX	27000	MIN	139	CFSM	1.03	IN.	14.02

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 upstream from Arlington Avenue bridge in Indianapolis, 0.5 mile downstream from small left-bank tributary, and at mile 7.9.

DRAINAGE AREA.--7.58 mi^2.

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

REMARKS.--Estimated daily discharges: Dec. 6-10, Jan. 10-12, 16, 17, and Jan. 20 to Feb. 21. Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--25 years (water years 1961 to current year), 7.73 ft^3/s, 13.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft^3/s June 25, 1978, gage height, 13.86 ft; no flow at times in 1960-62.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1956 reached a stage of 16.0 ft, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1615	521	6.23	Mar. 31	0715	*662	*6.86
Feb. 11	1615	ice	6.42	Apr. 5	1700	503	6.15

Minimum daily discharge, 0.46 ft^3/s July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	124	4.7	65	1.4	8.2	19	113	1.1	19	9.5	.86
2	.82	18	11	15	1.3	5.6	9.9	65	11	19	1.8	.77
3	.83	6.1	15	9.3	1.3	4.7	7.0	13	1.3	2.7	.83	.74
4	.79	6.8	5.5	7.6	1.4	28	11	6.6	1.0	1.3	.73	.85
5	.82	3.4	4.4	6.0	1.4	12	91	4.5	.98	2.4	23	.86
6	.82	2.2	3.5	5.0	1.3	5.7	26	3.4	.82	.83	3.3	.78
7	40	1.8	3.0	4.6	1.2	31	10	2.6	10	2.2	13	.88
8	11	1.6	2.9	3.8	1.2	26	6.5	2.1	2.1	.75	9.0	.67
9	3.6	1.8	3.3	2.9	1.1	9.5	5.0	1.7	1.2	.72	1.6	27
10	2.0	60	5.2	2.5	1.2	5.9	4.1	1.5	1.0	.78	.98	9.2
11	1.6	43	4.9	2.4	5.5	40	3.5	1.5	21	.60	.83	1.5
12	1.4	11	4.9	2.1	9.2	16	2.9	1.5	12	.58	.75	.88
13	1.3	6.0	20	2.4	7.0	7.8	2.5	1.2	4.0	.69	.69	.70
14	1.4	4.1	54	2.3	5.3	5.7	13	4.4	1.8	.65	15	.67
15	3.3	16	12	2.0	4.8	4.1	18	28	11	3.3	103	.64
16	2.2	5.3	7.6	1.8	4.3	3.3	8.4	7.8	4.2	.61	13	.62
17	1.5	3.3	5.8	2.2	3.9	3.5	3.7	7.5	3.7	.51	3.1	.72
18	1.5	6.7	4.4	2.4	3.6	2.4	2.8	2.4	2.0	.52	1.4	.73
19	3.7	4.6	11	1.9	3.4	2.2	2.2	1.7	1.3	.50	.97	.72
20	7.7	2.6	4.9	1.3	3.3	2.0	1.9	1.3	.90	1.8	.97	.69
21	7.3	2.1	35	1.6	7.4	1.7	1.7	8.9	.85	2.7	.73	.61
22	1.8	1.9	14	1.5	178	1.7	1.5	1.8	.80	1.3	.66	.71
23	1.1	1.8	6.6	1.5	64	2.0	1.3	1.2	.75	.57	.64	29
24	.97	2.1	5.1	1.6	36	3.0	5.7	1.0	.88	.46	2.2	4.9
25	7.9	2.1	3.4	1.5	16	1.7	2.1	.88	.83	11	.71	2.5
26	2.5	2.2	2.9	1.5	9.4	1.5	1.7	.82	1.5	46	.63	4.7
27	1.3	29	2.9	1.4	8.1	2.7	6.8	31	.76	2.0	.62	1.0
28	2.9	50	3.5	1.5	5.2	1.7	3.6	11	.65	.86	.54	.78
29	2.0	11	59	1.4	---	69	1.4	2.7	.62	.72	.67	.72
30	1.1	6.6	89	1.4	---	113	1.3	1.4	.59	.73	18	5.3
31	1.2	---	31	1.4	---	240	---	1.1	---	31	1.4	---
TOTAL	117.23	437.1	440.4	158.8	387.2	661.6	275.5	332.50	100.63	156.78	230.25	100.70
MEAN	3.78	14.6	14.2	5.12	13.8	21.3	9.18	10.7	3.35	5.06	7.43	3.36
MAX	40	124	89	65	178	240	91	113	21	46	103	29
MIN	.79	1.6	2.9	1.3	1.1	1.5	1.3	.82	.59	.46	.54	.61
CFSM	.50	1.93	1.87	.68	1.82	2.81	1.21	1.41	.44	.67	.98	.44
IN.	.58	2.15	2.16	.78	1.90	3.25	1.35	1.63	.49	.77	1.13	.49

CAL YR 1984	TOTAL	3409.48	MEAN	9.32	MAX	211	MIN	.53	CFSM	1.23	IN.	16.73
WTR YR 1985	TOTAL	3398.69	MEAN	9.31	MAX	240	MIN	.46	CFSM	1.23	IN.	16.68

03353180 BEAN CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°43'45", long 86°07'14", in NW¼SW¼ sec.20, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank 80 ft upstream from Keystone Avenue bridge and west edge of Sarah Shank Golf Course in Indianapolis, and at mile 1.8.

DRAINAGE AREA.--4.40 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 735.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 11-19, Dec. 5-8, 25, Jan. 11-13, 15, 16, 19-25, 27, 29, 31, Feb. 1-22, and Sept. 12-17. Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--15 years, 5.21 ft^3/s, 16.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 770 ft^3/s June 25, 1978, gage height, 7.77 ft; minimum daily, 0.38 ft^3/s Oct. 2, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s (revised) and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1615	230	4.54	July 31	2215	258	4.76
Mar. 31	0345	348	5.40	Aug. 15	1815	*712	*7.47
May 1	1515	207	4.35				

Minimum daily discharge, 1.1 ft^3/s July 12, 14, 23, 24, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	51	3.1	28	1.8	5.9	16	59	1.9	13	14	2.3
2	1.5	9.5	5.8	7.6	1.9	4.7	8.8	47	4.2	14	2.1	1.9
3	1.7	3.9	7.8	5.3	1.8	4.4	6.6	13	4.4	2.4	1.6	1.9
4	1.6	4.0	4.5	4.8	1.9	12	9.8	7.1	2.0	1.7	1.4	1.9
5	1.6	2.8	3.7	3.9	2.0	6.7	37	5.1	1.9	2.0	9.8	1.9
6	1.5	2.6	3.3	3.6	1.9	4.7	18	4.3	1.8	1.5	2.1	1.8
7	14	2.3	3.0	3.4	1.8	17	8.7	3.8	5.1	1.8	5.1	1.8
8	3.5	2.3	2.8	3.1	1.7	17	6.7	3.3	2.0	1.4	3.6	1.7
9	2.2	2.3	3.5	2.9	1.6	6.9	5.9	3.0	1.8	1.4	1.7	10
10	1.9	22	4.8	2.9	7.3	5.4	5.2	2.8	1.8	1.4	1.4	5.8
11	1.8	18	3.6	2.8	29	20	4.7	2.6	9.6	1.3	1.2	2.6
12	1.7	5.2	3.9	2.7	13	11	4.3	2.5	4.5	1.1	1.3	2.2
13	1.7	3.7	11	2.7	7.1	6.4	3.9	3.0	2.5	1.7	1.3	2.0
14	1.7	3.2	24	2.6	4.3	5.3	5.7	5.0	2.0	1.1	8.7	1.9
15	2.2	7.2	5.6	2.4	3.8	4.5	7.7	13	5.9	1.9	119	1.8
16	2.0	3.2	4.3	2.3	3.6	4.2	4.9	6.1	1.9	1.3	22	1.7
17	1.9	2.7	3.5	2.5	4.0	3.9	3.6	6.1	2.6	1.3	6.8	1.8
18	2.0	4.0	3.1	2.5	4.6	3.6	3.4	2.9	2.1	1.2	4.3	2.0
19	2.8	3.5	5.2	1.9	5.1	3.6	3.1	2.4	2.0	1.2	3.5	1.9
20	4.4	3.0	3.3	1.7	5.2	3.4	2.8	2.4	1.9	2.9	3.2	1.9
21	3.1	3.3	19	1.8	9.9	3.2	2.6	3.2	1.8	1.7	2.8	1.8
22	2.3	2.9	7.8	2.1	69	3.0	2.6	2.1	1.7	1.2	2.6	1.7
23	2.2	2.9	4.8	2.3	30	3.0	2.6	2.1	1.7	1.1	2.5	13
24	2.0	2.7	4.1	2.4	17	3.1	5.0	2.0	1.7	1.1	2.9	2.3
25	5.5	2.9	3.4	2.5	9.0	3.0	2.6	1.9	1.8	5.3	2.2	2.1
26	2.1	2.7	3.0	2.3	6.7	2.9	2.4	1.8	1.8	19	2.1	2.4
27	1.7	13	3.0	2.1	6.1	3.5	17	8.5	1.5	1.4	2.2	1.6
28	2.1	23	3.0	1.9	4.9	3.1	6.0	2.9	1.3	1.1	2.1	1.4
29	1.9	5.4	21	1.7	---	20	2.7	2.0	1.2	1.1	3.4	1.3
30	1.9	3.9	38	1.8	---	46	2.6	2.0	1.2	1.2	28	2.8
31	1.8	---	14	1.7	---	123	---	1.9	---	26	2.7	---
TOTAL	79.9	219.1	230.9	112.2	256.0	364.4	212.9	224.8	77.6	115.8	267.6	81.2
MEAN	2.58	7.30	7.45	3.62	9.14	11.8	7.10	7.25	2.59	3.74	8.63	2.71
MAX	14	51	38	28	69	123	37	59	9.6	26	119	13
MIN	1.5	2.3	2.8	1.7	1.6	2.9	2.4	1.8	1.2	1.1	1.2	1.3
CFSM	.59	1.66	1.69	.82	2.08	2.68	1.61	1.65	.59	.85	1.96	.62
IN.	.68	1.85	1.95	.95	2.16	3.08	1.80	1.90	.66	.98	2.26	.69

CAL YR 1984	TOTAL	1952.8	MEAN	5.34	MAX	62	MIN	1.2	CFSM	1.21	IN.	16.51
WTR YR 1985	TOTAL	2242.4	MEAN	6.14	MAX	123	MIN	1.1	CFSM	1.40	IN.	18.96

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'56", long 86°15'22", in SW¼NW¼ sec.1, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of bridge on State Highway 334 at Zionsville, 200 ft upstream from Long Branch, and at mile 24.7.

DRAINAGE AREA.--103 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges during water year: Dec. 6-7, Jan. 10-12, 22-25, Feb. 5-19, 22, 23. Records good. Low flow is affected by the Zionsville well field located on the right bank below the gage.

AVERAGE DISCHARGE.--28 years, 100.5 ft^3/s, 13.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft^3/s Apr. 20, 1964, gage height, 14.64 ft; no flow at times during 1959, 1963-68, 1970, 1971, 1983, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.20 ft, from floodmark.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1200	1860	7.08	Mar. 11	1500	2030	7.37
Feb. 22	0900	ice	*10.29	Mar. 31	1000	1920	7.17
Feb. 23	1400	*3830	9.87	Apr. 5	2300	2080	7.45
Mar. 8	0200	1730	6.83				

Minimum daily discharge, 0.51 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	111	130	1370	26	345	575	67	33	9.4	2.0	2.3
2	2.7	318	98	620	25	377	342	281	28	10	1.7	2.1
3	2.4	136	93	328	25	291	240	204	26	12	1.6	2.1
4	2.3	84	72	220	27	558	173	115	24	10	1.3	1.8
5	2.8	57	61	146	28	607	604	84	22	11	10	1.8
6	2.8	41	50	115	28	317	996	68	20	9.8	9.2	1.7
7	4.9	32	44	103	27	459	428	55	19	7.4	22	1.4
8	13	28	47	82	26	1070	271	47	18	6.2	15	1.3
9	22	26	43	65	25	485	187	41	17	5.0	6.2	2.8
10	16	609	53	57	32	330	144	38	15	4.0	4.0	7.0
11	11	788	57	51	52	1180	122	37	136	3.2	2.9	3.9
12	8.9	436	64	47	116	908	102	37	260	2.7	2.6	2.7
13	8.4	244	85	50	94	438	91	34	113	2.9	2.3	2.2
14	8.4	157	461	50	79	317	95	35	64	3.2	2.9	2.0
15	8.1	181	353	43	66	225	198	90	56	4.0	7.4	1.8
16	7.4	175	239	38	60	176	138	66	65	2.9	7.1	1.5
17	7.2	111	162	42	55	142	99	55	50	2.6	4.6	1.4
18	7.5	92	116	41	52	112	87	42	40	2.3	4.1	1.3
19	7.9	79	107	37	49	101	80	34	32	2.0	4.1	1.2
20	8.8	61	96	31	52	91	69	30	26	1.9	2.9	1.1
21	137	51	170	32	83	78	62	30	22	1.8	2.4	.79
22	82	46	298	32	2490	75	56	27	23	1.9	1.9	.52
23	44	44	157	31	3310	71	51	25	19	1.6	1.8	1.1
24	30	42	118	30	1970	65	50	23	18	1.3	3.0	1.2
25	24	39	82	29	903	60	47	21	18	1.4	24	.84
26	22	37	67	30	595	52	42	19	15	2.8	8.8	.74
27	20	42	67	31	469	55	39	82	14	2.9	4.6	.60
28	17	618	69	31	360	60	37	198	12	2.4	3.1	.63
29	15	364	78	29	---	62	32	69	11	1.5	2.5	.51
30	13	208	716	29	---	172	30	43	9.9	1.3	4.2	.68
31	12	---	445	28	---	1240	---	41	---	1.9	2.8	---
TOTAL	571.3	5257	4698	3868	11124	10519	5487	2038	1225.9	133.3	173.0	51.01
MEAN	18.4	175	152	125	397	339	183	65.7	40.9	4.30	5.58	1.70
MAX	137	788	716	1370	3310	1240	996	281	260	12	24	7.0
MIN	2.3	26	43	28	25	52	30	19	9.9	1.3	1.3	.51
CFSM	.18	1.70	1.48	1.21	3.85	3.29	1.78	.64	.40	.04	.05	.02
IN.	.21	1.90	1.70	1.40	4.02	3.80	1.98	.74	.44	.05	.06	.02

CAL YR 1984	TOTAL	40213.8	MEAN	110	MAX	2190	MIN	1.0	CFSM	1.07	IN.	14.52
WTR YR 1985	TOTAL	45145.51	MEAN	124	MAX	3310	MIN	.51	CFSM	1.20	IN.	16.30

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 upstream from Interstate Highway 74, 0.5 mile downstream from School Branch, 1.0 mile northeast of Clermont, and 2 miles west of Indianapolis.

DRAINAGE AREA.--162 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth-fill dam. Low flow is controlled through a 48-inch diameter conduit. Spillway elevation, 783 ft is an ogee section with 6 taintor gates, each 40 ft wide and 25 ft high. Permanent pool capacity is 24,000 acre-ft, elevation, 790.00 ft. Reservoir is used for flood control, low-flow maintenance, water supply, and recreation. Reservoir put into operation Nov. 27, 1969.

COOPERATION.--Water-stage elevations and capacity tables furnished by Indianapolis Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,350 acre-ft June 26, 1978, elevation, 792.39 ft; minimum, 13,750 acre-ft Nov. 28, 1971, elevation, 781.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 25,090 acre-ft Feb. 23, elevation, 790.78 ft; minimum, 20,980 acre-ft Sept. 30, elevation, 787.68 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	788.79	22,430	
Oct. 31	789.27	23,050	+620
Nov. 30	790.84	25,180	+2,130
Dec. 31	790.06	24,080	-1,100
CAL YR 1984			+210
Jan. 31	789.93	23,910	-170
Feb. 29	790.03	24,040	+130
Mar. 31	790.10	24,140	+100
Apr. 30	790.05	24,070	-70
May 31	790.01	24,010	-60
June 30	789.87	23,830	-180
July 31	788.85	22,500	-1,330
Aug. 31	788.63	22,220	-280
Sept. 30	787.68	20,980	-1,240
WTR YR 1985			-1,450

03353500 EAGLE CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°15'01", in NW¼NW¼ 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 south of intersection of West 10th Street and Lynhurst Drive, 0.5 mile downstream from West 10th Street bridge, 1.0 mile upstream from Vermont Street bridge, 3.0 miles upstream from Little Eagle Creek, and 7.1 miles upstream from mouth.

DRAINAGE AREA.--174 mi^2.

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 above 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 higher.

REMARKS.--Estimated daily discharges during water year: Jan. 16, 19 to Feb. 21, Aug. 2-13, Sept. 23-30. Records fair. Flow regulated since November 1969 by Eagle Creek Reservoir, 4.7 miles upstream (See sta 03353450).

AVERAGE DISCHARGE.--46 years (water years 1940 to current year), 156 ft^3/s, 12.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,800 ft^3/s June 28, 1957, gage height, 23.59 ft present datum from rating curve extended above 9,000 ft^3/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 present datum, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,110 ft^3/s Feb. 23, gage height, 9.13 ft; minimum daily, 4.4 ft^3/s Oct. 3, 4, 16-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	58	240	2070	38	413	945	219	41	19	15	13
2	4.8	42	164	1060	38	283	577	367	44	20	13	12
3	4.4	227	163	530	38	64	372	307	41	15	12	12
4	4.4	135	46	347	38	1080	256	160	40	15	12	12
5	4.7	17	141	243	38	907	652	135	40	15	12	13
6	4.7	56	43	159	38	247	1810	120	34	14	12	11
7	20	11	115	188	38	440	682	73	26	17	12	11
8	9.3	84	39	70	38	1790	392	50	20	15	12	12
9	5.8	11	37	157	38	762	214	48	18	15	12	19
10	5.9	711	40	52	38	419	282	44	19	15	12	14
11	5.1	1190	230	155	38	1580	213	43	37	12	12	11
12	4.8	495	50	49	50	1630	93	45	259	12	12	11
13	4.6	417	171	49	210	670	186	43	206	13	12	8.5
14	5.1	179	581	138	195	442	190	46	116	12	30	8.4
15	4.9	246	586	56	130	269	259	336	114	14	43	8.4
16	4.4	222	433	49	110	267	227	186	83	12	28	8.5
17	4.4	133	222	44	50	198	105	135	92	11	17	9.0
18	4.4	120	164	128	38	142	174	47	22	11	14	8.5
19	5.0	104	193	45	38	107	50	45	18	11	14	22
20	9.6	109	152	43	38	159	141	43	84	13	14	12
21	10	23	308	36	66	130	48	113	15	11	13	10
22	5.7	110	370	37	3410	53	174	44	14	11	13	10
23	7.0	21	252	38	6900	152	47	43	15	10	12	8.8
24	10	61	279	38	4080	51	46	41	15	10	12	8.4
25	12	65	77	38	1550	151	46	42	15	9.9	14	8.4
26	8.3	19	144	38	899	47	45	41	14	22	14	8.4
27	6.9	113	133	38	715	47	44	41	13	10	14	8.4
28	6.2	860	60	38	416	126	44	42	14	10	15	8.4
29	7.6	590	273	38	---	332	44	141	13	11	14	8.4
30	7.0	255	1200	38	---	537	44	42	13	9.6	34	8.4
31	6.6	---	725	38	---	2580	---	41	---	17	14	---
TOTAL	208.9	6684	7631	6047	19313	16075	8402	3123	1495	412.5	489	323.9
MEAN	6.74	223	246	195	690	519	280	101	49.8	13.3	15.8	10.8
MAX	20	1190	1200	2070	6900	2580	1810	367	259	22	43	22
MIN	4.4	11	37	36	38	47	44	41	13	9.6	12	8.4
CFSM	.04	1.28	1.41	1.12	3.97	2.98	1.61	.58	.29	.08	.09	.06
IN.	.04	1.43	1.63	1.29	4.13	3.44	1.80	.67	.32	.09	.10	.07

CAL YR 1984	TOTAL	59318.5	MEAN	162	MAX	3770	MIN	3.2	CFSM	.93	IN.	12.68
WTR YR 1985	TOTAL	70204.3	MEAN	192	MAX	6900	MIN	4.4	CFSM	1.10	IN.	15.01

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 upstream side of 16th Street bridge in Speedway, 0.6 mile upstream from Dry Run, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--23.9 mi^2 including 5.57 mi^2 from Dry Run basin. Since June 1964 part of the flow from the 5.57 mi^2 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 above 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 higher.

REMARKS.--Estimated daily discharges: Dec. 6, 7, Jan. 10-17, 19, 21-29, Feb. 3-6, 9-21, Apr. 7-10, May 27 to June 26, Sept. 9-30. Records poor.

AVERAGE DISCHARGE.--21 years (water years 1965 to current year) 21.2 ft^3/s, 12.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft^3/s July 28, 1979, gage height, 12.13 ft; no flow at times in 1960-64, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1700	468	4.95	Mar. 31	0730	*1600	*7.73
Feb. 22	1200	999	6.23	Apr. 5	2045	539	5.01
Mar. 29	0215	695	5.45				

Minimum daily discharge, 0.92 ft^3/s Sept. 8, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	184	21	206	4.2	38	142	78	4.3	9.7	45	3.2
2	3.4	70	18	56	4.2	38	70	95	4.6	7.0	6.5	2.3
3	2.7	23	28	32	4.3	29	43	28	6.1	4.1	4.0	2.2
4	2.3	16	16	24	4.2	85	37	17	4.7	1.9	4.8	1.9
5	2.0	13	13	19	4.2	71	195	13	3.9	2.9	81	1.3
6	2.0	7.4	12	16	4.1	35	138	8.8	3.4	2.2	13	1.3
7	51	7.9	11	15	4.0	81	72	7.2	4.8	6.8	18	1.0
8	33	7.1	11	13	3.6	154	41	6.2	3.8	1.9	8.0	.92
9	14	7.2	11	9.3	3.4	56	28	5.2	3.1	1.2	5.5	1.5
10	7.5	167	14	8.4	3.5	37	21	4.9	2.6	1.3	3.9	14
11	5.5	197	13	7.7	19	178	17	4.6	6.3	1.2	2.7	2.7
12	5.2	49	14	8.3	18	107	14	7.1	48	1.1	2.6	1.8
13	6.4	26	40	8.0	14	49	13	5.1	16	1.1	3.4	2.0
14	5.8	20	166	7.4	12	36	18	30	8.4	1.1	80	1.4
15	5.9	39	51	6.9	11	27	49	148	12	5.4	109	1.2
16	9.7	23	35	6.5	10	24	22	37	15	2.2	44	1.0
17	9.4	15	23	6.1	9.2	21	15	38	7.8	1.5	13	.97
18	10	17	19	5.8	8.6	19	12	19	5.5	1.4	7.5	.93
19	16	18	24	5.3	8.2	18	11	13	4.6	2.3	4.3	.92
20	23	12	19	4.0	8.0	16	9.7	9.9	3.8	3.8	4.8	1.1
21	34	10	62	4.4	32	14	8.8	17	3.3	7.4	3.4	.98
22	7.6	9.1	56	4.7	632	14	8.1	8.3	3.1	4.6	2.7	.93
23	4.3	8.6	26	4.8	418	14	7.9	6.9	2.8	1.4	2.5	17
24	3.5	8.4	20	4.7	217	14	8.1	6.4	2.6	1.1	2.9	6.5
25	16	7.6	15	4.7	92	12	7.3	5.9	2.3	1.8	3.7	3.4
26	12	7.4	12	4.7	60	11	6.1	5.3	2.0	65	2.1	4.7
27	6.1	28	12	4.6	47	14	5.4	6.0	2.3	5.6	2.2	3.0
28	4.8	186	13	4.5	34	15	7.8	9.2	1.9	3.0	1.5	2.3
29	3.7	50	48	4.4	---	150	5.5	6.4	1.4	2.4	2.5	2.0
30	4.1	30	238	4.6	---	281	4.6	5.2	1.5	2.6	43	1.9
31	5.4	---	69	4.5	---	787	---	4.8	---	36	5.6	---
TOTAL	319.9	1263.7	1130	515.3	1689.7	2445	1037.3	656.4	191.9	191.0	533.1	86.35
MEAN	10.3	42.1	36.5	16.6	60.3	78.9	34.6	21.2	6.40	6.16	17.2	2.88
MAX	51	197	238	206	632	787	195	148	48	65	109	17
MIN	2.0	7.1	11	4.0	3.4	11	4.6	4.6	1.4	1.1	1.5	.92
CFSM	.43	1.76	1.53	.69	2.52	3.30	1.45	.89	.27	.26	.72	.12
IN.	.50	1.97	1.76	.80	2.63	3.81	1.61	1.02	.30	.30	.83	.13

CAL YR 1984	TOTAL	9503.14	MEAN	26.0	MAX	600	MIN	.71	CFSM	1.09	IN.	14.79
WTR YR 1985	TOTAL	10059.65	MEAN	27.6	MAX	787	MIN	.92	CFSM	1.15	IN.	15.66

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.

DRAINAGE AREA.--15.6 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 742.00 ft above National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Estimated daily discharges: Dec. 5-8, Jan. 10-12, 20 to Feb. 21. Records good except those for periods of estimates discharge which are poor.

AVERAGE DISCHARGE.--15 years, 19.3 ft^3/s, 16.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft^3/s June 25, 1978, gage height, 9.61 ft; minimum daily, 0.05 ft^3/s Sept. 19, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1615	598	4.42	May 1	1545	596	4.41
Feb. 22	1145	598	4.42	July 31	2215	518	4.12
Mar. 31	0630	1060	5.94	Aug. 15	1800	*1480	*7.13
Apr. 5	1900	547	4.23	Aug. 30	0045	555	4.26

Minimum daily discharge, 0.91 ft^3/s July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	202	13	170	5.3	21	86	243	2.9	18	46	7.0
2	2.6	89	15	51	4.7	20	40	255	8.8	9.5	4.2	5.2
3	2.5	31	37	28	4.8	16	26	64	18	3.4	3.8	4.3
4	2.4	21	15	20	4.9	44	33	30	5.0	3.8	3.4	3.5
5	2.5	12	10	15	4.9	35	189	17	3.9	2.9	19	3.2
6	2.3	8.4	9.2	12	4.8	20	103	13	3.2	1.6	5.8	3.0
7	34	6.8	8.7	11	4.7	62	35	10	7.8	1.8	11	2.7
8	22	6.1	9.0	9.6	4.4	113	23	8.2	4.2	1.3	14	2.4
9	9.8	6.1	9.6	8.6	4.1	37	19	6.9	2.6	1.1	4.9	19
10	5.5	75	17	8.1	4.4	24	15	6.2	2.0	2.1	2.4	28
11	4.5	89	13	8.3	8.2	84	12	5.9	11	1.2	1.8	5.3
12	4.1	33	13	8.4	20	64	10	6.3	11	1.1	1.6	3.2
13	3.8	19	64	8.6	16	31	10	4.8	6.3	1.0	1.5	2.5
14	4.3	12	157	8.6	14	22	15	6.8	3.4	.96	6.7	2.2
15	4.5	24	49	8.2	12	17	35	29	9.0	2.3	371	2.1
16	6.4	13	30	8.5	11	15	16	11	6.0	1.3	192	1.9
17	4.2	9.6	21	10	10	13	10	19	4.6	.98	40	1.9
18	3.2	12	16	9.6	9.4	11	8.8	7.7	6.1	.93	18	1.8
19	7.2	12	24	7.9	8.8	11	7.7	5.6	3.8	.91	10	1.7
20	8.9	8.1	17	4.9	9.2	10	7.0	4.6	2.3	1.7	7.0	1.6
21	11	6.7	93	5.0	35	9.2	6.6	7.1	2.0	3.2	5.5	1.5
22	5.5	6.3	60	5.2	436	9.0	6.1	6.4	1.9	1.3	4.4	1.5
23	3.9	6.2	26	5.4	217	9.2	5.9	5.4	1.8	1.1	3.8	21
24	3.3	5.8	25	5.6	103	9.2	10	3.2	2.4	.95	6.1	11
25	15	5.3	13	5.5	53	8.1	6.4	2.8	1.9	4.5	4.9	5.6
26	11	5.0	12	5.3	33	7.1	5.1	3.5	1.7	46	3.4	5.4
27	5.4	30	11	5.1	26	8.3	31	22	1.6	2.6	3.1	3.1
28	5.4	138	11	5.1	20	8.4	32	21	1.5	1.4	2.8	2.5
29	5.4	38	68	5.0	---	75	10	6.2	1.4	1.1	11	2.2
30	3.9	22	240	5.0	---	247	6.8	4.5	1.3	1.0	105	3.1
31	3.3	---	77	5.2	---	537	---	3.8	---	38	14	---
TOTAL	210.5	952.4	1183.5	473.7	1088.6	1597.5	820.4	839.9	139.4	159.03	928.1	159.4
MEAN	6.79	31.7	38.2	15.3	38.9	51.5	27.3	27.1	4.65	5.13	29.9	5.31
MAX	34	202	240	170	436	537	189	255	18	46	371	28
MIN	2.3	5.0	8.7	4.9	4.1	7.1	5.1	2.8	1.3	.91	1.5	1.5
CFSM	.44	2.03	2.45	.98	2.49	3.30	1.75	1.74	.30	.33	1.92	.34
IN.	.50	2.27	2.82	1.13	2.60	3.81	1.96	2.00	.33	.38	2.21	.38

CAL YR 1984	TOTAL	8000.62	MEAN	21.9	MAX	372	MIN	.42	CFSM	1.40	IN.	19.08
WTR YR 1985	TOTAL	8552.43	MEAN	23.4	MAX	537	MIN	.91	CFSM	1.50	IN.	20.39

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 east of city limits of Danville, 0.5 mile upstream from small left-bank tributary, and 7 miles west of Avon.

DRAINAGE AREA.--28.8 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Oct. 23, 1968, nonrecording gage and crest-stage gage on upstream side of bridge at same datum. Oct. 23, 1968, to Aug. 6, 1970, water-stage recorder on upstream side of bridge at same datum.

REMARKS.--Estimated daily discharges: Dec. 5-10, Dec. 25-27, Jan. 9 to Feb. 20. Records good except for periods of no gage height record, Jan. 19 to Feb. 20, and periods with ice effect, Dec. 5-10, 25-27, and Jan. 9-18, which are poor. Low flow affected by releases from Danville Filtration Plant.

AVERAGE DISCHARGE.--27 years, 29.5 ft^3/s, 13.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft^3/s July 14, 1962, gage height, 11.32 ft; maximum gage height, 12.13 ft July 13, 1979; no flow at times during most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 16.0 ft, from floodmarks, discharge, 6,660 ft^3/s, from contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	1445	*1270	7.36	Apr. 5	1845	733	5.10
Mar. 31	0645	1120	6.75	Aug. 30	0330	1170	6.95

Minimum daily discharge, 0.08 ft^3/s, Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	81	50	370	5.5	86	213	30	4.7	2.0	9.3	11
2	.35	138	37	169	5.6	75	127	128	5.0	9.5	1.7	5.7
3	.25	55	36	94	5.2	64	87	63	5.4	3.0	.84	3.9
4	.15	30	27	61	4.8	152	67	31	4.6	2.1	.61	3.1
5	.11	18	21	37	4.6	96	241	22	4.6	2.4	83	2.8
6	.08	12	20	30	4.3	57	263	18	3.8	2.5	23	2.7
7	1.2	9.3	17	26	4.0	197	123	15	4.7	1.8	7.0	2.2
8	1.1	8.4	16	20	3.7	161	74	13	4.2	1.3	3.4	1.8
9	.81	8.5	16	16	3.5	94	46	12	3.6	1.1	2.1	1.9
10	.73	179	17	14	5.0	79	34	11	2.9	2.9	1.7	1.4
11	.62	221	20	13	90	267	28	11	50	1.6	1.4	1.3
12	.54	113	23	11	60	141	24	12	92	1.1	1.2	1.1
13	.70	60	30	10	40	90	21	9.1	37	1.1	.96	.88
14	.59	39	173	9.0	26	60	21	12	16	.99	1.6	.76
15	.50	40	107	8.3	18	42	21	53	18	1.5	4.3	.73
16	.73	32	73	7.6	15	35	18	26	25	.97	4.1	.74
17	.72	22	49	7.1	13	27	15	18	12	.72	2.2	.56
18	.49	20	33	6.6	11	24	14	13	9.0	.50	1.5	.37
19	.85	18	33	5.0	9.0	22	13	11	7.0	.38	1.2	.30
20	3.7	13	28	4.4	13	20	12	9.1	5.5	.61	1.3	.23
21	73	11	82	4.7	43	18	11	9.3	4.7	.90	.97	.17
22	19	11	107	5.3	872	17	11	7.9	5.1	.68	.77	.14
23	6.4	11	55	6.0	724	17	10	7.5	4.0	.44	.69	.83
24	3.3	10	39	8.0	459	15	10	6.6	3.7	.24	.92	.90
25	4.6	9.2	24	7.5	229	13	9.2	6.2	3.2	.98	.93	.47
26	4.7	8.8	21	7.0	152	12	8.7	5.9	3.0	14	.73	.37
27	4.6	18	20	6.6	113	14	9.1	7.1	2.7	1.2	.64	.29
28	4.2	292	21	6.0	80	15	8.5	14	2.4	.62	.57	.43
29	3.2	147	35	5.7	---	82	7.4	7.5	2.2	.35	1.1	.25
30	2.6	86	298	5.4	---	288	7.4	6.2	1.9	.22	321	.22
31	2.5	---	158	5.4	---	684	---	5.8	---	2.4	35	---
TOTAL	142.78	1721.2	1686	986.6	3013.2	2964	1554.3	601.2	347.9	60.10	515.73	47.54
MEAN	4.61	57.4	54.4	31.8	108	95.6	51.8	19.4	11.6	1.94	16.6	1.58
MAX	73	292	298	370	872	684	263	128	92	14	321	11
MIN	.08	8.4	16	4.4	3.5	12	7.4	5.8	1.9	.22	.57	.14
CFSM	.16	1.99	1.89	1.10	3.75	3.32	1.80	.67	.40	.07	.58	.05
IN.	.18	2.22	2.18	1.27	3.89	3.83	2.01	.78	.45	.08	.67	.06

CAL YR 1984	TOTAL	11619.75	MEAN	31.7	MAX	675	MIN	.00	CFSM	1.10	IN.	15.01
WTR YR 1985	TOTAL	13640.55	MEAN	37.4	MAX	872	MIN	.08	CFSM	1.30	IN.	17.62

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 downstream from McCracken Creek, 2.0 miles upstream from East Fork White Lick Creek, and at mile 11.4.

DRAINAGE AREA.--212 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft above National Geodetic Vertical Datum of 1929. Dec. 10, 1963 to Sept. 30, 1964, nonrecording gage at bridge 1,950 ft upstream at datum 1.39 ft higher.

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 10 to Feb. 10, Feb. 13-19. Records good.

AVERAGE DISCHARGE.--28 years, 220 ft^3/s, 14.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft^3/s July 13, 1979, gage height, 23.31 ft; minimum daily, 2.0 ft^3/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, from levels to high-water mark by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	1900	6,550	19.16	Apr. 5	2300	3,600	15.62
Mar. 31	1100	*7,810	*19.92				

Minimum daily discharge, 14 ft^3/s Sept. 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	198	301	1900	62	540	1560	198	79	50	52	102
2	22	676	232	1050	60	575	888	759	76	61	40	65
3	20	313	248	593	59	485	663	541	179	60	26	47
4	19	184	203	431	58	599	572	307	106	48	21	38
5	19	124	160	332	57	952	1160	226	83	41	80	33
6	18	89	140	273	56	545	1990	180	74	39	152	30
7	26	72	123	246	55	515	860	157	89	37	79	27
8	52	63	118	212	53	1530	597	137	90	33	61	25
9	36	58	127	180	52	832	445	125	73	32	44	23
10	29	483	143	155	53	578	362	115	65	38	34	24
11	25	1090	152	141	122	1040	320	109	136	35	27	21
12	24	615	156	136	394	1470	276	111	529	30	22	20
13	24	353	224	112	270	733	248	105	307	28	20	18
14	22	266	936	106	200	535	242	109	193	27	30	18
15	22	251	655	99	160	413	333	709	160	25	166	18
16	22	240	436	95	152	338	273	380	337	25	198	17
17	20	183	333	94	143	292	223	261	183	23	78	17
18	20	162	259	91	133	245	201	210	140	21	49	16
19	20	158	238	85	154	222	184	161	116	19	36	15
20	23	136	228	57	191	205	170	133	97	20	31	14
21	62	118	359	60	397	183	158	131	86	22	27	14
22	110	107	658	62	4540	173	148	115	79	29	24	14
23	67	102	385	63	5030	171	140	106	76	21	22	19
24	45	100	288	67	3050	161	136	98	70	19	22	42
25	42	96	222	72	1540	149	129	91	68	18	22	27
26	61	91	180	70	973	134	119	84	63	37	20	24
27	48	95	178	69	778	135	119	86	59	45	20	21
28	40	1160	177	68	606	142	129	150	54	26	19	18
29	35	731	204	67	---	336	107	144	48	20	18	17
30	32	434	1910	66	---	1540	99	104	44	17	875	17
31	30	---	924	64	---	5050	---	89	---	26	236	---
TOTAL	1059	8748	10897	7116	19398	20818	12851	6231	3759	972	2551	801
MEAN	34.2	292	352	230	693	672	428	201	125	31.4	82.3	26.7
MAX	110	1160	1910	1900	5030	5050	1990	759	529	61	875	102
MIN	18	58	118	57	52	134	99	84	44	17	18	14
CFSM	.16	1.38	1.66	1.08	3.27	3.17	2.02	.95	.59	.15	.39	.13
IN.	.19	1.54	1.91	1.25	3.40	3.65	2.25	1.09	.66	.17	.45	.14

CAL YR 1984	TOTAL	74647.3	MEAN	204	MAX	3640	MIN	8.3	CFSM	.96	IN.	13.10
WTR YR 1985	TOTAL	95201	MEAN	261	MAX	5050	MIN	14	CFSM	1.23	IN.	16.71

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 downstream from White Lick Creek, 1 mile south of Centerton, and at mile 199.3.

DRAINAGE AREA.--2,444 mi^2.

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 above 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 downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 20-22, June 10-21, and Aug. 16-23. Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--40 years (1930-31, 1946 to current year), 2,421 ft^3/s, 13.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft^3/s Apr. 22, 1964, gage height, 17.57 ft, at site 0.4 mile downstream; minimum daily, 131 ft^3/s Nov. 15, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft at site 0.4 mile downstream (from information by Corps of Engineers), discharge, 90,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	1300	11,400	9.99	Mar. 13	2000	13,200	11.06
Jan. 1	2200	12,700	10.79	Mar. 31	2400	24,500	15.07
Feb. 26	0200	*29,800	*16.11	Apr. 6	0700	13,700	11.30
Mar. 9	1500	11,800	10.24	May 2	1600	10,000	9.16

Minimum daily discharge, 343 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	521	885	3360	11000	1100	9200	20200	1920	1470	941	1580	910
2	458	4290	2720	12100	1070	7740	16400	8070	1470	1960	1070	697
3	412	3130	2690	10700	1000	6510	13800	6280	1700	1310	735	589
4	378	2910	2410	7910	968	6100	8330	4960	1690	1010	624	529
5	357	2410	2100	5390	970	8450	7280	4010	1350	906	752	495
6	343	1930	2030	4320	985	8060	13000	3180	1230	883	1500	471
7	364	1560	1790	3670	983	6490	12200	2720	1630	816	1000	433
8	1300	1310	1630	3310	941	9780	10200	2340	1510	799	1020	403
9	971	1210	1510	2860	905	11200	6840	2080	1230	753	976	365
10	1010	1930	1620	2620	896	9920	5290	1850	1200	726	768	837
11	969	5330	1690	2380	1180	8650	4490	1700	1700	678	652	829
12	810	6080	1860	2250	3200	12800	4030	1640	3300	638	575	666
13	697	4990	2340	1980	2590	13100	3620	1590	4000	617	562	653
14	642	3840	4930	1880	2590	11700	3260	1560	3500	598	718	593
15	595	3140	5840	1820	2340	7620	3830	2890	3200	639	2900	537
16	589	2960	5680	1710	2180	5780	3790	2890	2800	687	3600	507
17	560	2620	4700	1660	2020	4950	3550	2680	2500	616	2500	501
18	541	2330	3840	1710	2020	4300	3190	2300	2100	635	1500	487
19	547	2210	3290	1710	2150	3830	2920	1940	1800	595	1100	484
20	570	1920	3000	1300	2220	3520	2680	1690	1600	554	900	444
21	848	1710	3390	1000	2990	3230	2450	1590	1400	644	780	389
22	959	1450	5080	1200	10500	3070	2270	1600	1220	826	690	349
23	1090	1410	4140	1310	21500	2890	2220	1590	1130	647	660	398
24	1040	1270	3870	1370	24800	2760	2020	1450	1070	543	640	1280
25	917	1270	3290	1360	27100	2620	1970	1300	1070	532	615	748
26	1050	1180	2690	1280	29400	2490	1860	1190	1010	1330	584	615
27	888	1150	2440	1240	25900	2310	1730	1120	936	1220	601	561
28	783	4060	2270	1190	16700	2300	2100	1670	877	811	586	449
29	727	4590	2250	1170	---	3100	1720	2040	817	669	555	379
30	685	3910	9130	1170	---	7590	1550	2100	762	592	3510	367
31	623	---	8100	1160	---	19300	---	1660	---	635	1630	---
TOTAL	22244	78985	105680	95730	191198	211360	168790	75600	51272	24810	35883	16965
MEAN	718	2633	3409	3088	6829	6818	5626	2439	1709	800	1158	566
MAX	1300	6080	9130	12100	29400	19300	20200	8070	4000	1960	3600	1280
MIN	343	885	1510	1000	896	2300	1550	1120	762	532	555	349
CFSM	.29	1.08	1.39	1.26	2.79	2.79	2.30	1.00	.70	.33	.47	.23
IN.	.34	1.20	1.61	1.46	2.91	3.22	2.57	1.15	.78	.38	.55	.26

CAL YR 1984	TOTAL	938805	MEAN	2565	MAX	16300	MIN	338	CFSM	1.05	IN.	14.29
WTR YR 1985	TOTAL	1078517	MEAN	2955	MAX	29400	MIN	343	CFSM	1.21	IN.	16.42

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

PERIOD OF RECORD.--September 1953 to April 1956, October 1966 to September 1967, May 1970 to September 1972, October 1977 to July 1980, October 1982 to June 1985.

INSTRUMENTATION.--Water temperature recorder. Digital recorder set for one-hour-interval punches.

EXTREMES FOR PERIOD OF RECORD.--Water temperature: Maximum, 33 °C July 3, 1970; minimum, -0.5 °C, several days during winters.

EXTREMES FOR CURRENT YEAR.--Water temperature: Maximum recorded, 25.5 °C June 9, but may have been higher during instrument malfunction June 10 to Sept. 30; mimimum, -0.5 °C, Jan. 20-22.

REMARKS.--Temperature affected by upstream powerplants and reservoirs. Interruption in record was due to malfunction of the instrument.

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.5	18.0	7.5	9.5	2.0	4.5	8.0	18.5	23.5			
2	16.5	15.0	7.0	7.0	1.5	5.0	8.0	15.0	23.5			
3	17.5	12.5	6.5	5.5	1.0	6.0	9.0	15.5	23.5			
4	18.5	13.0	5.0	4.5	1.5	7.0	11.0	16.5	21.5			
5	19.0	13.0	4.0	4.0	2.5	5.5	12.5	17.5	21.0			
6	19.0	12.0	3.0	4.0	3.0	4.5	10.5	18.5	21.5			
7	19.0	11.5	2.5	4.0	2.5	5.0	9.5	18.0	20.5			
8	19.0	12.0	3.0	4.5	2.0	6.0	9.0	18.0	22.0			
9	20.0	12.5	4.0	3.5	2.5	5.5	8.5	19.5	24.0			
10	20.5	13.0	5.5	3.0	2.5	7.0	8.0	19.5	---			
11	21.0	11.5	6.0	3.0	3.0	8.0	9.5	20.0	---			
12	21.0	9.5	7.0	2.0	.5	8.0	12.0	21.0	---			
13	21.0	9.0	8.5	1.5	.0	7.0	13.5	21.5	---			
14	21.5	8.5	8.5	1.5	.5	7.0	14.0	22.5	---			
15	21.0	9.0	9.0	1.5	.5	7.5	14.5	21.0	---			
16	21.0	8.5	9.5	1.5	1.0	8.0	16.0	19.5	---			
17	21.0	7.5	10.0	2.5	1.5	7.5	16.5	17.5	---			
18	20.0	7.0	10.0	2.5	2.0	7.0	17.5	17.0	---			
19	20.5	7.0	8.0	1.5	2.5	8.5	19.0	18.5	---			
20	18.5	6.5	7.0	-0.5	3.0	10.0	19.5	19.5	---			
21	17.5	6.0	7.5	-0.5	2.0	10.0	20.0	20.0	---			
22	17.5	6.0	7.5	-0.5	1.5	9.0	20.5	18.0	---			
23	16.0	6.0	5.5	2.0	2.5	9.5	20.0	18.0	---			
24	16.5	6.5	5.0	2.0	5.0	9.0	19.0	19.0	---			
25	16.0	6.5	3.0	1.5	3.5	10.0	18.5	20.5	---			
26	17.5	8.0	2.5	1.0	4.0	10.5	20.0	21.5	---			
27	18.5	10.5	5.0	1.5	4.0	12.0	21.0	22.5	---			
28	19.0	8.5	8.5	2.5	3.5	14.5	20.5	21.0	---			
29	18.0	6.5	11.0	2.5	---	15.5	20.0	21.0	---			
30	17.5	7.0	9.5	3.5	---	11.5	19.5	22.5	---			
31	18.0	---	8.5	3.0	---	8.5	---	23.5	---			
MEAN	19.0	9.5	6.5	2.5	2.0	8.0	15.0	19.5	---			
MAX	21.5	18.0	11.0	9.5	5.0	15.5	21.0	23.5	---			
MIN	16.0	6.0	2.5	-0.5	.0	4.5	8.0	15.0	---			

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	18.0	7.5	10.0	2.5	4.5	8.0	20.0	25.0			
2	18.0	16.5	7.5	8.5	2.0	6.0	9.0	17.5	25.5			
3	19.5	13.0	7.5	6.5	2.0	6.0	10.5	16.5	24.5			
4	19.5	13.5	5.5	5.0	2.0	7.5	12.5	17.5	23.0			
5	19.5	13.5	4.5	4.5	3.5	6.5	13.0	19.0	21.5			
6	19.5	13.0	4.0	4.5	4.0	5.0	11.5	19.5	22.5			
7	19.0	12.0	2.5	4.0	3.0	5.0	10.0	18.5	21.5			
8	19.5	12.5	4.0	4.5	3.0	6.5	9.5	20.0	25.0			
9	21.0	13.0	5.0	4.0	3.0	6.5	9.0	21.0	25.5			
10	21.5	13.5	6.0	3.5	3.0	7.5	8.5	20.5	---			
11	22.0	13.0	6.5	3.5	3.5	8.5	11.0	21.5	---			
12	21.5	10.0	8.5	3.0	2.0	8.5	13.0	22.5	---			
13	21.5	9.5	9.0	2.0	.5	7.5	14.5	23.0	---			
14	22.5	9.0	9.5	2.0	.5	8.0	15.0	24.0	---			
15	22.0	9.0	9.5	2.0	1.0	8.5	15.0	22.5	---			
16	22.0	9.0	10.0	2.0	1.5	8.5	17.5	20.5	---			
17	22.5	8.0	10.0	3.0	2.5	8.5	17.5	18.5	---			
18	20.5	7.5	10.0	3.0	2.5	8.0	19.0	18.5	---			
19	21.5	7.5	10.0	2.0	3.0	9.5	20.0	20.5	---			
20	19.5	7.0	7.5	.0	4.5	11.0	21.0	21.5	---			
21	18.0	6.5	8.0	-0.5	3.0	10.5	21.0	20.5	---			
22	18.0	7.0	8.0	.0	3.0	9.5	21.5	19.5	---			
23	16.5	7.0	6.0	2.5	2.5	10.0	20.5	19.5	---			
24	17.5	7.0	5.5	2.5	5.0	10.0	19.5	21.0	---			
25	16.5	7.0	4.5	2.0	4.0	11.0	20.0	22.5	---			
26	18.5	9.5	3.5	1.5	5.0	12.0	21.5	23.5	---			
27	20.0	11.0	7.0	2.5	4.5	12.5	22.0	23.5	---			
28	19.5	10.5	10.0	3.0	4.5	16.0	22.0	22.0	---			
29	19.0	7.0	11.5	3.0	---	16.0	21.5	23.0	---			
30	17.5	7.5	11.5	4.0	---	15.0	20.5	23.5	---			
31	18.5	---	9.0	3.5	---	9.5	---	25.0	---			
MAX	22.5	18.0	11.5	10.0	5.0	16.0	22.0	25.0	---			

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.5	17.0	7.0	8.5	1.5	4.0	8.0	17.5	22.0			
2	15.0	13.0	7.0	6.5	1.0	4.5	7.0	14.5	22.5			
3	16.0	12.0	5.5	5.0	.5	5.5	8.0	14.0	23.0			
4	17.0	13.0	4.5	4.0	.5	6.0	10.0	15.0	21.5			
5	18.0	13.0	4.0	4.0	1.5	4.5	12.5	16.0	21.0			
6	18.5	11.5	2.0	4.0	2.5	4.0	10.0	17.5	20.5			
7	19.0	10.5	2.0	4.0	2.0	4.5	9.5	17.5	20.0			
8	19.0	11.5	2.0	4.0	1.0	5.5	8.5	16.5	20.0			
9	19.5	12.5	3.5	3.5	1.5	4.5	7.5	18.0	22.5			
10	20.0	13.0	5.0	2.5	2.5	6.0	7.5	18.5	---			
11	20.0	10.0	5.5	2.0	2.0	7.5	8.0	19.0	---			
12	20.5	9.0	6.0	1.5	.0	7.5	10.5	20.0	---			
13	20.5	8.5	8.5	1.0	.0	7.0	12.5	20.5	---			
14	20.5	8.0	8.0	1.5	.0	6.5	13.5	21.0	---			
15	21.0	9.0	9.0	1.0	.0	6.5	14.5	20.5	---			
16	20.0	8.0	9.0	1.5	.5	7.0	14.5	18.5	---			
17	20.0	7.0	9.5	2.0	1.0	7.0	15.0	16.0	---			
18	18.5	7.0	10.0	2.0	1.5	6.0	16.0	15.5	---			
19	20.0	7.0	7.5	.5	1.5	7.0	17.5	17.0	---			
20	17.5	5.5	7.0	-0.5	2.0	9.0	18.5	18.0	---			
21	17.5	5.5	7.0	-0.5	1.0	9.5	18.5	19.5	---			
22	17.0	5.5	6.5	-0.5	1.0	9.0	19.5	17.5	---			
23	16.0	5.5	5.0	.5	2.0	9.0	19.0	16.5	---			
24	15.5	5.5	4.5	2.0	4.0	8.5	18.0	17.5	---			
25	16.0	6.0	3.0	1.0	3.0	9.0	17.0	18.5	---			
26	16.5	7.0	2.5	.5	3.5	9.0	18.5	19.5	---			
27	18.0	9.5	3.5	1.0	3.5	11.5	20.0	21.0	---			
28	19.0	7.0	7.0	2.0	3.0	12.5	19.5	20.5	---			
29	17.5	6.0	10.0	1.5	---	15.0	18.5	19.5	---			
30	17.0	7.0	9.0	2.5	---	9.5	18.0	21.0	---			
31	17.0	---	8.5	2.5	---	8.5	---	22.5	---			
MIN	15.0	5.5	2.0	-0.5	.0	4.0	7.0	14.0	---			

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 downstream from bridge on State Highway 135, 0.3 mile south of Beanblossom, 2.7 miles upstream from North Fork Beanblossom Creek, and at mile 42.1.

DRAINAGE AREA.--14.6 mi^2.

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). WDR IN-79-1: 1978.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 673.65 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 10 to Feb. 9, Jul 4-31 and Aug. 3-4. Records fair except estimated daily record, which is poor.

AVERAGE DISCHARGE.--34 years, 16.2 ft^3/s, 15.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharges, 8,140 ft^3/s June 23, 1960, gage height, 11.78 ft, from curve extended above 2,000 ft^3/s on basis of contracted-opening measurement at gage height 11.78 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	0400	800	6.83	Mar. 31	0600	1050	8.01
Mar. 30	0100	773	6.70	May 2	0945	*2070	*10.52

No flow, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	96	11	190	3.1	21	70	40	1.8	2.4	3.3	.95
2	.15	42	12	64	3.0	20	36	889	2.6	2.3	.73	.81
3	.13	16	34	35	2.9	17	26	83	2.4	1.8	1.8	.69
4	.07	14	20	31	2.9	32	26	35	2.2	1.2	1.4	.67
5	.06	10	17	27	2.8	43	74	23	2.2	1.1	.86	.60
6	.07	6.1	14	24	2.8	30	76	16	2.0	.82	.72	.57
7	.99	5.3	12	22	2.8	34	45	13	2.2	.66	1.0	.48
8	1.9	3.4	11	20	2.8	93	35	9.8	2.0	.52	.58	.40
9	.84	2.9	10	17	3.0	46	26	7.7	1.7	.45	.32	.36
10	.73	33	52	16	3.7	34	22	6.0	1.4	.66	.18	.97
11	.51	44	49	14	122	148	25	5.1	1.7	.52	.11	.70
12	.56	23	63	13	244	137	21	7.4	3.8	.38	.07	.44
13	.68	15	140	12	141	51	18	13	2.7	.38	.01	.30
14	.92	9.9	181	11	81	37	21	12	1.9	.33	7.3	.30
15	1.4	6.4	77	10	38	33	37	100	1.8	1.7	11	.26
16	1.4	7.0	27	9.5	22	29	26	32	9.6	2.4	10	.23
17	1.7	4.8	16	8.8	18	24	19	29	5.5	2.1	2.9	.22
18	1.8	3.9	17	8.0	22	21	16	24	4.5	1.9	1.9	.18
19	2.0	6.1	22	7.3	34	18	14	15	2.9	1.7	1.4	.15
20	4.1	6.7	24	6.8	66	16	12	11	2.3	1.0	1.2	.09
21	10	6.0	269	6.3	80	14	10	8.6	1.8	1.5	.93	.06
22	8.4	5.3	126	5.8	316	13	8.7	7.7	1.7	1.4	.78	.00
23	6.2	4.4	47	5.5	179	13	7.4	8.3	1.5	1.1	.68	.16
24	4.9	4.5	33	5.0	67	14	6.7	5.8	12	.91	.79	.59
25	5.3	4.1	20	4.6	40	13	5.7	4.4	14	1.0	.74	.32
26	5.8	4.6	19	4.3	32	12	4.8	3.4	4.6	.79	.62	.35
27	5.4	7.0	49	4.0	26	12	5.6	2.8	2.8	1.8	.58	.29
28	6.7	104	66	3.7	22	13	26	4.6	2.2	1.2	.52	.27
29	11	23	90	3.6	---	70	12	3.3	1.5	.91	.49	.21
30	7.8	15	347	3.4	---	407	8.1	2.5	1.2	.58	2.8	.23
31	7.2	---	101	3.3	---	425	---	2.2	---	1.8	1.3	---
TOTAL	98.86	533.4	1976	595.9	1579.8	1890	740.0	1424.6	100.5	37.31	57.01	11.85
MEAN	3.19	17.8	63.7	19.2	56.4	61.0	24.7	46.0	3.35	1.20	1.84	.39
MAX	11	104	347	190	316	425	76	889	14	2.4	11	.97
MIN	.06	2.9	10	3.3	2.8	12	4.8	2.2	1.2	.33	.01	.00
CFSM	.22	1.22	4.36	1.32	3.86	4.18	1.69	3.15	.23	.08	.13	.03
IN.	.25	1.36	5.03	1.52	4.03	4.82	1.89	3.63	.26	.10	.15	.03

CAL YR 1984	TOTAL	7085.98	MEAN	19.4	MAX	577	MIN	.00	CFSM	1.33	IN.	18.05
WTR YR 1985	TOTAL	9045.23	MEAN	24.8	MAX	889	MIN	.00	CFSM	1.70	IN.	23.05

03357350 PLUM CREEK NEAR BAINBRIDGE, IN

LOCATION.--Lat 39°45'42", long 86°43'46", in SW¼SE¼ sec.3, T.15 N., R.3 W., Putnam County, Hydrologic Unit 05120203, on right upstream wingwall of bridge on U.S. Highway 36, 0.5 mile west of Groveland, and 4.5 miles east of Bainbridge.

DRAINAGE AREA.--3.00 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 828.44 ft above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Estimated daily discharges: Nov. 14-19, Dec. 2-12, 19-27, Jan. 4-19, 21-31, Feb. 4, 5, 11-19, Mar. 1, 2, 4-7. Records fair.

AVERAGE DISCHARGE.--16 years, 3.72 ft^3/s, 16.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft^3/s June 30, 1977, gage height, 5.75 ft; no flow at times during 1970, 1975-77, 1983-85.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 22	0930	*315	*3.76	Apr. 5	1700	186	3.32
Feb. 23	0230	155	3.20	Aug. 30	0115	254	3.55
Mar. 31	0430	197	3.36				

Minimum daily discharge, no flow Oct. 1-6, Sept. 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	11	5.0	57	.46	5.8	13	22	.19	.12	.17	2.7
2	.00	7.1	3.5	12	.42	5.6	8.4	28	.26	.16	.03	1.3
3	.00	2.8	2.6	7.5	.42	6.1	6.1	10	.41	.14	.03	.80
4	.00	1.6	2.0	5.0	.45	12	5.6	5.9	.29	.10	.03	.55
5	.00	.96	1.6	3.5	.42	7.0	48	3.8	.29	.12	17	.47
6	.00	.63	1.4	3.0	.39	5.6	19	2.6	.21	.07	2.3	.38
7	.01	.51	1.3	2.5	.30	8.0	9.2	2.0	.29	.04	2.0	.26
8	.01	.46	1.2	2.2	.26	20	6.7	1.6	.24	.04	.62	.20
9	.01	.49	1.2	1.7	.30	9.5	5.3	1.4	.16	.04	.32	.28
10	.01	24	1.3	1.6	.31	6.6	4.5	1.2	.11	5.4	.22	.29
11	.01	23	1.5	1.4	.50	39	3.9	1.1	4.4	.40	.17	.13
12	.01	7.9	1.7	1.3	2.2	17	3.1	1.0	2.4	.21	.14	.09
13	.01	4.8	3.3	1.3	2.0	9.0	2.7	.76	1.3	.17	.14	.06
14	.01	4.3	18	1.2	1.3	6.7	2.7	2.0	.93	.13	.23	.04
15	.01	3.8	8.9	1.0	1.0	5.0	2.9	1.6	2.8	.11	.81	.03
16	.01	3.1	6.7	.92	.82	4.3	2.2	1.3	5.6	.06	.89	.03
17	.01	2.3	4.9	.88	.64	3.3	1.8	1.7	1.7	.04	.32	.02
18	.01	1.9	3.6	.82	.58	2.6	1.6	1.2	1.3	.04	.19	.02
19	.02	1.6	3.0	.74	.58	2.4	1.4	.85	1.1	.03	.15	.02
20	3.2	1.3	2.5	.52	1.8	2.0	1.2	.66	.75	.04	.17	.02
21	5.6	1.2	3.5	.62	12	1.7	1.1	.69	.59	.04	.13	.01
22	.83	1.1	4.6	.56	189	1.7	1.1	.56	.61	.04	.12	.01
23	.35	1.1	3.6	.54	95	1.6	.98	.50	.43	.03	.11	.02
24	.21	1.0	2.6	.54	54	1.5	1.1	.39	.39	.03	.50	.05
25	.32	.94	2.2	.58	16	1.3	.92	.34	.32	.05	.24	.01
26	.40	.87	1.9	.56	11	1.1	.80	.29	.27	.05	.14	.01
27	.28	11	1.8	.50	8.7	1.4	13	1.8	.21	.03	.13	.01
28	.23	48	2.5	.48	6.9	1.3	13	.83	.17	.03	.12	.01
29	.17	12	5.5	.47	---	6.9	4.2	.45	.15	.03	1.1	.00
30	.14	7.6	39	.48	---	31	2.4	.37	.12	.02	53	.00
31	.12	---	14	.49	---	78	---	.31	---	.09	6.0	---
TOTAL	11.99	188.36	156.4	111.90	407.75	305.0	187.90	97.20	27.99	7.90	87.52	7.82
MEAN	.39	6.28	5.05	3.61	14.6	9.84	6.26	3.14	.93	.25	2.82	.26
MAX	5.6	48	39	57	189	78	48	28	5.6	5.4	53	2.7
MIN	.00	.46	1.2	.47	.26	1.1	.80	.29	.11	.02	.03	.00
CFSM	.13	2.09	1.68	1.20	4.87	3.28	2.09	1.05	.31	.08	.94	.09
IN.	.15	2.34	1.94	1.39	5.06	3.78	2.33	1.21	.35	.10	1.09	.10

CAL YR 1984	TOTAL	1067.36	MEAN	2.92	MAX	75	MIN	.00	CFSM	.97	IN.	13.24
WTR YR 1985	TOTAL	1597.73	MEAN	4.38	MAX	189	MIN	.00	CFSM	1.46	IN.	19.81

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 southwest of Reelsville, and 4.1 miles upstream from Mill Creek.

DRAINAGE AREA.--326 mi^2.

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 above 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.--Estimated daily discharges: Dec. 6-8, and Jan. 14 to Feb. 26. Records good except those for period of ice effect, Jan. 14 to Feb. 21, and those for period of no gage-height record, Feb. 22-26, which are fair. Flow partly regulated by Soil Conservation Service control structures on tributaries to Little Walnut Creek beginning in 1971.

AVERAGE DISCHARGE.--36 years, 350 ft^3/s, 14.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft^3/s June 28, 1957, gage height, 18.63 ft, from rating curve extended above 18,000 ft^3/s on basis of slope-conveyance method; minimum daily, 1.4 ft^3/s Sept. 8, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1600	3550	9.82	Mar. 31	1300	5690	12.61
Feb. 22	1200	6200	13.2	Apr. 5	2400	5600	12.50
Feb. 24	0600	*7800	*14.3				

Minimum daily discharge, 25 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	170	564	2750	110	1020	2810	265	104	76	94	205
2	33	630	427	1990	105	1020	1400	1380	102	77	67	121
3	30	511	396	1080	100	883	1010	1130	107	82	53	89
4	28	323	336	765	100	1060	853	667	107	77	46	72
5	27	235	290	587	98	1440	1990	490	102	80	640	64
6	25	178	260	477	98	970	4230	388	97	78	483	58
7	27	142	230	422	97	963	1810	321	134	72	263	53
8	36	121	220	371	94	1970	1160	274	112	68	165	49
9	43	109	224	321	90	1480	850	242	98	65	114	55
10	45	1050	236	295	90	1060	672	220	89	1000	88	126
11	39	1240	227	280	150	1500	587	207	167	285	75	78
12	35	922	227	255	210	2800	504	200	450	141	66	59
13	33	567	285	237	190	1540	448	187	335	107	59	49
14	32	403	915	220	170	1060	417	204	240	91	76	44
15	31	363	930	215	150	841	463	262	205	82	106	40
16	29	360	640	210	140	676	419	276	550	74	129	38
17	29	291	507	200	140	580	367	328	416	67	90	37
18	27	251	402	190	140	490	335	256	288	61	73	35
19	36	233	358	170	150	423	306	209	229	56	63	33
20	47	197	336	140	200	391	281	181	189	56	61	31
21	335	169	474	120	400	354	260	170	158	56	56	30
22	430	152	866	125	4380	327	242	158	139	55	52	29
23	239	144	593	130	4880	312	229	143	126	51	49	34
24	156	139	450	135	6240	303	219	133	116	48	68	51
25	136	130	355	130	3750	282	215	123	110	47	65	40
26	129	126	284	120	2490	256	204	118	101	49	59	38
27	113	223	282	110	1640	253	193	115	95	50	52	36
28	102	2380	271	110	1200	267	259	141	89	48	48	33
29	94	1370	292	110	---	573	244	150	84	45	45	31
30	86	814	1960	115	---	2150	193	124	79	43	1390	31
31	78	---	1430	115	---	4910	---	113	---	76	529	---
TOTAL	2567	13943	15267	12495	27602	32154	23170	9175	5218	3263	5224	1689
MEAN	82.8	465	492	403	986	1037	772	296	174	105	169	56.3
MAX	430	2380	1960	2750	6240	4910	4230	1380	550	1000	1390	205
MIN	25	109	220	110	90	253	193	113	79	43	45	29
CFSM	.25	1.43	1.51	1.24	3.02	3.18	2.37	.91	.53	.32	.52	.17
IN.	.29	1.59	1.74	1.43	3.15	3.67	2.64	1.05	.60	.37	.60	.19

CAL YR 1984	TOTAL	127897	MEAN	349	MAX	4600	MIN	16	CFSM	1.07	IN.	14.59
WTR YR 1985	TOTAL	151767	MEAN	416	MAX	6240	MIN	25	CFSM	1.28	IN.	17.32

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 U.S. Highway 231, 3 miles east of Cataract, and at mile 17.5.

DRAINAGE AREA.--245 mi^2.

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 above 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 upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 5-9, Dec. 26-29, Jan. 10 to Feb. 21, and June 19 to Sept. 4. Records good except for periods with ice effect, Dec. 5-9, Dec. 26-29, Jan. 10 to Feb. 21, and period of lagging intakes June 19 to Aug. 17, which are fair, and period of estimated daily record, Aug. 18 to Sept. 4, which is poor.

AVERAGE DISCHARGE.--36 years, 263 ft^3/s, 14.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft^3/s June 24, 1960, gage height, 22.58 ft; minimum daily, 0.1 ft^3/s Sept. 7, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	1600	2,740	12.74	Apr. 1	0500	4,850	16.15
Feb. 23	2300	*5,840	*17.50	Apr. 6	2000	2,760	12.78
Mar. 12	0300	2,530	12.34	Aug. 30	----	3,300	-----

Minimum daily discharge, 5.9 ft^3/s Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	200	302	2230	52	399	4530	82	59	40	546	260
2	8.2	737	224	1890	52	419	2230	800	53	46	232	140
3	9.3	227	281	655	51	343	707	616	67	53	85	90
4	9.9	132	226	437	51	519	468	298	114	60	35	59
5	10	90	160	324	50	1020	1010	205	71	49	500	40
6	10	61	130	267	50	438	2610	155	58	42	606	38
7	12	45	116	247	49	439	1540	125	312	36	190	33
8	25	39	120	207	47	2180	546	105	322	31	97	28
9	27	35	126	169	52	1100	386	92	147	27	68	30
10	17	332	163	126	60	547	312	82	93	250	52	54
11	10	802	174	120	150	1120	292	78	82	215	40	37
12	7.1	396	170	110	900	2330	245	80	475	130	32	25
13	5.9	209	439	106	610	844	215	77	259	88	26	20
14	6.4	148	1680	102	450	517	199	84	164	63	35	18
15	6.9	134	994	98	370	373	277	1280	126	48	770	17
16	6.4	161	514	92	310	301	242	910	896	37	2170	16
17	6.9	114	366	80	260	252	182	500	539	29	570	16
18	7.8	100	274	67	225	203	160	345	281	24	170	15
19	7.4	105	242	60	250	184	142	227	180	20	100	14
20	8.9	93	235	56	320	168	128	165	150	17	70	13
21	71	77	569	55	850	147	115	135	120	40	55	12
22	66	69	1130	55	3610	139	105	120	105	225	43	12
23	29	68	471	56	5500	137	99	104	90	41	34	12
24	19	68	339	57	5390	133	94	87	78	22	29	13
25	19	63	242	57	3540	121	90	76	86	20	25	18
26	52	59	175	57	1350	107	80	69	94	250	23	27
27	41	75	165	57	685	110	76	79	77	96	21	25
28	27	1870	160	56	459	122	78	278	65	47	20	22
29	21	1110	200	55	---	194	72	128	54	27	19	20
30	18	468	2440	54	---	1850	62	85	47	18	3000	19
31	15	---	2290	53	---	4130	---	73	---	150	700	---
TOTAL	588.6	8087	15117	8055	25743	20886	17292	7540	5264	2241	10363	1143
MEAN	19.0	270	488	260	919	674	576	243	175	72.3	334	38.1
MAX	71	1870	2440	2230	5500	4130	4530	1280	896	250	3000	260
MIN	5.9	35	116	53	47	107	62	69	47	17	19	12
CFSM	.08	1.10	1.99	1.06	3.75	2.75	2.35	.99	.71	.30	1.36	.16
IN.	.09	1.23	2.30	1.22	3.91	3.17	2.63	1.14	.80	.34	1.57	.17

CAL YR 1984	TOTAL	88967.4	MEAN	243	MAX	4190	MIN	5.0	CFSM	.99	IN.	13.51
WTR YR 1985	TOTAL	122319.6	MEAN	335	MAX	5500	MIN	5.9	CFSM	1.37	IN.	18.57

03359000 MILL CREEK NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'22", long 86°55'50", in SW¼SE¼ sec.11, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank 200 ft downstream from Cagles Mill, 0.7 mile downstream from Cagles Mill Lake, 0.8 mile upstream from Deer Creek, 5.8 miles south of Manhattan, and at mile 2.0.

DRAINAGE AREA.--294 mi^2.

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 above 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. Daily discharge computed from relation between discharge, head, and gate openings for Cagles Mill Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--47 years (1938 to current year), 309 ft^3/s, 14.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft^3/s Jan. 5, 1950, gage height, 18.38 ft; no flow Aug. 7, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,030 ft^3/s Mar. 26; minimum daily, 13 ft^3/s Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	223	107	99	123	124	1870	50	42	351	852
2	17	62	224	109	98	123	127	1170	50	33	635	747
3	17	421	224	111	98	124	128	764	63	33	630	356
4	17	832	513	111	98	124	128	891	70	33	213	69
5	17	402	997	112	85	125	128	883	77	33	130	69
6	17	30	1080	112	64	350	130	1010	89	33	297	56
7	17	19	1060	589	64	879	132	1150	400	33	569	50
8	13	19	1050	1200	64	708	133	1140	549	33	636	50
9	17	19	709	1560	64	548	355	698	313	33	630	39
10	17	19	379	1630	64	401	901	149	209	34	226	59
11	17	49	314	1610	146	276	1150	106	209	383	33	70
12	17	96	220	1580	206	280	1380	106	314	631	33	70
13	17	138	314	1550	503	154	1680	106	554	260	33	44
14	17	364	421	1600	726	101	1670	134	224	50	33	33
15	17	636	435	1690	751	326	1710	317	77	50	162	33
16	17	631	438	1650	341	858	1790	789	330	50	148	33
17	17	368	798	939	260	1430	1820	1270	959	38	603	33
18	17	119	1070	205	307	1820	1970	1250	901	33	1170	33
19	17	138	1000	131	238	1930	2000	605	418	26	1290	33
20	17	138	779	83	227	1910	1970	209	209	20	1270	33
21	18	90	528	83	524	1890	1950	209	124	20	1110	33
22	18	69	530	83	336	1870	1930	149	89	395	308	33
23	18	69	538	83	107	1850	1980	89	89	320	69	33
24	18	69	698	89	114	1830	2000	89	89	33	69	33
25	18	69	804	99	119	1950	1970	90	89	33	69	33
26	18	82	840	99	122	2030	1940	90	90	179	69	33
27	18	90	545	99	122	1720	1980	90	96	419	62	33
28	18	98	153	99	123	1500	1980	91	106	145	44	33
29	18	103	209	99	---	1480	1950	219	85	33	33	33
30	18	163	141	99	---	650	1910	260	62	33	76	33
31	18	---	104	99	---	166	---	111	---	33	471	---
TOTAL	534	5420	17338	17710	6070	29526	39016	16104	6984	3524	11472	3092
MEAN	17.2	181	559	571	217	952	1301	519	233	114	370	103
MAX	18	832	1080	1690	751	2030	2000	1870	959	631	1290	852
MIN	13	18	104	83	64	101	124	89	50	20	33	33

CAL YR 1984	TOTAL	107395	MEAN	293	MAX	1990	MIN	13
WTR YR 1985	TOTAL	156790	MEAN	430	MAX	2030	MIN	13

03360000 EEL RIVER AT BOWLING GREEN, IN

LOCATION.--Lat 39°22'58", long 87°01'14", in NE¼NE¼ sec.24, T.11 N., R.6 W., Clay County, Hydrologic Unit 05120203, on left bank 500 ft downstream from bridge on State Highway 46 at Bowling Green, 0.2 mile downstream from Jordan Creek, and at mile 38.4.

DRAINAGE AREA.--830 mi^2.

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 above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). See WSP 1725 for history of changes prior to Dec. 1, 1949.

REMARKS.--Estimated daily discharges: Jan. 14 to Feb. 19. Records good except those for periods of ice effect, which are fair. Flow regulated by Cagles Mill Lake.

AVERAGE DISCHARGE.--54 years, 879 ft^3/s, 14.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft^3/s Jan. 4, 1950, gage height, 23.53 ft; minimum daily, 11 ft^3/s Oct. 7, 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 30.0 ft in 1875, present datum, from information by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,000 ft^3/s Feb. 23, gage height, 19.68 ft; minimum daily, 66 ft^3/s Oct. 6,7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	503	1190	3920	290	1600	7370	2160	280	188	667	1230
2	87	1140	987	3800	280	1630	2680	3320	266	171	785	1080
3	79	954	973	1920	270	1430	1830	2330	265	173	702	780
4	73	1280	921	1390	265	1590	1550	1890	294	166	552	340
5	69	1080	1370	1140	265	2420	2190	1610	278	161	1950	270
6	66	429	1490	994	260	1750	6860	1520	278	154	1480	244
7	66	337	1410	1040	255	1990	3980	1560	450	141	982	212
8	88	301	1400	1640	245	4200	2120	1530	880	128	964	195
9	91	278	1350	1940	240	3000	1670	1350	604	117	833	187
10	95	1120	903	2020	235	2070	1830	672	403	1060	649	453
11	91	1800	805	1980	430	2710	2190	539	396	857	231	313
12	83	1530	768	1910	700	5190	2080	511	866	841	191	235
13	79	1000	844	1830	980	2830	2360	487	1030	653	164	201
14	77	875	2290	1790	1180	1880	2310	499	863	232	201	159
15	74	1150	2040	1810	1270	1540	2530	863	449	192	1020	147
16	72	1200	1520	1830	840	1730	2460	957	931	175	2220	137
17	69	1060	1410	1670	620	2110	2340	1940	1370	155	643	131
18	69	606	1720	670	650	2370	2380	1730	1500	135	1140	124
19	80	620	1630	460	710	2460	2400	1360	952	123	1330	118
20	104	577	1540	340	772	2390	2340	626	584	108	1310	113
21	438	512	1510	315	1430	2330	2290	571	492	142	1270	107
22	608	429	2100	300	8030	2270	2240	538	373	305	771	104
23	428	410	1620	300	13500	2240	2200	410	347	666	264	117
24	296	398	1380	310	13400	2210	2250	379	347	144	258	171
25	262	386	1480	315	9490	2210	2210	355	391	127	321	142
26	295	374	1340	320	3820	2310	2160	338	298	326	247	120
27	234	488	1290	305	2500	2190	2160	369	274	441	221	111
28	193	4140	750	290	1870	1890	2240	552	266	382	189	103
29	166	2740	846	285	---	2100	2250	574	250	124	162	95
30	144	1480	4050	290	---	4750	2130	532	210	107	1500	92
31	130	---	2970	300	---	8600	---	450	---	225	1470	---
TOTAL	4802	29197	45897	37424	64797	79990	77600	32522	16187	8919	24687	7831
MEAN	155	973	1481	1207	2314	2580	2587	1049	540	288	796	261
MAX	608	4140	4050	3920	13500	8600	7370	3320	1500	1060	2220	1230
MIN	66	278	750	285	235	1430	1550	338	210	107	162	92
CFSM	.19	1.17	1.78	1.45	2.79	3.11	3.12	1.26	.65	.35	.96	.31
IN.	.22	1.31	2.06	1.68	2.90	3.59	3.48	1.46	.73	.40	1.11	.35

CAL YR 1984	TOTAL	329306	MEAN	900	MAX	6560	MIN	48	CFSM	1.08	IN.	14.76
WTR YR 1985	TOTAL	429853	MEAN	1178	MAX	13500	MIN	66	CFSM	1.42	IN.	19.27

03360500 WHITE RIVER AT NEWBERRY, IN

LOCATION.--Lat 38°55'39", long 87°00'41", in NE¼NW¼ sec.30, T.6 N., R.5 W., Greene County, Hydrologic Unit 05120202, on left bank 0.4 mi upstream from bridge on State Highway 57 at Newberry, 1.9 miles downstream from Doans Creek, and at mile 113.0.

DRAINAGE AREA.--4,688 mi^2.

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 above National Geodetic Vertical Datum of 1929. Nonrecording gage prior to Oct. 21, 1928. Prior to Aug. 5, 1982, recording gage 0.3 mile downstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 19-21, Jan. 12-30, and Aug. 15-27. Records good except those for periods of no gage-height record, Jan. 12-30, and Aug. 15-27, which are fair. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--57 years, 4,746 ft^3/s, 13.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft^3/s May 21, 1943, gage height, 24.19 ft; minimum daily, 200 ft^3/s Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 27.5 ft Mar. 27, 1913, from floodmarks by Indiana Department of Highways, discharge, 130,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,200 ft^3/s Feb. 27, gage height, 21.82 ft; minimum daily, 592 ft^3/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	977	1890	7420	19200	3340	36900	34500	4930	3090	1670	1440	4480
2	850	7390	5960	20700	3210	31200	36800	9560	2730	1630	2180	3100
3	765	5950	5640	20100	2970	22600	39400	16200	2620	2120	2580	2580
4	705	4880	5120	19500	2870	13800	33300	16800	2610	2490	2140	2150
5	657	4380	4630	17400	3030	11700	25600	15700	2790	2020	2370	1690
6	617	3950	4470	12800	2590	11700	21900	11700	2590	1860	5800	1440
7	592	3010	4330	8750	2220	11800	19600	8320	2440	1650	4800	1330
8	656	2390	4090	7310	2130	14100	20800	6710	2490	1560	3140	1220
9	717	2040	3950	6910	2070	16300	20900	5960	3090	1470	2610	1120
10	1040	2570	4020	6570	2030	16900	17500	5280	2760	1430	2360	1380
11	963	3550	3720	6260	3660	17500	12600	4370	2390	1670	2150	1500
12	962	5200	3550	6000	6530	20100	10400	3840	2610	2310	1680	1560
13	990	6750	4220	5800	6920	19900	9250	3650	3270	1960	1430	1400
14	923	6300	7450	5700	6180	20300	8650	3810	4030	1890	1430	1260
15	848	4900	9770	5400	5630	19900	8800	5220	3990	1550	2000	1190
16	807	4180	9750	5200	5200	17700	8960	6540	3780	1330	3500	1110
17	765	3370	8790	5000	4620	13100	8720	6550	5090	1290	5000	1060
18	736	3350	7900	4800	4220	9920	8130	7170	4850	1280	3900	1010
19	709	3320	7220	4500	4330	9010	7680	6280	4330	1230	3400	988
20	703	3300	6570	4200	4810	8370	7280	5220	3620	1190	3200	956
21	945	3150	8710	3800	6390	7770	6810	4110	3000	1190	3200	934
22	1110	2690	13400	3500	12100	7320	6440	3640	2660	1160	3100	895
23	1290	2390	11900	3600	20500	6970	6060	3530	2370	1410	3000	875
24	1360	2200	9380	3800	25300	6660	5850	3330	2350	1640	2700	989
25	1330	2070	7450	3900	30400	6460	5670	3100	3550	1440	2400	1160
26	1500	1950	6550	3900	37600	6200	5480	2880	2840	1480	2000	1500
27	1380	1950	5720	3900	42400	6130	5290	2700	2220	1710	1500	1210
28	1320	8280	5220	3900	41000	5920	5120	2980	1990	1920	1360	1080
29	1270	10600	4620	3800	---	5950	5220	3310	1840	1870	1280	1010
30	1140	9950	11900	3700	---	14100	5240	3260	1760	1500	1300	930
31	1030	---	16700	3530	---	25400	---	3350	---	1320	3290	---
TOTAL	29657	127900	220100	233430	294250	441680	417950	190000	89750	50240	82240	43107
MEAN	957	4263	7100	7530	10510	14250	13930	6129	2992	1621	2653	1437
MAX	1500	10600	16700	20700	42400	36900	39400	16800	5090	2490	5800	4480
MIN	592	1890	3530	3500	2030	5920	5120	2700	1760	1160	1280	875
CFSM	.20	.91	1.51	1.61	2.24	3.04	2.97	1.31	.64	.35	.57	.31
IN.	.24	1.01	1.75	1.85	2.33	3.50	3.32	1.51	.71	.40	.65	.34

CAL YR 1984	TOTAL	1865394	MEAN	5097	MAX	28200	MIN	565	CFSM	1.09	IN.	14.80
WTR YR 1985	TOTAL	2220304	MEAN	6083	MAX	42400	MIN	592	CFSM	1.30	IN.	17.62

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW¼SW¼ sec.18, T.15 N., R.9 E., Rush County, Hydrologic Unit 05120204, on right bank 300 ft upstream from highway bridge, 0.5 mile northwest of Carthage, 2.2 miles downstream from Three Mile Creek, and at mile 50.7.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1961, published as Blue River at Carthage.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 859.33 ft above National Geodetic Vertical Datum of 1929. Prior to July 19, 1951, nonrecording gage at site 300 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 14, 15, Jan. 20 to Feb. 12, Feb. 14-20. Records good. Flow partly regulated by Big Blue River Conservancy District control structures on tributaries to Big Blue River beginning in 1969.

AVERAGE DISCHARGE.--35 years, 199 ft^3/s, 14.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft^3/s Mar. 4, 1963, gage height, 14.62 ft, from floodmarks, from rating curve extended above 6,200 ft^3/s; minimum daily, 17 ft^3/s Jan. 18, Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*);

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 23	1500	*4,100	*9.94	Mar. 31	1700	3,510	9.33

Minimum daily discharge, 43 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	259	180	1140	92	427	1580	251	164	114	107	57
2	70	888	152	826	88	388	741	1140	141	169	76	54
3	68	427	189	505	85	340	545	927	132	130	69	54
4	67	285	167	376	85	345	441	504	125	109	67	53
5	67	220	146	298	86	428	478	358	120	102	70	53
6	66	177	140	255	87	317	803	289	115	98	70	53
7	83	150	126	235	85	298	482	246	124	93	77	51
8	223	130	118	208	80	877	377	218	121	90	89	50
9	168	119	113	181	80	590	329	199	110	88	75	50
10	121	130	131	174	80	404	297	187	105	86	69	60
11	101	165	162	164	140	534	277	177	180	83	67	53
12	90	174	164	150	320	748	253	176	665	82	65	50
13	84	145	309	146	209	466	238	164	368	92	64	48
14	99	128	833	140	180	366	226	156	261	91	64	48
15	98	128	598	135	155	307	223	254	209	90	112	47
16	159	122	384	129	140	275	224	223	195	85	284	47
17	129	111	291	134	130	255	201	236	166	81	106	47
18	103	113	234	132	128	232	194	207	153	78	82	46
19	94	114	221	124	128	218	187	182	140	77	74	45
20	90	104	209	100	130	211	179	164	130	77	68	44
21	141	98	335	110	153	199	172	165	119	79	65	44
22	140	95	802	112	1120	195	167	151	121	122	64	43
23	121	96	421	115	3740	192	162	142	113	82	64	49
24	107	95	305	112	2850	195	163	137	132	76	66	77
25	100	95	234	110	1670	178	158	130	122	72	70	55
26	98	94	196	100	905	170	151	125	108	110	63	54
27	94	94	183	92	647	172	203	125	102	88	61	51
28	92	318	177	93	497	174	253	272	98	75	56	50
29	92	333	213	94	---	423	191	170	95	71	56	48
30	89	226	1370	95	---	1070	170	144	92	70	79	51
31	87	---	834	94	---	2550	---	189	---	91	63	---
TOTAL	3215	5633	9937	6679	14090	13544	10065	8008	4826	2851	2462	1532
MEAN	104	188	321	215	503	437	336	258	161	92.0	79.4	51.1
MAX	223	888	1370	1140	3740	2550	1580	1140	665	169	284	77
MIN	66	94	113	92	80	170	151	125	92	70	56	43
CFSM	.57	1.02	1.74	1.17	2.73	2.37	1.83	1.40	.87	.50	.43	.28
IN.	.65	1.14	2.01	1.35	2.85	2.74	2.03	1.62	.98	.58	.50	.31

CAL YR 1984	TOTAL	77390	MEAN	211	MAX	2120	MIN	48	CFSM	1.15	IN.	15.65
WTR YR 1985	TOTAL	82842	MEAN	227	MAX	3740	MIN	43	CFSM	1.23	IN.	16.75

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE¼SE¼ sec.31, T.13 N., R.7 E., Shelby County, Hydrologic Unit 05120204, on left bank 0.2 mile downstream from bridge on State Highway 9 in Shelbyville, 0.6 mile downstream from Little Blue River, and at mile 23.9.

DRAINAGE AREA.--421 mi^2.

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. WDR IN-79-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 737.67 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1953, nonrecording gage at bridge 0.2 mile upstream at datum 3.5 ft higher.

REMARKS.--Estimated daily discharges: Jan. 14-17, and Jan. 19 to Feb. 20. Records good.

AVERAGE DISCHARGE.--42 years, 465 ft^3/s, 15.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft^3/s Mar. 5, 1963, gage height, 17.70 ft; minimum daily, 27 ft^3/s Jan. 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 20.2 ft from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 31	0100	3,730	11.30	Apr. 1	1000	6,630	14.37
Feb. 24	1100	*8,040	*15.51				

Minimum daily discharge, 70 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	302	555	2770	220	1150	6250	428	351	183	315	116
2	114	1790	439	2700	215	1010	2940	2180	297	243	244	106
3	106	1390	480	1680	195	874	1630	3100	378	253	159	100
4	100	927	493	1210	195	828	1280	1740	362	214	132	98
5	96	675	403	926	200	997	1230	1140	302	190	130	96
6	93	507	371	751	205	851	1940	842	270	176	132	95
7	110	401	321	671	200	740	1420	671	713	165	128	93
8	241	339	314	587	190	1710	1050	560	594	154	160	90
9	374	302	286	504	180	1690	855	483	398	147	148	92
10	278	340	336	460	185	1180	740	435	316	141	129	106
11	214	655	457	433	250	1220	669	405	307	136	118	108
12	181	671	471	385	750	2030	602	390	1080	131	111	97
13	163	511	873	353	660	1470	554	366	1040	248	107	87
14	223	409	1790	340	450	1090	528	354	702	518	110	83
15	417	366	1830	320	400	867	522	859	523	251	204	81
16	350	340	1270	300	350	737	499	785	453	193	1230	81
17	318	296	947	320	320	662	461	654	394	160	578	79
18	261	283	741	321	310	585	425	587	349	143	316	78
19	223	293	636	290	300	533	406	479	315	134	226	78
20	213	283	595	220	300	501	386	409	281	130	183	76
21	324	254	774	240	310	464	367	388	259	133	160	72
22	387	238	1910	250	2280	442	350	364	242	170	142	70
23	338	232	1380	260	5690	435	337	333	238	154	132	85
24	288	225	958	260	7760	428	331	310	220	132	126	101
25	253	217	714	250	5720	403	325	291	237	123	127	109
26	234	216	561	230	2920	373	309	275	218	169	121	95
27	218	220	501	220	1760	367	359	271	199	209	116	91
28	211	645	472	230	1360	374	755	511	184	149	113	87
29	235	1030	525	230	---	558	655	462	175	127	108	83
30	233	742	2860	230	---	1910	466	348	166	118	142	87
31	213	---	3140	225	---	4670	---	307	---	130	146	---
TOTAL	7135	15099	27403	18166	33875	31149	28641	20727	11563	5524	6293	2720
MEAN	230	503	884	586	1210	1005	955	669	385	178	203	90.7
MAX	417	1790	3140	2770	7760	4670	6250	3100	1080	518	1230	116
MIN	93	216	286	220	180	367	309	271	166	118	107	70
CFSM	.55	1.19	2.10	1.39	2.87	2.39	2.27	1.59	.91	.42	.48	.22
IN.	.63	1.33	2.42	1.61	2.99	2.75	2.53	1.83	1.02	.49	.56	.24

CAL YR 1984	TOTAL	180438	MEAN	493	MAX	5080	MIN	71	CFSM	1.17	IN.	15.94
WTR YR 1985	TOTAL	208295	MEAN	571	MAX	7760	MIN	70	CFSM	1.36	IN.	18.41

03361650 SUGAR CREEK AT NEW PALESTINE, IN

LOCATION.--Lat 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 downstream from bridge on County Road 450 West, 0.5 mile south of New Palestine, 3.1 miles upstream from Little Sugar Creek, and 37.3 miles upstream from mouth.

DRAINAGE AREA.--93.9 mi^2.

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 8 and Jan. 13 to Feb. 21. Records good except those for period of ice effect, Jan. 13 to Feb. 21, which are fair.

AVERAGE DISCHARGE.--18 years, 102 ft^3/s, 14.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft^3/s Feb. 24, 1985, gage height, 9.19 ft; maximum gage height, 10.34 ft Feb. 23, 1979 (ice jam); minimum daily discharge, 2.4 ft^3/s Oct. 3, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 950 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Feb. 24	0900	*1,880	*919	Mar. 31	1500	1,640	8.67

Minimum daily discharge, 6.3 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	117	117	675	33	230	1110	155	63	23	28	15
2	16	409	94	545	32	201	795	548	65	25	25	14
3	14	340	127	392	31	172	372	496	46	29	17	12
4	14	196	127	239	31	170	270	349	40	33	12	11
5	12	135	104	176	30	211	316	198	37	29	14	11
6	11	101	90	137	30	174	567	140	34	27	13	10
7	15	80	80	119	30	165	435	109	33	23	17	9.9
8	56	68	72	103	29	336	263	89	33	22	13	9.6
9	50	60	66	88	28	315	189	77	31	20	16	10
10	42	85	71	82	31	215	151	70	28	18	12	14
11	29	261	80	77	70	253	130	65	33	17	11	11
12	22	288	92	73	130	333	114	58	40	16	9.8	9.2
13	17	178	129	70	200	259	102	53	109	20	8.8	8.5
14	16	127	384	67	170	184	97	49	87	19	9.9	7.9
15	16	109	403	64	140	146	101	64	70	19	91	7.6
16	16	98	282	62	115	123	106	68	59	17	134	7.4
17	16	84	193	56	100	110	124	63	54	15	71	7.0
18	16	77	145	52	93	97	104	71	47	14	42	6.6
19	15	74	126	45	88	88	92	63	42	13	27	6.5
20	15	69	117	39	85	82	83	53	38	14	21	6.5
21	18	63	179	42	86	76	76	49	35	15	18	6.4
22	24	58	319	44	820	73	71	44	32	19	16	6.3
23	26	56	278	45	1300	70	66	41	31	14	14	9.1
24	28	54	178	44	1750	70	64	38	29	13	13	17
25	27	53	131	42	1220	67	61	36	28	15	13	11
26	28	49	103	39	642	61	57	34	33	27	12	9.4
27	27	49	93	37	385	59	66	37	29	20	11	8.8
28	26	179	89	37	281	61	62	101	26	15	11	7.8
29	25	225	110	38	---	207	55	73	24	14	15	7.1
30	21	163	586	38	---	544	50	55	21	12	23	7.4
31	20	---	592	36	---	1320	---	45	---	16	16	---
TOTAL	697	3905	5557	3603	7980	6472	6149	3391	1277	593	754.5	285.0
MEAN	22.5	130	179	116	285	209	205	109	42.6	19.1	24.3	9.50
MAX	56	409	592	675	1750	1320	1110	548	109	33	134	17
MIN	11	49	66	36	28	59	50	34	21	12	8.8	6.3
CFSM	.24	1.38	1.91	1.24	3.04	2.23	2.18	1.16	.45	.20	.26	.10
IN.	.28	1.55	2.20	1.43	3.16	2.56	2.44	1.34	.51	.23	.30	.11

CAL YR 1984	TOTAL	37675.0	MEAN	103	MAX	819	MIN	6.3	CFSM	1.10	IN.	14.93
WTR YR 1985	TOTAL	40663.5	MEAN	111	MAX	1750	MIN	6.3	CFSM	1.18	IN.	16.11

03361850 BUCK CREEK AT ACTON, IN

LOCATION.--Lat 39°39'25", long 85°57'27", in NW¼SE¼ sec.15, T.14 N., R.5 E., Marion County, Hydrologic Unit 05120204, on left bank 30 ft downstream from McGregor Road bridge, 0.5 mile east of Acton, and 4.1 miles upstream from mouth.

DRAINAGE AREA.--78.8 mi^2.

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

REVISED RECORDS.--WDR IN-79-1: 1969 (M).

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 13-16, 19-20, Feb. 1-10, and Feb. 16. Records good. Low flow is effected by regulation.

AVERAGE DISCHARGE.--18 years, 90.6 ft^3/s, 15.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,140 ft^3/s July 20, 1969, gage height, 14.99 ft; minimum daily, 0.60 ft^3/s Oct. 1, 4, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 2	0430	1,180	8.12	Mar. 31	1645	*2,620	*10.99
Dec. 30	1200	1,340	8.60	Apr. 6	0145	1,120	7.88
Feb. 22	2330	2.170	10.36	May 2	1345	1,050	7.66

Minimum daily discharge, 2.5 ft^3/s Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	235	108	714	21	149	985	222	28	15	53	23
2	6.4	780	85	400	21	138	365	889	32	20	17	17
3	9.8	293	175	226	20	116	228	433	55	11	12	13
4	9.5	192	119	157	20	145	180	212	42	15	10	12
5	5.2	139	89	111	20	228	321	133	31	14	16	12
6	9.9	97	76	88	21	127	683	93	26	7.8	20	10
7	19	75	62	81	20	132	268	70	29	11	19	5.4
8	89	63	53	70	20	608	170	56	28	10	61	4.1
9	64	60	50	58	20	276	123	48	23	9.5	21	8.7
10	40	166	70	51	22	171	100	43	20	9.2	16	31
11	25	346	85	47	63	316	86	40	55	8.7	14	15
12	21	235	81	46	380	407	71	38	89	4.7	12	10
13	19	145	185	44	201	202	63	34	51	7.4	11	5.4
14	18	106	639	41	150	143	58	33	38	10	6.2	3.3
15	18	108	350	39	115	107	120	59	35	6.3	120	5.4
16	19	101	226	37	92	90	92	43	36	12	483	6.7
17	17	78	159	33	74	78	74	50	30	9.9	106	7.8
18	12	73	116	33	67	63	62	39	27	8.9	52	8.0
19	18	76	112	30	72	57	54	32	28	3.7	32	7.1
20	19	65	105	25	77	54	48	28	22	11	23	3.2
21	44	56	272	27	124	47	43	30	20	15	15	2.5
22	37	51	425	30	1280	46	40	27	19	8.4	17	5.1
23	26	49	199	31	1870	45	37	25	17	15	15	14
24	21	46	138	31	1110	44	37	24	14	14	15	55
25	24	39	97	30	588	42	35	23	17	6.5	17	18
26	40	38	76	26	335	37	29	22	16	46	12	16
27	34	43	72	25	239	40	33	27	11	23	6.5	13
28	29	437	70	25	177	43	91	129	14	14	11	10
29	23	253	109	23	---	207	44	70	14	6.4	11	8.8
30	19	154	1070	22	---	800	35	44	12	9.2	93	5.7
31	21	---	492	22	---	2060	---	35	---	7.6	39	---
TOTAL	769.8	4599	5965	2623	7219	7018	4575	3051	879	370.2	1355.7	356.2
MEAN	24.8	153	192	84.6	258	226	153	98.4	29.3	11.9	43.7	11.9
MAX	89	780	1070	714	1870	2060	985	889	89	46	483	55
MIN	5.2	38	50	22	20	37	29	22	11	3.7	6.2	2.5
CFSM	.31	1.94	2.44	1.07	3.27	2.87	1.94	1.25	.37	.15	.55	.15
IN.	.36	2.17	2.82	1.24	3.41	3.31	2.16	1.44	.41	.17	.64	.17

CAL YR 1984	TOTAL	35037.6	MEAN	95.7	MAX	1450	MIN	3.0	CFSM	1.21	IN.	16.54
WTR YR 1985	TOTAL	38780.9	MEAN	106	MAX	2060	MIN	2.5	CFSM	1.35	IN.	18.31

03362000 YOUNGS CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°25'08", long 86°00'18", in SE¼SW¼ sec.5, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank on upstream side of county highway bridge, 0.5 mile southwest of Amity, 2.0 miles upstream from mouth, and 5 miles northwest of Edinburgh.

DRAINAGE AREA.--107 mi^2.

PERIOD OF RECORD.--October 1942 to current year. Prior to December 1942 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 1335: 1944. WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 670.20 ft above National Geodetic Vertical Datum of 1929. Prior to June 30, 1955, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 6-7, Jan. 19-21, Feb. 1, 13-21. Records good except those for Dec. 6-7, Jan. 19-21, Feb. 1, 13-21, which are poor.

AVERAGE DISCHARGE.--43 years, 107 ft^3/s, 13.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft^3/s Jan. 27, 1952, gage height, 13.4 ft; minimum daily, 0.5 ft^3/s Sept. 29, Oct. 20, 21, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Dec. 31	0100	1,810	8.02	Mar. 31	2000	*3,760	*10.23
Feb. 23	1100	2,080	8.49				

Minimum daily discharge, 3.9 ft^3/s Oct. 3, 4, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	36	86	954	22	185	1560	74	30	31	31	95
2	4.2	201	65	580	21	159	469	830	39	68	38	58
3	3.9	72	116	337	20	135	315	479	38	72	18	41
4	3.9	43	105	245	20	143	252	252	65	44	11	31
5	4.0	31	76	179	21	190	276	169	48	30	15	25
6	3.9	23	66	148	23	135	605	125	39	24	25	21
7	5.8	19	58	131	20	129	310	98	262	19	21	19
8	17	16	50	107	18	507	225	82	306	18	16	18
9	16	15	46	88	17	360	173	71	147	16	18	17
10	12	26	59	83	19	232	142	63	98	16	15	26
11	7.3	130	84	74	86	404	131	59	92	15	11	29
12	5.6	117	83	62	722	812	113	67	362	15	9.5	18
13	5.1	66	334	60	300	370	102	58	190	14	8.6	15
14	5.0	48	691	65	200	259	96	56	123	14	41	13
15	5.4	42	441	49	150	192	137	301	97	13	260	12
16	6.6	40	278	46	130	155	120	180	97	13	855	12
17	8.4	32	200	49	110	128	98	122	85	12	244	12
18	6.9	31	146	49	90	104	87	93	77	11	121	11
19	8.2	35	125	40	100	93	78	73	63	10	75	10
20	9.6	38	105	30	110	83	70	62	53	11	54	10
21	19	33	307	34	150	73	64	54	46	10	41	9.6
22	16	29	804	33	1170	71	61	52	42	18	31	8.9
23	11	27	337	33	1960	68	55	48	38	21	26	11
24	8.6	26	221	33	969	73	53	43	34	14	23	29
25	7.8	25	147	32	545	60	50	40	32	11	21	22
26	9.6	23	110	25	364	53	45	37	29	19	19	15
27	8.6	23	98	25	269	55	45	34	26	34	18	12
28	9.2	233	92	26	211	57	71	63	23	16	16	11
29	9.7	214	118	24	---	81	50	50	20	11	14	8.9
30	8.2	125	1510	25	---	916	43	39	19	9.3	424	8.5
31	9.2	---	1060	26	---	2810	---	36	---	13	207	---
TOTAL	260.2	1819	8018	3692	7837	9092	5896	3810	2620	642.3	2727.1	628.9
MEAN	8.39	60.6	259	119	280	293	197	123	87.3	20.7	88.0	21.0
MAX	19	233	1510	954	1960	2810	1560	830	362	72	855	95
MIN	3.9	15	46	24	17	53	43	34	19	9.3	8.6	8.5
CFSM	.08	.57	2.42	1.11	2.62	2.74	1.84	1.15	.82	.19	.82	.20
IN.	.09	.63	2.79	1.28	2.79	3.16	2.05	1.32	.91	.22	.95	.22

CAL YR 1984	TOTAL	38856.1	MEAN	106	MAX	2880	MIN	3.2	CFSM	.99	IN.	13.51
WTR YR 1985	TOTAL	47042.5	MEAN	129	MAX	2810	MIN	3.9	CFSM	1.21	IN.	16.35

03362500 SUGAR CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°21'39", long 85°59'51", in SW¼SE¼ sec.29, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank 50 ft upstream from highway bridge in Camp Atterbury, 1.3 miles upstream from confluence with Blue River, 1.5 miles northwest of Edinburgh, and at mile 1.3.

DRAINAGE AREA.--474 mi^2.

PERIOD OF RECORD.--October 1942 to current year. Prior to February 1943 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.23 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1952, nonrecording gage on downstream side of old highway bridge, 100 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 7, 8, Jan. 13, and Jan. 15 to Feb. 21. Records good except those for period with ice effect, Jan. 16 to Feb. 21, which are fair.

AVERAGE DISCHARGE.--43 years, 490 ft^3/s, 14.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft^3/s May 29, 1956, gage height, 18.38 ft; minimum daily, 9.2 ft^3/s Sept. 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Dec. 31	0800	4,840	10.81	Apr. 1	0500	*9,630	*14.01
Feb. 24	0700	8,390	13.41				

Minimum daily discharge, 49 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	106	623	3620	180	1110	8880	305	216	145	104	228
2	72	1310	455	3390	170	972	5330	2610	224	190	189	146
3	63	1560	524	2000	160	839	2270	3630	316	202	115	113
4	58	935	685	1370	160	774	1490	2070	564	161	85	96
5	58	621	506	1010	160	978	1320	1240	349	147	80	85
6	58	445	419	791	160	884	2760	881	261	134	94	81
7	62	328	340	685	155	708	2210	671	621	125	104	75
8	86	258	310	594	150	1820	1440	542	884	115	101	71
9	222	220	273	503	140	2120	1070	450	509	110	171	67
10	193	224	266	448	160	1360	857	392	353	107	108	78
11	141	730	371	411	180	1310	746	354	299	100	84	102
12	104	1140	405	362	700	2820	648	355	1160	95	71	90
13	88	772	774	350	1100	1860	578	324	877	92	66	68
14	78	528	1960	349	850	1260	540	301	658	92	63	62
15	80	418	2360	330	720	966	642	659	496	110	287	57
16	82	404	1550	290	600	774	663	702	436	93	1900	55
17	81	340	1130	285	520	663	581	518	373	86	1110	55
18	74	290	851	260	480	565	534	440	332	83	521	55
19	71	278	687	240	485	491	471	371	286	78	301	54
20	74	276	638	200	520	448	421	316	255	75	204	53
21	97	246	804	215	800	401	381	282	223	74	156	51
22	145	218	2580	230	2550	371	350	270	206	87	125	49
23	151	200	1760	230	5750	359	326	246	193	97	110	51
24	125	193	1180	225	7990	358	309	227	181	81	101	75
25	111	182	848	215	5790	329	295	210	169	74	96	117
26	105	169	629	200	3950	296	273	196	162	84	92	80
27	120	165	542	190	2010	286	260	188	158	141	85	65
28	120	636	500	190	1380	294	378	312	147	110	77	61
29	112	1400	504	190	---	344	371	463	141	81	73	57
30	100	915	3050	190	---	2340	283	322	133	70	537	56
31	91	---	4540	190	---	5910	---	256	---	73	494	---
TOTAL	3101	15507	32064	19753	37970	34010	36677	20103	11182	3312	7604	2344
MEAN	100	517	1034	637	1356	1097	1223	648	373	107	245	78.1
MAX	222	1560	4540	3620	7990	5910	8880	3630	1160	202	1800	228
MIN	58	106	266	190	140	286	260	188	133	70	63	49
CFSM	.21	1.09	2.18	1.34	2.86	2.31	2.58	1.37	.79	.23	.52	.16
IN.	.24	1.22	2.52	1.55	2.98	2.67	2.88	1.58	.88	.26	.60	.18

CAL YR 1984	TOTAL	190003	MEAN	519	MAX	7100	MIN	40	CFSM	1.09	IN.	14.91
WTR YR 1985	TOTAL	223627	MEAN	613	MAX	8880	MIN	49	CFSM	1.29	IN.	17.55

03363000 DRIFTWOOD RIVER NEAR EDINBURGH, IN

LOCATION.--Lat 39°20'21", long 85°59'11", in NW¼SW¼ sec.4, T.10 N., R.5 E., Bartholomew County, Hydrologic Unit 05120204, on left bank at downstream side of highway bridge, 0.8 mile downstream from confluence of Big Blue River and Sugar Creek, 1.5 miles southwest of Edinburgh, and at mile 14.1.

DRAINAGE AREA.--1,060 mi^2.

PERIOD OF RECORD.--October 1940 to current year. Prior to July 1941 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 636.99 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 17-22, Feb. 1-11, 13-17, and Sept. 1-30. Records good except those for period of no gage-height record, Sept. 1-30, which are fair.

AVERAGE DISCHARGE.--45 years, 1,151 ft^3/s, 14.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft^3/s Mar. 6, 1963, gage height, 16.97 ft; minimum daily, 38 ft^3/s Sept. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 20.3 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 31	1900	8,450	11.89	Apr. 1	1100	*16,000	*14.55
Feb. 25	0600	16,000	14.54	May 3	2000	7,660	11.33

Minimum daily discharge, 160 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	442	1530	7740	500	2960	15300	954	726	453	351	450
2	262	2150	1190	7280	470	2530	13600	4500	726	507	582	360
3	242	3760	1160	5600	460	2190	6490	7200	773	576	427	310
4	229	2500	1420	3620	455	1980	3950	6370	1100	509	347	280
5	223	1740	1190	2660	450	2220	3310	3530	843	466	324	260
6	218	1310	1040	2100	445	2200	5110	2320	730	432	331	250
7	226	1040	871	1810	440	1790	5310	1760	1140	410	338	240
8	271	872	799	1580	420	3230	3470	1430	1870	383	336	230
9	580	768	778	1370	420	4910	2560	1220	1160	368	418	250
10	607	754	757	1240	430	3400	2080	1100	893	360	347	280
11	480	1330	959	1150	480	2900	1820	1010	789	341	310	260
12	395	2120	1060	1050	1240	5440	1620	989	1860	329	284	240
13	352	1670	1500	941	1900	4720	1460	937	2230	320	269	220
14	323	1260	3550	968	1700	3110	1370	904	1660	631	259	200
15	460	1060	4950	875	1450	2360	1450	1430	1270	587	467	190
16	520	992	3710	808	1300	1900	1450	1790	1090	447	2410	185
17	500	889	2650	800	1130	1650	1320	1410	980	386	2600	180
18	452	799	2010	740	975	1440	1240	1260	887	345	1240	180
19	407	772	1630	650	1000	1280	1150	1110	803	322	794	175
20	382	771	1480	550	1070	1190	1080	975	736	308	591	170
21	423	715	1720	600	1430	1100	1020	897	675	305	483	165
22	583	656	4550	640	3630	1030	969	872	632	316	413	160
23	619	617	4200	652	8990	1000	926	820	602	352	370	190
24	551	597	2790	624	15000	991	895	774	575	308	347	200
25	494	573	2020	610	15400	947	873	734	554	287	334	250
26	460	548	1540	565	11200	883	840	697	539	310	324	230
27	455	543	1320	537	5970	847	819	674	509	391	305	200
28	446	1050	1220	549	3780	849	1050	780	477	362	290	190
29	439	2620	1200	550	---	886	1260	1180	455	299	276	185
30	439	2070	4820	545	---	3860	1010	917	434	273	699	190
31	415	---	8040	544	---	8870	---	781	---	273	728	---
TOTAL	12739	36988	67654	49948	82135	74663	84802	51325	27718	11956	17594	6870
MEAN	411	1233	2182	1611	2933	2408	2827	1656	924	386	568	229
MAX	619	3760	8040	7740	15400	8870	15300	7200	2230	631	2600	450
MIN	218	442	757	537	420	847	819	674	434	273	259	160
CFSM	.39	1.16	2.06	1.52	2.77	2.27	2.67	1.56	.87	.36	.54	.22
IN.	.45	1.30	2.37	1.75	2.88	2.62	2.98	1.80	.97	.42	.62	.24

CAL YR 1984	TOTAL	443459	MEAN	1212	MAX	11100	MIN	153	CFSM	1.14	IN.	15.56
WTR YR 1985	TOTAL	524392	MEAN	1437	MAX	15400	MIN	160	CFSM	1.36	IN.	18.40

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE¼NE¼ sec.9, T.11 N., R.8 E., Shelby County, Hydrologic Unit 05120205, on right bank 500 ft downstream from highway bridge, 0.8 mile southwest of St. Paul, 1.5 miles downstream from Mill Creek, and at mile 34.4.

DRAINAGE AREA.--303 mi^2.

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 above 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 upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 6-9 and Jan. 13 to Feb. 19. Records good except for periods with ice effect, Jan. 21 to Feb. 19, which are poor.

AVERAGE DISCHARGE.--55 years, 320 ft^3/s, 14.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft^3/s Jan. 5, 1949, gage height, 10.60 ft; maximum recorded gage height, 12.37 ft May 24, 1968; minimum daily discharge, 0.6 ft^3/s Aug. 7, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of approximately 20.5 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	1200	3,570	5.10	Apr. 1	1400	4,010	5.44
Feb. 24	1500	*5,310	*6.35	May 2	1200	4,360	5.69

Minimum daily discharge, 8.3 ft^3/s Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	323	396	2840	150	691	3690	230	156	143	141	25
2	24	940	307	2170	140	584	2310	2800	163	167	113	23
3	22	763	281	1700	135	490	1220	2540	224	138	74	20
4	19	475	254	987	130	478	877	1940	210	118	56	20
5	19	367	233	692	130	693	856	1020	162	99	49	18
6	18	273	230	524	125	582	1280	655	145	90	47	18
7	26	220	190	448	125	473	1070	475	593	82	45	17
8	81	189	170	377	120	1090	792	370	644	73	92	14
9	114	175	170	310	115	1280	601	305	312	68	84	14
10	95	233	276	279	110	930	487	269	220	66	62	26
11	73	340	378	259	120	1040	429	248	208	60	47	18
12	59	328	356	247	700	2030	369	255	395	57	39	16
13	51	269	515	240	600	1530	328	252	429	58	34	14
14	46	223	1130	240	500	933	310	222	317	135	31	13
15	59	203	1210	245	420	665	313	1330	252	85	31	12
16	94	183	967	240	360	520	294	1050	220	85	83	11
17	102	159	671	230	320	440	259	804	196	64	137	11
18	89	157	497	220	280	365	238	611	181	53	88	11
19	75	162	414	200	250	316	227	428	172	47	64	9.9
20	69	169	372	140	236	288	219	328	153	44	50	9.6
21	123	158	925	160	350	257	208	281	141	45	42	8.3
22	152	145	1730	170	2760	241	200	267	141	46	36	9.1
23	129	138	1260	170	4830	236	195	239	142	91	33	12
24	111	135	801	170	5130	230	191	215	132	65	31	17
25	100	130	544	170	3830	213	184	195	137	47	31	22
26	92	125	396	165	2290	192	174	181	134	60	29	19
27	84	123	337	160	1260	188	171	174	119	102	27	16
28	110	575	309	160	877	193	371	212	107	70	26	15
29	303	787	361	160	---	216	322	206	100	54	23	13
30	237	568	2910	160	---	1410	230	179	94	43	31	13
31	169	---	2520	160	---	3400	---	160	---	46	30	---
TOTAL	2773	9035	21110	14393	26393	22194	18415	18441	6599	2401	1706	464.9
MEAN	89.5	301	681	464	943	716	614	595	220	77.5	55.0	15.5
MAX	303	940	2910	2840	5130	3400	3690	2800	644	167	141	26
MIN	18	123	170	140	110	188	171	160	94	43	23	8.3
CFSM	.30	.99	2.25	1.53	3.11	2.36	2.03	1.96	.73	.26	.18	.05
IN.	.34	1.11	2.59	1.77	3.24	2.72	2.26	2.26	.81	.29	.21	.06

CAL YR 1984	TOTAL	125708.5	MEAN	343	MAX	2970	MIN	9.5	CFSM	1.13	IN.	15.43
WTR YR 1985	TOTAL	143924.9	MEAN	394	MAX	5130	MIN	8.3	CFSM	1.30	IN.	17.67

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, 0.2 mile northwest of Columbus city limits, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--534 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 610.14 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-10 and Jan. 17 to Feb. 11. Records good.

AVERAGE DISCHARGE.--18 years, 600 ft^3/s, 15.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft^3/s May 25, 1968, gage height, 15.87 ft; minimum daily, 22 ft^3/s Oct. 5, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 31	0700	5590	10.90	Apr. 1	0600	7070	11.79
Feb. 24	0200	*8160	*12.30	May 3	0900	8090	12.27
Mar. 12	2100	3710	9.14				

Minimum daily discharge, 46 ft^3/s Oct. 6, Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	315	834	4330	255	1470	6210	405	338	195	123	81
2	57	962	645	4430	235	1270	4640	2090	338	690	211	73
3	52	1280	557	3090	230	1110	2580	6630	335	514	193	71
4	49	970	511	2060	230	1020	1650	3790	531	365	145	70
5	48	723	450	1420	225	1210	1410	2200	432	291	125	67
6	46	583	400	1100	220	1230	2070	1400	360	252	117	66
7	49	469	360	944	210	1030	1870	1050	389	222	111	63
8	56	397	330	828	205	1550	1510	846	1440	198	107	62
9	94	355	330	715	195	2110	1190	720	908	180	139	60
10	152	359	360	637	190	1820	993	639	620	172	144	61
11	142	562	627	593	210	1560	880	588	492	162	120	57
12	116	758	671	537	673	3070	789	560	773	151	106	62
13	99	644	740	452	1150	2970	712	555	876	143	97	57
14	90	525	1530	484	1020	2030	667	518	740	139	96	55
15	82	448	1960	455	792	1470	677	1500	601	240	100	53
16	118	405	1680	394	703	1180	647	2140	526	181	94	51
17	150	357	1280	390	618	1010	593	1390	461	168	130	49
18	156	325	1000	370	536	877	539	1130	423	145	200	48
19	144	323	826	330	533	775	507	884	385	132	153	48
20	126	335	745	270	561	717	479	715	356	128	123	47
21	121	342	840	280	836	659	454	619	321	126	106	46
22	180	317	2800	285	2130	610	429	571	301	125	96	46
23	232	295	2440	295	6470	590	410	543	290	118	90	50
24	208	282	1650	300	7540	574	396	488	277	142	87	50
25	186	270	1160	295	6790	541	382	447	265	127	86	52
26	171	256	871	280	4500	497	362	414	258	127	83	56
27	154	251	732	260	2760	468	347	392	245	122	79	57
28	149	449	663	265	1850	468	346	422	224	166	73	55
29	224	1280	634	270	---	476	565	437	208	136	71	53
30	422	1120	2320	270	---	1450	459	400	196	119	88	54
31	360	---	4930	260	---	4540	---	364	---	115	92	---
TOTAL	4297	15957	34876	26889	41867	40352	34763	34847	13909	6091	3585	1720
MEAN	139	532	1125	867	1495	1302	1159	1124	464	196	116	57.3
MAX	422	1280	4930	4430	7540	4540	6210	6630	1440	690	211	81
MIN	46	251	330	260	190	468	346	364	196	115	71	46
CFSM	.26	1.00	2.11	1.62	2.80	2.44	2.17	2.10	.87	.37	.22	.11
IN.	.30	1.11	2.43	1.87	2.92	2.81	2.42	2.43	.97	.42	.25	.12

CAL YR 1984	TOTAL	227449	MEAN	621	MAX	5720	MIN	46	CFSM	1.16	IN.	15.84
WTR YR 1985	TOTAL	259153	MEAN	710	MAX	7540	MIN	46	CFSM	1.33	IN.	18.05

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 downstream from confluence of Driftwood River and Flatrock River, 1.3 miles upstream from Haw Creek, and at mile 238.7.

DRAINAGE AREA.--1,707 mi^2.

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

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--38 years, 1,847 ft^3/s, 14.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.---Maximum discharge, 52,300 ft^3/s Mar. 6, 1963, gage height, 16.23 ft; minimum daily, 87 ft^3/s Sept. 29, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1800	14,300	7.53	Apr. 1	2400	22,300	10.39
Feb. 25	0900	*23,500	*10.76	May 3	1200	14,900	7.76

Minimum daily discharge, 247 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	394	1000	2510	14000	809	4650	20500	1530	1170	732	555	704
2	352	2350	1930	13200	779	3920	20700	8370	1190	1330	795	550
3	321	4910	1690	9970	694	3370	12000	14200	1160	1230	730	474
4	296	3700	1930	6080	701	3080	5840	11500	1720	1030	583	431
5	286	2570	1720	4510	776	3540	5120	6460	1470	879	522	402
6	274	1950	1530	3480	772	3580	6480	4240	1220	789	507	386
7	292	1550	1300	2930	713	2930	7040	3130	1240	725	519	386
8	344	1300	1200	2540	665	4390	5430	2530	3590	675	493	350
9	534	1150	1190	2190	665	6450	4230	2170	2340	634	609	369
10	777	1150	1250	1950	707	5480	3400	1940	1730	616	580	399
11	667	1590	1570	1810	887	4930	3000	1780	1440	587	499	407
12	558	2710	1760	1640	2100	7890	2630	1700	2330	562	443	359
13	495	2370	2070	1450	3120	7910	2330	1670	3260	543	415	322
14	457	1810	4740	1460	2840	5470	2160	1640	2630	686	401	306
15	476	1520	6230	1380	2340	4190	2270	3760	2080	968	615	294
16	650	1380	5610	1240	2070	3310	2270	4500	1850	731	1550	283
17	655	1250	4370	1310	1800	2820	2030	3170	1640	633	2880	277
18	625	1130	3290	1260	1620	2430	1860	2650	1490	563	1690	275
19	574	1090	2650	1190	1670	2140	1720	2230	1340	519	1150	268
20	540	1080	2350	832	1790	1960	1610	1910	1230	495	882	261
21	544	1050	3280	895	2470	1810	1510	1700	1120	484	729	255
22	688	965	6870	1120	5530	1670	1420	1610	1040	488	630	247
23	838	903	6780	1140	14400	1610	1350	1530	991	520	569	300
24	776	873	4930	1040	20600	1590	1300	1400	957	527	535	315
25	703	844	3550	1010	23200	1520	1260	1300	939	484	510	391
26	654	805	2640	900	18700	1400	1210	1220	902	507	490	340
27	615	802	2210	888	10500	1330	1160	1170	850	547	466	309
28	643	1510	2010	869	5700	1320	1630	1240	793	625	441	296
29	695	3790	1930	875	---	1390	2010	1710	747	524	417	280
30	851	3390	6630	866	---	5870	1630	1520	711	464	684	286
31	785	---	12800	858	---	13300	---	1300	---	461	1010	---
TOTAL	17359	52492	104520	84883	128618	117250	127100	96780	45170	20558	22899	10522
MEAN	560	1750	3372	2738	4594	3782	4237	3122	1506	663	739	351
MAX	851	4910	12800	14000	23200	13300	20700	14200	3590	1330	2880	704
MIN	274	802	1190	832	665	1320	1160	1170	711	461	401	247
CFSM	.33	1.03	1.98	1.60	2.69	2.22	2.48	1.83	.88	.39	.43	.21
IN.	.38	1.14	2.28	1.85	2.80	2.56	2.77	2.11	.98	.45	.50	.23

CAL YR 1984	TOTAL	698279	MEAN	1908	MAX	17000	MIN	228	CFSM	1.12	IN.	15.22
WTR YR 1985	TOTAL	828151	MEAN	2269	MAX	23200	MIN	247	CFSM	1.33	IN.	18.05

03364200 HAW CREEK NEAR CLIFFORD, IN

LOCATION.--Lat 39°16'04", long 85°51'22", in NW¼SW¼ sec.34, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, on left bank 20 ft downstream from bridge on County Road 450 North, 1.2 miles southeast of Clifford, 5.8 miles northeast of Columbus, and 7.6 miles upstream from mouth.

DRAINAGE AREA.--47.5 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 643.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-7, Jan. 11-22, Feb. 3, 4, 7-9. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--18 years, 50.3 ft^3/s, 14.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,560 ft^3/s May 24, 1968, gage height, 13.9 ft, from floodmark; no flow at times during September and October 1967 due to diversion for irrigation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*).

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	2300	1,250	9.90	Mar. 31	0800	1,400	10.49
Dec. 30	0800	1,400	10.49	May 2	1400	*1,550	*11.03
Feb. 22	2200	1,470	10.77				

Minimum daily discharge, 1.4 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	141	64	509	19	63	237	29	18	16	6.6	4.5
2	1.9	223	50	216	18	55	138	804	26	78	4.7	3.4
3	1.9	97	45	126	17	48	108	290	39	27	4.3	2.9
4	1.8	64	37	100	16	59	98	141	29	18	3.6	2.7
5	1.8	46	35	80	19	120	128	96	26	15	3.3	2.5
6	1.8	34	33	75	18	73	181	69	23	14	3.3	2.3
7	2.0	26	31	70	18	63	108	54	25	11	3.5	2.1
8	6.5	21	29	61	17	180	91	48	30	9.5	3.5	2.0
9	6.3	19	27	52	18	114	73	45	22	8.8	3.3	2.0
10	3.6	48	86	50	24	80	68	42	19	22	3.0	2.2
11	3.5	73	97	44	71	259	63	40	18	18	3.0	2.2
12	3.0	67	76	40	211	328	57	39	31	13	2.7	2.2
13	2.9	48	90	36	134	132	53	39	26	11	2.6	2.2
14	2.7	36	216	34	90	97	51	43	21	10	3.0	2.2
15	2.5	32	135	32	69	74	67	447	19	9.0	8.9	2.0
16	2.5	27	98	31	53	63	63	141	22	8.1	7.8	1.6
17	2.4	22	74	30	44	53	53	86	18	7.2	5.9	1.6
18	2.2	20	59	29	40	44	48	62	19	6.3	4.5	1.6
19	2.3	24	54	28	59	41	45	48	18	5.6	3.9	1.6
20	2.0	33	53	20	117	37	42	40	16	5.1	3.9	1.6
21	4.8	28	508	25	243	33	38	34	14	5.2	3.4	1.5
22	4.9	24	477	27	865	31	37	32	13	5.7	4.9	1.4
23	4.9	23	160	28	644	32	36	32	13	5.4	6.3	1.8
24	4.1	21	112	28	225	32	34	29	13	4.8	3.2	3.0
25	3.8	19	81	26	139	32	33	25	13	4.3	2.6	3.0
26	3.9	17	66	25	107	30	33	24	12	5.0	2.5	2.8
27	3.9	17	59	24	83	29	31	23	11	4.9	2.5	2.8
28	9.7	227	56	23	68	29	31	25	10	4.2	2.4	2.7
29	32	139	55	22	---	33	29	24	9.3	3.8	2.3	2.5
30	15	92	792	21	---	657	29	21	8.9	3.5	8.3	2.4
31	8.4	---	261	21	---	884	---	20	---	3.8	6.4	---
TOTAL	151.3	1708	4016	1933	3446	3805	2103	2892	582.2	363.2	130.1	69.3
MEAN	4.88	56.9	130	62.4	123	123	70.1	93.3	19.4	11.7	4.20	2.31
MAX	32	227	792	509	865	884	237	804	39	78	8.9	4.5
MIN	1.8	17	27	20	16	29	29	20	8.9	3.5	2.3	1.4
CFSM	.10	1.20	2.74	1.31	2.59	2.59	1.48	1.96	.41	.25	.09	.05
IN.	.12	1.34	3.15	1.51	2.70	2.98	1.65	2.26	.46	.28	.10	.05

CAL YR 1984	TOTAL	19322.90	MEAN	52.8	MAX	1100	MIN	.90	CFSM	1.11	IN.	15.13
WTR YR 1985	TOTAL	21199.1	MEAN	58.1	MAX	884	MIN	1.4	CFSM	1.22	IN.	16.60

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 county highway bridge, 0.2 mile north of Hartsville, 5.9 miles upstream from Duck Creek, and at mile 20.0.

DRAINAGE AREA.--91.4 mi^2.

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

REVISED RECORDS.--WSP 1335: 1950. WSP 1725: 1949(M). WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 677.34 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 6-9, and Jan. 11 to Feb. 21. Records good except those below 1 ft^3/s, which are poor.

AVERAGE DISCHARGE.--37 years, 97.2 ft^3/s, 14.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s Jan. 21, 1959, gage height, 14.29 ft; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached an elevation of 702.4 ft National Geodetic Vertical Datum of 1929, from floodmarks, upstream from bridge.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 2	0300	1810	5.60	Feb. 23	0200	*3230	*7.74
Dec. 21	2400	1870	5.70	Mar. 31	0900	1870	5.70
Dec. 30	1400	2290	6.36	May 2	2100	2810	7.14
Jan. 1	1900	1320	4.77	May 15	1100	1470	5.03

Minimum daily discharge, 0.03 ft^3/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	520	192	1010	26	120	530	40	35	17	8.1	2.7
2	7.0	1100	148	609	25	103	293	1800	44	248	9.0	1.8
3	6.6	414	137	334	24	85	203	784	43	97	10	1.2
4	5.3	289	110	244	22	115	173	330	138	37	6.1	.83
5	4.1	330	97	180	23	297	213	199	85	22	5.0	.59
6	3.3	214	80	148	23	166	428	139	49	17	4.5	.43
7	4.2	158	67	135	24	128	239	107	147	14	4.5	.34
8	26	119	69	112	23	448	207	82	260	12	8.0	.27
9	49	103	73	90	22	297	158	67	118	11	7.9	.21
10	25	266	255	85	24	187	122	60	69	37	6.0	.18
11	14	360	339	70	100	427	107	56	52	12	4.4	.17
12	9.6	276	239	55	400	860	85	57	68	9.2	3.4	.15
13	7.4	191	268	48	250	334	74	51	66	8.6	2.6	.13
14	6.6	143	527	40	150	209	71	57	54	42	2.0	.11
15	6.0	122	384	38	110	153	94	838	44	24	9.9	.09
16	18	100	270	36	90	125	79	417	43	12	8.7	.08
17	26	79	206	34	75	110	62	372	35	8.4	6.0	.06
18	19	76	163	32	70	91	55	205	34	6.5	4.6	.05
19	14	82	148	31	62	82	49	139	29	5.5	4.9	.03
20	14	97	145	25	100	78	44	103	24	5.3	3.6	.06
21	28	82	789	27	250	68	40	83	22	5.6	2.5	.15
22	60	66	1170	28	1900	65	37	72	27	6.5	2.0	.16
23	37	64	426	28	2210	65	36	83	35	6.0	1.6	.19
24	27	57	288	27	745	62	34	61	27	5.5	1.4	.17
25	23	51	197	26	403	55	33	51	22	5.3	1.3	.18
26	21	46	149	25	269	47	30	46	20	9.8	1.2	.18
27	20	51	131	24	191	48	30	47	18	13	1.1	.15
28	36	589	120	24	138	50	37	106	17	9.8	.83	.14
29	515	446	128	25	---	59	42	65	15	6.4	.60	.13
30	285	278	1660	26	---	907	33	45	14	4.6	6.0	.13
31	170	---	694	26	---	1490	---	39	---	6.8	5.5	---
TOTAL	1494.1	6769	9669	3642	7749	7331	3638	6601	1654	724.8	143.23	11.06
MEAN	48.2	226	312	117	277	236	121	213	55.1	23.4	4.62	.37
MAX	515	1100	1660	1010	2210	1490	530	1800	260	248	10	2.7
MIN	3.3	46	67	24	22	47	30	39	14	4.6	.60	.03
CFSM	.53	2.47	3.41	1.28	3.03	2.58	1.32	2.33	.60	.26	.05	.00
IN.	.61	2.75	3.94	1.48	3.15	2.98	1.48	2.69	.67	.29	.06	.00

CAL YR 1984	TOTAL	44101.70	MEAN	120	MAX	1870	MIN	.20	CFSM	1.31	IN.	17.95
WTR YR 1985	TOTAL	49426.19	MEAN	135	MAX	2210	MIN	.03	CFSM	1.48	IN.	20.12

03365000 SAND CREEK NEAR BREWERSVILLE, IN

LOCATION.--Lat 39°05'03", long 85°39'32", in NW¼NE¼ sec.5, T.7 N., R.8 E., Jennings County, Hydrologic Unit 05120206, on left bank at downstream side of county highway bridge, 2.5 miles west of Brewersville, 5.7 miles upstream from Wyaloosing Creek, and 16.0 miles upstream from mouth.

DRAINAGE AREA.--155 mi^2.

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 above 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 upstream at datum approximately 8 ft higher.

REMARKS.--Estimated daily discharges: Dec. 6-9, and Jan. 10 to Feb. 20. Records good.

AVERAGE DISCHARGE.--37 years, 173 ft^3/s, 15.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,900 ft^3/s Jan. 21, 1959, gage height, 21.70 ft inside, 22.20 ft outside, from rating curve extended above 6,500 ft^3/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 discharges greater than base discharge of 2,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 2	0100	3670	9.90	Feb. 12	0600	ice	9.23
Dec. 21	2200	3970	10.35	Feb. 22	2200	4740	11.46
Dec. 30	1000	4440	11.04	Mar. 30	0600	3860	10.18
Jan. 1	1700	4180	10.66	Mar. 30	2200	*5640	*12.56

Minimum daily discharge, 3.4 ft^3/s Sept. 16, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	533	212	2340	45	165	711	48	37	18	310	35
2	12	1810	163	945	43	160	358	940	76	101	48	20
3	10	424	152	409	42	136	251	719	114	56	24	15
4	9.1	671	132	333	40	232	205	268	69	29	16	11
5	9.3	619	113	259	40	692	227	172	51	94	14	9.0
6	8.9	262	95	241	40	274	597	128	46	40	13	7.6
7	37	175	85	202	41	203	352	101	37	22	117	7.1
8	180	135	90	175	41	485	329	82	70	16	224	6.7
9	143	118	100	141	39	369	227	70	58	14	71	6.4
10	87	442	781	120	40	247	189	61	39	103	38	5.3
11	51	717	535	100	190	903	194	57	38	125	25	4.7
12	34	333	307	88	1100	1200	166	53	112	39	18	4.2
13	26	202	486	78	500	415	149	67	81	25	15	6.4
14	23	153	1040	70	300	275	165	67	56	20	12	4.9
15	21	131	523	65	200	215	425	1180	46	17	183	3.8
16	28	117	324	63	160	169	217	418	144	16	186	3.4
17	29	95	245	60	130	149	158	370	61	13	62	3.6
18	31	94	194	57	120	128	127	204	45	11	31	3.8
19	24	162	182	55	190	113	114	141	37	9.5	21	4.3
20	20	151	201	50	280	107	101	105	28	8.6	17	4.0
21	21	111	1960	45	800	97	91	85	22	8.4	13	3.4
22	31	92	1680	49	3080	90	83	76	24	11	12	4.2
23	46	83	490	48	2400	89	76	72	22	20	10	4.1
24	40	80	311	46	811	90	72	63	21	11	13	6.6
25	38	74	225	44	436	85	71	51	23	8.4	20	5.1
26	38	69	170	43	295	75	64	43	16	82	28	5.8
27	36	74	154	42	235	71	59	40	13	44	16	9.9
28	67	1380	144	41	188	74	54	361	10	23	11	7.3
29	665	586	142	44	---	111	51	108	8.8	13	9.1	5.4
30	255	306	2600	45	---	3590	46	62	7.6	10	246	8.6
31	145	---	839	46	---	2520	---	46	---	9.3	102	---
TOTAL	2180.3	10199	14675	6344	11826	13529	5929	6258	1412.4	1017.2	1925.1	226.6
MEAN	70.3	340	473	205	422	436	198	202	47.1	32.8	62.1	7.55
MAX	665	1810	2600	2340	3080	3590	711	1180	144	125	310	35
MIN	8.9	69	85	41	39	71	46	40	7.6	8.4	9.1	3.4
CFSM	.45	2.19	3.05	1.32	2.72	2.81	1.28	1.30	.30	.21	.40	.05
IN.	.52	2.45	3.52	1.52	2.84	3.25	1.42	1.50	.34	.24	.46	.05

CAL YR 1984	TOTAL	76116.7	MEAN	208	MAX	3490	MIN	2.4	CFSM	1.34	IN.	18.27
WTR YR 1985	TOTAL	75521.6	MEAN	207	MAX	3590	MIN	3.4	CFSM	1.34	IN.	18.13

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW¼NE¼ sec.7, T.6 N., R.6 E., Jackson County, Hydrologic Unit 05120206, on left bank 1,700 ft downstream from highway bridge, 1 mile north of Seymour, 9.5 miles downstream from Sand Creek, and at mile 214.6.

DRAINAGE AREA.--2,341 mi^2.

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 above National Geodetic Vertical Datum of 1929. Oct. 1, 1927 to July 2, 1931, nonrecording gage 1,700 ft upstream at datum 7.61 ft higher. July 3, 1931 to July 16, 1934, nonrecording gage at site 100 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--58 years, 2,462 ft^3/s, 14.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,500 ft^3/s Jan. 5, 1949, gage height, 19.67 ft; minimum daily, 86 ft^3/s Sept. 28, 30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 21.0 ft, from information by Corps of Engineers and Indiana Department of Highways, discharge, 120,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 22	1800	14,900	14.65	Mar. 13	1000	12,500	13.97
Jan. 2	0600	28,200	16.82	Apr. 2	2100	28,200	16.82
Feb. 26	0100	*29,600	*16.99	May 3	2400	21,400	15.87

Minimum daily discharge, 360 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588	1370	3810	21400	1200	7320	26300	1820	1740	1030	1130	980
2	535	6310	2960	25800	1140	5470	27300	3700	1680	1280	909	772
3	495	6590	2480	18000	1050	4480	26200	15100	1850	1830	897	661
4	462	5700	2370	12400	1090	3960	15200	19100	1960	1520	768	602
5	437	4850	2350	8260	1100	5570	8420	13200	2120	1300	681	564
6	422	3380	2120	5800	1080	5290	7700	7930	1840	1200	640	538
7	435	2600	1870	4450	1040	4220	9740	4890	1680	1060	861	512
8	624	2130	1680	3800	980	4420	9850	3800	2620	982	830	497
9	891	1850	1660	3280	947	7840	7630	3230	3340	927	728	480
10	961	1860	2260	2890	972	8560	5360	2840	2460	893	736	474
11	944	2960	3540	2660	1200	7190	4330	2580	2020	993	661	506
12	826	3400	2930	2440	5230	10600	3900	2410	2050	907	603	490
13	731	3400	2880	2200	5340	12300	3440	2330	3280	837	566	472
14	675	2780	5190	2090	4560	9940	3140	2320	3280	794	538	443
15	639	2320	7830	2040	3490	6860	3400	5360	2720	983	580	418
16	695	2060	8160	1860	2810	4760	3590	8710	2470	995	1130	409
17	796	1870	6640	1820	2580	3870	3140	6220	2280	861	2200	397
18	803	1710	4650	1840	2350	3350	2800	4470	1990	788	2220	388
19	778	1720	3680	1770	2480	3000	2560	3580	1810	732	1470	378
20	726	1800	3270	1320	2860	2800	2370	2990	1660	690	1130	372
21	735	1690	4470	1150	4140	2590	2210	2590	1530	670	945	366
22	789	1560	12700	1320	7390	2400	2070	2350	1440	654	829	360
23	957	1450	12900	1480	19900	2230	1950	2240	1370	651	750	361
24	999	1380	9500	1530	26200	2140	1850	2120	1330	667	706	395
25	940	1330	6170	1520	28200	2080	1780	1950	1330	644	665	387
26	900	1270	4150	1390	28600	1970	1720	1820	1260	676	636	435
27	861	1230	3360	1330	21800	1850	1640	1730	1210	745	620	421
28	858	3270	2970	1290	11500	1790	1720	2490	1140	719	591	389
29	2650	5560	2770	1260	---	1780	2020	2290	1090	721	566	375
30	2220	4990	6670	1240	---	3930	2060	2200	1030	641	715	369
31	1590	---	16900	1230	---	19000	---	1920	---	604	1200	---
TOTAL	26962	84390	154890	140860	191229	163560	195390	140280	57580	27994	27501	14211
MEAN	870	2813	4996	4544	6830	5276	6513	4525	1919	903	887	474
MAX	2650	6590	16900	25800	28600	19000	27300	19100	3340	1830	2220	980
MIN	422	1230	1660	1150	947	1780	1640	1730	1030	604	538	360
CFSM	.37	1.20	2.13	1.94	2.92	2.25	2.78	1.93	.82	.39	.38	.20
IN.	.43	1.34	2.46	2.24	3.04	2.60	3.10	2.23	.91	.44	.44	.23

CAL YR 1984	TOTAL	1015940	MEAN	2776	MAX	23500	MIN	290	CFSM	1.19	IN.	16.14
WTR YR 1985	TOTAL	1224847	MEAN	3356	MAX	28600	MIN	360	CFSM	1.43	IN.	19.46

03366200 HARBERTS CREEK NEAR MADISON, IN

LOCATION.--Lat 38°46'55", long 85°29'08", in SW¼SE¼ sec.14, T.4 N., R.9 E., Jefferson County, Hydrologic Unit 05120207, attached to left downstream wingwall of bridge on County Road 533 West, 0.2 mile west of Smyrna, 3.7 miles upstream from Big Creek, and 4 miles northwest of Madison.

DRAINAGE AREA.--9.31 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 725.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 11 to Feb. 20. Records good except those for period of estimated daily discharges and those below 0.5 ft^3/s, which are fair.

AVERAGE DISCHARGE.--17 years, 13.5 ft^3/s, 19.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,540 ft^3/s Apr. 2, 1970, gage height, 7.89 ft; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1900	721	6.03	Mar. 30	1500	857	6.37
Mar. 29	2400	*1,200	*7.16				

Minimum daily discharge, no flow Oct. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	136	10	124	2.2	7.3	40	2.1	.78	7.3	81	1.5
2	.02	66	7.9	35	2.1	7.0	22	43	1.5	3.5	9.1	.85
3	.00	15	7.9	18	2.0	5.7	14	24	2.9	6.3	2.7	.61
4	.00	53	5.9	30	1.9	10	12	7.1	2.6	16	1.5	.48
5	.00	26	6.2	22	1.9	21	25	3.5	2.8	2.3	1.4	.47
6	.00	11	5.3	20	2.0	8.9	41	2.4	1.5	1.1	1.3	.53
7	3.5	7.2	6.8	16	2.1	6.8	24	1.8	8.3	.66	.96	.41
8	6.0	5.4	7.1	14	2.0	26	17	1.4	3.5	.45	.78	.38
9	.89	6.9	10	9.3	1.9	21	10	1.2	1.5	.34	.59	.37
10	.49	177	124	7.3	2.0	11	6.8	1.1	1.3	.36	.45	.29
11	.47	51	32	6.3	14	153	11	.95	17	.25	.33	.28
12	.43	19	20	5.2	80	79	8.0	.91	38	.27	.26	.23
13	.36	11	33	4.5	35	21	5.8	.98	16	.26	.21	.12
14	.38	8.1	40	4.0	20	14	5.6	1.2	6.3	.30	.15	.06
15	.49	7.4	21	3.4	14	10	33	30	3.3	.22	.24	.05
16	.57	7.0	15	3.2	10	7.8	19	11	4.9	.15	.55	.04
17	.52	4.8	11	3.1	8.0	6.3	11	14	2.8	.09	.33	.04
18	.44	30	9.2	2.9	9.0	4.9	7.9	6.7	2.5	.07	.18	.03
19	.37	40	16	2.5	20	4.2	6.2	3.2	1.6	.06	.11	.04
20	.35	13	14	1.7	50	3.7	4.7	1.9	1.1	.06	.65	.03
21	14	8.3	398	2.3	122	3.3	3.7	1.5	.79	.30	.47	.02
22	20	6.1	103	2.4	268	3.4	3.1	1.5	.69	.56	.21	.01
23	8.6	5.2	26	2.4	83	3.8	2.6	1.6	.61	.30	.12	.03
24	2.6	4.6	16	2.3	32	3.7	2.3	1.4	.98	.11	.92	.22
25	2.2	4.0	11	2.2	18	4.6	2.0	1.1	.78	.06	.65	.18
26	3.2	3.6	8.4	2.1	13	3.6	1.7	.89	.58	4.9	.28	.09
27	2.0	12	7.6	2.0	10	3.2	1.5	.86	.40	2.6	.16	.06
28	4.1	193	6.8	2.0	8.0	3.3	1.4	1.8	.29	.41	.10	.05
29	26	29	6.9	2.1	---	108	1.1	1.2	.28	.15	.08	.03
30	7.0	16	202	2.2	---	686	1.0	.88	.22	13	41	.04
31	3.8	---	46	2.2	---	135	---	.80	---	12	5.1	---
TOTAL	108.79	976.6	1234.0	356.6	834.1	1386.5	344.4	171.97	125.80	74.43	151.88	7.54
MEAN	3.51	32.6	39.8	11.5	29.8	44.7	11.5	5.55	4.19	2.40	4.90	.25
MAX	26	193	398	124	268	686	41	43	38	16	81	1.5
MIN	.00	3.6	5.3	1.7	1.9	3.2	1.0	.80	.22	.06	.08	.01
CFSM	.38	3.50	4.27	1.24	3.20	4.80	1.24	.60	.45	.26	.53	.03
IN.	.43	3.90	4.93	1.42	3.33	5.54	1.38	.69	.50	.30	.61	.03

CAL YR 1984	TOTAL	6096.21	MEAN	16.7	MAX	398	MIN	.00	CFSM	1.79	IN.	24.36
WTR YR 1985	TOTAL	5772.61	MEAN	15.8	MAX	686	MIN	.00	CFSM	1.70	IN.	23.07

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 northwest of Deputy, 1.9 miles upstream from Coffee Creek, 2.4 miles downstream from confluence of Graham Creek and Big Creek, and at mile 50.0.

DRAINAGE AREA.--293 mi^2.

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 540.00 ft above National Geodetic Vertical Datum of 1929. Prior to June 22, 1955, nonrecording gage at same site. Prior to Aug. 25, 1983, at datum 1.17 ft higher.

REMARKS.--Estimated daily discharges: Dec. 5-8 and Jan. 10 to Feb. 21. Records fair except those for Dec. 5-8, and Jan. 10 to Feb. 21, which are poor.

AVERAGE DISCHARGE.--37 years (water years 1949 to current year), 352 ft^3/s, 16.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,200 ft^3/s Jan. 21, 1959, from rating curve extended above 25,000 ft^3/s on basis of contracted-opening measurement of peak flow, gage height, 34.3 ft, present datum, from floodmarks; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,500 ft^3/s and maximum (*).

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 22	0300	13,800	23.52	Feb. 23	0200	8,220	20.36
Dec. 30	1800	8,200	20.35	Mar. 30	2000	*17,100	*24.99

Minimum daily discharge, 1.4 ft^3/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	518	384	2670	73	255	1940	65	36	32	1620	178
2	12	3280	267	2310	69	241	779	158	34	75	691	97
3	9.5	795	222	802	69	223	511	381	37	83	205	66
4	7.3	620	200	685	69	217	395	239	55	114	114	49
5	6.5	1350	170	727	72	806	351	133	113	105	83	39
6	6.0	477	150	654	70	508	787	101	86	66	73	31
7	6.8	254	142	546	67	292	624	83	71	45	100	27
8	62	177	140	447	66	373	557	71	66	34	85	24
9	190	147	156	346	64	920	422	63	54	28	57	18
10	100	1810	1530	255	61	472	329	56	42	24	48	14
11	65	2100	1830	230	300	1010	311	51	74	20	41	11
12	49	908	663	160	5000	3360	335	53	787	19	37	9.1
13	35	425	655	150	2200	1020	290	52	312	16	33	7.1
14	28	276	1250	145	1300	547	255	56	179	15	29	5.7
15	37	218	1010	120	600	382	626	512	112	15	30	4.9
16	49	183	530	115	450	290	487	546	94	13	32	4.1
17	37	152	384	100	350	250	322	321	80	12	55	4.1
18	33	176	294	90	300	213	250	290	67	11	48	3.7
19	27	792	287	82	450	185	211	171	60	9.7	38	3.5
20	22	629	475	70	900	168	185	115	51	9.3	41	3.3
21	21	332	4030	78	1500	153	163	84	45	11	34	3.0
22	60	219	8930	80	4680	141	145	68	42	13	30	2.3
23	141	173	1540	81	5270	141	129	60	40	11	27	2.0
24	137	149	680	78	1580	146	117	55	47	9.8	27	2.1
25	100	135	447	76	880	168	107	50	86	10	33	2.1
26	87	126	315	72	534	176	96	45	109	16	37	1.9
27	127	113	260	71	390	157	89	41	68	388	47	1.7
28	134	3330	233	71	298	141	82	43	44	163	43	1.4
29	202	2010	215	72	---	199	74	42	33	72	35	1.4
30	291	633	5150	72	---	13600	66	40	28	52	1140	1.8
31	167	---	2830	72	---	9090	---	38	---	104	366	---
TOTAL	2266.1	22507	35369	11527	27662	35844	11035	4083	2952	1595.8	5279	619.2
MEAN	73.1	750	1141	372	988	1156	368	132	98.4	51.5	170	20.6
MAX	291	3330	8930	2670	5270	13600	1940	546	787	388	1620	178
MIN	6.0	113	140	70	61	141	66	38	28	9.3	27	1.4
CFSM	.25	2.56	3.89	1.27	3.37	3.95	1.26	.45	.34	.18	.58	.07
IN.	.29	2.86	4.49	1.46	3.51	4.55	1.40	.52	.37	.20	.67	.08

CAL YR 1984	TOTAL	151709.6	MEAN	415	MAX	9020	MIN	2.6	CFSM	1.42	IN.	19.26
WTR YR 1985	TOTAL	160739.1	MEAN	440	MAX	13600	MIN	1.4	CFSM	1.50	IN.	20.41

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 northwest of Nebraska, 2.9 miles northeast of Butlerville, and 3.6 miles upstream from Brush Creek Dam.

DRAINAGE AREA.--11.4 mi^2.

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

REMARKS.--Estimated daily discharges: Oct. 1-7, 12-28, and Jan. 10 to Feb. 16. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--30 years, 13.2 ft^3/s, 15.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,360 ft^3/s June 10, 1981, gage height, 12.99 ft, from rating curve extended above 550 ft^3/s on basis of slope-area measurement of peak flow and a contracted-opening measurement at gage height, 10.20 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 950 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	0345	1,120	7.39	Mar. 30	0015	*1,120	*7.41

Minimum daily discharge, no flow on many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	70	8.1	202	2.9	6.5	32	2.6	.79	.90	20	.93
2	.90	29	6.5	32	2.8	6.5	16	60	4.6	.73	1.4	.45
3	.80	7.7	6.7	17	2.7	5.8	11	17	10	.89	.52	.24
4	.70	76	5.2	23	2.6	78	9.8	8.1	3.2	.64	.31	.20
5	.60	17	4.3	17	2.7	38	35	5.2	2.3	.66	.31	.20
6	.56	7.1	4.5	19	2.7	11	30	3.7	1.8	.75	.35	.17
7	10	4.5	3.8	13	2.6	8.7	34	2.8	2.2	.58	.36	.08
8	18	3.4	4.4	11	2.6	49	20	2.4	1.8	.46	.45	.01
9	5.5	4.1	6.0	8.2	2.5	19	12	2.1	1.3	.31	.27	.00
10	2.4	50	99	6.7	3.0	11	10	1.9	1.2	.27	.13	.00
11	1.8	45	21	5.8	60	173	15	1.8	3.5	.23	.04	.00
12	1.6	11	14	5.4	100	53	10	1.7	6.8	.20	.00	.00
13	1.4	6.7	39	5.0	38	16	8.4	2.2	2.9	.15	.00	.00
14	1.2	4.7	67	4.5	26	11	8.5	2.1	2.0	.13	.00	.00
15	1.5	4.2	20	4.4	19	8.0	15	31	1.7	.12	21	.00
16	1.8	3.4	14	4.0	12	6.9	9.8	4.7	2.2	.06	3.8	.00
17	2.5	2.5	9.6	3.8	10	6.2	7.6	3.3	1.9	.02	.95	.00
18	1.5	3.9	7.9	3.7	11	5.5	6.0	2.4	1.7	.00	.46	.00
19	1.3	16	11	3.6	23	5.1	5.2	1.9	1.3	.00	.29	.00
20	1.1	7.1	9.2	2.5	57	4.6	4.5	1.7	1.0	.00	.30	.00
21	2.0	4.2	424	2.7	146	4.1	4.0	1.6	.85	2.3	.21	.00
22	4.5	3.3	66	3.2	357	3.9	3.5	1.7	.99	3.0	.11	.00
23	4.0	3.0	20	3.1	83	4.0	3.2	1.6	.86	.37	.04	.00
24	2.3	2.6	13	2.9	31	5.3	3.1	1.3	.75	.08	1.9	.00
25	2.5	2.4	9.1	2.8	16	4.5	2.8	1.1	.73	.00	1.1	.00
26	4.0	2.2	7.1	2.7	11	3.8	2.5	.93	.66	7.5	.53	.00
27	3.0	5.0	6.8	2.6	8.5	3.5	2.3	.88	.60	1.7	.30	.00
28	8.0	172	6.5	2.7	6.8	3.5	2.1	5.3	.55	.35	.19	.00
29	14	21	6.3	2.8	---	81	1.9	1.7	.47	.12	.10	.00
30	4.8	12	353	2.9	---	607	1.8	1.1	.39	.01	55	.00
31	2.7	---	37	3.0	---	167	---	.93	---	.06	3.0	---
TOTAL	108.06	601.0	1310.0	423.0	1042.4	1410.4	327.0	176.74	61.04	22.59	113.42	2.28
MEAN	3.49	20.0	42.3	13.6	37.2	45.5	10.9	5.70	2.03	.73	3.66	.08
MAX	18	172	424	202	357	607	35	60	10	7.5	55	.93
MIN	.56	2.2	3.8	2.5	2.5	3.5	1.8	.88	.39	.00	.00	.00
CFSM	.31	1.75	3.71	1.19	3.26	3.99	.96	.50	.18	.06	.32	.01
IN.	.35	1.96	4.27	1.38	3.40	4.60	1.07	.58	.20	.07	.37	.01

CAL YR 1984	TOTAL	5484.50	MEAN	15.0	MAX	424	MIN	.00	CFSM	1.32	IN.	17.90
WTR YR 1985	TOTAL	5597.93	MEAN	15.3	MAX	607	MIN	.00	CFSM	1.34	IN.	18.27

03369000 VERNON FORK MUSCATATUCK RIVER NEAR BUTLERVILLE, IN

LOCATION.--Lat 39°02'55", long 85°32'40", in NW¼SE¼ sec.17, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on left bank 0.3 mile downstream from Muscatatuck State School dam, 1.1 miles downstream from Brush Creek, 2 miles northwest of Butlerville, and at mile 50.6.

DRAINAGE AREA.--85.9 mi^2.

PERIOD OF RECORD.--February 1942 to current year. Prior to October 1960, published as North Fork of Vernon Fork near Butlerville, and as Vernon Fork near Butlerville, October 1960 to September 1979.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 669.40 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1942, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 6-8, and Jan. 10 to Feb. 20. Records good. Water supply for the Muscatatuck State School is diverted and the sewage effluent returned above station. Flow regulated by Brush Creek Reservoir.

AVERAGE DISCHARGE.--43 years, 94.3 ft^3/s, 14.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft^3/s Jan. 21, 1959, gage height, 25.41 ft, from rating curve extended above 10,000 ft^3/s on basis of slope-area measurement at gage height 25.41 ft; no flow at times during 1944, 1945, 1949, and 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	0700	4,100	11.02	Feb. 22	2000	4,020	10.90
Jan. 1	1400	4,020	10.90	Mar. 30	2200	*4,850	*12.01

Minimum daily discharge, 0.97 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	220	79	1520	19	73	293	15	15	6.3	79	25
2	4.1	488	59	355	18	71	143	480	63	22	20	14
3	3.6	136	57	168	17	61	90	179	80	11	7.9	8.8
4	3.1	410	48	156	16	172	79	81	45	7.5	4.9	6.2
5	2.8	239	40	123	16	444	131	52	30	5.7	4.3	4.8
6	2.9	130	35	132	17	153	312	40	24	4.5	3.7	3.7
7	16	75	31	100	16	111	207	31	20	4.0	17	3.1
8	128	40	33	83	16	216	164	26	24	3.5	47	2.6
9	46	36	37	60	16	154	101	21	18	3.1	9.2	2.5
10	26	170	461	50	17	110	87	17	13	82	4.6	2.1
11	15	276	211	44	100	801	106	15	15	36	3.0	1.7
12	11	130	127	38	600	633	84	14	55	10	2.4	1.6
13	9.0	81	249	33	250	180	69	14	40	6.2	2.1	1.5
14	8.2	59	504	30	150	120	62	90	29	9.6	1.7	1.2
15	8.0	50	188	28	100	85	93	531	22	9.1	208	1.4
16	7.9	44	129	26	80	66	71	114	176	4.4	113	1.4
17	8.1	36	95	25	70	56	55	55	42	3.2	29	1.4
18	7.1	37	72	25	64	49	47	43	37	2.9	14	1.4
19	7.3	75	77	24	100	43	42	34	23	2.5	8.3	1.6
20	7.1	82	87	19	150	39	37	27	16	2.4	6.9	1.6
21	7.5	50	1830	21	594	35	31	22	12	2.3	4.8	1.3
22	8.8	39	728	21	2480	32	28	22	16	9.4	3.5	1.4
23	9.9	35	179	20	1080	32	25	20	21	5.7	2.8	2.0
24	10	33	120	19	321	34	23	18	10	3.3	43	2.8
25	11	30	85	19	176	32	23	14	11	2.5	55	2.3
26	15	28	63	18	127	28	20	12	7.2	18	15	42
27	14	30	58	17	101	27	18	11	5.6	12	8.2	35
28	25	913	53	17	80	27	16	214	4.7	4.5	5.4	1.1
29	208	216	57	18	---	64	14	44	4.0	3.0	3.9	.97
30	68	117	1910	19	---	3000	12	26	3.6	2.6	134	1.8
31	42	---	322	19	---	1410	---	20	---	2.9	61	---
TOTAL	745.7	4305	8024	3247	6791	8358	2483	2302	882.1	302.1	922.6	178.27
MEAN	24.1	144	259	105	243	270	82.8	74.3	29.4	9.75	29.8	5.94
MAX	208	913	1910	1520	2480	3000	312	531	176	82	208	42
MIN	2.8	28	31	17	16	27	12	11	3.6	2.3	1.7	.97
CFSM	.28	1.68	3.02	1.22	2.83	3.14	.96	.86	.34	.11	.35	.07
IN.	.32	1.86	3.47	1.41	2.94	3.62	1.08	1.00	.38	.13	.40	.08

CAL YR 1984	TOTAL	35892.03	MEAN	98.1	MAX	1910	MIN	.72	CFSM	1.14	IN.	15.54
WTR YR 1985	TOTAL	38540.77	MEAN	106	MAX	3000	MIN	.97	CFSM	1.23	IN.	16.69

03369500 VERNON FORK MUSCATATUCK RIVER 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 southwest of Vernon, 3.1 miles downstream from Otter Creek, and at mile 36.4.

DRAINAGE AREA.--198 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1979, published as Vernon Fork at Vernon.

REVISED RECORDS.--WSP 1335: 1940, 1953. WSP 1909: 1952-53. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 585.00 ft above 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. Prior to Aug. 8, 1983, datum 2.30 ft higher.

REMARKS.--Estimated daily discharges: Dec. 6-8, Jan. 11 to Feb. 20, July 17-23, and Sept. 15-23, 30. Records good except those for periods of July 17-23 and Sept. 15-23, 30, which are poor. 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.--46 years, 223 ft^3/s, 15.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,800 ft^3/s Jan. 21, 1959, from rating curve extended above 24,000 ft^3/s on basis of slope-area measurement of peak flow, gage height, 35.13 ft, present datum, from high-water mark. No flow at times in 1940, 1943-44.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	2200	7,680	14.73	Feb. 22	2300	7,090	14.13
Dec. 30	1100	7,650	14.70	Mar. 30	0700	7,110	14.15
Jan. 1	1800	6,260	13.25	Mar. 30	2100	*8,790	*15.81

Minimum daily discharge, 4.0 ft^3/s Sept. 15, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	465	239	3000	50	168	944	44	32	18	333	78
2	18	1660	173	1180	48	164	487	547	43	30	101	41
3	14	390	152	479	47	141	311	523	164	39	36	27
4	13	967	140	425	46	197	239	188	137	34	20	21
5	12	903	113	351	47	1190	284	114	73	18	16	16
6	10	351	97	338	48	362	792	86	56	15	15	14
7	30	227	84	258	47	260	500	69	46	11	45	12
8	491	125	85	209	46	524	512	59	42	9.7	56	9.5
9	241	113	104	156	44	498	298	49	43	8.7	41	7.7
10	111	652	1170	128	45	286	237	44	33	7.5	19	7.2
11	63	1120	750	110	270	1500	270	39	29	103	13	6.2
12	43	483	372	96	1600	1900	244	37	86	37	9.3	5.2
13	34	265	568	86	700	516	190	38	97	19	7.2	4.5
14	29	180	1240	79	450	342	170	118	63	13	5.1	4.2
15	25	146	616	74	330	248	365	1070	47	12	295	4.0
16	23	127	369	70	220	190	234	345	211	13	479	4.3
17	27	102	271	67	190	159	169	160	108	9.0	95	4.3
18	27	104	206	66	170	133	135	107	68	7.7	42	4.4
19	21	286	213	63	250	115	117	80	53	6.8	25	4.9
20	19	289	269	50	450	106	102	62	37	6.4	19	5.0
21	21	161	3640	55	1120	95	88	50	28	6.0	16	4.2
22	33	118	2850	56	4490	86	78	47	23	22	12	4.3
23	46	100	622	55	2990	86	71	46	32	14	9.3	4.8
24	46	91	374	52	946	141	65	41	29	8.9	94	5.6
25	40	83	257	49	513	123	62	35	30	5.7	203	7.0
26	54	76	182	47	333	101	57	29	22	73	70	6.9
27	64	74	159	45	253	89	51	27	19	73	34	33
28	52	2390	145	47	192	86	47	236	14	25	22	22
29	447	799	143	49	---	271	44	123	11	14	16	5.7
30	220	363	4150	51	---	6410	39	57	9.2	9.2	233	4.0
31	120	---	1100	52	---	4250	---	41	---	8.4	264	---
TOTAL	2417	13210	20853	7843	15935	20737	7202	4511	1685.2	677.0	2644.9	377.9
MEAN	78.0	440	673	253	569	669	240	146	56.2	21.8	85.3	12.6
MAX	491	2390	4150	3000	4490	6410	944	1070	211	103	479	78
MIN	10	74	84	45	44	86	39	27	9.2	5.7	5.1	4.0
CFSM	.39	2.22	3.40	1.28	2.87	3.38	1.21	.74	.28	.11	.43	.06
IN.	.45	2.48	3.92	1.47	2.99	3.90	1.35	.85	.32	.13	.50	.07

CAL YR 1984	TOTAL	99158.6	MEAN	271	MAX	4550	MIN	1.9	CFSM	1.37	IN.	18.63
WTR YR 1985	TOTAL	98093.0	MEAN	269	MAX	6410	MIN	4.0	CFSM	1.36	IN.	18.43

03371500 EAST FORK WHITE RIVER NEAR BEDFORD, IN

LOCATION.--Lat 38°46'10", long 86°24'30", in SW¼NE¼ sec.21, T.4 N., R.1 E., Lawrence County, Hydrologic Unit 05120208, on downstream side of center pier of bridge on county road, 0.4 mile upstream from Mill Creek, 2.9 miles downstream from Sugar Creek, 3.9 miles northeast of Mitchell, 7.8 miles southeast of Bedford, and at mile 153.3.

DRAINAGE AREA.--3,861 mi^2.

PERIOD OF RECORD.--May 1939 to current year (high-water records only October 1943 to September 1957).

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-73-1: 1972.

GAGE.--Water-stage recorder. Datum of gage is 473.59 ft above 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 downstream at datum 4.39 ft lower.

REMARKS.--Estimated daily discharges: Jan. 13 to Feb. 17. Records good, except those for periods of no gage-height record, Jan. 13 to Feb. 17, which are fair.

AVERAGE DISCHARGE.--32 years (1939-43, 1957 to current year), 3,976 ft^3/s, 13.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,700 ft^3/s Mar. 12, 1964; maximum gage height, 35.97 ft May 11, 1961; minimum daily discharge, 138 ft^3/s Sept. 7, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 47.5 ft, from floodmark determined by U.S. Army Corps of Engineers, discharge, 155,000 ft^3/s, at former site.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 26	0800	18,300	20.07	Mar. 15	1400	15,700	18.43
Jan. 4	2100	28,000	25.04	Apr. 4	0800	*37,000	*28.60
Feb. 28	0500	31,400	26.47	May 6	1700	14,900	17.82

Minimum daily discharge, 563 ft^3/s Sept. 30.

NOTE.--No gage-height record Jan. 13 to Feb. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	3470	8520	13900	2200	28200	20200	2710	2950	1980	1280	3940
2	929	4690	8540	18300	2100	22200	29500	2880	2630	2300	2650	3450
3	831	5740	7270	22800	2000	14900	35600	4340	2490	2310	3890	2400
4	763	7680	5280	27300	2000	9550	36500	7300	2510	2760	3230	1730
5	712	8320	4180	27300	1900	7740	33900	11100	2750	2800	2450	1370
6	669	7990	3870	24300	1800	7830	28800	14500	3080	2400	2380	1180
7	658	7240	3630	19700	1800	8830	22700	13500	3070	2120	2020	1060
8	663	5490	3220	14700	1900	8580	18200	9480	2800	1880	1730	980
9	761	4040	2900	11300	1800	8040	16000	6340	2670	1650	1950	922
10	1150	3320	2960	8980	1600	8670	14200	4940	3650	1500	1780	895
11	1510	3440	4190	6700	2500	10300	11600	4260	3630	1390	1510	838
12	1470	5150	6370	5500	8000	12100	8770	3850	3340	1320	1340	802
13	1290	6330	7140	4800	9000	12700	7020	3610	3750	1370	1200	792
14	1120	6440	7460	4400	8000	14300	6160	4360	4700	1310	1090	768
15	997	5370	7980	4000	6800	15600	5520	7130	4900	1230	1270	746
16	919	4170	9040	3700	6000	14800	5500	6840	4520	1170	2420	718
17	864	3500	9970	3500	5600	12100	6260	8550	4160	1300	3970	693
18	885	3140	10100	3300	5540	8910	5810	9700	3910	1260	3780	667
19	946	3070	8940	3200	5760	6490	4950	8310	3490	1160	3650	644
20	968	3430	7070	2600	6620	5480	4300	6350	3010	1090	2910	624
21	960	3910	8030	2200	8530	4880	3870	5020	2660	1060	2280	608
22	932	3650	11900	2300	10500	4440	3560	4220	2400	1070	1880	591
23	938	3090	12300	2600	13400	4120	3280	3770	2190	1080	1610	586
24	1000	2680	14100	2600	14900	3960	3060	3430	2120	1010	1430	594
25	1150	2420	17000	2600	19000	3840	2960	3200	2290	973	1440	589
26	1260	2250	18100	2500	25700	3700	2820	2950	2310	1030	1480	592
27	1250	2130	16400	2400	30000	3540	2640	2720	2160	1050	1410	587
28	1240	3070	13300	2400	31100	3350	2490	2920	1930	1090	1310	594
29	1430	5210	10300	2300	---	3230	2350	2990	1770	1270	1170	590
30	2230	7470	10700	2300	---	9470	2440	3390	1620	1450	1100	563
31	3250	---	11600	2200	---	16900	---	3280	---	1540	2590	---
TOTAL	34825	137900	272360	256680	236050	298750	350960	177940	89460	46923	64200	31113
MEAN	1123	4597	8786	8280	8430	9637	11700	5740	2982	1514	2071	1037
MAX	3250	8320	18100	27300	31100	28200	36500	14500	4900	2800	3970	3940
MIN	658	2130	2900	2200	1600	3230	2350	2710	1620	973	1090	563
CFSM	.29	1.19	2.28	2.14	2.18	2.50	3.03	1.49	.77	.39	.54	.27
IN.	.34	1.33	2.62	2.47	2.27	2.88	3.38	1.71	.86	.45	.62	.30

CAL YR 1984	TOTAL	1716572	MEAN	4690	MAX	30500	MIN	456	CFSM	1.21	IN.	16.54
WTR YR 1985	TOTAL	1997161	MEAN	5472	MAX	36500	MIN	563	CFSM	1.42	IN.	19.24

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 west of Leesville, 2.5 miles upstream from Jones Defeat Hollow, and 7 miles above mouth.

DRAINAGE AREA.--24.1 mi^2.

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

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-9, 29, Jan. 12 to Feb. 19, and Mar. 30. Records fair.

AVERAGE DISCHARGE.--15 years, 35.0 ft^3/s, 19.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft^3/s July 21, 1973, gage height, 14.0 ft, from floodmarks, from rating extended above 550 ft^3/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, 1976, 1981, and 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached a stage of 18.1 ft from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1630	1360	6.05	Feb. 22	1500	1000	5.50
Dec. 30	0300	1190	5.80	Mar. 30	1800	*1470	*a 6.20

Minimum daily discharge, 0.58 ft^3/s July 16-20.

a-Estimated

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	241	33	292	8.7	60	166	9.5	3.4	109	188	12
2	2.3	103	27	150	8.3	55	75	155	5.7	39	27	9.5
3	2.0	47	26	80	8.1	48	55	94	6.4	9.9	13	7.4
4	1.7	33	21	66	8.0	56	49	38	7.1	10	10	6.4
5	1.4	25	19	60	8.3	94	55	26	7.8	9.9	174	5.1
6	1.2	19	17	55	8.2	74	88	20	7.8	6.0	60	4.5
7	5.6	16	16	55	7.9	65	91	15	7.1	3.4	35	3.7
8	20	15	15	49	7.5	120	64	12	6.4	2.5	27	3.4
9	9.9	14	17	44	7.0	120	46	9.5	5.7	1.9	20	3.0
10	6.3	31	54	39	8.0	69	37	7.4	5.1	1.2	15	3.0
11	4.9	35	41	35	400	193	32	7.1	4.5	.98	12	2.5
12	4.0	27	37	30	250	152	28	6.4	8.2	.98	9.5	2.1
13	3.5	22	61	23	130	117	26	6.4	6.7	.86	7.8	2.1
14	3.2	19	128	21	90	63	24	14	5.7	.86	6.4	2.1
15	3.2	17	72	19	60	50	24	35	4.5	.76	94	2.1
16	3.4	15	51	17	47	43	22	20	9.1	.58	188	2.1
17	3.8	13	40	15	40	39	16	23	7.1	.58	110	1.7
18	3.9	17	32	14	36	36	14	16	5.4	.58	29	1.7
19	3.8	33	36	12	40	32	11	10	4.5	.58	20	1.4
20	4.9	29	33	8.0	60	29	11	8.6	3.4	.58	16	1.4
21	12	24	476	10	136	28	11	8.6	3.0	59	12	1.2
22	9.2	20	183	11	500	26	9.9	7.8	4.2	14	8.6	1.1
23	7.2	18	81	11	371	25	8.6	7.8	4.0	3.7	7.8	3.0
24	6.1	16	58	10	144	24	7.8	6.7	3.4	2.5	8.6	7.4
25	6.6	14	43	9.7	105	22	7.4	5.1	3.2	1.9	8.6	3.2
26	10	13	37	9.4	91	21	6.7	4.5	3.0	44	7.1	5.7
27	8.0	27	33	9.4	74	21	5.7	4.2	2.5	9.5	5.7	3.0
28	82	207	31	9.4	65	21	5.1	11	2.1	6.7	4.8	2.1
29	76	67	29	9.4	---	24	4.5	7.8	1.7	6.4	4.0	1.7
30	35	44	408	9.3	---	760	4.8	4.2	1.7	20	27	1.4
31	23	---	188	8.8	---	461	---	3.4	---	80	19	---
TOTAL	367.0	1221	2343	1191.4	2719.0	2948	1005.5	604.0	150.4	447.84	1174.9	107.0
MEAN	11.8	40.7	75.6	38.4	97.1	95.1	33.5	19.5	5.01	14.4	37.9	3.57
MAX	82	241	476	292	500	760	166	155	9.1	109	188	12
MIN	1.2	13	15	8.0	7.0	21	4.5	3.4	1.7	.58	4.0	1.1
CFSM	.49	1.69	3.14	1.59	4.03	3.95	1.39	.81	.21	.60	1.57	.15
IN.	.57	1.88	3.62	1.84	4.20	4.55	1.55	.93	.23	.69	1.81	.17

CAL YR 1984	TOTAL	13146.72	MEAN	35.9	MAX	642	MIN	.00	CFSM	1.49	IN.	20.29
WTR YR 1985	TOTAL	14279.04	MEAN	39.1	MAX	760	MIN	.58	CFSM	1.62	IN.	22.04

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN

LOCATION.--Lat 39°10'11", long 86°25'07", in NE¼NW¼ sec.4, T.8 N., R.1 E., Monroe County, Hydrologic Unit 05120208, on downstream side of right pier of bridge on State Highway 46, 0.2 mile downstream from Kerr Creek, 4.0 miles west of Belmont, and 6.1 miles east of Bloomington.

DRAINAGE AREA.--10.9 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 550.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 17 to Feb. 15. Records good except for periods of estimated record, which are fair.

AVERAGE DISCHARGE.--15 years, 14.6 ft^3/s, 18.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s July 13, 1979, gage height, 13.18 ft from rating curve extended above 1,200 ft^3/s on basis of contracted-opening measurements at gage heights of 11.52 ft and 13.18 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharges of 350 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1800	472	7.58	Mar. 30	1200	418	7.30
Dec. 30	0200	608	8.24	Mar. 31	0345	1220	10.33
Feb. 12	----	unknown	unknown	May 2	1000	*1550	*10.92
Feb. 22	1715	664	8.51	Aug. 14	1900	626	8.33
Mar. 29	2330	565	8.04				

Minimum daily discharge, 0.02 ft^3/s, Jul. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	85	12	115	1.9	18	85	22	1.9	.52	34	3.8
2	.15	33	9.1	60	1.9	16	55	667	2.4	.65	5.8	2.6
3	.17	13	16	36	1.8	13	41	83	1.9	.89	3.1	1.9
4	.19	8.4	12	27	1.8	21	36	45	2.3	.59	2.0	1.4
5	.19	5.8	10	19	1.8	30	57	34	2.4	1.2	15	1.1
6	.19	4.1	8.7	17	1.8	23	68	24	1.9	.73	9.4	.96
7	.39	3.0	7.2	14	1.8	29	57	19	3.1	.51	5.4	.73
8	1.4	2.4	6.5	12	1.8	73	49	15	3.0	.49	3.5	.61
9	.51	2.1	5.9	10	1.8	49	39	11	2.0	.41	2.3	.54
10	.16	19	10	9.5	1.9	34	33	9.5	1.5	.92	1.7	.53
11	.13	23	11	8.7	20	128	36	7.9	2.7	.52	1.2	.47
12	.13	13	11	7.5	220	101	31	7.4	6.0	.47	.79	.43
13	.21	8.8	27	6.8	120	45	28	14	4.8	.44	.57	.40
14	.31	6.5	94	6.4	60	29	26	10	3.5	.47	49	.41
15	.35	5.3	41	5.9	38	20	26	14	2.9	.45	43	.46
16	.32	4.3	25	5.6	15	15	23	11	8.9	.31	18	.48
17	.62	3.5	18	5.1	17	12	20	20	7.4	.18	10	.51
18	.80	3.6	14	4.6	18	9.4	18	17	6.4	.15	6.9	.48
19	1.1	4.6	13	4.4	22	7.8	17	12	4.6	.13	4.8	.53
20	2.2	5.2	12	4.0	32	6.6	15	8.4	3.0	.11	3.7	.51
21	6.4	4.6	199	3.7	50	5.2	13	6.4	2.0	.23	2.5	.52
22	5.7	4.0	99	3.3	276	4.5	11	5.7	1.5	.16	1.7	.54
23	4.5	3.4	42	3.1	156	4.1	9.7	6.2	1.0	.08	1.4	2.0
24	3.5	3.2	26	2.8	73	4.0	8.6	4.7	9.5	.05	1.3	2.2
25	3.7	2.8	17	2.6	45	3.3	7.4	3.8	8.5	.04	1.1	.97
26	5.0	2.4	13	2.5	33	2.9	6.4	2.8	3.6	.14	.89	.75
27	4.2	4.5	12	2.3	25	2.8	6.0	3.2	2.0	.04	.81	.59
28	4.8	92	10	2.2	20	2.9	5.1	7.6	1.2	.04	.70	.45
29	8.0	29	24	2.1	---	59	4.2	4.8	.68	.02	.61	.34
30	5.8	17	259	2.0	---	295	3.7	3.7	.37	.04	15	.36
31	4.3	---	79	1.9	---	411	---	2.7	---	.66	5.5	---
TOTAL	65.55	416.5	1143.4	407.0	1258.3	1474.5	835.1	1102.8	102.95	11.64	251.67	27.57
MEAN	2.11	13.9	36.9	13.1	44.9	47.6	27.8	35.6	3.43	.38	8.12	.92
MAX	8.0	92	259	115	276	411	85	667	9.5	1.2	49	3.8
MIN	.13	2.1	5.9	1.9	1.8	2.8	3.7	2.7	.37	.02	.57	.34
CFSM	.19	1.28	3.39	1.20	4.12	4.37	2.55	3.27	.31	.03	.74	.08
IN.	.22	1.42	3.90	1.39	4.29	5.03	2.85	3.76	.35	.04	.86	.09

CAL YR 1984	TOTAL	5837.26	MEAN	15.9	MAX	342	MIN	.07	CFSM	1.46	IN.	19.92
WTR YR 1985	TOTAL	7096.98	MEAN	19.4	MAX	667	MIN	.02	CFSM	1.78	IN.	24.22

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 downstream from Monroe Lake, 0.9 mile upstream from Clear Creek, 2.2 miles southeast of Harrodsburg, and 25.7 miles upstream from mouth.

DRAINAGE AREA.--432 mi^2.

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 above 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 upstream at datum 2.41 ft higher.

REMARKS.--Flow regulated by Monroe Lake. Daily discharge computed from relation between discharge, head, and gage openings for Monroe Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--30 years, 498 ft^3/s, 15.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft^3/s June 25, 1960, gage height, 32.76 ft site and datum then in use; maximum gage height at present site and datum, 35.35 ft May 9, 1961; no flow Sept. 29 to Dec. 2, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,240 ft^3/s May 12; minimum daily, 45 ft^3/s Oct. 1 to Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	45	205	226	1970	215	72	764	131	56	46	54
2	45	46	205	228	1780	215	161	778	97	59	46	54
3	45	46	205	229	1470	215	225	566	97	56	46	54
4	45	46	205	229	752	215	226	890	97	56	46	54
5	45	46	206	229	200	713	226	1310	97	56	46	54
6	45	46	206	229	200	1470	227	1310	97	56	74	54
7	45	46	205	229	200	1770	228	902	97	56	96	54
8	45	46	205	788	200	1770	228	653	97	56	96	54
9	45	46	205	1490	200	1770	648	630	77	56	96	54
10	45	46	206	1860	200	1760	1220	1240	56	56	96	54
11	45	124	206	1850	200	1760	1510	2150	56	56	96	54
12	45	202	206	1840	633	1770	1650	2240	56	56	96	54
13	45	202	207	1910	1240	1780	1840	2230	56	56	96	54
14	45	202	208	1980	1540	1780	1840	2220	56	56	96	54
15	45	201	210	1970	1690	1770	1910	1730	56	56	167	54
16	45	201	210	1970	1680	1770	1980	1760	56	56	313	54
17	45	201	301	1960	1680	1760	1970	2210	56	56	368	54
18	45	201	377	1950	854	1750	1970	2200	56	50	368	54
19	45	201	377	1950	382	1750	1960	2200	56	46	367	54
20	45	201	377	1940	737	1740	1950	2180	56	46	367	54
21	45	201	379	1930	1350	1730	1950	2170	56	46	367	54
22	45	201	275	1920	1040	1730	1940	2160	56	46	367	54
23	45	201	216	1910	211	1720	2130	2150	56	46	256	54
24	45	201	217	1900	213	1710	2220	2040	56	46	54	54
25	45	201	217	1900	214	1840	2210	1840	56	46	54	54
26	45	201	400	1890	214	1910	2200	1830	56	46	54	54
27	45	201	610	1880	214	1620	2190	1820	56	46	54	54
28	45	419	839	1870	215	1360	1910	1360	56	46	54	54
29	45	354	1120	1910	---	1360	303	870	56	46	54	54
30	45	205	777	1990	---	686	765	502	56	46	54	54
31	45	---	220	1980	---	160	---	276	---	46	54	---
TOTAL	1395	4780	10002	46137	21479	43569	39859	47181	2063	1603	4444	1620
MEAN	45.0	159	323	1488	767	1405	1329	1522	68.8	51.7	143	54.0
MAX	45	419	1120	1990	1970	1910	2220	2240	131	59	368	54
MIN	45	45	205	226	200	160	72	276	56	46	46	54

CAL YR 1984	TOTAL	150842	MEAN	412	MAX	2200	MIN	45
WTR YR 1985	TOTAL	224132	MEAN	614	MAX	2240	MIN	45

03373500 EAST FORK WHITE RIVER AT SHOALS, IN

LOCATION.--Lat 38°40'02", long 86°47'31", in SW¼NW¼ sec.30, T.3 N., R.3 W., Martin County, Hydrologic Unit 05120208, at left downstream side of U.S. Highway 50 bridge at Shoals, 340 ft upstream from Baltimore and Ohio Railroad bridge, 0.9 mile upstream from Beaver Creek, 6.6 mi downstream from Indian Creek, and at mile 105.3.

DRAINAGE AREA.--4,927 mi^2.

PERIOD OF RECORD.--June 1903 to July 1906, October 1908 to September 1916, June 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as East Branch White River at Shoals, 1903-6, 1908-16. Gage-height records collected at same site since May 1908 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 353: 1912. WSP 1335: 1903-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.25 ft above National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 26, 1932.

REMARKS.--Estimated daily discharges; Jan. 22-27. Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--71 years (1903-5, 1909-16, 1923 to current year), 5,467 ft^3/s, 15.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft^3/s Mar. 28, 1913, gage height, 42.2 ft, from rating curve extended above 100,000 ft^3/s; minimum daily, 64 ft^3/s Oct. 6, 1935, as a result of filling Williams Reservoir.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Jan. 6	0500	26900	17.95	Mar. 1	1800	30500	19.74
Feb. 23	2200	21900	14.91	Apr. 6	1000	*39100	*23.69

Minimum daily discharge, 649 ft^3/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1410	4560	9210	19000	4200	30200	29600	3700	3440	1790	2040	3480
2	1160	9500	9590	20800	4000	29100	29600	4290	3210	2660	2180	3830
3	993	7530	9100	21600	3600	23600	31300	8920	2860	2740	3480	3120
4	883	7440	7370	23600	3300	15800	34800	9310	2750	2810	3780	2340
5	807	8490	5560	26000	2600	11800	37500	10500	2890	3140	3220	1860
6	752	8520	4710	26700	2290	10600	38800	14300	3080	2990	4060	1560
7	729	7990	4340	24900	2260	11100	36100	15900	3250	2580	3490	1350
8	770	6790	3980	20800	2300	12400	29600	13500	3090	2330	2830	1200
9	857	5170	3710	16200	2250	13500	22100	9180	2860	2130	2410	1090
10	986	4150	3620	13300	2080	12600	18300	6380	3100	1930	2340	1020
11	1350	4160	4190	10900	3230	13200	16100	5730	3700	1740	2040	973
12	1690	4870	5850	8810	10400	16600	13500	5980	3510	1610	1760	899
13	1670	6180	7860	7540	12700	17500	10800	5790	3480	1550	1540	841
14	1510	6920	9880	6940	10400	17100	9520	5990	4040	1560	1370	818
15	1370	6710	10800	6510	10700	17800	9080	8310	4720	1510	1830	808
16	1230	5490	10300	6100	11000	18100	8590	9460	4750	1400	3310	798
17	1120	4450	10700	5890	11200	16700	8710	9600	4530	1330	5180	765
18	1060	3940	11100	5690	11400	13900	8860	11800	4090	1420	4790	739
19	1060	3890	10800	5480	10900	10500	8100	11800	3700	1390	4370	716
20	1130	3990	9450	4960	10200	8530	7250	9790	3270	1310	3880	704
21	1310	4350	10500	3600	10900	7510	6660	7890	2920	1220	3230	663
22	1390	4460	18300	3600	14500	6840	6250	6690	2650	1750	2750	649
23	1330	4030	18000	3800	20800	6420	5910	6100	2420	1570	2410	657
24	1300	3530	15500	3900	21200	6150	5650	5660	2310	1290	2110	683
25	1370	3190	16400	3900	19700	5980	5610	5260	2970	1190	1770	744
26	1690	2970	18100	3700	21500	5860	5510	4800	3060	1250	1780	752
27	1820	2870	18600	3900	24900	5780	5320	4520	2620	1560	1720	702
28	1800	5160	16900	4200	28300	5350	5110	4620	2300	1480	1620	679
29	2820	8280	14000	4200	---	5030	4590	4510	2070	1420	1470	674
30	2990	8260	15200	4250	---	12800	3450	4130	1900	1700	1320	688
31	3280	---	18600	4250	---	26200	---	3890	---	2120	1940	---
TOTAL	43637	167840	332220	325020	292810	414550	462270	238300	95540	56470	82020	35802
MEAN	1408	5595	10720	10480	10460	13370	15410	7687	3185	1822	2646	1193
MAX	3280	9500	18600	26700	28300	30200	38800	15900	4750	3140	5180	3830
MIN	729	2870	3620	3600	2080	5030	3450	3700	1900	1190	1320	649
CFSM	.29	1.14	2.18	2.13	2.12	2.71	3.13	1.56	.65	.37	.54	.24
IN.	.33	1.27	2.51	2.45	2.21	3.13	3.49	1.80	.72	.43	.62	.27

CAL YR 1984	TOTAL	2181001	MEAN	5959	MAX	27700	MIN	497	CFSM	1.21	IN.	16.47
WTR YR 1985	TOTAL	2546479	MEAN	6977	MAX	38800	MIN	649	CFSM	1.42	IN.	19.23

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 downstream from bridge on U.S. Highway 150, 1.7 miles northwest of West Baden Springs, 3.8 miles downstream from Lick Creek, and at mile 34.8.

DRAINAGE AREA.--287 mi^2.

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

REMARKS.--Estimated daily discharges: Oct. 15-25, Jan. 21, 22, and Jan. 28 to Mar. 14. Records good except for periods of no gage-height record, Oct. 15-25, and Jan. 28 to Mar. 14, which are fair.

AVERAGE DISCHARGE.--20 years, 378 ft^3/s, 17.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft^3/s May 1, 1983, gage height, 26.55 ft; minimum daily, 7.5 ft^3/s Oct. 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 28.1 ft, from floodmarks, discharge, 14,500 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 22	1500	3390	22.04	Feb. 23	unknown	2300	unknown
Jan. 2	1000	2310	20.68	Mar. 13	unknown	1600	unknown
Feb. 12	unknown	2510	21.06	Mar. 31	1400	*8350	*25.25

Minimum daily discharge, 17 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	483	563	1890	135	400	5650	151	122	397	50	58
2	22	1570	426	2270	130	360	3030	260	416	1060	47	53
3	21	1280	349	1960	120	340	1960	397	821	1050	44	48
4	19	688	292	1480	115	300	1460	270	617	822	41	45
5	18	392	250	1100	115	350	1180	192	868	524	130	43
6	17	278	237	796	115	360	1200	160	720	375	356	41
7	23	216	207	696	110	310	1030	141	509	319	264	40
8	50	179	192	627	100	300	886	126	442	243	147	38
9	62	153	197	556	95	310	779	113	363	194	87	35
10	47	230	332	502	100	310	695	104	296	166	70	36
11	35	419	535	456	450	330	643	98	454	141	61	35
12	31	362	476	399	2400	800	590	99	1280	123	55	33
13	27	271	521	355	1300	1500	536	111	1120	110	50	30
14	25	218	884	335	800	900	503	274	732	99	51	29
15	24	193	940	306	580	723	551	1690	504	91	183	27
16	22	173	746	270	450	604	532	1860	394	83	501	27
17	21	148	585	260	400	519	429	1530	332	75	828	27
18	20	163	460	251	400	437	378	1160	298	69	602	26
19	20	387	430	233	450	381	328	712	250	64	269	26
20	25	419	501	203	600	342	292	508	203	61	171	25
21	41	315	1210	150	800	303	267	400	176	141	129	24
22	70	251	3030	165	1400	278	245	367	154	341	105	24
23	54	215	2990	167	2200	261	224	543	138	163	91	24
24	47	191	2100	164	1300	247	211	418	151	96	157	28
25	42	171	1440	158	900	230	200	307	947	79	178	38
26	39	154	983	152	680	208	186	245	801	71	128	39
27	42	150	672	145	540	197	177	210	425	67	93	37
28	65	1050	541	125	460	191	168	189	295	61	78	32
29	489	1180	468	130	---	283	155	172	220	56	70	26
30	344	816	1100	135	---	3600	144	151	171	53	64	23
31	181	---	1550	135	---	7990	---	136	---	51	61	---
TOTAL	1968	12715	25207	16571	17245	23664	24629	13094	14219	7245	5161	1017
MEAN	63.5	424	813	535	616	763	821	422	474	234	166	33.9
MAX	489	1570	3030	2270	2400	7990	5650	1860	1280	1060	828	58
MIN	17	148	192	125	95	191	144	98	122	51	41	23
CFSM	.22	1.48	2.83	1.86	2.15	2.66	2.86	1.47	1.65	.82	.58	.12
IN.	.26	1.65	3.27	2.15	2.24	3.07	3.19	1.70	1.84	.94	.67	.13

CAL YR 1984	TOTAL	144056	MEAN	394	MAX	4700	MIN	12	CFSM	1.37	IN.	18.67
WTR YR 1985	TOTAL	162735	MEAN	446	MAX	7990	MIN	17	CFSM	1.55	IN.	21.09

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 upstream from intake structure of Indianapolis Power and Light Company's generating plant, 1.5 miles downstream from East Fork White River, 2.2 miles upstream from State Highway 61, 2.8 miles northeast of Petersburg, and at mile 48.0.

DRAINAGE AREA.--11,123 mi^2.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.52 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Discharges below 1500 ft^3/s only published. For a complete record of White River in this vicinity use records of White River at Petersburg, IN (sta. 03374000), 2.3 miles downstream.

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 downstream from bridge on State Highway 61, 0.4 mile upstream from Prides Creek, 1.4 miles north of Petersburg, and at mile 45.7.

DRAINAGE AREA.--11,125 mi^2.

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 above National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Apr. 1, 1941.

REMARKS.--No estimated daily discharges. Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--58 years, 11,850 ft^3/s, 14.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183,000 ft^3/s Jan. 22, 1937, gage height, 28.3 ft present datum, 31.58 ft site and datum then in use; minimum daily, 573 ft^3/s Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 29.5 ft, present site and datum, from floodmarks by Corps of Engineers, discharge, 235,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 86.400 ft^3/s Apr. 6, gage height, 24.72 ft; minimum daily, 1,890 ft^3/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3310	6850	21000	36300	8040	65900	49100	10700	8930	5280	4140	4430
2	2890	18100	19600	40300	7460	74200	57300	13400	8920	5060	4130	7360
3	2540	20800	17900	42200	7010	72700	68700	20100	9550	5820	4420	7430
4	2290	17600	16500	44400	6990	63700	76500	23300	8600	6590	5660	6290
5	2110	15100	14300	46300	6920	52500	82300	25300	9700	7060	6180	5220
6	1970	14100	12000	47500	6460	40400	84500	27300	8920	6890	6380	4340
7	1890	13300	10600	47700	5780	32100	76600	29600	8660	6330	9630	3640
8	1910	12100	9970	45100	5480	28000	67500	28500	8350	5710	10200	3230
9	2140	10400	9530	38800	5350	28300	59100	23400	7900	5280	7640	2930
10	2060	9380	9460	31000	5400	29600	52100	18200	7820	4940	6100	2750
11	2200	10100	9420	24300	8750	30300	45900	14500	7850	4660	5580	2720
12	2490	9960	9620	20300	15400	32500	40100	12700	8690	4430	5170	2830
13	2810	10700	11500	17200	19700	35600	33600	12000	8780	4780	4620	2730
14	2910	12900	16700	15300	22800	38100	26800	11700	9120	4580	4170	2690
15	2800	13700	20100	14100	21300	39100	24000	12900	9870	4480	4190	2510
16	2580	12900	21900	13200	19700	39300	22800	15900	10300	4250	5110	2400
17	2380	11200	22000	12600	18600	39400	21300	18400	10200	3910	7960	2310
18	2220	10100	21500	12100	17900	37400	20600	19700	10400	3720	12600	2230
19	2150	10400	20900	11700	17800	32200	19700	21300	10400	3690	12400	2150
20	2100	9820	20200	10900	18100	25300	18300	20700	9640	3650	9820	2080
21	2350	9180	22100	9100	20200	20800	16900	17700	8730	3620	8530	2040
22	2600	8920	30300	8000	25700	18200	15700	14900	7740	3810	7380	1980
23	2810	8600	33500	8380	34100	16600	14800	14000	6920	3850	6440	2000
24	2830	7950	34800	8650	39600	15700	14000	12500	6350	4020	5830	2140
25	3020	7090	33200	8860	43300	14900	13500	11500	6800	3830	5180	2090
26	3790	6440	30100	8320	46500	14300	13100	10700	8180	3700	4540	2090
27	3590	6050	28400	8180	50800	13800	12700	9950	8410	3470	4280	2310
28	3690	12500	27200	8750	56700	13500	12300	9410	7110	3800	4090	2340
29	5200	18400	24700	8340	---	13300	11800	9300	6100	3940	3860	2140
30	5140	21100	25000	8380	---	24200	11300	9530	5600	3950	3740	2040
31	5160	---	29900	8320	---	38500	---	9170	---	3960	3630	---
TOTAL	87930	355740	633900	664580	561840	1040400	1082900	508260	254540	143060	193600	93440
MEAN	2836	11860	20450	21440	20070	33560	36100	16400	8485	4615	6245	3115
MAX	5200	21100	34800	47700	56700	74200	84500	29600	10400	7060	12600	7430
MIN	1890	6050	9420	8000	5350	13300	11300	9170	5600	3470	3630	1980
CFSM	.25	1.07	1.84	1.93	1.80	3.02	3.24	1.47	.76	.41	.56	.28
IN.	.29	1.19	2.12	2.22	1.88	3.48	3.62	1.70	.85	.48	.65	.31

CAL YR 1984	TOTAL	4943930	MEAN	13510	MAX	68000	MIN	1470	CFSM	1.21	IN.	16.53
WTR YR 1985	TOTAL	5620190	MEAN	15400	MAX	84500	MIN	1890	CFSM	1.38	IN.	18.79

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.

DRAINAGE AREA.--11,305 mi^2.

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1981.
CHEMICAL ANALYSES: February 1973 to current year.
WATER TEMPERATURE: October 1973 to September 1981.
SEDIMENT DISCHARGE: October 1973 to current year (partial-record station).
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; 0.0 °C on several days during winter period 1975-76.
SPECIFIC CONDUCTANCE: Maximum, 882 microsiemens July 21, 1977; minimum, 192 microsiemens Nov. 6, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM, DIS-SOLVED (MG/L AS CA)
OCT												
24...	1500	2830	640	7.70	22.0	17.0	36	9.4	760	710	K110	67
MAR												
27...	1400	17800	540	7.90	--	11.0	20	10.6	754	450	320	63
JUN												
20...	1315	9600	501	7.80	--	22.5	60	7.2	760	K620	130	59
SEP												
18...	1500	2220	595	7.90	26.0	23.5	15	14.5	795	K110	--	55

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT												
24...	24	30	4.3	170	207	.000	170	88	39	.30	4.9	398
MAR												
27...	19	11	1.9	156	190	.000	159	48	19	.10	7.3	297
JUN												
20...	19	15	2.7	161	197	.000	162	58	25	.20	6.4	335
SEP												
18...	24	33	3.6	156	190	.000	156	69	45	.20	1.3	346

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)
OCT											
24...	2.1	.020	1.2	.320	--	.270	.080	20	1	60	<.0
MAR											
27...	3.1	.050	.70	.060	--	<.010	<.010	<10	1	54	<.5
JUN											
20...	4.9	.040	.80	.120	.37	.070	.050	<10	1	56	1.0
SEP											
18...	.69	<.010	1.5	.080	.25	.030	<.010	20	1	51	1.0

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT												
24...	<1	<1	<3	4	11	1	9	4	<.1	<10	<1	<1
MAR												
27...	<1	8	<3	2	12	<1	11	7	.2	<10	<1	<1
JUN												
20...	1	8	<3	2	6	2	<4	3	.1	<10	<1	<1
SEP												
18...	1	3	<3	4	11	<1	13	6	.4	<10	<1	<1

DATE	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
24...	240	<6	5	127	970	99
MAR						
27...	160	<6	7	116	5570	97
JUN						
20...	180	<6	4	212	5500	99
SEP						
18...	190	<6	6	87	521	99

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 downstream from Fudge Creek, 0.7 mile northeast of Valeene, 6.0 miles southwest of Hardinsburg, and at mile 158.0.

DRAINAGE AREA.--12.8 mi^2.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.89 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan 15 to Feb. 18, and Mar. 17 to Apr. 16. Records good except for periods with ice effect, Jan. 15-19, Feb. 11-12, and periods of no gage-height record, Jan. 20 to Feb. 10, Feb. 12-18, and Mar. 17 to Apr. 16, which are poor.

AVERAGE DISCHARGE.--17 years, 26.2 ft^3/s, 27.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,270 ft^3/s July 26, 1979, gage height, 11.35 ft; no flow for several days in 1971, 1972, 1975, 1983, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1745	1250	6.99	May 14	2215	2080	8.48
Mar. 31	unknown	*3000 a	unknown	Jun. 11	1930	1020	6.40

a-Estimate

Minimum daily discharge, 0.42 Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	31	19	242	3.7	19	102	3.8	2.3	4.4	1.1	2.8
2	.48	58	12	104	3.5	15	50	10	25	3.7	1.1	2.3
3	.53	17	9.5	61	3.2	13	35	8.4	12	12	.95	2.0
4	.47	10	7.2	47	3.2	21	28	5.1	11	5.8	.90	1.8
5	.45	8.8	6.9	35	3.3	45	25	4.2	26	4.0	1.4	1.7
6	.42	5.9	6.4	33	3.4	26	35	3.6	16	3.3	2.0	1.7
7	1.1	4.6	6.0	32	3.2	21	74	3.0	15	2.6	1.5	1.5
8	3.7	3.7	6.1	28	2.9	23	21	2.8	11	2.1	1.2	1.3
9	2.8	3.8	7.8	23	2.7	28	18	2.5	7.1	1.9	1.1	1.2
10	1.7	47	65	21	2.5	22	15	2.4	18	1.8	.92	1.1
11	1.4	41	45	17	250	68	14	2.3	314	1.5	.82	1.0
12	1.2	18	32	14	215	104	13	3.4	202	1.4	.84	.92
13	1.1	10	52	13	40	57	11	3.2	77	1.3	.77	.75
14	1.1	6.8	82	12	30	43	10	234	38	1.3	1.0	.70
15	1.1	6.0	54	9.7	24	31	34	352	22	1.2	52	.69
16	.96	4.8	37	8.2	21	24	19	62	14	1.2	53	.67
17	.88	3.9	25	8.8	20	17	14	52	10	1.1	16	.63
18	.84	24	18	8.1	30	14	12	38	8.3	1.0	6.2	.62
19	.83	63	28	7.3	46	13	9.8	21	5.4	.96	3.9	.58
20	.79	30	34	6.1	67	11	8.4	13	5.2	.91	3.3	.57
21	1.1	16	606	5.2	98	9.7	7.1	9.3	4.4	57	2.6	.47
22	1.2	10	217	5.4	361	9.0	6.1	9.5	4.1	28	2.1	.45
23	1.5	7.6	82	5.4	163	9.0	5.4	14	3.5	5.8	1.7	5.9
24	1.5	6.2	52	5.2	88	8.8	5.0	9.7	3.5	3.4	167	2.2
25	1.4	5.1	31	5.0	55	8.5	4.4	6.8	4.2	2.4	51	1.2
26	1.4	4.5	23	4.3	38	7.8	4.0	5.3	3.3	2.0	20	1.0
27	1.3	8.5	19	4.3	27	7.6	3.8	4.6	2.7	1.6	9.5	.84
28	1.4	185	16	4.3	21	7.5	3.5	4.2	2.3	1.4	6.1	.72
29	7.2	60	14	4.1	---	7.5	3.1	4.0	2.1	1.3	4.5	.61
30	5.1	33	99	4.0	---	660	2.8	3.3	1.9	1.2	4.3	.70
31	3.3	---	80	3.7	---	880	---	2.7	---	1.2	3.5	---
TOTAL	48.85	733.2	1791.9	781.1	1625.6	2230.4	593.4	900.1	872.3	158.77	422.30	38.62
MEAN	1.58	24.4	57.8	25.2	58.1	71.9	19.8	29.0	29.1	5.12	13.6	1.29
MAX	7.2	185	606	242	361	880	102	352	314	57	167	5.9
MIN	.42	3.7	6.0	3.7	2.5	7.5	2.8	2.3	1.0	.91	.77	.45
CFSM	.12	1.91	4.52	1.97	4.54	5.62	1.55	2.27	2.27	.40	1.06	.10
IN.	.14	2.13	5.21	2.27	4.72	6.48	1.72	2.62	2.54	.46	1.23	.11

CAL YR 1984	TOTAL	8661.59	MEAN	23.7	MAX	606	MIN	.00	CFSM	1.85	IN.	25.17
WTR YR 1985	TOTAL	10196.54	MEAN	27.9	MAX	880	MIN	.42	CFSM	2.18	IN.	29.63

03374500 PATOKA RIVER NEAR CUZCO, IN

LOCATION.--Lat 38°26'30", long 86°43'01", in SW¼SW¼ sec.11, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, on right bank 200 ft upstream from bridge on Cuzco Road South, 2.3 miles south of Cuzco, Indiana, 0.7 miles downstream from Patoka Lake, 4.5 miles upstream from Dillon Creek, and at mile 117.8.

DRAINAGE AREA.--170 mi^2.

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

GAGE.--Data Collection Platform. Datum of gage is 477.00 ft above 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, 1.7 mi downstream at same datum. Oct. 1, 1961 to Sept. 30, 1981, water-stage recorder at site described above. Prior to October 1979, published as "near Ellsworth". July 25, 1985 Data Collection Platform at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Patoka Lake. Daily discharge computed from relation between discharge, head, and gate openings for Patoka Lake beginning Oct. 1, 1981.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--24 years, 230 ft^3/s, 18.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft^3/s Mar. 10, 1964, gage height, 20.02 ft; no flow Oct. 30, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.1 ft according to information by local resident, discharge, 12,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1000 ft^3/s Feb. 1, 2; minimum daily, 20 ft^3/s Mar. 31, Apr. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	84	33	34	1000	608	20	266	100	163	86	100
2	49	49	33	34	1000	607	66	144	100	163	100	100
3	49	39	33	198	998	527	229	174	100	163	100	100
4	49	33	33	423	995	395	480	208	100	163	100	100
5	49	44	33	504	993	395	372	208	100	163	77	65
6	49	49	33	504	991	478	295	207	100	163	52	85
7	49	49	33	562	988	605	449	207	167	163	84	100
8	49	49	33	604	986	604	586	207	200	163	100	100
9	49	49	33	663	983	604	634	174	200	89	100	101
10	49	49	33	769	981	603	711	127	137	123	100	101
11	49	49	33	802	497	603	709	100	73	163	100	101
12	49	49	33	801	97	603	709	100	31	162	100	101
13	49	49	33	800	97	603	707	100	57	162	76	101
14	49	49	33	868	97	603	706	100	101	162	65	101
15	79	49	33	906	294	603	706	100	101	162	65	101
16	97	49	33	905	413	602	705	100	101	162	65	101
17	97	49	33	903	413	602	705	100	44	162	65	101
18	97	49	81	902	413	601	704	100	78	162	65	101
19	79	49	102	900	465	600	703	100	101	162	65	135
20	49	49	102	898	517	600	702	66	170	162	65	149
21	49	49	34	896	246	599	701	49	166	122	65	149
22	49	49	34	895	97	598	549	49	101	49	65	149
23	79	49	34	893	98	597	502	84	101	49	65	149
24	97	49	34	891	98	597	411	167	101	49	65	149
25	97	49	34	928	280	596	302	200	101	73	65	149
26	97	42	34	950	418	595	302	200	101	101	65	148
27	97	33	34	947	537	467	302	127	136	101	65	148
28	80	33	34	812	608	305	302	49	163	95	65	148
29	49	33	34	770	---	305	302	150	163	82	55	148
30	49	33	34	676	---	107	302	200	163	52	78	148
31	111	---	34	852	---	20	---	142	---	52	100	---
TOTAL	2038	1403	1220	22490	15600	16232	14873	4305	3457	3962	2383	3529
MEAN	65.7	46.8	39.4	725	557	524	496	139	115	128	76.9	118
MAX	111	84	102	950	1000	608	711	266	200	163	100	149
MIN	49	33	33	34	97	20	20	49	31	49	52	65

CAL YR 1984	TOTAL	64409	MEAN	176	MAX	812	MIN	20
WTR YR 1985	TOTAL	91492	MEAN	251	MAX	1000	MIN	20

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 upstream from unnamed outlet of Jasper Lake, 1.0 mile downstream from Coon Seitz bridge, 1.2 miles downstream from Beaver Creek, 3.3 miles northeast of Jasper, and at mile 91.5.

DRAINAGE AREA.--262 mi^2.

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 above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Nonrecording gage at bridge 5.6 miles downstream, used for high-water periods when flow exceeds about 2,500 ft^3/s, at datum 0.34 ft lower. Prior to Sept. 18, 1956, nonrecording gage at bridge 5.6 miles downstream at datum 0.34 ft lower.

REMARKS.--Estimated daily discharges: Feb. 13-14. Records good. Flow regulated by Beaver Creek Reservoir beginning Oct. 11, 1955, and by Patoka Lake beginning Feb. 13, 1978.

AVERAGE DISCHARGE.--37 years (water years 1949 to current year), 370 ft^3/s, 19.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft^3/s Mar. 11, 1964, gage height, 15.17 ft at downstream gage; maximum gage height at upstream gage, 21.20 ft 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 at downstream site, from floodmark furnished by local residents, discharge, 16,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,030 ft^3/s Mar. 31, gage height, 15.84 ft; minimum daily, 55 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	354	196	1140	1010	820	2400	299	139	159	62	127
2	57	1040	150	990	1080	816	1570	537	122	168	81	115
3	56	587	148	428	1100	801	756	592	133	169	94	109
4	56	233	140	467	1100	699	487	345	132	166	94	106
5	56	158	144	630	1100	788	682	284	239	161	98	105
6	55	133	144	663	1100	651	787	254	159	159	114	85
7	59	125	132	667	1100	724	555	237	139	158	70	88
8	76	116	133	719	1100	841	642	224	192	156	89	101
9	83	113	155	727	1090	906	691	215	209	154	96	100
10	71	188	242	779	1100	877	788	182	230	97	94	107
11	64	328	256	871	1410	897	892	144	286	123	92	109
12	64	239	198	901	1630	1090	901	126	709	150	91	109
13	97	180	257	900	1640	1100	888	129	346	151	91	108
14	85	171	490	897	1020	986	889	173	164	151	88	108
15	86	159	432	945	439	894	1020	904	165	151	310	108
16	99	151	279	986	564	840	1110	631	147	150	527	108
17	117	140	211	995	632	811	1080	266	143	149	187	108
18	115	185	175	999	669	789	993	275	106	150	104	108
19	114	435	236	995	719	775	926	200	98	150	88	108
20	106	305	337	983	922	765	887	160	118	151	82	134
21	121	183	968	1010	1120	756	863	117	169	156	79	146
22	137	148	1440	975	1230	743	839	129	154	229	78	148
23	119	134	1500	972	1350	747	667	197	110	83	77	153
24	127	124	847	970	1100	743	601	162	115	65	98	159
25	135	118	298	964	539	737	437	207	161	61	160	155
26	140	113	199	1000	601	730	317	219	132	76	102	164
27	142	128	178	1030	653	727	306	211	115	96	89	157
28	164	1010	167	1040	773	550	301	145	141	96	84	154
29	655	912	157	921	---	575	295	79	160	87	81	153
30	372	346	548	858	---	1610	290	145	159	83	158	153
31	175	---	727	906	---	2740	---	192	---	66	204	---
TOTAL	3861	8556	11484	27328	27891	27534	23860	7980	5332	4120	3762	3693
MEAN	125	285	370	882	996	888	795	257	180	133	121	123
MAX	655	1040	1500	1140	1640	2740	2400	904	709	228	527	164
MIN	55	113	132	428	439	550	290	79	98	61	62	85
CFSM	.48	1.09	1.41	3.37	3.80	3.39	3.03	.98	.69	.51	.46	.47
IN.	.55	1.21	1.63	3.88	3.96	3.91	3.39	1.13	.77	.58	.53	.52

CAL YR 1984	TOTAL	121267	MEAN	331	MAX	1800	MIN	31	CFSM	1.26	IN.	17.22
WTR YR 1985	TOTAL	155461	MEAN	426	MAX	2740	MIN	55	CFSM	1.63	IN.	22.07

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 upstream from Grassy Fork, 3.3 miles north of St. Anthony, and at mile 4.1.

DRAINAGE AREA.--21.8 mi^2.

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

REVISED RECORDS.--WDR IN-75-1: 1971-74.

GAGE.--Water-stage recorder. Datum of gage is 459.22 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Estimated daily discharges: Jan. 6-15, Jan. 17-25, Feb. 1-9, 12-19, Mar. 31 to May 1, May 4-14, 18-21, June 20-24, 27-30, July 2 to Aug. 13, Aug. 16-29, Sept. 2-24, 27-30. Records poor.

AVERAGE DISCHARGE.--15 years, 34.7 ft^3/s, 21.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s July 26, 1979, gage height, 15.30 ft from contracted-opening and flow-over-the-road measurements at gage height of 15.30 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 950 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 28	0300	1070	10.60	Feb. 22	1200	1740	11.26
Dec. 21	1900	2030	11.43	Mar. 30	0100	1780	11.28
Jan. 1	1000	1070	10.60	May 14	2100	1420	11.03
Feb. 11	1600	*2290	*11.57	June 24	2300	1030	10.54

Minimum daily discharge, 0.20 ft^3/s, Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	160	26	348	8.0	22	400	17	2.2	22	3.6	3.5
2	1.7	85	22	77	6.4	19	140	48	11	38	1.2	7.4
3	1.6	36	24	44	6.2	17	95	27	4.3	10	.70	4.5
4	1.5	25	17	40	6.2	36	35	15	115	1.7	.60	2.9
5	1.4	19	17	33	6.2	37	140	6.0	42	.90	2.9	1.8
6	1.3	14	17	29	6.3	23	125	3.9	19	.82	26	1.4
7	5.6	12	14	24	6.3	20	98	2.8	17	.73	19	1.2
8	25	11	16	21	6.7	27	82	1.9	12	.66	13	.90
9	5.8	10	31	19	9.1	25	58	1.7	8.6	.64	30	.74
10	3.1	59	85	18	12	21	48	1.5	66	1.4	1.7	.66
11	2.3	46	38	15	1210	67	43	1.9	212	.88	.80	.58
12	2.5	25	32	14	540	93	35	2.7	99	.78	.66	.52
13	4.8	18	77	13	230	50	28	4.9	32	.70	.60	.47
14	20	15	94	12	120	43	58	350	16	.62	110	.43
15	8.7	14	48	11	63	30	177	148	11	.55	124	.60
16	5.3	12	34	9.8	56	24	84	42	7.4	.47	19	1.2
17	4.0	10	25	9.2	50	19	50	34	7.6	.45	6.0	.76
18	3.1	82	20	8.6	62	15	23	16	6.1	1.0	1.9	.46
19	3.0	69	49	8.2	71	13	14	9.8	5.7	1.3	.90	.44
20	12	34	36	7.8	121	11	9.0	4.3	2.5	.70	30	.41
21	22	23	1100	7.4	127	9.8	7.6	8.0	1.4	30	6.8	.39
22	25	19	194	7.0	585	13	5.0	46	5.9	6.0	1.0	.35
23	17	16	58	6.8	136	12	3.0	17	.96	2.5	.76	23
24	12	14	39	6.4	88	13	5.0	9.8	240	1.1	33	7.4
25	12	13	25	6.2	50	12	3.1	6.8	119	3.7	24	2.8
26	15	11	20	6.0	37	10	5.0	5.3	20	8.2	10	10
27	12	85	18	7.3	27	9.6	8.4	4.6	13	1.6	2.0	.32
28	43	383	16	7.3	23	9.0	4.7	4.4	6.0	.95	1.0	.26
29	65	61	15	6.1	---	155	2.1	3.6	3.1	.60	2.6	.20
30	26	38	106	7.2	---	1740	5.2	3.0	1.7	3.5	42	.28
31	17	---	202	21	---	750	---	2.6	---	13	9.1	---
TOTAL	380.6	1419	2515	850.3	3669.4	3345.4	1791.1	849.5	1107.46	155.45	524.82	75.87
MEAN	12.3	47.3	81.1	27.4	131	108	59.7	27.4	36.9	5.01	16.9	2.53
MAX	65	383	1100	348	1210	1740	400	350	240	38	124	23
MIN	1.3	10	14	6.0	6.2	9.0	2.1	1.5	.96	.45	.60	.20
CFSM	.56	2.17	3.72	1.26	6.01	4.95	2.74	1.26	1.69	.23	.78	.12
IN.	.65	2.42	4.29	1.45	6.26	5.71	3.06	1.45	1.89	.27	.90	.13

CAL YR 1984	TOTAL	11579.59	MEAN	31.6	MAX	1100	MIN	.00	CFSM	1.45	IN.	19.76
WTR YR 1985	TOTAL	16683.90	MEAN	45.7	MAX	1740	MIN	.20	CFSM	2.10	IN.	28.47

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 north of Enos Corner, 3.1 miles north of Spurgeon, and at mile 8.0.

DRAINAGE AREA.--42.8 mi^2.

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 18 to Feb. 10. Records good except for period of estimated discharges which is fair. Regulation by coal-washing operation and strip-mining above gage.

AVERAGE DISCHARGE.--21 years, 52.4 ft^3/s, 16.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft^3/s June 9, 1979, gage height, 15.07 ft, from rating curve extended above 3,300 ft^3/s on basis of contracted-opening and flow over-the-road measurements at gage height of 15.07 ft; no flow Jan. 20-31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 13.09 ft, from floodmarks, discharge, 4,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 28	0200	1020	8.70	Mar. 30	0100	1810	10.96
Dec. 21	1900	1120	9.20	Mar. 30	1400	*2280	*11.63
Feb. 11	1500	1810	10.93	Mar. 31	0300	1880	11.09
Feb. 22	1200	1170	9.41				

Minimum daily discharge, 5.7 ft^3/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	97	33	361	34	62	234	81	22	16	11	17
2	5.7	75	30	126	18	57	152	334	24	16	9.8	12
3	5.9	28	46	73	9.2	49	124	117	32	16	9.7	11
4	6.1	22	28	76	8.4	97	109	61	148	15	10	11
5	6.2	18	26	59	8.0	97	150	49	102	15	13	11
6	6.3	16	28	56	8.0	54	137	42	51	15	12	9.9
7	15	15	36	56	8.0	47	106	37	188	14	17	11
8	14	16	26	52	8.0	64	88	32	80	14	13	10
9	9.3	16	43	44	7.7	62	72	31	42	14	11	9.3
10	7.8	52	73	43	49	51	67	29	107	14	11	24
11	8.2	37	39	39	1090	89	70	31	181	14	10	9.3
12	10	20	36	34	783	102	60	32	151	14	9.9	8.0
13	25	16	102	40	560	82	56	47	57	14	9.8	7.4
14	18	15	160	30	491	78	73	63	39	14	15	7.5
15	13	15	74	35	404	51	137	59	34	14	63	8.5
16	9.9	12	49	32	357	45	97	32	26	14	24	8.2
17	11	12	36	24	257	41	64	32	27	14	13	7.4
18	8.5	84	33	23	145	35	54	30	24	13	12	7.0
19	12	70	86	20	114	33	48	28	20	14	11	6.9
20	20	29	58	18	187	29	43	26	18	13	13	6.8
21	31	21	709	16	244	27	41	24	17	46	12	6.8
22	18	18	264	14	651	30	39	195	17	20	11	7.1
23	16	16	107	12	324	30	39	164	17	13	15	55
24	12	15	73	11	266	30	56	60	18	12	28	22
25	12	15	48	14	135	27	42	37	19	12	16	9.9
26	12	14	42	11	102	24	39	31	17	12	12	13
27	11	89	41	11	76	24	42	28	18	12	11	9.5
28	50	431	39	10	63	24	37	31	29	11	10	9.0
29	65	83	37	9.7	---	208	33	27	18	11	9.5	8.2
30	21	47	155	9.3	---	1330	32	24	16	12	12	10
31	22	---	242	14	---	921	---	23	---	11	13	---
TOTAL	488.0	1414	2799	1373.0	6407.3	3900	2341	1837	1559	459	447.7	353.7
MEAN	15.7	47.1	90.3	44.3	229	126	78.0	59.3	52.0	14.8	14.4	11.8
MAX	65	431	709	361	1090	1330	234	334	188	46	63	55
MIN	5.7	12	26	9.3	7.7	24	32	23	16	11	9.5	6.8
CFSM	.37	1.10	2.11	1.04	5.35	2.94	1.82	1.39	1.21	.35	.34	.28
IN.	.42	1.23	2.43	1.19	5.57	3.39	2.03	1.60	1.36	.40	.39	.31

CAL YR 1984	TOTAL	18933.8	MEAN	51.7	MAX	709	MIN	5.5	CFSM	1.21	IN.	16.46
WTR YR 1985	TOTAL	23378.7	MEAN	64.1	MAX	1330	MIN	5.7	CFSM	1.50	IN.	20.32

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 upstream from dam of Princeton Water and Lighting Co., 0.1 mile downstream from bridge on State Highway 65, 0.6 mile downstream from Indian Creek, 2 miles northeast of Princeton, and at mile 21.5.

DRAINAGE AREA.--822 mi^2.

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), 1940-50. WSP 1385: 1951-52. WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 394.14 ft above 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.--Estimated daily discharges: Jan. 26 to Feb. 13. Records good except the period of ice effect, Jan. 26 to Feb. 13, which is fair. Flow regulated by Patoka Lake.

AVERAGE DISCHARGE.--51 years, 1,037 ft^3/s, 17.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft^3/s Jan. 26, 1937, gage height, 26.80 ft, site and datum then in use; no flow Aug. 29 to Sept. 12, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,790 ft^3/s Apr. 5, gage height, 17.07 ft; minimum daily, 69 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	1290	1820	3390	1270	4220	4180	773	262	366	97	225
2	145	1500	1880	3390	1250	4070	4760	1730	377	466	91	378
3	111	1340	1940	3370	1220	3840	5300	1720	389	498	77	249
4	97	1320	1940	3330	1210	3630	5900	1760	383	462	69	163
5	90	1300	1860	3230	1200	3430	6500	1800	658	394	82	143
6	85	1150	1610	3130	1190	3160	6690	1720	856	349	103	138
7	84	785	1170	3020	1180	2910	6460	1450	833	303	298	138
8	299	476	760	2910	1180	2700	5870	1070	854	303	422	134
9	369	352	628	2800	1210	2500	5260	775	853	253	430	110
10	237	468	756	2690	1300	2290	4790	587	766	215	396	118
11	190	804	906	2550	1500	2160	4290	466	711	199	234	139
12	178	890	993	2370	2300	2100	3780	427	1060	175	139	127
13	190	839	1110	2170	2600	2040	3380	427	1240	129	116	126
14	220	647	1430	1950	2620	2020	3020	664	1290	139	106	121
15	330	471	1490	1730	2650	1990	2840	750	1320	173	121	120
16	355	391	1550	1560	2850	1980	2630	1000	1270	180	355	122
17	279	350	1570	1430	3130	1950	2450	1150	1000	174	841	125
18	204	420	1510	1350	3480	1910	2310	1190	690	170	994	120
19	186	860	1400	1300	3760	1860	2160	1050	458	163	920	122
20	197	1080	1260	1250	4010	1770	2020	784	360	163	695	126
21	282	1130	2000	1200	4010	1650	1910	550	227	189	445	123
22	373	1000	2280	1250	4280	1520	1790	648	191	606	226	128
23	398	711	2310	1150	4680	1410	1680	1350	213	552	138	179
24	388	484	2450	1020	4860	1340	1570	1330	274	471	342	380
25	382	390	2560	1000	4730	1280	1440	1220	247	294	535	376
26	339	348	2640	1100	4610	1230	1300	899	446	127	365	376
27	300	400	2700	1280	4470	1190	1130	631	672	85	303	307
28	393	1640	2760	1300	4350	1140	881	516	677	73	239	294
29	798	1650	2820	1300	---	1370	724	462	449	79	149	242
30	927	1740	3010	1300	---	3060	655	395	259	97	157	212
31	997	---	3120	1280	---	3930	---	269	---	101	137	---
TOTAL	9656	26226	56233	62100	77100	71650	97670	29563	19285	7948	9622	5661
MEAN	311	874	1814	2003	2754	2311	3256	954	643	256	310	189
MAX	997	1740	3120	3390	4860	4220	6690	1800	1320	606	994	380
MIN	84	348	628	1000	1180	1140	655	269	191	73	69	110
CFSM	.35	.99	2.06	2.27	3.12	2.62	3.69	1.08	.73	.29	.35	.21
IN.	.41	1.11	2.37	2.62	3.25	3.02	4.12	1.25	.81	.34	.41	.24

CAL YR 1984	TOTAL	414220	MEAN	1132	MAX	4010	MIN	53	CFSM	1.28	IN.	17.47
WTR YR 1985	TOTAL	472714	MEAN	1295	MAX	6690	MIN	69	CFSM	1.47	IN.	19.94

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 downstream from Patoka River, and at mile 94.4.

DRAINAGE AREA.--28,635 mi^2.

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 U.S. Army Corps of Engineers and since June 1884, are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 369.46 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1949, to Feb. 8, 1977, at datum 2.00 ft higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

REMARKS.--No estimated daily discharges. Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--58 years, 27,660 ft^3/s, 13.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 305,000 ft^3/s May 25, 1943; maximum gage height, 30.62 ft Feb. 5, 6, 1959, present datum; minimum daily discharge, 1,650 ft^3/s Sept. 27, 28, 1941.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--(1874-78, 1884 to 1985) Maximum discharge, 428,000 ft^3/s Mar. 30, 1913, from rating curve extended above 310,000 ft^3/s, gage height, 33.0 ft, present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 197,000 ft^3/s Mar. 3, gage height, 30.37 ft; minimum daily, 4,960 ft^3/s Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6830	15000	46000	65100	17800	171000	89400	23900	16300	14300	6630	8330
2	6460	28400	41400	71300	17300	187000	100000	31200	16600	12800	6710	11000
3	6090	36400	36800	77500	16700	195000	111000	43700	18000	11600	6870	13100
4	5670	37100	34300	83400	16200	196000	120000	50100	17800	12100	7240	12400
5	5340	31600	32000	87800	15700	189000	126000	50400	17700	13400	8820	10900
6	5140	26500	28700	91400	15400	173000	130000	47800	18100	14500	15100	9470
7	5020	24100	24700	95100	14600	152000	131000	45800	17100	14900	22800	8400
8	4960	22400	21700	97300	13700	133000	130000	44800	16600	14200	24900	7900
9	5640	20600	20000	95900	13300	120000	127000	42500	16200	12400	23900	7440
10	5130	19700	19500	90300	13300	112000	124000	36400	15400	11100	18400	6870
11	5260	22900	19900	80700	16300	108000	119000	29700	14800	9990	13300	6640
12	5540	28000	20300	68800	22800	106000	113000	25600	15600	9540	11400	6400
13	6160	28100	21600	56900	26600	107000	103000	23600	18500	10100	10200	6340
14	6450	27000	27800	45700	30700	109000	93400	23500	20800	9750	9190	6110
15	6560	27800	36900	37300	32200	111000	83500	23300	20800	8940	10100	6020
16	6410	28700	41800	32000	30800	112000	75600	26000	20300	8430	11200	6300
17	6160	27300	42800	29300	29200	113000	68300	29300	20500	7990	17500	6470
18	5930	25400	40900	27900	28200	111000	60700	30800	20800	7900	23200	6200
19	5940	24400	39900	26900	29300	106000	53400	32400	21400	8180	25900	5950
20	6000	23600	39200	25900	29500	99000	47100	32800	21000	8440	23500	5830
21	7300	22100	41700	24700	33900	88200	42400	31100	20300	9100	19600	5630
22	12700	20800	53300	20200	46300	77200	38700	27700	19000	9040	16600	5560
23	17600	19600	58000	17900	65300	68900	35900	26900	17500	8500	14100	5680
24	16500	18200	57900	18400	78700	63000	33700	24300	15900	8230	12600	5920
25	14700	16900	54800	19100	89300	57700	31700	22300	15300	7800	11700	5760
26	14500	15900	51900	19800	102000	52600	30100	20700	16700	7230	11400	5770
27	13800	15900	49400	13500	123000	47200	29000	19300	16900	6870	11100	5690
28	13400	25000	46900	18700	149000	41800	27700	17900	16800	6550	9590	5740
29	13700	39300	44700	19600	---	38300	26100	17000	15400	6560	8670	5680
30	13600	45600	45700	18200	---	50600	24700	16900	14600	6610	8180	5510
31	12900	---	56100	18200	---	74800	---	16700	---	6710	7820	---
TOTAL	267390	764300	1196600	1499800	1116100	3370300	2325400	934400	532700	303760	428120	214910
MEAN	8625	25480	38600	48380	39860	108700	77510	30140	17760	9799	13810	7164
MAX	17600	45600	58000	97300	149000	196000	131000	50400	21400	14900	25900	13100
MIN	4960	15000	19500	17900	13300	38300	24700	16700	14600	6550	6630	5510
CFSM	.30	.89	1.35	1.69	1.39	3.80	2.71	1.05	.62	.34	.48	.25
IN.	.35	.99	1.55	1.95	1.45	4.38	3.02	1.21	.69	.39	.56	.28

CAL YR 1984	TOTAL	11540770	MEAN	31620	MAX	131000	MIN	4400	CFSM	1.10	IN.	15.00
WTR YR 1985	TOTAL	12953780	MEAN	35400	MAX	196000	MIN	4960	CFSM	1.24	IN.	16.83

03378000 BONPAS CREEK AT BROWNS, IL

LOCATION.--Lat 38°23'11", long 87°58'32", in NW¼SE¼ sec.33, T.1 S., R.14 W., Wabash County, Hydrologic Unit 05120113, on right bank at downstream side of bridge on State Highway 15, 0.5 mi north of Browns, 0.7 mi upstream from Southern Railway bridge, and at mile 14.6.

DRAINAGE AREA.--228 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 372.92 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1968, water-stage recorder and concrete dam at site 0.4 mi downstream at datum 2.0 ft higher. Dec. 11, 1968, to Aug. 13, 1969, nonrecording gage at site 0.5 mi downstream at datum 1.0 ft lower. Prior to Oct. 1, 1982, auxiliary nonrecording gage near mouth on Wabash River at Grayville read twice daily.

REMARKS.--Estimated daily discharges: Nov. 21-26, Jan. 17 to Feb. 10, Feb. 25 to Mar. 4, Mar. 16-22, May 21, May 23 to June 17. Water-discharge records fair except those for period of estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--45 years, 232 ft^3/s, 13.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,500 ft^3/s May 9, 1961, gage height, 24.04 ft, site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,670 ft^3/s Apr. 1, gage height, 20.96 ft; minimum daily, 0.55 ft^3/s, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	658	1320	2040	7.5	300	4570	181	9.5	166	1.2	7.5
2	1.5	1890	1030	952	6.5	500	3840	1450	11	42	1.1	3.7
3	1.4	1880	520	575	6.0	350	3080	1380	12	27	.99	2.7
4	1.2	1700	251	471	5.5	800	2320	1200	11	21	20	2.0
5	1.1	1350	94	304	5.0	1250	1630	757	10	19	69	2.0
6	1.2	735	63	171	5.0	1000	1150	154	9.5	13	21	1.7
7	1.1	118	55	166	4.5	666	863	56	9.5	9.1	1950	1.6
8	37	38	51	185	4.5	512	501	41	9.0	7.4	1810	1.5
9	73	26	124	182	4.5	539	338	34	9.0	5.8	673	1.4
10	8.4	579	253	145	20	346	309	29	10	5.0	83	1.3
11	3.5	978	176	99	796	357	289	27	15	4.0	32	4.9
12	2.6	798	112	63	519	725	258	26	200	3.6	14	13
13	2.7	251	702	59	420	595	204	28	250	7.0	7.7	5.3
14	5.0	65	1300	50	441	439	164	232	90	8.1	10	2.9
15	11	46	1260	43	225	268	460	173	70	5.6	759	1.6
16	6.7	45	1220	36	195	200	616	87	60	4.2	800	1.0
17	3.8	33	909	30	154	130	276	44	90	3.5	172	.77
18	3.2	200	256	25	183	90	93	33	56	3.0	38	.71
19	4.6	661	271	22	355	70	62	28	25	2.6	18	.59
20	62	450	291	20	724	60	47	25	19	2.5	12	.58
21	432	200	1530	17	1180	50	37	22	16	28	8.2	.55
22	248	100	2050	15	2000	45	31	20	13	24	5.4	.61
23	82	70	1630	13	3280	40	26	250	11	6.1	4.0	1.0
24	23	50	1770	12	3880	36	25	90	27	3.5	78	2.8
25	528	40	625	10	2800	31	25	30	59	2.5	47	.98
26	810	30	522	9.5	1100	27	24	20	116	2.1	17	1.5
27	211	850	154	9.0	500	26	24	15	481	1.7	8.9	.96
28	154	2050	82	9.5	400	28	20	13	426	1.5	5.8	.76
29	413	1750	74	9.5	---	516	17	12	476	1.4	4.4	.60
30	97	1940	1160	8.5	---	3030	15	11	496	1.2	27	.73
31	40	---	1410	8.0	---	4510	---	10	---	1.2	36	---
TOTAL	3270.7	19581	21265	5759.0	19221.0	17536	21314	6478	3096.5	432.6	6733.69	67.24
MEAN	106	653	686	186	686	566	710	209	103	14.0	217	2.24
MAX	810	2050	2050	2040	3880	4510	4570	1450	496	166	1950	13
MIN	1.1	26	51	8.0	4.5	26	15	10	9.0	1.2	.99	.55
CFSM	.46	2.86	3.01	.82	3.01	2.48	3.11	.92	.45	.06	.95	.01
IN.	.53	3.19	3.47	.94	3.14	2.86	3.48	1.06	.51	.07	1.10	.01

CAL YR 1984	TOTAL	134485.80	MEAN	367	MAX	3520	MIN	.00	CFSM	1.61	IN.	21.94
WTR YR 1985	TOTAL	124754.73	MEAN	342	MAX	4570	MIN	.55	CFSM	1.50	IN.	20.35

03378500 WABASH RIVER AT NEW HARMONY, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", in SE¼SE¼ sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, at bridge on U.S. Highway 460 at New Harmony, at Indiana-Illinois State Line, and at mile 51.5.

DRAINAGE AREA.--29,234 mi². Flood of March 1913 reached a stage of 27.7 ft. Flood of Jan. 31, 1937, reached a stage of 24.4 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1980.
SEDIMENT DISCHARGE: October 1974 to current year (partial-record station).
WATER DISCHARGE: October 1938 to September 1947.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, Ill. (See sta 03377500). Code 80010-U.S. Geological Survey; code 17002-Illinois Environmental Protection Agency.

EXTREMES FOR PERIOD OF RECORD.--
WATER DISCHARGE: Maximum, 339,000 ft³/s May 26, 1943, gage height, 23.84 ft; minimum daily discharge, 1,800 ft³/s Sept. 29, 30, 1941.
SPECIFIC CONDUCTANCE: Maximum conductance, 805 microsiemens Feb. 15, 1977; minimum, 200 microsiemens Mar. 3, 1979.
WATER TEMPERATURE: Maximum, 32.0 °C June 28, 1978, July 14-18, 1980; minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER)	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)
OCT												
25...	1000	17002	17002	--	489	7.30	15.0	14.5	75	6.9	--	36
25...	1045	1028	80010	14200	489	7.30	18.0	14.5	60	6.9	762	--
MAR												
27...	0900	17002	17002	--	546	7.90	15.0	10.0	33	10.3	--	15
27...	1000	1028	80010	47700	546	7.90	--	10.0	35	10.3	754	--
JUN												
20...	0945	1028	80010	21100	567	8.00	--	22.5	40	7.9	765	--
SEP												
18...	1030	1028	80010	6220	537	7.80	27.5	22.0	8.0	11.2	798	--
18...	1100	17002	17002	--	538	7.70	23.0	22.0	14	11.1	--	25

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	POTASSIUM, DISSOLVED (MG/L AS K)
OCT												
25...	K400	--	--	.00	67	55	22	19	25	26	5.4	3.6
25...	--	710	K820	--	--	48	--	17	--	22	--	4.3
MAR												
27...	<1	--	--	--	67	66	21	21	10	11	2.5	2.3
27...	--	530	K94	--	--	64	--	20	--	10	--	2.2
JUN												
20...	--	110	K47	--	--	65	--	24	--	19	--	2.6
SEP												
18...	--	K20	--	--	--	48	--	26	--	26	--	3.3
18...	--	--	--	--	45	42	24	23	19	19	2.4	2.3

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	SOLIDS, VOLATILE, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
OCT												
25...	115	66	25	.3	--	--	--	351	37	1.5	--	.200
25...	--	63	26	--	.30	5.6	290	--	--	--	--	--
MAR												
27...	160	57	21	.1	--	--	--	123	48	3.6	--	<.100
27...	--	52	19	--	.10	6.7	258	--	--	--	4.1	--
JUN												
20...	--	67	28	--	.20	4.6	389	--	--	--	4.3	--
SEP												
18...	--	79	35	--	.20	.0	324	--	--	--	<.10	--
18...	143	84	35	.2	--	--	--	42	18	<.10	--	<.100

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	AMMONIA UNIONIZED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
OCT												
25...	--	.001	1.7	.430	--	.070	--	12000	60	6	--	150
25...	--	--	--	--	--	--	--	--	100	--	1	--
MAR												
27...	--	<.002	1.0	.170	--	.050	--	1500	60	1	--	61
27...	.050	--	.50	.100	--	.010	.020	--	10	--	1	--
JUN												
20...	.060	--	1.0	.130	.40	.050	.030	--	10	--	1	--
SEP												
18...	<.010	--	1.2	.050	.15	.030	<.010	--	10	--	<1	--
18...	--	<.002	.20	.080	--	<.010	--	350	<50	<1	--	52

DATE	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT												
25...	56	<2.0	<.5	120	100	<3	<3	10	<5	8	<5	25
25...	58	--	<.0	--	--	--	<1	--	<1	--	<3	--
MAR												
27...	45	<1.0	<.5	50	<50	<3	<3	<5	<5	<5	<5	7
27...	50	--	<.5	--	--	--	<1	--	<1	--	<3	--
JUN												
20...	58	--	2.3	--	--	--	1	--	9	--	<3	--
SEP												
18...	52	--	.9	--	--	--	<1	--	<1	--	<3	--
18...	45	<1.0	<.5	110	110	<3	<3	<5	<5	<5	<5	43

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
OCT												
25...	6	13000	<50	<50	<50	--	610	<5	<.10	--	--	20
25...	10	--	100	--	2	7	--	11	--	.4	<10	--
MAR												
27...	<5	2300	56	<50	<50	--	130	7	.20	--	--	7
27...	3	--	16	--	<1	11	--	6	--	.1	<10	--
JUN												
20...	3	--	11	--	3	<4	--	3	--	.1	<10	--
SEP												
18...	6	--	14	--	1	5	--	3	--	.2	<10	--
18...	<5	530	<50	<50	<50	--	140	<5	<.10	--	--	<5

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, TOTAL (UG/L AS V)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)
OCT												
25...	<5	--	<3	<3	240	220	20	<5	140	<100	<.010	<5
25...	1	<1	--	<1	--	210	--	<6	--	23	--	--
MAR												
27...	<5	--	<3	<3	180	180	<5	<5	<100	<50	<.010	<5
27...	3	<1	--	<1	--	190	--	<6	--	4	--	--
JUN												
20...	3	<1	--	<1	--	220	--	<6	--	12	--	--
SEP												
18...	2	<1	--	<1	--	220	--	<6	--	6	--	--
18...	<5	--	<3	<3	220	210	<5	<5	<50	<50	<.010	<5

DATE	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT				
25...	5	--	--	--
25...	--	363	13900	100
MAR				
27...	1	--	--	--
27...	--	117	15100	95
JUN				
20...	--	138	7860	99
SEP				
18...	--	60	1010	99
18...	5	--	--	--

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 State Highway 66, 0.6 mile northwest of Blairsville, and 1.6 miles southeast of Wadesville.

DRAINAGE AREA.--104 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 7, Jan. 13 to Feb. 9, Feb. 13-14, and Sept. 19-22. Records good except those for ice affected periods, which are fair.

AVERAGE DISCHARGE.--20 years, 117 ft^3/s, 15.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,880 ft^3/s May 1, 1983; maximum gage height, 19.72 ft Apr. 24, 1975; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 21	1800	4490	17.98	Feb. 22	2100	4370	17.93
Dec. 31	2000	3000	17.23	Mar. 31	0600	*5840	*18.48

Minimum daily discharge, 0.01 ft^3/s, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	277	68	1890	26	90	970	197	6.0	62	.31	.34
2	.36	374	60	342	22	77	185	341	7.6	29	.29	.23
3	.30	48	106	148	19	68	122	83	26	10	.24	.20
4	.25	28	62	118	18	112	94	53	18	6.6	.20	.18
5	.21	17	53	94	22	203	439	41	27	5.0	.26	8.7
6	.15	11	48	92	27	87	342	32	12	4.1	.28	3.8
7	.20	8.5	37	91	19	76	120	26	32	2.8	17	1.8
8	.30	7.4	46	88	16	95	90	22	30	2.1	17	.95
9	.31	8.5	80	82	18	136	71	19	13	1.8	2.7	.58
10	.30	311	173	74	158	91	63	18	54	1.7	.96	.33
11	.26	196	86	62	1810	97	60	18	68	1.5	.86	.27
12	7.9	53	75	54	469	112	51	17	172	1.3	.46	.21
13	21	33	391	52	290	89	48	18	40	1.2	.32	.15
14	20	25	708	47	220	132	93	80	25	1.2	.29	.09
15	9.6	23	258	43	167	82	489	25	20	1.7	112	.07
16	3.9	17	147	44	124	68	205	16	16	1.4	258	.08
17	3.7	13	102	41	111	57	111	15	27	.98	17	.07
18	2.3	286	80	37	168	46	83	13	26	.91	3.3	.05
19	6.2	315	287	32	197	43	63	10	13	.87	1.3	.04
20	7.7	81	190	34	421	39	51	8.8	9.0	.84	1.0	.03
21	43	49	2980	27	947	35	42	7.7	7.2	35	.85	.02
22	15	38	1710	25	3270	39	36	131	6.8	47	.55	.01
23	5.7	33	254	23	2270	39	31	140	6.1	4.5	.63	.43
24	3.3	29	145	24	1220	38	47	43	97	1.4	114	37
25	3.6	25	90	26	265	32	35	29	241	.86	37	7.6
26	5.8	23	72	17	171	29	29	22	20	.89	3.9	1.5
27	3.1	209	69	19	120	31	51	18	12	.85	1.3	.73
28	119	1350	69	21	94	31	30	13	9.9	.53	.88	.32
29	216	190	67	16	---	205	25	11	9.2	.32	.51	.25
30	25	105	413	17	---	3810	24	9.0	9.4	.33	.36	.44
31	12	---	1150	20	---	5020	---	8.1	---	.32	.90	---
TOTAL	537.14	4183.4	10076	3700	12679	11109	4100	1484.6	1060.2	229.00	594.65	66.47
MEAN	17.3	139	325	119	453	358	137	47.9	35.3	7.39	19.2	2.22
MAX	216	1350	2980	1890	3270	5020	970	341	241	62	258	37
MIN	.15	7.4	37	16	16	29	24	7.7	6.0	.32	.20	.01
CFSM	.17	1.34	3.12	1.14	4.36	3.44	1.32	.46	.34	.07	.18	.02
IN.	.19	1.50	3.60	1.32	4.54	3.97	1.47	.53	.38	.08	.21	.02

CAL YR 1984	TOTAL	50719.24	MEAN	139	MAX	3240	MIN	.00	CFSM	1.34	IN.	18.14
WTR YR 1985	TOTAL	49819.46	MEAN	136	MAX	5020	MIN	.01	CFSM	1.31	IN.	17.82

03381500 LITTLE WABASH RIVER AT CARMI, IL

LOCATION.--Lat 38°03'40", long 88°09'35", near center of E½ sec.25, T.5 S., R.9 E., White County, Hydrologic Unit 05120114, on right bank at upstream side of Possum Bridge, 2.3 mi south of Main Street Bridge in Carmi, 7.8 mi downstream from Skillet Fork, and at mile 30.5.

DRAINAGE AREA.--3,102 mi^2.

PERIOD OF RECORD.--October 1908 to December 1912 (gage heights only), October 1939 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 339.91 ft above National Geodetic Vertical Datum of 1929. Prior to December 1912, nonrecording gage at site 3.1 mi upstream at datum 0.4 ft 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 upstream.

REMARKS.--Estimated daily discharges: Oct. 1-31, Dec. 17 to Jan. 7, and Jan. 30 to Feb. 10. Records good except those for estimated daily discharge, which are poor. There was no diversion through McHenry Slough during the year. U.S. Army Corps of Engineers satellite telemeter and rain gage at station.

AVERAGE DISCHARGE.--46 years, 2,617 ft^3/s, 11.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,900 ft^3/s May 12, 1961; maximum gage height, 36.70 ft May 13, 1961; no flow Sept. 16-17, 1952, result of temporary dam upstream; minimum unregulated discharge, 0.6 ft^3/s Sept. 9, 1953, July 31, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,800 ft^3/s Apr. 6, maximum gage height, 32.41 ft Mar. 3; minimum daily discharge, 55 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2390	4500	8380	6500	290	20000	15500	645	169	6380	153	551
2	2340	6220	8410	7500	280	21000	16400	3360	154	6490	136	387
3	1840	7270	8390	8500	270	21100	18000	5190	189	6100	122	319
4	1040	7670	8020	9500	260	20500	20100	5700	182	5270	114	346
5	478	8150	7490	11000	250	19900	21600	4980	169	4600	120	417
6	268	8240	6740	12000	240	19000	22400	4390	252	4270	121	361
7	223	8260	6320	12500	240	17600	22500	4100	727	4150	412	288
8	246	7950	5800	13300	230	16500	21800	4000	1060	4110	2260	247
9	200	7240	5340	13000	230	15600	20400	3500	932	3570	5060	204
10	170	6720	4780	12800	300	14600	19300	2150	1730	2320	6370	200
11	150	7270	3760	12300	2660	13900	17700	1090	2670	1230	7030	165
12	130	7400	2690	12400	4060	13300	16700	675	2650	714	7660	156
13	120	7060	3100	11600	4100	12800	15600	534	2200	468	8100	150
14	120	6210	6070	10000	3640	12500	14000	881	2050	380	7770	139
15	130	5180	7350	9170	3150	11800	14400	1250	1860	348	7370	134
16	140	4320	7760	7460	2460	11300	13800	978	1860	277	7780	129
17	150	3810	8000	6090	1960	10500	13200	848	2100	247	7640	124
18	170	3660	7500	3660	1780	9690	12500	685	3050	214	7120	117
19	200	4610	6500	1730	2180	8570	11800	518	2570	195	6270	110
20	1000	4510	5500	906	2880	7740	11000	395	1530	179	5130	97
21	3500	3930	4000	718	4870	6580	9940	335	1000	236	3960	84
22	5000	3020	4500	592	8670	5520	8380	333	686	933	2410	71
23	6000	2260	6000	512	11100	4280	6200	594	514	400	1080	74
24	6500	1760	7000	476	12500	2540	3550	718	476	235	586	79
25	7000	1330	7500	441	13600	1460	1540	485	501	206	1590	69
26	7500	974	8000	408	14900	1090	802	357	540	180	2930	67
27	7500	2150	8500	376	16400	930	659	296	798	150	3010	64
28	7000	7430	8500	357	18200	857	608	243	4140	143	2270	58
29	5500	8070	8000	338	---	1400	559	216	6020	159	1900	56
30	4500	8270	7000	320	---	8020	504	208	6350	161	1370	63
31	4000	---	6000	300	---	14100	---	189	---	147	975	---
TOTAL	75505	165444	202900	186754	131700	344677	372342	49843	49129	54462	109719	5325
MEAN	2436	5515	6545	6024	4704	11120	12410	1608	1638	1757	3507	178
MAX	7500	8270	8500	13300	18200	21100	22500	5700	6350	6490	8100	551
MIN	120	974	2690	300	230	857	504	189	154	143	114	56
CFSM	.79	1.78	2.11	1.94	1.52	3.58	4.00	.52	.53	.57	1.13	.06
IN.	.91	1.99	2.43	2.24	1.58	4.13	4.47	.60	.59	.65	1.30	.06

CAL YR 1984 TOTAL 1587598 MEAN 4338 MAX 18500 MIN 26 CFSM 1.40 IN. 19.04
WTR YR 1985 TOTAL 1746801 MEAN 4786 MAX 22500 MIN 56 CFSM 1.54 IN. 20.95

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 upstream from Duck Creek, and 400 ft downstream from Lake George Dam.

DRAINAGE AREA.--124 mi^2.

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

REVISED RECORDS.--WSP 1337: 1953. WSP 1507: 1956. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft above 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 upstream at datum 11.80 ft higher.

REMARKS.--Estimated daily discharge during the water year: Dec. 6, Jan. 27 to Feb. 8, Feb. 10-12, 14 and 15. Records good except those for periods of estimated record, which are fair. Periods of unusual regulation by Lake George Dam, Oct. 15-21 and Dec. 12, 13.

AVERAGE DISCHARGE.--38 years, 109 ft^3/s, 11.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s June 14, 1981; maximum gage height, 19.48 ft, Oct. 11, 1954, present datum, site then in use; no flow Nov. 5, 1978, due to regulation of Lake George Dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	0600	1,620	11.43	Mar. 5	0800	1,430	10.85
Feb. 24	0700	*2,870	*14.72	Mar. 30	0100	815	8.71

Minimum daily discharge, 1.2 ft^3/s Oct. 18, regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	91	84	1030	18	570	518	44	23	15	104	26
2	20	123	70	1490	16	489	427	41	19	15	61	21
3	15	96	65	928	15	417	349	40	34	16	35	20
4	14	72	50	571	14	856	289	39	34	27	26	16
5	15	47	40	404	13	1360	267	35	27	28	33	18
6	15	28	37	319	12	936	393	37	22	20	34	19
7	22	28	34	254	11	628	422	35	20	18	25	23
8	26	31	32	204	10	493	342	32	20	14	19	23
9	27	38	32	178	19	413	284	32	15	13	16	77
10	26	47	55	154	19	351	239	29	13	12	14	197
11	24	69	88	136	18	313	197	29	17	13	13	130
12	22	94	55	111	18	309	172	32	24	13	13	74
13	24	84	5.2	98	18	280	153	26	24	14	13	50
14	26	70	84	94	18	248	144	28	21	15	28	38
15	52	62	190	79	19	219	138	43	34	14	129	31
16	79	42	172	76	20	191	126	51	63	12	209	27
17	65	32	130	75	21	166	115	41	59	11	128	24
18	1.2	34	108	71	21	147	106	38	41	11	74	21
19	2.6	35	105	65	22	129	85	37	30	11	49	19
20	1.6	35	109	53	22	118	78	32	24	11	35	18
21	45	32	117	46	26	109	79	31	26	12	29	16
22	78	32	232	41	169	101	73	31	25	9.1	24	19
23	58	31	274	40	1540	97	69	26	20	8.9	22	34
24	42	31	194	41	2670	97	66	23	15	11	21	33
25	33	30	136	42	1760	98	64	22	15	18	20	26
26	30	31	100	38	1090	95	58	21	14	45	19	24
27	30	59	96	36	812	95	54	24	13	46	18	23
28	25	131	107	34	677	188	50	31	14	28	17	20
29	25	147	162	32	---	563	48	33	15	18	17	17
30	25	108	456	30	---	752	45	28	15	14	25	23
31	32	---	512	29	---	604	---	36	---	70	32	---
TOTAL	918.4	1790	3931.2	6799	9088	11432	5450	1027	736	583.0	1302	1107
MEAN	29.6	59.7	127	219	325	369	182	33.1	24.5	18.8	42.0	36.9
MAX	79	147	512	1490	2670	1360	518	51	63	70	209	197
MIN	1.2	28	5.2	29	10	95	45	21	13	8.9	13	16
CFSM	.24	.48	1.02	1.77	2.62	2.98	1.47	.27	.20	.15	.34	.30
IN.	.28	.54	1.18	2.04	2.73	3.43	1.63	.31	.22	.17	.39	.33

CAL YR 1984	TOTAL	48403.6	MEAN	132	MAX	986	MIN	1.2	CFSM	1.06	IN.	14.52
WTR YR 1985	TOTAL	44163.6	MEAN	121	MAX	2670	MIN	1.2	CFSM	.98	IN.	13.25

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 east of Gary, and 0.4 mile downstream from confluence of Deep River and Little Calumet River.

DRAINAGE AREA.--160 mi^2. 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 (Since 1951 water year, backwater free periods only).

REVISED RECORDS.--WSP 1034: 1944. WSP 1337: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 577.04 ft above National Geodetic Vertical Datum of 1929. Prior to July 28, 1955, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharge: Dec. 27. Records 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. During high levels on Lake Michigan, only periods free from backwater are shown.

AVERAGE DISCHARGE.--28 years (1943-50, 1955-73, 1977, 1978, 1982), 140 ft^3/s, 11.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft^3/s Oct. 11, 1954; maximum gage height, 16.44 ft Mar. 16, 1944, from graph based on gage readings.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,750 ft^3/s Feb. 24, gage height, 15.12 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	124	965	---	966	720					
2		---	98	1460	---	825	610					
3		---	---	1360	---	719	528					
4		---	---	957	---	983	474					
5		---	---	689	---	1470	468					
6		---	---	525	---	1400	537					
7		---	---	461	---	1050	582					
8		---	---	392	---	828	544					
9		---	---	314	---	699	470					
10		---	---	272	---	600	---					
11		---	---	249	---	---	---					
12		---	---	220	---	---	---					
13		---	---	154	---	---	---					
14		---	---	---	---	---	---					
15		---	241	---	---	---	---					
16		---	212	---	---	---	---					
17		---	175	---	---	---	---					
18		---	162	---	---	---	---					
19		---	144	---	---	---	---					
20		---	132	---	---	---	---					
21		---	140	---	---	---	---					
22		---	257	---	295	---	---					
23		---	304	---	1370	---	---					
24		---	295	---	2470	---	---					
25		---	197	---	2390	---	---					
26		---	140	---	1910	---	---					
27		92	128	---	1450	---	---					
28		144	130	---	1160	289	---					
29		168	211	---	---	550	---					
30		157	434	---	---	863	---					
31		---	571	---	---	800	---					
TOTAL		---	---	---	---	---	---					
MEAN		---	---	---	---	---	---					
MAX		---	---	---	---	---	---					
MIN		---	---	---	---	---	---					
CFSM		---	---	---	---	---	---					
IN.		---	---	---	---	---	---					

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 upstream from bridge on U.S. Highway 20, 0.8 mile northwest of Porter, and 4.5 miles upstream from Salt Creek.

DRAINAGE AREA.--66.2 mi^2.

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

REVISED RECORDS.--WSP 1084: 1945. WSP 1337: 1946-47. WDR IN-72-1: Drainage area. WDR IN-83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 603.48 ft above National Geodetic Vertical Datum of 1929. Prior to June 26, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 74.3 ft^3/s, 15.24 in/yr.

REMARKS.--Estimated daily discharges during water year: Dec. 6-8, Dec. 25 to Feb. 26, Apr 10 to May 8. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft^3/s Oct. 10, 1954, gage height, 11.66 ft; minimum daily, 17 ft^3/s Aug. 24, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 24	unknown	*1840	*a 9.36	Mar. 05	0400	835	7.96

a-HWM

Minimum daily discharge, 26 ft^3/s July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	78	59	400	46	213	153	45	39	30	38	31
2	31	108	54	460	44	184	116	45	35	31	32	30
3	32	68	57	165	47	153	98	44	42	37	30	30
4	32	57	51	110	49	371	86	44	39	32	28	29
5	32	52	45	83	49	693	94	43	37	31	50	30
6	32	48	43	73	49	312	242	50	35	30	42	31
7	36	46	42	68	48	195	217	45	34	29	35	33
8	46	46	44	65	47	160	125	43	34	29	31	31
9	43	49	47	62	45	136	109	41	32	28	30	78
10	39	66	53	59	43	116	99	40	30	42	29	129
11	38	92	55	57	44	115	91	39	33	34	29	62
12	38	95	57	56	45	125	86	41	40	32	28	46
13	38	69	73	55	46	102	84	40	35	32	28	39
14	41	59	108	54	47	96	83	39	33	34	40	35
15	48	55	118	53	47	86	80	44	49	32	162	33
16	46	52	89	52	49	80	77	42	64	29	115	33
17	41	49	74	52	50	76	72	42	47	27	57	32
18	38	48	64	52	49	71	68	41	42	28	43	31
19	43	47	66	51	50	68	62	40	39	27	37	30
20	45	46	70	48	53	66	57	39	36	29	33	30
21	76	46	71	45	76	62	54	42	35	28	32	29
22	64	45	164	47	250	60	51	39	35	28	32	31
23	45	45	112	50	630	59	49	38	33	27	31	35
24	39	46	82	50	1100	66	67	36	33	26	31	34
25	38	46	61	49	690	68	75	35	32	30	32	33
26	37	46	56	49	460	62	56	35	31	82	35	33
27	38	58	54	47	368	79	50	41	34	42	34	33
28	39	117	74	47	275	175	48	48	43	33	32	31
29	39	89	145	48	---	295	47	40	32	30	31	30
30	38	68	280	48	---	212	46	37	31	28	35	34
31	43	---	215	49	---	170	---	45	---	37	33	---
TOTAL	1267	1836	2583	2604	4796	4726	2642	1283	1114	1014	1275	1146
MEAN	40.9	61.2	83.3	84.0	171	152	88.1	41.4	37.1	32.7	41.1	38.2
MAX	76	117	280	460	1100	693	242	50	64	82	162	129
MIN	31	45	42	45	43	59	46	35	30	26	28	29
CFSM	.62	.92	1.26	1.27	2.58	2.30	1.33	.63	.56	.49	.62	.58
IN.	.71	1.03	1.45	1.46	2.70	2.66	1.48	.72	.63	.57	.72	.64

CAL YR 1984	TOTAL	28745	MEAN	78.5	MAX	706	MIN	27	CFSM	1.19	IN.	16.15
WTR YR 1985	TOTAL	26286	MEAN	72.0	MAX	1100	MIN	26	CFSM	1.09	IN.	14.77

04094500 SALT CREEK NEAR McCOOL, IN

LOCATION.--Lat 41°35'48", long 87°08'40", in SE¼SE¼ sec.6, T.36 N., R.6 W., Porter County, Hydrologic Unit 04040001, on left bank on downstream side of highway bridge, 50 ft downstream from Conrail Railroad bridge, 1.2 miles north of McCool, and 1.5 miles upstream from Little Calumet River.

DRAINAGE AREA.--74.6 mi^2.

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

REVISED RECORDS.--WSP 1337: 1946-48(M), 1950(M). WSP 1911: 1958. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 594.10 ft above 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.

REMARKS.--Estimated daily discharges during water year: Dec. 5, 6, Jan. 13, 14, 19-21, 25, 30, 31, Feb. 2, 9-12, 14, June 23 to July 31, Aug. 2-4, and Aug. 8-13. Records good except periods of indefinite stage-discharge relationship, June 23 to July 31, Aug. 2-4, and Aug. 8-13, which are poor.

AVERAGE DISCHARGE.--40 years, 75.4 ft^3/s, 13.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,180 ft^3/s Oct. 11, 1954, gage height, 14.12 ft; minimum daily, 14 ft^3/s Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharges of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	2300	756	6.45	Mar. 5	0700	723	5.43
Feb. 24	0200	*1500	*9.42				

Minimum daily discharge, 32 ft^3/s, July 17, 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	101	77	536	64	252	265	61	44	36	71	40
2	49	116	74	637	63	201	176	61	41	35	41	40
3	48	88	76	364	67	169	155	59	59	42	37	42
4	49	76	73	151	75	410	139	59	49	39	35	43
5	49	72	64	111	74	684	153	57	44	37	64	45
6	48	69	65	102	71	468	290	62	43	36	55	46
7	52	66	66	97	67	223	253	60	42	34	39	50
8	62	66	66	93	67	164	180	56	40	34	36	45
9	58	74	65	88	63	147	165	55	38	41	35	135
10	54	85	69	84	60	133	146	52	36	54	34	218
11	53	124	69	81	61	141	132	51	38	44	34	122
12	53	127	73	78	63	149	123	52	51	39	33	73
13	53	96	86	78	63	132	117	50	43	37	33	52
14	54	81	137	77	66	129	117	49	39	39	58	48
15	63	75	132	75	67	119	113	61	68	37	230	46
16	66	71	103	73	71	112	110	63	89	34	187	44
17	58	68	90	75	71	107	101	57	57	32	101	43
18	54	67	81	74	70	100	96	56	53	40	59	43
19	57	67	86	71	71	97	91	52	45	38	44	39
20	58	66	90	67	72	93	83	47	42	34	42	38
21	89	65	92	64	85	87	75	52	39	33	46	37
22	84	64	208	71	264	83	70	49	39	33	42	39
23	68	64	126	71	891	82	64	46	38	32	41	47
24	61	64	97	70	1290	98	80	46	37	32	40	48
25	58	64	80	68	835	111	93	44	37	36	44	43
26	75	64	79	66	610	100	73	42	38	96	43	43
27	83	75	75	72	467	129	66	50	43	55	38	43
28	70	132	89	70	347	275	65	69	52	42	37	40
29	68	102	157	69	---	469	63	54	40	36	36	36
30	68	85	350	66	---	501	62	47	38	34	39	40
31	74	---	250	65	---	380	---	54	---	59	42	---
TOTAL	1886	2434	3245	3764	6135	6345	3716	1673	1362	1250	1716	1668
MEAN	60.8	81.1	105	121	219	205	124	54.0	45.4	40.3	55.4	55.6
MAX	89	132	350	637	1290	684	290	69	89	96	230	218
MIN	48	64	64	64	60	82	62	42	36	32	33	36
CFSM	.82	1.09	1.41	1.62	2.94	2.75	1.66	.72	.61	.54	.74	.75
IN.	.94	1.21	1.62	1.88	3.06	3.16	1.85	.83	.68	.62	.86	.83

CAL YR 1984	TOTAL	33640	MEAN	91.9	MAX	566	MIN	34	CFSM	1.23	IN.	16.77
WTR YR 1985	TOTAL	35194	MEAN	96.4	MAX	1290	MIN	32	CFSM	1.29	IN.	17.55

04095300 TRAIL CREEK AT MICHIGAN CITY, IN

LOCATION(revised).--Lat 41°43'00", long 86°51'34", in NE¼SE¼ sec.27, T.38 N., R.4 W., LaPorte County, Hydrologic Unit 04040001, on right upstream side of bridge on Springland Avenue in Michigan City, 1.0 mile upstream from Otter Creek, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--54.1 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 584.02 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 14-31, Nov. 16-29, Dec. 5-7, 26, 27, and Jan. 14 to Feb. 19. Records good except for periods of no gage-height record, Oct. 14-31 and Nov. 16-29, and period of ice effect, Jan. 14 to Feb. 19, which are fair.

AVERAGE DISCHARGE.--16 years, 72.9 ft^3/s, 18.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,200 ft^3/s Feb. 23, 1985, gage height, 11.69 ft; minimum daily, 20 ft^3/s Aug. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 01	1700	862	9.36	Mar. 04	2400	785	8.94
Feb. 09	----	ice jam	6.86	Mar. 29	0300	547	7.06
Feb. 23	1900	*2200	*11.69				

Minimum daily discharge, 29 ft^3/s Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	102	58	678	51	152	146	55	41	32	37	35
2	36	92	57	335	49	130	116	54	40	32	32	34
3	35	60	63	158	48	115	103	53	40	33	31	35
4	35	54	55	115	47	501	95	54	39	32	31	33
5	35	51	49	100	47	478	164	56	39	31	55	33
6	34	49	47	93	47	195	304	58	38	31	39	35
7	44	48	48	89	46	144	171	55	37	30	39	35
8	56	47	53	83	46	132	122	53	37	30	33	42
9	45	53	52	76	45	117	107	51	36	36	31	71
10	41	62	59	71	44	107	96	49	35	121	31	52
11	39	90	59	70	44	118	90	49	44	41	31	42
12	39	73	64	68	44	118	85	53	46	37	30	37
13	40	59	82	62	44	103	82	48	41	57	29	35
14	50	55	121	62	44	102	81	47	39	46	52	34
15	62	53	103	62	43	94	79	51	65	43	149	33
16	52	52	85	62	43	90	74	49	80	37	63	32
17	46	50	73	61	45	88	69	49	56	34	43	32
18	40	49	64	61	49	84	68	47	47	34	39	32
19	46	49	70	59	53	84	68	45	43	33	36	31
20	59	49	69	57	60	82	65	47	41	34	35	31
21	79	49	97	55	70	80	63	49	39	34	35	31
22	69	49	168	54	235	79	62	44	39	34	34	33
23	59	49	94	54	1380	81	61	43	37	31	33	36
24	51	48	78	54	1440	89	68	42	36	31	35	35
25	45	48	63	53	468	84	66	41	34	43	44	34
26	43	47	60	52	310	80	60	43	34	69	44	34
27	42	52	58	52	267	136	59	56	41	39	37	34
28	41	86	101	52	179	318	58	53	38	35	35	34
29	41	74	185	51	---	445	57	45	34	33	36	32
30	41	63	238	51	---	230	56	43	32	32	41	39
31	49	---	136	52	---	175	---	46	---	41	37	---
TOTAL	1432	1762	2609	3002	5288	4831	2795	1528	1248	1226	1277	1086
MEAN	46.2	58.7	84.2	96.8	189	156	93.2	49.3	41.6	39.5	41.2	36.2
MAX	79	102	238	678	1440	501	304	58	80	121	149	71
MIN	34	47	47	51	43	79	56	41	32	30	29	31
CFSM	.85	1.09	1.56	1.79	3.49	2.88	1.72	.91	.77	.73	.76	.67
IN.	.98	1.21	1.79	2.06	3.64	3.32	1.92	1.05	.86	.84	.88	.75

CAL YR 1984	TOTAL	28209	MEAN	77.1	MAX	793	MIN	28	CFSM	1.43	IN.	19.40
WTR YR 1985	TOTAL	28084	MEAN	76.9	MAX	1440	MIN	29	CFSM	1.42	IN.	19.31

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 upstream from Indiana-Michigan State line, and 9.8 miles north of Courthouse in LaPorte.

DRAINAGE AREA.--17.2 mi^2, of which 2.30 mi^2 does not contribute directly to surface runoff.

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

REVISED RECORDS.--WDR IN-80-1: 1970, 1971(P), 1972, 1973, 1974(P), 1975 (M), 1976 (P), and 1978 (P).

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 6-8, 25, 26, Jan. 12 to Feb. 19, and Sept. 20-22. Records good except those for period of ice effect, Jan. 12 to Feb. 19, which are fair.

AVERAGE DISCHARGE.--16 years, 25.5 ft^3/s, 20.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft^3/s Mar. 4, 1979 (correction), gage height, 7.02 ft; minimum daily, 6.7 ft^3/s Sept. 13, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30	0200	101	3.60	Mar. 4	2000	259	5.69
Jan. 1	1200	270	5.78	Mar. 29	0600	202	5.12
Feb. 23	1300	*460	*6.55	Apr. 6	0400	113	3.83

Minimum daily discharge, 11 ft^3/s Sept. 20-22, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	51	24	199	17	56	44	17	14	14	14	14
2	15	60	23	100	16	48	37	17	13	14	13	13
3	15	35	29	54	15	44	34	20	13	14	13	13
4	14	29	23	40	15	151	31	19	13	13	13	12
5	14	24	21	35	16	137	53	18	13	13	15	12
6	14	22	20	34	16	63	97	18	13	13	14	12
7	20	22	20	32	16	50	54	17	13	13	13	12
8	27	21	20	31	16	48	41	17	13	13	13	13
9	21	25	21	29	15	44	37	16	13	12	13	19
10	19	31	25	27	15	40	35	15	13	22	13	19
11	18	54	25	26	16	45	32	15	14	15	13	20
12	17	43	28	25	16	43	30	16	16	14	12	16
13	20	32	35	24	16	37	29	15	14	16	12	14
14	23	28	51	23	15	36	30	15	13	16	16	13
15	26	25	43	22	15	33	28	17	20	17	50	13
16	28	24	33	22	16	33	26	17	35	14	31	12
17	22	23	28	21	17	31	25	17	25	14	21	12
18	21	23	25	20	18	29	24	17	20	14	17	12
19	24	22	27	20	20	29	23	16	17	14	15	12
20	24	22	25	17	23	28	22	16	16	14	14	11
21	53	22	35	19	26	27	21	17	15	14	13	11
22	36	22	60	19	77	26	20	16	14	14	13	11
23	25	22	36	19	359	26	20	15	15	13	12	13
24	22	22	31	18	268	29	21	15	15	13	12	13
25	21	22	30	18	139	27	21	15	15	13	18	12
26	20	21	27	17	93	26	19	15	15	16	17	13
27	20	26	26	18	91	43	19	18	15	14	14	12
28	20	47	45	18	64	78	19	18	14	13	13	12
29	18	31	59	17	---	143	18	16	14	13	16	11
30	18	26	80	16	---	68	18	15	14	13	18	13
31	20	---	54	17	---	52	---	16	---	13	15	---
TOTAL	671	877	1029	997	1446	1570	928	511	467	438	496	395
MEAN	21.6	29.2	33.2	32.2	51.6	50.6	30.9	16.5	15.6	14.1	16.0	13.2
MAX	53	60	80	199	359	151	97	20	35	22	50	20
MIN	14	21	20	16	15	26	18	15	13	12	12	11
CFSM	1.26	1.70	1.93	1.87	3.00	2.94	1.80	.96	.91	.82	.93	.77
IN.	1.45	1.90	2.23	2.16	3.13	3.40	2.01	1.11	1.01	.95	1.07	.85

CAL YR 1984	TOTAL	10242	MEAN	28.0	MAX	168	MIN	10	CFSM	1.63	IN.	22.15
WTR YR 1985	TOTAL	9825	MEAN	26.9	MAX	359	MIN	11	CFSM	1.56	IN.	21.25

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 downstream from dam for Lime Lake, 30 ft upstream from bridge on Orland Road, and 0.7 mile northwest of Panama.

DRAINAGE AREA.--17.5 mi^2, of which 3.68 mi^2 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 above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation by control structure for Lime Lake.

AVERAGE DISCHARGE.--16 years, 7.96 ft^3/s, 6.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52 ft^3/s Apr. 10, 1985, gage height, 4.87 ft; no flow at times during 1971, 1972, and 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52 ft^3/s Apr. 10, gage height, 4.87 ft; minimum daily, 1.4 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	15	6.1	11	14	30	44	23	6.2	2.2	1.8	2.0
2	1.8	14	6.2	11	13	32	44	21	5.9	2.1	1.6	2.0
3	1.6	12	5.9	11	13	33	45	19	5.6	2.1	1.5	1.9
4	1.5	11	5.7	12	12	38	45	11	5.2	2.1	1.5	1.9
5	1.5	9.8	5.7	14	12	40	47	2.0	4.7	2.1	1.9	1.9
6	1.4	9.0	5.5	15	12	40	51	2.3	4.4	2.0	2.7	3.2
7	2.0	8.3	5.5	16	11	40	51	2.5	4.1	2.0	2.9	4.2
8	2.6	7.5	5.2	17	11	41	51	2.8	3.8	2.0	2.7	5.6
9	2.6	7.4	5.2	18	11	41	51	2.9	3.5	1.9	2.6	9.9
10	2.5	7.9	5.2	19	11	41	51	3.0	3.2	2.6	2.5	9.5
11	2.5	9.3	5.2	20	11	42	51	3.3	3.4	2.4	2.2	7.9
12	2.4	8.9	5.4	20	12	41	50	3.3	3.8	2.2	2.0	6.8
13	2.5	8.5	5.4	20	12	41	50	3.2	3.6	2.2	2.8	5.5
14	2.8	8.4	5.8	20	12	40	49	3.4	3.4	2.6	4.2	4.8
15	2.9	8.2	5.9	20	12	39	48	3.8	3.8	2.7	5.1	4.4
16	3.0	7.6	6.1	20	12	39	47	4.0	4.4	2.3	5.2	4.1
17	2.9	7.4	5.9	20	12	37	46	4.3	5.4	2.0	4.6	3.8
18	2.7	7.2	5.8	20	11	36	45	4.7	5.2	1.7	4.4	3.6
19	3.1	6.9	5.9	20	11	35	43	4.9	4.7	1.5	4.0	3.4
20	2.9	6.6	5.9	19	11	34	42	4.7	4.4	1.7	3.4	3.1
21	4.0	6.4	6.2	18	11	33	40	4.7	4.4	2.0	3.0	2.8
22	3.8	6.3	6.2	18	12	32	38	4.6	4.1	1.7	2.7	2.6
23	3.4	6.0	6.8	17	15	31	37	4.4	3.7	1.5	2.6	3.0
24	3.2	5.9	6.2	17	20	30	35	4.4	3.5	1.5	2.5	3.1
25	3.0	5.7	6.1	17	22	28	34	4.3	3.4	1.5	2.5	2.7
26	3.0	5.7	6.1	16	24	27	32	4.3	3.3	2.4	2.4	2.6
27	3.1	5.8	6.3	16	27	27	29	5.4	3.0	2.2	2.4	2.5
28	2.9	6.4	6.7	15	28	34	28	8.1	2.7	2.2	2.4	2.4
29	12	6.5	7.2	15	---	40	26	7.9	2.5	2.0	2.3	2.3
30	17	6.3	7.6	14	---	41	24	7.5	2.3	1.9	2.2	2.3
31	15	---	7.9	14	---	43	---	7.1	---	1.9	2.1	---
TOTAL	117.5	241.9	186.8	520	395	1126	1274	191.8	121.6	63.2	86.7	115.8
MEAN	3.79	8.06	6.03	16.8	14.1	36.3	42.5	6.19	4.05	2.04	2.80	3.86
MAX	17	15	7.9	20	28	43	51	23	6.2	2.7	5.2	9.9
MIN	1.4	5.7	5.2	11	11	27	24	2.0	2.3	1.5	1.5	1.9
CFSM	.22	.46	.34	.96	.81	2.07	2.43	.35	.23	.12	.16	.22
IN.	.25	.51	.40	1.11	.84	2.39	2.71	.41	.26	.13	.18	.25

CAL YR 1984	TOTAL	2581.11	MEAN	7.05	MAX	20	MIN	.27	CFSM	.40	IN.	5.49
WTR YR 1985	TOTAL	4440.3	MEAN	12.2	MAX	51	MIN	1.4	CFSM	.70	IN.	9.44

04099000 ST. JOSEPH RIVER AT MOTTVILLE, MI

LOCATION.--41°48'03", long 85°45'22", in SW¼ sec.6, T.8 S., R.12 W., Michigan Meridian, St. Joseph County, Hydrologic Unit 04050001, on right bank 500 ft upstream from bridge on U.S. Highway 12 at Mottville, 0.4 mi downstream from Michigan Power Co. hydroelectric plant, 4 mi upstream from Pigeon River, and at mile 96.

DRAINAGE AREA.--1,866 mi^2.

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, Michigan Power Co. datum. Prior to Oct. 1, 1951, at site 0.4 mi upstream at datum 4.2 ft higher.

REMARKS.--Estimated daily discharges: Jan. 9 to Feb. 22. Records good except those for estimated daily discharges, 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.--62 years, 1,593 ft^3/s, 11.59 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft^3/s Apr. 27, 1950, gage height, 10.76 ft, present datum; minimum daily, 39 ft^3/s Oct. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,680 ft^3/s Feb. 28, gage height, 9.57 ft; minimum daily, 495 ft^3/s July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	1380	1640	3650	1800	9470	4410	2530	1860	1030	806	575
2	997	1430	1690	4090	1750	8910	4640	2590	1510	1050	842	568
3	846	1510	1750	4550	1700	8020	4700	2330	1490	797	619	895
4	743	1680	1650	4550	1650	7620	4670	2240	1520	776	578	1090
5	966	1600	1570	4620	1600	6970	4760	2280	1490	836	814	683
6	688	1650	1630	4580	1600	6800	5220	2260	1300	647	991	707
7	711	1540	1440	4360	1600	6360	6310	2200	1070	648	997	554
8	1090	1400	1290	3770	1600	6360	6450	2000	1280	789	1070	564
9	1140	1450	1330	3500	1600	6200	6850	2190	1250	880	990	1110
10	1100	1410	1650	3200	1600	6020	6480	1940	1160	1030	600	1290
11	1060	1490	1490	3000	1600	5860	6090	1930	1350	1200	603	945
12	1110	1740	1510	2700	1600	5650	5660	1800	1200	639	964	1170
13	791	1760	1590	2600	1600	5290	5450	1770	1300	815	870	1050
14	787	1900	1680	2400	1600	5270	5230	1840	1390	905	862	904
15	1510	1900	1680	2350	1600	4840	4900	1640	1410	1550	1140	644
16	1240	1890	1750	2300	1600	4530	4710	1930	1450	1150	1010	818
17	983	1870	1870	2300	1600	4510	4190	1670	1470	900	1110	872
18	1000	1860	1920	2200	1600	4220	4190	1550	1350	1100	850	966
19	1100	1810	1870	2100	1600	3890	4090	1920	1540	1030	1100	795
20	980	1760	1790	2000	1600	4140	3830	1950	1350	853	1100	703
21	1460	1630	1820	2000	1600	3690	3670	1790	1340	932	762	549
22	1820	1570	1960	2000	1800	3590	3150	1590	1200	1220	817	561
23	1810	1670	2050	2000	2510	3530	3410	1660	998	1280	872	999
24	1750	1730	2050	2000	4590	3510	3130	1500	1200	714	545	918
25	1750	1560	2000	1800	6340	3130	3300	1470	1280	495	605	776
26	1870	1440	1850	2200	9320	3090	3070	1270	983	542	1160	796
27	1780	1510	1820	2150	9370	3070	3020	1530	1110	558	1000	912
28	1610	1670	1970	2100	9620	3350	2730	1920	1170	693	849	692
29	1590	1590	2160	2000	---	3450	2550	1700	786	884	814	651
30	1490	1640	2490	2000	---	3800	2610	1640	862	805	702	1120
31	1390	---	2820	1900	---	4460	---	1690	---	771	549	---
TOTAL	38482	49040	55780	86970	76650	159600	133470	58320	38669	27519	26591	24877
MEAN	1241	1635	1799	2805	2738	5148	4449	1881	1289	888	858	829
MAX	1870	1900	2820	4620	9620	9470	6850	2590	1860	1550	1160	1290
MIN	688	1380	1290	1800	1600	3070	2550	1270	786	495	545	549
CFSM	.67	.88	.96	1.50	1.47	2.76	2.38	1.01	.69	.48	.46	.44
IN.	.77	.98	1.11	1.73	1.53	3.18	2.66	1.16	.77	.55	.53	.50

CAL YR 1984 TOTAL 616821 MEAN 1685 MAX 3990 MIN 319 CFSM .90 IN. 12.30
WTR YR 1985 TOTAL 775968 MEAN 2126 MAX 9620 MIN 495 CFSM 1.14 IN. 15.47

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 upstream from bridge on U.S. Highway 20, 1.3 miles downstream from outlet of Hogback Lake, 1.3 miles southeast of Flint, and 5.8 miles west of Angola.

DRAINAGE AREA.--106 mi^2, of which 22.5 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1947, published as "near Flint". Published as Pigeon Creek at Hogback Lake Outlet near Angola, October 1947 to September 1971, and Pigeon Creek and Hogback Lake near Angola, October 1971 to September 1974.

REVISED RECORDS.--WSP 1144: 1948. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft above National Geodetic Vertical Datum of 1929. Prior to October 1947, nonrecording gage at site 0.3 mile downstream at different datum. October 1947 to Aug. 3, 1953, nonrecording gage at site 1.2 miles upstream at same datum. Aug. 4, 1953, to Apr. 3, 1974, recording gage at site 1.3 miles upstream at same datum. Apr. 18, 1974, to Sept. 2, 1974, non-recording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--40 years, 79.9 ft^3/s, 10.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 795 ft^3/s Mar. 22, 1982, gage height, 13.90 ft; minimum daily, 3.4 ft^3/s Oct. 25-27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 699 ft^3/s Mar. 1; maximum gage height, 11.62 ft, Feb. 28; minimum daily discharge, 25 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	60	85	229	60	689	494	97	67	36	28	33
2	51	66	84	306	59	643	511	93	64	35	27	32
3	47	70	81	347	57	586	504	89	62	34	26	30
4	45	72	80	362	56	559	482	86	58	33	25	30
5	42	71	80	348	55	544	458	82	55	33	27	29
6	40	69	79	319	54	534	484	80	52	33	30	31
7	43	67	76	284	53	519	503	77	51	37	32	33
8	48	65	73	251	52	491	502	74	49	36	35	34
9	52	73	69	219	51	460	486	72	47	36	36	46
10	54	121	68	194	51	431	454	69	45	41	35	64
11	54	194	66	173	52	405	412	68	45	42	34	80
12	52	234	66	154	55	381	374	66	46	43	33	85
13	51	241	67	138	56	363	339	63	47	43	34	82
14	50	229	74	125	57	337	308	62	50	44	37	76
15	49	208	85	115	57	311	280	62	51	43	44	70
16	48	189	92	107	56	284	254	61	52	44	50	63
17	46	170	105	101	56	258	230	59	56	43	53	57
18	46	152	107	96	55	235	209	58	59	41	55	51
19	46	141	103	91	54	215	191	57	61	39	53	46
20	48	130	100	85	54	198	174	56	64	37	50	42
21	56	120	98	80	55	182	161	56	65	36	47	40
22	63	113	103	76	64	169	149	56	64	35	43	37
23	66	105	114	74	155	158	139	55	62	34	40	37
24	66	97	119	71	387	150	129	52	58	33	37	40
25	66	91	118	70	535	142	124	51	52	33	38	39
26	65	86	112	69	596	134	118	49	49	32	40	39
27	62	81	106	68	656	130	114	53	46	31	41	38
28	60	82	105	66	687	146	109	61	44	29	40	37
29	58	83	116	64	---	241	104	65	40	28	38	36
30	56	85	143	62	---	354	101	68	37	27	37	35
31	56	---	167	62	---	440	---	68	---	27	35	---
TOTAL	1641	3565	2941	4806	4235	10689	8897	2065	1598	1118	1180	1392
MEAN	52.9	119	94.9	155	151	345	297	66.6	53.3	36.1	38.1	46.4
MAX	66	241	167	362	687	689	511	97	67	44	55	85
MIN	40	60	66	62	51	130	101	49	37	27	25	29
CFSM	.50	1.12	.90	1.46	1.42	3.25	2.80	.63	.50	.34	.36	.44
IN.	.58	1.25	1.03	1.69	1.49	3.75	3.12	.72	.56	.39	.41	.49

CAL YR 1984	TOTAL	37543	MEAN	103	MAX	368	MIN	11	CFSM	.97	IN.	13.18
WTR YR 1985	TOTAL	44127	MEAN	121	MAX	689	MIN	25	CFSM	1.14	IN.	15.49

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 downstream from bridge on County Road 750 North, 1,200 ft downstream from Page ditch, 0.7 mile south of Indiana-Michigan State line, and 1.2 miles northwest of Scott.

DRAINAGE AREA.--361 mi^2, of which 53.9 mi^2 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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 8, 26 and Jan. 8 to Feb. 22. Records good.

AVERAGE DISCHARGE.--17 years, 368 ft^3/s, 13.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft^3/s Mar. 21, 1982, gage height, 7.85 ft; minimum daily, 42 ft^3/s Oct. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,110 ft^3/s Feb. 25, gage height, 7.42 ft; minimum daily, 137 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	304	399	819	285	1900	1430	448	289	180	159	174
2	244	355	384	1120	280	1850	1490	430	279	176	154	175
3	228	366	379	1270	270	1790	1490	411	272	174	145	174
4	214	355	365	1220	265	1800	1470	397	262	170	137	172
5	204	345	345	1170	260	1830	1500	384	257	170	150	170
6	194	337	336	1150	260	1850	1670	376	250	175	175	194
7	208	332	328	1120	255	1760	1770	334	243	173	213	245
8	268	322	320	1070	250	1650	1670	341	235	169	190	218
9	286	316	313	1000	245	1570	1580	338	228	162	173	222
10	263	353	318	900	240	1490	1510	324	218	208	167	243
11	251	445	325	810	245	1410	1440	315	224	239	165	242
12	246	553	329	720	260	1340	1360	311	288	210	161	248
13	248	616	346	660	265	1270	1270	305	268	198	161	256
14	268	654	381	600	270	1210	1190	293	243	201	210	258
15	272	690	428	550	270	1130	1130	292	241	223	243	255
16	264	704	428	520	270	1060	1050	293	272	214	255	249
17	253	703	417	480	265	988	956	301	276	200	232	239
18	240	671	411	450	265	918	888	305	285	187	225	231
19	253	629	419	430	260	861	825	314	268	177	237	226
20	269	581	429	410	260	805	762	296	252	180	222	219
21	358	531	432	390	260	755	702	285	245	175	210	214
22	431	490	489	370	300	707	674	278	245	172	202	213
23	406	456	527	350	877	670	634	272	235	164	196	219
24	368	429	499	335	1690	622	609	264	231	150	193	263
25	346	405	471	330	2080	607	597	255	224	142	205	234
26	334	385	465	325	1980	584	565	249	213	189	206	220
27	324	374	458	320	1920	567	533	271	203	191	208	215
28	316	411	471	315	1910	647	509	335	193	170	204	203
29	298	446	537	310	---	1040	486	339	186	158	196	194
30	284	423	608	300	---	1420	465	308	185	150	187	193
31	275	---	648	290	---	1380	---	301	---	149	177	---
TOTAL	8672	13981	13005	20104	16257	37481	32225	9965	7311	5596	5958	6578
MEAN	280	466	420	649	581	1209	1074	321	244	181	192	219
MAX	431	704	648	1270	2080	1900	1770	448	289	239	255	263
MIN	194	304	313	290	240	567	465	249	185	142	137	170
CFSM	.78	1.29	1.16	1.80	1.61	3.35	2.98	.89	.68	.50	.53	.61
IN.	.89	1.44	1.34	2.07	1.68	3.86	3.32	1.03	.75	.58	.61	.68

CAL YR 1984	TOTAL	141186	MEAN	386	MAX	1080	MIN	100	CFSM	1.07	IN.	14.55
WTR YR 1985	TOTAL	177133	MEAN	485	MAX	2080	MIN	137	CFSM	1.34	IN.	18.25

04099808 LITTLE ELKHART RIVER AT MIDDLEBURY, IN

LOCATION.--Lat 41°40'31", long 85°42'01", in NE¼SE¼ sec.10, T.37 N., R.7 E., Elkhart County, Hydrologic Unit 04050001, on left bank 15 ft downstream from bridge on County Road 16, 0.1 mile east of Middlebury, and 1.7 mi downstream from Rowe Eden ditch.

DRAINAGE AREA.--97.6 mi^2, of which 5.89 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

REVISED RECORDS.--WRD IN-82-1: 1980, 1981.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20-25, Feb. 5, 6, 9-12, 22, and 23. Records fair.

AVERAGE DISCHARGE.--6 years, 105.5 ft^3/s, 14.68 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft^3/s, Feb. 24, 1985, gage height, 10.52 ft; minimum daily, 32 ft^3/s Aug. 30, 31, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Jan. 1	1600	1460	9.25	Mar. 29	0500	1280	8.96
Feb. 24	0200	*2470	*10.52	Apr. 6	0100	996	8.42
Mar. 4	2400	915	8.24				

Minimum daily discharge, 46 ft^3/s Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	122	107	894	90	324	394	101	67	54	52	48
2	56	165	100	610	88	288	310	98	66	54	50	48
3	54	126	100	375	87	252	267	95	66	53	49	47
4	53	112	93	287	85	367	233	93	66	53	49	47
5	52	102	88	238	78	567	357	92	65	53	53	48
6	51	95	87	213	80	341	664	91	64	53	54	67
7	57	90	85	197	83	285	402	89	63	53	53	70
8	86	86	83	180	81	268	308	87	62	52	51	60
9	79	89	81	166	77	239	261	85	60	49	50	80
10	72	114	87	156	74	217	233	83	59	98	48	114
11	67	249	91	149	71	218	214	82	68	76	48	86
12	63	187	100	143	70	218	200	81	74	65	46	73
13	66	149	119	138	68	200	189	79	69	60	50	66
14	81	132	172	134	74	194	181	78	66	67	53	62
15	79	123	166	129	77	179	178	80	68	64	58	59
16	88	116	140	124	81	171	166	80	70	59	56	58
17	80	108	125	123	80	164	154	80	77	56	53	56
18	74	103	114	120	80	154	148	78	74	54	54	55
19	89	98	115	113	79	151	142	76	70	54	53	54
20	91	93	112	94	79	145	136	74	67	53	52	54
21	275	91	123	89	81	139	130	73	65	53	51	54
22	202	89	278	93	240	135	126	70	64	52	49	54
23	145	87	169	97	1550	134	122	69	63	51	49	59
24	122	86	144	99	2040	133	126	67	61	50	49	78
25	109	84	124	100	914	126	125	65	59	52	60	67
26	103	83	113	101	568	121	117	65	59	56	56	63
27	99	85	111	99	490	125	113	73	58	53	54	60
28	93	150	159	97	379	510	111	79	50	52	52	57
29	88	134	224	95	---	885	106	72	55	50	50	56
30	84	117	281	93	---	477	103	69	55	48	50	57
31	83	---	200	92	---	449	---	68	---	51	49	---
TOTAL	2799	3465	4091	5638	7844	8176	6316	2472	1936	1748	1601	1857
MEAN	90.3	116	132	182	280	264	211	79.7	64.5	56.4	51.6	61.9
MAX	275	249	281	894	2040	885	664	101	77	98	60	114
MIN	51	83	81	89	68	121	103	65	55	48	46	47
CFSM	.93	1.19	1.35	1.86	2.87	2.70	2.16	.82	.66	.58	.53	.63
IN.	1.07	1.32	1.56	2.15	2.99	3.12	2.41	.94	.74	.67	.61	.71

CAL YR 1984	TOTAL	35344	MEAN	96.6	MAX	519	MIN	32	CFSM	.99	IN.	13.47
WTR YR 1985	TOTAL	47943	MEAN	131	MAX	2040	MIN	46	CFSM	1.34	IN.	18.27

04099850 PINE CREEK NEAR ELKHART, IN

LOCATION.--Lat 41°40'53", long 85°52'57", in NE¼NW¼ sec.7, T.37 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 50 ft upstream from bridge on County Road 14, 0.3 mile east of the intersection of County Roads 17 and 14, and 3.1 miles east of Elkhart.

DRAINAGE AREA.--31.0 mi², of which 8.75 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water stage recorder. Datum of gage is 755.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 13-26, Feb. 4-9, 16, 17, Jun. 20 to Jul. 9, Jul. 11 to Aug. 14, Aug. 16 to Sept. 9, Sept. 12-30. Records good, except those for periods of estimated discharges, which are fair.

AVERAGE DISCHARGE.--6 years, 20.3 ft³/s, 8.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 577 ft³/s Feb. 24, 1985, gage height, 7.45 ft; maximum gage height, 9.74 ft July 26, 1981; minimum daily discharge, 3.8 ft³/s July 26, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 170 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 1	2100	212	5.42	Apr. 6	0600	182	5.13
Feb. 24	0400	*577	*7.45				

Minimum daily discharge, 8.6 ft³/s Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	21	15	136	16	46	53	22	17	12	9.7	9.0
2	9.9	24	14	105	16	41	43	22	16	12	9.3	8.9
3	9.3	18	15	46	15	37	38	21	17	12	9.2	8.7
4	9.2	17	14	35	15	58	35	21	16	12	9.4	8.6
5	9.1	16	13	30	14	111	63	21	16	12	10	9.0
6	8.8	15	13	28	14	53	140	21	15	12	10	15
7	10	15	13	26	14	44	68	21	15	12	9.8	17
8	15	15	13	24	14	43	49	20	15	11	9.7	12
9	13	15	13	23	15	39	43	20	15	11	9.5	17
10	11	16	14	22	15	35	39	20	14	17	9.3	19
11	11	22	14	21	15	36	36	20	16	13	9.2	14
12	10	18	16	21	15	35	34	20	16	12	9.0	14
13	10	16	18	19	13	32	33	20	16	12	11	13
14	12	15	29	18	14	32	32	20	15	12	15	12
15	12	15	24	18	14	30	32	20	16	12	16	11
16	11	15	20	18	14	29	30	20	16	12	14	11
17	11	14	17	18	14	27	28	20	17	11	13	10
18	11	14	16	18	14	27	28	20	16	11	12	10
19	15	14	17	17	14	27	27	19	15	10	11	9.9
20	15	14	16	17	14	26	26	19	14	10	10	9.6
21	65	13	21	17	16	26	26	19	13	9.8	9.8	10
22	40	13	41	16	42	25	26	19	13	9.8	9.7	11
23	25	13	25	16	235	26	25	19	13	9.8	9.4	12
24	20	13	23	16	436	26	25	19	13	9.8	11	13
25	18	13	20	16	123	26	25	18	13	9.8	12	12
26	18	13	20	17	73	25	24	18	13	11	11	12
27	17	13	19	17	67	26	23	20	13	10	10	11
28	16	21	27	17	51	49	23	20	13	9.8	9.4	11
29	15	17	42	17	---	117	23	18	12	9.6	9.4	11
30	15	15	45	16	---	62	23	18	12	9.4	9.3	10
31	15	---	32	16	---	58	---	18	---	9.7	9.2	---
TOTAL	488.3	473	639	841	1332	1274	1120	613	441	346.5	326.3	351.7
MEAN	15.8	15.8	20.6	27.1	47.6	41.1	37.3	19.8	14.7	11.2	10.5	11.7
MAX	65	24	45	136	436	117	140	22	17	17	16	19
MIN	8.8	13	13	16	13	25	23	18	12	9.4	9.0	8.6
CFSM	.51	.51	.66	.87	1.54	1.33	1.20	.64	.47	.36	.34	.38
IN.	.59	.57	.77	1.01	1.60	1.53	1.34	.74	.53	.42	.39	.42

CAL YR 1984 TOTAL 6559.9 MEAN 17.9 MAX 111 MIN 7.1 CFSM .58 IN. 7.87
WTR YR 1985 TOTAL 8245.8 MEAN 22.6 MAX 436 MIN 8.6 CFSM .73 IN. 9.89

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN

LOCATION.--Lat 41°28'54", long 85°28'32", in NE¼NW¼ sec.22, T.35 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank at downstream side of bridge on County Road 900 North at Cosperville, 1,300 ft downstream from Boyd ditch, 1.7 miles upstream from Hustin ditch, and 3.1 miles downstream from Waldron Lake.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--October 1971 to current year. October 1950 to September 1971 at site 3.1 miles 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 above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Estimated daily discharges during water year: Jan. 13, 19-26, Feb. 1-4, 7-9, 15, 16. Records good. Flow regulated at times by dam at Waldron Lake.

AVERAGE DISCHARGE.--14 years, 141 ft^3/s, 13.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 919 ft^3/s Mar. 23, 1982, gage height, 8.12 ft; minimum daily, 2.4 ft^3/s Nov. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 834 ft^3/s Feb. 27, gage height, 7.51 ft; minimum daily, 15 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	97	143	366	114	818	762	181	80	29	20	53
2	48	128	141	434	107	804	769	167	74	28	19	52
3	44	132	136	468	104	793	754	152	81	28	17	48
4	43	122	131	474	102	785	737	138	81	27	15	46
5	42	109	125	466	100	805	741	127	76	30	20	44
6	41	98	118	454	97	797	787	119	72	31	27	48
7	50	92	114	439	95	768	796	114	66	32	35	65
8	91	86	108	421	91	740	781	108	61	31	37	65
9	102	91	104	396	88	708	760	100	56	30	38	158
10	92	122	108	376	90	673	730	94	54	52	34	267
11	80	179	111	353	92	644	699	90	56	68	32	305
12	69	196	115	330	93	611	666	86	60	65	29	309
13	65	191	122	302	92	588	630	83	58	59	28	305
14	70	180	142	285	97	557	596	80	56	55	40	290
15	72	167	153	273	100	528	564	79	58	53	58	275
16	75	156	155	254	102	495	531	82	68	48	66	257
17	72	150	154	239	103	466	497	82	80	43	63	239
18	69	146	150	224	105	435	461	81	91	38	60	217
19	73	144	150	206	107	408	433	78	93	34	59	197
20	81	140	148	178	111	385	405	77	67	33	55	178
21	116	137	153	166	116	361	378	79	58	35	51	162
22	128	133	171	157	187	335	350	76	51	31	47	148
23	121	130	177	154	407	313	325	73	49	27	44	145
24	108	127	174	152	648	294	307	69	50	23	41	144
25	98	124	163	149	762	276	289	65	48	20	45	138
26	94	121	155	144	805	256	271	62	47	23	49	133
27	92	121	151	140	831	241	252	74	44	20	52	126
28	88	136	162	132	829	320	232	102	40	20	52	119
29	85	145	193	127	---	570	214	102	37	19	50	113
30	80	146	231	125	---	653	195	94	32	18	55	109
31	80	---	252	121	---	725	---	85	---	19	55	---
TOTAL	2422	4046	4610	8504	6575	17142	15912	2999	1834	1069	1293	4742
MEAN	78.1	135	149	274	235	553	530	96.7	61.1	34.5	41.7	158
MAX	128	196	252	474	831	818	796	181	91	68	66	309
MIN	41	86	104	121	88	241	195	62	32	18	15	44
CFSM	.55	.95	1.05	1.93	1.65	3.89	3.73	.68	.43	.24	.29	1.11
IN.	.63	1.06	1.21	2.23	1.72	4.49	4.17	.79	.48	.28	.34	1.24

CAL YR 1984	TOTAL	50356	MEAN	138	MAX	354	MIN	29	CFSM	.97	IN.	13.19
WTR YR 1985	TOTAL	71148	MEAN	195	MAX	831	MIN	15	CFSM	1.37	IN.	18.64

04100252 PORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE¼ NE¼ sec.12, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank 300 ft downstream from bridge on State Highway 9, 400 ft downstream from Miller Lake Outlet, 0.8 mile northeast of Burr Oak, and 4.5 miles south of Albion.

DRAINAGE AREA.--19.2 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 889.00 ft above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Estimated daily discharges during water year: Apr. 27 to July 9. Records good above 10 ft^3/s, fair below. Occasional regulation at Miller Lake Outlet.

AVERAGE DISCHARGE.--16 years, 17.9 ft^3/s, 12.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 480 ft^3/s Feb. 24, 1985, gage height, 7.00 ft; minimum daily, 0.13 ft^3/s Sept. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 480 ft^3/s Feb. 24, gage height, 7.00 ft; minimum daily, 0.58 ft^3/s July 30-Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	5.4	6.0	104	5.0	115	166	8.6	3.8	1.1	.58	2.7
2	.77	6.1	6.0	149	4.9	91	133	8.4	3.5	1.0	.58	2.6
3	.75	6.5	5.9	136	4.7	76	105	8.3	3.2	1.0	.58	2.5
4	.75	6.6	5.5	102	4.4	84	84	8.0	3.0	.97	.58	2.4
5	.75	6.6	5.3	78	4.2	134	83	7.4	2.8	.94	.60	2.3
6	.75	6.4	5.0	62	4.2	136	127	7.0	2.6	.90	.63	2.5
7	.89	6.3	4.7	48	4.2	112	138	6.7	2.5	.87	.63	2.7
8	1.2	6.0	4.3	36	4.1	93	115	6.2	2.3	.84	.63	2.7
9	1.3	6.4	4.1	26	3.8	80	92	5.7	2.2	.86	.60	2.9
10	1.4	7.2	4.0	21	3.6	66	75	5.4	2.1	1.0	.61	3.1
11	1.5	11	3.9	18	4.1	57	63	5.2	2.0	1.1	.60	3.0
12	1.5	13	4.0	16	4.8	54	53	4.9	2.0	1.1	.60	2.9
13	1.6	15	5.0	14	5.0	49	45	4.7	1.9	1.0	.71	2.7
14	1.7	17	6.8	13	5.0	43	38	4.5	1.8	.98	1.1	2.6
15	1.8	17	14	12	5.1	37	34	4.7	1.7	.96	2.0	2.5
16	1.8	15	23	11	5.3	33	29	4.8	1.9	.91	2.6	2.3
17	1.8	14	26	11	5.2	29	24	4.8	2.0	.89	3.1	2.2
18	1.8	13	23	10	5.0	26	20	4.6	2.2	.82	3.5	2.0
19	2.2	12	20	10	5.0	24	18	4.4	2.2	.75	3.6	1.9
20	2.5	11	18	7.8	5.0	23	17	4.2	2.1	.69	3.5	1.7
21	4.6	9.5	17	7.0	5.1	22	16	4.0	2.0	.69	3.4	1.5
22	5.2	8.2	19	6.9	12	21	16	3.8	1.8	.69	3.2	1.4
23	5.3	7.3	21	6.5	146	20	14	3.7	1.7	.65	3.0	1.4
24	5.5	6.5	20	6.3	418	20	14	3.5	1.6	.63	2.9	1.5
25	5.5	5.2	16	6.3	431	19	14	3.4	1.4	.63	3.1	1.5
26	5.5	4.7	14	6.1	290	18	13	3.2	1.3	.63	3.1	1.5
27	5.5	4.6	13	5.9	204	18	12	3.6	1.2	.63	3.1	1.4
28	5.4	5.2	14	5.6	151	33	11	4.0	1.2	.63	3.1	1.4
29	5.1	5.5	27	5.4	---	129	10	4.2	1.1	.60	3.1	1.3
30	4.9	6.0	49	5.2	---	190	9.2	4.3	1.1	.58	3.1	1.3
31	4.8	---	59	5.0	---	185	---	4.1	---	.58	2.9	---
TOTAL	84.86	264.2	463.5	951.1	1749.7	2037	1588.2	160.3	62.2	25.62	61.33	64.3
MEAN	2.74	8.81	15.0	30.7	62.5	65.7	52.9	5.17	2.07	.83	1.99	2.14
MAX	5.5	17	59	149	431	190	166	8.6	3.8	1.1	3.6	3.1
MIN	.75	4.6	3.9	5.0	3.6	18	9.2	3.2	1.1	.58	.58	1.3
CFSM	.14	.46	.78	1.60	3.26	3.42	2.76	.27	.11	.04	.10	.11
IN.	.16	.51	.90	1.84	3.39	3.95	3.08	.31	.12	.05	.12	.12

CAL YR 1984	TOTAL	6392.49	MEAN	17.5	MAX	161	MIN	.74	CFSM	.91	IN.	12.39
WTR YR 1985	TOTAL	7512.31	MEAN	20.6	MAX	431	MIN	.58	CFSM	1.07	IN.	14.56

04100295 RIMMELL BRANCH NEAR ALBION, IN

LOCATION.--Lat 41°23'07", long 85°22'14", in NE¼SE¼ sec.21, T.34 N., R.10 E., Noble County, Hydrologic Unit 04050001, on right bank 900 ft downstream from culvert on County Road 300 E, .75 mile south of State Highway 8, 3.0 miles east of intersection of State Highway 9 and State Highway 8 in Albion.

DRAINAGE AREA.--10.7 mi^2.

PERIOD OF RECORD.--November 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 935.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges during water year: Dec. 6-10, Jan. 13, 15, 18-30, and Feb. 2-23. Records good between 1 and 100 ft^3/s, fair above and below.

AVERAGE DISCHARGE.--5 years, 11.9 ft^3/s, 15.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 414 ft^3/s Mar. 28, 1985, gage height, 11.51 ft; maximum gage height, 12.82 ft, Apr. 14, 1981, minimum daily discharge, 0.14 ft^3/s, many days during 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	0700	181	9.61	Mar. 28	2315	*414	11.51
Feb. 23	1930	ice	*11.96	Mar. 31	0915	170	8.65
Feb. 24	----	a408	-----	Apr. 5	2030	234	9.52
Mar. 4	1845	221	9.35				

Minimum daily, 0.34 ft^3/s Aug. 3.
[a]Estimated

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	13	6.4	136	3.3	59	82	3.2	1.4	.48	.43	.82
2	.45	15	5.7	66	2.9	48	60	3.1	1.3	.51	.37	.80
3	.46	8.4	5.9	38	2.6	39	45	2.8	1.3	.48	.34	.87
4	.45	6.3	5.0	25	2.3	101	36	2.7	1.2	.47	.35	.86
5	.46	5.0	4.4	18	2.5	101	89	2.6	1.1	.53	.57	.88
6	.45	4.1	3.9	14	2.9	50	116	2.5	1.0	.51	.63	1.2
7	1.2	3.6	3.5	13	3.1	38	62	2.4	.92	.47	.53	2.0
8	6.2	3.3	3.2	11	2.6	37	44	2.2	.86	.45	.43	1.2
9	4.8	4.2	3.0	8.9	2.3	32	36	2.1	.85	.44	.37	4.1
10	3.1	14	3.6	7.4	2.1	26	31	2.0	.79	7.1	.35	17
11	2.4	48	4.5	7.0	2.4	29	26	2.0	.87	1.7	.36	6.2
12	2.0	23	7.0	6.6	2.6	28	19	2.0	.97	.80	.37	2.7
13	1.9	13	22	6.5	2.9	20	17	1.9	.86	.67	.50	1.8
14	2.1	9.0	35	6.2	3.3	17	15	1.8	.79	.55	.99	1.3
15	2.4	8.0	22	6.0	3.6	14	15	2.0	.86	.51	2.3	1.1
16	3.9	7.1	15	5.4	3.8	12	13	2.0	1.1	.46	1.8	1.1
17	3.0	5.9	12	5.3	4.1	11	10	2.0	1.8	.43	.82	1.0
18	2.3	5.6	9.4	5.2	4.4	9.2	9.2	1.9	1.9	.41	.65	.98
19	5.6	5.0	11	5.1	4.6	9.2	7.7	1.8	1.1	.39	.72	.89
20	5.1	4.3	10	4.2	4.7	8.3	5.9	1.8	.90	.40	.59	.85
21	16	4.0	12	3.7	5.7	7.3	5.2	1.9	.80	.43	.51	.83
22	10	3.8	23	3.5	116	6.8	4.9	1.6	.75	.41	.51	.83
23	6.4	3.7	12	3.2	327	6.9	4.7	1.5	.70	.38	.51	.31
24	4.9	3.6	9.8	3.0	325	6.8	5.0	1.4	.65	.38	.63	1.2
25	4.1	3.5	7.7	2.9	145	6.1	5.0	1.3	.58	.39	9.3	.84
26	3.9	3.3	6.5	2.8	103	5.7	4.4	1.3	.56	.44	4.7	.76
27	3.6	3.4	6.6	2.7	97	6.1	4.0	1.7	.55	.37	1.9	.69
28	3.2	11	23	2.7	72	124	3.7	2.9	51	.35	1.2	.62
29	2.8	9.4	41	2.8	---	267	3.4	1.9	.51	.35	1.1	.58
30	2.6	7.7	42	3.0	---	108	3.3	1.7	.47	.35	1.1	.61
31	2.5	---	30	3.4	---	132	---	1.6	---	.40	.90	---
TOTAL	108.71	259.2	406.1	428.5	1253.7	1365.4	782.4	63.6	27.95	22.01	35.83	55.52
MEAN	3.51	8.64	13.1	13.8	44.8	44.0	26.1	2.05	.93	.71	1.16	1.85
MAX	16	48	42	136	327	267	116	3.2	1.9	7.1	9.3	17
MIN	.44	3.3	3.0	2.7	2.1	5.7	3.3	1.3	.47	.35	.34	.58
CFSM	.33	.81	1.22	1.29	4.19	4.11	2.44	.19	.09	.07	.11	.17
IN.	.38	.90	1.41	1.49	4.36	4.75	2.72	.22	.10	.08	.12	.19

CAL YR 1984	TOTAL	3805.62	MEAN	10.4	MAX	223	MIN	.25	CFSM	.97	IN.	13.23
WTR YR 1985	TOTAL	4808.92	MEAN	13.2	MAX	327	MIN	.34	CFSM	1.23	IN.	16.72

04100465 TURKEY CREEK AT SYRACUSE, IN

LOCATION.--Lat 41°25'35", long 85°45'16", in NE¼SE¼ sec.6, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, on right bank 75 ft upstream from Main Street bridge in Syracuse and 1,500 ft downstream from dam at outlet of Syracuse Lake.

DRAINAGE AREA.--43.8 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 848.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges during water year: Nov. 1 to Jan. 17. Records good except for periods of estimated record, which are fair. Flow occasionally regulated by dam on Syracuse Lake.

AVERAGE DISCHARGE.--16 years, 37.9 ft^3/s, 11.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 243 ft^3/s Mar. 31, 1985, gage height, 5.52 ft; minimum daily, 0.82 ft^3/s Oct. 8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 243 ft^3/s Mar. 31, gage height, 5.52 ft; minimum daily, 2.5 ft^3/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	62	55	96	9.5	159	229	102	14	7.2	4.0	3.6
2	6.1	66	53	106	9.1	148	221	98	15	6.9	3.9	3.8
3	6.2	65	53	105	9.0	141	209	95	17	6.6	3.4	3.9
4	6.1	62	52	103	9.6	163	200	92	16	6.6	3.7	4.0
5	6.7	59	52	101	9.9	181	208	90	14	7.4	5.4	4.2
6	11	57	52	98	11	175	223	74	14	6.5	4.3	4.3
7	13	55	51	93	11	185	219	10	14	6.2	4.2	4.5
8	13	54	51	87	11	184	213	10	12	5.6	4.1	4.6
9	12	55	51	83	10	163	204	9.8	10	5.4	4.2	6.3
10	12	62	50	80	11	157	196	9.3	11	6.2	3.6	3.7
11	12	70	50	77	14	158	187	8.9	13	5.4	3.5	3.5
12	14	77	53	74	32	151	179	8.5	12	4.9	4.0	3.4
13	15	82	57	72	57	153	180	8.5	11	4.7	4.4	3.3
14	15	84	66	70	57	148	182	8.6	10	4.6	4.3	3.2
15	15	83	75	68	57	143	177	9.2	13	4.5	4.7	2.8
16	15	81	84	67	55	138	168	8.6	12	4.4	3.7	3.4
17	15	78	93	65	54	131	163	8.1	17	4.4	3.2	3.3
18	15	73	94	63	54	129	155	7.7	14	4.3	4.4	3.3
19	18	68	89	62	52	125	148	7.7	13	4.3	3.6	3.3
20	19	64	83	61	52	120	144	8.8	12	4.1	3.7	3.3
21	26	61	79	60	52	118	139	9.3	12	4.3	3.6	3.4
22	25	58	76	59	71	113	135	9.2	11	4.5	3.5	3.0
23	35	56	75	58	112	109	131	8.6	10	4.4	3.5	5.5
24	73	54	73	57	118	107	130	8.4	11	4.2	5.0	3.3
25	70	52	70	57	177	104	125	8.0	11	4.7	3.5	2.8
26	69	51	66	55	176	101	119	7.6	10	4.2	4.0	2.9
27	67	53	63	54	174	100	114	15	10	3.7	3.7	2.8
28	65	56	64	54	168	128	110	20	9.4	3.7	3.4	2.5
29	63	57	69	54	---	210	107	19	7.6	4.2	3.7	3.1
30	61	56	86	40	---	236	104	17	7.3	4.0	3.7	3.9
31	61	---	92	9.6	---	239	---	15	---	5.0	3.6	---
TOTAL	861.1	1911	2077	2188.6	1633.1	4616	5019	811.8	362.3	157.1	121.5	109.9
MEAN	27.8	63.7	67.0	70.6	58.3	149	167	26.2	12.1	5.07	3.92	3.63
MAX	73	84	94	106	177	239	229	102	17	7.4	5.4	6.3
MIN	6.1	51	50	9.6	9.0	100	104	7.6	7.3	3.7	3.2	2.5
CFSM	.63	1.45	1.53	1.61	1.33	3.40	3.81	.60	.28	.12	.09	.08
IN.	.73	1.62	1.76	1.86	1.39	3.92	4.26	.69	.31	.13	.10	.09

CAL YR 1984	TOTAL	14951.3	MEAN	40.9	MAX	108	MIN	4.1	CFSM	.93	IN.	12.70
WTR YR 1985	TOTAL	19867.4	MEAN	54.4	MAX	239	MIN	2.5	CFSM	1.24	IN.	16.87

04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE¼NE¼ sec.8, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 20 ft downstream from River Avenue bridge at Goshen, 0.4 mile upstream from Rock Run, and at mile 16.1.

DRAINAGE AREA.--594 mi^2.

PERIOD OF RECORD.--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 above National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1931, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 10-27, and Feb. 2-9, 14-17. Records good.

AVERAGE DISCHARGE.--54 years, 520 ft^3/s, 11.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft^3/s Feb. 24, 1985; maximum gage height, 11.94 ft Mar. 14, 1982; minimum daily discharge, 7.0 ft^3/s Aug. 11, 1964, result of extreme regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	1100	3300	7.88	Mar. 29	2400	5000	10.05
Feb. 24	1400	*6360	*11.87	Apr. 6	1900	4080	8.74
Mar. 5	2000	3830	8.37				

Minimum daily discharge, 142 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	476	660	2100	465	3210	3430	733	411	237	172	209
2	237	701	620	3100	440	3030	3180	704	387	226	170	204
3	222	768	614	2360	360	2840	2960	676	410	223	152	201
4	211	653	588	1960	380	2910	2770	648	393	218	142	194
5	204	591	540	1740	390	3680	2850	627	386	218	173	187
6	197	544	500	1580	390	3390	3920	615	377	215	198	204
7	224	507	480	1490	390	2900	3610	593	362	211	199	199
8	310	474	480	1400	390	2640	3090	540	348	216	197	195
9	393	476	500	1200	385	2450	2790	515	330	207	191	293
10	399	538	513	1100	382	2280	2580	495	316	241	181	657
11	377	761	532	980	388	2170	2400	483	332	281	170	625
12	352	1030	559	900	404	2130	2250	473	367	271	163	545
13	345	921	645	840	391	1990	2100	457	346	267	161	512
14	361	810	761	800	380	1820	1960	443	328	273	177	489
15	357	756	975	750	370	1700	1860	445	330	271	244	473
16	351	728	914	720	400	1580	1730	442	468	249	268	454
17	353	692	795	670	430	1470	1610	439	531	228	253	432
18	331	660	730	630	441	1370	1490	430	515	217	257	410
19	344	636	717	550	448	1280	1380	414	468	204	251	387
20	381	608	734	450	452	1210	1280	401	421	198	239	369
21	640	586	742	420	469	1130	1190	399	387	196	229	340
22	915	563	1060	480	726	1060	1120	392	360	199	220	330
23	752	547	1260	540	2810	1020	1060	380	341	182	211	327
24	593	533	977	550	6010	983	1010	368	324	171	226	361
25	544	518	816	560	4990	932	979	355	310	168	290	352
26	516	515	680	560	3770	887	923	340	293	188	256	330
27	493	515	698	550	3510	866	875	368	276	181	230	324
28	470	634	764	542	3410	1370	833	495	260	168	222	302
29	451	798	968	531	---	4000	796	513	246	158	215	286
30	441	720	1270	522	---	4440	758	467	238	152	233	283
31	422	---	1310	506	---	3540	---	444	---	165	219	---
TOTAL	12441	19259	23402	31081	33771	66278	58784	15094	10861	6599	6509	10474
MEAN	401	642	755	1003	1206	2138	1959	487	362	213	210	349
MAX	915	1030	1310	3100	6010	4440	3920	733	531	281	290	657
MIN	197	474	480	420	360	866	758	340	238	152	142	187
CFSM	.68	1.08	1.27	1.69	2.03	3.60	3.30	.82	.61	.36	.35	.59
IN.	.78	1.21	1.47	1.95	2.11	4.15	3.68	.95	.68	.41	.41	.66

CAL YR 1984	TOTAL	216287	MEAN	591	MAX	2300	MIN	169	CFSM	.99	IN.	13.55
WTR YR 1985	TOTAL	294553	MEAN	807	MAX	6010	MIN	142	CFSM	1.36	IN.	18.45

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 downstream from Elkhart River, 200 ft upstream from Main Street bridge in Elkhart, 2,000 ft downstream from Christiana Creek, 0.5 mile downstream from Elkhart Hydroelectric Plant, and at mile 76.5.

DRAINAGE AREA.--3,370 mi^2.

PERIOD OF RECORD.--August 1947 to current year. Gage heights at site 0.8 mile downstream at different datum from September 1924 to March 1926 are available from the district office.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20-25, 27, 28, and Feb. 5, 7. The flow is regulated by Elkhart Hydroelectric Plant.

AVERAGE DISCHARGE.--38 years, 3,203 ft^3/s, 12.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,800 ft^3/s Feb. 27, 1985; maximum gage height, 27.91 ft Mar. 21, 1982; minimum daily discharge, 336 ft^3/s Aug. 5, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,800 ft^3/s Feb. 27, gage height, 27.05 ft; minimum daily, 1,210 ft^3/s July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	2880	3490	7580	3720	16000	10700	4690	3100	1920	1470	1290
2	2100	3220	3430	9510	3680	15300	10500	4560	2900	2010	1500	1290
3	1780	3380	3470	9250	3560	14400	10400	4360	2720	1640	1300	1440
4	1600	3530	3370	8680	3390	14000	10100	4150	2710	1590	1220	1880
5	1830	3260	3080	8600	3300	14700	10300	4140	2700	1680	1450	1380
6	1550	3300	3190	8320	3220	14000	12500	4140	2450	1510	1690	1480
7	1620	3110	2980	7960	3200	12900	13100	4000	2320	1440	1770	1380
8	2190	2830	2720	7540	3190	12400	12900	3720	2190	1520	1730	1390
9	2300	2830	2820	6910	3190	12000	12700	3690	2380	1680	1710	1930
10	2320	3090	3080	6900	3120	11400	12300	3530	2240	1880	1320	2630
11	2230	3330	3120	6170	3160	11000	11500	3440	2390	2160	1280	2410
12	2160	4060	3100	5820	3170	10800	10900	3320	2360	1550	1550	2220
13	1960	3840	3360	5030	3390	10100	10300	3230	2480	1590	1530	2320
14	1810	3920	3800	5200	3210	9800	9820	3030	2530	1770	1620	1950
15	2450	3930	4010	4940	3100	9320	9430	3280	2500	2190	1940	1870
16	2360	3890	3960	4710	3260	8660	8780	3240	2800	2380	1940	1800
17	2130	3840	3930	4860	3380	8300	8460	3240	3000	1710	2010	1950
18	2050	3790	3860	4540	3290	8000	7850	2870	2800	1720	1840	2000
19	2420	3720	3880	4350	3260	7570	7660	3200	2940	1950	1880	1740
20	2450	3600	3790	3400	3310	7310	7260	3540	2620	1500	1930	1650
21	3120	3440	3770	2550	3290	7080	6860	3540	2540	1650	1730	1470
22	3950	3270	4550	2630	4150	6640	6280	2960	2450	1730	1590	1450
23	3810	3290	4740	3150	7340	6500	6210	2940	2250	2030	1650	1800
24	3640	3380	4480	3700	14500	6370	5940	2800	2130	1590	1380	1900
25	3420	3230	4210	4100	17500	5980	5960	2690	2540	1210	1460	1700
26	3550	2960	3690	4220	17400	5250	5700	2480	2020	1320	1890	1710
27	3320	3050	3790	4180	17900	5650	5470	2720	2040	1300	1920	1490
28	3200	3420	4150	4140	16900	6540	5170	3230	2190	1360	1640	1260
29	2520	3610	4790	4090	---	9370	4820	3270	1680	1570	1580	1650
30	2880	3510	5420	4110	---	10900	4780	3140	1770	1480	1480	2170
31	2810	---	5750	3940	---	11000	---	2980	---	1460	1320	---
TOTAL	77730	102510	117780	171080	165080	309240	264650	106120	73740	52090	50320	52600
MEAN	2507	3417	3799	5519	5896	9975	8822	3423	2458	1680	1623	1753
MAX	3950	4060	5750	9510	17900	16000	13100	4690	3100	2380	2010	2630
MIN	1550	2830	2720	2550	3100	5250	4780	2480	1680	1210	1220	1260
CFSM	.74	1.01	1.13	1.64	1.75	2.96	2.62	1.02	.73	.50	.48	.52
IN.	.86	1.13	1.30	1.89	1.82	3.41	2.92	1.17	.81	.57	.56	.58

CAL YR 1984	TOTAL	1222820	MEAN	3341	MAX	7460	MIN	1020	CFSM	.99	IN.	13.50
WTR YR 1985	TOTAL	1542940	MEAN	4227	MAX	17900	MIN	1210	CFSM	1.25	IN.	17.03

04101500 ST. JOSEPH RIVER AT NILES, MI
(National stream-quality accounting network station)

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 upstream from Main Street bridge in Niles, 0.6 mi downstream from dam at French Paper Co., 1 mi upstream from Dowagiac River, and at mile 44.

DRAINAGE AREA.--3,666 mi^2.

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). WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 633.02 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, at datum 2.00 ft 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 upstream from present site (gage heights referred to NGVD). Since Apr. 13, 1970, auxiliary water-stage recorder at sewage-treatment plant, 1.1 mi 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 downstream from base gage at different datum.

REMARKS.--Estimated daily discharges: Feb. 5, 6, 8, and 9. Water-discharge records good except those for the estimated daily discharges, which are fair. Flow regulated by powerplants above station.

AVERAGE DISCHARGE.--55 years, 3,288 ft^3/s, 12.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft^3/s Apr. 5, 1950, gage height, 15.10 ft, present datum; minimum daily, 420 ft^3/s Aug. 30, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,900 ft^3/s Feb. 25, gage height, 14.96 ft; minimum daily, 1,650 ft^3/s Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2230	3310	3590	8210	3960	17000	11700	5310	3460	2190	1820	1810
2	2500	3480	3650	11300	3880	16300	11300	5080	3470	2280	1850	1790
3	2280	3550	3920	10700	3750	15500	10900	5010	3190	2280	1920	1710
4	2190	3950	3750	9400	3500	14900	10800	4560	3180	2100	1670	2100
5	1930	3500	3420	8920	3450	16500	11100	4430	3150	1980	1680	1870
6	2060	3360	3580	9270	3400	15800	13800	4680	3060	1950	1870	1810
7	2170	3650	3380	8320	3320	14300	14300	4540	2830	2020	2050	1970
8	2210	3320	2920	7950	3300	13300	13800	4460	2560	1950	2290	1820
9	2690	3020	3110	7200	3350	13000	13000	4100	2760	1930	2030	2120
10	2690	3140	3200	7190	3470	12400	13000	4260	2710	2450	2010	2810
11	2680	3820	3570	6630	3470	11800	12200	3980	2750	2400	1740	3010
12	2610	4000	3270	6170	3390	11500	11500	3990	2930	2400	1650	2640
13	2840	4390	3780	5840	3540	11100	11000	3770	2820	1970	2040	2680
14	2740	4130	4090	5470	3570	10400	10500	3660	2870	2080	1960	2580
15	2690	4110	4700	5090	3340	10200	9980	3890	3120	2220	2250	2450
16	3160	4060	4490	5140	3390	9460	9410	3610	3120	2840	2540	2220
17	2520	3970	4260	5000	3600	8940	9100	3910	3660	2270	2360	2170
18	2410	4000	4080	5020	3600	8370	8110	3640	3270	2050	2400	2340
19	2700	3940	4130	4610	3540	8050	8160	3460	3310	2230	2030	2330
20	3430	3880	4040	3840	3700	7780	7830	3900	3320	2280	2430	2230
21	3410	3660	4150	2740	3550	7740	7350	4110	3090	1970	2350	1940
22	4250	3480	4790	2720	4710	6990	6710	3870	2910	1980	1930	1920
23	4350	3460	5420	3270	7940	6930	6420	3400	2850	2220	1970	1900
24	3590	3500	4800	4130	16200	6840	6550	3440	2590	2350	2030	2250
25	3670	3510	4520	4510	19300	6510	6220	3310	2650	1880	1940	2420
26	3750	3350	3970	4430	17300	5910	6360	3170	2740	1860	1930	2090
27	3780	3350	4100	4220	17000	5810	5930	3170	2380	1740	2490	1890
28	3510	3540	4200	4390	17300	6870	5860	3570	2400	1730	2170	1750
29	3020	4090	5310	4320	---	10300	5330	4000	2440	1820	2020	1780
30	2810	3720	5940	4300	---	12100	5040	3570	2090	2000	2090	2280
31	3150	---	6110	4360	---	12000	---	3340	---	1930	1880	---
TOTAL	90020	110240	128240	184660	173820	334600	283260	123190	87680	65350	63390	64680
MEAN	2904	3675	4137	5957	6208	10790	9442	3974	2923	2108	2045	2156
MAX	4350	4390	6110	11300	19300	17000	14300	5310	3660	2840	2540	3010
MIN	1930	3020	2920	2720	3300	5810	5040	3170	2090	1730	1650	1710
CFSM	.79	1.00	1.13	1.62	1.69	2.94	2.58	1.08	.80	.58	.56	.59
IN.	.91	1.12	1.30	1.87	1.76	3.40	2.87	1.25	.89	.66	.64	.66

CAL YR 1984	TOTAL	1346310	MEAN	3678	MAX	8380	MIN	1050	CFSM	1.00	IN.	13.66
WTR YR 1985	TOTAL	1709130	MEAN	4683	MAX	19300	MIN	1650	CFSM	1.28	IN.	17.34

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE¼SW¼ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003, on left bank 6 ft upstream from bridge on County Road 775 South, 0.5 mile downstream from Hamilton Lake outlet, and 0.5 mile southeast of Hamilton.

DRAINAGE AREA.--37.5 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20, and Feb. 2-4, 7-9. Records good.

AVERAGE DISCHARGE.--16 years, 32.8 ft^3/s, 11.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 654 ft^3/s Feb. 24, 1985, gage height, 11.95 ft; minimum daily, 0.52 ft^3/s Aug. 31, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 140 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 11	2300	204	7.27	Mar. 05	1100	225	7.55
Jan. 01	2300	338	8.93	Mar. 29	1000	336	8.91
Feb. 24	2100	*654	*11.95	Apr. 06	1400	239	7.74

Minimum daily discharge, 2.2 ft^3/s July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	32	25	248	15	193	274	14	7.2	3.2	2.6	8.8
2	6.4	57	20	314	14	155	204	12	6.6	3.3	2.6	7.9
3	5.3	45	25	238	13	127	151	11	6.9	3.2	2.6	7.2
4	4.2	37	19	170	11	135	114	9.0	6.0	3.1	2.6	6.6
5	3.8	30	15	121	13	214	119	7.0	5.8	3.1	3.0	6.2
6	3.4	21	14	91	14	189	232	7.3	5.2	2.6	4.1	12
7	8.0	16	12	74	13	147	201	5.5	4.7	2.5	3.3	13
8	42	13	11	61	12	127	152	5.1	4.6	2.3	3.0	13
9	45	23	10	51	11	117	114	5.0	4.3	2.2	2.8	38
10	37	62	12	47	11	98	88	6.3	3.6	3.7	2.8	66
11	26	171	12	44	18	95	74	7.3	4.4	2.3	2.7	54
12	18	187	17	39	31	106	64	7.7	5.2	2.3	2.6	37
13	27	142	52	35	31	88	58	7.3	4.5	2.4	7.5	21
14	32	105	78	33	28	78	53	6.6	3.9	4.7	32	15
15	20	85	87	31	26	68	49	6.7	4.7	5.8	55	12
16	18	67	75	28	23	61	45	6.6	6.9	5.2	50	9.4
17	15	49	62	28	20	54	36	7.6	15	4.2	33	7.8
18	11	39	49	28	19	47	34	7.3	17	3.5	22	6.8
19	11	31	48	27	17	44	32	6.4	13	3.3	16	6.1
20	9.9	23	44	22	17	42	30	6.9	9.5	3.1	13	5.5
21	58	19	45	21	18	37	27	8.8	7.3	3.1	9.8	5.1
22	58	16	75	19	75	34	24	8.2	6.7	2.9	8.0	4.8
23	46	14	61	18	302	35	21	7.4	6.0	2.7	7.0	6.0
24	33	14	50	17	609	35	25	6.9	5.9	2.7	7.3	6.6
25	23	13	37	18	605	32	29	6.5	4.9	2.7	10	4.9
26	21	12	29	17	458	30	29	5.5	4.4	3.0	11	5.1
27	18	12	28	17	344	31	23	9.5	3.8	2.8	12	4.5
28	17	31	53	17	254	108	20	16	3.5	2.7	11	4.2
29	13	32	89	16	---	322	17	13	3.3	2.6	9.3	4.0
30	11	30	112	15	---	286	15	11	3.2	2.5	13	4.2
31	9.2	---	101	15	---	282	---	10	---	2.7	10	---
TOTAL	658.7	1428	1367	1920	3022	3417	2354	255.4	188.0	96.4	371.6	402.7
MEAN	21.2	47.6	44.1	61.9	108	110	78.5	8.24	6.27	3.11	12.0	13.4
MAX	58	187	112	314	609	322	274	16	17	5.8	55	66
MIN	3.4	12	10	15	11	30	15	5.0	3.2	2.2	2.6	4.0
CFSM	.57	1.27	1.18	1.65	2.88	2.93	2.09	.22	.17	.08	.32	.36
IN.	.65	1.42	1.36	1.90	3.00	3.39	2.34	.25	.19	.10	.37	.40

CAL YR 1984	TOTAL	13545.7	MEAN	37.0	MAX	302	MIN	1.8	CFSM	.99	IN.	13.44
WTR YR 1985	TOTAL	15480.8	MEAN	42.4	MAX	609	MIN	2.2	CFSM	1.13	IN.	15.36

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 northeast of Newville, 6.5 miles northwest of Hicksville, Ohio, and at mile 42.3.

DRAINAGE AREA.--610 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 7, 20-24, Dec. 7, 8, 25-27, Jan. 10-18, 21-23, Jan. 29 to Feb. 10, Feb. 14-21. Records good, except those for periods of estimated discharges, which are fair.

AVERAGE DISCHARGE.--39 years, 529 ft^3/s, 11.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,710 ft^3/s Apr. 6, 1950, gage height, 17.05 ft; maximum gage height, 17.96 ft Mar. 17, 1982; minimum daily discharge, 14 ft^3/s Sept. 10, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,290 ft^3/s Feb. 26, gage height, 17.22 ft; minimum daily, 64 ft^3/s Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	199	462	2300	225	4330	5390	305	261	71	86	80
2	111	464	431	2970	210	3430	4240	292	220	74	80	72
3	99	546	420	3270	195	2870	3370	271	181	78	77	69
4	89	491	382	3400	190	2600	2750	253	153	79	70	67
5	82	388	336	3140	185	2940	2380	237	142	87	64	80
6	75	334	293	2640	190	2840	2630	225	127	155	76	92
7	79	290	210	2120	195	2630	2680	213	118	331	85	95
8	190	270	230	1610	190	2440	2680	206	111	250	111	89
9	376	249	272	1100	185	2270	2580	198	102	171	94	153
10	412	352	263	810	175	2120	2310	181	99	159	94	495
11	313	1430	237	620	244	2050	1990	174	96	152	80	458
12	239	2040	243	530	295	2100	1660	160	105	144	71	323
13	192	2140	522	485	335	2030	1360	164	105	135	68	222
14	165	2070	1060	455	305	1850	1150	161	112	118	107	161
15	163	1870	1390	425	280	1630	996	156	109	115	244	127
16	166	1540	1300	420	255	1410	880	154	114	239	449	107
17	188	1060	1070	415	245	1160	781	152	140	512	428	95
18	193	788	819	405	240	979	690	160	237	528	283	88
19	185	632	640	385	230	917	622	161	299	372	192	83
20	176	510	601	285	225	787	572	161	277	234	149	97
21	552	435	584	230	245	689	526	170	208	187	124	94
22	787	385	908	250	777	616	478	191	157	162	109	78
23	724	340	1060	265	2500	562	443	186	136	147	97	68
24	541	315	1020	279	4560	528	397	164	126	126	91	73
25	378	294	700	288	7450	538	385	144	117	112	93	72
26	296	278	460	293	9110	531	407	132	108	105	89	69
27	250	266	500	284	8140	478	418	129	102	93	90	68
28	227	303	675	277	5900	857	374	298	93	96	91	66
29	209	413	1190	260	---	2850	332	428	89	101	89	65
30	202	495	1600	235	---	3910	310	470	74	96	89	67
31	184	---	1670	230	---	5560	---	359	---	87	89	---
TOTAL	7975	21187	21548	30676	43276	60502	45781	6655	4318	5316	3959	3773
MEAN	257	706	695	990	1546	1952	1526	215	144	171	128	126
MAX	787	2140	1670	3400	9110	5560	5390	470	299	528	449	495
MIN	75	199	210	230	175	478	310	129	74	71	64	65
CFSM	.42	1.16	1.14	1.62	2.53	3.20	2.50	.35	.24	.28	.21	.21
IN.	.49	1.29	1.31	1.87	2.64	3.69	2.79	.41	.26	.32	.24	.23

CAL YR 1984	TOTAL	216896	MEAN	593	MAX	4330	MIN	40	CFSM	.97	IN.	13.23
WTR YR 1985	TOTAL	254966	MEAN	699	MAX	9110	MIN	64	CFSM	1.15	IN.	15.55

04180000 CEDAR CREEK NEAR CEDARVILLE, IN

LOCATION.--Lat 41°13'08", long 85°04'35", in NW¼NW¼ 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 northwest of Cedarville, 5.8 miles upstream from mouth, and 10 miles south of Auburn.

DRAINAGE AREA.--270 mi^2.

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

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.09 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 4, 1947, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-10, Dec. 6-8, 26, and Jan. 13 to Feb. 21. Records good except for period with ice effect, Jan. 13 to Feb. 21, which are fair.

AVERAGE DISCHARGE.--39 years, 245 ft^3/s, 12.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,340 ft^3/s Mar. 14, 1982, gage height, 12.98 ft; minimum daily, 13 ft^3/s Oct. 3, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*).

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 02	1000	2930	8.49	Mar. 29	2200	4160	10.90
Feb. 24	2200	*5150	*12.65	Apr. 06	1700	2770	8.11
Mar. 05	1600	2630	7.78				

Minimum daily discharge, 23 ft^3/s Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	99	174	1620	91	1490	2870	140	74	40	31	82
2	72	332	151	2750	90	1160	1980	141	67	43	28	67
3	66	276	155	1900	81	935	1330	133	68	44	26	59
4	62	201	150	1060	80	1020	970	126	69	40	23	55
5	58	166	133	692	80	2350	907	122	68	44	27	50
6	56	144	120	513	80	1790	2380	120	65	42	97	107
7	70	129	115	418	79	1090	2080	116	59	36	330	496
8	300	118	110	348	78	849	1270	111	57	40	134	292
9	250	117	109	286	74	745	883	110	54	37	81	254
10	185	186	109	255	70	614	693	108	49	102	59	890
11	148	681	111	229	83	691	589	104	55	91	48	811
12	124	1120	119	204	130	897	504	102	77	57	42	525
13	110	756	335	185	135	613	443	100	60	48	49	367
14	104	486	605	170	120	503	397	98	54	43	216	272
15	110	368	771	155	115	433	360	100	55	41	428	212
16	119	301	483	145	105	380	330	99	78	41	433	171
17	126	248	362	140	98	344	294	99	102	38	215	145
18	113	212	288	140	96	308	277	98	209	36	140	124
19	103	188	259	135	94	288	259	96	144	35	116	107
20	99	167	281	120	92	271	240	91	104	34	94	94
21	242	150	253	110	90	250	223	104	86	32	75	81
22	372	138	518	100	741	233	208	92	73	32	63	72
23	249	130	413	100	2720	224	197	86	63	30	55	73
24	186	127	298	115	4760	217	194	82	57	29	51	99
25	152	120	237	120	4910	204	204	79	54	30	169	81
26	136	116	200	120	3600	192	182	73	51	35	227	79
27	125	116	181	120	2690	188	167	73	48	31	251	73
28	115	156	309	110	2050	707	157	138	46	28	169	66
29	107	246	799	105	---	3200	149	113	43	24	120	58
30	101	204	1070	97	---	3750	143	92	41	26	106	55
31	96	---	739	92	---	3120	---	85	---	31	111	---
TOTAL	4240	7798	9957	12654	23432	29056	20880	3231	2130	1260	4014	5917
MEAN	137	260	321	408	837	937	696	104	71.0	40.6	129	197
MAX	372	1120	1070	2750	4910	3750	2870	141	209	102	433	890
MIN	56	99	109	92	70	188	143	73	41	24	23	50
CFSM	.51	.96	1.19	1.51	3.10	3.47	2.58	.39	.26	.15	.48	.73
IN.	.58	1.07	1.37	1.74	3.23	4.00	2.88	.45	.29	.17	.55	.82

CAL YR 1984	TOTAL	110595	MEAN	302	MAX	2970	MIN	43	CFSM	1.12	IN.	15.24
WTR YR 1985	TOTAL	124569	MEAN	341	MAX	4910	MIN	23	CFSM	1.26	IN.	17.16

04180500 ST. JOSEPH RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 41°10'41", long 85°03'19", in NW¼NE¼ sec.3, T.31 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank 0.8 mile downstream from Ely Run, 1.3 miles upstream from Ely Bridge and Mayhew Road, 8.0 miles northeast of the Fort Wayne Court House.

DRAINAGE AREA.--1,060 mi^2.

PERIOD OF RECORD.--October 1983 to current year. July 1941 to September 1955 gage located 1.3 miles downstream at Ely Bridge.

GAGE.--Water-stage recorder. Datum of gage is 750.00 ft above National Geodetic Vertical Datum of 1929. (levels by State of Indiana).

REMARKS.--Estimated daily discharges: Dec. 6, 8, 27, Jan. 10 to Feb. 21. Records good except those for winter periods, which are fair. Flow regulated by Cedarville Reservoir and some flow diverted into storage of Hurshtown Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft^3/s Feb. 26, 1985, gage height, 17.79 ft; minimum daily, 73 ft^3/s Oct. 11, 1983

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,200 ft^3/s Feb. 26, gage height, 17.79 ft; minimum daily, 121 ft^3/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	339	805	4960	365	8690	10200	479	504	139	151	244
2	182	569	647	6630	350	6700	8900	560	341	146	145	219
3	130	975	632	5800	335	5290	6740	386	345	150	139	207
4	147	831	641	4840	325	5020	5320	413	340	156	135	202
5	143	689	517	4460	330	6700	4690	406	232	152	142	199
6	122	486	420	4060	330	6090	6420	395	195	159	196	201
7	121	459	344	3410	325	4670	5940	352	235	197	916	898
8	226	447	365	2530	320	4150	4660	308	211	442	391	806
9	497	425	382	1850	310	3800	4310	312	206	419	208	571
10	805	493	426	1100	305	3360	3740	326	189	264	202	1780
11	629	1780	377	930	410	3330	3290	290	166	232	214	1730
12	443	3550	387	805	490	3820	2730	273	178	243	154	1210
13	341	2950	816	755	550	3270	2110	272	179	225	136	1060
14	319	2730	1860	690	515	2690	1880	254	176	208	361	506
15	288	2500	2460	650	470	2500	1440	255	198	196	1110	471
16	317	2020	2080	620	435	2000	1660	260	231	179	1370	428
17	292	1740	1720	595	415	1820	1150	263	270	237	957	338
18	288	1160	1380	580	405	1370	1180	263	519	743	710	289
19	306	904	1120	550	390	1410	1050	263	499	710	515	301
20	279	845	1040	495	385	1380	965	261	430	347	374	279
21	596	738	1050	435	600	1010	923	273	405	266	280	254
22	1450	636	1850	420	2380	1030	842	276	309	241	272	243
23	1110	767	1540	440	8710	966	690	300	205	200	244	254
24	998	533	1670	465	10200	874	736	331	209	183	239	302
25	709	483	1280	480	12200	876	758	291	200	187	268	229
26	530	434	790	475	13100	815	573	237	198	193	392	236
27	403	433	720	455	12900	869	681	250	189	161	396	245
28	400	465	997	430	11600	1840	680	351	162	149	345	239
29	371	696	2400	410	---	7490	602	473	134	149	289	233
30	279	788	3060	395	---	8890	439	659	144	156	276	214
31	285	---	2770	375	---	9250	---	654	---	138	269	---
TOTAL	13241	31865	36546	51090	79450	111970	85299	10686	7799	7567	11796	14388
MEAN	427	1062	1179	1648	2838	3612	2843	345	260	244	381	480
MAX	1450	3550	3060	6630	13100	9250	10200	659	519	743	1370	1780
MIN	121	339	344	375	305	815	439	237	134	138	135	199
CFSM	.40	1.00	1.11	1.55	2.68	3.41	2.68	.33	.25	.23	.36	.45
IN.	.46	1.12	1.28	1.79	2.79	3.93	2.99	.38	.27	.27	.41	.50

CAL YR 1984	TOTAL	388230	MEAN	1061	MAX	6710	MIN	104	CFSM	1.00	IN.	13.62
WTR YR 1985	TOTAL	461697	MEAN	1265	MAX	13100	MIN	121	CFSM	1.19	IN.	16.20

04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW¼ SW¼ sec.27, T.28 N., R.14 E., Adams County, Hydrologic Unit 04100004, on right bank 10 ft downstream from bridge on U.S. Highway 27, 0.5 mile upstream from Holthouse ditch, 1.3 miles north of Decatur, and at mile 29.1.

DRAINAGE AREA.--621 mi^2.

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 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 above National Geodetic Vertical Datum of 1929. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 12 to Feb. 21. Records good except for estimated daily discharges, which are poor. Flow regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

AVERAGE DISCHARGE.--39 years, 494 ft^3/s, 10.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s Feb. 10, 11, 1959; maximum gage height, 24.40 ft Mar. 14, 1982; minimum daily discharge, 5.4 ft^3/s Oct. 18, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 2	0300	3,540	17.26	Apr. 1	0400	3,600	17.38
Feb. 25	1900	*10,300	*24.31	Apr. 6	1100	2,910	15.62

Minimum daily discharge, 19 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	42	256	2930	63	3730	3490	84	268	48	31	55
2	31	74	264	3460	62	2400	2750	116	182	49	29	49
3	29	89	251	2910	62	1370	2270	158	152	43	27	45
4	28	128	198	2320	61	1490	2100	134	154	42	26	48
5	26	178	153	1890	60	2680	1760	138	130	40	31	43
6	25	173	130	1410	59	1930	2810	180	227	54	35	37
7	35	136	96	953	59	1250	2070	161	207	103	35	31
8	44	106	122	614	58	1330	1130	127	157	82	31	28
9	44	90	116	376	56	1100	914	105	122	65	29	28
10	32	84	107	258	68	778	748	91	98	59	30	28
11	25	787	114	178	82	915	593	84	103	51	34	28
12	23	786	125	160	92	1820	451	80	579	46	43	28
13	23	398	219	130	115	1230	358	74	708	40	48	26
14	46	351	568	130	110	924	306	66	526	34	38	29
15	67	377	836	130	100	874	272	61	484	33	44	33
16	83	341	685	120	92	784	245	63	1240	30	37	33
17	63	227	632	110	87	633	214	70	1240	30	35	29
18	36	165	615	105	82	462	190	76	707	30	35	26
19	29	134	569	99	78	344	175	86	516	30	34	24
20	26	113	452	92	110	305	156	88	386	31	33	23
21	31	96	343	88	250	269	139	87	259	31	34	22
22	26	81	600	84	1240	251	127	104	177	29	32	23
23	34	71	509	78	4820	260	118	119	132	27	31	30
24	35	64	420	76	8420	261	113	130	106	25	44	30
25	35	58	405	73	10100	247	111	128	88	25	39	24
26	38	53	348	72	9800	244	103	116	75	32	35	24
27	36	53	273	70	8150	262	96	111	65	27	35	22
28	34	136	325	68	5840	478	91	336	56	26	41	20
29	33	248	744	68	---	774	86	527	51	25	54	19
30	31	223	1930	67	---	578	80	411	47	31	70	22
31	30	---	1720	66	---	2480	---	358	---	34	56	---
TOTAL	1110	5862	14125	19185	50176	32453	24066	4469	9242	1252	1156	907
MEAN	35.8	195	456	619	1792	1047	802	144	308	40.4	37.3	30.2
MAX	83	787	1930	3460	10100	3730	3490	527	1240	103	70	55
MIN	23	42	96	66	56	244	80	61	47	25	26	19
CFSM	.06	.31	.73	1.00	2.89	1.69	1.29	.23	.50	.07	.06	.05
IN.	.07	.35	.85	1.15	3.01	1.94	1.44	.27	.55	.07	.07	.05

CAL YR 1984	TOTAL	187721	MEAN	513	MAX	4430	MIN	23	CFSM	.83	IN.	11.25
WTR YR 1985	TOTAL	164003	MEAN	449	MAX	10100	MIN	19	CFSM	.72	IN.	9.82

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 40°59'16", long 85°06'03", in A. LaFontaine Reserve, T.29 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 130 ft downstream from Anthony Boulevard Extension, 0.8 mile downstream from Houk ditch, 5 miles south of Fort Wayne, and 10.8 miles upstream from mouth.

DRAINAGE AREA.--762 mi^2.

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 from the District Office.

REVISED RECORDS.--WSP 974: 1942. WSP 1337: 1933, 1947. WSP 1912: 1954, 1955, 1960, drainage area. WDR IN-82-1: 1973, 1974, 1978, 1979.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on upstream highway bridge at same datum.

REMARKS.--Estimated daily discharges: Jan. 10 to Feb. 21. Records good except for estimated daily discharges, which are poor. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal. During extreme floods, some water bypasses gage and flows through Houk ditch and Paul Trier ditch into the Maumee River.

AVERAGE DISCHARGE.--55 years, 579 ft^3/s, 10.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s Feb. 11, 1959; maximum gage height, 19.66 ft, Mar. 14, 1982; minimum daily discharge, 3.4 ft^3/s Oct. 19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater then base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	2000	5,340	12.08	Apr. 1	1000	4,770	11.33
Feb. 26	0700	*12,400	*18.33				

Minimum daily discharge, 24 ft^3/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	50	271	4290	73	6940	4740	91	357	49	47	58
2	40	69	297	4950	71	4170	4150	107	248	54	42	56
3	41	104	310	4200	70	1970	2860	148	201	57	39	51
4	41	112	275	3110	70	2090	2480	166	170	48	37	48
5	38	155	205	2330	70	3620	2260	143	149	47	37	51
6	38	188	171	1750	69	2830	3810	167	160	45	44	46
7	39	170	152	1230	69	1600	3230	193	242	59	50	41
8	53	136	153	820	68	1570	1630	162	191	93	45	35
9	58	113	151	530	76	1430	1170	131	142	74	40	37
10	51	103	135	350	86	1020	959	109	109	72	36	40
11	41	973	127	230	100	1020	769	97	90	67	36	34
12	34	1280	140	180	120	2000	599	90	282	57	40	31
13	31	657	293	170	130	1680	480	86	849	52	51	31
14	40	432	724	160	125	1110	406	80	646	47	73	29
15	67	431	1120	140	120	997	358	76	547	44	69	31
16	103	488	907	130	115	913	318	72	1520	42	60	36
17	93	346	760	130	110	777	278	76	1810	38	48	38
18	70	236	701	130	100	594	242	83	1100	38	40	34
19	52	179	664	120	93	450	219	89	688	38	39	30
20	45	147	581	120	160	376	201	98	520	38	37	28
21	73	123	471	110	450	335	181	104	373	40	35	27
22	62	106	765	100	1690	301	163	97	246	41	37	27
23	46	92	714	96	6480	300	150	119	171	38	35	29
24	47	85	538	93	10600	308	140	135	129	35	34	37
25	48	78	484	90	12100	293	133	142	106	33	44	43
26	49	74	441	88	12300	274	127	135	87	36	43	33
27	53	70	373	84	11700	287	117	131	74	42	41	32
28	53	101	398	82	9720	374	108	498	65	36	44	28
29	50	265	823	80	---	921	103	676	56	34	50	26
30	48	284	2350	78	---	736	95	536	51	33	66	24
31	47	---	2350	75	---	2970	---	444	---	39	68	---
TOTAL	1590	7647	17844	26046	66935	44256	32476	5281	11379	1466	1407	1091
MEAN	51.3	255	576	840	2391	1428	1083	170	379	47.3	45.4	36.4
MAX	103	1280	2350	4950	12300	6940	4740	676	1810	93	73	58
MIN	31	50	127	75	68	274	95	72	51	33	34	24
CFSM	.07	.33	.76	1.10	3.14	1.87	1.42	.22	.50	.06	.06	.05
IN.	.08	.37	.87	1.27	3.27	2.16	1.59	.26	.56	.07	.07	.05

CAL YR 1984	TOTAL	244068	MEAN	667	MAX	5620	MIN	29	CFSM	.88	IN.	11. 92
WTR YR 1985	TOTAL	217418	MEAN	596	MAX	12300	MIN	24	CFSM	.78	IN.	10. 61

04182590 HARBER DITCH AT FORT WAYNE, IN

LOCATION.--Lat 41°00'27", long 85°10'58", in NE¼SW¼ sec.33, T.30 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 50 ft upstream from bridge on Baer Road in Fort Wayne, 3.2 miles upstream from mouth. The stream name changes to Fairfield ditch 0.7 mile downstream at bridge on Lower Huntington Road.

DRAINAGE AREA.--21.9 mi^2.

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 downstream.

REVISED RECORDS.--WDR IN-82-1: 1980 (P), 1981 (P).

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 5-9, Dec. 25 to Feb. 24, and May 29 to Jun. 13. Records good except those for periods of no gage-height record, Dec. 25 to Feb. 11, and May 29 to June 13, and periods of ice effect, Feb. 12-22, which are poor.

AVERAGE DISCHARGE.--21 years, 18.2 ft^3/s, 11.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 916 ft^3/s June 13, 1981; maximum gage height, 12.25 ft Mar. 14, 1982; minimum daily discharge, 0.06 ft^3/s Oct. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 01	----	400	unknown	Mar. 31	1100	381	7.96
Feb. 23	1830	*818	*11.27	Apr. 05	2245	322	7.26
Mar. 04	1900	421	8.35				

Minimum daily discharge, 0.16 ft^3/s July 23, Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	3.6	2.0	350	1.8	52	116	2.9	6.5	2.2	1.0	.92
2	.28	1.3	1.7	150	1.5	44	60	3.8	5.0	2.3	.37	1.2
3	.22	.54	3.9	45	1.2	28	35	2.2	15	1.4	.22	.76
4	.47	.59	1.8	25	1.2	205	23	1.7	6.3	1.0	.76	.87
5	.33	.82	1.4	17	1.2	154	101	1.4	5.3	10	5.6	2.0
6	.37	.47	1.2	12	1.2	53	162	1.7	4.3	1.5	3.9	.90
7	11	.34	1.1	9.0	1.1	34	75	1.9	3.3	.91	1.3	.65
8	5.6	.43	1.0	8.0	.95	57	42	1.6	2.5	.68	.97	.37
9	1.5	3.5	1.1	7.0	.83	33	33	1.3	2.0	.56	.48	24
10	.75	3.8	2.1	6.5	1.0	22	26	1.2	1.5	1.0	.30	5.2
11	.70	58	2.0	5.8	2.5	64	20	1.3	30	.63	.19	1.6
12	.70	16	4.0	5.5	5.5	58	15	1.2	13	.40	.16	1.0
13	.90	5.4	11	5.2	4.3	28	13	.99	6.2	.36	12	.66
14	14	3.0	40	4.8	4.0	21	12	1.0	3.9	.29	45	.36
15	3.6	3.6	25	4.4	3.0	15	9.8	1.5	8.5	.80	37	.21
16	1.8	2.9	13	4.1	2.6	12	7.8	1.1	87	.53	5.8	.21
17	.66	2.2	9.1	3.9	2.7	11	5.9	1.3	63	.36	2.8	.21
18	.42	1.5	5.6	3.6	3.4	8.2	5.6	2.0	27	.28	1.7	.24
19	.74	1.3	5.5	3.3	3.2	8.2	5.2	1.2	12	.25	3.5	.27
20	4.8	1.2	4.2	2.5	3.2	7.8	4.7	3.1	8.0	.20	2.4	.26
21	11	.95	17	2.6	6.0	6.0	4.2	2.3	5.9	.18	1.6	.25
22	1.3	.68	30	2.7	100	6.1	4.1	1.5	4.8	.17	1.0	.27
23	.83	.62	7.3	2.8	710	6.4	3.8	.91	3.8	.16	.75	9.2
24	.50	.58	5.0	2.7	700	6.2	4.3	.75	3.0	.22	1.0	2.4
25	.60	.55	4.3	2.4	269	5.0	3.6	.61	2.5	.32	.93	.72
26	.71	.55	3.5	2.1	159	3.9	2.8	.43	2.2	2.9	.63	1.1
27	.53	.96	8.0	1.9	133	5.2	2.9	11	2.0	.55	.62	.37
28	.58	8.0	60	2.0	68	18	2.4	119	1.8	.26	.62	.18
29	.55	3.7	90	2.0	---	17	2.1	50	1.5	.18	.70	.17
30	.55	2.7	85	2.0	---	19	1.9	20	1.4	.29	6.0	.28
31	.55	---	40	1.9	---	235	---	8.0	---	4.4	1.2	---
TOTAL	66.91	129.78	486.8	697.7	2191.38	1243.0	804.1	248.89	339.2	35.28	140.50	56.83
MEAN	2.16	4.33	15.7	22.5	78.3	40.1	26.8	8.03	11.3	1.14	4.53	1.89
MAX	14	58	90	350	710	235	162	119	87	10	45	24
MIN	.22	.34	1.0	1.9	.83	3.9	1.9	.43	1.4	.16	.16	.17
CFSM	.10	.20	.72	1.03	3.58	1.83	1.22	.37	.52	.05	.21	.09
IN.	.11	.22	.83	1.19	3.72	2.11	1.37	.42	.58	.06	.24	.10

CAL YR 1984	TOTAL	6615.37	MEAN	18.1	MAX	586	MIN	.22	CFSM	.83	IN.	11.24
WTR YR 1985	TOTAL	6440.37	MEAN	17.6	MAX	710	MIN	.16	CFSM	.80	IN.	10.94

04182810 SPY RUN CREEK AT FORT WAYNE, IN

LOCATION.--Lat 41°06'18", long 85°09'12", in SW¼SW¼ sec.26, T.31 N., R.12 E., Allen County, Hydrologic Unit 04100004, on right bank 50 ft upstream from Sherman Boulevard bridge in Fort Wayne, and at mile 2.2 miles above mouth.

DRAINAGE AREA.--14.0 mi^2.

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage Recorder. Datum of gage is 760.00 ft above National Geodetic Verticle Datum of 1929 (levels by City of Fort Wayne).

REMARKS.--Estimated daily discharges: Dec. 6-8, Jan. 7-28, and Feb. 4-9, 14. Record good, execpt those for estimated record, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,150 ft^3/s March 16, 1984, gage height 9.94 ft; minimum daily, 2.2 ft^3/s July 14, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 14, 1982 reached a stage of 10.75 ft, present site and datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1015	769	8.52	Mar. 31	0900	537	7.51
Feb. 23	1715	*909	*9.08	Apr. 5	2115	865	8.90
Mar. 4	1815	636	7.96				

Minimum daily discharge, 2.4 ft^3/s Sept. 8, 15-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	18	4.9	387	3.3	23	45	5.7	3.4	3.7	4.5	2.8
2	3.6	13	4.2	45	2.9	22	26	9.3	3.9	4.0	3.5	2.5
3	3.6	5.0	14	23	2.5	14	22	4.1	23	3.9	3.1	2.8
4	3.3	4.0	5.6	16	2.5	247	13	3.8	4.8	3.2	3.1	2.8
5	3.3	3.8	4.0	9.5	2.5	66	225	3.6	3.8	8.3	8.4	2.8
6	3.3	3.7	3.7	7.1	2.5	24	104	3.5	3.6	3.2	7.6	2.9
7	26	4.1	3.6	6.0	2.5	20	31	3.6	3.5	6.5	7.2	2.8
8	26	3.7	3.7	5.0	2.5	27	21	3.6	3.4	5.0	4.0	2.4
9	7.1	9.2	4.3	4.5	2.5	15	16	3.5	3.2	3.7	3.6	35
10	4.0	10	7.4	4.2	3.0	11	11	3.5	3.1	5.5	3.1	22
11	3.7	90	5.8	3.9	9.2	95	9.0	3.5	18	3.6	2.9	4.4
12	3.7	19	11	3.6	19	39	7.5	3.5	11	3.4	3.1	3.2
13	7.7	8.5	37	3.5	15	19	6.6	3.4	4.7	3.3	18	2.9
14	24	5.9	60	3.5	13	14	5.8	3.4	3.9	3.3	79	2.5
15	13	6.3	22	3.4	11	9.4	5.6	4.3	9.9	3.2	76	2.4
16	14	5.8	12	3.3	8.9	7.5	6.4	3.7	16	3.3	12	2.4
17	5.8	4.7	8.2	3.2	9.4	6.5	5.1	3.6	41	3.2	5.1	2.4
18	4.2	4.2	6.1	3.2	12	5.9	5.2	4.9	11	3.2	6.5	2.4
19	5.4	4.1	11	3.2	11	5.7	5.6	4.0	6.1	3.3	4.5	2.4
20	12	4.1	7.4	3.1	11	5.5	5.3	3.4	5.2	3.1	4.1	2.5
21	84	4.1	40	3.1	22	4.9	4.9	3.7	4.8	3.1	3.8	2.5
22	12	3.9	56	3.1	376	4.7	4.8	3.3	4.3	3.1	3.5	2.6
23	5.6	3.6	12	3.1	713	5.1	4.8	3.3	4.0	3.1	3.4	17
24	3.9	3.6	7.1	3.1	287	5.3	8.4	3.7	4.0	3.1	3.4	11
25	3.4	3.5	4.4	3.0	77	4.5	6.4	3.3	3.9	4.7	3.2	3.6
26	3.8	3.6	3.6	3.0	48	4.1	4.6	3.1	4.0	9.9	4.3	3.8
27	3.8	4.6	10	3.0	56	4.5	4.0	26	4.0	3.7	3.8	3.2
28	3.9	34	62	3.0	26	64	3.7	31	4.0	3.2	3.3	2.9
29	4.0	11	63	3.3	---	32	3.6	5.5	3.8	3.2	3.3	2.7
30	5.2	6.2	64	3.3	---	25	3.6	4.1	3.6	3.2	19	3.5
31	5.9	---	28	3.4	---	212	---	3.7	---	8.0	3.7	---
TOTAL	312.3	305.2	586.0	575.6	1751.2	1042.6	624.9	172.6	222.9	128.2	314.0	159.1
MEAN	10.1	10.2	18.9	18.6	62.5	33.6	20.8	5.57	7.43	4.14	10.1	5.30
MAX	84	90	64	387	713	247	225	31	41	9.9	79	35
MIN	3.1	3.5	3.6	3.0	2.5	4.1	3.6	3.1	3.1	3.1	2.9	2.4
CFSM	.72	.73	1.35	1.33	4.46	2.40	1.49	.40	.53	.30	.72	.38
IN.	.83	.81	1.56	1.53	4.65	2.77	1.66	.46	.59	.34	.83	.42

CAL YR 1984	TOTAL	6078.0	MEAN	16.6	MAX	564	MIN	2.2	CFSM	1.19	IN.	16.15
WTR YR 1985	TOTAL	6194.6	MEAN	17.0	MAX	713	MIN	2.4	CFSM	1.21	IN.	16.46

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 upstream from bridge on Landin Road, 1,400 ft upstream from the Norfolk and Western Railroad bridge, 1.1 miles northwest of New Haven, 2.8 miles upstream from Sixmile Creek and at mile 129.0.

DRAINAGE AREA.--1,967 mi².

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 above 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 downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 11, 16, 17, 20-22, 30, Feb. 1, 2, 4-9, 12-21. Records good, except those for winter period, which are fair. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 miles upstream from station. Flow slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--29 years (1956 to current year), 1,676 ft³/s, 11.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft³/s Mar. 17, 1982, gage height, 25.49 ft; minimum daily, 48 ft³/s Oct. 6, 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 02	0700	12200	17.18	Apr. 02	0200	14600	19.11
Feb. 27	0800	*23800	*24.19	Apr. 07	0200	11100	16.18
Mar. 05	1100	11300	16.30				

Minimum daily discharge, 150 ft³/s Aug. 8; unusual regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362	491	1140	9400	520	18300	14100	652	966	191	200	314
2	409	590	1150	12100	505	13800	14100	801	695	197	176	264
3	181	1020	1200	11400	493	9880	11600	686	716	208	171	227
4	193	1030	996	9400	490	8530	9250	629	576	201	150	221
5	199	947	932	7920	470	11100	8160	642	455	454	188	213
6	192	815	777	6760	465	10500	10700	610	343	244	214	221
7	349	714	665	5600	450	8220	10600	631	470	253	806	658
8	547	673	538	4220	450	6770	8270	578	486	532	584	944
9	493	735	640	3010	440	6260	6500	526	393	539	285	891
10	868	713	659	2040	450	5280	5590	495	333	422	260	1770
11	803	2830	639	1550	534	5220	4910	463	404	324	273	2390
12	562	5420	628	1380	600	6590	4030	420	430	302	197	1230
13	485	4710	1080	1250	800	5970	3230	403	992	292	336	1230
14	620	3710	2780	1110	780	4800	2740	405	966	267	863	599
15	527	3340	4030	1010	730	4180	2240	383	859	254	1710	482
16	585	2990	3600	975	690	3560	2240	379	1630	218	1780	466
17	501	2580	2970	910	680	3260	1860	391	2720	229	1110	377
18	432	1740	2420	939	630	2490	1550	420	2170	563	889	301
19	408	1310	2150	879	610	2120	1560	415	1510	791	623	296
20	393	1070	1910	810	600	2090	1290	426	690	436	460	274
21	1040	1050	1900	740	800	1740	1280	497	798	304	345	241
22	1510	808	2890	710	3490	1470	1130	196	725	268	300	232
23	1350	915	2980	863	12000	1560	1030	383	477	208	252	361
24	1150	770	2470	1020	18700	1350	974	431	409	198	257	464
25	929	681	2180	1000	21600	1360	1040	433	343	201	262	249
26	707	587	1570	865	23300	1220	819	349	316	323	448	263
27	570	579	1450	781	23700	1230	850	461	345	221	419	215
28	510	812	1780	686	22300	1820	870	1260	291	177	382	214
29	477	948	3360	620	---	7330	807	1190	225	156	324	218
30	384	1220	5760	570	---	9610	720	1330	197	153	624	201
31	410	---	6150	540	---	11700	---	1160	---	208	367	---
TOTAL	18146	45798	63394	91058	137277	179310	134040	18045	21930	9334	15255	16026
MEAN	585	1527	2045	2937	4903	5784	4468	582	731	301	492	534
MAX	1510	5420	6150	12100	23700	18300	14100	1330	2720	791	1780	2390
MIN	181	491	538	540	440	1220	720	196	197	153	150	201
CFSM	.30	.78	1.04	1.49	2.49	2.94	2.27	.30	.37	.15	.25	.27
IN.	.34	.87	1.20	1.72	2.60	3.39	2.53	.34	.41	.18	.29	.30

CAL YR 1984	TOTAL	718850	MEAN	1964	MAX	12600	MIN	74	CFSM	1.00	IN.	13.59
WTR YR 1985	TOTAL	749613	MEAN	2054	MAX	23700	MIN	150	CFSM	1.04	IN.	14.18

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN

LOCATION.--Lat 41°33'50", long 86°29'50", in NW¼NE¼ sec.23, T.36 N., R.1 W., St. Joseph County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on county highway named " New Road", 2.7 miles upstream from Little Kankakee River, 4 miles northwest of North Liberty, and at mile 126.9.

DRAINAGE AREA.--174 mi^2, of which 58.2 mi^2 does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1915: 1952, 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.04 ft above 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.--Estimated daily discharges: Jan. 1-8, Jan. 20 to Feb. 19, Feb. 23 to Apr. 20. Records good except for periods of variable backwater from downstream tributaries, Jan. 1-8, and Feb. 23 to Apr. 20, and period with ice effect, Jan. 20 to Feb. 19, which are fair.

AVERAGE DISCHARGE.--34 years, 152 ft^3/s, 11.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 908 ft^3/s Mar. 17, 1982, gage height, 9.01 ft; maximum gage height, 9.04 ft June 27, 1968; minimum daily discharge, 46 ft^3/s Sept. 9, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 820 ft^3/s Feb. 24, gage height, 8.64 ft; minimum daily, 92 ft^3/s July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	163	166	450	145	680	390	199	136	126	121	103
2	102	211	161	540	140	630	360	192	142	124	114	100
3	101	198	173	450	140	570	330	188	160	121	108	100
4	98	184	174	380	140	620	300	181	156	131	107	97
5	98	172	163	330	140	700	320	186	151	124	111	99
6	97	162	160	300	135	650	500	182	140	114	114	101
7	109	157	153	280	135	600	480	178	128	117	109	103
8	161	153	151	260	130	570	440	174	131	115	102	100
9	164	152	147	248	130	530	420	167	135	107	100	115
10	151	156	149	236	130	490	390	169	132	173	97	133
11	141	204	158	225	125	450	370	171	138	151	97	122
12	136	213	176	217	125	430	350	170	151	138	96	115
13	135	193	212	212	125	400	340	161	144	135	95	104
14	150	180	247	209	120	380	320	160	136	137	106	101
15	178	173	273	198	120	360	310	166	157	126	135	107
16	186	164	243	194	120	350	300	167	236	113	134	105
17	167	158	219	195	125	330	290	169	224	106	120	106
18	153	154	202	193	130	320	280	163	203	107	115	105
19	161	150	197	183	135	310	270	157	182	106	108	99
20	173	146	190	170	138	300	260	157	172	108	103	97
21	279	144	193	165	142	290	253	159	165	110	104	95
22	287	142	297	160	233	280	245	153	161	105	104	96
23	228	141	272	160	550	270	239	147	152	93	106	99
24	200	138	237	160	800	265	236	150	145	92	106	99
25	184	137	214	155	780	260	231	148	140	104	126	98
26	174	135	200	155	780	260	224	152	136	145	122	100
27	165	138	194	150	740	260	218	167	134	127	115	101
28	158	179	208	150	700	330	213	170	129	115	109	98
29	150	190	253	150	---	480	208	165	125	110	107	97
30	145	177	361	150	---	400	205	158	128	115	108	100
31	143	---	318	145	---	440	---	151	---	122	105	---
TOTAL	4878	4964	6461	7170	7353	13205	9292	5177	4569	3717	3404	3095
MEAN	157	165	208	231	263	426	310	167	152	120	110	103
MAX	287	213	361	540	800	700	500	199	236	173	135	133
MIN	97	135	147	145	120	260	205	147	125	92	95	95
CFSM	.90	.95	1.20	1.33	1.51	2.45	1.78	.96	.87	.69	.63	.59
IN.	1.04	1.06	1.38	1.53	1.57	2.82	1.99	1.11	.98	.79	.73	.66

CAL YR 1984	TOTAL	57218	MEAN	156	MAX	489	MIN	63	CFSM	.90	IN.	12.23
WTR YR 1985	TOTAL	73285	MEAN	201	MAX	800	MIN	92	CFSM	1.16	IN.	15.67

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 east of State Highway 39, 1.5 miles west of U.S. Highway 35, and 3 miles south of LaPorte city limits.

DRAINAGE AREA.--7.08 mi^2, of which 4.07 mi^2 does not contribute directly to surface run-off.

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

REVISED RECORDS.--WDR IN-83-1: 1981 (P).

GAGE.--Water-stage recorder. Datum of gage is 753.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges during water year. Records fair.

AVERAGE DISCHARGE.--15 years, 4.25 ft^3/s, 8.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 306 ft^3/s July 26, 1981, gage height, 6.83 ft from rating curve extended above 20 ft^3/s on the basis of contracted-opening measurement at gage height 6.18 ft; minimum daily, 0.83 ft^3/s Dec. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	0500	59	5.40	Mar. 4	1700	44	5.19
Feb. 23	2300	*64	*5.46	Sept. 9	1200	30	4.94

Minimum daily discharge, 2.0 ft^3/s Oct. 30, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.9	3.0	24	3.8	10	8.8	5.3	4.2	2.6	2.6	2.2
2	2.5	3.0	3.0	7.3	3.7	9.6	7.8	5.2	4.1	2.7	2.4	2.2
3	2.4	2.7	3.7	5.9	3.6	9.5	7.3	5.0	4.0	2.9	2.4	2.2
4	2.3	2.5	3.0	5.5	3.5	28	6.9	5.0	4.0	2.8	2.4	2.2
5	2.3	2.3	2.8	5.3	3.6	16	13	5.0	3.9	2.8	3.0	2.2
6	2.3	2.2	2.8	5.3	3.6	12	15	5.1	3.8	2.7	2.8	2.3
7	3.0	2.2	2.7	5.3	3.5	10	11	5.0	3.7	2.6	2.6	2.2
8	3.7	2.1	2.7	5.0	3.4	10	9.7	4.9	3.7	2.5	2.4	2.2
9	3.2	2.3	2.7	4.8	3.4	9.8	9.0	4.8	3.5	2.6	2.3	9.5
10	2.8	3.1	2.9	4.8	3.4	9.4	8.5	4.6	3.4	8.4	2.4	4.7
11	2.6	6.2	3.0	4.7	3.6	9.7	8.2	4.5	3.5	3.6	2.3	3.4
12	2.5	4.3	3.4	4.6	3.3	9.7	7.9	4.6	4.0	3.3	2.2	2.9
13	2.6	3.7	3.7	4.5	3.2	8.9	7.6	4.5	3.8	3.2	2.2	2.6
14	2.9	3.4	5.1	4.5	3.6	8.7	7.5	4.4	3.6	3.2	3.1	2.5
15	3.0	3.4	4.1	4.4	3.5	8.2	7.5	4.7	4.6	3.1	6.3	2.4
16	3.1	3.2	3.8	4.3	3.5	7.7	7.3	4.8	5.3	2.8	3.5	2.3
17	2.6	3.0	3.5	4.5	3.4	7.4	7.0	4.8	4.6	2.7	2.8	2.3
18	2.4	3.0	3.2	4.5	3.3	7.1	6.8	4.7	4.2	2.7	2.6	2.3
19	2.6	3.0	3.4	4.4	3.3	7.0	6.6	4.5	3.9	2.6	2.5	2.2
20	2.5	2.9	3.3	4.1	3.3	6.9	6.4	4.5	3.7	2.5	2.4	2.1
21	5.3	2.8	5.3	4.1	3.6	6.6	6.3	4.6	3.5	2.5	2.3	2.1
22	3.3	2.8	5.9	4.1	7.7	6.6	6.1	4.4	3.4	2.5	2.2	2.3
23	2.8	2.8	4.2	4.1	47	6.6	6.0	4.3	3.2	2.3	2.2	2.4
24	2.6	2.8	4.0	4.2	43	7.0	6.6	4.3	3.1	2.3	2.4	2.2
25	2.3	2.7	3.5	4.1	18	6.8	6.8	4.2	3.0	3.3	2.6	2.2
26	2.3	2.7	3.4	4.0	15	6.4	6.3	4.0	2.9	2.7	2.5	2.2
27	2.2	3.1	3.5	4.0	15	8.1	5.9	4.2	2.9	2.4	2.3	2.2
28	2.2	4.0	4.3	3.9	11	13	5.7	4.8	2.8	2.4	2.3	2.2
29	2.1	3.3	7.3	3.8	---	12	5.5	4.4	2.7	2.3	2.3	2.1
30	2.0	3.1	6.7	3.8	---	9.7	5.4	4.3	2.7	2.3	2.4	2.3
31	2.0	---	5.4	3.8	---	9.2	---	4.3	---	2.8	2.3	---
TOTAL	82.9	92.5	119.3	161.6	229.8	297.6	230.4	143.7	109.7	90.1	81.0	79.1
MEAN	2.67	3.08	3.85	5.21	8.21	9.60	7.68	4.64	3.66	2.91	2.61	2.64
MAX	5.3	6.2	7.3	24	47	28	15	5.3	5.3	8.4	6.3	9.5
MIN	2.0	2.1	2.7	3.8	3.2	6.4	5.4	4.0	2.7	2.3	2.2	2.1
CFSM	.38	.44	.54	.74	1.16	1.36	1.08	.66	.52	.41	.37	.37
IN.	.44	.49	.63	.85	1.21	1.56	1.21	.76	.58	.47	.43	.42

CAL YR 1984	TOTAL	1524.5	MEAN	4.17	MAX	55	MIN	2.0	CFSM	.59	IN.	8.01
WTR YR 1985	TOTAL	1717.7	MEAN	4.71	MAX	47	MIN	2.0	CFSM	.67	IN.	9.03

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 downstream from Mill Creek, 4 miles east of Hanna, and at mile 110.9.

DRAINAGE AREA.--537 mi^2, of which 137 mi^2 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 above National Geodetic Vertical Datum of 1929. July 13, 1905, to July 21, 1906, nonrecording gage at site 50 ft downstream at different datum. July 28, 1925, to May 18, 1929, nonrecording gage on bridge 0.5 mile downstream at different datum. Apr. 19, 1931, to Nov. 3, 1953, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Jan. 20 to Feb. 17. Records good except for period with ice effect, which is fair.

AVERAGE DISCHARGE.--61 years, (1924 to current year), 506 ft^3/s, 12.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft^3/s Mar. 20, 1982; maximum gage height, 13.52 ft Mar. 5, 1985: minimum daily discharge, 154 ft^3/s Aug. 30 to Sept. 3, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,620 ft^3/s Mar. 5; gage height, 13.52 ft; minimum daily, 273 ft^3/s July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	331	517	591	1150	500	1570	1440	761	489	378	350	308
2	324	655	561	1330	490	1570	1430	723	472	375	332	301
3	321	662	590	1330	480	1560	1400	700	482	377	318	296
4	318	612	612	1280	480	1590	1370	686	487	367	309	293
5	314	576	579	1190	470	1610	1370	674	478	375	327	293
6	311	539	553	1100	470	1600	1460	669	467	356	339	301
7	337	517	526	1040	460	1590	1490	643	449	342	337	310
8	418	500	515	975	460	1580	1490	627	434	337	318	303
9	457	493	504	913	450	1560	1470	610	428	330	302	345
10	439	506	507	866	440	1530	1440	596	419	397	295	522
11	415	668	528	820	440	1510	1420	589	428	442	291	487
12	395	769	563	778	430	1490	1400	590	466	396	286	421
13	393	716	646	741	420	1460	1370	578	460	383	283	376
14	428	657	734	731	420	1440	1330	564	443	388	302	345
15	462	615	828	704	430	1410	1300	569	456	381	405	337
16	498	582	795	688	440	1380	1270	568	536	354	451	331
17	484	556	748	679	450	1340	1220	569	572	332	402	324
18	450	539	696	669	448	1290	1180	558	555	318	366	321
19	468	526	670	644	455	1260	1140	542	528	312	346	311
20	521	511	663	610	460	1230	1120	533	502	314	332	304
21	684	501	658	590	471	1190	1080	534	491	305	323	298
22	832	490	836	580	640	1160	1040	526	480	304	319	300
23	763	488	884	560	1240	1120	1010	510	463	285	316	306
24	671	481	818	550	1530	1100	979	500	444	273	317	313
25	607	476	744	540	1510	1070	952	494	428	281	342	313
26	572	472	689	540	1530	1050	913	485	417	359	363	310
27	549	481	668	540	1570	1030	872	514	399	361	347	309
28	527	579	687	530	1570	1120	842	558	390	336	330	307
29	504	668	777	520	---	1370	809	540	391	318	319	302
30	487	635	954	510	---	1440	781	518	386	309	319	309
31	480	---	977	500	---	1440	---	514	---	335	315	---
TOTAL	14760	16987	21101	24198	19154	42660	36388	18042	13840	10720	10301	9896
MEAN	476	566	681	781	684	1376	1213	582	461	346	332	330
MAX	832	769	977	1330	1570	1610	1490	761	572	442	451	522
MIN	311	472	504	500	420	1030	781	485	386	273	283	293
CFSM	.89	1.05	1.27	1.45	1.27	2.56	2.26	1.08	.86	.64	.62	.61
IN.	1.02	1.18	1.46	1.68	1.33	2.96	2.52	1.25	.96	.74	.71	.69

CAL YR 1984	TOTAL	202928	MEAN	554	MAX	1200	MIN	243	CFSM	1.03	IN.	14.06
WTR YR 1985	TOTAL	238047	MEAN	652	MAX	1610	MIN	273	CFSM	1.21	IN.	16.49

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 upstream from LaPorte Street footbridge in Plymouth, 1.1 miles downstream from Elmer Seltenright (formerly Baker) ditch, 8.1 miles upstream from Wolf Creek, and at mile 41.3(revised).

DRAINAGE AREA.--294 mi^2, of which 22 mi^2 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. WDR IN-73-1: 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 764.78 ft above 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.--Estimated daily discharges: Jan. 11 to Feb. 19. Records good except for periods with ice effect, Jan. 11 to Feb. 19, which are poor.

AVERAGE DISCHARGE.--37 years, 261 ft^3/s, 12.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,390 ft^3/s Oct. 12, 13, 1954, gage height, 17.13 ft; minimum daily, 13 ft^3/s Dec. 3, 7, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,920 ft^3/s Feb. 26, gage height, 15.68 ft; minimum daily, 34 ft^3/s Aug. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	191	246	1370	93	2690	2610	169	113	63	46	41
2	39	587	203	1750	91	2290	2410	163	104	63	40	39
3	37	544	206	2110	89	1850	2100	154	95	63	39	37
4	36	318	216	2140	88	1620	1650	151	89	63	37	37
5	36	243	179	1750	86	1710	1420	148	87	62	48	37
6	35	195	165	1200	84	1960	1700	148	82	58	45	42
7	49	169	140	781	83	2000	2050	143	77	57	43	41
8	73	154	150	516	81	1740	2220	138	76	54	41	57
9	105	150	139	380	79	1390	2080	133	73	52	37	95
10	84	207	143	316	78	1130	1670	129	67	50	36	214
11	67	497	176	260	76	934	1260	127	77	49	34	168
12	58	654	224	230	74	890	958	127	87	49	34	101
13	58	413	374	210	73	860	742	124	84	48	34	70
14	70	280	566	190	72	714	611	120	78	47	60	57
15	99	238	831	180	71	608	597	123	80	49	124	50
16	105	210	817	160	72	514	567	124	142	46	91	46
17	95	183	541	150	78	451	426	125	271	44	67	44
18	86	167	368	140	83	387	364	121	267	43	58	42
19	105	158	310	135	93	353	330	115	179	42	53	40
20	156	144	334	130	105	329	301	111	134	42	50	39
21	407	131	325	125	120	292	275	110	115	42	47	38
22	746	123	736	120	436	275	258	109	103	42	44	38
23	571	121	1020	115	1440	266	244	107	96	42	42	39
24	291	120	873	115	2460	263	233	105	89	41	42	39
25	214	115	482	110	3180	250	223	104	82	43	43	39
26	182	110	309	105	3800	218	212	102	77	50	43	38
27	166	118	269	105	3730	214	200	116	74	45	50	37
28	148	260	330	100	3240	586	193	242	70	43	47	36
29	133	471	625	98	---	1600	181	206	68	41	45	37
30	118	328	934	96	---	2340	172	148	64	38	44	38
31	116	---	1140	95	---	2640	---	129	---	44	42	---
TOTAL	4525	7599	13371	15282	20055	33364	28257	4171	3100	1515	1506	1676
MEAN	146	253	431	493	716	1076	942	135	103	48.9	48.6	55.9
MAX	746	654	1140	2140	3800	2690	2610	242	271	63	124	214
MIN	35	110	139	95	71	214	172	102	64	38	34	36
CFSM	.50	.86	1.47	1.68	2.44	3.66	3.20	.46	.35	.17	.17	.19
IN.	.57	.96	1.69	1.93	2.54	4.22	3.58	.53	.39	.19	.19	.21

CAL YR 1984	TOTAL	94648	MEAN	259	MAX	2020	MIN	34	CFSM	.88	IN.	11.98
WTR YR 1985	TOTAL	134421	MEAN	368	MAX	3800	MIN	34	CFSM	1.25	IN.	17.01

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 upstream from bridge on U.S. Highway 35 in Knox, 1.4 miles downstream from Eagle Creek, and at mile 11.6.

DRAINAGE AREA.--435 mi^2, of which 51 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1905 to July 1906, August 1943 to current year.

REVISED RECORDS.--WSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft above 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.--Estimated daily discharges: Oct. 17 to Nov. 2, Dec. 7, Jan. 13 to Feb. 19. Records good except for periods with ice effect, Jan. 13 to Feb. 19, which are fair.

AVERAGE DISCHARGE.--42 years (water years 1944 to current year), 398 ft^3/s , 12.42 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft^3/s Oct. 15, 16, 1954, gage height, 13.75 ft; minimum daily, 50 ft^3/s Jan. 21-31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,010 ft^3/s Feb. 28, gage height, 12.15 ft; minimum daily, 109 ft^3/s Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	243	528	1340	255	3790	2790	389	261	169	140	122
2	119	418	457	1720	250	3260	2850	379	247	176	130	119
3	116	618	423	1780	245	2780	2680	368	240	175	122	116
4	115	639	408	1990	240	2470	2410	352	235	170	117	113
5	114	490	403	2150	235	2310	2160	342	232	167	128	112
6	113	432	364	1960	230	2120	2190	338	229	163	143	113
7	121	374	340	1590	230	2150	2180	331	222	159	135	115
8	152	328	319	1130	225	2240	2290	323	217	155	132	115
9	177	308	318	787	225	2110	2430	317	210	150	125	151
10	196	320	311	643	220	1820	2370	309	204	146	119	241
11	178	529	318	572	220	1580	2090	304	211	142	115	295
12	158	751	358	525	215	1400	1730	302	236	140	111	260
13	157	793	420	480	215	1260	1400	295	234	142	109	201
14	167	642	556	430	210	1180	1110	290	225	139	150	171
15	177	502	711	400	205	1020	943	293	223	139	214	154
16	197	445	851	370	210	892	892	296	241	134	253	145
17	206	406	898	350	220	802	823	295	318	131	209	139
18	200	373	733	340	230	730	711	291	405	128	176	134
19	210	349	582	330	240	672	646	282	390	125	163	129
20	246	332	530	190	252	635	600	276	317	123	154	125
21	352	315	544	300	254	596	567	270	276	122	145	123
22	536	299	676	290	378	557	537	262	262	121	140	123
23	681	288	875	285	1020	539	510	256	240	118	135	126
24	627	282	1010	285	2060	534	490	252	226	116	132	125
25	435	278	969	280	2770	528	473	243	216	119	132	124
26	352	270	687	280	3270	503	455	238	204	132	129	124
27	314	275	522	275	3770	477	436	242	192	135	129	124
28	292	346	495	270	3980	598	424	276	184	127	131	123
29	274	497	567	270	---	1170	410	360	178	119	127	120
30	250	615	780	265	---	1680	399	324	175	115	128	123
31	232	---	947	260	---	2340	---	281	---	125	126	---
TOTAL	7586	12757	17900	22137	22074	44743	39996	9376	7250	4322	4399	4305
MEAN	245	425	577	714	788	1443	1333	302	242	139	142	144
MAX	681	793	1010	2150	3980	3790	2850	389	405	176	253	295
MIN	113	243	311	190	205	477	399	238	175	115	109	112
CFSM	.56	.98	1.33	1.64	1.81	3.32	3.06	.69	.56	.32	.33	.33
IN.	.65	1.09	1.53	1.89	1.89	3.83	3.42	.80	.62	.37	.38	.37

CAL YR 1984	TOTAL	149726	MEAN	409	MAX	1970	MIN	106	CFSM	.94	IN.	12.80
WTR YR 1985	TOTAL	196845	MEAN	539	MAX	3980	MIN	109	CFSM	1.24	IN.	16.83

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 abandoned bridge at Dunns Bridge, 1.8 miles north of Tefft, 3.6 miles upstream from Davis ditch, and at mile 90.8.

DRAINAGE AREA.--1,352 mi^2, of which 192 mi^2 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 above 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.--Estimated daily discharge: Jan. 13-15, and Jan. 21 to Feb. 20: Records Good.

AVERAGE DISCHARGE.--37 years, 1,336 ft^3/s, 13.42 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,870 ft^3/s Mar. 23, 1982; maximum gage height, 13.38 ft Mar. 20, 1982; minimum daily discharge, 280 ft^3/s Jan. 25-29, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,370 ft^3/s Mar. 4; gage height, 13.18 ft; minimum daily, 514 ft^3/s Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	582	1060	1570	2660	1250	4960	4020	2070	1120	798	684	606
2	569	1220	1520	3020	1220	5080	4370	1980	1080	820	659	588
3	561	1380	1510	3200	1200	5180	4640	1890	1060	812	614	580
4	557	1470	1510	3330	1180	5330	4790	1810	1040	792	590	566
5	552	1480	1480	3450	1170	5350	4900	1740	1030	784	636	567
6	543	1390	1430	3550	1160	5280	4980	1690	984	748	692	571
7	563	1320	1340	3590	1140	5190	4980	1630	961	710	690	515
8	635	1250	1300	3530	1100	5120	4960	1560	942	697	655	514
9	728	1200	1270	3350	1080	5060	4980	1510	928	684	617	546
10	759	1200	1250	3090	1060	5000	4990	1450	906	671	591	697
11	754	1390	1240	2810	1040	4970	4990	1410	901	709	575	836
12	735	1750	1290	2550	1030	4900	4960	1390	955	693	564	800
13	728	1940	1390	2400	1000	4800	4860	1360	974	700	551	727
14	762	1940	1540	2300	980	4670	4710	1330	953	701	569	664
15	800	1790	1770	2150	960	4520	4520	1340	949	694	817	629
16	853	1640	1920	2010	950	4340	4280	1330	1010	660	1010	607
17	880	1510	2000	1960	950	4140	4040	1340	1090	632	986	596
18	861	1460	2050	1900	960	3930	3800	1320	1200	604	871	581
19	851	1420	1980	1810	970	3740	3620	1290	1190	584	793	572
20	907	1350	1860	1660	1000	3610	3480	1240	1140	606	751	556
21	1050	1250	1810	1580	1100	3500	3350	1220	1100	588	709	544
22	1360	1200	1920	1520	1310	3400	3220	1190	1090	577	681	549
23	1530	1180	2100	1500	2290	3300	3100	1180	1040	555	662	561
24	1550	1170	2210	1490	3360	3210	2960	1130	992	533	653	571
25	1460	1150	2240	1450	3950	3120	2810	1110	949	530	655	569
26	1320	1130	2170	1420	4400	3030	2660	1080	917	584	684	570
27	1220	1140	2000	1410	4680	2950	2510	1080	878	631	689	568
28	1170	1240	1900	1380	4850	2990	2390	1170	855	603	670	563
29	1120	1410	1900	1340	---	3220	2280	1220	829	572	642	556
30	1070	1530	2070	1300	---	3490	2170	1240	814	551	631	559
31	1030	---	2290	1260	---	3730	---	1180	---	609	625	---
TOTAL	28060	41560	53830	69970	47340	131110	118320	43480	29877	20432	21216	17928
MEAN	905	1385	1736	2257	1691	4229	3944	1403	996	659	684	598
MAX	1550	1940	2290	3590	4850	5350	4990	2070	1200	820	1010	836
MIN	543	1060	1240	1260	950	2950	2170	1080	814	530	551	514
CFSM	.67	1.02	1.28	1.67	1.25	3.13	2.92	1.04	.74	.49	.51	.44
IN.	.77	1.14	1.48	1.93	1.30	3.61	3.26	1.20	.82	.56	.58	.49

CAL YR 1984	TOTAL	520701	MEAN	1423	MAX	3310	MIN	440	CFSM	1.05	IN.	14.33
WTR YR 1985	TOTAL	623123	MEAN	1707	MAX	5350	MIN	514	CFSM	1.26	IN.	17.15

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 downstream from bridge on State Highway 49, 4.5 miles south of Kouts, 0.7 mile upstream from Cook ditch, and at mile 86.7.

DRAINAGE AREA.--1,376 mi^2, of which 194 mi^2 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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 26-31, Nov. 17-20, Nov. 29 to Dec. 1, Dec. 13-21, Dec. 29 to Jan. 15, and Jan. 21 to Feb. 20. Records fair.

AVERAGE DISCHARGE.--11 years, 1,508 ft^3/s, 14.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,420 ft^3/s Mar. 24, 1982, gage height, 14.52 ft; minimum daily, 335 ft^3/s Sept. 12, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,360 ft^3/s Mar. 5, gage height, 13.98 ft; minimum daily, 457 ft^3/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	539	1000	1520	2600	1330	4920	4520	2240	1170	797	765	642
2	528	1160	1530	2950	1300	5090	4680	2160	1190	824	769	623
3	491	1310	1520	3200	1290	5180	4820	2060	1170	774	734	602
4	485	1440	1480	3350	1270	5260	4900	1980	1080	757	656	601
5	481	1470	1470	3490	1240	5340	5000	1950	1060	791	624	558
6	457	1400	1430	3550	1210	5330	5060	1870	1020	723	699	563
7	524	1340	1360	3600	1190	5290	5080	1770	1020	674	713	502
8	617	1330	1330	3590	1170	5240	5090	1660	1010	660	692	490
9	716	1330	1280	3250	1150	5190	5150	1610	982	656	639	534
10	747	1330	1240	3000	1130	5140	5160	1570	940	637	577	738
11	685	1420	1220	2800	1120	5100	5170	1530	893	669	557	921
12	650	1740	1250	2600	1100	5070	5150	1480	966	675	545	836
13	640	1950	1380	2430	1090	5020	5090	1440	1010	672	564	762
14	705	1940	1500	2300	1070	4930	4990	1400	958	696	598	705
15	727	1800	1730	2180	1040	4830	4880	1410	953	744	882	682
16	811	1700	1890	2060	1030	4730	4710	1420	1020	713	1150	653
17	836	1550	1990	2010	1040	4620	4540	1460	1120	684	1150	638
18	775	1480	2010	1960	1070	4500	4370	1440	1240	621	1000	635
19	758	1400	1990	1840	1100	4400	4180	1430	1220	597	898	653
20	862	1320	1880	1700	1120	4290	4000	1340	1170	617	849	615
21	978	1270	1810	1620	1170	4190	3810	1260	1170	584	746	549
22	1290	1200	2010	1600	1370	4100	3630	1210	1210	561	706	581
23	1490	1150	2190	1590	2540	3990	3480	1210	1130	537	678	592
24	1550	1140	2260	1560	3810	3880	3300	1190	1060	528	696	596
25	1450	1120	2240	1520	4260	3800	3100	1190	920	542	719	567
26	1390	1140	2210	1500	4480	3690	2900	1110	866	564	779	576
27	1260	1150	2080	1480	4710	3590	2710	1080	827	623	737	560
28	1160	1220	1990	1460	4870	3670	2580	1180	801	621	701	568
29	1100	1330	1930	1410	---	4010	2480	1250	800	610	665	549
30	1050	1430	2100	1400	---	4220	2360	1290	841	576	699	552
31	1010	---	2320	1370	---	4380	---	1230	---	646	702	---
TOTAL	26762	41560	54140	70970	50270	142990	126890	46420	30817	20373	22889	18643
MEAN	863	1385	1746	2289	1795	4613	4230	1497	1027	657	738	621
MAX	1550	1950	2320	3600	4870	5340	5170	2240	1240	824	1150	921
MIN	457	1000	1220	1370	1030	3590	2360	1080	800	528	545	490
CFSM	.63	1.01	1.27	1.66	1.30	3.35	3.07	1.09	.75	.48	.54	.45
IN.	.72	1.12	1.46	1.92	1.36	3.87	3.43	1.25	.83	.55	.62	.50

CAL YR 1984	TOTAL	535743	MEAN	1464	MAX	3450	MIN	415	CFSM	1.06	IN.	14.48
WTR YR 1985	TOTAL	652724	MEAN	1788	MAX	5340	MIN	457	CFSM	1.30	IN.	17.65

05517890 COBB DITCH NEAR KOUTS, IN

LOCATION.--Lat 41°20'19", long 87°04'30", in NW¼SE¼ sec. 2, T.33 N., R.6 W., Porter County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on County Road 50 West, 1.6 miles upstream from mouth, and 3 miles northwest of Kouts.

DRAINAGE AREA.--30.3 mi^2.

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 above National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to Oct. 19, 1978, water-stage recorder at site 1.4 miles downstream at same datum.

REMARKS.--Estimated daily discharges during the water year: Jan. 19 to Feb. 27, Mar. 4-6, and Apr. 20 to May 20. Records fair.

AVERAGE DISCHARGE.--17 years, 33.7 ft^3/s, 15.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 795 ft^3/s Mar. 29, 1985, gage height, 17.95 ft; minimum daily 8.9 ft^3/s Sept. 11, 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 01	1400	531	15.19	Mar. 04	----	563	a 15.57
Feb. 24	----	746	a 17.50	Mar. 29	0100	*795	*17.95

a-High water mark

Minimum daily discharge, 13.0 ft^3/s July 24, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	27	21	371	22	87	98	27	21	16	20	16
2	15	27	21	134	21	75	76	26	21	15	18	16
3	15	23	22	72	23	66	65	26	21	15	17	16
4	14	21	20	57	25	375	57	25	21	16	18	16
5	15	20	20	49	25	165	111	25	20	15	24	16
6	14	19	19	45	24	104	140	26	20	15	20	16
7	16	19	20	39	23	77	76	25	19	15	18	15
8	17	19	18	35	23	71	60	25	19	15	17	15
9	15	19	18	32	22	62	55	24	18	14	17	32
10	15	21	18	31	20	56	49	23	18	14	17	29
11	15	54	18	29	21	60	45	22	20	14	16	19
12	15	35	20	29	21	59	43	23	19	14	16	18
13	15	27	24	28	21	52	41	23	19	16	16	17
14	16	24	47	27	22	52	39	22	19	17	71	17
15	17	23	41	26	23	47	39	23	22	16	108	17
16	17	21	33	25	24	44	36	24	21	16	43	16
17	16	20	28	25	24	42	35	25	21	16	28	16
18	15	20	25	25	23	41	34	24	19	15	25	16
19	16	19	26	24	24	40	33	23	19	15	22	15
20	16	18	27	21	25	38	32	23	18	15	21	15
21	28	18	40	22	32	36	32	23	19	15	20	15
22	22	18	113	24	90	36	31	23	18	15	19	16
23	20	18	47	24	330	36	30	25	18	14	19	16
24	19	18	37	24	500	36	33	25	17	13	18	15
25	19	17	31	24	340	36	34	25	17	14	18	15
26	18	17	27	22	220	36	32	27	17	15	18	15
27	18	19	26	22	135	57	30	31	17	14	17	15
28	18	35	33	23	100	311	29	29	16	14	17	15
29	18	26	68	23	---	507	28	28	16	13	17	15
30	18	23	124	23	---	170	28	24	16	13	17	16
31	18	---	58	22	---	131	---	21	---	31	17	---
TOTAL	525	685	1090	1377	2203	3005	1471	765	566	475	749	506
MEAN	16.9	22.8	35.2	44.4	78.7	96.9	49.0	24.7	18.9	15.3	24.2	16.9
MAX	28	54	124	371	500	507	140	31	22	31	108	32
MIN	14	17	18	21	20	36	28	21	16	13	16	15
CFSM	.56	.75	1.16	1.47	2.60	3.20	1.62	.82	.62	.50	.80	.56
IN.	.64	.84	1.34	1.69	2.70	3.69	1.81	.94	.69	.58	.92	.62

CAL YR 1984	TOTAL	13045	MEAN	35.6	MAX	370	MIN	14	CFSM	1.17	IN.	16.02
WTR YR 1985	TOTAL	13417	MEAN	36.8	MAX	507	MIN	13	CFSM	1.21	IN.	16.47

05518000 KANKAKEE RIVER AT SHELBY, IN

LOCATION.--Lat 41°10'58", long 87°20'33", in SW¼NE¼ sec.33, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, on right bank 25 ft upstream from Monon Railroad bridge, 1 mile south of Shelby, 7.7 miles upstream from Beaver Lake ditch, and at mile 67.9.

DRAINAGE AREA.--1,779 mi^2, of which 201 mi^2 does not contribute directly to surface runoff.

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 above National Geodetic Vertical Datum of 1929. Prior to Dec. 19, 1934, nonrecording gage at highway bridge about 400 ft upstream. Dec. 19, 1934, to Oct. 4, 1965, water- stage recorder on left bank 50 ft downstream, and Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft upstream. All at same datum.

REMARKS.--Estimated daily discharges: Jan. 20 to Feb. 25. Records fair.

AVERAGE DISCHARGE.--63 years, 1,628 ft^3/s, 12.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,650 ft^3/s Mar. 26, 1982; maximum gage height, 12.98 ft Mar. 24, 1982; minimum daily discharge, 260 ft^3/s Jan. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,340 ft^3/s Mar. 9; gage height, 12.25 ft; minimum daily, 590 ft^3/s July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670	1210	1730	3060	1600	5690	5050	2910	1370	936	759	759
2	671	1310	1760	3830	1590	5720	5140	2750	1330	931	776	730
3	643	1410	1780	3970	1550	5810	5180	2580	1340	915	762	711
4	620	1490	1760	3970	1510	5880	5240	2450	1290	879	746	694
5	616	1550	1740	3990	1490	5950	5340	2360	1250	868	738	678
6	607	1550	1730	4040	1480	6110	5480	2290	1220	862	760	668
7	636	1490	1690	4110	1450	6110	5660	2180	1190	807	799	654
8	723	1420	1680	4160	1420	6200	5760	2050	1160	774	776	615
9	797	1380	1620	4140	1400	6290	5830	1950	1150	762	724	646
10	844	1400	1570	3990	1370	6050	5870	1880	1120	749	668	758
11	824	1570	1540	3760	1350	5930	5930	1810	1080	720	631	922
12	797	1820	1540	3490	1330	5820	5970	1740	1100	748	613	940
13	779	1990	1590	3210	1320	5800	5970	1680	1150	746	603	881
14	810	2070	1730	2980	1300	6020	5970	1630	1130	770	666	818
15	843	2060	1940	2780	1280	6090	5950	1630	1130	773	1070	789
16	880	1960	2050	2680	1260	6070	5870	1630	1190	775	1320	802
17	930	1860	2130	2490	1270	6020	5710	1650	1250	746	1320	760
18	924	1750	2190	2410	1280	5910	5520	1650	1310	716	1200	737
19	902	1700	2230	2310	1300	5750	5370	1630	1350	666	1070	765
20	927	1620	2170	2200	1350	5620	5180	1590	1320	670	990	726
21	1050	1550	2110	2080	1400	5470	4960	1520	1280	671	914	696
22	1190	1500	2280	2000	1600	5300	4750	1460	1310	635	851	676
23	1350	1450	2410	1940	2500	5120	4540	1430	1280	615	814	712
24	1420	1420	2480	1900	4300	4970	4360	1400	1220	591	802	697
25	1510	1400	2470	1860	5000	4830	4160	1400	1150	590	810	679
26	1440	1400	2460	1810	5560	4650	3930	1350	1060	633	843	687
27	1360	1420	2420	1790	5570	4490	3680	1320	1010	640	844	684
28	1310	1490	2340	1750	5580	4470	3450	1350	964	636	815	692
29	1260	1590	2300	1720	---	4640	3270	1400	936	621	778	706
30	1210	1680	2450	1680	---	4880	3080	1440	950	620	775	708
31	1170	---	2590	1630	---	5010	---	1430	---	668	786	---
TOTAL	29713	47510	62480	87730	59410	172670	152170	55540	35590	22733	26023	21990
MEAN	958	1584	2015	2830	2122	5570	5072	1792	1186	733	839	733
MAX	1510	2070	2590	4160	5580	6290	5970	2910	1370	936	1320	940
MIN	607	1210	1540	1630	1260	4470	3080	1320	936	590	603	615
CFSM	.54	.89	1.13	1.59	1.19	3.13	2.85	1.01	.67	.41	.47	.41
IN.	.62	.99	1.31	1.83	1.24	3.61	3.18	1.16	.74	.48	.54	.46

CAL YR 1984	TOTAL	656693	MEAN	1794	MAX	4280	MIN	562	CFSM	1.01	IN.	13.73
WTR YR 1985	TOTAL	773559	MEAN	2119	MAX	6290	MIN	590	CFSM	1.19	IN.	16.18

05519000 SINGLETON DITCH AT SCHNEIDER, IN

LOCATION.--Lat 41°12'44", long 87°26'44", in SW¼NW¼ sec.22, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on Ackerman Avenue, 0.5 mile upstream from Bruce ditch, 1.5 miles downstream from Cedar Creek, 1.6 miles north of Schneider, and at mile 10.1.

DRAINAGE AREA.--123 mi^2.

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

REVISED RECORDS.--WSP 1915: 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 623.67 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1949, nonrecording gage at same site at datum 2.00 ft higher. Oct. 1, 1949, to Aug. 13, 1951, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-9, 26, 27, and Jan. 13 to Feb. 21. Records good except for periods of estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--37 years, 109 ft^3/s, 12.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft^3/s Mar. 5, 1976; maximum gage height, 12.37 ft June 25, 1975; minimum daily discharge, 3.6 ft^3/s Sept. 7, 8, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 730 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 01	1500	980	7.14	Mar. 04	1900	1220	8.13
Feb. 23	1400	*2120	*11.43	Mar. 29	0600	982	7.15

Minimum daily discharge, 9.1 ft^3/s July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	38	45	734	54	550	522	70	40	15	32	32
2	22	50	43	691	53	475	386	67	38	15	15	31
3	22	42	43	423	52	418	325	63	38	17	13	32
4	21	37	47	305	51	929	277	62	38	17	12	31
5	21	35	44	242	50	912	299	62	38	17	18	31
6	21	34	41	209	50	589	484	61	36	17	17	32
7	22	32	39	174	49	461	361	58	34	16	13	31
8	29	32	37	151	49	408	288	56	34	14	12	29
9	27	32	40	136	48	356	253	53	32	12	10	38
10	24	36	38	128	47	316	217	52	31	13	11	47
11	23	49	37	107	46	358	197	51	36	11	12	41
12	22	55	37	95	45	399	181	52	38	11	10	37
13	24	48	39	92	45	342	170	49	36	12	12	33
14	25	44	49	86	44	352	164	48	34	12	46	31
15	25	41	72	80	44	304	157	53	42	12	203	29
16	50	40	66	88	43	274	135	52	46	12	167	29
17	55	38	62	90	43	237	124	50	43	11	103	28
18	46	37	58	80	46	213	122	48	41	9.2	77	26
19	46	36	56	73	49	200	115	46	39	9.1	64	25
20	44	35	59	69	52	160	111	46	38	10	56	24
21	51	34	59	66	95	142	107	43	38	10	50	23
22	47	34	169	64	296	135	102	43	36	10	47	24
23	41	34	135	63	1700	138	99	41	35	9.8	46	27
24	38	35	110	62	1710	141	96	40	33	9.3	44	27
25	36	35	100	60	1440	135	90	39	32	10	42	25
26	35	33	92	59	1090	129	84	38	31	18	41	25
27	35	38	87	58	867	152	81	42	28	11	38	24
28	37	54	85	57	652	524	77	45	27	11	37	25
29	39	56	102	56	---	922	73	42	19	9.9	35	24
30	42	50	233	56	---	732	72	41	17	10	35	26
31	34	---	196	55	---	617	---	42	---	24	34	---
TOTAL	1025	1194	2320	4709	8810	12020	5769	1555	1048	395.3	1352	887
MEAN	33.1	39.8	74.8	152	315	388	192	50.2	34.9	12.8	43.6	29.6
MAX	55	56	233	734	1710	929	522	70	46	24	203	47
MIN	21	32	37	55	43	129	72	38	17	9.1	10	23
CFSM	.27	.32	.61	1.24	2.56	3.15	1.56	.41	.28	.10	.35	.24
IN.	.31	.36	.70	1.42	2.66	3.64	1.74	.47	.32	.12	.41	.27

CAL YR 1984	TOTAL	44227	MEAN	121	MAX	1240	MIN	11	CFSM	.98	IN.	13.38
WTR YR 1985	TOTAL	41084.3	MEAN	113	MAX	1710	MIN	9.1	CFSM	.92	IN.	12.43

05520500 KANKAKEE RIVER AT MOMENCE, IL

LOCATION.--Lat 41°09'36", long 87°40'07", in SW¼NE¼ sec.24, T.31 N., R.13 E., Kankakee County, Hydrologic Unit 07120001, on right bank at Hill Street in Momence, 0.2 mi downstream from bridge on State Highways 1 and 17, and 1.2 mi upstream from Tower Creek, and at mile 47.9.

DRAINAGE AREA.--2,294 mi^2, of which 201 mi^2 does not contribute directly to surface runoff.

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-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.18 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1938, nonrecording gage at site 0.2 mi upstream at datum 1.00 ft higher. Aug. 1, 1938, to Aug. 8, 1969, water-stage recorder at present site at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 11 to Feb. 21. Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--70 years (water years 1916-85), 1,981 ft^3/s, 11.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s, Mar. 6, 1979, gage height, 10.51 ft, ice jam; minimum observed, 306 ft^3/s, Sept. 1, 6, 17, 1919.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,450 ft^3/s Mar. 4, gage height, 5.79 ft; minimum, 565 ft^3/s July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	658	1170	1920	4810	3470	7260	6710	3650	1580	973	750	801
2	650	1360	1980	5320	3370	7020	6340	3480	1520	953	788	763
3	645	1440	2020	5000	3280	6850	6120	3300	1480	958	774	736
4	618	1520	2020	4890	3090	8330	5980	3150	1460	923	756	719
5	601	1590	2010	4210	2610	8800	6030	2990	1430	898	746	708
6	601	1630	2090	4570	2430	7780	6670	2880	---	885	741	692
7	610	1640	2290	4490	2360	7410	6630	2770	---	866	786	687
8	708	1590	2160	4530	2300	7240	6480	2660	---	825	787	649
9	755	1540	1940	4510	2190	7120	6400	2530	---	786	754	646
10	804	1560	1890	4480	2130	7040	6330	2400	---	776	717	718
11	834	1660	1880	4400	2190	7170	6270	2290	---	722	669	843
12	813	1830	1850	4470	2220	7240	6240	2200	---	712	637	943
13	817	2030	1830	4740	2140	7050	6250	2120	---	725	616	919
14	825	2210	1930	4600	2010	6930	6270	2050	---	736	773	859
15	846	2320	2120	4480	1780	6850	6260	2020	1300	758	1220	806
16	885	2330	2310	4510	1610	6820	6180	1990	1300	759	1510	783
17	927	2260	2440	4510	1520	6720	6080	2010	1320	737	1480	787
18	953	2150	2520	4090	1570	6590	6010	1980	1350	700	1400	745
19	943	2050	2600	3740	1660	6460	5830	1960	1390	655	1260	742
20	934	1950	2650	10600	1730	6290	5670	1930	1410	634	1130	740
21	1030	1850	2690	11500	1810	6070	5510	1870	1410	639	1040	715
22	1130	1760	2840	11500	2370	5880	5330	1790	1380	628	949	682
23	1210	1690	2960	11500	9230	5720	5140	1710	1380	586	894	709
24	1390	1610	3000	11500	9760	5640	4990	1650	1340	566	861	706
25	1480	1570	3000	11500	8390	5510	4810	1600	1270	565	852	686
26	1510	1540	3030	11500	8410	5340	4620	1560	1190	610	851	669
27	1450	1610	3040	8620	8100	5230	4420	1540	1100	615	878	675
28	1390	1710	3030	4310	7620	5930	4200	1530	1050	615	856	670
29	1340	1770	3030	4100	---	7070	3980	1520	1000	602	828	686
30	1260	1850	3400	3800	---	6860	3800	1550	968	579	799	713
31	1230	---	3380	3530	---	6830	---	1590	---	627	799	---
TOTAL	29847	52790	75850	190310	101350	209050	171550	68270	---	22613	27901	22197
MEAN	963	1760	2447	6139	3620	6744	5718	2202	---	729	900	740
MAX	1510	2330	3400	11500	9760	8800	6710	3650	---	973	1510	943
MIN	601	1170	1830	3530	1520	5230	3800	1520	---	565	616	646
CFSM	.42	.77	1.07	2.68	1.58	2.94	2.49	.96	---	.32	.39	.32
IN.	.48	.86	1.23	3.09	1.64	3.39	2.78	1.11	---	.37	.45	.36

CAL YR 1984	TOTAL	827050	MEAN	2260	MAX	7000	MIN	517	CFSM	1.08	IN.	14.70
WTR YR 1985	TOTAL	907316	MEAN	2486	MAX	8800	MIN	565	CFSM	1.19	IN.	16.13

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 downstream from bridge on county road, 0.5 mile north of Rosebud, 0.5 mile downstream from confluence of Swain and Dexter ditches, 1.5 miles upstream from Davidson ditch, 2 miles east of Parr, and at mile 93.5.

DRAINAGE AREA.--35.6 mi^2.

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 above 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.--Estimated daily discharge: Dec. 5-7, and Jan. 12 to Feb. 21. Records good except for periods of estimated daily record, which are fair.

AVERAGE DISCHARGE.--37 years, 27.1 ft^3/s, 10.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 475 ft^3/s May 2, 1983; maximum gage height, 8.86 ft Feb. 10, 1959; minimum daily discharge, 0.5 ft^3/s Oct. 11, 12, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 01	1100	291	4.46	Mar. 11	1500	163	3.14
Feb. 23	0900	*443	*5.82	Apr. 05	2300	216	3.72
Mar. 04	2000	232	3.89				

Minimum daily discharge, 2.4 ft^3/s July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	13	16	242	15	113	94	24	22	5.2	3.3	3.7
2	3.6	11	18	155	14	99	71	22	22	5.2	2.8	3.7
3	3.4	8.4	28	92	14	84	60	21	17	5.3	2.5	3.7
4	3.6	7.4	22	65	14	184	53	21	16	5.1	2.5	3.7
5	3.7	6.9	19	52	14	147	109	21	14	4.9	5.6	3.9
6	3.8	6.3	17	48	14	95	174	21	12	4.6	11	3.9
7	4.0	5.9	16	45	14	87	112	19	12	4.5	11	3.9
8	4.7	5.7	15	39	13	94	83	18	11	4.3	7.1	3.6
9	4.6	6.0	16	35	13	77	69	17	8.9	4.4	6.1	3.9
10	4.4	11	17	34	13	65	61	16	8.6	4.1	5.7	3.8
11	4.3	53	15	31	13	124	54	15	9.9	3.6	5.1	3.7
12	4.6	31	17	30	13	115	49	15	9.8	3.6	4.6	3.6
13	5.4	23	18	27	12	87	47	13	9.2	4.3	4.7	3.5
14	5.2	20	33	24	12	85	45	13	8.8	4.3	5.3	3.7
15	4.8	19	32	22	12	67	43	13	10	4.1	10	3.5
16	4.8	17	29	21	12	60	40	13	11	3.9	9.2	3.5
17	4.4	18	27	26	12	53	36	12	11	3.5	7.7	3.5
18	4.2	16	24	23	13	47	36	12	9.7	3.5	6.7	3.5
19	5.1	14	23	21	14	48	33	12	8.8	3.6	6.0	3.2
20	5.0	13	22	19	15	43	32	11	8.1	3.5	5.6	3.3
21	11	13	41	18	50	39	30	11	7.9	3.5	5.2	3.0
22	7.6	12	68	18	268	38	30	10	7.4	3.4	4.9	3.2
23	6.4	12	43	17	415	37	28	9.5	7.0	3.0	4.7	3.9
24	5.8	12	37	17	367	42	30	9.3	6.3	2.9	4.5	4.3
25	5.6	12	32	16	236	44	27	9.3	6.4	3.0	4.4	3.6
26	5.3	13	27	16	179	42	26	9.4	6.3	3.6	4.2	3.8
27	4.6	14	27	16	156	43	25	13	6.1	2.9	4.0	4.0
28	4.5	28	29	15	124	96	24	20	5.9	2.7	3.9	5.1
29	4.0	22	36	15	---	95	23	14	5.4	2.5	3.8	3.9
30	3.9	19	56	15	---	107	23	12	5.2	2.4	4.2	4.3
31	4.4	---	52	15	---	123	---	26	---	3.9	3.9	---
TOTAL	150.0	462.6	872	1229	2061	2480	1567	472.5	303.7	119.3	170.2	111.9
MEAN	4.84	15.4	28.1	39.6	73.6	80.0	52.2	15.2	10.1	3.85	5.49	3.73
MAX	11	53	68	242	415	184	174	26	22	5.3	11	5.1
MIN	3.3	5.7	15	15	12	37	23	9.3	5.2	2.4	2.5	3.0
CFSM	.14	.43	.79	1.11	2.07	2.25	1.47	.43	.28	.11	.15	.10
IN.	.16	.48	.91	1.28	2.15	2.59	1.64	.49	.32	.12	.18	.12

CAL YR 1984	TOTAL	10303.4	MEAN	28.2	MAX	257	MIN	2.6	CFSM	.79	IN.	10.77
WTR YR 1985	TOTAL	9999.2	MEAN	27.4	MAX	415	MIN	2.4	CFSM	.77	IN.	10.45

05522000 IROQUOIS RIVER NEAR NORTH MARION, IN

LOCATION.--Lat 40°58'12", long 87°06'50", in NE¼NW¼ sec.16, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on downstream side of county highway bridge, 1.2 miles upstream from Ryan ditch, 2 miles east of North Marion, 3.5 miles northeast of Rensselaer, and at mile 87.7.

DRAINAGE AREA.--144 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-9, and Jan. 11 to Feb. 20. Records good except for estimated daily discharges, which are fair. Water from Oliver ditch, an upstream tributary, can be diverted to Ryan ditch and thus enter the Iroquois River below station. Streamflow affected by irrigation.

AVERAGE DISCHARGE.--36 years (water years 1950 to current year), 133 ft^3/s, 12.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft^3/s June 10, 1958, gage height, 15.09 ft; minimum daily, 1.6 ft^3/s Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,450 ft^3/s Feb. 25, gage height, 12.84 ft; minimum daily, 9.3 ft^3/s July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	34	88	559	67	993	591	83	73	15	31	16
2	12	63	80	913	66	818	524	79	58	17	19	15
3	12	49	102	868	65	641	431	72	53	17	13	15
4	12	39	99	650	65	597	333	71	49	16	12	14
5	12	37	85	430	64	805	355	71	43	15	22	14
6	11	32	79	292	63	773	722	70	42	16	34	14
7	12	34	75	242	62	609	815	66	37	15	61	16
8	15	33	73	214	61	512	711	64	34	16	38	14
9	15	35	80	184	60	463	565	61	28	13	26	14
10	14	46	93	164	58	392	441	58	28	13	21	19
11	13	173	73	140	57	380	343	51	29	12	19	16
12	12	211	78	131	57	572	283	56	38	11	16	14
13	13	157	80	120	56	575	243	52	34	20	15	13
14	15	120	109	108	55	487	224	50	31	33	18	14
15	15	103	147	100	55	415	212	59	33	25	45	13
16	23	89	139	96	54	342	198	63	51	19	58	12
17	18	80	128	115	54	289	177	62	55	17	47	13
18	16	75	118	100	59	248	165	59	47	15	38	14
19	17	69	110	92	63	231	151	56	38	14	31	13
20	17	64	109	86	68	213	139	51	35	13	29	13
21	32	61	118	83	168	188	131	49	34	11	33	12
22	33	61	256	80	376	178	124	46	32	11	35	12
23	25	57	262	78	984	175	119	44	27	9.4	22	13
24	26	55	199	76	1350	175	118	40	26	9.3	26	17
25	24	54	146	75	1440	189	115	39	24	12	27	15
26	24	57	154	74	1400	189	106	36	23	17	27	14
27	22	58	128	72	1320	184	104	41	22	13	21	14
28	23	97	133	71	1180	275	94	69	20	11	19	16
29	21	107	146	70	---	484	88	60	17	9.8	18	14
30	20	103	218	70	---	496	84	52	16	9.4	19	14
31	21	---	243	68	---	545	---	84	---	22	17	---
TOTAL	555	2253	3948	6421	9427	13433	8706	1814	1077	466.9	857	427
MEAN	17.9	75.1	127	207	337	433	290	58.5	35.9	15.1	27.6	14.2
MAX	33	211	262	913	1440	993	815	84	73	33	61	19
MIN	10	32	73	68	54	175	84	36	16	9.3	12	12
CFSM	.12	.52	.88	1.44	2.34	3.01	2.01	.41	.25	.10	.19	.10
IN.	.14	.58	1.02	1.66	2.44	3.47	2.25	.47	.28	.12	.22	.11

CAL YR 1984	TOTAL	51405.8	MEAN	140	MAX	1230	MIN	6.4	CFSM	.97	IN.	13.28
WTR YR 1985	TOTAL	49384.9	MEAN	135	MAX	1440	MIN	9.3	CFSM	.94	IN.	12.76

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 downstream from bridge on State Highway 114, 0.8 mile east of Rensselaer, 1.5 miles downstream from Ryan ditch, 5.5 miles upstream from Slough Creek, and at mile 84.9.

DRAINAGE AREA.--203 mi^2.

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 above 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.--Estimated daily discharges: Dec. 4, 5, 7, 8, and Jan. 13 to Feb. 20. Records good except for estimated daily discharges, which are fair. Streamflow affected by irrigation.

AVERAGE DISCHARGE.--37 years, 169 ft^3/s, 11.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft^3/s June 10, 1958, gage height, 16.54 ft; minimum daily, 2.2 ft^3/s Sept. 9, 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,930 ft^3/s Feb. 25, gage height, 14.40 ft; minimum daily, 14 ft^3/s July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	44	98	913	88	1230	757	106	108	20	40	20
2	16	73	89	1190	87	1020	622	103	80	21	25	19
3	16	55	122	1100	86	822	482	93	72	22	19	19
4	16	46	110	841	85	872	386	90	65	21	17	18
5	16	43	100	565	83	1080	529	91	57	20	28	17
6	15	39	90	391	82	981	1060	90	57	21	39	18
7	16	40	88	324	80	793	1070	85	52	20	75	19
8	19	39	87	281	79	703	884	81	47	20	47	18
9	19	43	91	238	78	629	666	79	40	19	34	18
10	19	59	92	214	77	525	510	76	38	18	29	22
11	18	233	80	196	76	563	420	67	41	18	26	20
12	17	271	88	163	75	807	361	72	51	17	23	18
13	19	191	90	153	74	758	322	68	47	20	22	17
14	21	137	131	142	72	647	307	64	43	40	25	17
15	20	117	184	135	72	549	294	78	46	30	61	16
16	26	99	173	128	71	452	272	84	69	24	73	15
17	22	87	157	145	70	378	238	82	79	21	54	16
18	20	82	141	132	77	319	223	78	66	20	45	17
19	22	74	131	120	82	302	203	74	52	18	36	16
20	23	70	129	112	89	271	185	67	46	18	34	16
21	42	65	150	110	108	236	173	63	45	17	34	15
22	42	66	393	105	385	226	163	60	42	16	42	15
23	33	63	364	102	1300	222	156	66	37	15	26	16
24	33	62	267	100	1820	228	154	57	34	14	28	19
25	32	58	187	98	1920	248	150	53	31	15	30	18
26	31	61	175	96	1810	244	139	52	30	20	31	17
27	29	64	164	95	1680	242	135	72	26	19	24	17
28	30	110	170	93	1490	435	121	109	25	17	22	19
29	28	123	194	92	---	631	113	89	23	16	21	17
30	27	117	330	90	---	632	107	75	21	15	23	17
31	28	---	353	89	---	735	---	120	---	22	21	---
TOTAL	730	2631	5018	8553	12096	17780	11202	2444	1470	614	1054	526
MEAN	23.5	87.7	162	276	432	574	373	78.8	49.0	19.8	34.0	17.5
MAX	42	271	393	1190	1920	1230	1070	120	108	40	75	22
MIN	15	39	80	89	70	222	107	52	21	14	17	15
CFSM	.12	.43	.80	1.36	2.13	2.83	1.84	.39	.24	.10	.17	.09
IN.	.13	.48	.92	1.57	2.22	3.26	2.05	.45	.27	.11	.19	.10

CAL YR 1984	TOTAL	63776.0	MEAN	174	MAX	1460	MIN	9.2	CFSM	.86	IN.	11.69
WTR YR 1985	TOTAL	64118	MEAN	176	MAX	1920	MIN	14	CFSM	.87	IN.	11.75

05523000 BICE DITCH NEAR SOUTH MARION, IN

LOCATION.--Lat 40°52'00", long 87°05'32", in NE¼NW¼ sec.22, T.28 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on State Highway 16, 2.3 miles upstream from mouth, 3 miles southeast of South Marion, and 5 miles southeast of Rensselaer.

DRAINAGE AREA.--21.8 mi^2.

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 above 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 higher.

REMARKS.--Estimated daily discharges: Dec. 5-8, Jan. 12-14, and Jan. 22 to Feb. 19. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--36 years (water years 1950 to current year), 17.5 ft^3/s, 10.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft^3/s Mar. 4, 1979; maximum gage height, 14.02 ft June 13, 1958, at present datum; no flow at times during 1952, 1955, and 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 340 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 01	0500	553	8.12	Mar. 28	1400	*957	*10.84
Feb. 23	2200	757	9.57	Apr. 05	2000	691	9.12

Minimum daily discharge, 0.37 ft^3/s Oct. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	1.6	6.3	395	2.8	66	114	3.7	5.8	1.4	1.1	1.0
2	.39	4.5	5.5	123	2.8	66	85	3.8	3.5	1.4	.95	.96
3	.37	2.0	27	74	2.8	60	66	3.4	3.3	1.5	.82	.91
4	.37	1.5	14	53	2.8	179	51	3.2	2.8	1.5	.78	.89
5	.37	1.4	6.0	38	2.7	122	269	3.1	2.5	1.4	1.4	.86
6	.37	1.2	4.6	35	2.7	72	310	3.0	2.3	1.3	2.2	.84
7	.47	1.1	4.3	29	2.6	76	118	2.8	2.2	1.2	13	.84
8	.76	1.1	4.1	21	2.6	97	78	2.8	2.2	1.2	2.8	.82
9	.83	1.3	4.2	16	2.6	74	60	2.9	1.9	1.2	1.7	.80
10	.60	5.7	4.5	15	2.5	61	44	2.8	1.7	1.2	1.4	.79
11	.56	97	4.8	11	2.5	109	32	2.8	2.2	1.2	1.3	.77
12	.57	42	8.6	9.0	2.4	91	24	2.8	2.9	1.3	1.2	.79
13	.95	17	27	7.8	2.4	69	20	2.5	2.7	1.3	1.5	.77
14	1.2	11	64	7.0	2.4	63	21	2.5	2.4	1.3	7.0	.77
15	.91	8.7	46	6.6	2.3	46	19	3.7	3.0	1.3	13	.77
16	.94	6.0	32	6.7	2.3	38	13	3.8	9.5	1.3	8.5	.77
17	.86	4.5	21	7.4	2.3	27	9.6	4.2	6.9	1.1	3.1	.72
18	.75	4.1	15	6.8	2.4	19	8.9	4.0	4.5	1.0	2.1	.71
19	.90	3.8	16	5.4	2.6	20	7.3	3.5	3.2	.99	1.8	.69
20	1.1	3.2	12	4.0	3.0	16	6.3	3.1	2.7	.98	2.0	.67
21	4.3	2.9	27	3.6	3.7	13	5.7	3.0	2.3	1.3	1.5	.65
22	2.9	2.8	39	3.5	252	12	5.2	2.7	2.1	1.3	1.4	.65
23	1.3	2.8	22	3.3	637	11	4.9	2.6	1.8	1.0	1.3	.75
24	1.0	2.8	17	3.2	525	15	5.2	2.6	1.6	.93	1.3	.87
25	.96	2.8	10	3.2	180	19	4.8	2.5	1.6	.86	1.2	.87
26	.96	2.9	8.8	3.1	97	17	4.4	2.4	1.5	.94	1.2	.88
27	.93	3.0	9.2	3.1	86	16	4.1	3.1	1.4	1.0	1.1	.83
28	.91	13	13	3.0	67	534	3.9	8.3	1.3	.92	1.0	.78
29	.86	12	33	3.0	---	352	3.6	4.2	1.3	.84	.99	.73
30	.82	8.9	86	2.9	---	182	3.6	3.4	1.4	.85	1.1	.72
31	.81	---	83	2.9	---	188	---	8.5	---	1.0	1.1	---
TOTAL	29.43	272.6	674.9	905.5	1899.2	2730	1401.5	107.7	84.5	36.01	80.84	23.87
MEAN	.95	9.09	21.8	29.2	67.8	88.1	46.7	3.47	2.82	1.16	2.61	.80
MAX	4.3	97	86	395	637	534	310	8.5	9.5	1.5	13	1.0
MIN	.37	1.1	4.1	2.9	2.3	11	3.6	2.4	1.3	.84	.78	.65
CFSM	.04	.42	1.00	1.34	3.11	4.04	2.14	.16	.13	.05	.12	.04
IN.	.05	.47	1.15	1.55	3.24	4.66	2.39	.18	.14	.06	.14	.04

CAL YR 1984	TOTAL	7900.71	MEAN	21.6	MAX	647	MIN	.25	CFSM	.99	IN.	13.48
WTR YR 1985	TOTAL	8246.05	MEAN	22.6	MAX	637	MIN	.37	CFSM	1.04	IN.	14.07

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 north of intersection of State Highways 16 and 55, 0.5 mile downstream from Mosquito Creek, 0.6 mile west of Foresman, 3 miles east of Brook, and at mile 72.7.

DRAINAGE AREA.--449 mi^2.

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 above National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1955, nonrecording gage 2.5 miles upstream at datum 3.54 ft higher.

REMARKS.--Estimated daily discharges: Dec. 4-9, and Jan. 12 to Feb. 20. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--36 years (water years 1950 to current year), 384 ft^3/s, 11.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,930 ft^3/s June 14, 1958, gage height, 24.42 ft; minimum daily, 6.3 ft^3/s Sept. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,230 ft^3/s Feb. 25, gage height, 21.06 ft; minimum daily, 17 ft^3/s July 24, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	62	219	1240	171	2610	2240	211	253	38	39	34
2	19	116	188	1760	168	2240	1990	212	187	37	40	30
3	20	119	236	1870	164	1920	1700	197	155	39	27	27
4	19	91	220	1710	161	1800	1440	185	141	39	21	26
5	20	77	200	1480	159	1930	1290	183	126	36	37	27
6	22	71	190	1220	158	1860	1710	182	115	34	162	27
7	21	65	180	977	153	1680	2000	170	107	33	500	27
8	26	64	175	766	151	1560	1950	161	96	29	266	27
9	29	68	190	572	150	1460	1720	154	86	28	117	27
10	29	97	205	451	150	1310	1480	146	73	26	65	26
11	26	429	178	393	149	1200	1250	139	77	25	46	30
12	27	620	169	350	145	1250	1040	139	99	24	36	26
13	30	501	199	310	143	1260	857	139	102	25	31	23
14	37	351	310	290	142	1210	712	130	92	39	74	21
15	36	267	475	270	141	1110	624	146	92	47	287	22
16	34	223	450	250	140	990	556	170	237	37	350	20
17	38	185	395	290	140	851	478	175	274	30	239	19
18	31	168	335	250	141	695	432	173	206	26	152	20
19	34	155	297	230	154	583	397	161	157	25	99	20
20	38	140	284	220	175	516	362	143	123	22	79	21
21	59	126	298	215	191	448	334	136	109	25	67	19
22	79	121	600	209	683	409	314	125	96	22	69	19
23	63	116	656	200	2180	394	300	122	85	19	56	20
24	49	116	576	198	3900	395	290	119	75	17	49	22
25	45	110	433	191	4210	429	284	106	69	18	54	26
26	44	108	334	189	4020	436	267	98	64	23	51	26
27	43	114	352	186	3640	433	255	117	58	24	45	24
28	41	187	326	183	3140	1280	239	255	50	21	38	23
29	41	270	359	180	---	2350	222	220	47	18	35	25
30	38	254	620	178	---	2450	213	175	41	17	40	26
31	38	---	766	174	---	2370	---	200	---	21	40	---
TOTAL	1096	5391	10415	17002	25019	39429	26946	4989	3492	864	3211	730
MEAN	35.4	180	336	548	894	1272	898	161	116	27.9	104	24.3
MAX	79	620	766	1870	4210	2610	2240	255	274	47	500	34
MIN	19	62	169	174	140	394	213	98	41	17	21	19
CFSM	.08	.40	.75	1.22	1.99	2.83	2.00	.36	.26	.06	.23	.05
IN.	.09	.45	.86	1.41	2.07	3.27	2.23	.41	.29	.07	.27	.06

CAL YR 1984	TOTAL	153611	MEAN	420	MAX	3140	MIN	14	CFSM	.94	IN.	12.73
WTR YR 1985	TOTAL	138584	MEAN	380	MAX	4210	MIN	17	CFSM	.85	IN.	11.48

05525000 IROQUOIS RIVER AT IROQUOIS, IL

LOCATION.--Lat 40°49'25", long 87°34'55", in SE¼ sec.15, T.27 N., R.11 W., Iroquois County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on U.S. Highway 52 in Iroquois, 500 ft upstream from Penn Central bridge, 4.5 mi downstream from Indiana-Illinois State line, and at mile 50.4.

DRAINAGE AREA.--686 mi^2.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.34 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-9, Jan. 13 to Feb. 21, and May 4-27. Water-discharge records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--41 years, 555 ft^3/s, 10.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s June 13, 1958, gage height, 26.31 ft; minimum, 5.2 ft^3/s Sept. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,020 ft^3/s Feb. 25, gage height, 22.46 ft; minimum, 23 ft^3/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	63	322	2120	236	4590	4450	277	658	51	25	47
2	25	97	277	2980	236	4130	4070	390	687	47	34	42
3	24	130	266	3180	236	3670	3630	625	524	47	43	37
4	23	140	343	3140	236	3520	3120	571	413	47	37	34
5	24	116	368	2880	235	3610	2780	539	281	46	42	32
6	25	97	307	2470	233	3410	3200	527	---	43	52	32
7	27	89	339	2010	233	3150	3410	506	---	40	519	33
8	28	82	306	1520	233	2950	3460	463	133	39	610	33
9	30	82	300	1100	233	2740	3290	437	117	36	333	39
10	35	102	264	803	231	2470	2950	416	102	35	171	39
11	36	309	236	639	213	2270	2520	392	94	33	97	34
12	35	703	220	542	206	2240	2070	373	102	31	66	35
13	39	753	221	541	206	2170	1640	357	114	31	51	33
14	45	590	305	610	205	2110	1290	350	116	32	45	30
15	48	431	552	612	205	1980	1060	344	115	41	148	28
16	50	334	671	612	205	1770	901	368	149	54	486	27
17	46	270	625	544	203	1510	773	441	307	48	441	27
18	50	225	537	507	192	1230	677	456	306	39	291	26
19	51	201	462	475	175	986	610	431	234	34	187	25
20	47	183	417	466	175	832	551	386	180	32	128	27
21	60	167	417	466	180	718	501	344	146	31	98	26
22	73	153	780	466	350	634	461	311	124	31	82	26
23	86	146	1010	466	763	587	433	282	109	29	77	26
24	81	140	978	383	5330	569	412	269	97	27	70	27
25	68	138	804	303	6010	577	392	260	87	25	60	27
26	60	133	591	299	5830	607	373	233	80	25	59	29
27	58	138	516	266	5490	627	349	231	75	26	57	31
28	57	173	511	229	5040	3090	329	628	69	29	53	30
29	54	276	506	231	---	4820	304	805	61	28	48	28
30	53	344	848	234	---	4750	285	660	55	26	49	30
31	54	---	1180	236	---	4680	---	552	---	24	49	---
TOTAL	1420	6805	15479	31330	33320	72997	50291	13224	---	1107	4508	940
MEAN	45.8	227	499	1011	1190	2355	1676	427	---	35.7	145	31.3
MAX	86	753	1180	3180	6010	4820	4450	805	---	54	610	47
MIN	23	63	220	229	175	569	285	231	---	24	25	25
CFSM	.07	.33	.73	1.47	1.73	3.43	2.44	.62	---	.05	.21	.05
IN.	.08	.37	.84	1.70	1.81	3.96	2.73	.72	---	.06	.24	.05

CAL YR 1984	TOTAL	233735	MEAN	639	MAX	4470	MIN	18	CFSM	.93	IN.	12.67
WTR YR 1985	TOTAL	226543	MEAN	621	MAX	6010	MIN	23	CFSM	.91	IN.	12.28

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 downstream from Ridge Road, and 0.4 mile upstream from mouth.

DRAINAGE AREA.--70.7 mi^2.

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 591.27 ft above 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 upstream from base gage, at same datum.

REMARKS.--Estimated daily discharges: Jan. 1, 2, Jan. 17 to Feb. 20, and Feb. 24 to Mar. 10. Records fair except for periods of estimated daily discharges, which are poor. High flow occasionally in backwater from Little Calumet River.

AVERAGE DISCHARGE.--43 years, 62.3 ft^3/s, 11.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft^3/s Apr. 28, 1959; maximum gage height, 8.04 ft June 14, 1981; minimum daily discharge, 1.6 ft^3/s Dec. 24-26, 31, 1963, Jan. 1, 2, Sept. 4-9, 14-17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 01	----	a 1250	b 5.36	Mar. 04	----	a 1320	b 5.96
Feb. 24	----	*a 2400	*b 7.95				

Minimum daily discharge, 6.0 ft^3/s July 24.

(a) Estimated.
(b) Due to backwater from Little Calumet River, peak stage occurred later than peak discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	140	43	1120	20	180	289	23	15	8.7	23	12
2	8.7	85	37	840	20	140	160	19	14	18	15	11
3	7.6	39	34	436	19	180	134	19	20	12	12	11
4	7.3	27	28	195	21	1150	120	18	14	14	15	13
5	7.2	22	26	117	20	910	201	20	13	17	17	16
6	11	19	24	83	19	415	359	20	11	11	14	18
7	14	18	22	72	20	230	193	19	11	9.7	12	13
8	10	17	21	61	19	160	131	18	12	8.8	12	15
9	8.5	38	21	49	19	120	103	17	12	9.7	11	62
10	9.5	47	26	46	21	105	79	16	11	11	11	29
11	12	71	25	44	21	196	69	19	30	10	11	17
12	12	54	31	37	22	202	61	18	15	10	10	15
13	13	37	38	36	21	139	58	17	12	12	10	13
14	20	29	186	34	19	139	79	18	12	16	29	12
15	23	25	152	30	19	107	75	64	51	10	95	12
16	18	24	91	26	21	85	61	25	23	8.7	36	13
17	10	24	69	22	21	72	49	23	19	7.9	20	12
18	10	21	53	22	21	63	45	20	16	6.6	16	12
19	17	22	69	22	21	59	41	18	15	9.0	13	14
20	18	23	62	21	24	52	36	20	14	9.5	13	14
21	80	20	144	21	46	46	34	17	22	9.8	13	15
22	30	20	278	21	308	44	31	16	11	8.5	11	34
23	16	20	143	20	1860	44	32	16	13	6.9	11	54
24	13	20	86	20	1900	52	40	15	10	6.0	23	21
25	14	19	48	20	1000	55	32	14	9.2	52	14	17
26	12	21	46	19	500	47	28	23	25	30	12	16
27	11	141	46	21	350	53	26	36	18	11	11	15
28	11	164	63	19	230	358	23	17	11	9.3	11	13
29	11	92	289	21	---	562	23	15	10	7.5	29	13
30	11	57	388	19	---	328	25	13	9.9	8.6	21	21
31	47	---	253	19	---	366	---	22	---	112	14	---
TOTAL	502.8	1356	2842	3533	6602	6659	2637	635	479.1	481.2	565	553
MEAN	16.2	45.2	91.7	114	236	215	87.9	20.5	16.0	15.5	18.2	18.4
MAX	80	164	388	1120	1900	1150	359	64	51	112	95	62
MIN	7.2	17	21	19	19	44	23	13	9.2	6.0	10	11
CFSM	.23	.64	1.30	1.61	3.34	3.04	1.24	.29	.23	.22	.26	.26
IN.	.26	.71	1.50	1.86	3.47	3.50	1.39	.33	.25	.25	.30	.29

CAL YR 1984	TOTAL	31163.7	MEAN	85.1	MAX	1390	MIN	6.0	CFSM	1.20	IN.	16.40
WTR YR 1985	TOTAL	26845.1	MEAN	73.5	MAX	1900	MIN	6.0	CFSM	1.04	IN.	14.13

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 upstream from Hohman Street bridge at north city limits of Munster, 0.4 mile upstream from Indiana-Illinois State line, and 4.6 miles upstream from Thorn Creek.

DRAINAGE AREA.--90.0 mi^2. 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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 1-3, Jan. 11 to Feb. 21, Feb. 23-26, and Mar. 4-6. Records fair except those for periods of estimated daily discharge, which are poor. Flow from eastern portion of Little Calumet River basin is diverted to Lake Michigan by Burns ditch.

AVERAGE DISCHARGE.--27 years, 75.1 ft^3/s, 11.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft^3/s Apr. 28, 1959, gage height, 13.67 ft; maximum gage height, 16.40 ft June 14, 1981; minimum daily discharge, 1.9 ft^3/s Aug. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 800 ft^3/s Feb. 24, gage height, 15.06 ft; minimum daily, 5.8 ft^3/s July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	133	45	578	25	311	210	26	16	8.2	30	9.4
2	12	86	38	659	25	262	158	23	13	11	15	8.9
3	9.8	51	33	419	24	213	137	22	20	16	11	9.2
4	9.6	36	29	288	26	570	152	20	15	9.3	10	8.5
5	9.0	28	33	213	25	560	188	22	14	18	17	10
6	10	24	28	161	24	440	251	22	14	10	11	12
7	20	21	29	127	25	341	179	21	13	9.1	10	12
8	14	20	24	102	24	282	140	20	13	7.9	9.3	11
9	11	31	22	81	24	239	122	19	13	7.7	8.9	48
10	11	36	26	68	26	198	102	17	13	9.4	9.0	31
11	14	53	24	53	26	200	86	19	26	8.6	9.6	15
12	15	49	27	44	28	196	75	19	20	7.8	8.4	11
13	15	39	31	59	27	167	65	18	14	8.9	8.2	9.6
14	22	32	95	40	24	154	72	17	13	11	19	8.7
15	20	28	98	36	24	133	72	57	48	10	89	8.5
16	28	25	80	28	27	111	65	30	27	7.3	36	8.5
17	17	24	67	28	27	96	56	28	20	7.2	18	8.2
18	15	22	54	28	27	81	50	24	16	7.2	13	7.8
19	23	22	56	28	27	72	46	22	15	5.8	11	7.9
20	15	22	55	27	31	63	41	22	14	8.6	10	8.4
21	79	20	81	27	59	54	37	22	21	7.4	9.1	8.0
22	40	20	152	27	263	48	33	18	14	8.0	8.9	11
23	26	19	117	25	720	46	34	19	15	7.5	8.9	64
24	20	19	85	25	780	51	41	17	13	6.4	25	23
25	18	17	70	25	650	53	34	16	11	25	16	14
26	17	18	66	24	510	47	31	16	15	64	10	12
27	15	83	52	26	431	50	30	49	30	12	9.4	11
28	15	103	51	24	369	215	26	23	13	9.9	8.8	9.9
29	15	79	138	27	---	318	25	18	11	8.3	14	9.9
30	14	58	288	24	---	232	26	16	8.9	8.2	28	16
31	40	---	205	24	---	219	---	20	---	146	12	---
TOTAL	602.4	1218	2199	3345	4298	6022	2584	702	508.9	491.7	503.5	432.4
MEAN	19.4	40.6	70.9	108	154	194	86.1	22.6	17.0	15.9	16.2	14.4
MAX	79	133	288	659	780	570	251	57	48	146	89	64
MIN	9.0	17	22	24	24	46	25	16	8.9	5.8	8.2	7.8
CFSM	.22	.45	.79	1.20	1.71	2.16	.96	.25	.19	.18	.18	.16
IN.	.25	.50	.91	1.38	1.78	2.49	1.07	.29	.21	.20	.21	.18

CAL YR 1984	TOTAL	29515.0	MEAN	80.6	MAX	701	MIN	8.2	CFSM	.90	IN.	12.20
WTR YR 1985	TOTAL	22906.9	MEAN	62.8	MAX	780	MIN	5.8	CFSM	.70	IN.	9.47

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
25...	0940	19	17	.87
NOV				
09...	1000	17	23	1.1
DEC				
07...	1332	28	37	2.8
FEB				
14...	1530	419	316	357
MAR				
23...	1150	359	69	67
APR				
12...	1400	121	41	13
JUN				
21...	1230	36	52	5.1
SEP				
13...	0925	16	16	.69

05536275 THORN CREEK AT THORNTON, IL

LOCATION.--Lat 41°34'05", long 87°36'30", near center of N½ sec.34, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Margaret Street in Thornton, 1.0 mi downstream from North Creek, and at mile 4.2.

DRAINAGE AREA.--104 mi^2.

PERIOD OF RECORD.--May 1948 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 1707: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1948, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 17-23. Water-discharge records good except those for estimated daily discharges, which are fair. Some diurnal fluctuation caused by pumping operations above station. Figures of discharge include about 16 ft^3/s pumped from ground-water sources for municipal supply and an undetermined amount of ground-water pumpage for industrial use.

AVERAGE DISCHARGE.--37 years, 101 ft^3/s, 13.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,700 ft^3/s July 13, 1957, gage height, 16.00 ft; maximum gage height, 17.06 ft June 14, 1981; minimum daily discharge, 4.4 ft^3/s Sept. 11, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 5, 1947, reached a stage of 14.34 ft, from floodmark, discharge, 4,200 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 1	1615	1,540	11.97	Mar. 4	2030	1,650	12.31
Feb. 23	2345	*2,110	*13.66				

Minimum daily discharge, 18 ft^3/s Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	351	71	1230	33	204	287	36	27	33	80	27
2	30	221	64	992	32	181	180	31	23	31	42	24
3	30	87	58	412	33	150	146	31	28	31	33	23
4	31	57	48	221	31	1150	227	31	25	28	33	22
5	31	44	44	152	32	1160	568	36	24	53	53	22
6	32	36	40	120	32	491	638	37	26	31	37	31
7	47	34	34	105	31	293	330	31	26	35	34	31
8	37	30	32	89	30	226	196	30	26	28	32	35
9	36	62	32	77	29	163	156	28	25	30	29	94
10	32	104	39	72	30	133	119	28	25	36	30	60
11	33	100	35	68	32	210	102	27	48	31	27	35
12	33	66	44	59	30	218	88	25	44	30	26	28
13	59	49	50	59	30	148	84	24	31	31	26	25
14	65	42	282	54	32	168	118	24	27	45	46	24
15	75	40	237	45	32	156	141	109	111	34	185	23
16	60	38	118	45	31	102	111	45	77	29	76	22
17	44	42	85	43	31	88	70	64	48	26	37	21
18	39	43	67	44	34	91	60	38	36	27	30	21
19	93	38	97	42	33	98	56	30	30	28	28	22
20	56	37	84	41	31	83	54	31	30	28	29	20
21	188	38	227	39	91	84	50	31	35	27	27	18
22	82	43	437	38	534	65	46	26	30	28	27	35
23	47	35	167	38	1560	60	72	27	26	27	27	126
24	33	30	118	37	1820	73	53	25	24	25	43	71
25	29	30	80	37	982	83	48	24	25	37	44	35
26	31	30	69	37	527	75	42	24	37	108	26	30
27	38	285	107	34	348	77	48	92	320	40	23	27
28	37	348	94	35	244	634	37	50	93	29	23	27
29	32	128	385	32	---	599	33	34	49	29	29	26
30	27	81	563	34	---	364	33	31	38	28	104	40
31	83	---	350	34	---	342	---	30	---	219	36	---
TOTAL	1521	2569	4158	4365	6735	7969	4193	1130	1414	1242	1322	1045
MEAN	49.1	85.6	134	141	241	257	140	36.5	47.1	40.1	42.6	34.8
MAX	188	351	563	1230	1820	1160	638	109	320	219	185	126
MIN	27	30	32	32	29	60	33	24	23	25	23	18
CFSM	.47	.82	1.29	1.36	2.32	2.47	1.35	.35	.45	.39	.41	.33
IN.	.54	.92	1.49	1.56	2.41	2.85	1.50	.40	.51	.44	.47	.37

CAL YR 1984	TOTAL	40816	MEAN	112	MAX	1710	MIN	21	CFSM	1.08	IN.	14.60
WTR YR 1985	TOTAL	37663	MEAN	103	MAX	1820	MIN	18	CFSM	.99	IN.	13.47

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'25", long 87°35'52", in NE¼SE¼ sec.15, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on Cottage Grove Avenue in South Holland, 2.0 mi downstream from Thorn Creek, and at mile 23.0.

DRAINAGE AREA.--208 mi^2.

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. WDR IL-81-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 575.00 ft above National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Prior to Oct. 27, 1947, nonrecording gage and Oct. 27, 1947, to Mar. 31, 1981, water-stage recorder at site 1.4 mi upstream at same datum. Apr. 1 to Nov. 8, 1981, nonrecording gage at same site and datum. Nov. 17, 1947, to Nov. 19, 1970, auxiliary water-stage recorder at Dixmoor, 4.7 mi downstream; prior to Nov. 17, 1947, nonrecording gage at the Dixmoor site read twice daily.

REMARKS.--Estimated daily discharges: Oct. 11-23, Jan. 22 to Feb. 21, July 23-25, 28-30, and Aug. 3-13. Records fair except those for estimated daily discharges, which are poor. Flow from upper Little Calumet River is diverted to Lake Michigan by Burns ditch. Calumet Sag Channel, 6.6 mi below station, diverts the entire flow to the Mississippi River basin.

AVERAGE DISCHARGE.--38 years, 185 ft^3/s, 12.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft^3/s July 14, 1957, gage height, 20.11 ft, site then in use; maximum gage height, 20.20 ft June 14, 1981; minimum daily discharge, 7.9 ft^3/s Oct. 6, 1950.

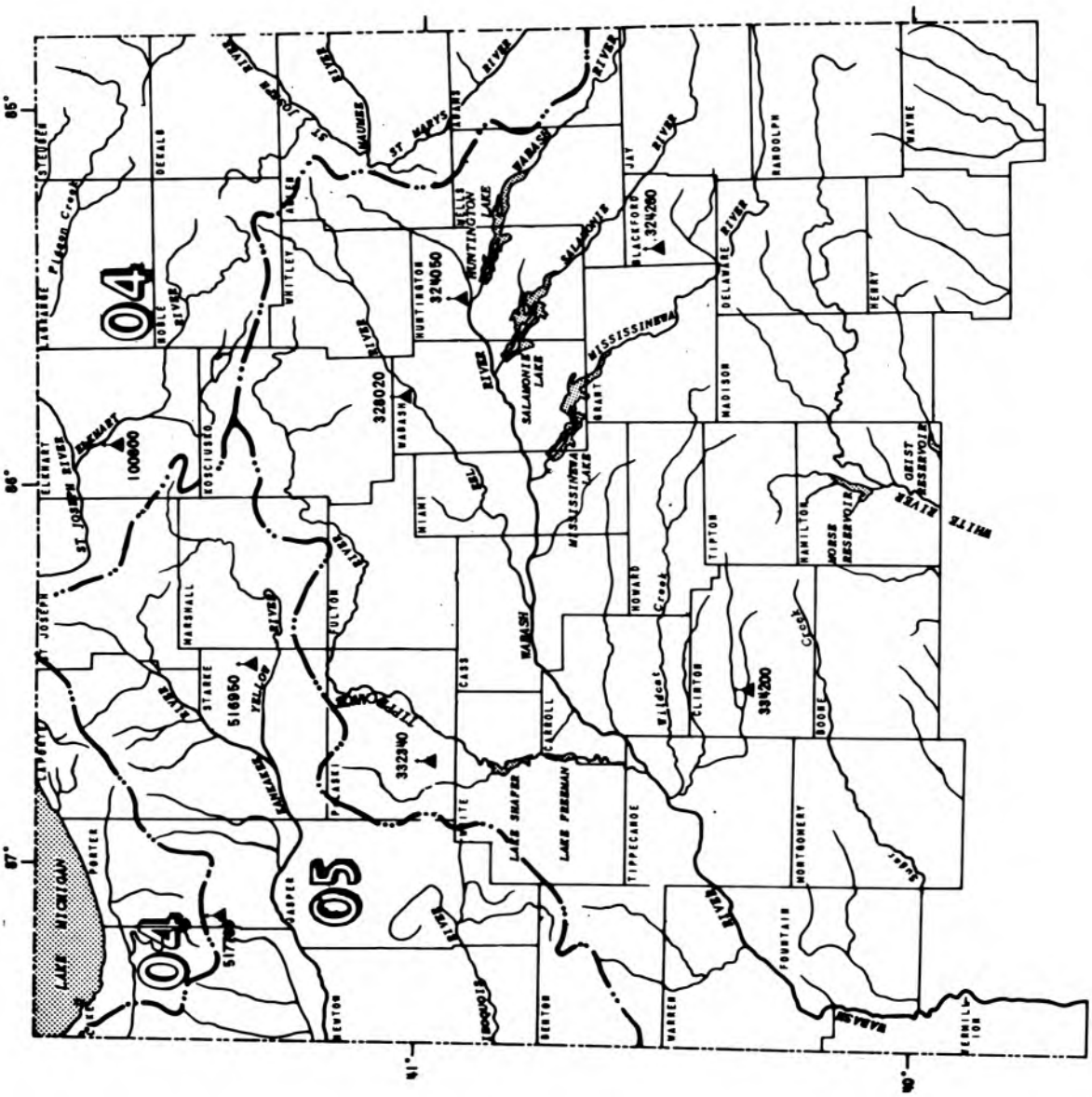
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1947, reached a stage of 19.24 ft, from floodmarks, discharge, 4,760 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,980 ft^3/s Feb. 24, gage height, 17.82 ft; minimum daily, 26 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	551	118	1750	58	539	534	62	48	41	187	48
2	42	432	102	1940	57	470	374	58	42	37	56	42
3	39	173	92	1010	57	399	311	51	47	56	43	42
4	36	101	73	558	57	1760	349	50	50	38	43	38
5	35	74	65	395	57	2200	829	55	43	89	62	40
6	33	60	59	291	56	1210	979	65	46	50	48	53
7	62	53	50	241	56	704	606	54	43	46	44	63
8	50	48	47	194	54	554	378	52	47	37	42	51
9	43	79	45	155	54	442	301	48	51	39	38	137
10	37	147	56	137	56	356	234	49	48	46	39	146
11	45	151	53	121	58	396	196	51	72	43	37	66
12	52	122	64	98	58	453	169	55	121	41	36	40
13	76	92	77	118	57	339	160	51	53	44	36	33
14	84	74	353	94	56	328	191	55	40	53	48	30
15	96	64	375	81	56	316	201	210	225	63	358	29
16	88	55	213	71	58	230	200	105	195	42	208	28
17	64	53	154	71	58	189	139	99	72	36	72	28
18	52	55	119	72	61	159	120	68	51	35	50	29
19	115	51	150	70	60	174	110	53	35	36	40	31
20	71	51	136	68	62	137	106	52	35	35	39	30
21	260	50	260	66	150	116	96	58	52	37	36	27
22	120	48	631	65	988	99	88	43	57	36	35	48
23	74	47	341	63	2230	99	107	41	53	36	36	242
24	66	41	214	62	2900	116	103	40	46	38	78	159
25	54	39	135	62	2170	114	97	40	36	65	106	57
26	50	38	152	61	1250	133	82	43	56	248	45	41
27	49	373	143	60	845	128	90	177	436	62	34	32
28	47	538	137	59	651	718	72	116	252	40	36	28
29	44	261	423	59	---	985	62	69	75	39	42	26
30	37	158	882	58	---	649	63	61	50	38	180	43
31	82	---	630	58	---	561	---	56	---	513	70	---
TOTAL	2049	4079	6349	8208	12330	15073	7347	2087	2477	2059	2224	1707
MEAN	66.1	136	205	265	440	486	245	67.3	82.6	66.4	71.7	56.9
MAX	260	551	882	1940	2900	2200	979	210	436	513	358	242
MIN	33	38	45	58	54	99	62	40	35	35	34	26
CFSM	.32	.65	.99	1.27	2.12	2.34	1.18	.32	.40	.32	.34	.27
IN.	.37	.73	1.14	1.47	2.21	2.70	1.31	.37	.44	.37	.40	.31

CAL YR 1984	TOTAL	74924	MEAN	205	MAX	2250	MIN	32	CFSM	.99	IN.	13.40
WTR YR 1985	TOTAL	65989	MEAN	181	MAX	2900	MIN	26	CFSM	.87	IN.	11.80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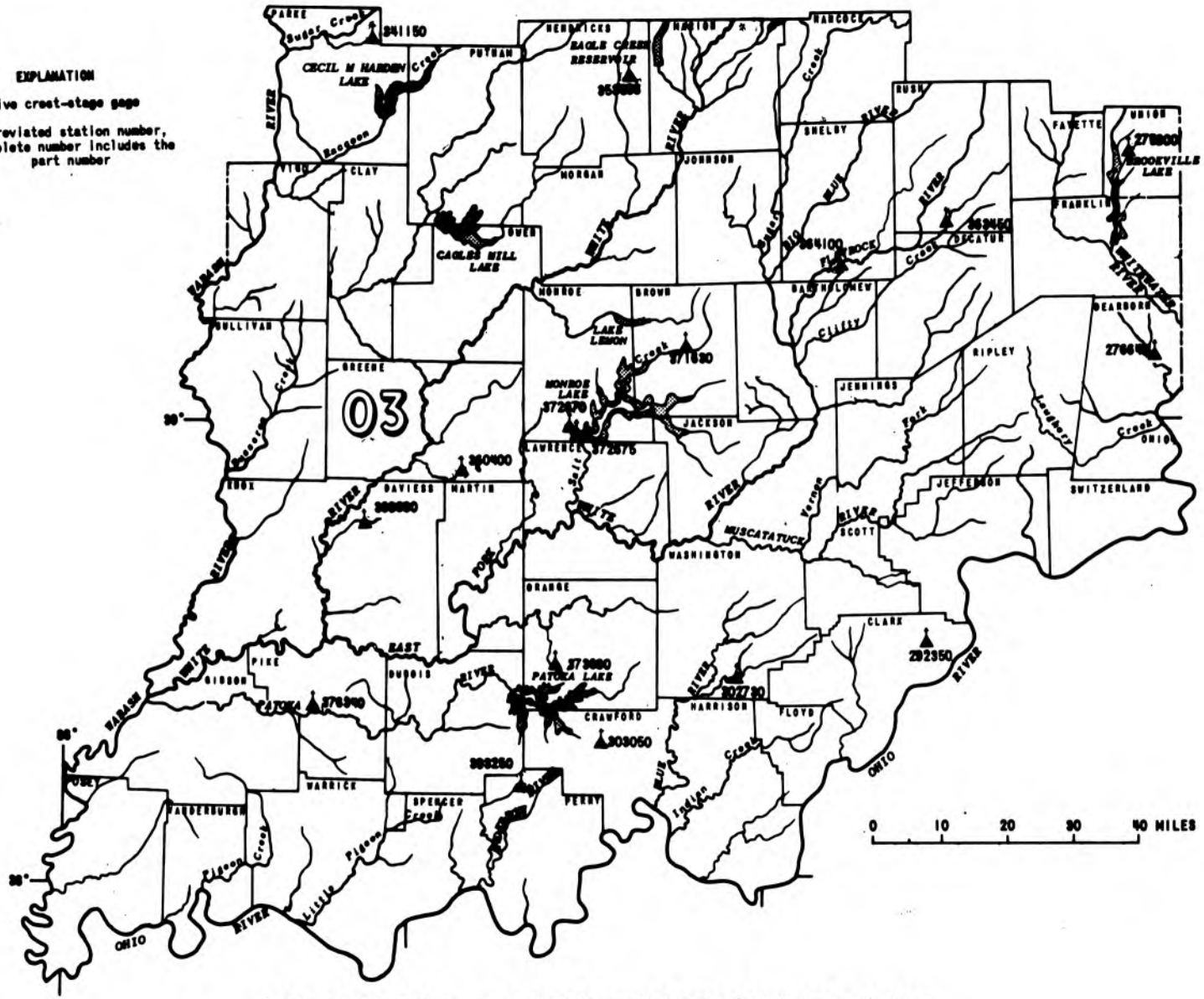

Figure 7.-- Location of crest-stage partial-record stations in Indiana.

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.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		OHIO RIVER BASIN					
		Great Miami River basin					
03275800	West Run near Liberty, IN	Lat 39°38'24", long 84°57'18", in SE¼SE¼SW¼ sec.2, T.14 N., R.2 W., Union County, at culvert on State Highway 44, 4.8 miles east of Fayette-Union County Line, 1.1 miles west of Liberty.	0.26	1973-	07-05-85	6.52	70
		Tanners Creek basin					
03276640	Tanners Creek tributary near Lawrenceburg, IN	Lat 39°09'18", long 84°52'20", in NW¼SW¼NE¼ 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-	No marks all year		<46
		Fourteenmile Creek basin					
03292350	Flag Run tributary near New Washington, IN	Lat 38°31'08", long 85°32'29", in NW¼NW¼NE¼ sec.20, T.1 N., R.9 E., Clark County, at culvert on State Highway 62, 3.0 miles south of New Washington.	.16	1973-	04-22-84 07-21-85	-- 6.87	14 32
		Blue River basin					
03302730	South Fork Blue River near Palmyra, IN	Lat 38°28'07", long 86°04'55", in NE¼NW¼ sec.4, T. 15 N., R.4 E., Washington County, at bridge on Old Palmyra Road, 0.2 mile north of State Highway 135 and 4.7 miles north of the intersection of U.S. Highway 150 and State Highway 135 in Palmyra.	64.3	1974-	03-31-85	19.09	2,450
		Little Blue River basin					
03303050	Bird Hollow Creek at English, IN	Lat 38°21'02", long 86°28'01", in SE¼NE¼NW¼ sec.13, T.2 S., R.1 W., Crawford County, at bridge on State Highway 37, 0.7 mile north of State Highway 64.	9.31	1974-	07-05-84 03-30-85	12.64 14.45	1,500 2,550
		Anderson River basin					
03303250	Sigler Creek tributary at Uniontown, IN	Lat 38°13'21", long 86°41'50", in NW¼SW¼SW¼ 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-	06-11-85	7.60	77
		Wabash River basin					
03324050	Clear Creek near Huntington, IN	Lat 40°54'57", long 85°32'42", in SE¼NE¼NW¼ 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]	1974-80 1983-	02-25-85	13.10	2,160

Crest-stage partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued					
		Wabash River basin--Continued					
03324260	Salamonie River tributary near Montpelier, IN	Lat 40°33'06", long 85°19'25", in NW¼NW¼NE¼ sec.7, T.24 N., R.11 E., Blackford County, at culvert on State Highway 18, 2.5 miles east of State Highway 3.	0.86	1973-	02-23-85	7.67	132
03328020	Otter Creek tributary near North Manchester, IN	Lat 40°59'59", long 85°49'37", in SW¼SE¼SW¼ sec.35, T.30 N., R.6 E., Wabash County, at culvert on State Highway 114, 1.7 miles west of State Highway 13.	.92	1973-	02-24-85	6.01	94
03332340	Weltzin ditch tributary near Francesville, IN	Lat 40°48'00", long 86°46'33", in SW¼NW¼NW¼ sec.16, T.29 N., R.3 W., Pulaski County, at culvert on State Highway 39, 6.1 miles south of State Highway 14.	.50	1973-	02-23-85	6.21	19
03334200	Prairie Creek tributary near Frankfort, IN	Lat 40°15'14", long 86°30'36", in NW¼SE¼NE¼ sec.22, T.21 N., R.1W., Clinton County, at culvert on State Highways 38 and 39, 1.8 miles south of State Highway 28 in Frankfort.	2.61	1973-	02-23-85	9.53	190
03341150	Demeree Creek tributary near Byron, IN	Lat 39°52'39", long 87°05'56", in NW¼SW¼NE¼ sec.33, T.17 N., R.6 W., Parke County, at culvert on State Highway 47, 0.5 mile west of Montgomery County Line.	.15	1973-	08-30-85	6.83	37
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	1973-	02-22-85	6.53	95
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-	04-05-84 11-28-84	7.01 5.36	73 18
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[a]	1973-	02-22-75 02-17-76 03-29-77 05-14-78 07-13-79 11-26-79 05-27-81 08-30-82 05-01-83 04-22-84 03-31-85	16.08 14.30 15.61 16.05 15.91 14.97 16.00 15.24 16.61 15.95 16.40	1,100 660 1,000 1,100 1,050 800 1,070 870 1,270 1,050 1,200
03363450	Little Flatrock River 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-	04-22-84 02-23-85	10.67 11.58	1,030 1,470
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-	05-02-85	8.06	143
03371630	North Fork Salt Creek tributary near Nashville, IN	Lat 39°11'38", long 86°12'11", in NE¼NE¼NW¼ sec.28, T.9 N., R.3 E., Brown County, at culvert on State Highway 46, 2.6 miles east of State Highway 135 in Nashville.	.22	1973-	05-02-85	6.82	27

Crest-stage partial-record stations--continued

Station number	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft³/s)
		OHIO RIVER BASIN--Continued					
		Wabash River basin--Continued					
03372670	Jackson Creek near Bloomington, IN	Lat 39°07'17", long 86°30'50", in SW¼SW¼ sec.15, T.8 N., R.1 W., Monroe County, at bridge on Rhorer Road 0.95 mile east of State Highway 37 on the south side of Bloomington.	4.66	1974-	08-30-82 12-25-82 04-22-84 05-02-85	4.64 4.15 4.60 4.91	990 680 950 1,160
03372675	Jackson Creek at Clear Creek, IN	Lat 39°06'01", long 86°32'18", in SE¼NE¼ 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	1976-	05-23-81 08-30-82 12-25-82 04-22-84 05-02-85	-- 5.15 6.39 6.62 --	4,600 1,070 2,000 2,300 2,700
03373680	French Lick Creek tributary near French Lick, IN	Lat 38°30'08", long 86°36'20", in SW¼NW¼SW¼ sec.23, T.1 N., R.2 W., Orange County, at culvert on State Highway 145, 4.3 miles south of intersection of State Highways 145 and 56 in French Lick.	.29	1973-	05-15-85	6.78	109
03376340	Patoka River tributary near Glezen, IN	Lat 38°23'41", long 87°19'05", in NE¼SE¼SE¼ sec.29, T.1 S., R.8 W., Pike County, at culvert on State Highway 57, 7.9 miles south of intersection of State Highways 61, 56, and 57 in Petersburg.	.84	1973-	03-30-85	7.32	125
		STREAMS TRIBUTARY TO LAKE MICHIGAN					
		St. Joseph River basin					
04100800	Yellow Creek at Dunlap, IN	Lat 41°38'44", long 85°56'00", in NE¼NE¼ sec.27, T.37 N., R.5 E., Elkhart County, at bridge on U.S. Highway 33, at northwest edge of Dunlap.	33[a]	1974	02-23-85	14.08	790
		UPPER MISSISSIPPI RIVER BASIN					
		Illinois River basin					
05516950	Eagle Creek near Grovertown, IN	Lat 41°18'44", long 86°31'27", in NE¼SE¼NE¼ 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]	1973-	02-25-85	10.44	230
05517780	Cobb ditch near Valparaiso, IN	Lat 41°24'41", long 87°08'08", in NE¼NE¼SW¼ sec.8, T.34 N., R.6 W., Porter County, at culvert on State Highway 2, 5.7 miles southwest of Valparaiso.	.39	1973-	02-23-85	9.51	75

[a]About.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given for 1985 in the following table.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN				
		Wabash River basin				
Pleasant Run	White River	Lat 39°43'58", long 86°09'21", in SW¼NW¼ sec. 24, T.15N., R.3E., Marion County, between Madison Avenue and Meridian Street, in Indianapolis.	20.6	1983	07-11-85	3.64
Eagle Creek	White River	Lat 39°44'10", long 86°11'47", on line between secs. 21 and 22, T.15N., R.3E., Marion County, at Raymond Street bridge, in Indianapolis.		1981-83	07-11-85	26.9
		STREAMS TRIBUTARY TO LAKE ERIE				
		Maumee River Basin				
Junk ditch	St. Marys River	Lat 41°02'47", long 85°12'34", in SW¼SW¼ sec. 17, T.30N., R.12E., Allen County, at bridge on Smith Road, 300 ft north of Engle Road, and 0.9 mi south of Covington Road.		1978, 1982	02-26-85	229

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
03275500	East Fork Whitewater River at Richmond	Wayne	121	1949-78
03277000	Laughery Creek near Farmers Retreat	Ohio	248	1941-73[a]
03303276	Friday Branch tributary near Saint Meinrad	Dubois	.096	1981[b]
03304000	Little Pigeon Creek near Tennyson	Warrick	187	1944-47
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	1959-73a
03332400	Big Monon Creek near Franceswille	Pulaski	152	1959-73[a]
03332500	Tippecanoe River near Monticello	White	1,732	1932-81[c]
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 Vermilion River near Newport	Vermillion	237	1965-72
03339855	Sugar Creek tributary near Deer Mill	Montgomery	.45	1981[b]
03340000	Sugar Creek near Byron	Parke	670	1941-71[b]
03341000	Big Raccoon Creek at Mansfield	Parke	248	1939-58[d]
03341200	Little Raccoon Creek near Catlin	Parke	134	1957-71[d,e]
03341420	Brouilletts Creek near Universal	Vermillion	321	1966-71[b]
03341470	North Coal Creek near Terre Haute	Vigo	1.91	1974-76
03341570	Honey Creek near Riley	Vigo	5.79	1981[b]
03342250	Mud Creek near Dugger	Sullivan	11.9	1966-81
03342350	Buttermilk Creek near Paxton	Sullivan	16.5	1966-73
03342360	Buttermilk Creek near Sullivan	Sullivan	17.6	1975-78
03342800	South Fork Smalls Creek at Bruceville	Knox	4.94	1972-75[b,e]
03348100	Killbuck Creek near Anderson	Madison	97.8	1964-68
03348500	White River near Noblesville	Hamilton	828	1915-26, 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]
03350500	Cicero Creek at Noblesville	Hamilton	216	1950-80[d]
03352000	Lawrence Creek at Fort Benjamin Harrison	Marion	2.74	1952-56, 1958-69
03352200	Mud Creek at Indianapolis	Marion	42.4	1958-76[a]
03353160	Pleasant Run at Brookville Road at Indianapolis	Marion	10.1	1960-81
03355000	Bear Creek near Trevlac	Brown	6.94	1952-73[a]
03356000	Beanblossom Creek at Dolan	Monroe	100	1946-78
03356500	Beanblossom Creek near Bloomington	Monroe	112	1931-33
03357000	White River at Spencer	Owen	2,988	1925-71[d]
03357420	Big Walnut Creek at Greencastle	Putnam	216	1975-1982
03359500	Deer Creek near Putnamville	Putnam	59.0	1955-65, 1968-72
03359980	Jordan Creek near Jordan	Owen	25.9	1981[b]
03366000	Graham Creek near Vernon	Jennings	77.2	1955-73
03367000	Muscatatuck River near Austin	Jackson	359	1932-43, 1944-71[f]
03367500	Stucker Creek near Austin	Scott	127	1932-33
03370000	Vernon Fork near Crothersville	Jackson	391	1932-33
03370500	Muscatatuck River near Tampico	Washington	960	1939
03371000	Muscatatuck River near Vallonia	Jackson	1,134	1932-33
03371600	South Fork Salt Creek at Kurtz	Jackson	38.2	1961-71[g]
03371650	North Fork Salt Creek at Nashville	Brown	76.1	1962-76[a]
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[d]
03373200	Indian Creek near Springville	Lawrence	60.7	1961-73[a]
03374100	White River at Hazleton	Gibson	11,305	1928-38[h]
03376000	Patoka River near Jasper	Dubois	348	1944-47[e]
03376260	Flat Creek near Otwell	Pike	21.3	1965-1982
03376279	Little Flat Creek near Otwell	Dubois	6.56	1981[b]
03376300	Patoka River at Winslow	Pike	603	1964-74
03378500	Wabash River at New Harmony	Posey	29,234	1939-47[h]

Station no.	Station name	County	Drainage area (mi^2)	Period of record
	STREAMS TRIBUTARY TO LAKE MICHIGAN			
04093200	Little Calumet River at Gary	Lake	5.82	1958-67, 1969-71
04090500	Dunes Creek at Porter	Porter	3.40	1979-1982
04095100	Derby ditch at Beverly Shores	Porter	4.64	1980
04098000	Fawn River at Orland	Steuben	86.4	1943-47
04099500	Pigeon Creek and Hogback Lake near Angola	Steuben	103	1946-74
04099610	Pretty Lake Inlet near Stroh	Lagrange	1.96	1963-80
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
04179000	St. Joseph River at Cedarville	Allen	763	1931-32, 1956-81
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
	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 Illinoi, IL	Kankakee, IL	220	1945-77
05521500	Oliver ditch near Aix	Jasper	79.6	1948-51
05523500	Slough Creek near Collegeville	Jasper	83.7	1948-52 1953-82
05524000	Carpenter Creek at Egypt	Jasper	44.8	1948-52 1953-82

[a]Continued as a crest-stage and low-flow partial-record station through 1984.
[b]Some quality of water data available.
[c]Records of daily discharges furnished by Northern Indiana Public Service Company.
[d]Continued as a stage only station through 1984.
[e]Some record fragmentary.
[f]High-water records only.
[g]Stage only station 1972-75.
[h]Some quality of water data available after discontinuing of station for stream-gaging records.

RECORDS AVAILABLE ON LAKES

For many years records of the water-surface elevations of many of the lakes in Indiana have been collected by the Geological Survey under cooperative agreement with the Indiana Department of Natural Resources. Basic data for a few selected lakes have been published in WSP 1363, entitled "Hydrology of Indiana Lakes." Records which have not been published are available in the files of the District Office of the Geological Survey in Indianapolis, Indiana. In general, the records 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 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 (square miles)	Surface area (acres)	Established levelxx	Capacity (acre-feet)	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-
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[1]	Noble	35.2	10	------	------	-	1945-51
03330240	Webster Lake at North Webster	Kosciusko	49.2	774	852.75	7,170	+	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[2]	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	Muskellunge 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[3]	Kosciusko	5.51	15	881.00	230	+	1954-
03331140	Winona Lake at Warsaw	Kosciusko	32.1	562	811.06	16,680	+	1943-

Lakes in the Ohio River basin for which records are available--Continued

	Lake	County	Drainage (square miles)	Surface area (acres)	Established levelxx	Capacity (acre-feet)	Contour map available	Records available
	WABASH RIVER BASIN--Continued							
03331160	Center Lake at Warsaw	Kosciusko	0.73	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
03331300	Hill Lake near Silver Lake	Kosciusko	.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	1,158	778.41	10,165	+	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[4]	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	6.38	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[9]	Lake	5.72	999	--------	------	-	1946-49
04092990	Lake George at Hobart	Lake	124	282	602.23	------	-	1946-
04097520	Lake Pleasant near Nevada Mills	Steuben	3.18	424	961.50	3,490	+	1954-69, 1971, 1976-
04097550	Lake George at Jamestown	Steuben	[8]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	21.3	69	965.18	1,780	+	1946-53
04097650	Snow Lake at Lake James	Steuben	[8]40.2	310	964.96	7,998	+	1943-49
04097660	Lake James at Lake James	Steuben	[8]47.8	1,034	964.96	33,585	+	1943-49
04097680	Jimmerson Lake at Nevada Mills[5]	Steuben	[8]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	10.4	828	988.17	10,555	+	1946-
04097950	Lake Gage at Panama	Steuben	[8]17.3	332	954.25	10,140	+	1946-
04097960	Lime Lake at Panama	Steuben	[8]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	[8]35.2	61	988.24	930	+	1954-63
04099100	Fox Lake near Angola	Steuben	[8]1.25	142	1,018.83	3,150	+	1946-53
04099190	Pleasant Lake at Pleasant Lake	Steuben	[8]1.12	53	963.52	1,190	+	1946-66
04099200	Long Lake at Moonlight	Steuben	[8]67.9	92	--------	1,540	+	1946-
04099250	Bower Lake near Pleasant Lake	Steuben	[8]84.6	25	948.50	280	+	1946-71, 1976-
04099260	Golden Lake near Pleasant Lake	Steuben	[8]88.8	119	948.50	1,810	+	1946-71, 1976-
04099400	Silver Lake near Angola	Steuben	[8]3.79	238	959.40	2,540	+	1945-53
04099430	Bass Lake near Angola	Steuben	[8].39	61	979.68	450	+	1954-66
04099440	Howard Lake near Angola	Steuben	[8]3.90	27	977.34	130	+	1954-63
04099500	Hogback Lake near Angola	Steuben	[8]103	146	948.50	1,450	+	1946-
04099520	Otter Lake near Flint	Steuben	[8]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	956.2	------	-	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	4.69	69	936.50	1,630	+	1952-
04099670	Fish Lake near Plato	Lagrange	[8]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	[8]6.74	202	852.04	1,350	+	1951-
04099760	Fish Lake near Scott	Lagrange	[8]6.21	139	814.42	2,560	+	1954-73, 1976-

Lakes in the St. Lawrence River basin for which records are available--Continued

	Lake	County	Drainage (square miles)	Surface area (acres)	Established levelxx	Capacity (acre-feet)	Contour map available	Records available
	STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued							
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 Middlebury	Elkhart	.51	99	856.90	1,120	+	1946-53
04099840	Wolf Lake near Goshen	Elkhart	[8]1.29	100	813.00	------	-	1947-57
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	303	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 Laker 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 neaqr Valentine	Lagrange	5.81	103	899.45	9,180	+	1945-
04100100	Oliver Lake near Valentine	Lagrange	11.1	362	899.45	15,358	+	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[6]	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	669	916.20	5,986	+	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-
04100360	Sparta Lake at Kimmel	Noble	.69	31	888.50	170	+	1946-51
04100370	Engle Lake near Ligonier	Noble	[8]4.19	48	878.90	670	+	1956-71, 1977-
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[7]	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	Papakeechie 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]8.05	551	867.70	9,000	+	1945-
04100480	Wabee Lake near Milford	Kosciusko	[8]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 avaliable

	ILLINOIS RIVER BASIN							
05514740	Saugany Lake near Rolling Prairie	LaPorte	[8]2.34	74	781.21	2,190	+	1946-50
05514741	Hudson Lake at Hudson Lake	LaPorte	7.92	432	763.09	5,060	+	1946-

Lakes in the Upper Mississippi River basin for which records are available--Continued

	Lake	County	Drainage (square miles)	Surface area (acres)	Established levelxx	Capacity (acre-feet)	Contour map available	Records available
	ILLINOIS RIVER BASIN--Continued							
05514750	North Chain Lake at Lydick	St. Joseph	[8]3.89	88	721.17	1,400	+	1946-53
05514760	South Chain Lake at Westfield	St. Joseph	[8]6.32	90	717.04	270	-	1946-53
05514770	Wharton Lake near South Bend	St. Joseph	[8]1.85	-----	--------	------	-	1960-
05514900	Silver Lake near Rolling Prairie	LaPorte	1.72	54	795.20	------	-	1946-66
05515200	Upper Fish Lake near Stillwell	LaPorte	[8]9.65	139	688.22	1,040	+	1946-53
05515210	Lower Fish Lake near Stillwell	LaPorte	[8]10.4	134	688.22	870	+	1946-53
05515220	Pine Lake at LaPorte	LaPorte	[8]10.7	564	796.20	------	-	1946-75 1980-
05515230	Stone Lake at LaPorte	LaPorte	[8]10.7	140	796.20	------	-	1946-75 1980-
05515240	Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1942-49, 1952-75 1980-
05515600	Koontz Lake at Koontz Lake	Starke	[8]6.25	346	714.56	3,170	+	1943-
05515800	Riddles Lake near Lakeville	St. Joseph	[8]11.7	77	817.50	640	+	1946-73, 1976-
05516200	Lake of the Woods near Bremen	Marshall	[8]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	[8]5.34	168	767.75	1,020	+	1945-53
05516900	Eagle Lake near Ober	Starke	[8]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	738.70	------	-	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.
xxElevation, in feet, above mean sea level.
[1]Formerly published as Rider Lake at Wilmot.
[2]Formerly published as Chapman Lake near Warsaw.
[3]Formerly published as Johnson Lake near Pierceton.
[4]Formerly published as Hawks Lake near Culver.
[5]Formerly published as Jimerson Lake at Nevada Mills.
[6]Formerly published as Sanford Lake near Cosperville.
[7]Formerly published as Duley Lake near Cromwell, and Druely Lake near Cromwell, and Druley Lake near Cromwell.
[8]Contains drainage area (5 percent or greater) that does not contribute directly to surface-water runoff.
[9]Same as Wolf Lake at Chicago, Illinois WRD District.

OTHER LAKE MAPS AVAILABLE

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	Sullivan	56	610
Kunkel Lake	Wells	25	150	Twin Lakes	Wabash	18	190
Lake Freeman	Carroll	1,547	26,000	Whitewater Lake	Union	199	3,650
Lake Shafer	White	1,291	13,120	Yellowwood Lake	Brown	133	1,890
			STREAMS TRIBUTARY TO LAKE MICHIGAN				
Appleman Lake	Lagrange	52	590	Mateer Lake	Lagrange	18	150
Bartley Lake	Noble	34	430	Miller Lake	Noble	11	160
Barton Lake	Steuben	94	1,340	Millers Lake	Noble	28	410
Bell Lake	Steuben	38	510	Mud Lake	Noble	8	70
Boner Lake	Kosciusko	40	370	Norman Lake	Noble	14	280
Bowen Lake	Noble	30	1,080	Pigeon Lake	Lagrange	61	1,160
Bristol Lake	Noble	27	740	Port Mitchell Lake	Noble	15	180
Buck Lake	Lagrange	18	150	Rainbow Lake	Lagrange	16	250
Center Lake	Steuben	46	390	Schockopee Lake	Noble	21	280
Cline Lake	Lagrange	20	350	Shock Lake	Kosciusko	37	1,210
Deer Lake	Noble	36	420	Smith Hole	Lagrange	2	10
Dock Lake	Noble	16	230	Still Lake	Lagrange	30	620
Eve Lake	Lagrange	31	670	Sweet Lake	Noble	16	210
Fish Lake	Steuben	59	750	Tamarack Lake	Noble	84	1,340
Hog Lake	LaPorte	59	690	Walters Lake	Steuben	53	550
Hog Lake	Steuben	48	570	Weir Lake	Lagrange	6	70
Lime Lake	Steuben	30	330	Wible Lake	Noble	49	650
Little Turkey Lake	Steuben	58	780	Williams Lake	Noble	46	1,070
Marl Lake	Noble	30	510	Wyland Lake	Kosciusko	6	100
			STREAMS TRIBUTARY TO LAKE ERIE				
Dunton Lake	DeKalb	21	340	Mirror Lake	Steuben	9	120
Handy Lake	Steuben	16	290	Terry Lake	DeKalb	17	160
Lake Anne	Steuben	17	280				
			UPPER MISSISSIPPI RIVER BASIN				
Cook Lake	Marshall	93	1,650	Gilbert Lake	Marshall	37	490
Dixon Lake	Marshall	33	480	Holem Lake	Marshall	40	390
Flat Lake	Marshall	26	210	Lawrence Lake	Marshall	69	1,580

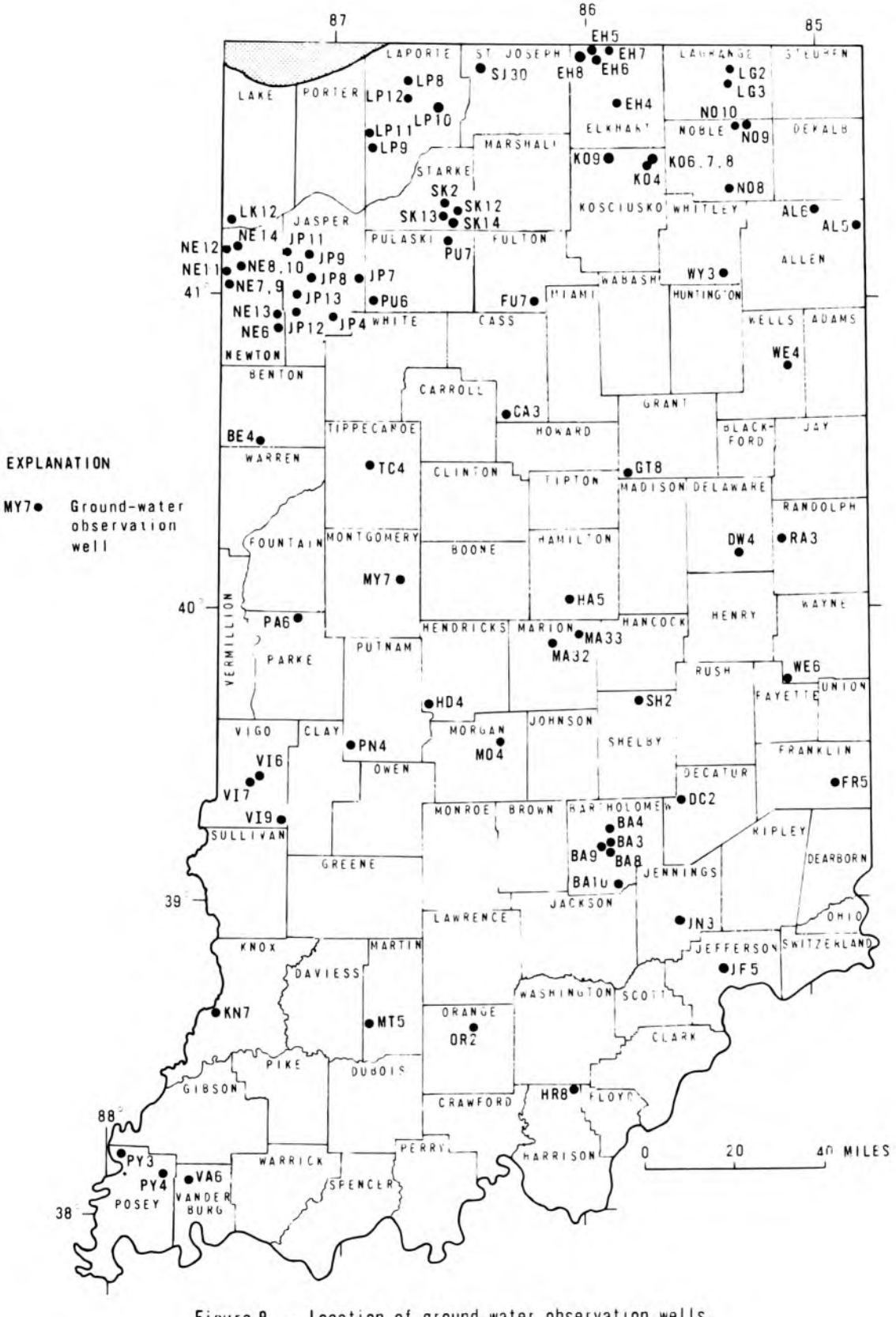

Figure 8.-- Location of ground-water observation wells.

ALLEN COUNTY

410426084495201. Local number, AL 5.

LOCATION.--Lat 41°04'26", long 84°49'52", in NW¼NE¼SE¼ sec.9, T.30 N., R.15 E., Allen County, Hydrologic Unit 04100005, 1.3 mi west of Edgerton.
Owner: Noel Gerig.

AQUIFER.--Limestone of Salina Formation of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in., depth 97 ft, cased to 40 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 0.00 ft (revised) 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 below land-surface datum, July 8, 9, 1962; lowest, 38.41 ft below land-surface datum, May 4, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.33	---	26.10	25.90		---	24.69	25.09	25.21	24.86	24.85	24.87
10	26.41	---	25.96	26.07		25.75	25.40	25.22	25.07	24.81	24.81	24.78
15	---	---	26.35	---		25.75	25.07	25.11	24.94	24.79	24.72	24.93
20	---	---	26.18	---		25.52	25.26	25.06	25.05	24.88	24.85	24.77
25	---	26.20	26.40	---		25.51	25.15	25.08	25.22	24.78	24.62	24.46
EOM	---	25.82	25.99	---		24.95	25.22	24.83	25.19	24.83	24.81	24.60

WTR YR 1985 HIGH 24.41 SEP 26 LOW 27.03 NOV 21

ALLEN COUNTY

410932084561101. Local number, AL 6.

LOCATION.--Lat 41°09'32", long 84°56'11", in SW¼SW¼NE¼ sec.10, T.31 N., R.14 E., Allen County, Hydrologic Unit 04100005, at the intersection of Ehle and Thimler Roads, 10 mi northeast of New Haven.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 94 ft, cased to 81.5 ft, screened to 83.5 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.50 ft 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, 8.21 ft below land-surface datum, Mar 5, 1985; lowest, 14.77 ft below land-surface datum, Oct. 29, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.89	13.39	12.59	9.55	11.18	8.21	8.68	10.69	11.31	11.93	13.11	13.11
10	13.75	13.37	12.55	9.98	11.35	8.75	8.91	11.00	11.53	11.98	13.04	13.00
15	13.67	12.73	12.27	10.26	11.14	8.96	9.31	11.17	11.55	12.14	12.83	13.01
20	13.62	12.71	11.95	10.56	11.26	9.51	9.84	11.22	11.33	12.57	12.74	13.16
25	13.40	12.66	11.59	10.72	8.69	9.95	10.23	11.43	11.62	12.77	12.81	13.13
EOM	13.47	12.56	10.75	11.03	8.55	8.77	10.52	11.17	11.98	13.02	13.06	13.20

WTR YR 1985 HIGH 8.21 MAR 5 LOW 14.05 OCT 4, 6

BARTHOLOMEW COUNTY

391320085534601. Local number, BA 3.

LOCATION.--Lat 39°13'20", long 85°53'46", in NE¼NE¼SE¼ sec.18, T.9 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, in northeast corner of Lincoln Park in the city of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 123 ft, cased to 116 ft, screened to 121 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 639.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.50 ft 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 below land-surface datum, Feb. 24, 25, 1975; lowest, 28.74 ft below land-surface datum, Oct. 9, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.60	19.15	19.22	18.28	19.02	18.56	18.14	18.12	18.95	19.09	19.29	19.72
10	19.52	19.34	19.20	18.49	19.11	18.42	18.44	18.62	18.80	19.39	19.66	19.97
15	19.64	19.38	18.92	18.63	18.88	18.52	18.13	18.54	19.02	19.25	19.72	19.78
20	19.67	19.31	19.22	18.75	18.88	19.11	18.50	18.27	19.11	19.45	19.71	20.39
25	19.62	19.28	18.65	19.00	18.18	18.75	18.73	18.65	19.25	19.70	19.66	19.87
EOM	19.44	19.06	18.14	19.13	18.48	17.87	18.90	18.92	19.18	19.37	19.46	19.79

WTR YR 1985 HIGH 17.84 APR 1 LOW 21.04 SEP 19

BARTHOLOMEW COUNTY

391627085534401. Local number, BA 4.

LOCATION.--Lat 39°16'27", long 85°53'44", in NE¼NE¼NE¼ sec.31, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, by a cemetery on the north side of Bakalar APB 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., depth 93 ft, cased to 85 ft, screened to 90 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 654.04 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.60 ft above land-surface datum.

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

REVISED RECORDS.--WDR IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.25 ft below land-surface datum, Mar. 23, 1979; lowest, 21.15 ft below land-surface datum, Feb. 11, 12, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.61	18.98	18.92	17.59	16.82	16.34	15.71	15.25	14.93	15.64	16.59	17.36
10	18.70	18.92	18.89	16.98	16.95	16.23	15.32	15.05	15.06	15.78	16.73	17.48
15	18.77	18.92	18.85	16.68	16.95	16.18	15.10	14.81	15.18	15.93	16.82	17.61
20	18.85	18.93	18.76	16.59	16.86	16.12	15.09	14.67	15.23	16.09	16.97	17.73
25	18.92	18.94	18.56	16.57	16.60	16.06	15.15	14.67	15.35	16.24	17.09	17.84
EOM	18.99	18.95	17.98	16.71	16.49	15.98	15.28	14.79	15.49	16.44	17.24	17.95

WTR YR 1985 HIGH 14.66 MAY 22 - 24 LOW 19.01 NOV 2, 3

BARTHOLOMEW COUNTY

390950085553501. Local number, BA 8.

LOCATION.--Lat 39°09'50", long 85°55'35", in NE¼NW¼SW¼ sec.1, T.8 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, on property of Meadows Metal Products Co., 4 mi 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., depth 49 ft, casing length unknown.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 615.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.06 ft below land-surface datum, June 3, 1968; lowest, 23.17 ft below land-surface datum, Nov. 30, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.75	19.97	19.03	16.63	16.33	14.95	13.09	12.98	13.65	15.36	17.02	18.23
10	19.89	19.64	18.92	15.76	16.59	14.62	12.51	12.73	13.99	15.64	17.23	18.39
15	20.01	19.40	18.79	15.54	16.72	14.44	12.33	12.69	14.31	15.91	17.47	18.61
20	20.14	19.28	18.59	15.62	16.72	14.27	12.46	12.75	14.59	16.19	17.69	18.78
25	20.25	19.19	18.25	15.74	16.41	14.31	12.73	12.97	14.86	16.45	17.85	18.95
EOM	20.25	19.14	17.46	16.05	15.78	14.22	13.08	13.27	15.11	16.79	18.06	19.13

WTR YR 1985 HIGH 12.33 APR 15, 16 LOW 20.32 OCT 28, 29

BARTHOLOMEW COUNTY

391035085560401. Local number, BA 9.

LOCATION.--Lat 39°10'35", long 85°56'04", in SW¼NE¼SW¼ sec.35, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, at the Bartholomew County Home on the 4-H Fairgrounds, 3.0 mi south of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 115 ft, cased to 106 ft, screened to 111 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 621.58 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 1.65 ft above land-surface datum.

REMARKS.--Water level affected by pumpage from municipal supply well field.

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

REVISED RECORDS.--WDR IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.75 ft below land-surface datum, Apr. 27-30, 1973; lowest, 38.75 ft below land-surface datum, Sept. 15, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.42	30.74	29.76	27.55	26.43	25.13	22.61	22.52	23.12	24.89	26.93	28.15
10	31.07	30.64	29.64	26.80	26.60	24.75	22.12	22.51	23.33	25.00	27.17	28.44
15	30.49	30.36	29.70	26.41	26.70	24.54	22.30	22.68	23.44	25.31	27.29	28.34
20	30.83	30.24	29.47	26.19	26.73	24.14	22.45	22.46	23.70	26.03	27.26	28.60
25	30.86	29.96	28.81	26.19	26.19	23.81	22.60	22.53	24.03	26.13	27.40	28.66
EOM	31.07	29.93	28.19	26.24	25.66	23.70	22.94	22.88	24.77	26.86	27.79	28.79

WTR YR 1985 HIGH 22.06 APR 11 LOW 31.92 NOV 1

BARTHOLOMEW COUNTY

390317085523701. Local number, BA 10.

LOCATION.--Lat 39°03'17", long 85°52'37", in NE¼NE¼NE¼ sec.16, T.7 N., R.6 E., Bartholomew County, Hydrologic Unit 05120207, 0.8 mi east of State Highway 11 and 1.0 mi southeast of Jonesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 85 ft, cased to 80 ft, screened to 85 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 580 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.67 ft below land-surface datum, Apr. 14, 1979; lowest, 11.85 ft below land-surface datum, Nov. 12, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.66	9.01	8.33	4.34	8.09	5.41	4.25	3.39	7.37	8.10	9.00	9.41
10	10.54	8.85	8.52	5.95	8.41	5.30	5.15	5.81	7.56	8.44	8.75	9.54
15	10.55	8.72	7.68	6.70	7.65	4.72	5.89	5.82	7.56	8.66	8.94	9.57
20	10.54	8.90	7.49	7.22	7.49	6.05	6.40	6.18	7.87	8.88	8.95	9.83
25	10.54	8.92	5.27	7.44	2.20	6.74	6.92	6.74	8.10	9.08	9.14	9.88
EOM	10.03	8.29	3.27	7.85	3.39	2.83	7.19	7.04	8.37	9.20	9.20	10.02

WTR YR 1985 HIGH 2.20 FEB 25 LOW 10.79 OCT 6, 7

BENTON COUNTY

402851087213501. Local Number, BE 4.

LOCATION.--Lat 40°28'51", long 87°21'35", in SE¼NE¼SE¼ sec.31, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on north side of county road, 3.6 mi southeast of Boswell.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 310 ft, cased to 300 ft, screened to 305 ft.

INSTRUMENTATION.-- Water-level recorder.

DATUM.--Elevation of land-surface datum is 710 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.15 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.65 ft below land-surface datum, May 7, 1982; lowest, 16.11 ft below land-surface datum, Feb. 13, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	15.00	15.45	15.37	14.82	14.36	12.90	12.64	13.08	13.68	14.41	14.97
10	---	14.94	15.40	15.28	14.80	14.23	13.15	12.70	13.20	13.81	14.46	15.10
15	14.64	15.16	15.52	15.11	14.73	14.04	12.86	12.62	13.19	13.90	14.51	15.37
20	14.72	15.40	15.53	15.00	14.84	13.78	12.79	12.69	13.35	14.13	14.70	15.36
25	14.95	15.36	15.60	14.75	14.71	13.57	12.68	12.86	13.53	14.20	14.72	15.32
EOM	15.06	15.22	15.39	14.83	14.63	13.18	12.70	12.84	13.68	14.38	14.91	15.42

WTR YR 1985 HIGH 12.58 MAY 17 LOW 15.72 DEC 26

CASS COUNTY

403407086175701. Local number, CS 3.

LOCATION.--Lat 40°34'07", long 86°17'57", in NE¼NE¼SE¼ sec.33, T.25 N., R.2 E., Cass County, Hydrologic Unit 05120105, at intersection of State Highway 18 and County Road 400 East, 2.5 mi east of Young America. Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic Limestone of Devonian-Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 130 ft, cased to 78 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Datum is 781.74 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.65 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.85 ft below land-surface datum, Feb. 2, 1968; lowest, 8.04 ft below land-surface datum, Sept. 14, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.76	6.64	6.30	5.87	5.73	5.28	5.00	5.75	6.17	6.44	7.08	7.41
10	6.83	6.46	6.17	5.77	5.82	5.27	5.54	5.99	6.44	6.76	7.20	7.69
15	6.72	6.46	6.25	5.70	5.88	5.19	5.38	5.98	6.14	6.77	7.06	7.82
20	6.69	6.59	6.10	5.75	5.96	5.11	5.55	6.03	6.27	6.88	7.13	7.68
25	6.82	6.33	6.22	5.56	5.54	5.20	5.62	6.19	6.32	6.95	7.08	7.59
EOM	6.86	6.15	5.94	5.76	5.61	5.14	5.70	6.00	6.59	7.08	7.24	7.66

WTR YR 1985 HIGH 4.82 MAR 11 LOW 8.04 SEP 14

DECATUR COUNTY

392022085371801. Local number, DC 2.

LOCATION.--Lat 39°20'22", long 85°37'18", in SE¼NE¼SW¼ sec.3, T.10 N., R.8 E., Decatur County, Hydrologic Unit 05120206, at the intersection of County Roads 50 North and 750 West and 7.5 mi west of Greensburg. Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 49 ft, cased to 12.5 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 840.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.02 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.16 ft below land-surface datum, Dec. 10, 1966; lowest, 9.25 ft below land-surface datum, Feb. 9-11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.68	1.39	2.77	---	---	1.15	1.08	1.55	4.10	6.32	7.05	6.53
10	6.29	1.52	2.79	2.61	6.03	1.34	2.09	3.48	4.35	5.93	7.00	6.98
15	6.31	2.16	1.51	---	3.73	1.44	3.07	1.11	4.92	6.41	6.66	7.34
20	6.26	3.20	2.25	---	1.71	2.88	3.79	2.35	5.39	6.69	6.91	7.54
25	6.26	4.00	1.38	---	.86	3.99	4.30	3.85	5.76	6.90	7.23	7.55
EOM	4.57	1.53	.57	---	1.39	.53	4.73	4.06	6.09	6.90	5.89	7.64

WTR YR 1985 HIGH .36 FEB 22 LOW 7.81 OCT 7

DELAWARE COUNTY

400541085213701. Local number, DW 4.

LOCATION.--Lat 40°05'41", long 85°21'37", in SE¼NW¼SW¼ sec.9, T.19 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on property owned by Monroe Township Conservation Club, and 8.0 mi south of Muncie.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 91 ft, cased to 89 ft, screened to 91 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 1,005 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.88 ft 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, 44.49 ft below land-surface datum, Aug. 1, 1979; lowest, 49.50 ft below land-surface datum, Oct. 13, 14, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.72	48.35	48.37	47.35	48.44	46.91	46.95	47.60	48.25	48.42	48.69	48.84
10	48.63	48.40	48.45	47.76	48.51	46.98	47.26	47.81	48.29	48.46	48.72	48.77
15	48.63	48.30	48.13	47.99	48.23	46.95	47.53	47.95	48.19	48.51	48.69	48.82
20	48.64	48.41	48.15	48.15	48.38	47.39	47.67	48.04	48.28	48.56	48.73	48.87
25	48.61	48.49	48.12	48.28	44.95	47.70	47.81	48.12	48.34	48.60	48.76	48.86
EOM	48.63	48.35	47.62	48.38	46.17	46.66	47.93	48.20	48.39	48.64	48.79	48.87

WTR YR 1985 HIGH 44.69 FEB 23, 24 LOW 48.90 SEP 21

ELKHART COUNTY

413121085481301. Local number, EH 4.

LOCATION.--Lat 41°31'21", long 85°48'13", in SW¼SE¼SW¼ sec.35, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, 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., depth 62 ft, cased to 58 ft, screened to 60 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 818 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.60 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.60 ft below land-surface datum, Apr. 14, 1985; lowest, 16.18 ft below land-surface datum, Dec. 1-5, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.00	14.31	14.04	12.92	13.13	11.95	10.90	11.27	12.21	13.07	14.37	14.62
10	14.99	14.26	14.06	12.72	13.23	11.84	10.65	11.43	12.34	13.35	14.38	14.58
15	14.95	14.18	14.07	12.74	13.30	11.85	10.61	11.68	12.45	13.45	14.55	14.47
20	14.93	14.14	14.03	12.83	13.39	11.86	10.79	11.79	12.53	13.77	14.53	14.44
25	14.62	14.09	13.99	12.87	12.07	11.95	10.96	11.94	12.64	13.93	14.55	14.44
EOM	14.40	14.05	13.85	13.02	12.00	11.29	11.13	12.07	12.76	14.12	14.58	14.48

WTR YR 1985 HIGH 10.60 APR 14 LOW 15.02 OCT 6 - 8

ELKHART COUNTY

414419085544601. Local number, EH 5.

LOCATION.--Lat 41°44'19", long 85°54'46", in NW¼NE¼NE¼ sec.23, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on the inlet to Heaton Lake, and 3.5 mi east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 13 ft, cased to 11 ft, screened to 13 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 770 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.37 ft below land-surface datum, Jun. 16, 1981; lowest, 5.57 ft below land-surface datum, Jan. 28, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.71	3.48	3.41	2.41	3.35	1.99	2.08	3.15	---	4.00	4.95	5.34
10	4.45	3.33	3.46	2.81	3.41	2.17	2.08	---	---	4.18	4.99	5.17
15	4.41	3.37	3.19	3.07	3.39	2.42	2.44	---	3.48	4.24	5.01	5.35
20	4.07	3.45	3.20	3.14	3.43	2.79	2.70	---	3.56	4.48	5.03	5.45
25	3.69	3.53	3.11	3.18	1.65	2.87	2.92	---	3.67	4.60	5.10	5.48
EOM	3.60	3.38	2.83	3.25	1.61	2.09	3.07	---	3.86	4.81	5.23	5.49

WTR YR 1985 HIGH 1.60 FEB 26, 27 LOW 5.50 SEP 29, 30

ELKHART COUNTY

414351085540401. Local number, EH 6.

LOCATION.--Lat 41°43'51", long 85°54'04", in NW¼NE¼SW¼ sec.24, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on the southeast shore of Heaton Lake, and 4.0 mi east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 22 ft, cased to 20 ft, screened to 22 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 770 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.10 ft below land-surface datum, Jun. 16-19, 1981; lowest, 10.43 ft below land-surface datum, Nov. 10 to Dec. 3, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.62	8.46	8.28	6.70	7.56	6.02	5.73	6.54	7.40	8.51	---	
10	9.62	8.41	8.31	6.77	7.69	5.92	5.49	6.72	7.64	8.82	---	
15	9.59	8.23	8.15	6.98	7.74	6.04	5.72	6.91	7.78	8.99	---	
20	9.51	8.21	7.94	7.11	7.89	6.24	5.97	7.03	7.82	9.18	---	
25	8.88	8.22	7.78	7.26	6.37	6.42	6.14	7.18	8.05	9.39	---	
EOM	8.60	8.21	7.48	7.40	6.06	5.87	6.37	7.31	8.29	9.48	10.08	

WTR YR 1985 HIGH 5.49 APR 8 - 11 LOW 10.09 AUG 31

ELKHART COUNTY

414514085505001. Local number, EH 7.

LOCATION.--Lat 41°45'14", long 85°50'50", in SW¼SE¼SW¼ sec.9, T.38 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on north side of County Road 2, 200 ft east of County Road 21, and 2.7 mi northwest of Bristol.
Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 61 ft, cased to 56 ft, screened to 61 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 781 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.70 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.50 ft below land-surface datum, Feb. 24, 1985; lowest, 11.95 ft below land-surface datum, Sept. 3, 4, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.87	10.33	10.21	8.90	9.36	7.76	7.48	7.98	9.17	10.31	11.74	11.92
10	10.87	10.29	10.26	8.79	9.49	7.69	7.13	8.42	9.30	10.75	11.56	11.79
15	10.89	10.23	10.29	8.84	9.59	7.81	7.19	8.63	9.39	11.01	11.86	11.69
20	10.90	10.17	10.13	8.97	9.70	7.95	7.42	8.74	9.47	11.18	11.63	11.62
25	10.56	10.14	10.01	9.07	5.79	8.13	7.60	8.87	9.56	11.50	11.51	11.59
EOM	10.39	10.14	9.81	9.25	7.40	7.69	7.79	8.97	9.97	11.58	11.89	11.57

WTR YR 1985 HIGH 5.50 FEB 24 LOW 11.95 SEP 3, 4

ELKHART COUNTY

414446086002501. Local number, EH 8.

LOCATION.--Lat 41°44'46", long 86°00'25", in SW¼SE¼SW¼ sec.36, T.38 N., R.4 E., Elkhart County, Hydrologic Unit 04050001, 50 feet north of Bristol Street (C. R. 10), 400 feet west of intersection of Bristol Street (10), and Nappanee Street extension, in Elkhart.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 80 ft, cased to 70 ft, screened to 80 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 763.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: "V" notch filed on top of well casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--March 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.43 ft below land-surface datum, Apr. 10, 1985; lowest, 12.40 ft below land-surface datum, Sept. 30, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.54	10.97	10.84	9.25	10.00	8.06	7.78	8.83	10.23	11.01	11.62	12.13
10	11.51	10.98	10.88	9.31	10.17	7.79	7.43	9.12	10.38	11.12	11.71	12.12
15	11.48	10.88	10.81	9.49	10.28	7.99	7.70	9.38	10.54	11.21	---	12.20
20	11.41	10.89	10.67	9.61	10.37	8.16	8.04	9.62	10.64	11.33	---	12.26
25	11.05	10.87	10.52	9.68	8.56	8.47	8.35	9.84	10.77	11.46	---	12.32
EOM	10.99	10.84	10.22	9.90	8.23	7.94	8.56	9.99	10.90	11.53	12.06	12.39

WTR YR 1985 HIGH 7.43 APR 10 LOW 12.40 SEP 30

FRANKLIN COUNTY

392416085004301. Local number, FR 5.

LOCATION.--Lat 39°24'16", long 85°00'43", in SE¼NE¼NW¼ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, adjacent to property of Franklin County Conservation Club, 1.0 mi south of Brookville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 61 ft, cased to 57 ft, screened to 59 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 621.79 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of floor of shelter, 2.70 ft 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 below land-surface datum, May 24, 1968; lowest, 27.32 ft below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.61	24.38	24.92	22.08	25.54	22.27	22.73	23.44	25.53	25.84	25.98	26.54
10	26.30	24.51	24.99	23.14	25.67	22.83	23.23	24.05	25.33	25.99	26.12	26.59
15	26.32	24.66	24.17	24.09	24.99	22.50	23.86	24.30	25.22	26.03	26.31	26.67
20	26.16	24.88	24.09	24.67	24.95	23.65	24.49	24.55	25.53	26.22	26.32	26.76
25	25.84	25.21	23.52	25.11	20.78	24.46	24.91	25.04	25.66	26.19	26.32	26.81
EOM	25.29	24.58	22.35	25.41	21.72	22.09	25.16	25.27	25.85	26.18	26.47	26.85

WTR YR 1985 HIGH 20.78 FEB 25 LOW 26.85 SEP 29, 30

FULTON COUNTY

405829086175801. Local number, FU 7.

LOCATION.--Lat 40°58'29", long 86°17'58", in NW¼NW¼SW¼ sec.10, T.29 N., R.2 E., Fulton County, Hydrologic Unit 05120106, 2.5 mi northwest of Fulton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 102 ft, cased to 96 ft, screened to 102 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Datum is 776.45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.50 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.35 ft below land-surface datum, Apr. 23-27, 1973; lowest, 12.62 ft below land-surface datum, Oct. 19, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.09	11.34	9.93	8.39	9.65	7.51	7.16	8.73	9.85	10.42	11.03	11.34
10	12.12	11.01	9.96	8.60	9.80	7.44	7.12	9.04	9.98	10.46	11.10	11.54
15	11.99	10.11	9.86	8.79	9.87	7.43	7.34	9.21	9.86	10.54	10.98	11.65
20	11.92	10.11	9.63	9.05	10.03	7.72	7.74	9.41	9.77	10.65	11.00	11.69
25	11.63	10.10	9.58	9.16	8.28	8.05	8.09	9.74	9.94	10.89	11.06	11.71
EOM	11.56	9.90	9.23	9.48	7.91	7.49	8.48	9.74	10.36	11.08	11.22	11.80

WTR YR 1985 HIGH 7.05 APR 7,8 LOW 12.14 OCT 10-12.

GRANT COUNTY

402322085481901. Local number, GT 8.

LOCATION.--Lat 40°23'22", long 85°48'19", in NW¼SW¼NW¼ sec.1, T.22 N., R.6 E., Grant County, Hydrologic Unit 05120107, located on County Road 700 West right of way, and 1.0 mi northwest of Rigdon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 35 ft, cased to 20 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 880 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.10 ft 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, 1.16 ft below land-surface datum, Mar. 21, 1984: lowest, 10.66 ft below land-surface datum, Oct. 29, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.64	7.21	5.14	2.52	4.48	1.83	1.91	3.74	4.42	4.63	5.68	5.14
10	7.75	6.94	5.20	3.41	4.65	1.89	2.45	3.94	4.58	4.96	5.46	4.87
15	7.60	5.49	4.34	3.73	4.41	2.08	2.77	3.97	4.14	5.00	4.19	5.10
20	7.70	5.68	4.10	4.15	4.55	2.85	3.13	4.04	3.88	5.12	4.54	5.34
25	7.69	5.70	4.00	4.13	2.56	3.33	3.57	4.11	4.29	5.41	4.31	5.27
EOM	7.76	5.02	2.58	4.46	2.59	2.26	3.83	4.16	4.57	5.66	4.72	5.44

WTR YR 1985 HIGH 1.31 MAR 11,12 LOW 8.15 OCT 31

HAMILTON COUNTY

400000086023001. Local number, HA 5.

LOCATION.--Lat 40°00'00", long 86°02'30", in NE¼NE¼NW¼ sec.23, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on south side of 146th Street, 1.0 mi west of White River, 1.2 mi west of Allisonville Road, and 3.5 mi southwest of Noblesville.
Owner: Earlham College.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 100 ft, cased to 80 ft, screened to 85 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 755.47 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of floor of shelter, 2.76 ft 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, 8.00 ft below land-surface datum, Feb. 24, 25, 1982; lowest, 11.66 ft below land-surface datum, Sept. 19, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.87	10.57	10.04	9.36	10.17	8.82	8.66	9.14	9.95	10.31	10.66	10.86
10	10.82	10.45	10.08	9.56	10.25	8.73	8.87	9.39	10.05	10.40	10.71	10.89
15	10.83	10.22	9.95	9.73	10.01	8.66	9.00	9.45	9.93	10.48	10.67	10.94
20	10.86	10.20	9.90	9.86	10.08	8.99	9.22	9.59	10.05	10.56	10.72	10.99
25	10.81	10.24	9.86	9.98	8.58	9.25	9.43	9.74	10.15	10.63	10.78	10.93
EOM	10.82	10.07	9.71	10.09	8.62	8.84	9.52	9.84	10.24	10.66	10.81	10.98

WTR YR 1985 HIGH 8.56 FEB 26, 27 and MAR 12, 13 LOW 11.02 SEP 22, 23

HARRISON COUNTY

382323086044501. Local number, HR 8.

LOCATION.--Lat 38°23'23", long 86°04'45", in NW¼NW¼NE¼ sec.33, T.1 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on Harrison County road right of way, 2.0 mi southeast of Palmyra.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 93 ft, cased to 54 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 827 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.10 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.98 ft below land-surface datum, Apr. 2, 1979; lowest, 19.71 ft below land-surface datum, Nov. 5, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.74	16.03	8.89	2.28	7.24	4.00	3.01	8.12	4.95	6.94	---	---
10	16.05	15.23	7.97	3.17	7.86	4.01	3.97	8.91	5.12	7.99	---	---
15	16.31	14.40	4.13	4.14	3.77	2.72	4.55	8.49	3.64	9.08	---	15.28
20	16.61	12.99	4.00	5.04	3.07	3.92	5.46	8.34	5.39	10.03	---	15.63
25	16.69	12.38	2.85	5.63	2.67	4.75	6.41	7.66	6.06	10.52	---	15.96
EOM	16.87	9.50	1.76	6.77	3.45	1.03	7.42	7.85	6.67	11.22	---	16.27

WTR YR 1985 HIGH 1.03 MAR 31 LOW 16.90 NOV 1

HENDRICKS COUNTY

394025086400801. Local number, HD 4.

LOCATION.--Lat 39°40'25", long 86°40'08", in NW¼NW¼NW¼ sec.8, T.14 N., R.2 W., Hendricks County, Hydrologic Unit 05120203, at the intersection of State Highway 75 and County Road 600 South on county right of way, and 1.0 mi south of Coatesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 85 ft, cased to 70 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 860 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 1.92 ft 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 below land-surface datum, Jan. 30, 1976; lowest, 28.0 ft below land-surface datum, January 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.28	23.96	20.86	20.13	22.14	20.39	19.68	21.22	22.24	22.19	23.24	22.98
10	25.38	23.47	20.96	20.87	22.37	20.14	20.18	21.41	22.37	22.43	22.98	23.06
15	25.30	22.12	20.77	21.05	22.01	20.14	20.42	21.53	22.04	22.51	23.03	23.44
20	25.32	21.62	20.48	21.33	21.91	20.38	20.68	21.52	21.78	22.85	23.01	23.61
25	25.16	21.47	20.46	21.56	---	20.83	21.10	21.81	21.79	23.05	23.08	23.74
EOM	24.88	21.14	20.20	21.97	20.70	20.12	21.53	22.06	22.12	23.25	23.32	23.85

WTR YR 1985 HIGH 19.68 APR 5 LOW 25.61 OCT 17

JASPER COUNTY

410249087011201. Local number, JP 4.

LOCATION.--Lat 41°02'49", long 87°01'12", in SW¼NE¼SW¼ sec.17, T.30 N., R.5 W., Jasper County, Hydrologic Unit 07120002, on property of William Gehring, Inc., 0.9 mi east of Newland.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in., depth 300 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Datum is 676.93 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 0.00 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.95 ft below land-surface datum, Apr. 9, 1962; lowest, 40.17 ft below land-surface datum, July 25, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.42	6.16	4.87	3.61	3.08	2.55	2.05	3.04	4.79	8.83	7.46	5.27
10	8.18	5.83	4.66	3.49	3.20	2.41	2.30	5.29	6.73	9.25	6.97	5.24
15	7.31	5.61	4.66	3.43	3.15	2.49	2.14	4.22	6.71	9.16	6.73	5.24
20	6.97	5.68	4.50	3.15	3.26	2.39	2.32	3.74	5.87	8.05	6.12	5.16
25	6.67	5.19	4.49	3.08	2.87	2.53	2.45	3.96	5.16	8.88	5.68	5.05
EOM	6.45	4.94	3.89	3.23	2.64	2.17	2.60	3.72	9.11	7.96	5.45	5.03

WTR YR 1985 HIGH 2.05 APR 5 LOW 10.77 JUL 13

JASPER COUNTY

410809087580801. Local number, JP 7.

LOCATION.--Lat 41°08'10", long 86°58'08", in SE¼SE¼NE¼ sec.15, T.31 N., R.5 W., Jasper County, Hydrologic Unit 07120002, in northwest corner of intersection of County Roads 850N and 400E, 4.0 mi south of Tefft.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Middle Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 130 ft, cased to 94 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Datum is 699.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.75 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--May 1967 to current year. (Semi-annual tape-down readings only September 1971 to May 1978).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.04 ft below land-surface datum, Apr. 5, 1985; lowest, 16.04 ft below land-surface datum, Sept. 6, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.46	8.64	7.75	7.10	6.91	6.58	6.04	6.69	7.63	10.94	12.68	
10	10.16	8.30	7.56	7.17	7.02	6.55	6.58	7.65	7.63	12.80	11.65	
15	9.51	8.12	7.67	7.13	7.13	6.69	6.37	9.17	7.40	12.72	10.80	
20	9.37	8.39	7.54	7.19	7.22	6.60	6.55	8.39	7.55	12.13	10.45	
25	9.16	7.90	7.75	6.81	6.89	6.72	6.64	7.87	7.65	13.59	---	
EOM	9.00	7.62	7.14	7.08	6.71	6.15	6.74	7.40	8.39	14.64	---	

WTR YR 1985 HIGH 6.04 APR 5 LOW 14.82 JUL 30

JASPER COUNTY

410535087035801. Local number, JP 8.

LOCATION.--Lat 41°05'35", long 87°03'58", in NE¼NE¼SE¼ sec.35, T.31 N., R.6 W., Jasper County, Hydrologic Unit 07120002, 1.7 miles north of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 12 in., depth 310 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 686 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Lower lip of 2 in. tapedown pipe, 2.10 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--May 1978 to current year. Record prior to Oct. 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.77 ft below land-surface datum, May 3, 4, 1983; lowest, 25.11 ft below land-surface datum, July 26, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.16	12.44	11.80	10.76	10.59	9.72	9.40	10.12	10.77	12.86	14.61	
10	13.04	12.24	11.67	10.71	10.62	9.78	9.49	10.32	10.87	13.29	13.84	
15	12.77	12.11	11.62	10.62	10.62	9.65	9.53	10.40	10.89	---	---	
20	12.65	12.14	11.52	10.67	10.73	9.69	9.71	10.46	11.00	15.53	---	
25	12.61	11.98	11.45	10.55	10.06	9.78	9.85	10.63	11.15	16.09	---	
EOM	12.66	11.76	11.10	10.59	9.94	9.53	10.06	10.59	12.13	14.61	---	

WTR YR 1985 HIGH 9.40 APR 5,6 LOW 19.08 JUL 25

JASPER COUNTY

410713087063201. Local number, JP 9.

LOCATION.--Lat 41°07'13", long 87°06'32", in NE¼SW¼SE¼ sec.21, T.31 N., R.6 W., Jasper County, Hydrologic Unit 07120002, 4.4 miles northwest of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Silurian Limestone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 18 in., depth 260 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 685 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Lower lip of 2 in. tapedown pipe, 2.10 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--July 1978 to current year. Record prior to Oct. 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.18 ft below land-surface datum, Apr. 3, 1982; lowest, 30.25 ft below land-surface datum, July 28, Aug. 12, 13, 14, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.42	8.00	7.12	---	6.07	5.04	4.47	5.29	6.11	22.42	14.43	8.37
10	9.22	7.69	6.94	6.06	6.13	5.01	4.75	5.50	6.18	26.76	12.11	8.29
15	8.82	7.57	6.98	5.91	6.14	4.88	4.68	5.59	6.30	21.60	10.77	8.34
20	8.70	7.60	---	5.97	6.29	4.86	4.87	5.73	6.40	22.07	9.71	8.21
25	8.64	7.29	---	5.83	5.72	4.89	4.98	5.90	6.54	24.57	9.03	8.10
EOM	8.28	7.07	---	6.05	5.46	4.58	5.22	5.81	16.01	21.47	8.63	8.07

WTR YR 1985 HIGH 4.47 APR 5 LOW 29.19 JUL 13

JASPER COUNTY

410322087163101. Local number, JP 11.

LOCATION.--Lat 41°03'22", long 87°16'31", in NW¼NW¼NW¼ sec.18, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on Prudential Life Insurance Company of America property, 3.2 mi north of State Highway 14, and 1.5 mi southwest of Fair Oaks.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in., depth 630 ft, cased to 63 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 680 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.50 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.04 ft above land-surface datum, Apr. 3, 1982; lowest, 51.48 ft below land-surface datum, July 20, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.46	7.06	5.23	3.76	3.23	2.10	1.39	2.08	7.15	45.90	26.55	
10	9.79	6.56	5.00	3.69	3.22	1.92	1.61	2.87	7.26	42.50	23.56	
15	8.97	6.18	4.83	3.56	3.20	1.85	1.53	6.91	9.21	38.03	---	
20	8.47	6.17	4.65	3.56	3.18	1.84	1.70	4.60	10.95	39.08	---	
25	8.07	5.68	4.57	3.26	2.79	1.92	1.80	15.90	17.22	22.43	---	
EOM	7.57	5.31	3.96	3.35	2.47	1.52	1.93	6.56	37.55	40.43	---	

WTR YR 1985 HIGH 1.39 APR 5 LOW 48.58 JUL 6,7

JASPER COUNTY

410145087130401. Local number, JP 12.

LOCATION.--Lat 41°01'45", long 87°13'04", in NW¼SW¼SW¼ sec.22, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, in Old Union Township school yard, 200 ft east of County Road 900 West, 750 ft north of State Highway 14, and in Parr.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone/Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 150 ft, cased to 103 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 695 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of well casing, 2.6 ft(revised) above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.-- May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.08 ft below land-surface datum, May 22, 1983; lowest, 48.02 ft below land-surface datum, July 21, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.16	22.04		---		---	15.56	15.62	22.56	---	41.18	---
10	25.29	21.45		17.35		---	15.48	15.89	23.29	45.55	35.67	---
15	24.28	21.13		16.51		16.08	15.27	17.47	24.11	43.76	32.24	---
20	23.63	21.03		---		15.86	15.37	17.52	24.15	44.61	30.00	---
25	23.13	20.45		---		15.84	15.42	26.64	28.03	37.81	28.30	---
EOM	22.53	20.21		---		15.56	15.54	21.63	30.08	43.87	28.67	25.88

WTR YR 1985 HIGH 15.27 APR 15 LOW 47.44 JUL 17

JASPER COUNTY

405902087141501. Local number, JP 13.

LOCATION.--Lat 40°59'02", long 87°14'15", in NW¼NW¼NW¼ sec.9, T.29 N., R.7 W., Jasper County, Hydrologic Unit 07120002, at southwest corner of North Newton school, and 4.6 mi northwest of Rensselaer.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 150 ft, cased to 106 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 700 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of well casing, 3.4 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--March 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.98 ft below land-surface datum, Apr. 3, 1982; lowest, 51.90 ft below land-surface datum, Aug. 4, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.74	31.78	29.17	27.23	25.78	25.13	23.69	23.70	29.61	43.45	49.33	41.77
10	35.68	31.08	28.79	26.99	25.72	24.84	23.96	23.92	30.01	47.36	46.21	42.18
15	34.52	30.71	28.54	26.76	25.66	24.81	23.70	24.66	30.56	49.68	43.30	40.26
20	33.69	30.59	28.24	26.52	25.64	24.53	23.75	25.20	30.06	50.98	41.06	38.59
25	33.10	29.91	28.15	26.05	25.50	24.44	23.72	28.06	31.95	47.74	39.16	37.00
EOM	32.37	29.39	27.33	26.04	25.35	23.89	23.74	28.92	37.95	50.19	40.58	35.98

WTR YR 1985 HIGH 23.64 APR 24 LOW 51.20 JUL 19

JEFFERSON COUNTY

384949085251901. Local number, JF 5.

LOCATION.--Lat 38°49'49", long 85°25'19", in SE¼NW¼SW¼ sec. 33, T.5 N., R.10 E., Jefferson County, Hydrologic Unit 05120207, on Jefferson Proving Ground, 500 ft north of Airfield Road, 1,000 ft southwest of the watertower, and 2.2 mi west of main gate.
Owner: U.S. Army

AQUIFER.--Limestone, Dolomite, and shale of Silurian and Ordovician Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 200 ft, cased to 33 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 855 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

REMARKS.--This well was drilled on a mapped fracture trace.

PERIOD OF RECORD.--March 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.17 ft below land-surface datum, Dec. 28, 1982; lowest, 8.54 ft below land-surface datum, Oct. 9, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.39	5.56	3.96	3.34	3.92	4.15	3.99	4.88	5.72	5.61	6.06	5.95
10	7.29	4.94	3.83	3.34	4.13	4.10	4.36	5.04	5.82	5.61	5.96	5.94
15	6.95	4.73	3.89	3.48	4.20	4.17	4.17	5.14	5.61	5.72	5.93	6.16
20	6.89	4.77	3.68	3.70	4.20	4.07	4.38	5.24	5.61	5.92	6.06	6.24
25	6.64	4.28	3.81	3.56	4.16	4.32	4.56	5.34	5.60	6.09	5.97	6.23
EOM	6.16	3.97	3.38	3.88	4.15	4.15	4.84	5.40	5.69	6.20	6.07	6.43

WTR YR 1985 HIGH 3.19 JAN 4, 14 LOW 7.53 OCT 2, 6

JENNINGS COUNTY

385601085365701. Local number, JN 3.

LOCATION.--Lat 38°56'01", long 85°36'57", in SE¼SW¼NE¼ sec.27, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, 200 ft west of State Highway 3, 1.6 mi south of Crosley Fish and Game Office and 3.0 mi south of Vernon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestones and dolomites of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 180 ft, cased to 45 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 718 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.64 ft below land-surface datum, Jan. 21, 1979; lowest, 40.52 ft below land-surface datum, Sept. 18, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.45	38.67	38.61	38.16	38.63	38.43	37.99	38.68	39.03	39.20	39.12	38.94
10	39.31	38.52	38.52	38.37	38.71	38.35	38.48	38.87	39.00	39.32	38.84	39.12
15	39.11	38.72	38.52	38.52	38.50	38.40	38.34	38.79	38.90	39.48	39.03	39.43
20	39.21	38.93	38.47	38.71	38.51	38.53	38.51	38.75	39.05	39.61	39.11	39.41
25	39.28	38.72	38.47	38.48	38.30	38.60	38.68	38.89	39.27	39.65	39.00	39.27
EOM	39.16	38.36	38.17	38.63	38.33	38.06	38.89	38.90	39.36	39.35	38.88	39.51

WTR YR 1985 HIGH 37.99 APR 5 LOW 39.70 JUL 17 - 19

KNOX COUNTY

383247087361001. Local number, KN 7.

LOCATION.--Lat 38°32'47", long 87°36'10", in SE¼SE¼NW¼ sec.2, T.1 N., R.11 W., Knox County, Hydrologic Unit 05120113, in the right of way of Sixth Street Road, 9.8 mi south of Vincennes.
Owner: Michael J. Kelley.

AQUIFER.--Sand and Gravel Quaternary Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 43 ft, cased to 16 ft, slotted to 19 ft, open end.

INSTRUMENTATION.--Water-level recorder. Prior to April 1968, handtaped monthly.

DATUM.--Elevation of land-surface datum is 405 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.42 ft 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, 2.57 ft below land-surface datum, May 3, 1983; lowest, 11.35 ft below land-surface datum, Feb. 1-13, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.76	6.46	8.52	7.72	9.67	6.91	4.56	6.40	9.10	9.67	10.31	10.42
10	10.77	7.88	8.85	8.51	9.74	7.85	5.58	8.02	9.19	9.82	10.30	10.45
15	10.71	8.26	8.22	8.77	9.18	8.28	7.00	8.44	9.17	9.95	10.23	10.50
20	10.56	8.58	8.65	9.10	9.09	8.68	8.05	8.74	9.39	10.05	10.28	10.53
25	9.78	8.86	7.56	9.29	5.03	8.98	8.51	8.73	9.58	10.14	10.35	10.50
EOM	8.94	7.44	6.99	9.53	5.97	3.77	8.87	9.03	9.53	10.24	10.40	10.53

WTR YR 1985 HIGH 3.74 APR 1 LOW 10.77 OCT 5-13

KOSCIUSKO COUNTY

411839085451601. Local number, KO 4.

LOCATION.--Lat 41°18'39", long 85°45'16", in NE¼SW¼SE¼ sec.18, T.33 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106, on the county right of way of Armstrong Road, and 2.0 mi east of Oswego.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 22 ft, cased to 20 ft, screened to 22 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 852 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.42 ft below land-surface datum, Mar. 24-26, 1982; lowest, 12.96 ft below land-surface datum, Dec. 19-24, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.49	12.34	12.22	11.23	11.70	10.00	9.83	10.78	11.57	11.99	12.07	11.99
10	12.41	12.37	12.24	11.01	11.81	9.89	9.61	11.05	11.70	11.98	12.07	11.98
15	12.40	12.28	12.22	11.05	11.86	10.03	9.69	11.19	11.77	11.98	12.00	12.00
20	12.39	12.23	12.13	11.18	11.95	10.23	9.99	11.30	11.81	12.00	11.99	12.02
25	12.28	12.22	12.08	11.32	10.77	10.44	10.23	11.41	11.88	12.02	11.97	12.05
EOM	12.32	12.21	11.99	11.53	10.37	10.19	10.54	11.47	11.98	12.07	11.96	12.05

WTR YR 1985 HIGH 9.61 APR 10 - 12 LOW 12.50 OCT 5 - 7
P

KOSCIUSKO COUNTY

412554085450001. Local number, KO 6.

LOCATION.--Lat 41°25'54", long 85°45'00", in NW¼SW¼NW¼ sec.5, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, west end of North Shore Drive and Lakeview Park in Syracuse, Indiana.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 23 ft, cased to 20 ft, screened to 23 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.94 ft below land-surface datum, Apr. 15, 16, 1985; lowest, 10.64 ft below land-surface datum, Feb. 9, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.72	9.41	9.46	8.84	9.03	8.09	7.04	7.35	7.79	8.18	8.78	9.03
10	9.62	9.35	9.49	8.81	9.09	8.00	6.98	7.47	7.89	8.29	8.83	9.06
15	9.61	9.31	9.39	8.80	9.06	7.94	6.94	7.55	7.94	8.39	8.86	9.15
20	9.59	9.38	9.36	8.86	9.13	7.98	7.02	7.63	7.92	8.53	8.88	9.20
25	9.43	9.42	9.30	8.87	8.38	7.97	7.08	7.68	8.02	8.64	8.91	9.23
EOM	9.46	9.39	9.12	8.94	8.30	7.29	7.23	7.69	8.12	8.71	8.97	9.26

WTR YR 1985 HIGH 6.94 APR 15, 16 LOW 9.73 OCT 5 - 7

KOSCIUSKO COUNTY

412510085442801. Local number, KO 7.

LOCATION.--Lat 41°25'10", long 85°44'28", in SE¼NE¼NW¼ sec.8, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, 20 ft north of the intersection of Chicago Avenue and County Road 530 East in Syracuse.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 23.8 ft, cased to 20.8 ft, screened to 23.8 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.86 ft below land-surface datum, Mar. 16, 1982; lowest, 5.63 ft below land-surface datum, Sept. 18, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.90	4.06	4.33	3.16	4.53	2.55	2.55	4.00	4.60	4.87	5.12	5.21
10	4.48	3.89	4.50	3.70	4.62	2.79	2.55	4.18	4.79	4.91	5.22	5.10
15	4.51	3.91	4.24	4.03	4.59	3.03	2.70	4.34	4.61	4.96	5.13	5.17
20	4.29	4.18	4.26	4.21	4.64	3.30	3.10	4.44	4.44	5.05	5.09	5.27
25	4.04	4.37	4.10	4.36	2.55	3.54	3.30	4.62	4.71	5.13	5.08	5.11
EOM	4.23	4.16	3.81	4.43	2.59	2.55	3.75	4.39	4.85	5.15	5.14	5.16

WTR YR 1985 HIGH 2.55 FEB 23 - 27, MAR 4 - 6, 28 - APR 11 LOW 5.28 AUG 13, SEP 20 - 23

KOSCIUSKO COUNTY

412404085442501. Local number, KO 8.

LOCATION.--Lat 41°24'04", long 85°44'25", in SE¼SE¼NW¼ sec.17, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, 0.5 mi south of County Road 1200 North on west side of State Highway 13, and 1.7 mi south of Syracuse.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 27.8 ft, cased to 24 ft, screened to 27 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 863 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.80 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.90 ft below land-surface datum, Mar. 14, 1982; lowest, 6.30 ft below land-surface datum, Sept. 14-16, 18, 19, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.58	4.75	4.67	3.64	4.74	3.00	2.65	4.50	4.84	5.07	5.90	6.06
10	5.21	4.51	4.75	4.10	4.78	3.51	3.06	4.66	5.06	5.12	5.98	5.94
15	5.17	4.44	4.44	4.33	4.69	3.68	3.50	4.81	4.94	5.15	5.90	5.99
20	5.00	4.66	4.48	4.52	4.74	3.91	3.85	4.84	4.83	5.39	5.86	6.12
25	4.71	4.79	4.36	4.57	2.67	4.07	4.05	4.88	4.92	5.73	5.91	5.94
EOM	4.87	4.52	4.00	4.68	3.09	2.46	4.28	4.70	5.03	5.90	5.94	5.94

WTR YR 1985 HIGH 2.27 MAR 29 LOW 6.15 SEP 21 - 23

KOSCIUSKO COUNTY

412556085513401. Local number, KO 9.

LOCATION.--Lat 41°25'56", long 85°51'34", in SW¼NE¼NW¼ sec.5, T.34 N., R.6 E., Kosciusko County, Hydrologic Unit 04050001, on the north edge of property owned by the Dome Pipeline Corporation, on County Road 50 West, 1.5 miles northwest of Milford.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 4 in., depth 102 ft, cased to 99 ft, screened to 102 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 830.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.2 ft above land-surface datum.

PERIOD OF RECORD.--October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.24 ft below land-surface datum, April 8, 9, 1985; lowest, 13.82 ft below land-surface datum, Nov. 27, 28, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.68	13.02	12.38	10.49	10.86	9.46	7.44	8.76	10.42	11.53	13.00	13.37
10	13.70	12.89	12.35	10.31	10.99	9.18	7.25	9.07	10.60	11.82	13.06	13.43
15	13.68	12.73	12.31	10.29	11.03	9.18	7.55	9.38	10.80	12.06	13.17	13.47
20	13.64	12.59	12.20	10.43	11.23	9.22	7.89	9.65	10.89	12.37	13.22	13.52
25	13.37	12.48	12.01	10.53	9.87	9.43	8.17	9.93	11.03	12.67	13.27	13.56
EOM	13.16	12.41	11.67	10.71	9.63	7.67	8.47	10.19	11.26	12.88	13.33	13.61

WTR YR 1985 HIGH 7.24 APR 8, 9 LOW 13.70 OCT 6 - 14

LAGRANGE COUNTY

414318085200601. Local number, LG 2.

LOCATION.--Lat 41°43'18", long 85°20'06", in SW¼SE¼NE¼ sec. 26, T.38 N., R.10 E., Lagrange County, Hydrologic Unit 04050001, on northeast corner of intersection of State Highway 120 and County Road 475 East, and 1.2 mi west of Brighton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 86 ft, cased to 80 ft, screened to 86 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 911.02 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.99 ft below land surface datum, Apr. 3, 1982; lowest, 16.03 ft below land surface datum, Aug. 31, 1984

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.75	15.49	15.19	14.58	14.04	12.87	12.35	11.77	12.59	13.37	14.32	14.43
10	15.74	15.42	15.16	14.34	14.08	12.81	12.08	11.99	12.74	13.63	14.29	14.45
15	15.73	15.37	15.15	14.22	14.10	12.76	11.88	12.13	12.72	13.71	14.35	14.48
20	15.73	15.34	15.14	14.11	14.17	12.72	11.79	12.16	12.78	13.97	14.35	14.51
25	15.71	15.28	15.13	14.06	12.90	12.72	11.74	12.38	12.85	14.24	14.35	14.52
EOM	15.59	15.22	15.10	14.05	12.94	12.59	11.74	12.36	13.17	14.15	14.39	14.56

WTR YR 1985 HIGH 11.74 APR 24 - 27, 30 LOW 15.76 OCT 1

LAGRANGE COUNTY

414158085253401. Local number, LG 3.

LOCATION.--Lat 41°41'58", long 85°25'34", in SE¼SE¼SE¼ sec.36, T.38 N., R.9 E., Lagrange County, Hydrologic Unit 04050001, at northwest corner of intersection of State Highway 9 and County Road 400 North, at edge of woods, and 1.4 mi south of Howe.
Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in; depth 40 ft, cased to 35 ft, screened to 40 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.7 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.48 ft below land-surface datum, Mar. 21, 1982; lowest, 8.56 ft below land-surface datum, Nov. 27, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.98	7.22	7.13	---		---	4.08	5.76	6.80	7.39	7.95	8.09
10	7.87	7.21	7.18	---		---	4.11	5.97	6.93	7.50	7.96	8.02
15	7.79	7.04	7.13	---		---	4.55	6.18	7.02	7.59	7.93	8.05
20	7.73	7.00	7.05	---		---	4.95	6.36	7.07	7.68	7.93	8.10
25	7.36	7.04	6.90	---		5.45	5.26	6.54	7.15	7.80	8.00	8.08
EOM	7.28	7.05	6.68	---		4.29	5.54	6.67	7.27	7.88	8.03	8.12

WTR YR 1985 HIGH 3.90 APR 7 LOW 8.19 SEP 27

LAKE COUNTY

411038087284701. Local number, LK 12.

LOCATION.--Lat 41°10'38", long 87°28'47", in SW¼NE¼SW¼ sec.32, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on the northern edge of Kankakee River State Park, 2.0 mi southwest of Schneider.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 82 ft, cased to 52 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 630.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.55 ft(revised) 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 below land-surface datum, Jan. 12, 1973; lowest, 16.41 ft below land-surface datum, Aug. 29, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.21	7.28	5.77	4.40	4.16	2.69	2.09	2.69	3.54	7.98	15.58	14.17
10	9.51	6.89	5.68	4.28	4.12	2.55	2.04	2.86	3.70	10.24	15.46	13.26
15	8.95	6.55	5.51	4.22	4.09	2.47	1.96	3.06	3.76	11.87	15.31	12.30
20	8.45	6.44	5.31	4.21	4.11	2.47	2.10	3.12	3.85	13.28	13.93	11.53
25	8.07	6.25	5.12	4.16	3.20	2.56	2.26	3.25	3.94	14.60	13.96	10.83
EOM	7.67	5.93	4.85	4.16	2.97	2.24	2.51	3.35	5.32	15.82	14.59	10.28

WTR YR 1985 HIGH 1.96 APR 15 LOW 16.20 JUL 30

LA PORTE COUNTY

413700086445401. Local number, LP 8.

LOCATION.--Lat 41°37'00", long 86°44'54", in NE¼SE¼NW¼ sec.34, T.37 N., R.3 W., La Porte County, 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 3.0 in., depth 22 ft, cased to 20 ft, screened to 22 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 802.79 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.70 ft(revised) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.84 ft below land-surface datum, May 24, 25, 1983; lowest, 7.04 ft below land-surface datum, Mar. 8-11, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.02	4.70	4.74	4.35	4.42	3.29	2.67	3.75	4.04	4.28	4.25	4.47
10	4.89	3.88	4.75	4.44	4.44	3.36	3.42	3.81	4.21	3.71	4.55	4.17
15	4.56	4.59	4.53	4.51	4.39	3.54	3.39	3.82	3.26	4.22	3.64	4.44
20	4.16	4.74	4.59	4.46	4.38	3.58	3.51	3.92	4.07	4.38	4.41	4.56
25	4.78	4.75	4.66	4.42	3.45	3.65	3.59	3.99	4.14	4.40	3.84	4.58
EOM	4.63	4.65	3.76	4.45	3.65	3.31	3.68	3.97	4.24	4.01	4.38	4.47

WTR YR 1985 HIGH 2.67 APR 5 LOW 5.05 OCT 5,6

LA PORTE COUNTY

412350086512801. Local number, LP 9.

LOCATION.--Lat 41°23'50", long 86°51'28", in SE¼SW¼NE¼ sec.15, T.34 N., R.4 W., La Porte County, Hydrologic Unit 07120001, at the intersection of County Roads 1450 South and 825 West, 3.0 mi southeast of Wanatah.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 32 ft, cased to 27 ft, screened to 32 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 706.81 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 1.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.56 ft below land-surface datum, Apr. 5, 1985; lowest, 8.01 ft below land-surface datum, Dec. 6, 7, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.74	7.55	6.97	4.74	5.87	2.32	1.56	4.04	5.58	6.49	7.59	7.83
10	7.78	7.46	6.95	4.89	6.04	2.94	2.04	4.34	5.75	6.69	7.66	7.91
15	7.81	7.18	6.86	5.17	6.15	3.33	2.61	4.63	5.89	6.88	7.69	7.87
20	7.83	7.07	6.67	5.38	6.28	3.69	3.17	4.88	6.04	7.09	7.74	7.90
25	7.75	7.02	6.32	5.47	3.03	4.02	3.45	5.10	6.16	7.28	7.76	7.93
EOM	7.73	6.98	5.91	5.75	2.96	1.68	3.81	5.35	6.34	7.48	7.80	7.96

WTR YR 1985 HIGH 1.56 APR 5 LOW 7.96 SEP 29, 30.

LA PORTE COUNTY

413139086341401. Local number, LP 10.

LOCATION.--Lat 41°31'40", long 86°34'10", in SE¼SW¼NE¼ sec. 31, T.36 N., R.1 W., La Porte County, Hydrologic Unit 07120001, 200 ft north of the Mixsawbah Fish Hatchery Manager's residence and 2.6 mi southeast of Stillwell. Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 104 ft, cased to 102 ft, screened to 104 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 695 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--August 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.88 ft below land-surface datum, Feb 24, 1985; lowest, 9.53 ft below land-surface datum, Sep 30, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.17	8.40	7.66	4.82	7.09	3.32	3.79	7.43	8.30	8.82	9.14	9.41
10	9.10	8.29	7.63	5.80	7.26	4.47	4.59	7.65	8.43	8.87	9.20	9.36
15	8.98	8.07	7.15	6.41	7.41	5.20	5.38	7.82	8.49	8.92	9.24	9.37
20	8.85	8.07	7.05	6.68	7.48	5.74	6.37	7.94	8.56	9.00	9.28	9.45
25	8.62	8.04	6.75	6.70	3.07	6.30	6.92	8.08	8.65	9.07	9.32	9.49
EOM	8.56	7.83	5.51	7.01	3.53	3.64	7.23	8.18	8.74	9.11	9.36	9.52

WTR YR 1985 HIGH 2.88 FEB 24 LOW 9.53 SEP 30

LA PORTE COUNTY

412839086533101. Local number, LP 11.

LOCATION.--Lat 41°28'39", long 86°53'31", in SW¼SW¼SW¼ sec.16, T.35 N., R.4 W., La Porte County, Hydrologic Unit 07120001, in the northeast corner of intersection of U.S. Highway 421 and County Road 900 South. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 100 ft, cased to 95 ft, screened to 100 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 4.1 ft above land- surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.52 ft below land-surface datum, July 2, 1983; lowest, 9.11 ft below land surface datum, Nov. 13, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.71	7.76	7.33	5.23	6.12	4.67	3.85	4.63	5.58	6.39	7.43	8.30
10	7.87	7.61	7.35	5.35	6.32	4.70	3.77	4.79	5.75	6.57	7.61	8.33
15	7.95	7.16	7.33	5.55	6.46	4.72	3.89	4.93	5.84	6.70	7.62	8.51
20	8.01	7.16	6.97	5.71	6.59	4.76	4.13	5.09	6.00	6.90	7.82	8.63
25	7.90	7.18	6.54	5.76	5.14	4.96	4.32	5.25	6.14	7.06	7.96	8.74
EOM	7.96	7.23	5.98	6.01	5.12	4.02	4.48	5.39	6.28	7.26	8.17	8.86

WTR YR 1985 HIGH 3.77 APR 10 LOW 8.90 SEP 30

LA PORTE COUNTY

413434086434701. Local number, LP 12.

LOCATION.--Lat 41°34'34", long 86°43'47", in NE¼NE¼NW¼ sec.14, T.36 N., R.3 W., La Porte County, Hydrologic Unit 07120001, on County Road 150 West, at La Porte Municipal Airport, 1.6 mi south of La Porte.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 77 ft, cased to 71 ft, screened to 77 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 805 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.70 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.59 ft below land-surface datum, May 29, 30, 31, 1983, lowest, 20.46 ft below land-surface datum, Feb. 15,16, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.59	20.02		---	19.64	18.92	17.48	17.32	17.82	18.43	19.10	19.62
10	19.68	20.07		20.18	19.67	18.29	17.58	17.36	17.89	18.58	19.17	19.71
15	19.72	20.13		19.97	19.72	17.89	17.48	17.42	17.99	18.73	19.28	19.81
20	19.81	20.17		19.79	19.82	17.71	17.41	17.52	18.10	18.83	19.40	19.86
25	19.89	---		19.68	19.59	17.66	17.36	17.62	18.19	18.90	19.45	19.93
EOM	19.97	---		19.65	19.38	17.51	17.34	17.67	18.27	19.04	19.55	19.99

WTR YR 1985 HIGH 17.31 MAY 6 LOW 20.26 NOV 16

MARION COUNTY

395218086082701. Local number, MA 32.

LOCATION.--Lat 39°52'18", long 86°08'27", in NE¼SW¼SW¼ sec.36, T.17 N., R.3 E., Marion County, Hydrologic Unit 05120201, at Indianapolis Water Company station on Westfield Boulevard in Broad Ripple, City of Indianapolis.
Owner: Indianapolis Water Company.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 10 in., depth 308 ft, cased to 60 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 719.78 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.15 ft 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 below land-surface datum, June 17, 1958; lowest, 15.15 ft below land-surface datum, Oct. 5, 1965.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.09	9.73	9.75	9.10	9.87	8.15	8.37	9.13	9.66	10.02	10.14	10.07
10	9.96	9.66	9.76	9.42	9.91	8.19	8.62	9.40	9.81	10.16	10.05	10.02
15	9.99	9.53	9.33	9.64	9.77	8.18	8.83	9.37	9.55	10.12	9.90	9.95
20	9.99	9.76	9.52	9.80	9.76	8.66	9.12	9.42	9.71	10.17	9.91	10.13
25	9.98	9.81	9.61	9.73	6.65	9.13	9.24	9.54	9.87	10.40	10.01	9.95
EOM	10.04	9.52	9.00	9.80	7.50	8.38	9.33	9.55	9.98	10.27	9.98	10.03

WTR YR 1985 HIGH 6.65 FEB 25, 26 LOW 11.33 JUL 31

MARION COUNTY

395259086030101. Local number, MA 33.

LOCATION.--Lat 39°52'59", long 86°03'01", in NW¼NW¼NW¼ sec. 35, T.17 N., R.4 E., Marion County, Hydrologic Unit 05120201, in the northwest corner of Skiles Test Elementary School property, 150 ft south of the intersection of Johnson Road and East 71st Street, 0.3 mi west of Shadeland Avenue, and 1.5 mi south of Castleton. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 94 ft, cased to 89 ft, screened to 94 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 812.20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.90 ft above land-surface datum.

PERIOD OF RECORD.--May 12, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.75 ft below land-surface datum, Apr. 15, 1980; lowest, 75.29 ft below land-surface datum, Dec. 17, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.50	74.17	74.31	73.92	73.82	73.43	72.66	73.30	73.67	73.70	74.04	74.03
10	74.68	73.95	74.07	74.07	73.90	73.62	73.69	73.31	73.59	73.78	73.99	74.14
15	74.07	74.28	74.56	74.00	74.01	73.71	73.11	73.21	73.39	73.91	74.01	74.49
20	74.16	74.80	74.26	74.12	74.22	73.46	73.33	73.29	73.60	74.05	74.17	74.28
25	74.63	74.22	74.69	73.63	73.95	73.61	73.31	73.36	73.75	73.98	73.90	74.02
EOM	74.60	73.95	73.81	73.95	73.70	73.03	73.39	73.15	73.83	74.00	74.12	74.27

WTR YR 1985 HIGH 72.66 APR 5 LOW 75.14 NOV 21

MARTIN COUNTY

383659086545901. Local number, MT 5.

LOCATION.--Lat 38°36'59", long 86°54'59", in SE¼NE¼SW¼ sec.12, T.2 N., R.5 W., Martin County, Hydrologic Unit 05120208, on private property 0.25 mi southwest of Whitfield. Owner: Joseph Arvin.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 143 ft, cased to 53 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 565 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.8 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.91 ft below land-surface datum, Apr. 14, 1980; lowest, 34.10 ft 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 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.33	27.48	27.67	27.17	26.57	26.45	25.36	25.73	25.61	25.44	25.95	26.34
10	27.52	27.23	27.36	27.20	26.65	26.51	26.19	25.72	25.60	25.48	25.98	26.40
15	27.09	27.68	27.70	27.19	26.74	26.60	25.74	25.55	25.48	25.60	26.04	26.89
20	27.19	28.09	27.43	27.11	26.86	26.34	25.93	25.56	25.62	25.73	26.26	26.78
25	27.72	27.70	27.77	26.46	26.75	26.25	25.79	25.60	25.66	25.70	26.10	26.50
EOM	27.77	27.35	27.01	26.61	26.66	25.65	25.79	25.31	25.66	25.84	26.31	26.81

WTR YR 1985 HIGH 25.30 MAY 17 LOW 28.39 NOV 21, 22

MONTGOMERY COUNTY

400247086482101. Local number, MY 7.

LOCATION.--Lat 40°02'47", long 86°48'21", in NE¼NW¼SW¼ sec.31, T.19 N., R.3 W., Montgomery County, Hydrologic Unit 05120110, on the county right of way at the intersection of State Highway 32 and County Road 525 East, and 4.5 mi east of Crawfordsville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 111 ft, cased to 107 ft, screened to 109 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 801 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.38 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.10 ft below land-surface datum, Apr. 13, 1974; lowest, 32.06 ft below land-surface datum, June 4, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.50	30.39		29.13	29.01	28.25	27.06	27.83	28.76	29.33	30.14	30.24
10	30.49	30.24		28.89	29.15	27.78	27.35	27.99	28.88	29.48	30.20	30.25
15	30.34	30.23		28.72	29.18	27.46	27.25	28.05	28.85	29.61	30.14	30.42
20	30.63	30.63		28.71	29.25	27.24	27.44	28.18	29.00	29.85	30.25	30.41
25	30.68	---		28.62	28.74	27.17	27.57	28.40	29.18	29.94	30.22	30.34
EOM	30.55	---		29.06	28.64	27.19	27.88	28.49	29.33	30.06	30.26	30.42

WTR YR 1985 HIGH 27.06 APR 5 LOW 30.82 OCT 25

MORGAN COUNTY

393423086161001. Local number, MG 4.

LOCATION.--Lat 39°34'23", long 86°16'10", in NW¼NW¼NW¼ sec.13, T.13 N., R.2 E., Morgan County, Hydrologic Unit 05120201, on east side of County Road 850 East, 0.4 mi north of County Road 950 North, and 1.1 mi north of Waverly.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 60 ft, cased to 56 ft, screened to 60 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 645 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.90 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.27 ft below land-surface datum, Apr. 7, 1985; lowest, 15.65 ft below land-surface datum, Nov. 9, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.70	14.88	14.20	12.13	12.53	---	8.35	9.42	10.72	11.46	12.23	12.37
10	14.76	14.77	14.14	11.91	12.68	---	8.39	9.72	10.86	11.65	12.30	12.52
15	14.83	14.55	13.91	11.95	12.49	8.89	8.64	9.87	10.91	11.87	12.29	12.68
20	14.97	14.47	13.68	12.07	12.32	9.10	8.98	10.06	11.01	12.08	12.03	12.83
25	15.04	14.42	13.42	12.17	---	9.44	9.33	10.27	11.17	12.13	12.10	12.97
EOM	15.12	14.28	12.95	12.36	---	9.99	9.68	10.48	11.38	12.14	12.23	13.12

WTR YR 1985 HIGH 8.27 APR 7 LOW 15.12 OCT 30 to NOV 1

NEWTON COUNTY

405105087173301. Local number, NE 6.

LOCATION.--Lat 40°51'05", long 87°17'33", in SE¼SW¼SE¼ sec.23, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on the right of way of County Road 1000 South, 1.0 mi south of Foresman.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 80 ft, cased to 76 ft, screened to 78 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 654.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.15 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.94 ft below land-surface datum, Mar. 20, 21, 1982; lowest, 17.09 ft below land-surface datum, Oct. 30, 31, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.91	16.88	15.01	11.59	12.79	10.48	9.50	12.08	13.30	14.21	15.43	14.09
10	16.98	16.70	14.77	11.69	12.96	10.39	9.64	12.53	13.51	14.43	14.62	14.32
15	16.95	16.06	14.48	11.92	13.11	10.41	10.14	12.78	13.55	14.67	14.04	14.53
20	16.96	15.86	14.10	12.18	13.24	10.74	10.79	12.93	13.48	14.84	13.68	14.71
25	17.02	15.59	13.55	12.25	11.18	11.18	11.31	13.18	13.73	15.04	13.67	14.77
EOM	17.04	15.29	12.68	12.62	10.63	9.24	11.81	13.19	13.97	15.31	13.91	14.87

WTR YR 1985 HIGH 9.24 MAR 31 LOW 17.09 OCT 30,31

NEWTON COUNTY

405959087282901. Local number, NE 7.

LOCATION.--Lat 40°59'59", long 87°28'29", in SE¼SW¼SE¼ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 136 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 680.83 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.03 ft above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.65 ft below land-surface datum, Apr 14, 1980; lowest, 84.09 ft below land-surface datum, Aug. 6, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	69.85	60.92	55.16	50.91	47.96	45.94	43.86	42.95	45.07	53.36	83.98	74.66
10	68.15	59.57	54.38	50.42	47.60	45.62	43.98	42.99	45.05	60.43	83.05	73.76
15	66.33	58.68	53.59	49.98	47.24	45.44	43.65	43.14	45.22	66.55	81.25	72.64
20	64.80	57.97	52.93	49.43	46.94	45.14	43.49	43.41	45.04	71.79	79.45	71.35
25	63.56	56.84	52.39	48.82	46.51	44.87	43.34	43.84	44.82	77.34	77.30	69.67
EOM	62.09	55.91	51.36	48.45	46.26	44.22	43.17	44.55	47.31	81.90	75.44	68.23

WTR YR 1985 HIGH 42.95 MAY 5, 6 LOW 84.09 AUG 6

NEWTON COUNTY

410428087231501. Local number, NE 8.

LOCATION.--Lat 41°04'28", long 87°25'44", in NW¼SW¼SW¼ sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 97 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 663.34 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.83 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft below land-surface datum, May 31, 1976; lowest, 94.14 ft below land-surface datum, July 30, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.04	27.54	22.59	19.11	16.42	14.43	12.34	11.25	15.06	40.42	62.33	64.68
10	34.34	26.34	21.96	18.67	16.06	14.12	12.38	13.03	14.03	46.60	53.07	58.48
15	32.58	25.56	21.36	18.27	15.74	13.92	12.04	12.73	13.17	48.75	58.30	56.34
20	31.12	24.97	20.87	17.79	15.43	13.60	11.86	16.60	12.72	73.35	48.39	45.39
25	29.99	23.98	20.44	17.21	14.94	13.35	11.69	21.17	15.64	86.10	44.61	41.27
EOM	28.56	23.21	19.49	16.89	14.76	12.71	11.51	16.73	31.93	81.84	70.17	38.60

WTR YR 1985 HIGH 11.24 MAY 6 LOW 94.14 JUL 30

NEWTON COUNTY

405959087282902. Local number, NE 9.

LOCATION.--Lat 40°59'59", long 87°28'29", in SE¼SW¼SE¼ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 45 ft, cased to 42 ft, screened to 45 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 681 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of "Y" in well casing 3.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.07 ft below land-surface datum, May 3, 1978; lowest, 14.34 ft below land-surface datum, Oct. 18-22, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.10	13.82	12.77	11.54	11.84	9.82	8.70	9.85	10.97	12.29	13.55	13.61
10	14.12	13.60	12.66	11.28	11.94	9.72	8.73	10.10	11.35	12.61	13.38	13.73
15	14.13	13.14	12.52	11.27	11.99	9.40	8.82	10.31	11.54	12.82	13.39	13.90
20	14.15	13.00	12.40	11.36	12.08	9.42	9.13	10.47	11.55	13.08	13.22	14.02
25	14.15	12.91	12.30	11.47	10.49	9.42	9.30	10.79	11.80	13.26	13.23	14.11
EOM	14.05	12.82	12.05	11.69	10.13	8.86	9.62	10.92	12.07	13.42	13.42	14.19

WTR YR 1985 HIGH 8.68 APR 6-8 LOW 14.19 SEP 29, 30

NEWTON COUNTY

410428087231502. Local number, NE 10.

LOCATION.--Lat 41°04'28", long 87°25'44", in NW¼SW¼SW¼ sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 45 ft, cased to 41 ft, screened to 44 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 663 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of "Y" in well casing, 2.65 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.03 ft below land-surface datum, Mar. 16, 1982; lowest, 6.43 ft below land-surface datum, Oct. 18-21, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.36	5.86	5.24	4.28	5.17	1.46	1.47	4.14	5.05	5.50	5.71	5.83
10	6.36	5.74	5.20	4.28	5.26	1.98	2.19	4.38	5.24	5.55	5.69	5.89
15	6.38	5.29	5.21	4.52	5.38	1.56	2.65	4.58	5.27	5.59	5.75	5.97
20	6.43	5.27	5.10	4.75	5.48	2.42	3.15	4.76	5.21	5.65	5.49	6.09
25	6.17	5.33	4.94	4.89	2.25	2.42	3.44	4.86	5.33	5.72	5.62	6.15
EOM	6.16	5.33	4.83	5.02	1.93	1.68	3.84	4.98	5.42	5.77	5.78	6.16

WTR YR 1985 HIGH 1.23 MAR 11 LOW 6.43 OCT 18-21

NEWTON COUNTY

410235087305901. Local number, NE 11.

LOCATION.--Lat 41°02'35", long 87°30'59", in SW¼SW¼SE¼ sec.13, T.30 N., R.10 W., Newton County, Hydrologic Unit 07120001, on right of way of County Road 300 North, 0.5 mi west of County Road 600 West, and 4.0 mi northwest of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth of 150 ft, cased to 90 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.30 ft above land-surface datum.

PERIOD OF RECORD.--October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.78 ft below land-surface datum, May 6, 1982; lowest recorded, 83.41 ft below land-surface datum, July 25, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.83	47.34	41.73	37.80	33.80	31.58	29.25	28.24	30.56	46.85	75.61	62.93
10	55.00	45.97	---	36.64	33.43	31.24	29.37	28.28	31.80	57.55	73.24	61.55
15	52.99	45.04	40.13	36.15	33.03	31.03	29.06	28.98	31.56	56.51	71.41	59.88
20	51.39	44.43	39.32	35.55	32.71	30.62	28.94	29.12	31.27	79.47	69.61	58.28
25	50.07	43.13	38.85	34.73	32.22	30.41	28.71	29.58	30.92	78.72	67.24	56.54
EOM	48.48	42.19	37.82	34.42	31.96	29.59	28.56	30.25	38.83	77.18	64.56	55.17

WTR YR 1985 HIGH 28.24 MAY 5 LOW 83.41 JUL 25

NEWTON COUNTY

410830087305601. Local number, NE 12.

LOCATION.--Lat 41°08'17", long 87°30'56", in SW¼SW¼NE¼ sec.13, T.31 N., R.10 W., Newton County, Hydrologic Unit 07120001, along ditch on the east side of County Road 650 West, 130 feet north of County Road 950 North, 1.0 mi south of State Highway 10, and 3.5 miles west of Lake Village.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 150 ft, cased to 64 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 805 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.30 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--Oct. 16, 1981 June 21, 1985.(Discontinued)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.25 ft above land-surface datum, Apr. 16, 17, 1982; lowest, 21.55 ft below land-surface datum, Aug. 18, 19, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.36	9.93	7.78	5.95	4.89	3.73	2.62	3.35	4.82			
10	12.67	9.39	7.53	5.69	4.77	3.51	2.63	4.14	5.32			
15	11.97	9.07	7.25	5.47	4.66	3.32	2.56	4.26	5.11			
20	11.41	8.81	6.99	5.27	4.58	3.18	2.56	4.40	4.98			
25	10.97	8.43	6.75	5.08	4.30	3.07	2.58	5.55	4.97			
EOM	10.38	8.04	6.27	5.04	4.08	2.79	2.65	5.06	---			

WTR YR 1985 HIGH 2.56 APR 15, 16, 18-21 LOW 13.92 OCT 1

NEWTON COUNTY

405853087172401. Local number, NE 13.

LOCATION.--Lat 40°58'53", long 87°17'24", in SW¼NE¼NW¼ sec.12, T.29 N., R.8 W., Newton County, Hydrologic Unit 07120002, on the Richard Smart property, 60 ft east of County Road 525 East, 900 ft south of County Road 100 South, and 2.0 mi north of Mount Ayr.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 130 ft, cased to 71 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 676 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.9 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--May 1982 to Sept. 10, 1985.(Discontinued)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.39 ft above land-surface datum, May 6, 1982; lowest, 29.36 ft below land-surface datum, Aug. 4, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.28	10.63	7.96	5.72	4.16	3.49	2.15	2.19	7.92	21.63	26.78	19.74
10	14.28	9.96	7.58	5.43	4.13	3.24	2.40	2.41	8.23	25.15	23.94	20.33
15	13.18	9.53	7.32	5.26	4.13	3.23	2.17	3.10	8.69	27.43	21.19	---
20	12.41	9.44	6.95	4.96	4.07	3.00	2.20	3.69	8.32	28.54	19.12	---
25	11.82	8.70	6.79	4.48	3.83	2.95	2.24	6.21	10.10	25.47	17.46	---
EOM	11.17	8.24	5.86	4.46	3.67	2.31	2.23	7.29	16.03	27.57	18.53	---

WTR YR 1985 HIGH 2.15 APR 5, 24 LOW 28.74 JUL 20

NEWTON COUNTY

410917087285801. Local number, NE 14.

LOCATION.--Lat 41°09'17", long 87°28'58", in NE¼SW¼NW¼ sec.8, T.31 N., R.9 W., Newton County, Hydrologic Unit 07120001, 1.5 miles west of the intersection of U.S. Highway 41 and State Highway 10, then north 0.5 mile on county road leading to the entrance of the La Salle State Fish and Wildlife Area, then 0.2 mile to the Wildlife Area parking lot. Well is located 100 ft south of the parking lot and 75 ft west of the road. Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic limestone of Silurian/Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 82 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 636 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.30 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--August to September 1985.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.55 ft below land-surface datum, Sept. 30, 1985; lowest, 27.56 ft below land-surface datum, Aug. 14, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5											---	25.68
10											---	24.07
15											27.08	22.57
20											24.93	21.41
25											25.52	20.31
EOM											26.63	19.55

WTR YR 1985 HIGH 19.55 SEP 30 LOW 27.56 AUG 14

NOBLE COUNTY

411922085221801. Local number, NO 8.

LOCATION.--Lat 41°19'22", long 85°22'18", in SE¼SW¼SE¼ sec.9, T.33 N., R.10 E., Noble County, Hydrologic Unit 04050001, near the east edge of Chain O' Lakes State Park, and 5.0 mi south of Albion. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 149 ft, cased to 146 ft, screened to 148 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 928 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.65 ft 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, 28.55 ft below land-surface datum, May 31, 1982; lowest, 32.49 ft below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.94	29.90	30.12	29.97	29.90	29.62	28.73	28.76	29.12	29.16	29.57	29.76
10	29.92	29.98	30.04	30.15	30.03	29.66	29.22	28.85	29.13	29.24	29.66	29.83
15	29.82	30.09	30.33	29.99	30.10	29.70	28.86	28.82	29.03	29.38	29.61	30.02
20	29.87	30.11	30.19	30.10	30.25	29.49	28.94	28.88	29.20	29.50	29.82	29.93
25	29.97	30.03	30.38	29.77	30.10	29.52	28.85	28.93	29.31	29.49	29.65	29.87
EOM	29.90	29.90	30.05	30.04	29.91	29.01	28.89	28.78	29.35	29.56	29.83	29.98

WTR YR 1985 HIGH 28.69 MAY 17 LOW 30.58 DEC 25, 26

NOBLE COUNTY

413106085232701. Local number, NO 9.

LOCATION.--Lat 41°31'06", long 85°23'27", in NW¼NE¼SE¼ sec.5, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001, at the intersection of County Roads 175 East and 1150 North, and 2.0 mi west of Wolcottville. Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 44 ft, cased to 39 ft, screened to 42 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 930 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.45 ft below land-surface datum, Mar. 31, Apr. 1, 1985; lowest, 17.55 ft below land-surface datum, Dec. 27, 28, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.47	13.48	12.94	9.98	12.64	9.31	9.03	11.95	13.62	14.44	15.30	15.86
10	14.97	13.36	13.16	10.91	13.01	9.67	9.29	12.34	13.83	14.54	15.43	13.70
15	14.80	12.04	12.80	11.36	13.15	9.99	9.86	12.68	13.94	14.54	15.50	13.59
20	14.77	12.64	12.48	11.89	13.29	10.45	10.64	12.94	14.00	14.77	15.59	14.10
25	14.03	12.84	11.89	12.07	9.35	10.97	11.17	13.21	14.21	14.92	15.60	14.26
EOM	14.27	12.74	11.02	12.51	9.43	8.45	11.65	13.25	14.37	15.15	15.77	14.40

WTR YR 1985 HIGH 8.45 MAR 31, APR 1 LOW 15.96 SEP 7, 8

NOBLE COUNTY

412948085223401. Local number, NO 10.

LOCATION.--Lat 41°29'48", long 85°22'34", in SW¼SW¼SE¼ sec.9, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001, on the east side of West Lakes Marina in Rome City. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 24 ft, cased to 21 ft, screened to 24 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 920 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--November, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.89 ft below land-surface datum, Mar. 31, Apr. 1, 1985; lowest, 12.74 ft below land-surface datum, Dec. 29, 1978, Feb 17, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.27	8.66	6.15	5.03	6.28	4.60	4.14	5.69	5.90	6.17	6.26	6.31
10	10.92	8.18	6.22	5.60	6.33	4.96	4.42	5.81	6.04	6.03	6.24	5.21
15	10.53	6.93	6.10	5.89	6.26	5.28	4.93	5.85	6.07	6.04	6.07	5.43
20	10.20	6.28	6.02	6.07	6.27	5.54	5.25	5.87	5.97	6.14	6.16	5.94
25	9.74	6.22	5.99	6.17	4.23	5.69	5.32	5.94	6.07	6.22	6.26	6.15
EOM	9.17	6.16	5.81	6.25	4.01	3.89	5.53	5.81	6.15	6.26	6.25	6.28

WTR YR 1985 HIGH 3.89 MAR 31, APR 1 LOW 11.39 OCT 1

ORANGE COUNTY

383702086215601. Local number, OR 2.

LOCATION.--Lat 38°37'02", long 86°21'56", in NE¼SE¼SE¼ sec.11, T.2 N., R.1 E., Orange County, Hydrologic Unit 05120208, on property of Paul Middletown Farm, 6.6 miles southeast of Orleans.
Owner: Paul Middletown.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 108 ft, cased to 56 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 712 ft above Nationa Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.30 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.59 ft below land-surface datum, May 15, 1983; lowest, 44.44 ft below land-surface datum, Jan. 29, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.78	22.46	23.92	---	26.52	14.31	7.98	25.90	14.44	21.69	29.06	36.35
10	41.36	24.73	22.79	---	26.24	16.83	10.60	26.70	19.62	25.63	30.84	37.67
15	42.13	24.98	---	13.47	17.13	15.53	12.95	11.58	18.64	26.59	30.60	38.79
20	42.05	24.15	---	18.19	14.79	20.44	17.61	12.27	23.80	27.81	26.48	39.59
25	41.83	24.88	---	23.31	10.57	24.30	22.42	15.24	22.61	29.04	30.39	39.67
EOM	37.77	---	---	25.84	12.48	6.09	25.17	20.40	25.16	31.41	33.97	39.97

WTR YR 1985 HIGH 6.09 MAR 31 LOW 42.55 OCT 20

PARKE COUNTY

393619087043001. Local number, PA 6.

LOCATION.--Lat 39°36'19", long 87°04'30", in SE¼SW¼SE¼ sec.33, T.14 N., R.6 W., Parke County, Hydrologic Unit 05120111, on county right of way on north side of Parke-Clay county line road, 1.7 mi east of Carbon, 2.6 mi east of State Highway 59, and 6.2 mi north of Brazil.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 155 ft, cased to 46 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 703 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.40 ft above land-surface datum.

PERIOD OF RECORD.--July 1967 to August 1971. October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.53 ft below land-surface datum, Apr. 19, 1970; lowest, 16.40 ft below land-surface datum, Oct. 17, 18, 1984.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.20	16.17	15.79	14.79	14.19	14.82	13.91	14.14	14.46	14.74	15.44	15.85
10	16.27	15.97	15.61	14.65	14.29	14.65	14.13	14.20	14.49	14.92	15.56	15.94
15	16.21	16.07	15.55	14.61	14.35	14.62	14.00	14.21	14.37	15.05	15.69	16.09
20	16.17	16.23	15.29	14.43	14.56	14.47	14.13	14.23	14.40	15.20	15.74	16.12
25	16.23	16.01	15.33	14.18	14.72	14.38	14.14	14.29	14.59	15.39	15.64	15.98
EOM	16.28	15.77	14.82	14.22	14.80	14.01	14.19	14.32	14.69	15.48	15.81	15.98

WTR YR 1985 HIGH 13.91 APR 5 LOW 16.40 OCT 17, 18

POSEY COUNTY

380758087551001. Local number, PY 3.

LOCATION.--Lat 38°07'58", long 87°55'10", in NW¼NW¼SW¼ sec.31, T.4 S., R.13 W., Posey County, 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., depth 58 ft, cased to 54 ft, screened to 56 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 380 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.00 ft 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, 4.95 ft below land-surface datum, May 14, 1983; lowest, 21.25 ft below land-surface datum, Feb. 15-20, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.77	18.56	17.01	12.93	14.10	7.03	7.03	9.92	13.09	14.73	16.75	17.49
10	18.91	18.35	16.97	12.13	14.34	7.69	7.04	10.33	13.43	15.08	16.85	17.69
15	19.02	18.17	16.80	12.20	13.67	8.18	7.33	10.97	13.65	15.45	16.98	17.90
20	19.11	17.95	16.27	12.79	13.43	8.20	8.28	11.58	13.97	15.80	17.05	18.09
25	19.17	17.84	14.79	13.15	10.91	8.89	9.20	11.83	14.27	16.10	17.13	18.28
EOM	18.99	17.38	13.97	13.74	10.04	5.81	9.93	12.49	14.42	16.46	17.38	18.45

WTR YR 1985 HIGH 5.81 MAR 31 LOW 19.19 OCT 24, 25

GROUND-WATER LEVELS

POSEY COUNTY

380638087471901. Local number, PY 4.

LOCATION.--Lat 38°06'38", long 87°47'19", in NW¼NW¼NW¼ sec.8, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, 0.6 mi north of Wadesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 280 ft, cased to 200 ft, open hole.

INSTRUMENTATION: Water-level recorder.

DATUM.--Elevation of land-surface datum is 458 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.00 ft above land-surface datum.

REMARKS.--Water level affected by pumpage from feed lot.

PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.99 ft below land-surface datum, Apr. 2, 1979; lowest, 140.42 ft below land-surface datum, July 30, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	130.56	129.79	129.74	129.33	128.27	127.52	126.79	129.11	129.48	129.58	131.36	130.94
10	130.53	129.77	129.46	129.13	128.23	127.54	127.53	129.21	128.94	130.50	131.19	131.06
15	130.06	129.90	130.23	129.06	127.66	128.23	127.32	128.89	128.93	132.06	131.19	131.10
20	130.27	130.00	129.80	129.08	127.70	127.63	128.31	128.79	129.46	132.53	131.89	136.34
25	130.09	130.01	130.17	128.83	127.82	127.52	128.10	128.66	129.89	131.54	130.73	131.53
EOM	130.24	129.77	129.81	128.80	127.74	126.90	128.06	128.79	129.43	132.78	130.78	131.16

WTR YR 1985 HIGH 126.79 APR 5 LOW 140.42 JUL 30

PULASKI COUNTY

405916086530701. Local number, PU 6.

LOCATION.--Lat 40°59'16", long 86°53'07", in NW¼SE¼SW¼ sec.4, T.29 N., R.4 W., Pulaski County, 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., depth 663 ft, cased to 11 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 678.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.00 ft 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 below land-surface datum, June 15, 1958; lowest, 22.15 ft below land-surface datum, Sept. 28, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.59	20.87	18.18	13.27	15.57	12.14	11.36	14.05	15.60	17.29	19.66	20.69
10	20.78	20.86	17.75	13.56	15.74	11.80	11.34	14.87	15.68	17.92	20.08	20.97
15	20.69	19.04	17.77	14.05	16.29	11.89	11.73	14.76	16.07	18.01	20.01	21.11
20	20.89	19.19	16.97	14.67	16.61	12.21	12.57	14.81	16.29	18.84	20.03	21.54
25	20.68	18.90	16.51	14.37	13.34	12.92	13.16	15.26	16.92	19.39	20.18	21.62
EOM	20.93	18.57	15.35	14.99	12.61	11.82	13.67	14.86	17.30	19.47	20.43	21.75

WTR YR 1985 HIGH 11.24 APR 8 LOW 22.15 SEP 28

PULASKI COUNTY

410739086365201. Local number, PU 7.

LOCATION.--Lat 41°07'39", long 86°36'52", in NE¼NE¼NW¼ sec.23, T.31 N., R.2 W., Pulaski County, Hydrologic Unit 05120106, in the Winamac State Fish and Game Area, 0.8 mi southwest of Beardstown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 105 ft, cased to 98 ft, screened to 100 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 715.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.50 ft 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, 4.69 ft below land-surface datum, June 15, 1981; lowest, 11.66 ft below land-surface datum, Dec. 2, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.15	10.74	9.32	7.97	8.79	6.61	6.12	7.30	8.60	9.63	10.36	10.76
10	11.21	10.48	9.33	8.10	8.93	6.72	5.98	7.58	8.86	9.86	10.48	10.81
15	11.20	9.67	9.28	8.31	9.06	6.53	6.12	7.85	8.91	9.98	10.49	10.89
20	11.15	9.60	9.23	8.50	9.12	6.80	6.53	7.99	9.06	10.16	10.49	10.98
25	10.96	9.55	9.02	8.53	6.83	7.00	6.82	8.24	9.24	10.32	10.55	11.03
EOM	10.88	9.41	8.66	8.73	6.74	6.42	7.09	8.33	9.55	10.31	10.68	11.10

WTR YR 1985 HIGH 5.85 APR 7 LOW 11.28 OCT 17

PUTNAM COUNTY

393254086590401. Local number, PN 4.

LOCATION.--Lat 39°32'54", long 86°59'04", in NW¼SW¼SE¼ sec.20, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, in the well field of Brazil Water Works about 8.0 mi east of Brazil.
Owner: Brazil Water Company.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in., depth 60 ft, cased to 20 ft, slotted to 60 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 612 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 1.82 ft above land-surface datum.

REMARKS.--Water level affected by Big Walnut Creek, and by pumpage from municipal well field.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.20 ft below land-surface datum, Apr. 9, 1961; lowest, 19.95 ft below land-surface datum, Jan. 15-25, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.89	17.78	16.85	14.89	18.46	12.70	11.40	15.04	17.20	17.55	17.14	17.24
10	18.75	17.72	17.59	16.10	18.47	12.56	13.02	16.11	17.41	16.82	17.20	17.53
15	18.84	17.03	17.00	16.94	17.88	12.76	14.28	16.36	16.76	17.50	17.55	18.26
20	18.85	17.58	16.96	17.29	17.19	14.23	15.03	16.40	16.60	17.77	17.64	18.15
25	18.22	18.05	16.82	17.39	6.13	15.02	15.73	16.88	17.18	17.82	17.64	17.81
EOM	18.83	15.79	15.53	17.97	11.51	9.90	16.15	17.01	17.38	18.03	16.37	17.98

WTR YR 1985 HIGH 4.63 FEB 24 LOW 19.91 OCT 31

RANDOLPH COUNTY

401532085085301. Local number, RA 3.

LOCATION.--Lat 40°15'32", long 85°08'53", in NE¼NE¼SE¼ sec.23, T.21 N., R.12 E., Randolph County, Hydrologic Unit 05120103, at the east edge of Purdue University Agriculture Experiment Station, about 5.5 mi north of Farmland.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 54 ft, cased to 33 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 970 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.86 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.84 ft below land-surface datum, June 6, 1981; lowest, 15.00 ft below land-surface datum, Feb. 10, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.72	12.84	11.57	9.64	11.16	9.19	8.95	10.53	11.32	11.44	12.54	13.40
10	13.56	12.64	11.60	10.19	11.37	9.11	9.35	10.83	11.18	11.77	12.71	13.58
15	13.36	12.23	10.85	10.51	10.58	9.09	9.53	10.97	10.09	11.94	12.86	13.73
20	13.34	12.48	10.81	10.88	10.67	9.52	10.06	11.06	10.50	12.09	13.01	13.90
25	13.41	12.29	10.83	10.76	9.13	9.94	10.37	11.24	10.97	12.27	13.01	13.82
EOM	13.44	11.72	9.66	11.11	9.36	8.50	10.68	11.00	11.34	12.43	13.26	13.96

WTR YR 1985 HIGH 8.42 MAR 11 LOW 14.11 SEP 28

ST JOSEPH COUNTY

414138086265101. Local number, SJ 30.

LOCATION.--Lat 41°41'38", long 86°26'51", in SW¼SW¼SW¼ sec.32, T.38 N., R.1 E., St. Joseph County, Hydrologic Unit 07120001, 4.1 mi southeast of New Carlisle.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 87.5 ft, cased to 83.3 ft, screened to 87.5ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 737 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.20 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.50 ft below land-surface datum, Mar. 20, 1982; lowest, 9.73 ft below land-surface datum, Dec. 9-12, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.37	8.73	8.41	5.50	6.95	3.11	3.64	5.18	6.85	7.82	8.60	8.97
10	9.42	8.62	8.36	5.70	7.25	3.21	3.73	5.47	7.14	8.03	8.70	9.03
15	9.43	8.54	8.23	5.98	7.45	3.62	4.03	5.73	7.32	8.14	8.79	9.09
20	9.38	8.49	7.74	6.22	7.64	3.98	4.36	6.00	7.40	8.27	8.83	9.14
25	9.01	8.45	7.28	6.36	4.64	4.35	4.65	6.28	7.52	8.40	8.87	9.19
EOM	8.83	8.45	6.55	6.73	4.09	3.81	4.93	6.54	7.66	8.51	8.93	9.26

WTR YR 1985 HIGH 3.10 MAR 4 LOW 9.43 OCT 11-18

SHELBY COUNTY

393943085490901. Local number, SH 2.

LOCATION.--Lat 39°39'43", long 85°49'09", in SW¼SW¼NW¼ sec.13, T.14 N., R.6 E., Shelby County, Hydrologic Unit 05120204, on the county right of way at the intersection of County Roads 950 North and 200 West, 3.0 mi south of Carrollton.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 128 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 816.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.90 ft below land-surface datum, May 27, 1968; lowest, 22.65 ft below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.25	19.70	18.90	17.06	19.31	17.55	16.76	17.32	19.04	19.50	20.28	20.65
10	21.14	19.66	19.06	17.93	19.52	17.14	17.26	17.93	19.05	19.78	20.27	20.79
15	21.02	19.35	18.10	18.33	18.79	17.06	17.61	18.23	19.05	19.99	20.36	20.94
20	20.99	19.64	18.14	18.82	18.85	17.66	18.09	18.33	19.06	20.21	20.16	21.05
25	20.83	19.61	17.91	18.87	16.95	18.19	18.42	18.66	19.07	20.31	20.27	21.07
EOM	20.85	18.93	16.98	19.19	17.10	16.78	18.67	18.81	19.40	20.30	20.48	21.18

WTR YR 1985 HIGH 16.54 APR 3 LOW 21.32 OCT 6

STARKE COUNTY

411342086365601. Local number, SK 2.

LOCATION.--Lat 41°13'42", long 86°36'56", in NW¼NE¼NW¼ sec.14, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, on private property in the southeast angle of intersection of U.S. Highway 35 and County Road 500 South, and 5.0 mi south of Knox.
Owner: Samuel A. Craigmile.

AQUIFER.--Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 85 ft, cased to 77 ft, screened to 85 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 712.97 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1935 to December 1952 (random instantaneous measurements only), August 1963 to October 1966, June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft below land-surface datum, June 17, 1949; lowest, 6.99 ft below land-surface datum, Aug. 2, 1939.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.46	5.67	5.07	4.21	5.32	3.30	3.30	5.00	5.61	5.76	6.17	6.50
10	6.48	5.27	5.23	4.57	5.40	3.86	3.69	5.17	5.72	5.79	6.31	6.35
15	6.37	4.97	4.92	4.84	5.31	3.98	3.95	5.25	5.60	5.96	6.00	6.41
20	6.06	5.21	5.02	5.03	5.46	4.29	4.38	5.38	5.61	6.14	6.18	6.56
25	5.82	5.37	4.91	5.10	3.29	4.37	4.64	5.48	5.67	6.25	6.26	6.59
EOM	5.88	5.03	4.50	5.24	3.60	3.82	4.87	5.50	5.77	6.06	6.42	6.61

WTR YR 1985 HIGH 3.24 FEB 24, APR 6 LOW 6.65 SEP 28-30

STARKE COUNTY

411419086340401. Local number, SK 12.

LOCATION.--Lat 41°14'19", long 86°34'04", in NW¼SE¼NE¼ sec.7, T.32 N., R.1 W., Starke County, Hydrologic Unit 07120001, in the Bass Lake State Fish Hatcheries on the northeast shore of the lake, 5.0 mi southeast of Knox.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2.0 in., depth 17 ft, cased to 15 ft, screened to 17 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 717.02 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.70 ft(revised) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.34 ft below land-surface datum, June 13, 14, 1981; lowest, 3.31 ft below land-surface datum, Jan. 12, 13, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.68	1.59	2.01	1.90	2.44	1.34	1.21	1.89	1.80	1.40	---	1.85
10	1.55	1.25	2.13	2.09	2.49	1.98	1.69	1.81	1.99	1.46	---	1.44
15	1.47	1.54	1.88	2.23	2.38	2.02	1.70	1.74	1.69	1.41	---	1.63
20	1.17	1.91	2.06	2.24	2.39	2.19	1.86	1.77	1.76	---	1.62	1.75
25	1.40	2.03	2.10	2.29	1.13	2.18	1.91	1.84	1.71	---	1.72	1.87
EOM	1.45	1.82	1.68	2.36	1.60	1.59	2.01	1.79	1.62	---	1.80	1.92

WTR YR 1985 HIGH 1.06 FEB 24 LOW 2.50 FEB 10, 11

STARKE COUNTY

411255086364501. Local number, SK 13.

LOCATION.--Lat 41°12'55", long 86°36'45", in NE¼NE¼NW¼ sec.23, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, on state property in the public parking area at the west end of Bass Lake, at Bass Lake. Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 3.0 in., depth 13 ft, cased to 11 ft, screened to 13 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 714.07 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.90 ft(revised) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.65 ft below land-surface datum, April 5, 1985; lowest, 3.40 ft below land-surface datum, Sept. 11, 12, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.66	2.18	2.13	1.91		---	.65	---	---	2.41	2.34	2.53
10	2.57	1.49	2.20	1.96		1.32	1.17	---	---	2.50	2.53	2.41
15	2.37	2.05	1.93	---		1.33	1.23	---	---	2.50	2.00	2.53
20	1.91	2.18	2.08	---		1.44	1.58	2.03	2.20	2.55	2.38	2.53
25	2.24	2.25	2.07	---		1.44	1.66	---	2.23	2.55	2.48	2.54
EOM	2.19	2.02	1.59	---		.96	1.69	---	2.38	2.09	2.51	2.54

WTR YR 1985 HIGH .65 APR 5 LOW 2.66 OCT 2-7

STARKE COUNTY

411225086353901. Local number, SK 14

LOCATION.--Lat 41°12'25", long 86°35'39", in NE¼NE¼SW¼ sec.24, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, in southeast corner of intersection of State Highway 10 and Beach Street in Bass Lake. Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2.0 in., depth 24 ft, cased to 21 ft, screened to 24 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 717 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.10 ft above land- surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.21 ft below land-surface datum, June 13, 1981; lowest, 4.59 ft below land-surface datum, Dec. 8, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.83	2.81	2.58	2.17	2.73	1.47	.69	2.68	3.14	3.41	3.27	3.72
10	3.57	1.40	2.71	2.33	2.80	1.92	1.72	2.79	3.33	3.56	3.52	3.43
15	3.31	2.38	2.29	2.44	2.78	1.91	1.84	2.70	2.83	3.61	3.02	3.70
20	2.70	2.67	2.52	2.48	2.77	2.07	2.21	2.95	3.00	3.78	3.33	3.85
25	3.15	2.80	2.42	2.53	.92	2.01	2.33	3.06	3.14	3.79	3.48	3.89
EOM	3.15	2.39	1.91	2.69	1.64	1.34	2.56	2.98	3.31	3.00	3.60	3.89

WTR YR 1985 HIGH .63 FEB 24 LOW 3.94 JUL 24, SEP 29, 30

TIPPECANOE COUNTY

402543086533401. Local number, TC 4.

LOCATION.--Lat 40°25'43", long 86°53'34", in NE¼SW¼NE¼ sec.20, T.23 N., R.4 W., Tippecanoe County, 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., depth 97 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 520.9 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 15.43 ft 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, 2.44 ft below land-surface datum, Feb. 28, 1985; lowest, 40.14 ft below land-surface datum, Aug. 4, 1944.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.57	15.78	16.91	12.79	17.33	2.47	8.46	18.36	17.40	20.31	21.21	20.37
10	18.44	17.09	20.02	13.20	18.29	3.63	7.66	18.32	22.41	22.31	23.32	22.37
15	19.53	15.70	19.50	15.21	18.45	6.56	11.32	18.58	20.18	21.02	20.31	21.71
20	17.46	17.73	16.17	16.77	18.18	8.29	12.04	19.22	18.34	21.70	21.18	20.81
25	16.44	17.25	14.34	17.24	4.47	10.19	18.51	18.23	21.11	23.68	22.14	21.95
EOM	19.28	20.35	19.31	15.39	2.44	9.56	17.95	20.34	23.60	23.66	19.57	18.58

WTR YR 1985 HIGH 2.44 FEB 28 LOW 30.51 JUL 9

VANDERBURGH COUNTY

380608087395901. Local number, VA 6.

LOCATION.--Lat 38°06'08", long 87°39'59", in SE¼SW¼NW¼ sec.8, T.5 S., R.11 W., Vanderburgh County, Hydrologic Unit 05120113, on county right of way at the intersection of Buente and New Harmony Roads, 1.0 mi southwest of Armstrong.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 125 ft, cased to 80 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 446.57 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 3.40 ft(revised) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.88 ft below land-surface datum, Apr. 3, 4, 1968; lowest, 34.11 ft below land-surface datum, Oct.1, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.38	33.33	32.98	32.37	31.99	32.02	31.44	31.54	32.17	32.23	32.99	33.19
10	33.48	33.13	32.71	32.22	32.06	31.95	31.78	31.75	32.19	32.39	33.03	33.32
15	33.25	33.26	32.79	32.30	32.27	31.97	31.49	31.76	32.14	32.57	32.97	33.61
20	33.31	33.35	32.48	32.26	32.26	31.89	31.67	31.71	32.22	32.85	33.06	33.68
25	33.47	33.13	32.82	31.99	32.14	31.86	31.58	31.76	32.40	32.81	33.02	33.50
EOM	33.52	32.83	32.30	31.99	32.09	31.35	31.63	31.92	32.32	32.94	33.11	33.57

WTR YR 1985 HIGH 31.35 MAR 31 LOW 33.79 SEP 24, 28, 29

VIGO COUNTY

393201087232101. Local number, VI 6.

LOCATION.--Lat 39°32'01", long 87°23'21", in NE¼NE¼NE¼ sec.34, T.13 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on property of Anaconda Industries, at the north edge of Terre Haute.
Owner: Anaconda Industries.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 138 ft, cased to 137 ft, with perforated pipe.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 511 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.50 ft (revised) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 40.79 ft below land-surface datum, Mar. 20, 1985; lowest, 52.25 ft below land-surface datum, Nov. 15-25, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.15	48.48	48.01	47.32	46.63	---	41.45	42.89	44.54	45.71	46.85	47.38
10	48.20	48.46	47.88	47.05	46.74	---	41.58	43.14	44.80	45.84	46.93	47.54
15	48.30	48.40	47.81	46.76	46.84	41.04	41.66	43.43	45.01	46.07	47.04	47.58
20	48.36	48.23	47.72	46.60	46.94	40.79	41.97	43.66	45.20	46.34	47.13	47.58
25	48.42	48.35	47.64	46.57	46.81	40.86	42.24	43.94	45.40	46.52	47.21	47.62
EOM	48.48	48.22	47.51	46.58	---	41.29	42.59	44.25	45.56	46.71	47.30	47.79

WTR YR 1985 HIGH 40.79 MAR 20 LOW 48.49 NOV 2-5

VIGO COUNTY

392820087242601. Local number, VI 7.

LOCATION.--Lat 39°28'20", long 87°24'26", in SE¼SE¼NE¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on the campus of Indiana State University, in Terre Haute.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 70 ft, cased to 67 ft, screened to 70 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 502 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.80 ft below land-surface datum, June 7, 1974; lowest, 51.90 ft below land-surface datum, Sept. 29 to Oct. 1, 1972 .

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.99	47.55	47.05	46.59	46.28	44.98	42.80	42.96	44.02	44.66	45.72	46.12
10	47.01	47.50	47.05	46.17	46.43	44.07	42.65	43.12	44.15	44.79	45.89	46.22
15	47.24	47.41	47.04	45.85	46.53	43.45	42.35	43.34	44.28	44.94	46.01	46.34
20	47.45	47.32	46.96	45.79	46.63	42.93	42.33	43.59	44.36	45.10	46.01	46.42
25	47.61	47.18	46.85	45.86	46.53	42.73	42.51	43.75	44.40	45.32	46.07	46.50
EOM	47.63	47.06	46.73	46.09	46.12	42.74	42.76	43.89	44.50	45.53	46.11	46.57

WTR YR 1985 HIGH 42.31 APR 18 LOW 47.66 OCT 28, 29

VIGO COUNTY

391534087152901. Local number, VI 9.

LOCATION.--Lat 39°15'34", long 87°15'29", in SW¼SW¼SW¼ sec.36, T.10 N., R.8 W., Vigo County, Hydrologic Unit 05120111, 50 ft north of State Highway 246, behind U.S. Post Office in Lewis.
Owner: U.S. Geological Survey.

AQUIFER.--Shale and Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 201 ft, cased to 140 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 615 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of well casing, 3.80 ft above land-surface datum.

PERIOD OF RECORD.--January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.68 ft below land-surface datum, May 2, 1983; lowest, 77.44 ft below land-surface datum, Oct. 1, 1985.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.56	74.32	73.33	72.88	72.78	72.81	72.13	73.10	73.13	72.81	73.28	73.22
10	74.46	73.43	73.26	72.84	72.88	72.82	72.97	73.23	72.87	72.95	73.12	73.35
15	74.07	73.54	73.24	72.76	72.45	72.86	72.34	72.96	72.73	73.18	73.16	73.54
20	74.04	73.94	73.14	72.81	72.71	72.99	72.52	72.71	72.91	73.53	73.32	73.48
25	74.02	73.71	73.49	72.55	72.61	72.84	72.55	72.65	72.70	73.29	73.11	73.43
EOM	74.11	73.35	72.89	72.77	72.58	72.06	73.02	74.56	72.75	73.33	73.30	73.14

WTR YR 1985 HIGH 72.06 MAR 31 LOW 77.44 OCT 1

WAYNE COUNTY

394426085080601. Local number, WE 6.

LOCATION.--Lat 39°44'26", long 85°08'06", in SE¼NW¼NE¼ sec.24, T.15 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on county right of way of Inter-state Road, 750 ft east of State Highway 1, and 4.0 mi 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., depth 49 ft, cased to 47 ft, screened to 49 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 888 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of collar in shelter, 3.60 ft above land-surface datum.

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

REVISED RECORDS.--WDR IN-81-1: 1980.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.07 ft below land-surface datum, Aug. 3, 1979; lowest, 21.68 ft below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.56	17.94	17.75	14.85	15.10	12.74	11.40	11.44	12.89	13.78	14.60	15.59
10	17.69	17.87	17.70	14.40	15.30	12.88	11.69	11.61	13.06	13.96	14.70	15.82
15	17.78	17.84	17.57	14.39	15.27	12.73	12.06	11.99	13.17	14.16	14.87	16.06
20	17.87	17.83	17.24	14.53	15.35	12.75	12.40	12.17	13.28	14.41	14.99	16.29
25	17.95	17.86	16.85	14.67	13.16	12.95	12.68	12.42	13.43	14.61	15.14	16.50
EOM	18.01	17.83	15.95	14.90	12.63	12.21	12.87	12.68	13.61	14.69	15.38	16.72

WTR YR 1985 HIGH 11.40 APR 4, 5 LOW 18.02 NOV 1

WELLS COUNTY

404331085064701. Local number, WL 4.

LOCATION.--Lat 40°43'31", long 85°06'47", in SE¼NW¼NE¼ sec.12, T.26 N., R.12 E., Wells County, Hydrologic Unit 05120101, 1000 ft south of north entrance to Ouabache State Recreation Area, and 3.5 mi southeast of Bluffton. Owner: U.S. Geological Survey.

AQUIFER.--Silty dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 79 ft, cased to 46 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Land-surface datum is 826.04 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter, 2.35 ft above land-surface datum.

PERIOD OF RECORD.--January 1967 to current year. (Semi-annual tape-down readings only September 1971 to December 1981).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.70 ft below land-surface datum, Apr. 4, 1973: lowest, 24.13 ft below land-surface datum, Nov. 1, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.29	23.07	23.02	21.91	22.64	20.97	19.97	21.11	21.95	22.42	23.32	23.71
10	23.29	23.01	23.00	22.30	22.81	21.00	20.44	21.55	22.25	22.70	23.42	23.80
15	23.04	22.92	22.93	22.47	22.64	20.96	20.37	21.61	21.98	22.94	23.44	23.83
20	23.06	23.29	22.89	22.66	22.63	21.11	20.71	21.65	21.94	23.05	23.61	23.88
25	23.14	23.12	23.05	22.38	20.31	21.35	20.91	21.80	22.23	23.18	23.54	23.77
EOM	23.20	22.92	22.15	22.65	20.69	20.44	21.10	21.72	22.43	23.26	23.67	23.85

WTR YR 1985 HIGH 19.97 APR 5 LOW 24.08 SEP 28

WHITLEY COUNTY

410337085264201. Local number, WY 3.

LOCATION.--Lat 41°03'37", long 85°26'42", in NW¼SE¼NW¼ sec.18, T.30 N., R.10 E., Whitley County, Hydrologic Unit 05120104, on the county right of way of Evergreen Road, and 0.75 mi north of Laud. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 191 ft, cased to 187 ft, screened to 191 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of floor of shelter, 2.68 ft 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 below land-surface datum, Mar. 27, 1976; lowest, 52.67 ft below land-surface datum, Mar. 15, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.55	51.43	51.52	51.31	51.18	51.05	50.20	50.54	51.00	51.14	51.49	51.56
10	51.56	51.32	51.43	51.32	51.30	51.00	50.68	50.73	51.11	51.27	51.51	51.51
15	51.32	51.45	51.61	51.21	51.23	50.92	50.48	50.72	50.95	51.36	51.34	51.75
20	51.37	51.75	51.51	51.21	51.41	50.77	50.57	50.70	51.00	51.53	51.53	51.79
25	51.50	51.55	51.69	50.96	51.38	50.80	50.50	50.91	51.18	51.57	51.42	51.69
EOM	51.55	51.32	51.34	51.21	51.29	50.43	50.58	50.74	51.29	51.52	51.54	51.76

WTR YR 1985 HIGH 50.20 APR 5 LOW 51.97 SEP 13

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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
	Length	
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)
	Area	
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)
	Volume	
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)
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)
	Flow	
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)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons