CALENDAR FOR WATER YEAR 1982

1981

OCTOBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1982

JANUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEBRUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

MARCH

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

APRIL

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

MAY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JUNE

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

JULY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Water Resources Data Indiana

Water Year 1982

by R.L. Miller, R.E. Hoggatt, and G.E. Nell

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-82-1
Prepared in cooperation with the State of Indiana
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to
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Indianapolis, Indiana 46254

1983

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:

D. V. Arvin	G. K. Butch	K. K. Fowler	J. H. Ibsen	W. A. Skinner
R. A. Barnett	R. A. Craig	W. F. Hadley	R. R. Ondrish	J. D. Stewart
G. E. Baumbach	J. R. Davis	L. E. Hammil	C. E. Prince	L. R. Watson
D. D. Beck	C. E. Deiwert	J. T. Hinesley	P. L. Robinson	

S. A. Davis typed the text of the report.

This report was prepared in cooperation with the State of Indiana and with other agencies under the general supervision of D. K. Stewart, District Chief, Indiana, and S. P. Sauer, Regional Hydrologist, Northeast Region.

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-83/063	2.	3. Recipient's Accession No.

4. Title and Subtitle

Water Resources Data-Indiana, Water Year 1982

5. Report Date July 1983

6.

7. Author(s)

R. L. Miller, R. E. Hoggatt, and G. E. Nell

8. Performing Organization Rept. No. USGS-WRD-IN-82-1

9. Performing Organization Name and Address

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6023 Guion Road, Suite 201
Indianapolis, Indiana 46254

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.

(C)

(G)

12. Sponsoring Organization Name and Address

U.S. Geological Survey, Water Resources Division
6023 Guion Road, Suite 201
Indianapolis, Indiana 46254

13. Type of Report & Period Covered Annual - Oct. 1, 1981, to Sept. 30, 1982

14.

15. Supplementary Notes

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

16. Abstract (Limit: 200 words)

Water resources data for the 1982 water year for Indiana consists of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels in wells. This report contains discharge records for 176 gaging stations, stage and contents for 9 lakes and reservoirs, releases from 8 flood control reservoirs, water quality for 26 gaging stations, and water levels for 87 observation wells. Also included are 71 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.

17. Document Analysis a. Descriptors

*Indiana, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

Sampling sites

c. COSATI Field/Group

18. Availability Statement No restriction on distribution. This report may be purchased from: National Technical Information Service Springfield, VA 22161

19. Security Class (This Report) Unclassified

21. No. of Pages 354

20. Security Class (This Page) Unclassified

22. Price

(See ANSI-Z39.18) *See Instructions on Reverse*

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

ILLUSTRATIONS

TABLES

STREAMFLOW STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

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

VIII STREAMFLOW STATIONS, IN DOWNSTREAM ORDER--Continued

GROUND-WATER WELL STATIONS FOR WHICH RECORDS ARE PUBLISHED

GROUND-WATER WELL STATIONS FOR WHICH RECORDS ARE PUBLISHED--Continued

INTRODUCTION

Water resources data for the 1982 water year for Indiana consist of records of stage, discharge, and water quality of streams; stage, and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 176 gaging stations; stage and contents at 9 lakes and reservoirs; water quality at 26 gaging stations, and water levels at 87 observation wells. Also included are data for 71 crest-stage. Locations of these sites are shown on figures 4, 5, and 6. Additional water data were collected at various sites not involved in 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, local, and Federal agencies in Indiana.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia, 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water- quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report IN-82-1." 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, Virginia, 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, and for water-quality records since 1951. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

State of Indiana, Department of Natural Resources, James M. Ridenour, director, through Bureau of Water and Mineral Resources, W. J. Andrews, deputy director.

Indiana State Board of Health, R. G. Blankenbaker, M.D., commissioner, and Ralph C. Pickard, assistant commissioner for environmental health.

Indiana State Highway Commission, D. C. Pratt, chairman, H. P. Wehrenberg, executive director, and G. K. Hallock, chief engineer.

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

The following organizations aided in collecting records: The cities of Anderson, Bloomington, Fort Wayne, Hammond, Indianapolis, Muncie, and Richmond; Indianapolis Water Co.; Indianapolis Power and Light Co.; Public Service Co. of Indiana; Container Corporation of America; and Sanitary District of Chicago.

DEFINITION OF TERMS

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

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

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

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

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

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

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

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

Cubic feet per second per square mile $(ft^3/s)/mi^2$, cfsm is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

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

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

> Mean discharge (MEAN) is the arithmetic average of individual daily mean discharges during a specific period.
>
> Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (ft^3/s)".

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

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein may include an estimate of that portion of the total drainage area which does not contribute directly to surface runoff.

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

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

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

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

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

Milligrams per liter (mg/L, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 9. Concentration of suspended sediment also is expressed in mg/L, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 9.

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

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

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

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

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

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

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

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

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

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

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

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

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

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

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

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

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

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

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

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25° C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids concentrations in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in

micromhos/cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

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

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

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

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

WDR is used as an abbreviation for "Water Data Report" in the REVISED RECORD paragraph to refer to previously published State annual basic-data reports.

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

Table 1.--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 2.--Factors for conversion of sediment concentrations in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 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.

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 03335500, which appears just to the left of the station name, includes the 2-digit part number "03" plus the 6-digit downstream order number "335500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines.

Records in this report are in Part 3 (Ohio River basin), Part 4 (St. Lawrence River basin) and Part 5 (Upper Mississippi River basin). All records for drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS

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

SPECIAL NETWORK

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

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

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a non-recording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or

weirs), step-back water techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity tables gives the contents, from which the daily, monthly, or yearly change in contents is computed.

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

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

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

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS' on page 5.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

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

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

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

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record,

backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

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

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

Accuracy of data

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

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

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

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

Other data available

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

Publications

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

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Indiana are compiled in Water-Supply Paper 1305, 1307, and 1308 through September 1950, and in 1725, 1727, and 1728 for October 1950 to September 1960.

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

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

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

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

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

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

Water analysis

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

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

Water temperature

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

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

Sediment

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

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

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

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

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.4	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

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

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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

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

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

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

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

SUMMARY OF HYDROLOGIC CONDITIONS

Average annual rainfall across Indiana ranges from 34 inches in the north to 46 inches in the south, except at La Porte, where atmospheric circulation and urban-industrial influences produce an average annual rainfall of 48 inches

(National Oceanic and Atmospheric Administration, 1941-70). Moisture is available in each month of the year, but the winter months are usually the wettest in southern Indiana. Rain in June provides the greatest monthly precipitation for central and northern sections. Annual runoff is approximately one-third of precipitation.

Streamflow was above normal much of the year at the three index stations: Mississinewa River at Marion, Ind.; East Fork White River at Shoals, Ind.; and Wabash River at Mt. Carmel, Ill. Flow of the Wabash River at Mt. Carmel, Ill., consistently exceeded normal. Monthly and annual mean flows as percentages of median flows (water years 1951-80) at Indiana's index stations are shown in the following table:

	Mississinewa River at Marion	East Fork White River at Shoals	Wabash River at Mt Carmel
Drainage area	682 mi^2 (1,766 km^2)	4,927 mi^2 (12,761 km^2)	28,635 mi^2 (74,165 km^2)
October	158	79	176
November	98	65	112
December	79	68	72
January	183	217	175
February	196	288	241
March	270*	128	186*
April	99	96	126
May	77	77	82
June	177	142	190
July	81	134	155
August	119	112	109
September	69	258	187
Water Year	117	115	136

*Monthly record.

Rainfall was near normal during the first quarter of the 1982 water year. Streamflow and ground-water levels generally declined, and reservoir storage was reduced to seasonal levels during this time. Minimum daily flows and water levels for the year were recorded at some stream-gaging stations and wells in southern Indiana. These low readings were due to below-normal precipitation in the previous water year. Water levels were higher in northern Indiana at this time owing to heavy rainfall the last half of the 1981 water year.

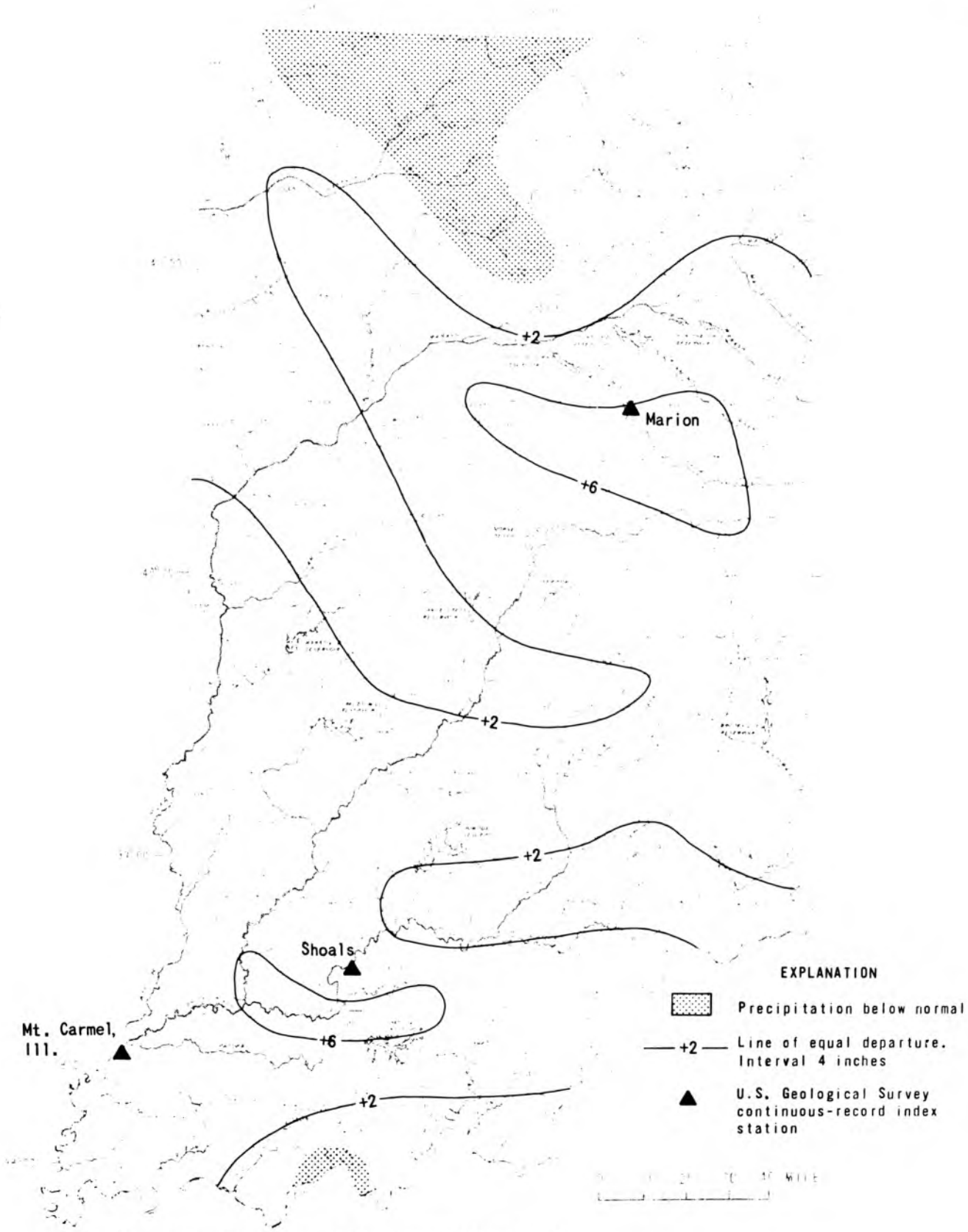
During the second quarter of the 1982 water year, streamflow decreased in mid-January as extreme cold reduced ground-water inflow and caused temporary storage of large quantities of water as ice. Recharge to ground-water virtually ceased during this time. Runoff increased greatly in the remainder of the second quarter because of frequent winter storms. An extensive area in the southern part of the State was flooded in late January and early February when as much as 8 inches of rain fell on frozen ground. Many stream-gaging stations in this area recorded the maximum daily flow for the year at this time. Storm runoff maintained excessive streamflow in February, particularly in central and southern Indiana where snowmelt also increased flows. Lowland flooding continued along the lower Wabash and lower White Rivers. Mean flow of the East Fork White River at Shoals, Ind., was highest for February since 1950 and second highest on record. Mean flow of the Wabash River at Mt. Carmel, Ill., was highest for February since 1969. Runoff was reduced in northern Indiana where a snowpack inhibited drainage into streams.

Precipitation departure from normal for the first half of the 1982 water year is shown in figure 1. Precipitation was above normal in parts of central and southern Indiana but below normal in the extreme southern part of the State and near Lake Michigan. Much of the precipitation in northern Indiana from late January to early March did not contribute to streamflow because it was stored as snow and ice.

Snowmelt greatly increased streamflow in the headwaters of the Wabash River and the southern half of the Maumee River basins March 10-12. A major snowmelt developed late March 12 across northern Indiana as temperatures exceeded 50 degrees in most of the area. Runoff from a record snowpack containing 2 to 6 in. water equivalent was rapid and nearly 100 percent owing to a frozen saturated ground. Severe flooding affected areas north of the Wabash River and east of the Iroquois River, and record flooding occurred along the Elkhart, Kankakee, and both St. Joseph Rivers. Flooding along the Maumee, and St. Marys Rivers was the worst since 1913, and flooding along the Yellow River was the worst since 1954. Generally, most streams draining less than 5 mi^2 had peak discharges with recurrence intervals of less than 5 yr and flooded for about 1 day. However, streams draining at least 100 mi^2 had peak discharges with recurrence intervals of 20 to more than 100 yr and were above flood stage for at least 2 weeks. Recurrence intervals exceeded 100 yr at gaging stations along the Kankakee River, Yellow River, and at the St. Joseph River at Cedarville. Mean March flows of the Wabash River at Mt. Carmel, Ill., and Missisinewa River at Marion, Ind., were highest on record.

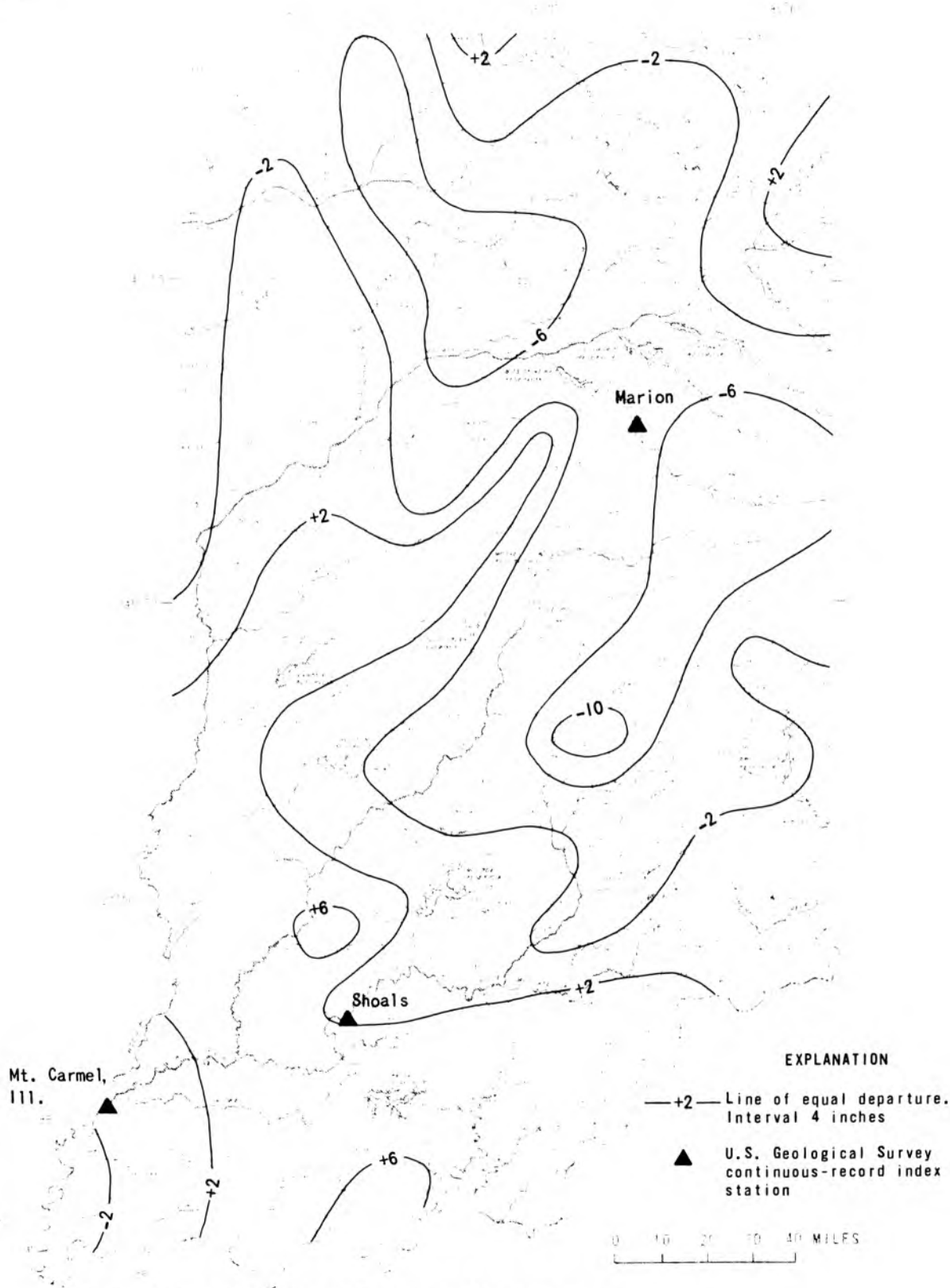
Five flood-control reservoirs were filled to within 70 to 80 percent of maximum storage capacity during February and March. Storage at Mississinewa and Salamonie Lakes exceeded previous records.

Highest ground-water levels for the year were recorded in many wells during March and early April. Water levels for Elkhart 4, Tippecanoe 4, and Vigo 6 were highest since at least 1966, 1944, and 1956.



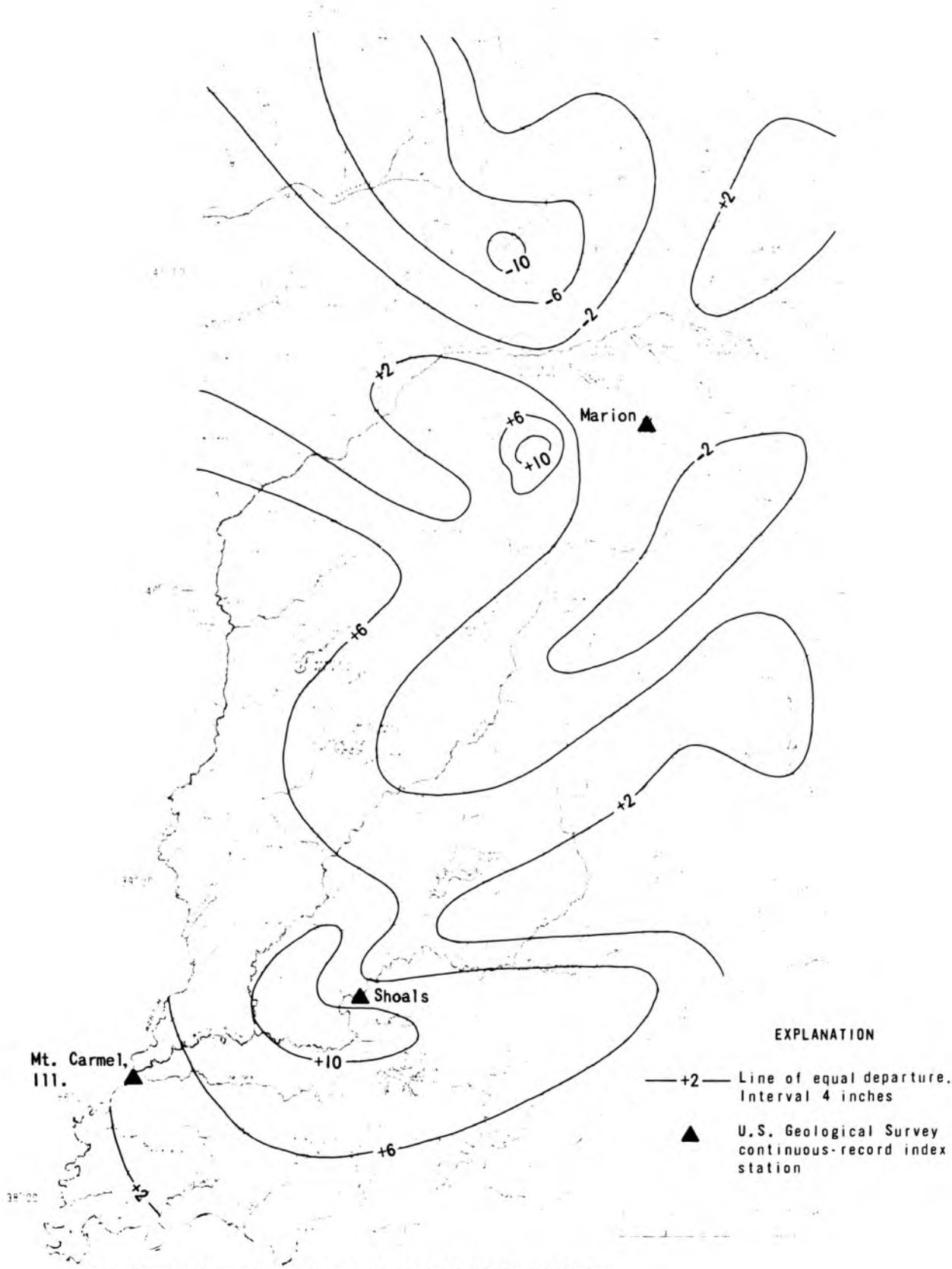
Data from National Oceanic and Atmospheric Administration, 1981-82, Climatological data, Indiana: Asheville, N.C., National Climatic Center, v.86, nos.10-12, and v.87, nos.1-3.

Figure 1.-- Precipitation departure from normal in Indiana, October 1981 to March 1982.



Data from National Oceanic and Atmospheric Administration, 1981-82, Climatological data, Indiana: Asheville, N.C., National Climatic Center, v.87, nos.4-9.

Figure 2.-- Precipitation departure from normal in Indiana, April to September 1982.



Data from National Oceanic and Atmospheric Administration, 1981-82, Climatological data, Indiana: Asheville, N.C., National Climatic Center, v.86, nos.10-12, and v.87, nos.1-9.

Figure 3.--Precipitation departure from normal in Indiana, October 1981 to September 1982.

Lake elevations at or near record levels in March in much of northern Indiana caused extensive flooding to surrounding communities.

Floodwaters, lasting from mid-February to mid-April along the lower half of the Wabash River and from mid-February to early May along the Kankakee River, subsided during the third quarter of the water year when precipitation was below normal. However, scattered heavy rainfall caused lowland flooding along the Wabash River in west-central Indiana in late May and early June. Ground-water levels at a few sites were highest for the year during this time. Lake elevations in northern Indiana remained at or near record levels, especially on lakes having no natural outlet.

Streamflow varied statewide during the fourth quarter of the water year. Precipitation was 2 to 7 in. above normal in west-central, southwest, and south-central Indiana and caused local flooding. Northern and central Indiana received below-normal rainfall, and many surface- and ground-water stations recorded the minimum daily flow and water level for the year.

A precipitation deficiency across northern and east-central Indiana during the second half of the water year is summarized in figure 2. Southern parts of the State received above-normal rainfall.

Precipitation departure from normal for the entire water year is illustrated in figure 3. Much of the State received normal to above-normal precipitation. A 10-inch excess is shown for southern and central parts of Indiana. Below-normal precipitation was measured in northern and east-central sections of the State.

Mean annual flows of the Mississnewa River at Marion, Ind., and East Fork White River at Shoals, Ind., were 17 and 15 percent above the median. Above-normal precipitation in west-central and southwest Indiana during the 1982 water year maintained high flow on the lower Wabash River. Mean annual flow of the Wabash River at Mt. Carmel was 36 percent above the median.

The 1982 water year was highlighted by floods caused from snowmelt rather than rainfall. Precipitation for the first half of the water year was near or below normal in northern Indiana as shown in figure 1. However, floods with recurrence intervals in excess of 100 years were recorded along several rivers in northern Indiana in March. Rapid melting of a record, moisture-laden snowpack on frozen, saturated ground proved to be as devastating as heavy rain.[1]

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[1]"Snowmelt floods of March 1982, Indiana, Michigan, and Ohio," U.S. Geological Survey Open-File Report 83-XXX, by D. R. Glatfelter, G. K. Butch, and J. A. Stewart.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-one manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Picket Street, Alexandria, VA 22303 (authorized agent of the Superintendent of Documents, Government Printing Office).

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

1-D1. Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 p.

2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. Application of borehole geophysics to water-resources investigations, by W. W. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS-TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS-TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS-TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS-TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr.: USGS-TWRI Book 3, Chapter A12. 1968. 31 pages. Not currently available.

3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. Introduction to ground-water hydraulics-a programed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. Methods for collection and analysis of water samples for dissolved minerals and gases, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages.

5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. Methods for analysis or organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

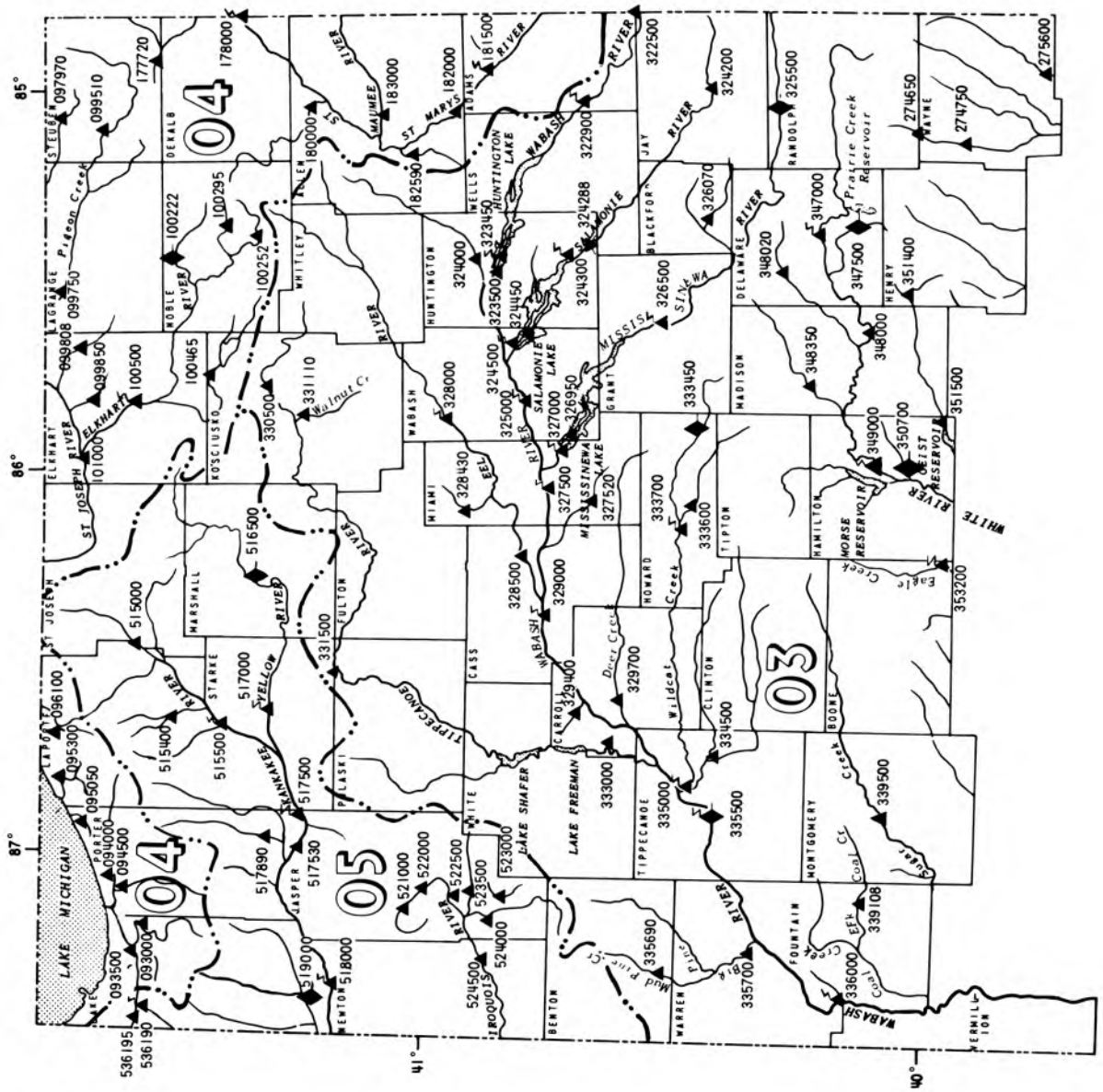
5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, by K. V. Slack, R. C. Averett, P. E. Greeson, and P. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages.

5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.


04
05
03
LAKE MICHIGAN
ST JOSEPH RIVER
ELKHART
KOSCIUSKO
MARSHALL
STARKE
PULASKI
FULTON
MIAMI
WABASH
HUNTINGTON
WHITLEY
ALLEN
WELLS
ADAMS
JAY
BLACKFORD
DELAWARE RIVER
RANDOLPH
HENRY
WAYNE
GRANT
MADISON
HAMILTON
TIPTON
HOWARD
CLINTON
CASS
CARROLL
WHITE
BENTON
WARREN
TIPPECANOE
MONTGOMERY
FOUNTAIN
BOONE
VERMILLION
LAKE SHAFER
LAKE FREEMAN
SALAMONIE LAKE
MISSINEWA LAKE
HUNTINGTON LAKE
MORSE RESERVOIR
PRAIRIE CREEK RESERVOIR
WEST FORK WHITE RIVER
WABASH RIVER
TIPPECANOE RIVER
YELLOW RIVER
KANKAKEE RIVER
ELKHART RIVER
ST JOSEPH RIVER
ST MARYS RIVER
MISSISSINEWA RIVER
SALAMONIE RIVER
MISSISINEWA
SINAWA
Pigeon Creek
Walnut Cr
Deer Creek
Wildcat Creek
Mud Pine Creek
Big Pine Creek
Coal Creek
Prairie Creek Reservoir
41°
86°
87°
85°

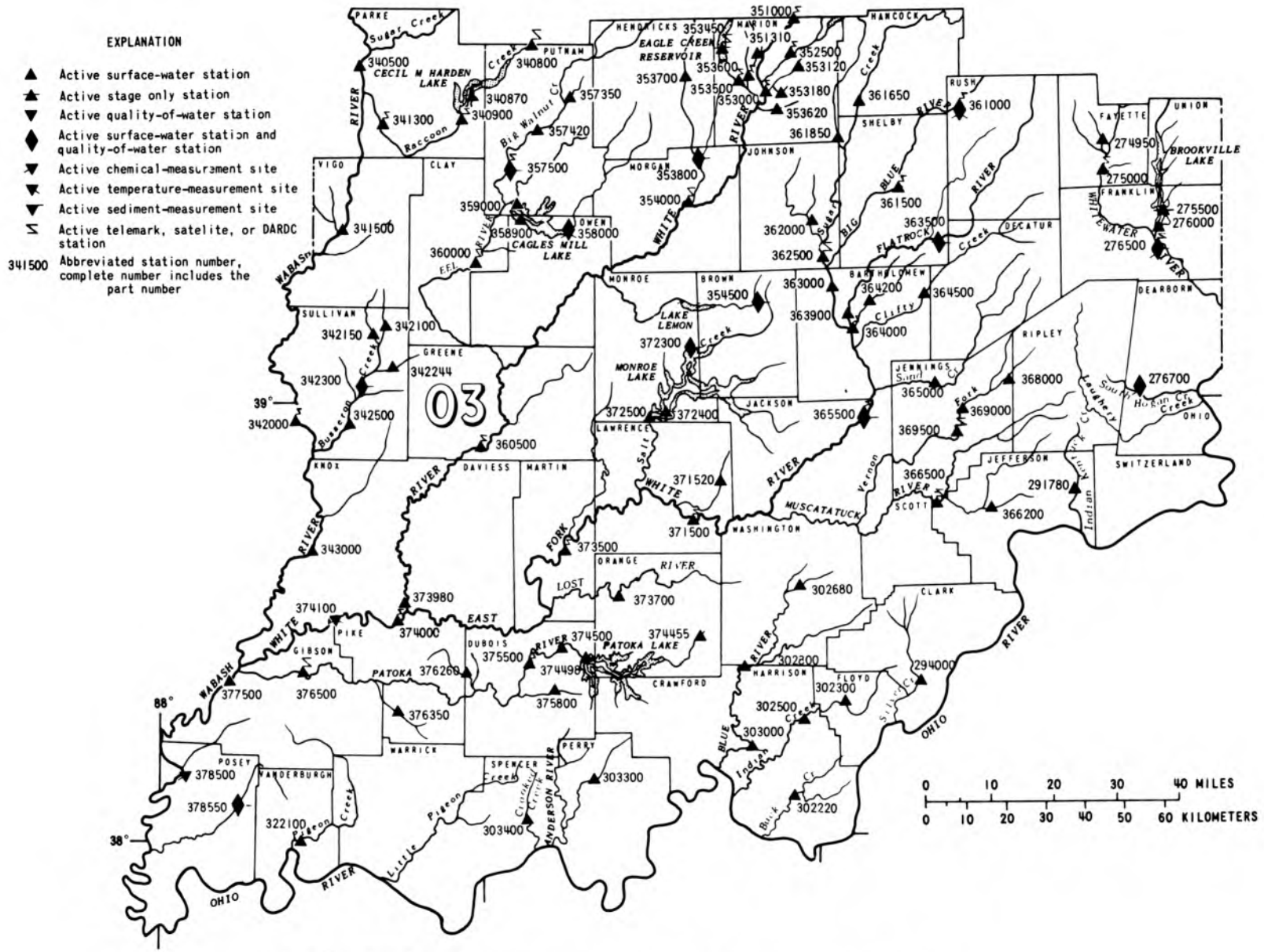


Figure 4.-- Location of stream-flow and water-quality gaging stations in Indiana.

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 (1.8 m) downstream from bridge on Wayne County Line Road, 1.7 miles (2.7 km) upstream from Little Creek, 2.4 miles (3.9 km) northwest of Economy, and at mile 91.9 (147.9 km).

DRAINAGE AREA.--10.4 mi^2 (26.9 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,066.00 ft (324.917 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years, 11.2 ft^3/s (0.317 m^3/s), 14.62 in/yr (371 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s (31.2 m^3/s) Aug. 20, 1979, gage height, 8.85 ft (2.697 m); minimum daily discharge, 0.28 ft^3/s (0.008 m^3/s) Jan. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft^3/s (5.66 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	0200	217	6.15	5.20	1.585	Feb. 20	1900	251	7.11	5.43	1.655
Jan. 23	0400	*446	12.6	*6.49	1.978	Feb. 23	1700	265	7.50	5.52	1.682
Jan. 30	2100	216	6.12	5.19	1.582	Mar. 16	1000	285	8.07	5.64	1.719
Feb. 17	0400	318	9.01	5.83	1.777	Mar. 19	2400	264	7.48	5.51	1.679

Minimum daily discharge, 0.57 ft^3/s (0.016 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	1.1	1.0	4.9	25	30	16	4.9	18	2.2	1.3	.84
2	2.3	1.0	1.0	4.5	15	30	12	4.7	8.6	2.1	1.2	.84
3	2.2	1.0	.93	27	12	23	37	4.5	6.1	2.2	1.2	.86
4	2.2	1.0	.93	119	10	73	19	4.4	5.1	2.0	2.4	.86
5	2.2	1.0	.93	30	8.9	40	15	4.3	4.4	1.9	1.3	.80
6	2.5	1.0	.86	16	8.1	24	17	4.2	3.7	1.8	1.2	.85
7	2.2	1.0	.86	8.8	7.5	16	17	11	3.5	1.8	2.9	.90
8	2.2	1.0	.86	5.8	7.5	12	18	22	3.4	1.8	1.3	.86
9	2.1	.93	.76	4.8	7.2	10	19	11	3.3	1.7	1.2	.87
10	1.9	.93	.70	4.2	6.6	15	25	8.0	3.2	2.0	1.1	.92
11	1.9	.93	.74	4.0	6.3	95	24	6.8	2.9	2.6	1.1	.86
12	1.8	.93	.80	3.3	6.0	51	17	5.8	2.8	1.9	1.1	.87
13	1.8	.93	.80	3.3	6.0	80	13	5.1	2.7	1.7	1.0	.93
14	1.6	.93	.80	3.2	5.8	35	10	4.6	2.5	1.6	1.0	.91
15	1.7	.93	.80	3.1	6.6	32	9.1	4.2	2.7	1.5	1.0	.93
16	1.6	.93	.80	2.8	50	119	9.7	4.1	16	1.5	1.0	.86
17	1.6	.86	.80	2.5	202	47	29	4.0	14	1.5	1.0	.86
18	1.8	.86	.80	2.5	68	30	16	5.1	6.6	1.5	1.0	.88
19	1.8	.93	.76	2.5	41	69	13	4.3	5.1	1.6	1.0	.77
20	1.5	.93	.70	2.6	97	127	10	10	4.3	1.5	.98	.71
21	1.4	.93	.74	2.7	92	40	8.6	26	3.9	1.4	.99	.78
22	1.3	.86	1.8	3.5	76	29	7.8	22	3.3	1.8	1.0	.69
23	1.2	.86	49	170	123	23	7.2	17	2.9	1.7	1.0	.64
24	1.2	1.1	14	39	71	18	7.1	8.6	2.7	1.4	1.4	.69
25	1.2	1.1	6.7	21	33	17	6.9	6.7	2.5	1.4	1.0	.65
26	1.3	1.1	5.1	13	27	19	6.8	5.8	2.4	1.3	.93	.66
27	1.6	1.0	6.2	10	24	15	6.1	5.7	2.3	1.3	.91	.75
28	1.5	.93	6.0	9.4	24	11	5.4	5.4	2.8	1.3	.84	.64
29	1.3	.93	4.7	8.9	------	11	5.3	6.6	2.7	1.3	.84	.64
30	1.1	.86	4.2	123	------	10	5.2	13	3.0	1.3	.86	.57
31	1.1	-----	4.2	53	------	25	-----	8.0	-----	1.3	.80	-----
TOTAL	53.3	28.79	119.27	708.3	1066.5	1176	412.2	257.8	147.4	51.9	35.85	23.89
MEAN	1.72	.96	3.85	22.8	38.1	37.9	13.7	8.32	4.91	1.67	1.16	.80
MAX	2.5	1.1	49	170	202	127	37	26	18	2.6	2.9	.93
MIN	1.1	.86	.70	2.5	5.8	10	5.2	4.0	2.3	1.3	.80	.57
CFSM	.17	.09	.37	2.19	3.66	3.64	1.32	.80	.47	.16	.11	.08
IN.	.19	.10	.43	2.53	3.81	4.21	1.47	.92	.53	.19	.13	.09

CAL YR 1981 TOTAL 2671.40 MEAN 7.32 MAX 168 MIN .54 CFSM .70 IN 9.55
WTR YR 1982 TOTAL 4081.20 MEAN 11.2 MAX 202 MIN .57 CFSM 1.08 IN 14.60

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 (1.6 km) upstream from Pronghorn Run, 1.5 miles (2.4 km) north of Interstate 70, 2.0 miles (3.2 km) downstream from Nettle Creek, 2.6 miles (4.2 km) south of Hagerstown, and at mile 84.9 (136.6 km).

DRAINAGE AREA.--58.7 mi² (152.0 km²).

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years, 70.2 ft³/s (1.988 m³/s), 16.24 in/yr (412 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft³/s (65.1 m³/s) Jan. 26, 1976, gage height, 10.89 ft (3.319 m); maximum gage height, 11.24 ft (3.426 m) Aug. 1, 1979; minimum daily, 5.3 ft³/s (0.15 m³/s) Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0900	1830	51.8	10.16	3.097	Feb. 20	2100	1240	35.1	8.30	2.530
Jan. 30	2300	1280	36.2	8.46	2.579	Mar. 20	0500	1300	36.8	8.53	2.600
Feb. 17	0600	*1880	53.2	*10.29	3.136						

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	16	36	146	132	118	55	92	30	21	21
2	15	16	15	34	103	126	96	54	61	30	21	21
3	14	16	15	69	90	118	243	53	52	30	21	20
4	15	16	15	642	80	288	121	53	47	29	22	18
5	15	16	15	134	75	185	110	52	43	28	29	18
6	15	16	14	91	69	113	139	51	40	28	23	18
7	16	16	15	75	64	91	116	70	40	28	36	18
8	16	15	14	62	63	81	112	116	42	28	29	18
9	18	16	15	55	62	76	112	73	39	27	26	17
10	16	16	15	44	58	78	126	64	37	28	24	17
11	16	16	15	45	57	401	126	59	35	29	24	16
12	16	16	15	41	55	214	101	56	34	27	22	16
13	16	15	14	40	54	338	91	54	33	25	22	16
14	16	15	15	39	54	160	83	52	32	22	21	16
15	15	15	15	37	57	144	79	51	35	23	20	15
16	15	15	14	34	491	573	82	59	88	23	20	15
17	19	15	15	31	1310	219	155	57	71	23	21	15
18	20	15	14	31	330	144	101	52	47	24	20	14
19	20	20	13	31	202	228	87	53	43	34	19	14
20	18	18	12	31	546	718	82	52	40	26	22	14
21	18	16	13	31	429	209	74	127	41	25	21	14
22	18	15	20	47	371	148	70	120	36	29	19	14
23	17	16	152	1050	517	125	67	99	34	27	20	14
24	17	18	67	172	279	112	65	67	33	24	185	14
25	17	16	47	104	140	111	63	59	32	23	75	15
26	19	16	40	80	116	123	63	58	31	23	30	15
27	25	16	43	71	109	104	61	59	31	24	26	16
28	21	15	43	66	113	92	58	56	33	24	24	15
29	19	15	37	60	----	88	57	125	33	23	22	14
30	17	15	33	711	----	87	56	127	31	22	22	14
31	16	----	33	423	----	209	----	64	----	22	22	----
TOTAL	531	477	819	4417	6040	5835	2914	2147	1286	808	929	482
MEAN	17.1	15.9	26.4	142	216	188	97.1	69.3	42.9	26.1	30.0	16.1
MAX	25	20	152	1050	1310	718	243	127	92	34	185	21
MIN	14	15	12	31	54	76	56	51	31	22	19	14
CFSM	.29	.27	.45	2.42	3.68	3.20	1.65	1.18	.73	.45	.51	.27
IN.	.34	.30	.52	2.80	3.83	3.70	1.85	1.36	.81	.51	.59	.31

CAL YR 1981 TOTAL 15775.4 MEAN 43.2 MAX 700 MIN 9.0 CFSM .74 IN 10.00
WTR YR 1982 TOTAL 26685.0 MEAN 73.1 MAX 1310 MIN 12 CFSM 1.25 IN 16.91

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 (2 km) west of Connersville, and 2.6 miles (4.2 km) upstream from mouth.

DRAINAGE AREA.--9.16 mi^2 (23.72 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 842.00 ft (256.642 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 10.5 ft^3/s (0.297 m^3/s), 15.57 in/yr (395 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11.3 m^3/s) (revised) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	0400	794	22.5	6.01	1.832	May 20	2300	*1210	34.3	*6.88	2.097
Jan. 31	1000	603	17.1	5.52	1.682	May 31	2300	516	14.6	5.27	1.606
Feb. 16	2100	927	26.3	6.31	1.923	June 9	1900	900	25.5	6.25	1.905

Minimum daily discharge, 0.74 ft^3/s (0.021 m^3/s) Oct. 8-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	2.3	7.9	21	11	20	5.6	46	4.9	1.6	1.2
2	.97	1.2	1.9	6.0	12	11	19	5.3	7.1	4.2	1.5	1.2
3	.97	1.2	1.5	23	19	11	36	5.0	5.6	4.2	1.5	1.1
4	.89	1.3	1.5	98	10	17	21	4.8	5.0	3.9	1.5	1.1
5	.82	1.3	1.2	21	7.1	19	23	4.5	4.5	3.7	1.5	1.1
6	.97	1.3	1.1	14	5.0	16	23	4.2	4.0	3.6	1.4	1.1
7	.89	1.2	1.1	11	4.0	15	16	7.7	4.0	3.5	1.4	.99
8	.74	1.2	1.1	6.7	3.5	13	16	14	8.4	19	1.6	.97
9	.74	1.3	1.1	5.4	3.3	13	15	9.0	82	7.0	1.6	.97
10	.74	1.2	1.2	3.6	3.0	14	14	7.2	7.7	9.4	1.5	.97
11	.82	1.2	1.3	2.8	3.0	44	13	6.1	4.7	5.5	1.5	1.0
12	.82	1.2	1.3	2.5	3.0	26	13	5.3	3.9	4.2	1.4	.94
13	.89	1.2	1.3	2.4	3.1	51	12	4.6	3.7	3.8	1.4	1.0
14	.89	1.2	1.3	2.3	3.3	22	11	4.1	3.4	3.6	1.4	1.1
15	1.1	1.2	1.3	2.2	44	23	9.6	3.9	5.9	3.6	1.3	1.1
16	1.2	1.2	1.3	2.1	242	79	10	3.8	19	3.5	1.3	1.1
17	1.1	1.2	1.7	2.0	167	24	11	3.7	7.7	3.3	1.3	1.1
18	1.3	1.2	1.4	2.0	26	19	9.6	3.6	5.2	3.3	1.2	1.1
19	1.3	2.4	1.2	2.0	21	32	9.1	3.6	6.0	12	1.2	1.1
20	1.3	2.5	1.0	2.0	25	73	8.6	74	4.6	3.9	1.9	1.1
21	1.3	1.4	1.5	2.5	21	24	7.6	102	4.2	2.7	1.7	1.1
22	1.3	1.1	18	29	17	19	7.1	20	4.5	3.6	1.3	1.1
23	1.4	.89	82	235	16	18	7.0	13	4.0	2.9	1.3	1.0
24	1.3	1.4	40	25	16	18	7.0	11	3.4	2.5	1.7	1.1
25	1.2	.97	9.6	15	14	19	6.8	9.6	3.3	2.4	1.8	1.4
26	1.6	.89	6.0	10	12	18	7.0	13	3.3	2.4	1.4	1.5
27	2.3	1.4	7.9	8.0	12	18	6.5	11	4.1	8.7	1.2	1.5
28	2.0	.97	6.7	7.0	12	17	6.0	8.3	24	2.6	1.2	.96
29	1.8	.89	4.5	6.0	-----	17	5.7	83	28	1.9	1.2	.87
30	1.5	.89	3.6	150	-----	17	5.7	18	7.1	1.7	1.2	.82
31	1.4	-----	4.5	283	-----	26	-----	52	-----	1.7	1.4	-----
TOTAL	36.65	37.80	211.4	989.4	745.3	744	376.3	520.9	324.3	143.2	44.4	32.69
MEAN	1.18	1.26	6.82	31.9	26.6	24.0	12.5	16.8	10.8	4.62	1.43	1.09
MAX	2.3	2.5	82	283	242	79	36	102	82	19	1.9	1.5
MIN	.74	.89	1.0	2.0	3.0	11	5.7	3.6	3.3	1.7	1.2	.82
CFSM	.13	.14	.75	3.48	2.90	2.62	1.37	1.83	1.18	.50	.16	.12
IN.	.15	.15	.86	4.02	3.03	3.02	1.53	2.12	1.32	.58	.18	.13

CAL YR 1981 TOTAL 3271.72 MEAN 8.96 MAX 224 MIN .74 CFSM .98 IN 13.29
WTR YR 1982 TOTAL 4206.34 MEAN 11.5 MAX 283 MIN .74 CFSM 1.26 IN 17.08

03275000 WHITEWATER RIVER NEAR ALPINE, IN

LOCATION.--Lat 39°34'23", long 85°09'27", in SW¼SE¼ sec.14, T.13 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on right bank 500 ft (152 m) downstream from highway bridge, 0.4 mile (0.6 km) downstream from Wilson Creek, 1.6 miles (2.6 km) northeast of Alpine, 4.6 miles (7.4 km) upstream from Bear Creek, and at mile 54.3 (87.4 km).

DRAINAGE AREA.--529 mi² (1,370 km²).

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--54 years, 554 ft³/s (15.69 m³/s), 14.22 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s (1,050 m³/s) Jan. 14, 1937, gage height, 16.61 ft (5.063 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Sept. 8, 9, 1964.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 24	0200	8480	240	12.32	3.755	Feb. 21	0900	6800	193	11.31	3.447
Jan. 31	1300	13600	385	14.02	4.273	Mar. 20	1900	6830	193	11.33	3.453
Feb. 17	2000	*16400	464	*14.51	4.423						

Minimum daily discharge, 100 ft³/s (2.83 m³/s) Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	122	165	350	3130	987	1540	443	2610	446	187	184
2	115	122	154	363	1580	1070	1060	436	1410	390	186	179
3	111	120	148	480	1440	1040	1960	426	920	372	183	171
4	109	120	146	4310	1150	1030	1640	416	739	354	180	163
5	113	118	138	2780	904	2220	1120	405	648	329	220	157
6	121	118	132	1180	739	1250	1490	395	565	313	197	155
7	115	113	132	818	630	1000	1200	430	522	301	183	155
8	113	110	132	580	624	851	1060	799	2190	381	243	154
9	113	115	130	500	570	788	1020	690	1360	321	267	151
10	111	113	127	360	475	746	1020	555	898	357	211	149
11	109	108	125	380	446	1840	1110	501	630	356	197	146
12	111	110	122	370	436	3250	965	467	541	303	185	143
13	111	110	120	359	441	3060	865	440	494	280	178	143
14	109	108	120	359	431	2360	760	418	460	265	173	145
15	110	108	120	337	923	1770	678	401	446	253	168	143
16	109	113	118	313	3150	3200	640	386	704	245	167	142
17	107	113	125	280	13100	3500	759	381	1090	237	165	139
18	112	113	122	250	6600	1880	839	375	704	229	162	137
19	118	135	110	260	2660	1640	705	369	575	469	158	133
20	116	204	100	259	2280	5100	654	444	517	357	197	134
21	112	165	120	263	4990	2970	599	1590	522	268	192	133
22	112	143	186	317	2310	1750	557	693	485	279	163	134
23	113	138	915	6710	2670	1300	533	700	441	294	160	132
24	108	146	904	3800	3030	1060	517	573	399	247	171	142
25	105	146	560	1280	1650	948	510	478	376	228	768	171
26	137	143	422	892	1230	1020	505	585	359	218	347	167
27	168	146	385	665	1090	926	498	816	390	294	254	200
28	157	140	399	590	1000	801	480	1020	704	261	216	189
29	148	135	350	508	-----	739	461	1880	1150	220	196	172
30	138	135	309	3350	-----	704	450	3590	575	206	187	165
31	127	----	301	10500	-----	1650	-----	1590	-----	196	187	----
TOTAL	3680	3830	7437	43763	59679	52450	26195	22692	23424	9269	6648	4628
MEAN	119	128	240	1412	2131	1692	873	732	781	299	214	154
MAX	168	204	915	10500	13100	5100	1960	3590	2610	469	768	200
MIN	105	108	100	250	431	704	450	369	359	196	158	132
CFSM	.23	.24	.45	2.67	4.03	3.20	1.65	1.38	1.48	.57	.41	.29
IN.	.26	.27	.52	3.08	4.20	3.69	1.84	1.60	1.65	.65	.47	.33

CAL YR 1981 TOTAL 152605 MEAN 418 MAX 3410 MIN 100 CFSM .79 IN 10.73
WTR YR 1982 TOTAL 263695 MEAN 722 MAX 13100 MIN 100 CFSM 1.37 IN 18.54

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 (5 km) downstream from Elkhorn Creek, 8 miles (13 km) southwest of Richmond, and at mile 26.7 (43.0 km).

DRAINAGE AREA.--200 mi^2 (518 km^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 (241.097 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--17 years, 235 ft^3/s (6.655 m^3/s), 15.96 in/yr (405 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft^3/s (379 m^3/s) July 20, 1969, gage height, 16.18 ft (4.932 m); minimum daily, 16 ft^3/s (0.45 m^3/s) July 24, 27, 28, Aug. 4-6, 1977.

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

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	1200	3820	108	10.31	3.142	Feb. 17	0600	*6580	186	*13.21	4.026
Jan. 23	1100	5420	153	12.02	3.664	Mar. 20	0800	3100	87.8	9.35	2.850
Jan. 31	0300	4990	141	11.65	3.551						

Minimum daily discharge, 31 ft^3/s (0.88 m^3/s) Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	46	96	262	1230	214	495	124	545	92	43	61
2	34	44	82	235	578	230	358	120	324	85	43	59
3	33	44	71	440	603	222	708	116	235	85	43	55
4	33	43	67	2840	458	302	488	113	190	82	66	51
5	33	43	60	934	340	520	410	109	163	78	122	48
6	45	43	57	505	271	299	611	107	138	76	62	47
7	38	40	57	377	240	241	462	187	127	72	178	48
8	37	38	57	262	235	204	392	459	781	73	312	48
9	36	40	54	230	200	191	385	268	225	70	168	46
10	35	40	50	156	180	181	386	200	167	74	96	45
11	34	39	46	169	170	976	400	169	128	76	79	44
12	34	38	47	142	165	887	327	150	117	67	65	43
13	34	38	45	128	160	981	295	137	107	64	58	43
14	32	37	46	109	156	594	257	128	100	61	53	43
15	33	37	44	100	360	473	236	124	106	59	50	42
16	32	37	42	95	2210	1260	238	121	302	56	48	42
17	31	37	45	90	5480	821	295	123	328	54	47	41
18	41	36	46	88	1200	484	260	115	185	53	45	40
19	36	97	40	90	700	471	233	125	169	70	44	39
20	37	162	36	90	924	2100	219	164	134	60	46	40
21	36	72	40	90	1170	828	196	215	126	54	53	41
22	37	58	128	162	521	532	178	161	122	60	43	41
23	41	54	1190	3910	595	420	168	155	107	61	46	40
24	37	77	591	868	599	353	162	140	96	53	291	41
25	36	64	314	436	364	352	155	123	92	50	768	81
26	79	59	232	283	280	405	157	103	88	49	161	90
27	136	70	240	238	251	341	151	195	85	51	100	117
28	113	57	240	214	230	292	134	431	215	51	81	65
29	67	53	190	174	-----	272	128	707	188	48	69	52
30	55	51	152	1910	-----	262	126	859	113	46	65	47
31	49	----	158	4260	-----	679	----	394	----	44	63	----
TOTAL	1389	1594	4563	19887	19870	16387	9010	6642	5803	1974	3408	1540
MEAN	44.8	53.1	147	642	710	529	300	214	193	63.7	110	51.3
MAX	136	162	1190	4260	5480	2100	708	859	781	92	768	117
MIN	31	36	36	88	156	181	126	103	85	44	43	39
CFSM	.22	.27	.74	3.21	3.55	2.65	1.50	1.07	.97	.32	.55	.26
IN.	.26	.30	.85	3.70	3.70	3.05	1.68	1.24	1.08	.37	.63	.29

CAL YR 1981 TOTAL 61637 MEAN 169 MAX 1520 MIN 30 CFSM .85 IN 11.46
WTR YR 1982 TOTAL 92067 MEAN 252 MAX 5480 MIN 31 CFSM 1.26 IN 17.12

03275990 BROOKVILLE LAKE AT BROOKVILLE, IN

LOCATION.--Lat 39°26'27", long 85°00'10', in NE¼SE¼ sec.17, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, in discharge tower of reservoir on East Fork Whitewater River, 1.4 miles (2.3 km) northeast of Brookville, and 2.2 miles (3.5 km) above mouth.

DRAINAGE AREA.--379 mi² (982 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by two gates, 5.25 ft (1.60 m) wide and 12 ft (3.66 m) high, in circular conduit through dam. Minimum design capacity is 55,600 acre-ft (68.6 hm³), elevation, 713 ft (217.3 m). Seasonal pool capacity is 184,000 acre-ft (227 hm³), elevation, 748 ft (228.0 m). Capacity at uncontrolled spillway is 359,600 acre-ft (443 hm³), elevation, 775 ft (236.2 m). Reservoir is used for flood control and recreation. Reservoir was put in operation on January 22, 1974.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 218,110 acre-ft (269 hm³) Aug. 3, 1979, elevation, 754.15 ft (229.865 m); minimum, 127,370 acre-ft (157 hm³) Feb. 3, 1976, elevation, 735.93 ft (224.311 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 193,850 acre-ft (239 hm³) May 30, elevation, 749.84 ft (228.551 m); minimum, 142,940 acre-ft (176 hm³) Mar. 8, elevation, 739.55 ft (225.415 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	748.45	186,400	
Oct. 31	745.08	169,050	-17,350
Nov. 30	740.18	145,760	-23,290
Dec. 31	740.10	145,400	-360
CAL YR 1981			+230
Jan. 31	748.31	185,650	+40,250
Feb. 28	741.69	152,700	-32,950
Mar. 31	743.80	162,760	+10,060
Apr. 30	746.66	177,050	+14,290
May 31	749.48	191,910	+14,860
June 30	748.62	187,300	-4,610
July 31	748.24	185,280	-2,020
Aug. 31	748.44	186,340	+1,060
Sept. 30	748.35	185,870	-470
WTR YR 1982			-530

03276000 EAST FORK WHITEWATER RIVER AT BROOKVILLE, IN

LOCATION.--Lat 39°26'02", long 85°00'12", in NE¼NE¼ sec.20, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, on right bank 100 ft (30 m) upstream from bridge on State Highway 101, at Brookville, 0.4 mile (0.6 km) downstream from Brookville Lake, and 1.8 miles (2.9 km) upstream from mouth.

DRAINAGE AREA.--380 mi^2 (984 km^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 (189.512 m) National Geodetic Vertical Datum of 1929. Prior to May 22, 1954, nonrecording gage at site 100 ft (30 m) downstream at datum 2.00 ft (0.610 m) higher. May 22, 1954 to Aug. 20, 1965, water-stage recorder at site 165 ft (50 m) downstream at datum 2.00 ft (0.610 m) higher. 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 (see sta 03275990).

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--28 years, 393 ft^3/s (11.13 m^3/s), 14.04 in/yr (357 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,100 ft^3/s (1,020 m^3/s) Jan. 21, 1959; maximum gage height, 17.35 ft (5.288 m) May 24, 1968; no flow, July 27, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,440 ft^3/s (97.4 m^3/s) Feb. 5; no flow, July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	1010	23	480	58	2800	663	57	2080	1030	93	57
2	57	1010	22	264	1150	2080	866	57	2080	387	57	57
3	57	924	15	23	2580	990	867	57	1400	387	57	57
4	43	1010	14	110	3240	990	868	57	673	247	71	57
5	57	1000	10	478	3440	990	868	57	493	93	164	57
6	57	1000	52	1300	3430	990	869	57	501	57	200	57
7	57	1000	52	1490	3410	989	869	57	387	57	200	57
8	57	1160	52	1480	3390	689	869	57	1230	57	93	57
9	57	1190	52	1480	3370	236	878	57	2080	57	57	46
10	57	659	55	1480	3360	191	884	57	2070	57	57	42
11	57	639	55	895	3340	191	506	57	963	165	101	42
12	57	627	55	481	2280	192	380	57	387	201	57	42
13	57	613	55	211	480	193	380	57	387	201	57	42
14	57	599	55	16	480	146	380	87	247	201	57	42
15	304	585	55	17	480	331	137	97	200	201	57	42
16	386	570	19	19	780	377	56	97	340	201	57	42
17	386	505	23	203	563	1860	56	97	387	201	57	42
18	386	371	55	191	197	2400	56	97	387	201	57	42
19	382	371	55	191	599	2120	56	97	387	341	57	42
20	490	372	69	191	1010	2030	56	97	631	387	57	11
21	490	372	55	326	1020	2030	56	315	386	387	57	21
22	490	46	55	371	1020	2030	56	388	387	387	57	42
23	490	56	293	375	2010	1340	56	388	331	387	57	42
24	490	55	554	378	2900	701	373	697	228	387	57	42
25	490	49	738	681	2890	769	279	882	200	387	305	42
26	889	44	738	1380	2880	863	56	573	200	97	387	42
27	1020	41	737	1500	2870	863	56	697	200	.00	387	42
28	1020	36	1200	1490	2860	863	57	882	201	290	387	42
29	1020	31	491	1010	-----	579	57	919	761	387	387	42
30	1010	25	552	486	-----	376	57	1700	1240	247	140	42
31	1010	-----	936	206	-----	377	-----	2080	-----	200	57	----
TOTAL	11537	15970	7192	19203	56087	31576	11667	10931	21444	7885.00	3941	1332
MEAN	372	532	232	619	2003	1019	389	353	715	254	127	44.4
MAX	1020	1190	1200	1500	3440	2800	884	2080	2080	1030	387	57
MIN	43	25	10	16	58	146	56	57	200	.00	57	11
CFSM	.98	1.40	.61	1.63	5.27	2.68	1.02	.93	1.88	.67	.33	.12
IN.	1.13	1.56	.70	1.88	5.49	3.09	1.14	1.07	2.10	.77	.39	.13

CAL YR 1981 TOTAL 101561.00 MEAN 278 MAX 1940 MIN 10 CFSM .73 IN 9.94
WTR YR 1982 TOTAL 198765.00 MEAN 545 MAX 3440 MIN .00 CFSM 1.43 IN 19.46

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 (0.5 km) downstream from East Fork Whitewater River, 1.1 miles (1.8 km) south of Brookville, and at mile 29.3 (47.1 km).

DRAINAGE AREA.--1,224 mi^2 (3,170 km^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 (181.572 m) National Geodetic Vertical Datum of 1929. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft (0.457 m) higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Brookville Lake since January 1974 (see sta 03275990).

AVERAGE DISCHARGE.--61 years (water years 1916-17, 1924 to current year), 1,278 ft^3/s (36.19 m^3/s), 14.18 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,800 ft^3/s (2,320 m^3/s) Jan. 21, 1959, gage height, 27.78 ft (8.467 m), from rating curve extended above 45,000 ft^3/s (1,270 m^3/s) on basis of contracted-opening measurement of peak flow; minimum daily, 60 ft^3/s (1.70 m^3/s) July 27, 1934.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,600 ft^3/s (838 m^3/s) Jan. 31; gage height, 16.57 ft (5.051 m); minimum daily, 156 ft^3/s (4.42 m^3/s) Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	1020	464	1210	9180	3440	2820	626	6070	1210	374	303
2	192	1010	486	920	3860	3040	2360	611	4050	788	336	303
3	190	991	429	1380	4910	2260	4490	592	2690	750	330	292
4	188	1040	412	7140	4970	2540	3330	578	1780	669	326	281
5	191	1040	335	4550	4370	3390	2440	563	1450	544	334	276
6	195	1040	274	2770	4000	2660	2760	550	1210	487	340	271
7	193	1040	226	2610	3850	2370	2430	592	986	468	353	276
8	190	1030	193	2280	3830	1860	2220	2670	2920	529	414	266
9	190	1020	210	2170	3640	1410	2090	1370	3470	575	401	251
10	191	822	210	1840	3600	1290	2000	971	3230	483	366	246
11	190	598	206	1170	3580	2350	2010	816	1820	671	359	242
12	191	598	202	937	3110	4230	1750	731	950	567	379	242
13	188	591	202	756	1290	4490	1460	667	921	506	370	228
14	189	590	198	659	1260	3500	1330	641	811	483	349	223
15	268	589	198	639	1570	3310	1120	642	706	454	310	219
16	356	590	185	607	4590	4860	999	610	931	454	306	219
17	367	506	182	567	13500	6910	1140	597	1410	447	303	214
18	372	305	198	542	11700	4680	1250	587	1190	440	303	210
19	489	363	182	515	4410	6050	1070	564	960	1040	297	210
20	652	579	156	521	3710	7730	988	632	1040	820	308	210
21	652	469	166	566	5100	7190	909	4320	931	631	361	210
22	647	414	237	861	3860	4460	840	2930	820	595	319	206
23	646	389	2490	14500	4470	3260	793	1350	754	640	308	206
24	642	394	2000	6000	5730	2230	900	1370	656	580	303	206
25	638	403	1580	2650	4620	1960	888	1460	601	528	677	202
26	796	397	1390	2430	3940	2420	745	1200	574	397	706	202
27	1060	399	1420	2340	3700	2250	725	1760	566	349	560	202
28	1070	403	1830	2220	3550	2050	682	1870	1880	496	513	202
29	1060	388	1130	1690	------	1660	650	3200	2450	547	483	210
30	1050	381	924	5180	------	1360	635	6740	2030	463	392	198
31	1030	-----	1150	23800	------	2850	-----	4020	-----	411	314	----
TOTAL	14469	19399	19465	96020	130900	104060	47824	45830	49857	18022	11794	7026
MEAN	467	647	628	3097	4675	3357	1594	1478	1662	581	380	234
MAX	1070	1040	2490	23800	13500	7730	4490	6740	6070	1210	706	303
MIN	188	305	156	515	1260	1290	635	550	566	349	297	198
CFSM	.38	.53	.51	2.53	3.82	2.74	1.30	1.21	1.36	.48	.31	.19
IN.	.44	.59	.59	2.92	3.98	3.16	1.45	1.39	1.52	.55	.36	.21

CAL YR 1981 TOTAL 333713 MEAN 914 MAX 7820 MIN 156 CFSM .75 IN 10.14
WTR YR 1982 TOTAL 564666 MEAN 1547 MAX 23800 MIN 156 CFSM 1.26 IN 17.16

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 (discontinued).
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1981 (discontinued).
SEDIMENT DISCHARGE: October 1974 to current year (Partial-record station).

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos Feb. 9, 19, 1980, July 27, 1981; minimum, 95 micromhos 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.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos July 27 minimum, 200 micromhos July 5.
WATER TEMPERATURE: Maximum, 24.0°C July 9-12, 14; minimum, 0.0°C Jan. 9-11, Feb. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV											
18...	0840	343	522	7.9	2.0	10.1	----	9.8	K4710	K1300	---
JAN											
20...	1300	537	565	7.8	3.5	1.4	3.0	12.9	1040	573	320
MAR											
18...	0830	4640	406	7.7	8.0	6.7	----	13.3	-----	26000	---
MAY											
25...	1100	1480	459	7.5	20.5	14.7	80	9.2	K27	3640	240
JUL											
20...	1700	776	449	7.7	----	25.0	70	9.3	K9800	K10600	206
SEP											
16...	1215	242	556	7.6	25.5	21.2	12	11.8	-----	------	267

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	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)
NOV											
18...	--	--	--	----	-	--	---	--	--	--	---
JAN											
20...	50	82	28	9.6	6	.2	1.8	35	20	.2	6.9
MAR											
18...	--	--	--	----	-	--	---	--	--	--	---
MAY											
25...	57	63	20	7.8	6	.2	2.4	35	16	.2	5.8
JUL											
20...	35	51	19	8.2	7	.2	2.8	32	13	.2	3.7
SEP											
16...	63	64	26	13	9	.3	2.3	32	23	.2	4.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV											
18...	---	---	---	----	1.3	.040	.05	.070	.050	.020	.06
JAN											
20...	371	346	.50	538	3.3	<.010	.01	.050	.050	.040	.12
MAR											
18...	---	---	---	----	3.1	.170	.21	.170	.080	.070	.21
MAY											
25...	334	260	.45	1335	4.3	.110	.14	.160	.040	.020	.06
JUL											
20...	281	232	.38	589	2.3	.040	.05	.190	.040	.020	.06
SEP											
16...	319	287	.43	208	2.2	.040	.05	.060	.010	<.010	---

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)
NOV 18...	--	--	--	---	--	--	--	--	--	--	--
JAN 20...	1	0	1	100	30	67	<1	--	<1	30	10
MAR 18...	--	--	--	---	--	--	--	--	--	--	--
MAY 25...	2	1	1	100	40	57	1	--	<1	10	--
JUL 20...	1	0	1	200	--	55	1	0	1	10	0
SEP 16...	2	0	2	100	20	93	1	--	<1	10	0

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
NOV 18...	--	--	--	--	--	--	--	----	----	--	--
JAN 20...	20	1	--	<1	7	4	3	190	180	13	4
MAR 18...	--	--	--	--	--	--	--	----	----	--	--
MAY 25...	<10	10	6	4	15	11	4	5400	5400	23	9
JUL 20...	10	2	0	2	16	9	7	4100	4100	18	11
SEP 16...	10	3	--	<1	2	1	1	680	680	5	7

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)
NOV 18...	--	--	---	---	--	--	--	--	--	--	--
JAN 20...	1	3	20	10	9	.2	.1	.1	26	4	22
MAR 18...	--	--	---	---	--	--	--	--	--	--	--
MAY 25...	7	2	130	120	6	.2	.0	.2	10	7	3
JUL 20...	9	2	170	170	4	.1	.0	.1	7	5	2
SEP 16...	6	1	40	30	10	.1	--	<.1	9	2	7

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 18...	--	--	--	--	--	--	--	--	--	--
JAN 20...	<1	<1	<1	<1	70	60	11	74	107	26
MAR 18...	--	--	--	--	--	--	--	126	1580	88
MAY 25...	<1	<1	<1	<1	40	--	<4	170	679	--
JUL 20...	<1	<1	<1	<1	40	40	4	183	383	--
SEP 16...	<1	<1	<1	2	50	--	<4	48	31	--

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	12.5	7.5	3.5	4.0	6.5	13.0	14.5	15.5	23.0	21.0	22.5
2	17.5	12.0	8.5	3.0	2.0	5.5	14.0	13.5	16.0	22.0	18.5	22.0
3	16.5	12.0	6.5	2.5	1.0	4.5	14.0	13.5	17.5	20.5	19.0	21.0
4	16.0	13.0	5.5	1.5	.0	5.0	15.0	14.5	17.5	20.5	19.5	21.0
5	15.0	12.5	7.5	.5	.5	5.0	12.0	16.0	19.0	20.0	21.5	20.0
6	14.5	12.5	9.0	1.0	1.5	4.0	10.0	15.0	18.5	21.5	23.0	20.5
7	15.5	12.5	9.5	1.5	2.5	3.5	10.0	12.0	18.5	18.5	22.0	20.5
8	16.5	12.5	10.5	1.0	2.0	4.0	12.0	12.5	18.5	20.5	21.0	20.5
9	18.5	14.0	9.5	.0	2.0	4.0	14.0	13.0	17.5	24.0	21.0	19.5
10	19.5	12.0	8.0	.0	2.5	5.0	13.5	13.5	17.5	24.0	20.0	18.0
11	17.5	10.0	7.0	.0	2.0	5.0	16.0	14.5	17.5	24.0	21.0	19.0
12	16.0	11.0	6.0	.5	1.0	5.0	16.0	13.0	18.0	24.0	21.0	20.0
13	15.0	11.0	6.0	1.0	.5	6.5	16.0	13.5	19.5	23.0	20.0	20.5
14	15.0	11.5	6.0	1.0	1.5	6.0	16.5	13.5	20.5	24.0	20.0	21.5
15	15.5	11.5	5.5	2.0	3.0	6.0	14.0	14.0	21.0	23.0	20.0	21.0
16	16.0	10.5	5.0	1.0	4.0	6.0	12.0	13.5	22.0	22.0	20.0	19.0
17	17.0	10.0	4.5	1.0	3.0	6.0	14.0	13.0	18.5	22.0	19.5	18.0
18	16.5	9.0	5.0	1.0	6.0	6.5	16.5	12.5	18.5	23.0	19.5	16.0
19	15.5	8.0	4.0	1.5	6.0	5.5	15.5	11.5	18.5	23.0	19.5	15.0
20	15.0	8.0	1.5	2.5	5.0	4.0	14.0	12.5	19.0	22.0	19.5	15.0
21	15.0	8.5	.5	3.0	5.0	4.5	12.0	13.0	19.5	22.5	19.5	16.0
22	15.0	8.5	.5	4.0	5.5	5.0	12.0	13.5	21.0	18.0	20.5	16.5
23	15.5	9.0	1.0	4.0	5.0	6.0	14.0	16.5	20.0	16.5	20.5	17.5
24	15.5	10.0	3.5	5.0	5.0	7.0	13.5	16.5	21.0	19.5	20.5	18.0
25	14.0	8.5	2.0	5.0	5.0	8.0	12.0	18.0	23.5	21.5	22.0	18.5
26	13.0	7.5	1.5	6.0	5.0	8.5	13.0	17.5	21.0	21.5	21.5	19.0
27	12.5	8.0	1.5	5.5	5.5	10.0	15.0	16.5	20.5	22.0	21.0	19.5
28	13.0	7.5	1.0	4.0	7.0	11.0	20.0	16.0	19.0	22.5	20.5	17.5
29	12.0	8.0	1.5	4.0	---	12.5	18.0	16.5	21.0	21.0	21.0	15.0
30	11.5	7.0	2.5	3.0	---	13.0	16.0	17.0	21.0	20.0	21.5	15.0
31	12.0	----	3.0	3.0	---	13.0	----	17.0	----	19.5	22.0	----
MEAN	15.5	10.5	5.0	2.5	3.5	6.5	14.0	14.5	19.0	21.5	20.5	19.0
MAX	19.5	14.0	10.5	6.0	7.0	13.0	20.0	18.0	23.5	24.0	23.0	22.5
MIN	11.5	7.0	.5	.0	.0	3.5	10.0	11.5	15.5	16.5	18.5	15.0

WTR YR 1981 MEAN 12.5 MAX 24.0 MIN .0

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

(MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	510	410	425	525	575	575	400	410	515	580	610	590
2	495	405	440	515	400	560	450	470	570	570	555	600
3	480	410	440	490	475	475	520	490	560	480	575	610
4	475	430	470	495	550	450	560	530	570	480	588	600
5	480	395	515	505	585	430	535	560	585	200	575	600
6	480	420	525	550	555	475	510	470	595	440	500	595
7	485	425	520	575	525	515	545	510	450	540	385	590
8	485	425	520	550	525	520	600	505	480	570	490	602
9	495	440	490	560	550	525	625	500	525	600	515	605
10	505	425	470	605	578	550	575	510	565	612	570	610
11	465	400	470	560	400	550	470	525	570	615	460	610
12	450	420	480	520	300	588	470	558	585	620	510	625
13	470	410	490	575	360	550	480	545	450	625	565	610
14	465	430	500	600	410	550	530	530	550	590	555	595
15	480	420	500	595	465	530	545	420	555	575	555	600
16	475	415	515	575	500	540	575	470	565	590	550	575
17	480	405	515	555	280	545	595	502	585	570	550	580
18	495	410	525	505	355	515	490	430	585	570	555	600
19	465	395	500	575	475	490	510	400	595	580	565	615
20	450	400	475	590	490	490	550	465	612	590	570	625
21	445	415	450	575	490	515	520	515	605	420	595	625
22	450	410	425	575	490	535	500	535	570	485	595	615
23	460	415	475	575	485	535	250	580	588	515	585	610
24	445	420	525	575	515	518	460	550	590	575	580	600
25	430	420	520	585	500	530	540	410	608	605	580	595
26	420	395	525	590	530	550	580	485	595	612	590	590
27	415	395	520	575	550	550	605	410	590	630	595	595
28	415	400	480	575	500	555	605	435	588	545	605	575
29	415	415	500	575	---	550	570	515	602	390	610	580
30	420	420	525	575	---	380	500	540	605	535	605	595
31	410	---	500	575	---	400	---	385	---	595	600	---
MEAN	462	413	491	560	479	517	522	489	567	545	559	601
MAX	510	440	525	605	585	588	625	580	612	630	610	625
MIN	410	395	425	490	280	380	250	385	450	200	385	575

WTR YR 1981 MEAN 517 MAX 630 MIN 200

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

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

DRAINAGE AREA.--38.1 mi² (98.7 km²).

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 571.00 ft (174.041 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those below 1 ft³/s (0.028 m³/s) and those for winter periods, which are poor.

AVERAGE DISCHARGE.--21 years, 42.0 ft³/s (1.189 m³/s), 14.97 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Apr. 29, 1970, maximum gage height, 12.7 ft (3.87 m), 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 (4.267 m), discharge, 16,300 ft³/s (462 m³/s), on basis of contracted-opening measurement.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0215	*4080	116	*8.15	2.484	June 8	1615	3440	97.4	7.57	2.307
Jan. 31	0745	3810	108	7.91	2.411						

Minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.89	182	70	152	20	60	9.5	95	2.2	.40	9.2
2	.34	.79	26	32	66	19	42	8.4	28	1.4	.24	5.3
3	.30	.70	13	134	153	25	560	7.8	15	2.8	.21	2.8
4	.21	.62	9.5	486	95	53	86	6.8	10	8.4	.17	1.8
5	.11	.62	8.1	76	55	69	54	6.5	9.9	3.5	.14	1.2
6	.44	.62	5.9	52	44	38	83	6.2	7.8	2.0	.11	.70
7	.99	.62	5.6	49	39	32	45	7.4	5.9	1.3	.09	.46
8	1.5	.70	5.0	43	36	27	38	240	496	1.0	.07	.19
9	1.1	2.2	4.2	31	25	25	38	49	115	.89	.06	.13
10	.75	4.2	4.0	12	24	23	43	26	39	.70	.05	.11
11	.50	4.0	3.7	13	22	287	39	19	21	.79	.19	.10
12	.47	3.0	3.2	11	21	138	33	15	14	.70	.40	.09
13	.47	2.5	3.2	9.2	19	289	26	12	12	.79	.62	.08
14	.36	2.3	2.6	7.8	18	89	21	9.9	8.4	.62	.40	.07
15	.34	2.2	2.8	6.8	59	361	18	9.9	6.2	.40	.34	.06
16	.32	2.3	2.6	6.0	310	216	19	8.4	29	.34	.24	.05
17	.38	2.2	2.8	5.4	251	81	39	6.5	32	.29	.15	.04
18	.47	2.0	2.5	5.2	98	51	29	6.2	12	.24	.14	.19
19	.43	2.2	1.3	5.4	78	237	21	7.8	7.8	.19	.12	.10
20	.54	70	1.3	6.0	51	275	18	5.0	6.5	.19	.24	.07
21	.84	9.9	1.9	8.0	59	222	16	89	6.2	.15	.47	.05
22	.65	4.5	12	557	42	74	13	87	5.0	.40	.79	.03
23	.62	2.6	293	1260	36	45	12	29	4.5	.54	1.1	.02
24	.46	8.4	63	88	35	35	12	15	4.2	1.1	.62	.03
25	.46	9.5	21	50	29	29	11	11	2.8	.79	.47	.19
26	1.0	5.6	17	37	24	28	17	8.8	2.3	.54	.29	.15
27	2.5	5.3	44	28	23	23	15	10	2.0	.40	13	1.2
28	2.2	4.5	40	26	21	19	12	12	1.7	22	12	.89
29	1.6	4.0	35	27	----	17	10	13	2.8	5.3	3.5	.62
30	1.3	15	25	702	----	16	9.9	33	3.0	2.0	1.7	.40
31	1.1	------	22	2020	----	243	------	15	------	.89	6.8	-----
TOTAL	23.15	173.96	863.2	5863.8	1885	3106	1439.9	790.1	1005.0	62.85	45.12	26.32
MEAN	.75	5.80	27.8	189	67.3	100	48.0	25.5	33.5	2.03	1.46	.88
MAX	2.5	70	293	2020	310	361	560	240	496	22	13	9.2
MIN	.11	.62	1.3	5.2	18	16	9.9	5.0	1.7	.15	.05	.02
CFSM	.02	.15	.73	4.96	1.77	2.63	1.26	.67	.88	.05	.04	.02
IN.	.02	.17	.84	5.73	1.84	3.03	1.41	.77	.98	.06	.04	.03

CAL YR 1981 TOTAL 14577.14 MEAN 39.9 MAX 2690 MIN .05 CFSM 1.05 IN 14.23
WTR YR 1982 TOTAL 15284.40 MEAN 41.9 MAX 2020 MIN .02 CFSM 1.10 IN 14.92

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 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)
OCT 27...	1445	2.5	590	7.7	11.4	10.1	----	----	-----	255	85
NOV 17...	1245	1.8	655	8.1	12.5	11.9	.38	K100	K171	257	77
DEC 07...	1245	5.2	525	8.0	3.0	13.6	----	K92	216	236	56
JAN 19...	1645	5.5	555	8.2	.5	12.1	2.4	K10	K20	301	81
FEB 17...	0900	260	255	8.0	2.1	12.2	1.9	----	59000	98	30
MAR 17...	1230	133	382	8.0	12.8	10.8	2.3	----	4300	160	40
APR 13...	1430	26	450	8.4	12.5	----	.66	K10	K218	213	53
MAY 24...	1530	12	455	8.1	21.9	10.1	1.5	K10	1900	224	53
JUN 22...	1245	4.8	460	7.6	19.7	9.1	.81	K10	540	216	47
JUL 21...	1030	.15	503	7.6	27.2	8.6	----	K89	1200	206	46
AUG 26...	1515	.23	430	7.8	24.8	9.3	----	----	-----	185	49
SEP 16...	1630	.06	473	7.4	24.5	11.4	----	----	-----	179	63

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (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)
OCT 27...	79	14	28	18	.7	5.1	170	77	42	.2	3.7
NOV 17...	80	14	27	18	.7	4.3	180	89	39	.2	1.6
DEC 07...	73	13	12	9	.3	4.1	180	80	19	.2	3.9
JAN 19...	94	16	17	10	.4	4.9	220	82	23	<.1	6.0
FEB 17...	31	5.1	6.7	12	.3	3.2	69	27	12	.1	6.2
MAR 17...	50	8.6	9.0	10	.3	2.9	120	40	13	.2	7.0
APR 13...	64	13	12	10	.3	2.2	160	61	11	.2	2.6
MAY 24...	70	12	8.4	7	.2	3.1	171	40	10	.2	5.6
JUN 22...	65	13	12	10	.3	3.2	169	55	13	.2	1.4
JUL 21...	61	13	20	17	.6	3.6	160	57	27	.2	4.8
AUG 26...	56	11	14	13	.4	4.4	136	55	18	.2	4.5
SEP 16...	55	10	21	19	.7	5.1	116	58	29	.2	3.0

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT 27...	370	351	.50	2.5	----	----	-----	-----	---	----	---
NOV 17...	399	363	.54	1.9	.02	.04	.020	.020	.02	4.3	.32
DEC 07...	350	313	.47	4.9	.88	.88	.030	.020	.02	----	---
JAN 19...	406	375	.55	6.0	2.0	2.0	.020	.030	.03	.36	.38
FEB 17...	148	134	.20	104	1.0	1.0	.150	.150	.19	.57	.70
MAR 17...	239	203	.32	85.8	1.4	1.3	.060	.090	.11	.67	.88
APR 13...	265	262	.36	18.6	.30	.34	.040	.030	.03	.12	.29
MAY 24...	274	252	.37	9.5	1.1	1.1	.060	.060	.07	.64	.34
JUN 22...	308	264	.41	3.9	.30	.31	<.010	.020	.02	.59	.48
JUL 21...	355	283	.48	.14	<.10	<.10	.040	.040	.05	.36	.46
AUG 26...	281	245	.38	.17	<.10	<.10	<.010	<.010	.01	----	---
SEP 16...	282	251	.38	.04	<.10	<.10	.040	.030	.03	.26	.27

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT 27...	----	----	----	----	-----	----	---	----	--	--	--
NOV 17...	4.40	4.1	.34	4.4	19	.030	.09	.020	--	--	--
DEC 07...	<.10	----	<.10	----	-----	.050	.15	.040	--	--	--
JAN 19...	.38	.00	.41	2.3	10	.050	.15	.550	--	--	--
FEB 17...	.72	.00	.85	1.7	7.6	.170	.52	.120	2	1	1
MAR 17...	.73	.00	.97	2.1	9.4	.120	.37	.060	--	--	--
APR 13...	.16	.00	.32	.46	2.0	.030	.09	.250	--	--	--
MAY 24...	.70	.30	.40	1.8	7.9	.100	.31	.040	--	--	--
JUN 22...	.60	.10	.50	.90	3.9	.240	.74	.140	--	--	--
JUL 21...	.40	.00	.50	.50	.50	.060	.18	.020	--	--	--
AUG 26...	.30	.00	.30	----	-----	.050	.15	.020	1	0	1
SEP 16...	.30	.00	.30	.40	.30	.070	.21	.020	--	--	--

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
OCT 27...	----	--	--	--	--	--	--	--	--	--	--
NOV 17...	----	--	--	--	--	--	--	--	--	--	--
DEC 07...	----	--	--	--	--	--	--	--	--	--	--
JAN 19...	----	--	--	--	--	--	--	--	--	--	--
FEB 17...	<100	--	42	<1	<1	<1	20	16	4	<3	10
MAR 17...	----	--	--	--	--	--	--	--	--	--	--
APR 13...	----	--	--	--	--	--	--	--	--	--	--
MAY 24...	----	--	--	--	--	--	--	--	--	--	--
JUN 22...	----	--	--	--	--	--	--	--	--	--	--
JUL 21...	----	--	--	--	--	--	--	--	--	--	--
AUG 26...	100	50	49	<1	1	<1	10	--	<1	<3	4
SEP 16...	----	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT 27...	---	----	----	---	--	---	--	---	---	--	--
NOV 17...	---	----	----	---	--	---	--	---	---	--	--
DEC 07...	---	----	----	---	--	---	--	---	---	--	--
JAN 19...	---	----	----	---	--	---	--	---	---	--	--
FEB 17...	<10	2800	2000	810	5	<10	<4	200	140	62	.1
MAR 17...	---	----	----	---	--	---	--	---	---	--	--
APR 13...	---	----	----	---	--	---	--	---	---	--	--
MAY 24...	---	----	----	---	--	---	--	---	---	--	--
JUN 22...	---	----	----	---	--	---	--	---	---	--	--
JUL 21...	---	----	----	---	--	---	--	---	---	--	--
AUG 26...	<10	480	470	6	2	<10	<4	50	30	16	.1
SEP 16...	---	----	----	---	--	---	--	---	---	--	--

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	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, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 27...	--	---	---	--	--	--	--	---	----	--	--
NOV 17...	--	---	---	--	--	--	--	---	----	--	--
DEC 07...	--	---	---	--	--	--	--	---	----	--	--
JAN 19...	--	---	---	--	--	--	--	---	----	--	--
FEB 17...	--	<.1	<10	<1	<1	<1	<1	79	<6.0	20	10
MAR 17...	--	---	---	--	--	--	--	---	----	--	--
APR 13...	--	---	---	--	--	--	--	---	----	--	--
MAY 24...	--	---	---	--	--	--	--	---	----	--	--
JUN 22...	--	---	---	--	--	--	--	---	----	--	--
JUL 21...	--	---	---	--	--	--	--	---	----	--	--
AUG 26...	.0	.1	<10	<1	<1	<1	<1	240	<6.0	30	<4
SEP 16...	--	---	---	--	--	--	--	---	----	--	--

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 27...	----	--	---	--	---	--	---	---	---	---	--
NOV 17...	----	--	---	--	---	--	---	---	4.6	---	--
DEC 07...	----	--	---	--	---	--	---	---	2.9	---	--
JAN 19...	----	--	---	--	---	--	---	---	2.3	---	--
FEB 17...	----	--	---	--	---	--	---	---	---	5.2	--
MAR 17...	----	--	---	--	---	--	---	---	5.0	---	--
APR 13...	----	--	---	--	---	--	---	---	2.9	---	--
MAY 24...	----	--	---	--	---	--	---	---	5.1	---	--
JUN 22...	----	--	---	--	---	--	---	---	2.8	---	--
JUL 21...	----	--	---	--	---	--	---	---	---	---	--
AUG 26...	<7.5	.7	4.0	.6	3.8	.6	.08	.25	---	3.7	.6
SEP 16...	----	--	---	--	---	--	---	---	2.9	---	--

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CYANIDE TOTAL (MG/L AS CN)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
27...	--	--	--	--	--	--	--	10	.07	--
NOV										
17...	--	--	--	--	--	--	--	--	--	--
DEC										
07...	--	--	--	--	--	--	--	--	--	--
JAN										
19...	--	--	--	--	--	--	--	79	1.2	34
FEB										
17...	<.01	--	--	--	--	--	--	112	79	98
MAR										
17...	--	--	--	--	--	--	--	58	21	98
APR										
13...	--	--	--	--	--	--	--	34	2.4	--
MAY										
24...	--	--	--	--	--	--	--	34	1.2	--
JUN										
22...	--	--	--	--	--	--	--	12	.16	--
JUL										
21...	--	--	--	--	--	--	--	20	.00	--
AUG										
26...	<.01	<.10	<1.0	<.10	<1	<.01	<.1	--	--	--
SEP										
16...	--	--	--	--	--	--	--	9	.00	--

DATE	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
27...	----	----	----	---	----	---	----	---	----	----	---
JAN											
19...	----	----	----	---	----	---	----	---	----	----	---
FEB											
17...	----	----	----	---	----	---	----	---	----	----	---
MAR											
17...	----	----	----	---	----	---	----	---	----	----	---
APR											
13...	----	----	----	---	----	---	----	---	----	----	---
MAY											
24...	----	----	----	---	----	---	----	---	----	----	---
JUN											
22...	----	----	----	---	----	---	----	---	----	----	---
JUL											
21...	----	----	----	---	----	---	----	---	----	----	---
AUG											
26...	<.10	<1.0	<.01	<.1	<.01	<.1	<.01	<.1	<.01	<.01	<.1
SEP											
16...	----	----	----	---	----	---	----	---	----	----	---

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 27...	----	---	----	---	----	----	---	----	---	----	---
JAN 19...	----	---	----	---	----	----	---	----	---	----	---
FEB 17...	----	---	----	---	----	----	---	----	---	----	---
MAR 17...	----	---	----	---	----	----	---	----	---	----	---
APR 13...	----	---	----	---	----	----	---	----	---	----	---
MAY 24...	----	---	----	---	----	----	---	----	---	----	---
JUN 22...	----	---	----	---	----	----	---	----	---	----	---
JUL 21...	----	---	----	---	----	----	---	----	---	----	---
AUG 26...	<.01	<.1	<.01	<.1	<.01	<.01	<.1	<.01	<.1	<.01	<.1
SEP 16...	----	---	----	---	----	----	---	----	---	----	---

DATE	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)
OCT 27...	----	----	---	----	----	----	---	----	----	----	----
JAN 19...	----	----	---	----	----	----	---	----	----	----	----
FEB 17...	----	----	---	----	----	----	---	----	----	----	----
MAR 17...	----	----	---	----	----	----	---	----	----	----	----
APR 13...	----	----	---	----	----	----	---	----	----	----	----
MAY 24...	----	----	---	----	----	----	---	----	----	----	----
JUN 22...	----	----	---	----	----	----	---	----	----	----	----
JUL 21...	----	----	---	----	----	----	---	----	----	----	----
AUG 26...	<.01	<.01	<.1	<.01	<.01	<.01	<.1	<.10	<1.0	<.01	<.10
SEP 16...	----	----	---	----	----	----	---	----	----	----	----

DATE	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 27...	-----	--	---	----	----	----	----	----	10	.07	--
JAN 19...	-----	--	---	----	----	----	----	----	79	1.2	34
FEB 17...	-----	--	---	----	----	----	----	----	112	79	98
MAR 17...	-----	--	---	----	----	----	----	----	58	21	98
APR 13...	-----	--	---	----	----	----	----	----	34	2.4	--
MAY 24...	-----	--	---	----	----	----	----	----	34	1.2	--
JUN 22...	-----	--	---	----	----	----	----	----	12	.16	--
JUL 21...	-----	--	---	----	----	----	----	----	20	.00	--
AUG 26...	<1.00	<1	<10	<.01	<.01	<.01	<.01	<.01	---	-----	--
SEP 16...	-----	--	---	----	----	----	----	----	9	.00	--

03291780 INDIAN-KENTUCK CREEK NEAR CANAAN, IN

LOCATION.--Lat 38°52'41", long 85°15'26", in SW¼NW¼ sec.13, T.5 N., R.11 E., Jefferson County, Hydrologic Unit 05140101, on downstream end of left pier of bridge on State Highway 62, 1,500 ft (457 m) upstream from Wilson Fork, 2.0 miles (3.2 km) northeast of Canaan, and at mile 16.7 (26.9 km).

DRAINAGE AREA.--27.5 mi^2 (71.2 km^2).

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

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

REMARKS.--Records fair.

AVERAGE DISCHARGE.--13 years, 33.6 ft^3/s (0.952 m^3/s), 16.59 in/yr (421 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,240 ft^3/s (205 m^3/s) June 10, 1981, maximum gage height, 11.27 ft (3.435 m) Aug. 1, 1979; no flow for many days in 1970, 1972, and 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft^3/s (34.0 m^3/s) (revised) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	0215	1500	42.5	6.30	1.920	May 21	1900	2910	82.4	7.88	2.402
Jan. 22	Unknown	2200	62.3	unknown		June 8	1815	*4760	135	*9.32	2.841
Jan. 31	0730	2890	81.8	7.87	2.399	July 22	1745	1220	34.6	5.84	1.780
Apr. 3	0445	1980	56.1	7.01	2.137						

Minimum daily discharge, 0.01 ft^3/s (<0.001 m^3/s) Oct. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.51	167	51	173	9.7	47	5.3	142	4.3	.86	6.5
2	.01	.46	29	31	68	9.6	36	4.5	42	3.3	.69	6.1
3	.01	.44	13	150	128	11	584	3.4	28	38	.55	5.0
4	.01	.42	9.1	440	79	46	84	3.1	23	11	.46	2.4
5	.01	.42	7.0	95	47	40	54	2.7	19	5.1	.35	1.4
6	.05	.39	5.1	59	30	25	60	2.5	13	3.2	.65	.91
7	.02	.36	4.3	44	24	20	37	3.8	12	2.5	5.8	.60
8	.02	.34	3.8	25	21	15	33	113	527	8.5	1.7	.45
9	.02	1.6	3.1	20	18	13	36	24	133	6.4	1.1	.37
10	.02	9.4	2.8	9.0	13	12	35	14	77	8.9	.66	.30
11	.02	3.3	2.6	9.6	11	252	33	9.2	32	10	.80	.25
12	.02	1.8	2.5	8.0	10	131	27	6.6	25	3.9	1.4	.20
13	.02	1.3	2.3	7.0	9.1	216	23	5.0	20	2.3	.76	.18
14	.02	.97	2.5	6.0	9.1	71	18	3.7	13	1.8	.45	.17
15	.02	.84	2.3	5.0	48	387	16	3.5	11	1.5	.33	.12
16	.02	.75	2.0	4.7	230	151	16	2.5	131	1.1	.25	.08
17	.02	.67	2.5	4.3	210	64	32	1.8	59	.87	.23	.07
18	.04	.64	2.0	4.5	75	42	23	1.5	28	1.1	.16	.11
19	.02	.61	1.0	4.5	63	159	19	1.5	20	6.1	.12	.08
20	.02	3.4	1.0	4.8	50	257	16	1.1	15	9.9	.11	.06
21	.02	4.4	1.5	6.0	46	215	13	354	23	2.7	.10	.05
22	.02	2.5	30	1000	31	69	11	209	12	126	.07	.06
23	.04	1.8	200	450	26	44	9.2	182	11	29	.06	.06
24	.03	3.6	60	152	23	34	8.1	40	7.3	8.0	.06	.14
25	.02	5.4	34	80	16	28	7.6	26	5.4	4.0	.07	.21
26	.07	3.3	24	50	13	22	12	20	4.5	2.7	.04	.28
27	.17	7.2	57	40	12	18	8.3	53	4.1	2.1	3.7	.44
28	.58	5.2	48	35	11	15	6.5	60	13	3.2	3.1	.34
29	.83	3.3	47	50	------	13	5.7	153	19	2.7	.94	.27
30	.65	5.5	24	852	------	13	5.7	138	7.7	1.6	27	.23
31	.58	-----	26	1540	------	188	------	52	------	1.2	27	-----
TOTAL	3.41	70.82	816.4	5237.4	1494.2	2590.3	1316.1	1499.7	1477.0	312.97	79.57	27.43
MEAN	.11	2.36	26.3	169	53.4	83.6	43.9	48.4	49.2	10.1	2.57	.91
MAX	.83	9.4	200	1540	230	387	584	354	527	126	27	6.5
MIN	.01	.34	1.0	4.3	9.1	9.6	5.7	1.1	4.1	.87	.04	.05
CFSM	.004	.09	.96	6.15	1.94	3.04	1.60	1.76	1.79	.37	.09	.03
IN.	.00	.10	1.10	7.08	2.02	3.50	1.78	2.03	2.00	.42	.11	.04

CAL YR 1981 TOTAL 9987.39 MEAN 27.4 MAX 1060 MIN .01 CFSM 1.00 IN 13.51
WTR YR 1982 TOTAL 14925.30 MEAN 40.9 MAX 1540 MIN .01 CFSM 1.49 IN 20.19

03294000 SILVER CREEK NEAR SELLERSBURG, IN

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

DRAINAGE AREA.--189 mi^2 (490 km^2).

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 429.78 ft (130.997 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1976, nonrecording gage and crest-stage gage at same site and datum.

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

AVERAGE DISCHARGE.--28 years, 221 ft^3/s (6.259 m^3/s), 15.88 in/yr (403 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft^3/s (555 m^3/s) Jan. 22, 1959, gage height, 30.89 ft (9.415 m), from floodmarks, from rating curve extended above 6,300 ft^3/s (178 m^3/s) on basis of contracted-opening measurements of peak flow, at site 5.2 miles (8.4 km) upstream, drainage area, 165 mi^2 (427 km^2), adjusted to gage site; no flow at times in most years.

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

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 24	0100	*7360	208	*23.77	7.245	Mar. 15	1800	3220	91.5	16.77	5.111
Feb. 1	0500	4730	134	19.88	6.059	Apr. 3	1800	3000	85.0	16.15	4.923

Minimum daily discharge, 1.9 ft^3/s (0.054 m^3/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	9.6	563	118	3630	122	469	75	733	77	6.9	1120
2	1.9	5.3	184	105	724	115	293	70	314	58	5.4	1870
3	2.4	4.0	95	276	685	138	2160	60	177	43	5.6	542
4	3.5	3.9	69	1550	764	268	1040	51	122	37	4.9	210
5	4.3	3.6	51	566	445	490	458	47	117	32	122	134
6	5.7	3.7	40	299	331	275	438	41	87	28	155	92
7	6.9	3.7	40	214	248	230	312	41	64	23	39	66
8	6.4	3.7	39	151	217	186	269	215	140	19	22	51
9	7.5	3.7	35	125	208	171	397	134	235	30	14	40
10	8.8	3.3	31	80	156	156	320	83	108	26	9.1	38
11	8.5	2.9	29	74	152	268	254	62	69	77	9.8	25
12	7.1	2.9	26	60	141	518	231	47	51	88	13	21
13	5.9	3.3	22	54	126	489	201	40	62	45	11	19
14	4.5	3.9	21	48	141	431	167	33	47	32	8.4	20
15	4.1	7.8	21	44	189	2480	142	27	37	23	6.4	18
16	4.3	6.4	20	40	423	1750	130	22	436	19	5.4	14
17	5.4	4.5	20	35	1470	977	306	18	402	15	4.9	11
18	13	2.7	26	36	711	521	272	16	163	13	4.9	10
19	17	3.0	21	37	480	740	184	17	105	18	6.7	10
20	10	23	16	39	359	735	156	17	83	47	7.2	12
21	6.9	20	14	51	337	1050	130	17	68	33	34	10
22	5.3	12	55	812	264	521	111	59	56	24	36	9.4
23	3.8	8.4	774	5780	223	367	97	61	44	38	13	8.4
24	2.8	9.8	285	5540	208	286	88	34	35	24	8.4	9.1
25	2.4	11	172	843	176	238	82	21	27	15	5.4	13
26	2.7	10	121	318	150	219	139	16	23	11	3.7	16
27	7.0	12	136	244	141	173	153	20	21	8.4	25	12
28	11	16	167	217	132	145	108	104	65	7.8	45	10
29	11	15	138	180	-----	131	92	86	270	17	19	10
30	9.5	13	101	271	-----	121	85	2030	107	11	45	7.8
31	12	-----	90	3020	-----	830	----	430	----	8.4	139	------
TOTAL	204.7	232.1	3422	21227	13231	15141	9284	3994	4277	947.6	875.1	4428.7
MEAN	6.60	7.74	110	685	473	488	309	129	143	30.6	28.2	148
MAX	17	23	774	5780	3630	2480	2160	2030	733	88	139	1870
MIN	1.9	2.7	14	35	126	115	82	16	21	7.8	3.7	7.8
CFSM	.04	.04	.58	3.62	2.50	2.58	1.64	.68	.76	.16	.15	.78
IN.	.04	.05	.67	4.18	2.60	2.98	1.83	.79	.84	.19	.17	.87

CAL YR 1981 TOTAL 35601.3 MEAN 97.5 MAX 1780 MIN 1.9 CFSM .52 IN 7.01
WTR YR 1982 TOTAL 77264.2 MEAN 212 MAX 5780 MIN 1.9 CFSM 1.12 IN 15.21

03302220 BUCK CREEK NEAR NEW MIDDLETOWN, IN

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

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 501.63 ft (152.897 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--13 years, 80.4 ft³/s (2.277 m³/s), 16.74 in/yr (425 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft³/s (360 m³/s) Apr. 2, 1970, gage height, 14.40 ft (4.389 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Sept. 13, 1972.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	0230	1080	30.6	5.45	1.661	Mar. 16	1200	1730	49.0	6.56	1.999
Jan. 23	0515	*5450	154	*10.32	3.146	Mar. 20	2045	1140	32.3	5.57	1.698
Jan. 31	1230	1470	41.6	6.15	1.875	Apr. 3	0545	3160	89.5	8.32	2.536
Mar. 15	0445	2470	70.0	7.55	2.301						

Minimum daily discharge, 3.2 ft³/s (0.085 m³/s) Aug. 4.

NOTE.--No gage-height record: Aug. 30 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	9.7	175	42	354	46	86	28	49	12	4.2	130
2	4.0	10	36	42	210	45	79	24	24	9.3	3.8	240
3	4.1	9.8	21	108	212	41	935	22	19	8.6	3.6	100
4	4.2	8.7	16	426	209	43	279	21	18	8.6	3.2	45
5	3.9	8.3	13	165	158	46	190	20	17	11	3.4	25
6	3.7	7.8	12	114	124	42	139	19	14	15	6.4	15
7	3.7	7.3	11	86	108	41	115	23	12	10	4.6	11
8	4.1	7.0	11	68	93	35	103	28	48	15	4.0	9.3
9	4.3	7.1	9.6	57	86	34	96	20	58	12	4.2	7.9
10	4.5	6.9	9.0	45	80	33	81	20	64	9.7	3.8	6.9
11	4.6	7.0	8.8	43	76	69	67	19	31	51	4.8	6.0
12	4.6	6.9	9.2	41	73	101	63	18	26	20	5.1	5.6
13	4.7	6.9	9.5	38	72	129	60	16	23	13	4.0	6.4
14	4.8	6.7	9.2	35	76	124	50	15	20	11	3.8	10
15	5.1	6.4	8.5	33	93	962	45	14	16	8.6	3.6	8.0
16	5.3	6.2	8.6	31	210	719	44	14	50	7.3	9.7	6.2
17	5.9	6.4	9.4	29	334	384	148	13	52	6.7	6.7	5.1
18	13	6.1	8.2	27	239	268	113	13	34	5.8	5.1	4.9
19	12	7.0	7.4	28	190	245	90	13	28	5.3	4.4	4.7
20	10	12	7.0	31	156	320	81	13	22	60	4.2	4.6
21	9.1	10	8.0	38	118	274	64	13	18	15	4.2	4.5
22	7.9	8.2	152	752	95	190	56	18	15	11	3.8	4.3
23	7.6	7.2	224	1980	84	158	52	14	13	7.9	4.0	4.0
24	7.4	7.6	78	414	79	142	50	11	11	6.4	4.6	4.1
25	7.2	11	48	239	64	104	40	10	9.3	5.6	4.4	5.4
26	9.7	14	39	178	55	90	38	10	8.6	6.4	4.0	9.2
27	14	21	43	142	53	80	34	19	7.9	6.4	12	7.4
28	13	15	42	92	50	75	30	33	34	5.6	8.3	6.0
29	11	8.7	35	63	----	71	30	13	30	5.1	4.2	5.4
30	10	9.4	30	72	----	56	29	34	16	4.4	3.8	5.0
31	9.9	-----	33	674	----	124	----	18	-----	6.4	69	-----
TOTAL	218.0	266.3	1131.4	6133	3751	5091	3287	566	787.8	380.1	214.9	706.9
MEAN	7.03	8.88	36.5	198	134	164	110	18.3	26.3	12.3	6.93	23.6
MAX	14	21	224	1980	354	962	935	34	64	60	69	240
MIN	3.7	6.1	7.0	27	50	33	29	10	7.9	4.4	3.2	4.0
CFSM	.11	.14	.56	3.04	2.06	2.52	1.69	.28	.40	.19	.11	.36
IN.	.12	.15	.65	3.50	2.14	2.90	1.88	.32	.45	.22	.12	.40

CAL YR 1981 TOTAL 12202.5 MEAN 33.4 MAX 534 MIN 3.7 CFSM .51 IN 6.96
WTR YR 1982 TOTAL 22533.4 MEAN 61.7 MAX 1980 MIN 3.2 CFSM .95 IN 12.86

03302300 LITTLE INDIAN CREEK NEAR GALENA, IN

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

DRAINAGE AREA.--16.1 mi² (41.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 703.00 ft (214.274 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those below 1 cfs which are poor.

AVERAGE DISCHARGE.--14 years, 24.2 ft³/s (0.685 m³/s), 20.41 in/yr (518 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0445	2400	68.0	6.81	2.076	Apr. 3	0400	1930	54.7	6.36	1.939
Mar. 15	0330	*2750	77.9	*7.10	2.164						

Minimum daily discharge, 0.07 ft³/s (0.002 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.91	.85	101	17	71	11	35	6.2	25	6.7	.53	63
2	.79	.80	18	16	35	11	29	5.7	13	5.0	.49	45
3	.71	.76	11	45	56	13	406	5.0	9.7	4.6	.44	11
4	.64	.71	7.9	209	44	62	54	4.6	10	3.9	.40	4.8
5	.63	.67	5.7	47	30	47	36	4.2	10	3.0	.37	3.0
6	.69	.69	5.0	33	23	30	30	3.9	7.3	2.4	.34	2.3
7	.77	.63	4.1	25	21	23	23	9.9	5.7	2.3	.30	1.9
8	.84	.55	3.6	20	20	19	23	13	17	2.8	.30	1.8
9	.98	.62	3.0	14	22	17	29	7.4	16	2.9	.27	1.7
10	.84	.55	2.8	9.0	17	16	24	5.7	11	2.7	.24	1.7
11	.69	.62	2.5	10	16	41	21	5.0	8.1	12	.44	1.7
12	.68	.53	2.2	9.0	15	39	20	3.9	9.5	4.1	.64	1.6
13	.64	.46	2.1	8.4	14	50	18	3.3	9.0	2.8	.30	3.2
14	.53	.44	2.3	7.7	18	42	15	3.0	6.3	2.4	.25	2.3
15	.53	.44	2.3	7.1	20	596	14	2.8	4.9	2.1	.35	1.6
16	.53	.46	2.0	6.6	87	137	13	2.5	58	1.9	.39	1.4
17	.69	.49	3.2	6.3	100	88	35	2.5	30	1.7	.39	1.2
18	4.5	.44	2.5	6.0	46	42	23	2.3	18	1.6	.60	1.2
19	1.8	3.9	1.7	6.4	33	67	20	3.0	14	1.5	.62	1.2
20	.82	8.4	1.6	7.0	27	65	17	2.3	11	2.6	.45	1.2
21	.61	2.1	2.0	8.0	25	116	14	4.2	8.9	2.0	1.3	.90
22	.54	1.5	94	28	21	43	12	11	7.1	2.2	1.2	.75
23	.68	1.4	107	718	19	30	11	4.2	5.8	2.1	.27	.50
24	.63	3.1	30	59	18	23	10	2.5	4.8	1.8	.15	.84
25	.60	2.3	20	34	15	22	9.9	2.3	4.0	1.3	.13	4.2
26	.79	2.1	17	31	14	20	12	2.3	3.5	1.1	.07	1.9
27	2.4	6.1	21	23	13	17	9.4	23	3.2	1.0	8.9	1.6
28	1.7	3.5	18	20	12	15	8.4	15	102	.87	2.8	1.3
29	1.2	2.6	15	18	----	14	7.0	24	19	.76	1.5	.98
30	.94	18	14	27	----	13	7.0	40	10	.66	8.9	.80
31	.89	-----	14	416	----	106	-----	17	-----	.60	7.4	------
TOTAL	30.19	65.71	536.5	1891.5	852	1835	985.7	241.7	461.8	83.39	40.73	166.57
MEAN	.97	2.19	17.3	61.0	30.4	59.2	32.9	7.80	15.4	2.69	1.31	5.55
MAX	4.5	18	107	718	100	596	406	40	102	12	8.9	63
MIN	.53	.44	1.6	6.0	12	11	7.0	2.3	3.2	.60	.07	.50
CFSM	.06	.14	1.08	3.79	1.89	3.68	2.04	.48	.96	.17	.08	.35
IN.	.07	.15	1.24	4.37	1.97	4.24	2.28	.56	1.07	.19	.09	.38

CAL YR 1981	TOTAL 3722.73	MEAN 10.2	MAX 207	MIN .17	CFSM .63	IN 8.60		
WTR YR 1982	TOTAL 7190.79	MEAN 19.7	MAX 718	MIN .07	CFSM 1.22	IN 16.61		

03302500 INDIAN CREEK NEAR CORYDON, IN

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

DRAINAGE AREA.--129 mi^2 (334 km^2), of which 10.6 mi^2 (27.4 km^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 (175.906 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1948, nonrecording gage, and Dec. 9, 1948, to June 12, 1952, recorder records for stages above 6.3 ft (1.920 m) at same site and datum.

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

AVERAGE DISCHARGE.--39 years, 171 ft^3/s (4.843 m^3/s), 18.00 in/yr (457 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft^3/s (756 m^3/s) Mar. 5, 1964, gage height, 22.64 ft (6.901 m); no flow at times during 1943-44, 1951-54, 1959, 1965, 1972-73, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,500 ft^3/s (127 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	1000	*9460	268	*17.61	5.368

Minimum daily discharge, 3.3 ft^3/s (0.093 m^3/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	642	124	916	107	447	59	321	50	9.0	346
2	11	12	228	102	447	102	310	56	169	40	8.2	720
3	10	11	136	198	427	107	1800	52	109	35	8.0	238
4	9.3	11	97	1300	480	138	629	49	83	32	7.5	84
5	9.0	10	76	466	341	331	402	46	91	30	7.3	48
6	9.9	11	63	301	259	231	344	44	71	27	7.0	33
7	11	10	57	223	198	196	256	47	50	24	6.5	25
8	12	9.7	53	173	185	161	226	102	48	25	6.9	21
9	14	9.3	47	115	191	146	241	78	142	31	6.5	17
10	12	8.8	43	80	136	133	211	58	79	27	6.3	15
11	10	8.2	40	90	138	185	189	49	58	85	9.1	13
12	9.7	8.0	38	80	139	341	173	44	48	64	8.4	12
13	8.7	7.6	37	75	121	341	156	40	59	35	6.5	13
14	8.0	7.3	36	70	119	325	136	36	42	28	4.9	19
15	7.2	6.9	35	65	202	2380	121	34	31	24	4.1	18
16	7.2	6.7	33	60	344	1370	110	32	63	20	4.5	13
17	8.0	7.0	34	57	714	831	171	29	180	19	4.8	10
18	22	6.7	37	55	447	500	177	28	98	18	6.0	9.7
19	51	7.1	27	59	341	547	148	27	73	16	5.6	8.8
20	21	8.2	26	63	284	607	133	27	61	63	5.2	8.9
21	14	19	29	73	267	970	112	26	50	35	5.4	8.5
22	11	14	100	1200	221	511	97	43	42	23	9.0	7.3
23	11	11	943	7160	194	370	87	56	36	16	10	6.5
24	9.8	12	292	785	181	286	80	36	31	13	6.1	7.1
25	10	17	185	420	156	233	78	29	27	11	4.3	8.9
26	12	18	143	256	136	205	88	26	25	14	3.3	17
27	18	25	139	202	128	169	82	36	24	12	11	14
28	31	42	145	173	118	148	70	107	118	11	36	10
29	22	28	128	138	----	134	64	65	253	9.8	13	8.5
30	17	24	107	187	----	124	62	723	73	8.7	116	7.1
31	15	-----	107	2390	----	913	----	175	----	9.6	189	------
TOTAL	434.8	389.5	4103	16740	7830	13142	7200	2259	2555	856.1	535.4	1767.3
MEAN	14.0	13.0	132	540	280	424	240	72.9	85.2	27.6	17.3	58.9
MAX	51	42	943	7160	916	2380	1800	723	321	85	189	720
MIN	7.2	6.7	26	55	118	102	62	26	24	8.7	3.3	6.5
CFSM	.11	.10	1.02	4.19	2.17	3.29	1.86	.57	.66	.21	.13	.46
IN.	.13	.11	1.18	4.83	2.26	3.79	2.08	.65	.74	.25	.15	.51

CAL YR 1981 TOTAL 28553.4 MEAN 78.2 MAX 1110 MIN 3.0 CFSM .61 IN 8.23
WTR YR 1982 TOTAL 57812.1 MEAN 158 MAX 7160 MIN 3.3 CFSM 1.23 IN 16.67

03302680 WEST FORK BLUE RIVER AT SALEM, IN

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

DRAINAGE AREA.--19.0 mi² (49.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage 713.00 ft (217.322 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--12 years, 23.3 ft³/s (0.660 m³/s), 16.65 in/yr (423 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,430 ft³/s (125 m³/s) July 10, 1974, gage height, 12.29 ft (3.746 m) from rating curve extended above 900 ft³/s (25.5 m³/s) by a step-backwater analysis; minimum daily, 0.02 ft³/s (0.001 m³/s) Sept. 24, 1970.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	0045	678	19.2	5.89	1.795	June 28	2045	694	19.7	5.94	1.811
Jan. 22	1615	2440	69.1	9.81	2.990	July 19	1945	767	21.7	6.17	1.881
Jan. 31	0830	2110	59.8	9.30	2.835	Aug. 30	1845	2100	59.5	9.28	2.829
Apr. 3	0400	916	25.9	6.62	2.018	Sept. 1	0930	*3170	89.8	*10.84	3.304
May 29	2030	920	26.1	6.63	2.021	Sept. 2	0915	1530	43.3	8.15	2.484

Minimum daily discharge, 0.16 ft³/s (0.005 m³/s) Oct. 3, 14-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	PEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	1.1	31	16	101	14	13	9.1	22	6.6	1.1	603
2	.21	.98	16	16	56	14	14	8.5	13	5.1	.85	300
3	.16	.91	11	48	77	15	185	7.7	9.5	12	.70	89
4	.21	.84	9.0	166	55	22	49	7.4	8.5	7.0	.62	49
5	.23	.96	6.9	49	39	22	35	7.0	7.5	5.4	.82	30
6	.62	.99	5.9	34	28	20	27	6.6	6.1	3.8	1.1	21
7	.46	.98	5.7	25	24	21	20	9.2	5.2	3.1	.77	15
8	.39	.84	5.0	19	21	18	20	22	11	32	.62	11
9	.37	3.8	4.3	16	19	17	20	13	7.0	11	.51	9.4
10	.32	5.3	3.9	11	17	16	17	11	4.9	11	.40	7.5
11	.27	3.2	3.6	12	16	29	16	9.6	4.1	24	.57	6.3
12	.24	2.4	3.2	11	15	29	16	8.5	4.4	9.9	.67	5.1
13	.20	1.9	3.1	10	14	39	15	7.8	4.2	7.2	.49	6.3
14	.16	1.7	3.3	9.4	14	34	14	7.1	3.3	5.6	.37	5.7
15	.16	1.5	3.2	8.8	38	186	13	6.6	5.9	4.6	.30	4.4
16	.16	1.4	2.7	8.2	110	72	13	6.2	44	3.8	.45	3.4
17	.42	1.3	3.4	7.6	89	44	18	5.7	14	3.2	.56	2.9
18	2.8	1.2	2.6	7.4	49	32	14	5.3	8.7	2.7	.41	3.8
19	1.3	4.3	2.1	8.0	37	107	14	5.4	7.4	62	.28	2.9
20	.73	6.7	2.0	8.6	32	80	13	6.4	5.7	23	6.9	2.3
21	.58	3.4	2.1	9.6	29	54	12	6.8	5.8	9.2	11	2.2
22	.53	2.5	47	770	23	36	12	10	4.6	7.2	1.3	2.0
23	.58	2.5	84	434	21	28	12	13	4.0	5.4	.65	1.7
24	.55	5.5	34	75	19	22	12	7.3	3.4	4.4	.56	2.8
25	.57	5.3	23	49	17	19	12	6.2	3.0	3.3	.50	3.6
26	3.3	5.2	18	30	15	15	12	6.0	2.7	2.5	.43	2.5
27	4.9	10	20	21	15	14	11	5.4	2.5	2.2	2.6	2.2
28	2.7	6.6	19	19	14	13	10	4.9	76	2.1	1.3	2.1
29	1.8	5.1	18	17	----	13	10	139	26	1.8	.62	1.7
30	1.4	6.2	16	358	----	13	10	52	9.7	1.4	230	1.3
31	1.2	-----	17	923	----	18	----	24	-----	1.3	29	------
TOTAL	27.75	94.60	426.0	3196.6	1004	1076	659	444.7	334.1	283.8	305.45	1200.0
MEAN	.90	3.15	13.7	103	35.9	34.7	22.0	14.3	11.1	9.15	9.85	40.0
MAX	4.9	10	84	923	110	186	185	139	76	62	230	603
MIN	.16	.84	2.0	7.4	14	13	10	4.9	2.5	1.3	.28	1.3
CFSM	.05	.17	.72	5.42	1.89	1.83	1.16	.75	.58	.48	.52	2.11
IN.	.05	.19	.83	6.26	1.97	2.11	1.29	.87	.65	.56	.60	2.35

CAL YR 1981 TOTAL 4109.58 MEAN 11.3 MAX 250 MIN .08 CFSM .60 IN 8.05
WTR YR 1982 TOTAL 9052.00 MEAN 24.8 MAX 923 MIN .16 CFSM 1.31 IN 17.72

03302800 BLUE RIVER AT FREDERICKSBURG, IN

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

DRAINAGE AREA.--283 mi^2 (733 km^2), of which 76.9 mi^2 (199.2 km^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 (179.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--14 years, 332 ft^3/s (9.402 m^3/s), 15.93 in/yr (405 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft^3/s (351 m^3/s) Jan. 23, 1982, gage height, 23.28 ft (7.096 m), from peak stage indicator; minimum daily, 6.1 ft^3/s (0.17 m^3/s) Oct. 18, 1968.

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

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft^3/s (85.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	Unknown	*12400	351	*23.28[a]	7.096	Sept. 1	2300	5690	161	15.45	4.709
Jan. 31	2200	11500	326	22.31	6.800						

Minimum daily discharge, 14 ft^3/s (0.40 m^3/s) Oct. 14-16, Aug. 19, 20.

[a]From peak stage indicator.

NOTE.--No gage-height record Dec. 12 to Jan 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	31	376	220	5660	247	628	113	749	160	24	1920
2	16	28	328	210	1290	237	528	105	439	111	23	2270
3	15	25	196	270	989	232	2580	96	296	91	22	798
4	15	24	139	2500	1180	256	1320	88	223	99	20	364
5	15	24	104	1400	819	722	785	83	187	77	20	233
6	29	23	83	700	660	538	656	79	148	67	20	158
7	39	22	73	500	509	460	498	83	119	57	24	118
8	29	21	67	360	475	365	429	381	117	92	22	95
9	23	21	59	290	428	315	434	293	191	229	21	81
10	20	28	50	200	328	284	416	189	130	107	18	72
11	18	42	45	160	283	324	371	145	96	301	20	65
12	17	33	42	180	284	648	333	119	86	186	20	56
13	15	29	40	160	275	733	309	100	86	102	20	55
14	14	26	38	140	258	779	263	88	77	76	17	56
15	14	23	37	130	281	2980	229	80	66	66	16	53
16	14	22	35	120	916	1690	213	73	234	60	15	46
17	16	22	37	95	1780	1090	285	67	354	54	15	41
18	28	22	33	95	1040	805	392	62	188	48	17	41
19	45	22	29	110	764	857	305	60	129	45	14	38
20	36	113	28	100	644	1220	266	58	100	213	14	37
21	28	88	31	100	608	1370	223	63	84	100	85	32
22	24	56	300	9900	521	1050	191	72	74	62	66	29
23	24	45	1400	7400	453	783	174	98	64	53	31	25
24	21	49	900	3500	415	649	162	83	58	46	23	32
25	29	64	450	1000	360	559	154	64	51	40	19	33
26	41	64	340	600	306	478	157	60	48	36	17	35
27	78	82	250	450	284	402	153	56	46	33	24	31
28	78	99	260	418	266	357	131	50	333	30	42	28
29	56	76	240	341	-----	331	120	184	1160	28	31	26
30	44	66	230	821	-----	303	119	2100	285	26	29	24
31	37	----	210	9100	-----	490	-----	573	----	26	758	----
TOTAL	896	1290	6450	41570	22076	21554	12824	5765	6218	2721	1507	6892
MEAN	28.9	43.0	208	1341	788	695	427	186	207	87.8	48.6	230
MAX	78	113	1400	9900	5660	2980	2580	2100	1160	301	758	2270
MIN	14	21	28	95	258	232	119	50	46	26	14	24
CFSM	.10	.15	.74	4.74	2.78	2.46	1.51	.66	.73	.31	.17	.81
IN.	.12	.17	.85	5.46	2.90	2.83	1.69	.76	.82	.36	.20	.91

CAL YR 1981 TOTAL 58421 MEAN 160 MAX 2220 MIN 12 CFSM .57 IN 7.68
WTR YR 1982 TOTAL 129763 MEAN 356 MAX 9900 MIN 14 CFSM 1.26 IN 17.06

03303000 BLUE RIVER NEAR WHITE CLOUD, IN

LOCATION.--Lat 38°14'15", long 86°13'42", in NW¼SE¼ sec.19, T.3 S., R.3 E., Harrison County, Hydrologic Unit 05140104, on left bank 400 ft (122 m) downstream from Spring Creek, 600 ft (183 m) upstream from bridge on Interstate 64, 0.2 mile (0.3 km) upstream from bridge on State Highway 62, 0.8 mile (1.3 km) north of White Cloud, and at mile 14.7 (23.6 km).

DRAINAGE AREA.--476 mi² (1,233 km²), of which 192 mi² (497 km²) does not contribute directly to surface runoff. Also, part of flow from Indian Creek, downstream from Corydon, 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 (132.362 m) 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.--Records good.

AVERAGE DISCHARGE.--52 years, 628 ft³/s (17.78 m³/s), 17.92 in/yr (455 mm/yr).

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 24	0500	*16700	473	*16.68	5.084	Sept. 2	1100	7800	221	11.22	3.420
Feb. 1	1100	14400	408	15.44	4.706						

Minimum daily discharge, 44 ft³/s (1.25 m³/s) Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	103	816	472	13200	530	1360	413	1600	427	82	2370
2	57	91	932	460	3400	505	1070	400	1210	316	77	4980
3	53	81	576	608	2170	492	3690	383	737	249	74	2250
4	51	74	428	3860	2400	569	3730	364	552	215	71	906
5	50	72	339	2800	1770	918	1860	342	456	215	69	578
6	49	72	282	1390	1420	1030	1480	325	393	197	71	438
7	51	66	249	1010	1150	879	1220	331	334	164	67	346
8	61	64	222	757	985	757	1050	569	285	193	76	275
9	68	61	198	618	921	678	1020	813	319	247	68	228
10	70	61	173	450	819	628	998	587	375	338	66	197
11	62	60	153	350	704	1090	912	479	292	501	67	170
12	55	63	138	370	680	1270	855	415	254	535	72	151
13	51	77	127	340	611	1560	804	367	238	346	64	152
14	47	70	120	300	599	4220	738	330	222	251	60	159
15	46	66	116	270	683	4410	665	303	199	192	58	148
16	44	63	111	240	1130	4750	630	281	290	161	61	142
17	46	61	113	212	2680	2660	1090	260	657	146	60	118
18	62	59	108	212	2130	1800	1150	245	513	132	56	110
19	79	59	92	248	1480	1750	941	236	361	120	53	104
20	107	132	88	231	1220	2780	835	227	290	1390	51	99
21	95	217	100	231	1130	3100	734	222	247	608	57	93
22	80	185	240	1960	1010	2300	650	309	206	317	64	87
23	72	138	2190	14000	886	1630	591	347	176	233	125	80
24	65	129	1650	12000	817	1340	553	329	153	175	89	81
25	60	134	863	2680	735	1140	530	284	135	152	72	90
26	65	144	632	1660	648	996	516	241	123	131	68	91
27	162	263	560	1170	596	876	500	247	114	120	152	166
28	224	269	580	948	575	777	474	277	159	108	177	117
29	198	259	665	805	-----	712	443	238	1260	100	127	92
30	152	215	505	915	-----	671	425	3360	783	92	366	81
31	121	----	464	9680	-----	1330	-----	1620	-----	86	1670	-----
TOTAL	2465	3408	13724	61217	46549	48148	31514	15204	12033	8457	4270	14899
MEAN	79.5	114	443	1975	1662	1553	1050	490	401	273	138	497
MAX	224	269	2190	14000	13200	4750	3730	3360	1600	1390	1670	4980
MIN	44	59	88	212	575	492	425	222	114	86	51	80
CFSM	.17	.24	.93	4.15	3.49	3.26	2.21	1.03	.91	.57	.29	1.04
IN.	.19	.27	1.07	4.78	3.64	3.76	2.46	1.19	1.01	.66	.33	1.16

CAL YR 1981 TOTAL 122175 MEAN 335 MAX 4150 MIN 44 CFSM .70 IN 9.55
WTR YR 1982 TOTAL 262788 MEAN 720 MAX 14000 MIN 44 CFSM 1.51 IN 20.54

03303000 BLUE RIVER NEAR WHITE CLOUD, IN--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN						
28...	1220	934	5.0	45	113	95

03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN

LOCATION.--Lat 38°08'19", long 86°43'16", in SW¼NE¼ sec.27, T.4 S., R.3 W., Perry County, Hydrologic Unit 05140201, on left bank at downstream side of bridge on State Highway 145 at Bristow, 2.0 miles (3.2 km) downstream from Coon Branch, 5.8 miles (9.3 km) upstream from Sulphur Fork Creek, and at mile 14.1 (22.7 km).

DRAINAGE AREA.--39.8 mi^2 (103.1 km^2).

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

REVISED RECORDS.--WDR IN. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 395.00 ft (120.396 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Forest Service and Middle Fork Anderson River Conservancy District control structures beginning June 1967.

AVERAGE DISCHARGE.--21 years, 58.0 ft^3/s (1.643 m^3/s), 19.79 in/yr (503 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft^3/s (180 m^3/s) Mar. 9, 1964; maximum gage height, 19.33 ft (5.892 m) Mar. 4, 1964; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 20.0 ft (6.096 m), from floodmark, discharge, 15,000 ft^3/s (425 m^3/s), from rating curve extended above 7,000 ft^3/s (198 m^3/s). This is the maximum flood since 1905, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft^3/s (36.8 m^3/s) Jan. 23, gage height, 15.26 (4.651 m); minimum daily, 1.4 ft^3/s (0.040 m^3/s) Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.2	215	49	450	29	238	20	47	9.8	8.4	353
2	1.8	2.2	122	49	412	27	143	18	30	6.4	4.8	523
3	1.8	2.0	72	146	414	28	470	16	19	6.3	5.9	357
4	1.5	2.0	49	611	336	46	374	14	11	6.1	5.3	268
5	1.5	2.0	37	402	195	73	301	12	8.5	5.7	25	112
6	1.8	2.2	30	332	102	59	176	11	6.5	5.1	83	62
7	1.8	2.0	26	163	60	51	110	13	6.2	5.3	23	43
8	1.6	1.8	23	73	50	42	87	16	12	5.9	13	33
9	1.5	1.6	20	47	46	38	80	14	10	9.4	9.6	27
10	1.8	1.8	17	35	43	36	67	11	7.9	22	7.2	22
11	2.0	1.6	15	30	40	80	57	9.3	7.0	67	6.9	18
12	2.0	3.0	13	28	38	106	52	7.7	7.4	32	6.1	14
13	2.0	5.0	11	25	35	138	46	6.9	7.2	20	4.6	101
14	2.0	3.7	11	23	36	135	40	6.6	6.4	13	3.7	93
15	2.0	2.6	11	22	45	498	36	6.5	5.9	8.9	3.3	54
16	2.0	2.0	9.8	20	118	526	41	6.4	14	7.0	20	40
17	2.6	1.7	11	19	176	424	208	6.2	14	6.5	8.0	30
18	5.8	1.4	9.5	19	134	374	150	6.5	19	7.1	4.6	28
19	5.1	12	8.2	18	98	377	100	6.9	13	6.9	3.2	24
20	3.5	32	7.8	18	77	397	74	6.6	8.8	279	3.0	20
21	2.8	30	8.6	20	66	508	56	6.0	6.6	316	4.8	17
22	2.6	22	155	420	56	345	46	7.2	6.2	249	3.2	13
23	3.3	19	400	896	49	193	40	7.0	5.9	103	3.0	11
24	3.3	35	272	524	44	101	35	7.1	5.5	48	3.4	16
25	3.3	29	120	478	39	75	32	6.8	4.8	33	3.1	27
26	7.1	34	74	454	35	61	31	6.6	4.2	27	2.6	19
27	13	97	78	437	33	50	28	7.1	3.4	23	18	14
28	8.0	54	76	399	31	43	25	6.8	15	19	11	10
29	5.1	38	64	298	----	39	23	6.5	22	15	6.5	8.1
30	3.5	50	52	221	----	38	22	6.1	17	12	5.5	6.5
31	2.4	-----	48	646	----	377	----	23	-----	10	47	-----
TOTAL	100.3	492.8	2065.9	6922	3258	5314	3188	304.8	351.4	1384.4	356.7	2363.6
MEAN	3.24	16.4	66.6	223	116	171	106	9.83	11.7	44.7	11.5	78.8
MAX	13	97	400	896	450	526	470	23	47	316	83	523
MIN	1.5	1.4	7.8	18	31	27	22	6.0	3.4	5.1	2.6	6.5
CFSM	.08	.41	1.67	5.60	2.92	4.30	2.66	.25	.29	1.12	.29	1.98
IN.	.09	.46	1.93	6.47	3.05	4.97	2.98	.28	.33	1.29	.33	2.21

CAL YR 1981 TOTAL 13544.48 MEAN 37.1 MAX 750 MIN .51 CFSM .93 IN 12.66
WTR YR 1982 TOTAL 26101.90 MEAN 71.5 MAX 896 MIN 1.4 CFSM 1.80 IN 24.40

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 (2.1 km) east of Santa Claus Post Office, and 1.8 miles (2.9 km) upstream from unnamed right-bank tributary.

DRAINAGE AREA.--7.86 mi² (20.36 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 404.34 ft (123.243 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--13 years, 11.2 ft³/s (0.317 m³/s), 19.35 in/yr (491 mm/yr).

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0330	*3460	98.0	*9.66	2.944	Apr. 3	0330	619	17.5	8.94	2.725
Mar. 16	0915	945	26.8	9.12	2.780	Sept. 13	2030	921	26.1	9.11	2.777

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) Oct. 3, 4.

NOTE.--No gage-height record Nov. 9 to Dec. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.50	15	6.2	23	4.4	12	1.8	2.2	.70	.22	75
2	.06	.50	8.0	11	14	4.0	11	1.7	1.2	.61	.20	67
3	.05	.46	5.5	49	26	3.7	79	1.6	.99	.79	.17	14
4	.05	.54	4.0	70	16	11	15	1.4	.99	.57	.17	5.9
5	.06	.54	3.0	17	11	8.6	12	1.4	.99	.50	20	2.5
6	.13	.50	2.3	12	8.0	6.6	13	1.5	.89	.43	2.3	1.4
7	.10	.43	1.9	7.1	6.0	5.4	8.2	2.8	.84	.43	.50	.84
8	.06	.39	1.6	4.5	5.2	4.4	7.5	2.3	37	10	.43	.74
9	.06	.74	1.4	3.3	4.5	4.0	8.3	2.3	10	.70	.39	.70
10	.06	.50	1.2	2.7	3.9	4.2	6.5	2.1	4.0	3.2	.33	.66
11	.08	.43	1.1	2.3	3.6	17	6.0	1.8	2.4	6.6	.36	.61
12	.08	.40	1.0	2.1	3.3	20	5.8	1.4	2.3	.66	.36	.57
13	.08	.37	.95	1.8	3.1	32	5.4	1.7	1.7	.46	.33	46
14	.08	.36	.92	1.6	3.0	16	4.7	1.1	1.4	.39	.30	40
15	.10	.34	.91	1.5	11	79	4.2	1.1	1.2	.36	.30	14
16	.12	1.0	.89	1.4	37	86	8.3	1.1	2.4	.33	20	7.8
17	.61	.64	1.4	1.3	28	24	82	1.2	1.5	.33	.74	4.8
18	.28	.56	.99	1.2	17	17	15	1.6	1.1	.46	.54	3.5
19	.20	15	.79	1.1	11	31	9.7	1.3	.99	.39	.46	2.5
20	.17	5.0	.74	1.1	9.7	26	7.9	.99	.84	.99	.50	2.2
21	.17	2.5	1.2	2.5	8.7	22	4.8	.99	.79	.43	.70	1.5
22	.30	1.6	80	200	6.3	13	3.9	1.2	.70	.36	.43	1.2
23	.25	3.5	53	550	5.9	8.3	3.4	.99	.70	.33	3.4	.99
24	.22	1.8	14	50	5.3	6.5	3.1	.94	.61	.33	.84	11
25	1.9	1.3	8.3	20	4.2	5.4	2.9	1.7	.57	.30	.66	22
26	3.6	13	6.9	10	5.4	4.4	2.9	1.2	.54	.30	.50	7.8
27	.99	6.0	18	7.1	6.4	3.9	2.4	1.1	.54	.28	11	5.1
28	.74	3.0	12	3.3	4.5	3.5	2.1	.99	18	.28	1.4	3.3
29	.61	2.0	7.3	3.2	-----	3.5	2.0	1.1	3.0	.25	.66	2.5
30	.54	40	5.2	119	-----	4.2	1.9	.94	.94	.25	.57	2.0
31	.50	------	6.2	191	-----	47	-----	1.7	------	.22	22	------
TOTAL	12.35	103.90	265.69	1354.3	291.0	526.0	350.9	45.04	101.32	32.23	90.76	348.11
MEAN	.40	3.46	8.57	43.7	10.4	17.0	11.7	1.45	3.38	1.04	2.93	11.6
MAX	3.6	40	80	550	37	86	82	2.8	37	10	22	75
MIN	.05	.34	.74	1.1	3.0	3.5	1.9	.94	.54	.22	.17	.57
CFSM	.05	.44	1.09	5.56	1.32	2.16	1.49	.18	.43	.13	.37	1.48
IN.	.06	.49	1.26	6.41	1.38	2.49	1.66	.21	.48	.15	.43	1.65

CAL YR 1981 TOTAL 1800.55 MEAN 4.93 MAX 91 MIN .02 CFSM .63 IN 8.52
WTR YR 1982 TOTAL 3521.60 MEAN 9.65 MAX 550 MIN .05 CFSM 1.23 IN 16.66

03322100 PIGEON CREEK AT EVANSVILLE, IN

LOCATION.—(Corrected) Lat 38°00'14", long 87°32'19", in NE¼NW¼ sec.16, T.6 S., R.10 W., Vanderburgh County, Hydrologic Unit 05140202, on left bank in the median strip of Old U.S. 41, between two steel truss bridges at Evansville, and at mile 6.0 (9.6 km).

DRAINAGE AREA.--323 mi² (837 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 352.24 ft (107.363 m) National Geodetic Vertical Datum of 1929. Nonrecording auxiliary gage at site 1.2 miles (1.9 km) upstream at same datum. Prior to October 1, 1968, water-stage recorder, and October 1, 1968, to September 30, 1971, nonrecording gage at site 1.2 miles (1.9 km) upstream, was used as base gage, and present base gage was used as auxiliary gage.

REMARKS.--Records good except those for periods of backwater effect, which are poor. Backwater or reverse flow from the Ohio River generally occurs when the stage of the Ohio River at Evansville, In. (Sta. 03322000) exceeds a gage height of about 24 ft (7.3 m).

AVERAGE DISCHARGE.--22 years, 352 ft³/s (9.969 m³/s), 14.80 in/yr (376 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,010 ft³/s (170 m³/s) Feb. 3, gage height, 16.88 ft (5.145 m); maximum gage height (affected by backwater), 17.12 ft (5.218 m) Jan. 27; minimum daily discharge (unaffected by backwater), 6.4 ft³/s (0.181 m³/s), Oct. 2, 3; minimum daily discharge (affected by backwater), no flow Feb. 13.

NOTE.--Backwater from Ohio River Jan. 7-10, 25-29, Feb. 5-15, 20-28, Mar. 16 to Apr. 1, Apr. 4-8, June 3, Sept. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	16	776	174	4830	174	430	69	712	79	9.5	1260
2	6.4	13	493	176	5580	137	233	66	564	50	10	1870
3	6.4	12	200	752	5960	132	1150	61	75	61	9.0	1300
4	7.2	13	137	1700	5350	220	970	58	72	126	8.1	820
5	8.1	12	98	1420	3800	318	180	52	47	72	21	530
6	9.0	10	75	1090	1900	222	300	47	36	41	20	330
7	11	9.5	63	530	1050	202	330	111	29	31	10	180
8	11	9.0	58	360	1030	166	300	348	262	28	14	103
9	10	14	47	260	1000	135	306	164	1020	49	196	72
10	10	14	37	180	970	128	212	100	807	41	246	53
11	11	13	31	120	690	280	172	75	237	143	48	42
12	11	16	27	74	80	673	158	58	110	137	36	38
13	14	15	25	60	.00	985	143	49	79	45	31	36
14	16	12	23	50	360	1220	123	43	63	29	16	565
15	16	10	22	43	450	3180	108	37	45	23	13	596
16	19	41	21	37	1210	2400	335	35	494	21	14	206
17	40	47	27	34	2120	2200	1970	37	706	18	22	79
18	23	58	23	33	2050	1800	1510	35	204	17	27	52
19	53	58	19	33	2540	1100	1200	31	95	18	16	42
20	34	262	16	33	2800	680	456	92	61	30	12	36
21	19	148	25	45	1500	720	255	54	47	57	11	27
22	13	58	280	1300	430	940	181	296	37	43	12	25
23	16	53	1430	4310	280	830	150	308	29	23	21	21
24	12	101	1210	4300	450	820	143	91	24	19	187	42
25	11	143	985	4200	400	850	114	50	21	16	86	414
26	37	98	417	4800	350	750	106	38	18	25	29	360
27	41	313	494	4200	130	700	101	31	15	26	320	160
28	48	231	702	2100	240	820	89	36	36	29	676	60
29	42	97	379	1800	--------	750	79	40	526	16	160	25
30	28	147	222	3020	--------	560	73	315	231	11	58	12
31	19	------	164	4900	--------	1100	-----	168	----	8.5	97	----
TOTAL	608.3	2043.5	8526	42134	47550.00	25282	11877	2995	6702	1332.5	2435.6	9356
MEAN	19.6	68.1	275	1359	1698	816	396	96.6	223	43.0	78.6	312
MAX	53	313	1430	4900	5960	3180	1970	348	1020	143	676	1870
MIN	6.4	9.0	16	33	.00	128	73	31	15	8.5	8.1	12
CFSM	.06	.21	.85	4.21	5.26	2.53	1.23	.30	.69	.13	.24	.97
IN.	.07	.24	.98	4.85	5.48	2.91	1.37	.34	.77	.15	.28	1.08

CAL YR 1981 TOTAL 95812.30 MEAN 262 MAX 5190 MIN .00 CFSM .81 IN 11.03
WTR YR 1982 TOTAL 160841.90 MEAN 441 MAX 5960 MIN .00 CFSM 1.37 IN 18.52

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 (3m) downstream from county bridge on Indiana-Ohio State line road, 2 miles (3 km) east of New Corydon, 2.8 miles (4.5 km) downstream from Beaver Creek, and at mile 466.0 (749.8 km).

DRAINAGE AREA.--262 mi² (678 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 830.10 ft (253.014 m) National Geodetic Vertical Datum of 1929. Prior to June 24, 1953, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--31 years, 202 ft³/s (5.721 m³/s), 10.47 in/yr (266 mm/yr).

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1700	3010	85.2	17.01	5.185	Mar. 11	2200	*3580	101	*17.50	5.334
Jan. 31	0900	3190	90.3	17.17	5.233	Mar. 16	2400	3100	87.8	17.09	5.209
Feb. 24	0600	2560	72.5	16.61	5.063						

Minimum daily discharge, 4.9 ft³/s (0.139 m³/s) Sept. 21.

NOTE.--No gage-height record Jan. 24-30, July 12 to Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	32	75	150	1500	669	901	150	978	117	14	8.1
2	13	28	75	203	864	1280	531	104	530	107	13	11
3	13	26	73	595	458	930	655	96	246	103	13	21
4	12	47	72	2490	285	779	561	93	178	101	16	9.6
5	12	67	71	1890	235	1950	431	89	150	99	14	6.5
6	11	71	69	824	212	1160	411	84	129	94	12	5.4
7	11	67	69	383	182	524	409	91	116	65	11	5.0
8	12	66	69	259	186	362	424	513	112	61	12	5.1
9	12	65	68	227	190	310	486	289	327	58	16	5.3
10	11	65	67	188	218	408	714	163	673	58	20	5.2
11	12	65	66	202	271	2320	1430	127	223	68	15	5.3
12	12	65	77	212	213	2770	1280	109	164	54	12	5.2
13	11	64	72	218	201	2760	818	97	145	43	10	5.3
14	11	64	71	214	195	2080	520	93	130	35	9.2	5.1
15	10	64	71	207	197	1200	431	90	129	27	8.6	5.2
16	10	64	70	203	319	1890	393	88	241	25	8.2	5.0
17	10	64	58	194	630	2410	789	84	317	22	8.0	5.2
18	17	64	54	175	1400	1260	590	79	194	24	8.6	5.8
19	25	65	52	192	1790	990	441	76	168	30	9.0	6.1
20	15	75	45	188	1400	2030	383	103	140	75	9.7	5.6
21	13	71	56	193	2090	1420	338	97	185	60	11	4.9
22	13	67	78	198	1860	793	314	249	139	38	12	5.2
23	18	66	1070	360	1890	571	301	304	124	35	12	5.6
24	19	78	1190	1160	2250	492	289	136	116	100	11	5.7
25	16	91	433	1350	1200	479	282	103	112	45	17	5.7
26	14	82	184	940	609	625	279	93	110	27	17	6.8
27	51	80	188	570	416	522	274	193	107	17	13	9.9
28	190	85	242	390	416	450	267	924	106	20	9.8	16
29	72	77	165	350	-----	425	264	477	204	25	8.5	11
30	46	74	142	800	-----	412	260	548	156	18	7.3	8.3
31	37	----	137	2600	-----	1230	-----	404	----	14	7.1	-----
TOTAL	742	1968	5219	18105	21677	35502	15466	6140	6639	1661	365.0	215.0
MEAN	23.9	65.6	168	584	774	1145	516	198	221	53.6	11.8	7.17
MAX	190	91	1190	2600	2250	2770	1430	924	978	117	20	21
MIN	10	26	45	150	182	310	260	79	106	14	7.1	4.9
CFSM	.09	.25	.64	2.23	2.95	4.37	1.97	.76	.84	.21	.05	.03
IN.	.11	.28	.74	2.57	3.09	5.04	2.20	.87	.94	.24	.05	.03

CAL YR 1981 TOTAL 82032.4 MEAN 225 MAX 4480 MIN 7.3 CFSM .86 IN 11.65
WTR YR 1982 TOTAL 113708.0 MEAN 312 MAX 2770 MIN 4.9 CFSM 1.19 IN 16.14

03322900 WABASH RIVER AT LINN GROVE, IN

LOCATION.--Lat 40°39'22", long 85°01'58", in SE¼SE¼ sec.34, T.26 N., R.13 E., Adams County, Hydrologic Unit 05120101, on right bank 10 ft (3 m) downstream from bridge on State Highway 218, 800 ft (244 m) downstream from Shoemaker ditch, 0.8 mile (1.3 km) north of Linn Grove, and 2.2 miles (3.5 km) upstream from Rice ditch.

DRAINAGE AREA.--453 mi² (1,173 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 809.00 ft (246.278 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--18 years, 379 ft³/s (10.73 m³/s), 11.36 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft³/s (271 m³/s) Mar. 17, 1978, gage height, 13.87 ft (4.228 m); minimum daily, 5.1 ft³/s (0.14 m³/s) Oct. 8, 1964.

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	1200	2880	81.6	10.16	3.097	Feb. 22	1500	ice jam		*13.02[a]	3.968
Jan. 6	1400	ice jam		11.13[a]	3.392	Feb. 23	----	5000	142	unknown	
Jan. 31	----	3200	90.6	unknown		Mar. 13	0600	*5770	163	12.63	3.850
Feb. 20	1200	4600	130	unknown							

Minimum daily discharge, 8.0 ft³/s (0.227 m³/s) Sept. 13.

[a]Ice affected.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	53	96	170	2600	972	1320	267	872	157	21	13
2	16	44	96	225	1500	1490	1220	155	1190	122	19	15
3	15	40	93	715	760	1600	876	125	693	114	19	64
4	15	36	90	1910	470	1250	915	118	310	110	26	42
5	14	50	87	2600	290	1970	677	114	223	107	22	18
6	16	81	86	1900	250	2840	557	109	179	103	19	12
7	13	84	83	900	215	1500	532	111	150	91	18	10
8	15	80	84	520	218	880	556	271	137	59	19	11
9	15	77	84	320	220	743	652	556	144	52	24	10
10	14	75	82	235	255	610	936	278	835	49	30	9.6
11	13	76	71	248	295	2510	1500	186	653	52	25	9.8
12	13	76	81	258	260	5140	1980	151	268	58	20	8.6
13	13	75	90	262	242	5600	1910	132	195	46	16	8.0
14	13	76	83	260	232	5080	1370	121	163	34	14	9.3
15	13	74	81	255	228	3980	803	113	163	24	14	9.8
16	12	74	74	248	340	3050	574	109	445	22	14	9.9
17	12	73	63	234	780	3300	777	108	812	20	14	9.5
18	13	75	61	215	1700	3430	1030	102	457	21	14	9.7
19	14	77	58	222	4000	2460	772	97	264	25	12	9.6
20	27	88	50	232	4500	2320	563	113	206	87	15	9.4
21	19	101	60	238	4100	2940	467	208	299	70	18	10
22	16	90	80	242	3000	2500	406	217	233	46	18	11
23	18	82	300	700	3650	1590	378	609	167	41	17	9.9
24	17	86	1340	1500	4800	987	360	330	142	122	18	9.5
25	20	146	1420	1300	4150	749	346	177	131	52	33	9.9
26	18	152	320	970	1900	914	339	137	124	30	42	9.7
27	20	140	220	610	1100	864	330	136	110	22	28	12
28	226	146	300	470	740	690	315	945	115	30	21	16
29	274	122	280	410	-----	593	305	1270	131	37	15	20
30	118	104	185	1100	-----	555	303	922	243	25	13	16
31	73	----	160	2900	-----	966	-----	758	-----	20	12	-----
TOTAL	1112	2552	6258	22369	42795	64163	23069	9045	10063	1866	610	420.2
MEAN	35.9	85.1	202	722	1528	2070	769	292	335	60.2	19.7	14.0
MAX	274	152	1420	2900	4800	5600	1980	1270	1190	157	42	64
MIN	12	36	50	170	215	555	303	97	115	20	12	8.0
CFSM	.08	.19	.45	1.59	3.37	4.57	1.70	.65	.74	.13	.04	.03
IN.	.09	.21	.51	1.84	3.51	5.27	1.89	.74	.83	.15	.05	.03

CAL YR 1981 TOTAL 138998.0 MEAN 381 MAX 5260 MIN 12 CFSM .84 IN 11.41
WTR YR 1982 TOTAL 184322.2 MEAN 505 MAX 5600 MIN 8.0 CFSM 1.12 IN 15.14

03323450 HUNTINGTON LAKE NEAR HUNTINGTON, IN

LOCATION.--Lat 40°50'45", long 85°28'07", in SW¼SW¼ sec.25, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, in operating pylon of dam of reservoir on Wabash River at State Highway 5, 1.5 miles (2.4 km) southeast of Huntington, and at mile 411.4 (661.9 km).

DRAINAGE AREA.--717 mi^2 (1,857 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by concrete and rolled-earth fill dam which is State Highway 5. Releases normally controlled by six sluices, 6.0 ft (1.83 m) wide and 6.0 ft (1.83 m) high and spillway, crest elevation, 765 ft (233.2 m), with three taintor gates, 45 ft (13.7 m) by 36.5 ft (11.13 m) setting atop spillway. Minimum design capacity is 4,100 acre-ft (5.06 hm^3), elevation, 737 ft (224.6 m). Seasonal pool capacity is 12,500 acre-ft (15.4 hm^3), elevation, 749 ft (228.3 m). Capacity at flood control pool is 153,100 acre-ft (189 hm^3), elevation, 798 ft (243.2 m). Reservoir is used for flood control and recreation. Reservoir put into operation on Jan. 9, 1969.

COOPERATION.--Water-stage recorder graph, dam tenders records, and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 115,900 acre-ft (142.9 hm^3) Mar. 25, 1978, elevation, 792.46 ft (241.542 m); minimum, 1,760 acre-ft (2.17 hm^3) Nov. 18, 1974, elevation, 731.27 ft (222.891 m), lowered reservoir for repairs.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 107,664 acre-ft (133 hm^3) Mar. 20, elevation, 790.94 ft (241.078 m); minimum, 4,120 acre-ft (5.08 hm^3) Dec. 8, elevation, 737.00 ft (224.637 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	745.00	9,149	
Oct. 31	744.03	8,426	-723
Nov. 30	737.21	4,226	-4,200
Dec. 31	737.36	4,302	+76
CAL YR 1981			+172
Jan. 31	749.02	12,498	+8,196
Feb. 28	744.92	9,088	-3,410
Mar. 31	753.33	16,729	+7,641
Apr. 30	748.92	12,408	-4,321
May 31	764.66	31,305	+18,897
June 30	748.61	12,130	-19,175
July 31	749.13	12,598	+468
Aug. 31	749.07	12,543	-55
Sept. 30	745.04	9,180	-3,363
WTR YR 1982			+31

03323500 WABASH RIVER AT HUNTINGTON, IN

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

DRAINAGE AREA.--721 mi² (1,867 km²).

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

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

GAGE.--None. Datum of gage was 700.04 ft (213.372 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). July 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 (See sta 03323450). Daily discharge computed from relation between discharge, head, and gate openings for Huntington Lake beginning Oct. 1, 1974.

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

AVERAGE DISCHARGE.--31 years, 608 ft³/s (17.22 m³/s), 11.45 in/yr (291 mm/yr).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,230 ft³/s (176 m³/s) Mar 24; minimum daily discharge, 20 ft³/s (0.57 m³/s) Aug. 12, 1982.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	69	123	327	665	2730	2280	327	1170	192	43	43
2	38	23	138	380	1630	2440	2080	327	1790	94	43	43
3	38	22	125	636	2170	2850	1550	267	1360	94	43	43
4	38	150	124	911	2680	3120	1540	220	1180	132	43	55
5	38	160	105	2180	2890	3520	1520	179	1160	183	43	61
6	38	149	103	3900	1850	3800	1400	156	1140	189	43	76
7	38	83	93	4410	555	3780	1430	141	1120	189	43	83
8	38	84	75	4250	393	3670	887	172	1100	179	43	69
9	38	104	77	3070	383	2020	724	253	1150	140	43	49
10	38	134	80	1180	295	842	781	407	1160	77	33	253
11	38	121	80	338	296	1060	1200	463	1140	61	27	594
12	38	108	79	259	290	2520	1450	340	1120	61	20	371
13	38	107	61	288	238	848	1550	223	1080	71	27	39
14	38	106	71	288	251	1070	1930	187	984	76	130	39
15	38	121	71	259	289	1120	2580	187	509	76	43	39
16	48	138	71	218	296	2460	2090	187	488	76	43	39
17	65	140	71	215	568	3920	1020	187	866	75	43	39
18	89	138	72	181	1360	5610	1590	156	1030	75	43	39
19	97	135	64	179	2380	2510	2390	283	452	75	35	39
20	96	134	65	163	2980	2560	1990	357	253	66	38	39
21	85	116	73	169	3500	5270	1180	370	254	55	43	39
22	79	123	72	208	4340	6160	917	380	294	90	51	39
23	103	131	201	220	4710	6190	674	386	329	113	76	38
24	129	142	493	257	4880	6230	456	392	282	113	83	38
25	136	167	928	757	4930	6150	493	191	192	93	83	38
26	134	197	1110	1360	4870	6160	590	90	170	91	83	38
27	133	221	1440	1600	4740	6150	862	91	170	95	83	48
28	133	224	1500	1090	3750	6100	373	93	170	72	83	53
29	180	219	1410	506	-----	4640	335	96	307	61	59	53
30	210	164	702	410	-----	2880	325	100	367	52	43	43
31	209	----	310	586	-----	2010	-----	103	-----	43	43	----
TOTAL	2496	3930	9987	30795	58179	110390	38187	7311	22787	3059	1599	2479
MEAN	80.5	131	322	993	2078	3561	1273	236	760	98.7	51.6	82.6
MAX	210	224	1500	4410	4930	6230	2580	463	1790	192	130	594
MIN	38	22	61	163	238	842	325	90	170	43	20	38
CFSM	.11	.18	.45	1.38	2.88	4.94	1.77	.33	1.05	.14	.07	.12
IN.	.13	.20	.52	1.59	3.00	5.70	1.97	.38	1.18	.16	.08	.13

CAL YR 1981 TOTAL 196515 MEAN 538 MAX 4060 MIN 22 CFSM .75 IN 10.14
WTR YR 1982 TOTAL 291199 MEAN 798 MAX 6230 MIN 20 CFSM 1.11 IN 15.02

03324000 LITTLE RIVER NEAR HUNTINGTON, IN

LOCATION.--Lat 40°54'14", long 85°24'22", in NE¼NW¼ sec.9, T.28 N., R.10 E., Huntington County, Hydrologic Unit 05120101, on right bank on upstream side of highway bridge, 5 miles (8 km) east of Huntington, and at mile 7.5 (12.1 km).

DRAINAGE AREA.--263 mi^2 (681 km^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 (221.925 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, nonrecording gage 4 miles (6 km) downstream at datum 8.79 ft (2.679 m) lower, and Oct. 1, 1948, to Sept. 5, 1950, nonrecording gage at present site and datum.

REMARKS.--Records 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.--39 years, 225 ft^3/s (6.372 m^3/s), 11.62 in/yr (295 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,990 ft^3/s (170 m^3/s) Jan. 4, 1950; maximum gage height, 19.39 ft (5.910 m) Mar. 14, 1982; minimum daily discharge, 1.1 ft^3/s (0.031 m^3/s) Oct. 8, 1946, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft^3/s (79.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	1800	2890	81.8	13.26	4.042
Mar. 14	1000	*5700	161	*19.39	5.910

Minimum daily discharge, 19 ft^3/s (.538 m^3/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	67	76	200	1430	350	897	96	1830	76	24	21
2	30	57	74	250	810	732	471	90	1000	58	27	21
3	25	51	62	574	490	565	1020	84	310	46	39	20
4	25	47	58	2450	330	560	672	78	200	216	30	20
5	24	45	58	2400	260	1430	377	75	140	120	27	20
6	82	43	52	1130	210	1070	298	72	100	72	26	20
7	86	41	51	552	185	530	294	90	78	52	25	22
8	49	37	53	310	178	325	286	123	68	41	61	25
9	37	34	49	235	168	253	342	92	64	36	54	22
10	31	31	45	190	152	231	465	78	478	33	34	21
11	29	30	46	170	155	1400	991	71	120	36	27	20
12	28	29	45	162	160	3000	1680	65	76	59	25	21
13	27	28	40	168	148	4600	1610	63	62	44	23	21
14	26	29	39	170	144	5610	697	60	54	38	23	23
15	28	34	40	162	148	5030	424	59	50	35	22	33
16	27	30	38	152	225	4240	348	104	140	33	21	23
17	27	29	36	134	1000	4150	2240	100	363	31	21	20
18	43	28	34	129	1270	3360	1630	83	140	30	20	21
19	50	28	33	124	850	2570	684	125	92	28	20	22
20	39	56	32	118	900	2900	443	379	120	28	30	20
21	33	103	33	115	1300	2380	317	655	542	25	33	19
22	52	78	44	122	810	1670	239	447	210	23	26	20
23	249	61	444	520	900	1230	197	826	100	30	24	20
24	133	63	648	726	1780	968	173	280	75	24	40	20
25	83	118	369	490	1030	835	154	170	61	21	63	20
26	65	128	225	336	540	901	143	120	50	20	36	21
27	72	185	255	258	415	616	147	210	48	130	27	24
28	259	140	157	222	323	465	126	927	45	80	24	29
29	167	100	101	198	-----	378	108	685	377	50	23	23
30	107	80	78	1320	-----	400	100	706	169	28	22	20
31	81	----	140	2420	-----	1970	-----	406	----	27	21	----
TOTAL	2053	1830	3455	16507	16311	54719	17573	7419	7162	1570	918	652
MEAN	66.2	61.0	111	532	583	1765	586	239	239	50.6	29.6	21.7
MAX	259	185	648	2450	1780	5610	2240	927	1830	216	63	33
MIN	24	28	32	115	144	231	100	59	45	20	20	19
CFSM	.25	.23	.42	2.02	2.22	6.71	2.23	.91	.91	.19	.11	.08
IN.	.29	.26	.49	2.33	2.31	7.74	2.49	1.05	1.01	.22	.13	.09

CAL YR 1981 TOTAL 78086 MEAN 214 MAX 3790 MIN 17 CFSM .81 IN 11.04
WTR YR 1982 TOTAL 130169 MEAN 357 MAX 5610 MIN 19 CFSM 1.36 IN 18.41

03324200 SALAMONIE RIVER AT PORTLAND, IN

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

DRAINAGE AREA.--85.6 mi² (221.7 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 877.59 ft (267.489 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1960, nonrecording gage at site 1.4 miles (2.3 km) upstream at datum 6.43 ft (1.960 m) higher.

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

AVERAGE DISCHARGE.--23 years, 74.3 ft³/s (2.104 m³/s), 11.79 in/yr (299 mm/yr).

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1400	2090	59.2	12.73	3.880	Mar. 11	1900	*2430	68.8	*13.96	4.255
Jan. 31	0100	2220	62.9	13.20	4.023	Mar. 16	1900	1960	55.5	12.26	3.737
Mar. 4	2300	1610	45.6	10.87	3.313	May 28	0400	1730	49.0	11.35	3.459

Minimum daily discharge, 0.80 ft³/s (0.023 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	11	12	116	707	320	129	15	587	6.0	2.1	1.6
2	3.5	8.6	12	72	335	631	65	14	114	5.2	2.4	2.0
3	3.3	7.3	9.3	367	160	249	198	14	46	4.8	2.4	1.7
4	2.9	6.6	9.7	1800	90	602	97	13	33	3.8	2.2	1.6
5	2.8	6.2	8.2	472	58	789	56	13	28	3.5	2.6	1.4
6	3.6	6.0	7.5	114	45	190	53	12	23	2.7	2.7	1.4
7	3.3	5.2	8.2	70	39	87	56	21	21	3.1	3.0	1.5
8	3.2	4.7	7.8	47	36	60	69	78	20	5.2	15	1.4
9	3.0	4.5	7.0	37	33	48	105	42	21	4.3	32	1.4
10	2.7	4.2	6.0	26	30	211	344	24	22	3.6	8.6	1.5
11	2.5	3.8	6.4	21	28	1980	671	20	18	3.5	3.8	1.6
12	2.6	3.7	5.4	17	26	1230	282	17	17	3.7	2.7	1.4
13	2.7	3.7	5.2	15	25	1530	129	15	15	2.8	2.3	1.5
14	2.9	3.7	5.2	14	25	407	69	14	14	2.9	1.9	1.5
15	3.0	3.6	5.6	13	24	287	60	13	17	2.7	1.7	1.3
16	3.2	3.7	5.4	12	40	1350	45	14	30	2.6	1.6	1.4
17	3.6	3.7	5.2	11	500	599	205	14	59	2.5	1.6	1.2
18	8.2	3.7	4.9	10	970	173	103	12	26	3.0	1.3	1.3
19	6.8	4.8	4.7	9.8	670	489	60	12	20	5.0	1.4	1.3
20	4.8	11	4.3	9.5	610	1220	42	44	16	23	3.9	1.2
21	4.2	7.8	6.8	9.2	930	309	34	458	18	9.7	4.5	1.1
22	6.4	5.8	17	24	600	129	28	311	14	8.6	2.2	1.1
23	6.4	5.2	864	560	690	86	24	117	9.3	20	1.9	.95
24	6.6	16	433	494	320	73	23	49	7.0	7.3	3.0	1.0
25	5.8	46	105	276	170	74	22	31	6.4	4.2	8.9	1.0
26	5.6	24	58	182	100	172	21	24	6.2	3.2	3.7	1.1
27	27	51	100	119	81	95	20	182	5.8	2.9	2.5	2.3
28	193	31	125	90	93	57	18	1130	6.1	3.3	1.9	.99
29	50	18	63	67	----	50	16	168	13	3.1	1.6	.81
30	23	14	49	1010	----	47	16	143	8.9	2.7	1.5	.80
31	16	-----	45	1470	----	588	----	74	------	2.4	1.7	-----
TOTAL	416.3	328.5	2005.8	7554.5	7435	14132	3060	3108	1241.7	161.3	128.6	40.35
MEAN	13.4	11.0	64.7	244	266	456	102	100	41.4	5.20	4.15	1.35
MAX	193	51	864	1800	970	1980	671	1130	587	23	32	2.3
MIN	2.5	3.6	4.3	9.2	24	47	16	12	5.8	2.4	1.3	.80
CFSM	.16	.13	.76	2.85	3.11	5.33	1.19	1.17	.48	.06	.05	.02
IN.	.18	.14	.87	3.28	3.23	6.14	1.33	1.35	.54	.07	.06	.02

CAL YR 1981 TOTAL 25643.70 MEAN 70.3 MAX 2350 MIN 2.0 CFSM .82 IN 11.14
WTR YR 1982 TOTAL 39612.05 MEAN 109 MAX 1980 MIN .80 CFSM 1.27 IN 17.21

03324300 SALAMONIE RIVER NEAR WARREN, IN

LOCATION.--Lat 40°42'45", long 85°27'13", in SE¼SE¼ sec.12, T.26 N., R.9 E., Huntington County, Hydrologic Unit 05120102, on right bank at downstream side of bridge on County Road 800 South, 0.4 mile (0.6 km) downstream from Detamore ditch, 0.4 mile (0.6 km) downstream from Interstate 69, 0.8 mile (1.3 km) upstream from concrete and stone dam, 2.4 miles (3.9 km) northwest of Warren, and at mile 30.0 (48.3 km).

DRAINAGE AREA.--425 mi^2 (1,101 km^2).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 784.65 ft (239.161 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 28, 1960, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--25 years, 389 ft^3/s (11.02 m^3/s), 12.43 in/yr (316 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft^3/s (374 m^3/s) Feb. 10, 1959, gage height, 17.05 ft (5.197 m); minimum daily, 5.1 ft^3/s (0.14 m^3/s) Jan. 2, 1977.

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

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	2200	4870	138	11.52	3.511	Mar. 2	1200	4700	133	11.37	3.466
Jan. 31	1000	4070	115	10.80	3.292	Mar. 6	0600	3580	101	10.36	3.158
Feb. 21	0700	4280	121	10.98	3.347	Mar. 13	1600	*9240	262	*14.96	4.560
Feb. 24	0400	5710	162	12.26	3.737						

Minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Sept. 9, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	83	87	351	2200	795	1040	88	652	144	33	16
2	25	65	81	475	1000	2950	408	83	952	74	36	21
3	28	56	69	773	650	2410	503	76	319	63	34	73
4	24	51	62	4000	460	1330	708	77	171	51	38	59
5	23	50	56	4190	350	3040	365	76	122	39	39	37
6	24	47	52	3400	285	3360	266	74	95	29	44	26
7	22	45	50	1080	250	1380	250	84	76	25	53	20
8	22	43	51	628	215	645	269	101	66	23	62	15
9	23	40	49	280	195	439	350	161	61	28	79	13
10	28	37	45	165	178	392	704	140	288	38	131	14
11	28	36	40	142	168	4470	2150	99	239	43	94	15
12	30	35	39	160	160	7550	2420	89	106	39	46	15
13	29	34	39	150	150	8840	1110	84	71	36	34	14
14	31	34	37	134	145	6930	596	81	55	36	29	13
15	34	34	37	118	141	4390	390	79	52	40	27	14
16	36	34	35	108	190	2860	308	76	199	42	26	17
17	37	34	33	104	720	3380	991	87	813	43	23	15
18	42	34	31	95	2250	2840	1020	159	421	47	21	16
19	39	36	29	84	2000	1310	509	196	198	62	16	18
20	54	41	27	75	1550	3220	332	265	154	66	31	18
21	58	59	30	68	3900	3490	247	311	231	78	57	17
22	58	65	33	66	3550	2160	193	546	175	135	56	17
23	87	55	626	584	3250	837	161	475	101	152	57	16
24	105	55	2090	1630	4500	603	142	229	71	128	46	15
25	70	181	1780	1000	1700	505	137	125	55	71	190	17
26	51	237	514	510	840	826	128	83	46	43	180	17
27	64	291	495	330	600	688	116	74	40	31	81	20
28	430	234	827	260	540	432	105	474	45	28	45	18
29	504	167	498	210	-----	334	93	1110	384	23	31	17
30	210	109	314	1000	-----	301	89	457	333	30	25	20
31	122	----	254	3500	-----	564	-----	346	----	34	20	----
TOTAL	2367	2322	8410	25670	32137	73271	16100	6405	6591	1721	1684	623
MEAN	76.4	77.4	271	828	1148	2364	537	207	220	55.5	54.3	20.8
MAX	504	291	2090	4190	4500	8840	2420	1110	952	152	190	73
MIN	22	34	27	66	141	301	89	74	40	23	16	13
CFSM	.18	.18	.64	1.95	2.70	5.56	1.26	.49	.52	.13	.13	.05
IN.	.21	.20	.74	2.25	2.81	6.41	1.41	.56	.58	.15	.15	.05

CAL YR 1981 TOTAL 129621 MEAN 355 MAX 5280 MIN 20 CFSM .84 IN 11.35
WTR YR 1982 TOTAL 177301 MEAN 486 MAX 8840 MIN 13 CFSM 1.14 IN 15.52

03324450 SALAMONIE LAKE AT DORA, IN

LOCATION.--Lat 40°48'25", long 85°40'38", in SW¼NW¼ sec.7, T.27 N., R.8 E., Wabash County, Hydrologic Unit 05120102, in discharge tower of reservoir on Salamonie River, 1.1 miles (1.8 km) northwest of Dora, and 3.4 miles (5.5 km) upstream from mouth.

DRAINAGE AREA.--553 mi^2 (1,432 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4.75 ft (1.45 m) wide and 16.0 ft (4.88 m) high, in semi-elliptical conduit through dam. Minimum design capacity is 13,100 acre-ft (16.2 hm^3), elevation, 730 ft (222.5 m). Seasonal pool capacity is 60,700 acre-ft (74.8 hm^3), elevation, 755 ft (230.1 m). Capacity at uncontrolled spillway elevation, 793 ft (241.7 m) is 263,000 acre-ft (325 hm^3). Reservoir is used for flood control and recreation. Reservoir put in operation on Apr. 17, 1967.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 212,976 acre-ft (263 hm^3) Mar. 23, 1982, elevation, 786.91 ft (239.850 m); minimum, 10,000 acre-ft (12.3 hm^3) Mar. 11, 1969, elevation, 726.44 ft (221.419 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 212,976 acre-ft (263 hm^3) Mar. 23, elevation, 786.91 ft (239.850 m); minimum, 13,095 acre-ft (16.1 hm^3) Dec. 19, elevation, 729.99 ft (222.501 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	751.10	50,257	
Oct. 31	743.52	33,274	-16,983
Nov. 30	730.74	13,842	-19,432
Dec. 31	730.59	13,690	-152
CAL YR 1981			+290
Jan. 31	742.75	31,754	+18,064
Feb. 28	759.66	75,094	+43,340
Mar. 31	782.83	184,562	+109,468
Apr. 30	755.22	61,325	-123,237
May 31	755.81	63,040	+1,715
June 30	755.30	61,555	-1,485
July 31	755.08	60,923	-632
Aug. 31	755.43	61,932	+1,009
Sept. 30	754.77	60,040	-1,892
WTR YR 1982			+9,783

03324500 SALAMONIE RIVER AT DORA, IN

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

DRAINAGE AREA.--557 mi² (1,443 km²).

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

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

GAGE.--None. Datum of gage was 673.96 ft (205.423 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Oct. 9, 1961, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1951, nonrecording gage at site 1.5 miles (2.4 km) upstream at datum 688.59 ft (209.882 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers) and Oct. 1, 1951, to Oct. 8, 1961, water-stage recorder located on left bank 2,000 ft (610 m) upstream at datum 679.77 ft (207.194 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

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

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

AVERAGE DISCHARGE.--58 years (1924 to current year), 513 ft³/s (14.53 m³/s), 12.51 in/yr (318 mm/yr).

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

EXTREMES FOR 1982 WATER YEAR.--Maximum daily discharge, 6,150 ft³/s (174 m³/s) Apr. 5; minimum daily, 26 ft³/s (0.74 m³/s) July 28 to Aug. 20, 22-25, 30, 31, Sept. 1-3, 13-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	738	398	586	110	1130	5650	309	400	534	26	26
2	352	729	206	677	112	2020	4690	308	96	217	26	26
3	351	720	281	684	114	2290	3330	212	96	117	26	26
4	350	473	211	310	115	1460	5360	131	96	70	26	41
5	348	370	159	109	115	1560	6150	131	97	70	26	48
6	348	368	159	113	115	1980	6060	131	97	70	26	48
7	427	366	159	115	1090	1990	5960	131	97	70	26	48
8	344	363	159	116	2130	1980	5850	217	97	70	26	48
9	343	361	159	116	2490	2420	5910	217	97	55	26	48
10	343	358	159	116	2400	3160	5900	217	97	48	26	299
11	341	355	158	1010	2310	1900	5850	217	97	48	26	652
12	340	352	158	2180	2190	103	5820	131	97	45	26	390
13	377	349	127	2530	2060	105	5780	131	97	48	26	26
14	377	346	112	2440	1480	106	5830	113	97	48	26	26
15	375	343	112	1880	638	107	5350	95	291	48	26	26
16	413	340	112	1120	353	107	3050	132	494	48	26	26
17	411	336	112	1090	662	107	839	151	347	48	26	26
18	410	333	112	1650	919	107	2130	151	665	48	26	26
19	408	330	64	2060	1130	107	1220	462	1170	48	26	26
20	406	327	35	1380	620	107	738	592	1380	48	26	26
21	404	324	59	585	108	108	1510	594	1370	48	33	26
22	403	321	99	232	112	109	1500	596	1360	306	26	26
23	497	369	280	343	116	1350	1760	599	984	409	26	26
24	562	476	557	357	119	2010	1800	599	346	312	26	26
25	451	512	1060	379	121	2370	1780	598	182	161	26	26
26	395	507	1240	391	123	2550	923	597	182	116	317	26
27	393	575	1210	394	123	2540	410	595	182	51	297	26
28	508	619	1180	396	124	2530	217	870	167	26	111	26
29	676	608	1160	567	-----	3760	252	1010	151	26	43	26
30	753	594	753	445	-----	5130	308	1010	461	26	26	26
31	746	-----	449	107	-----	3150	------	1010	-----	26	26	----
TOTAL	13205	13162	11199	24478	22099	48453	101927	12257	11390	3305	1477	2168
MEAN	426	439	361	790	789	1563	3398	395	380	107	47.6	72.3
MAX	753	738	1240	2530	2490	5130	6150	1010	1380	534	317	652
MIN	340	321	35	107	108	103	217	95	96	26	26	26
CFSM	.77	.79	.65	1.42	1.42	2.81	6.10	.71	.68	.19	.09	.13
IN.	.88	.88	.75	1.63	1.48	3.24	6.81	.82	.76	.22	.10	.14

CAL YR 1981 TOTAL 175185 MEAN 480 MAX 3970 MIN 26 CFSM .86 IN 11.70
WTR YR 1982 TOTAL 265120 MEAN 726 MAX 6150 MIN 26 CFSM 1.30 IN 17.71

03325000 WABASH RIVER AT WABASH, IN

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

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 642.66 ft (195.883 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1954, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--59 years, 1,495 ft³/s (42.34 m³/s), 11.48 in/yr (292 mm/yr).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,200 ft³/s (430 m³/s) Mar. 13, gage height, 17.25 ft (5.258 m); minimum daily, 78 ft³/s (2.21 m³/s) Aug. 13.

REVISIONS.--Revised figures of discharge for the water year 1979, superseding those published in the report WRD IN-79-1, are given herein:

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	512	516	251	2810	242	3000	3880	622	952	281	1990	808
2	503	496	209	3110	242	4500	3020	488	584	251	3100	334
3	512	437	489	3450	223	6010	2510	557	511	259	1920	322
4	508	129	2080	5330	215	9840	2440	807	510	288	1860	347
5	507	146	3100	4330	228	9250	2390	603	399	279	1820	254
6	512	145	2240	3240	220	8020	1670	562	349	280	1780	200
7	502	147	1290	1770	215	6900	1270	538	401	287	2950	161
8	499	159	2140	853	213	7080	899	460	572	244	2810	154
9	494	155	2790	420	209	7500	1260	414	575	404	2370	150
10	491	137	2090	440	209	7650	1580	395	610	895	2010	200
11	490	126	1140	340	217	7900	1940	379	917	884	1110	303
12	489	120	680	295	226	7360	3440	384	2490	994	1760	764
13	481	118	470	310	217	6960	2970	371	2540	1050	2040	737
14	485	234	365	285	178	7500	2660	358	2120	1450	1480	726
15	502	328	320	270	154	6710	2630	442	2290	2090	646	1440
16	574	203	305	265	159	5230	2430	596	1590	2090	465	1460
17	624	356	300	260	154	5140	3230	478	409	2620	356	939
18	642	521	297	270	159	5080	3410	429	391	2510	303	677
19	614	655	290	285	166	5080	3000	372	353	1730	265	686
20	614	638	294	297	170	4740	3120	305	313	1290	281	699
21	670	412	281	313	188	4320	3030	289	299	600	306	638
22	633	390	278	305	257	4270	2380	287	521	316	461	687
23	574	328	281	300	390	3920	2320	277	798	247	694	688
24	574	325	309	313	1300	3970	2200	254	763	232	1470	683
25	583	322	290	350	4490	3840	1750	261	636	1880	1880	678
26	610	312	255	366	3680	3660	1440	392	351	1700	1700	673
27	619	287	220	330	3050	3200	1650	687	235	884	884	683
28	592	245	205	297	2590	2650	1460	1010	205	666	666	702
29	587	231	198	272	-----	4450	1390	1210	206	1110	1110	697
30	610	260	262	234	-----	6800	977	1200	221	1360	1360	694
31	666	----	438	240	-----	6380	-----	1120	-----	1560	1560	-----
TOTAL	17273	8878	24157	31950	19961	178910	68346	16547	23111	30731	43407	18184
MEAN	557	296	779	1031	713	5771	2278	534	770	991	1400	606
MAX	670	655	3100	5330	4490	9840	3880	1210	2540	2620	3100	1460
MIN	481	118	198	234	154	2650	899	254	205	232	265	150
CFSM	.32	.17	.44	.58	.40	3.26	1.29	.30	.44	.56	.79	.34
IN.	.36	.19	.51	.67	.42	3.76	1.44	.35	.49	.65	.91	.38

CAL YR 1978 TOTAL 585657 MEAN 1605 MAX 11300 MIN 118 CFSM .91 IN 12.32
WTR YR 1979 TOTAL 481455 MEAN 1319 MAX 9840 MIN 118 CFSM .75 IN 10.13

03325000 WABASH RIVER AT WABASH, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	1070	897	1340	4000	4030	8460	794	3700	980	102	89
2	420	1050	388	1800	3500	5250	7610	765	3500	525	101	89
3	412	1030	472	1960	3500	5520	5660	669	2230	334	100	84
4	406	837	422	6030	3600	5570	6840	533	1600	337	105	87
5	402	659	352	5260	3600	7010	7320	478	1480	466	103	108
6	441	599	328	5250	2500	7240	6990	454	1400	383	98	116
7	566	585	323	5180	2100	6140	6920	501	1340	349	95	135
8	494	508	315	4760	2900	5620	6640	593	1300	331	106	143
9	403	518	301	3930	3300	4950	6330	581	1370	301	123	132
10	386	531	300	1700	3000	4210	6690	677	1780	257	124	175
11	377	553	287	1500	2900	7390	7600	785	1510	223	103	1080
12	386	530	287	2960	2800	9040	9640	703	1360	193	87	1140
13	402	523	279	3550	2600	14000	9820	544	1300	177	78	278
14	400	519	242	3290	2000	10900	8280	411	1240	173	82	99
15	409	519	255	2940	1600	8680	8040	372	1230	170	213	92
16	431	537	253	1500	1150	8740	7220	401	906	165	88	95
17	438	553	245	1400	2440	9980	8090	453	1550	162	94	96
18	491	551	223	2200	4000	10200	6070	441	1820	166	88	94
19	510	550	200	2630	4460	9950	5100	713	1990	162	81	90
20	515	573	150	2090	4790	6750	3580	1220	1820	160	95	88
21	504	593	170	1050	5040	9240	3280	1650	1950	148	217	88
22	518	603	261	498	6630	9260	2710	1600	1850	201	107	89
23	764	613	593	1090	6930	9020	2780	2070	1540	350	103	86
24	916	711	1840	2000	7870	9550	2390	1540	827	357	127	86
25	729	834	2410	2100	7040	9560	2360	1200	540	298	218	88
26	599	923	2690	2400	5940	9940	1880	856	442	249	249	87
27	651	1100	2760	2500	5420	9580	1470	859	478	201	312	95
28	979	1230	3150	1900	4620	9110	943	1740	449	157	225	104
29	1080	1140	2980	1400	------	8880	864	1910	717	146	167	108
30	1160	1080	2280	3300	------	8750	808	2150	1040	127	115	103
31	1100	-----	1140	5000	------	8410	------	1730	-----	114	91	----
TOTAL	17705	21622	26793	84508	110230	252470	162385	29393	44259	8362	3997	5244
MEAN	571	721	864	2726	3937	8144	5413	948	1475	270	129	175
MAX	1160	1230	3150	6030	7870	14000	9820	2150	3700	980	312	1140
MIN	377	508	150	498	1150	4030	808	372	442	114	78	84
CFSM	.32	.41	.49	1.54	2.23	4.61	3.06	.54	.83	.15	.07	.10
IN.	.37	.45	.56	1.78	2.32	5.31	3.42	.62	.93	.18	.08	.11

CAL YR 1981 TOTAL 508556 MEAN 1393 MAX 10200 MIN 101 CFSM .79 IN 10.70
WTR YR 1982 TOTAL 766968 MEAN 2101 MAX 14000 MIN 78 CFSM 1.19 IN 16.14

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 10 ft (3 m) downstream from highway bridge, 0.8 mile (1.3 km) downstream from Mud Creek, 2 miles (3 km) east of Ridgeville, and at mile 99.5 (160.0 km).

DRAINAGE AREA.--133 mi² (344 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 965.28 ft (294.217 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 5, 1950, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--36 years, 127 ft³/s (3.597 m³/s), 12.97 in/yr (329 mm/yr).

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0300	2590	73.3	11.28	3.438	Mar. 4	2200	2530	71.6	11.20	3.414
Jan. 31	1500	ice jam		*12.50	3.810	Mar. 11	1700	2740	77.6	11.46	3.493
Feb. 17	----	2700	76.5	ice jam		Mar. 16	1600	*2940	83.3	11.67	3.557

Minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Aug. 30, Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	11	14	75	500	640	274	16	1130	39	3.4	3.1
2	8.5	11	15	93	300	804	152	14	497	27	3.2	3.7
3	8.3	11	12	87	170	369	427	14	280	25	3.8	3.8
4	8.0	10	12	990	110	895	216	14	179	22	3.8	2.9
5	7.6	9.8	11	1630	70	992	133	13	131	18	6.2	2.9
6	8.2	10	9.5	375	56	322	120	13	95	15	4.0	2.5
7	8.8	9.5	9.8	211	50	170	125	62	80	15	7.9	2.6
8	9.0	8.9	11	100	45	118	153	653	78	18	15	3.1
9	9.2	8.2	10	70	41	98	218	206	74	13	24	3.0
10	9.0	8.2	9.8	55	38	269	472	90	121	14	5.5	2.6
11	8.5	8.5	8.5	48	36	1990	680	57	59	19	3.8	2.7
12	8.5	8.5	9.2	40	34	1260	341	38	49	12	3.4	2.5
13	7.9	8.5	7.9	37	32	1750	213	27	44	11	3.2	2.4
14	9.2	8.2	7.9	33	31	617	115	21	33	11	3.1	2.8
15	9.5	7.9	7.6	30	35	535	87	24	42	10	3.1	3.3
16	9.5	7.6	7.4	27	60	1850	74	21	363	9.8	2.7	3.5
17	11	8.2	7.2	26	1000	1010	335	49	418	9.8	2.8	3.2
18	22	8.2	6.8	27	2000	391	185	17	117	21	2.8	3.4
19	13	8.9	6.2	28	1890	614	114	14	65	21	2.7	3.6
20	8.2	12	5.0	26	981	1650	83	290	56	73	2.8	3.1
21	7.6	9.5	5.4	25	1490	540	55	547	218	17	3.9	3.3
22	8.2	7.6	7.0	24	937	278	42	258	53	18	2.6	4.2
23	12	7.6	600	600	1440	191	33	145	32	19	2.5	3.9
24	8.5	15	450	450	930	141	30	63	25	7.3	3.1	3.8
25	7.3	19	150	180	330	127	27	40	22	5.2	6.0	4.1
26	7.3	16	115	120	216	198	26	33	20	4.4	3.9	4.5
27	52	28	104	66	179	133	22	195	18	4.2	2.9	7.9
28	82	19	147	55	245	93	18	1100	72	4.4	2.8	5.0
29	28	14	90	50	-----	83	16	648	313	4.2	2.5	3.4
30	18	12	60	200	-----	83	16	801	84	3.8	2.4	3.2
31	14	-----	56	1200	-----	1060	----	420	----	3.6	2.7	-----
TOTAL	438.2	331.8	1972.2	6978	13246	19271	4802	5903	4768	494.7	142.5	104.0
MEAN	14.1	11.1	63.6	225	473	622	160	190	159	16.0	4.60	3.47
MAX	82	28	600	1630	2000	1990	680	1100	1130	73	24	7.9
MIN	7.3	7.6	5.0	24	31	83	16	13	18	3.6	2.4	2.4
CFSM	.11	.08	.48	1.69	3.56	4.68	1.20	1.43	1.20	.12	.04	.03
IN.	.12	.09	.55	1.95	3.70	5.39	1.34	1.65	1.33	.14	.04	.03

CAL YR 1981 TOTAL 41611.0 MEAN 114 MAX 3250 MIN 4.5 CFSM .86 IN 11.64
WTR YR 1982 TOTAL 58451.4 MEAN 160 MAX 2000 MIN 2.4 CFSM 1.20 IN 16.35

03325500 MISSISSINEWA RIVER NEAR RIDGEVILLE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
21...	1335	7.6	11.5	6	.12
DEC					
02...	1315	11	5.5	78	2.3
08...	1044	11	3.5	0	.29
JAN					
19...	1112	28	.0	153	11

03326070 BIG LICK CREEK NEAR HARTFORD CITY, IN

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

DRAINAGE AREA.--29.2 mi² (75.6 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft (263.652 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 28.8 ft³/s (0.816 m³/s), 13.39 in/yr (340 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1940 ft³/s (54.9 m³/s) June 6, 1981, gage height, 16.14 ft (4.919 m); minimum daily, 0.38 ft³/s (0.011 m³/s) Sept. 25, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.74 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	0800	706	20.0	12.59	3.837	Mar. 11	1500	*1220	34.6	14.48	4.414
Jan. 30	2000	895	25.3	13.47	4.106	Mar. 16	1300	488	13.8	11.00	3.353
Mar. 4	2100	469	13.3	10.83	3.301	Mar. 19	2400	558	15.8	11.60	3.536

Minimum daily discharge, 0.71 ft³/s (0.02 m³/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	4.2	6.6	51	130	103	37	6.5	39	2.1	1.5	1.3
2	2.8	3.6	6.3	24	60	188	22	6.1	14	2.0	1.5	1.4
3	2.5	3.4	5.2	172	40	96	53	6.1	7.4	2.0	1.4	1.2
4	2.1	3.2	5.3	548	25	184	26	5.9	5.9	2.1	1.8	1.0
5	2.0	3.1	5.7	142	16	227	19	5.7	5.4	1.8	44	1.0
6	2.3	3.0	5.0	73	13	120	17	5.6	4.7	1.7	5.5	.95
7	2.7	2.7	5.0	45	12	53	20	7.3	4.5	2.2	2.5	.95
8	2.3	2.5	4.8	25	10	33	24	12	4.4	12	4.4	1.0
9	2.0	2.3	4.0	14	9.5	22	37	7.3	12	2.5	8.8	.95
10	2.0	2.3	3.7	10	8.8	76	126	6.0	12	1.8	3.1	.95
11	1.9	2.2	3.4	8.8	8.2	841	174	5.6	5.2	2.8	1.8	.88
12	1.7	2.1	3.2	7.4	7.8	395	78	5.3	4.2	1.9	1.5	.88
13	1.7	2.1	3.1	6.6	7.3	441	40	5.0	3.9	1.6	1.4	.88
14	1.8	2.0	3.0	5.9	7.0	155	22	4.8	3.7	1.6	1.3	.88
15	1.8	2.1	3.1	5.4	9.0	110	17	5.7	4.8	1.6	1.2	.95
16	1.8	2.3	3.0	5.0	5.0	278	23	5.0	44	1.5	1.2	.95
17	1.9	2.3	2.9	4.8	250	137	179	5.1	55	1.5	1.2	.95
18	3.3	2.3	2.9	6.8	367	74	59	4.8	12	1.5	1.3	1.1
19	3.3	2.4	2.6	5.5	254	183	29	5.4	14	2.7	1.3	1.1
20	2.0	11	2.5	4.3	185	364	20	9.0	9.4	3.1	1.3	.95
21	1.8	5.9	2.9	4.0	256	117	14	18	6.1	1.6	1.8	.88
22	2.5	3.8	5.0	4.3	202	63	12	11	4.3	8.7	1.4	.82
23	6.6	3.2	269	288	224	44	10	8.6	3.2	9.0	1.5	.77
24	3.1	30	123	154	225	34	9.9	5.8	2.7	2.9	2.1	.71
25	2.4	30	43	74	96	38	9.2	5.0	2.5	1.8	5.0	.77
26	2.1	14	22	26	59	63	8.9	4.7	2.4	1.7	1.9	.82
27	41	15	74	14	37	29	8.0	5.1	2.2	2.2	1.4	.82
28	64	9.7	60	9.8	33	21	7.2	6.0	2.3	2.9	1.3	.95
29	15	7.1	28	8.5	------	19	6.9	14	5.7	2.6	1.2	.82
30	7.5	5.9	19	489	------	19	6.6	15	3.0	1.7	1.2	.82
31	5.2	-----	15	373	------	116	------	7.8	-----	1.6	1.5	-----
TOTAL	197.0	185.7	742.2	2609.1	2556.6	4643	1114.7	225.2	299.9	86.7	108.3	28.40
MEAN	6.35	6.19	23.9	84.2	91.3	150	37.2	7.26	10.0	2.80	3.49	.95
MAX	64	30	269	548	367	841	179	18	55	12	44	1.4
MIN	1.7	2.0	2.5	4.0	5.0	19	6.6	4.7	2.2	1.5	1.2	.71
CFSM	.22	.21	.82	2.88	3.13	5.14	1.27	.25	.34	.10	.12	.03
IN.	.25	.24	.95	3.32	3.26	5.91	1.42	.29	.38	.11	.14	.04

CAL YR 1981 TOTAL 13306.60 MEAN 36.5 MAX 1580 MIN 1.7 CFSM 1.25 IN 16.95
WTR YR 1982 TOTAL 12796.80 MEAN 35.1 MAX 841 MIN .71 CFSM 1.20 IN 16.30

03326500 MISSISSINEWA RIVER AT MARION, IN

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

DRAINAGE AREA.--682 mi² (1,766 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 774.56 ft (236.086 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1933, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--59 years, 630 ft³/s (17.84 m³/s), 12.54 in/yr (319 mm/yr).

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

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	----	6500	184	ice jam		Mar. 11	2400	*13100	371	*12.29	3.746
Feb. 24	0800	6280	178	8.45	2.576	Mar. 20	1700	6270	178	8.44	2.573

Minimum daily discharge, 17 ft³/s (0.481 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	244	209	594	3220	1110	2320	233	1210	372	84	70
2	84	202	194	696	2070	2950	1210	227	1630	242	81	116
3	78	178	173	1030	1180	2970	1030	218	1010	213	76	91
4	77	163	163	5000	707	2380	1310	212	511	170	88	76
5	78	151	151	5690	500	4320	904	205	382	151	86	69
6	95	142	140	3460	433	4300	667	200	310	140	199	64
7	84	134	135	1400	375	1870	598	230	265	129	182	64
8	83	123	133	881	340	1110	616	260	234	136	231	65
9	71	115	128	614	307	812	723	489	215	163	135	65
10	74	108	122	253	295	737	1010	479	567	169	230	63
11	72	104	114	340	279	6870	2410	331	386	137	236	30
12	71	101	111	360	267	11400	2420	276	273	121	143	17
13	71	96	108	345	255	11300	1480	247	210	251	109	93
14	71	93	106	310	244	6710	936	226	179	119	92	58
15	71	92	104	285	249	3470	682	211	182	108	82	58
16	70	92	214	268	338	3270	598	206	748	100	75	58
17	68	92	104	243	1380	4740	1190	199	1280	94	71	56
18	89	92	102	230	2750	3760	1390	277	1010	112	71	56
19	82	97	90	215	1850	2230	915	270	681	100	67	54
20	84	113	85	205	1450	5670	667	224	686	108	103	53
21	80	136	100	200	3800	5250	537	453	450	127	73	51
22	134	129	128	195	4400	2560	442	1200	513	155	71	49
23	192	123	750	900	5150	1420	382	664	376	175	68	52
24	178	168	1800	1860	5820	1210	349	536	267	204	169	54
25	142	339	1340	1390	4070	877	327	325	162	165	504	55
26	123	334	875	900	1980	1230	313	261	114	122	192	56
27	238	465	950	550	1250	1070	295	241	170	120	118	65
28	808	343	1280	395	983	812	273	260	167	102	92	61
29	762	294	932	350	-----	673	253	1210	317	112	80	66
30	372	236	636	1400	-----	612	240	973	696	104	75	68
31	310	----	525	4000	-----	906	-----	1060	-----	94	70	----
TOTAL	4903	5099	12002	34559	45942	98599	26487	12403	15201	4615	3953	1853
MEAN	158	170	387	1115	1641	3181	883	400	507	149	128	61.8
MAX	808	465	1800	5690	5820	11400	2420	1210	1630	372	504	116
MIN	68	92	85	195	244	612	240	199	114	94	67	17
CFSM	.23	.25	.57	1.64	2.41	4.66	1.30	.59	.74	.22	.19	.09
IN.	.27	.28	.65	1.89	2.51	5.38	1.44	.68	.83	.25	.22	.10

CAL YR 1981 TOTAL 208075 MEAN 570 MAX 9460 MIN 54 CFSM .84 IN 11.35
WTR YR 1982 TOTAL 265616 MEAN 728 MAX 11400 MIN 17 CFSM 1.07 IN 14.49

03326950 MISSISSINEWA LAKE AT PEORIA, IN

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

DRAINAGE AREA.--807 mi² (2,090 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers)

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 282,331 acre-ft (348 hm³) Mar. 22, 1982, elevation, 771.48 ft (235.147 m); minimum, 17,446 acre-ft (21.5 hm³) Mar. 5, 1980, elevation, 707.03 ft (215.503 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 282,331 acre-ft (348 hm³) Mar. 22, elevation, 771.48 ft (235.147 m); minimum, 23,239 acre-ft (28.7 hm³) Dec. 1, elevation, 711.96 ft (217.005 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	736.41	73,329	
Oct. 31	729.04	53,475	-19,854
Nov. 30	712.42	23,834	-29,641
Dec. 31	713.12	24,758	+924
CAL YR 1981			+1,378
Jan. 31	725.56	45,745	+20,987
Feb. 28	747.46	115,936	+70,191
Mar. 31	762.88	207,318	+91,382
Apr. 30	735.28	69,900	-137,418
May 31	738.22	79,161	+9,261
June 30	737.13	75,599	-3,562
July 31	737.06	75,375	-224
Aug. 31	737.08	75,439	+64
Sept. 30	735.93	71,853	-3,586
WTR YR 1982			-1,476

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 (1.0 km) downstream from Mississinewa Lake, 6.5 miles (10.4 km) southeast of Peru, and 6.7 miles (10.8 km) upstream from mouth.

DRAINAGE AREA.--808 mi^2 (2,092 km^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 (201.168 m) 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, non-recording gage and crest-stage gage on highway bridge 2,500 ft (762 m) upstream, and Oct. 7, 1954, to Sept. 30, 1962, water-stage recorder on right bank at site 2,500 ft (762 m) upstream at same datum.

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

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

AVERAGE DISCHARGE.--30 years, 718 ft^3/s (20.33 m^3/s), 12.07 in/yr (307 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,080 ft^3/s (172 m^3/s) Apr. 10; minimum daily, 47 ft^3/s (1.33 m^3/s) Sept. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	825	631	969	401	1210	5720	200	346	581	90	68
2	285	701	467	968	410	1210	6010	201	114	435	90	142
3	275	719	251	1100	1070	1860	5970	150	514	354	90	204
4	240	716	214	823	1480	1590	5930	66	713	226	90	204
5	214	713	177	623	1470	1630	5960	66	712	162	90	190
6	214	677	185	873	1470	2040	5950	67	711	162	90	120
7	214	657	193	1050	1460	2050	5900	67	710	162	90	68
8	232	655	193	1440	1840	2260	5840	67	708	162	90	68
9	249	625	196	1750	2060	2880	5980	68	707	162	91	58
10	249	591	199	1760	2040	3660	6080	220	706	162	91	47
11	249	588	176	1940	2010	2250	6060	473	705	162	91	47
12	225	585	153	2250	1990	266	6030	464	704	162	91	47
13	213	594	153	2360	1950	273	5990	379	702	162	144	47
14	213	609	153	2310	1930	278	5910	328	701	180	198	69
15	256	622	138	1910	1900	280	5360	328	405	198	198	313
16	530	618	124	1340	1340	282	3290	328	528	198	197	340
17	445	614	125	1320	976	283	1130	328	1070	196	196	271
18	444	610	145	1310	997	285	1660	294	1220	191	196	271
19	490	606	164	1290	1030	285	1490	451	1220	191	195	250
20	587	603	164	1030	621	1660	1130	546	1220	191	195	206
21	648	600	144	537	193	3380	1410	505	1210	173	194	182
22	646	614	124	417	108	4170	1550	483	930	155	193	182
23	668	656	368	419	108	4500	1750	485	655	155	192	182
24	778	756	611	510	111	5170	1840	486	443	155	158	182
25	884	798	1180	636	114	5820	1820	703	405	155	384	223
26	773	1090	1330	645	778	5950	1810	810	257	155	505	288
27	671	1190	1490	648	1210	5930	1800	808	176	155	298	310
28	1160	1020	1600	648	1210	5900	1460	806	193	152	89	337
29	1740	655	1980	747	-----	5860	622	806	376	76	68	307
30	1060	627	2220	560	-----	5510	200	826	609	90	68	229
31	853	-----	1550	387	-----	3160	------	812	-----	90	68	----
TOTAL	15990	20934	16798	34570	32277	81882	111652	12621	19670	5910	4820	5452
MEAN	516	698	542	1115	1153	2641	3722	407	656	191	155	182
MAX	1740	1190	2220	2360	2060	5950	6080	826	1220	581	505	340
MIN	213	585	124	387	108	266	200	66	114	76	68	47
CFSM	.64	.86	.67	1.38	1.43	3.27	4.61	.50	.81	.24	.19	.23
IN.	.74	.96	.77	1.59	1.49	3.77	5.14	.58	.91	.27	.22	.25

CAL YR 1981 TOTAL 252653 MEAN 692 MAX 3990 MIN 20 CFSM .86 IN 11.63
WTR YR 1982 TOTAL 362576 MEAN 993 MAX 6080 MIN 47 CFSM 1.23 IN 16.69

03327500 WABASH RIVER AT PERU, IN

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

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

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

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-1. 1974: 1973. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 617.94 ft (188.348 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 20, 1961, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--39 years, 2,368 ft³/s (67.06 m³/s), 11.97 in/yr (304 mm/yr).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,000 ft³/s (453 m³/s) Mar. 13, gage height, 12.62 ft (3.847 m); minimum daily, 214 ft³/s (6.06 m³/s) Sept. 1.

REVISIONS.--The maximum discharge for the 1975 water year has been revised to 12,000 cfs Mar. 7, 1975,superseding figures published in WDR IN-75-1.

NOTE.--No gage-height record Dec. 3-27, Dec. 31 to Feb. 7, Feb. 10-17 and June 17 to July 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	2280	1870	2300	6000	5190	13900	1000	4080	1500	246	214
2	642	2050	979	2800	5000	6480	13900	1080	4080	850	253	232
3	640	2060	940	3400	4800	7220	11500	930	3020	700	245	273
4	640	2000	900	8000	5100	7760	12300	736	2560	700	235	266
5	640	1710	750	7000	5200	8460	12900	451	2410	900	242	276
6	645	1640	680	6500	4000	9800	12700	647	2320	750	259	273
7	900	1550	680	6400	3700	8520	12400	689	2260	620	242	249
8	840	1500	675	6300	4900	7840	12300	777	2220	570	259	259
9	800	1370	670	5700	5300	7960	11900	771	2250	550	252	260
10	707	1360	650	3800	5100	7610	12400	801	2550	530	262	233
11	687	1360	600	3600	5000	10200	13000	1310	2470	500	256	759
12	650	1370	590	5000	4800	10400	15100	1130	2290	480	250	1310
13	662	1350	580	6000	4500	14800	15800	976	2220	450	264	699
14	675	1350	540	5700	3800	12900	14300	799	2110	420	332	244
15	750	1370	510	5000	3200	9690	13400	704	2110	443	425	279
16	1080	1370	500	2900	2700	9050	11900	692	1720	434	365	388
17	965	1370	490	2900	3500	10600	10100	765	2300	418	336	328
18	1030	1370	460	3500	5130	10000	7760	758	3000	368	343	328
19	1050	1370	400	4000	5350	10500	7650	965	3200	367	330	320
20	1170	1420	350	3000	5840	8310	4850	1770	3000	424	359	277
21	1250	1410	380	1800	5350	12400	4700	2160	3200	437	359	255
22	1310	1430	500	1000	6410	13400	4380	2250	2900	386	419	265
23	1440	1450	1300	2200	7360	13300	4420	2720	2300	518	320	267
24	1820	1650	2500	2900	8220	14400	4340	2290	1300	599	289	279
25	1830	1850	3400	3000	7360	14900	4260	2010	1000	551	402	288
26	1590	2120	3800	3100	6440	15400	4070	1860	800	503	802	323
27	1510	2420	4200	3200	6630	15100	3320	1830	820	436	637	359
28	2140	2450	4680	2800	6120	14700	2720	2310	800	357	418	367
29	2990	2130	4770	2400	------	14400	2040	2890	900	310	317	387
30	2670	1880	4640	4500	------	14200	1160	3150	1600	283	272	329
31	2180	-----	3100	7000	------	12000	------	2780	-----	262	229	-----
TOTAL	36547	50010	47084	127700	146810	337490	275470	44001	67790	16616	10219	10586
MEAN	1179	1667	1519	4119	5243	10890	9182	1419	2260	536	330	353
MAX	2990	2450	4770	8000	8220	15400	15800	3150	4080	1500	802	1310
MIN	640	1350	350	1000	2700	5190	1160	451	800	262	229	214
CFSM	.44	.62	.57	1.53	1.95	4.05	3.42	.53	.84	.20	.12	.13
IN.	.51	.69	.65	1.77	2.03	4.67	3.82	.61	.94	.23	.14	.15

CAL YR 1981 TOTAL 779593 MEAN 2136 MAX 11200 MIN 180 CFSM .80 IN 10.80
WTR YR 1982 TOTAL 1170323 MEAN 3206 MAX 15800 MIN 214 CFSM 1.19 IN 16.21

03327520 PIPE CREEK NEAR BUNKER HILL, IN

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

DRAINAGE AREA.--159 mi^2 (412 km^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 (224.333 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--14 years, 148 ft^3/s (4.191 m^3/s), 12.64 in/yr (321 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 5	0300	1630	46.2	9.65	2.941	Mar. 12	1800	*3240	91.8	*14.03	4.276
Jan. 31	1200	1240	35.1	ice jam		Mar. 20	1500	1450	41.1	9.10	2.774
Feb. 24	1100	1430	40.5	9.06	2.761	Apr. 18	0200	2360	66.8	11.77	3.587
Mar. 5	0700	1410	39.9	9.00	2.743	June 1	1000	1110	31.4	7.99	2.435

Minimum daily discharge, 9.2 ft^3/s (0.26 m^3/s) Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	160	87	124	720	401	226	71	918	57	13	13
2	58	136	80	132	401	918	180	67	505	41	13	13
3	46	119	66	273	238	689	292	64	257	43	13	24
4	39	109	62	1380	180	677	263	62	167	38	12	15
5	36	102	56	1430	150	1320	188	59	130	33	14	13
6	38	105	52	688	132	1110	165	58	105	29	13	12
7	51	101	54	397	116	558	149	73	92	27	12	12
8	44	90	54	282	107	341	150	76	82	25	16	12
9	41	78	48	170	103	246	176	65	97	23	29	12
10	37	68	44	120	101	263	260	59	76	25	22	11
11	34	65	42	102	95	1630	653	56	63	39	16	11
12	31	59	42	96	89	2990	891	54	57	31	13	11
13	29	55	42	92	83	3150	626	52	53	25	12	11
14	28	52	39	89	78	2510	354	49	49	24	11	10
15	27	51	42	85	75	1330	251	49	52	25	11	11
16	27	50	40	82	121	1170	254	47	63	21	11	10
17	26	49	39	77	433	1250	2020	46	112	19	10	9.9
18	59	45	37	71	365	754	1610	55	106	23	9.9	10
19	84	45	35	68	320	665	589	199	89	30	9.6	10
20	60	51	32	66	533	1350	388	159	97	23	11	9.6
21	50	47	37	65	965	1130	269	143	89	19	14	9.2
22	87	42	50	64	740	624	198	274	70	20	12	9.2
23	424	40	210	170	1050	435	159	289	55	17	13	9.6
24	274	69	472	575	1350	345	137	160	47	16	44	9.6
25	178	132	273	433	787	304	121	114	43	15	48	10
26	133	120	145	279	460	376	109	94	40	14	55	11
27	249	145	202	165	330	299	99	121	38	14	34	11
28	701	129	260	128	287	228	85	95	40	15	22	12
29	423	100	199	106	-----	199	78	110	71	26	17	12
30	273	86	128	350	-----	337	74	686	87	17	15	11
31	198	----	102	1210	-----	378	-----	357	----	14	14	-----
TOTAL	3861	2500	3071	9369	10409	27977	11014	3863	3750	788	559.5	345.1
MEAN	125	83.3	99.1	302	372	902	367	125	125	25.4	18.0	11.5
MAX	701	160	472	1430	1350	3150	2020	686	918	57	55	24
MIN	26	40	32	64	75	199	74	46	38	14	9.6	9.2
CFSM	.79	.52	.62	1.90	2.34	5.67	2.31	.79	.79	.16	.11	.07
IN.	.90	.58	.72	2.19	2.44	6.55	2.58	.90	.88	.18	.13	.08

CAL YR 1981 TOTAL 51392.0 MEAN 141 MAX 1680 MIN 11 CFSM .89 IN 12.02
WTR YR 1982 TOTAL 77506.6 MEAN 212 MAX 3150 MIN 9.2 CFSM 1.33 IN 18.13

03328000 EEL RIVER AT NORTH MANCHESTER, IN

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

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

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Gage-height records since November 20, 1923 are available 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 (224.942 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1953, nonrecording gage on downstream side of Second Street bridge, 700 ft (213 m) upstream at same datum.

REMARKS.--Records good except those for winter periods which are fair. Records include flow of Pony Creek.

AVERAGE DISCHARGE.--53 years, 359 ft³/s (10.17 m³/s), 11.69 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,180 ft³/s (232 m³/s) Mar. 13, 1982, gage height, 13.72 ft (4.182 m); maximum gage height, 14.00 ft (4.267 m) Feb. 27, 1936; minimum daily discharge, 16 ft³/s (0.45 m³/s) Oct. 19, 1956.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	2200	2550	72.2	7.61	2.320	Apr. 17	1700	3040	86.1	8.44	2.573
Mar. 13	2400	*8180	232	*13.72	4.182	June 1	1600	2400	68.0	7.36	2.243

Minimum daily discharge, 69 ft³/s (1.95 m³/s) Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	225	282	330	1200	493	780	313	2100	203	94	78
2	183	203	269	400	800	632	680	302	2000	186	94	78
3	146	190	244	520	550	570	744	292	1420	214	105	75
4	129	177	230	1940	450	522	820	278	763	473	103	72
5	119	170	229	2350	390	1050	677	274	543	392	99	72
6	161	165	219	1600	340	888	599	269	430	271	96	69
7	269	158	212	1100	310	619	588	298	359	214	93	76
8	199	146	204	800	300	500	564	361	316	181	96	87
9	161	137	192	540	280	380	575	311	288	161	102	78
10	142	134	181	440	270	300	635	282	352	153	96	75
11	131	131	172	380	260	1290	800	267	340	184	91	73
12	122	127	165	340	255	3060	1400	255	288	197	87	72
13	114	121	158	310	250	6750	2060	246	257	168	85	71
14	111	119	153	280	245	6840	1510	240	238	151	84	72
15	111	119	151	260	240	5670	923	244	247	142	84	72
16	110	117	146	240	350	5870	796	238	307	136	81	72
17	110	117	142	235	1000	6190	2700	246	302	127	81	71
18	122	116	138	230	2080	5120	2480	240	263	121	79	81
19	142	116	132	220	1800	4360	1910	244	336	117	78	82
20	144	227	130	215	1270	4440	1350	331	430	117	97	76
21	137	478	150	210	1320	3820	884	276	663	117	93	73
22	153	394	200	210	1360	3040	677	274	418	116	82	76
23	475	296	250	300	1190	2560	575	693	309	121	81	75
24	363	269	270	400	1710	2050	509	554	259	116	84	72
25	267	354	250	330	1530	1790	460	380	238	111	88	78
26	223	385	220	300	954	1580	428	309	221	105	84	76
27	325	689	300	280	686	1240	408	356	234	102	81	82
28	599	556	374	260	554	1020	368	572	221	108	79	99
29	404	394	300	250	-----	895	340	546	225	105	76	91
30	307	311	250	800	-----	816	327	509	221	99	76	82
31	255	----	290	1600	-----	816	-----	423	-----	97	76	----
TOTAL	6476	7141	6603	17670	21944	75171	27567	10423	14588	5105	2725	2306
MEAN	209	238	213	570	784	2425	919	336	486	165	87.9	76.9
MAX	599	689	374	2350	2080	6840	2700	693	2100	473	105	99
MIN	110	116	130	210	240	300	327	238	221	97	76	69
CFSM	.50	.57	.51	1.37	1.88	5.82	2.20	.81	1.17	.40	.21	.18
IN.	.58	.64	.59	1.58	1.96	6.71	2.46	.93	1.30	.46	.24	.21

CAL YR 1981 TOTAL 179509 MEAN 492 MAX 5060 MIN 92 CFSM 1.18 IN 16.01
WTR YR 1982 TOTAL 197719 MEAN 542 MAX 6840 MIN 69 CFSM 1.30 IN 17.64

03328430 WEESAU CREEK NEAR DEEDSVILLE, IN

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

DRAINAGE AREA.--8.87 mi² (22.97 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 785.00 ft (239.268 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--12 years, 9.11 ft³/s (0.258 m³/s), 13.95 in/yr (354 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft³/s (13.1 m³/s) Mar. 13, 1982, gage height, 7.37 ft (2.246 m); minimum daily, 0.26 ft³/s (0.07 m³/s) Feb. 1, 1977.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1100	146	4.13	4.48	1.366	Apr. 12	1900	90	2.55	3.74	1.140
Feb. 17	1900	86	2.44	3.69	1.125	Apr. 17	0400	161	4.56	4.65	1.417
Feb. 24	0600	79	2.24	3.61	1.100	June 1	0300	110	3.12	4.02	1.225
Mar. 13	0600	*464	13.1	*7.37	2.246						

Minimum daily discharge, 0.64 ft³/s (0.018 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.1	2.6	3.1	23	9.3	8.6	5.8	72	4.5	1.5	.97
2	1.1	2.0	2.3	4.5	15	21	8.3	5.7	17	3.9	1.4	.97
3	1.1	1.8	2.0	13	10	16	9.1	5.5	8.9	4.0	1.4	.92
4	1.1	1.8	2.1	107	8.2	26	8.2	5.4	7.0	3.6	1.3	.89
5	1.2	1.8	2.3	44	7.2	38	7.7	5.3	6.2	3.4	1.3	.89
6	1.8	1.7	2.1	16	6.8	15	8.1	5.1	5.7	3.1	1.3	.87
7	1.5	1.7	2.1	9.3	6.3	8.6	7.7	5.8	5.3	3.0	1.3	.91
8	1.4	1.6	2.0	12	6.0	7.0	7.8	5.6	5.0	2.9	1.3	.90
9	1.3	1.5	1.8	9.0	5.6	6.0	9.0	5.3	4.8	2.8	1.3	.87
10	1.2	1.5	1.7	7.5	5.3	6.6	12	5.2	4.7	2.9	1.2	.82
11	1.2	1.5	1.7	6.5	5.1	161	26	5.1	4.4	3.1	1.2	.82
12	1.3	1.5	1.6	6.0	4.9	169	54	4.9	4.0	2.7	1.2	.82
13	1.3	1.5	1.6	5.5	4.7	312	39	4.8	4.2	2.5	1.1	.78
14	1.4	1.5	1.6	5.1	4.5	134	13	4.7	4.1	2.4	1.1	.78
15	1.5	1.5	1.6	4.8	5.0	94	10	4.3	5.6	2.3	1.1	.78
16	1.6	1.4	1.5	4.5	10	112	14	4.6	7.0	2.1	1.1	.75
17	1.7	1.5	1.5	4.4	60	79	96	4.4	5.7	2.1	1.1	.78
18	3.4	1.4	1.5	4.2	55	52	30	4.5	4.9	2.0	1.1	.78
19	2.8	1.5	1.4	4.1	23	79	15	4.6	8.4	2.0	1.1	.78
20	2.4	3.6	1.5	4.0	21	89	13	4.9	6.1	1.9	1.1	.75
21	2.3	3.6	1.8	3.9	47	49	10	4.6	5.1	1.9	1.1	.71
22	3.6	2.6	1.7	4.0	29	33	9.3	4.9	4.7	1.7	1.1	.71
23	5.1	2.3	2.0	8.0	30	26	8.6	5.6	4.3	1.7	1.0	.71
24	3.0	2.8	2.2	9.0	72	22	8.0	4.8	4.1	1.6	1.2	.71
25	2.0	4.5	2.0	6.4	26	22	7.4	4.4	4.0	1.6	1.2	.75
26	1.6	10	1.8	5.2	12	20	7.0	5.8	3.8	1.5	1.0	.71
27	3.8	12	2.6	4.6	8.6	15	6.6	26	4.3	1.6	1.0	.71
28	9.7	5.3	3.6	4.2	7.4	12	6.3	19	16	1.7	.98	.71
29	4.8	3.4	3.5	4.0	-----	11	5.9	9.4	8.6	1.5	.97	.68
30	3.2	2.8	3.2	30	-----	10	5.9	9.4	5.7	1.5	.97	.64
31	2.4	----	2.8	38	-----	9.6	-----	12	-----	1.5	.97	-----
TOTAL	72.8	83.7	63.7	391.8	518.6	1664.1	471.5	207.4	251.6	75.0	35.99	23.87
MEAN	2.35	2.79	2.05	12.6	18.5	53.7	15.7	6.69	8.39	2.42	1.16	.80
MAX	9.7	12	3.6	107	72	312	96	26	72	4.5	1.5	.97
MIN	1.0	1.4	1.4	3.1	4.5	6.0	5.9	4.3	3.8	1.5	.97	.64
CFSM	.27	.32	.23	1.42	2.09	6.05	1.77	.75	.95	.27	.13	.09
IN.	.31	.35	.27	1.64	2.17	6.98	1.98	.87	1.06	.31	.15	.10

CAL YR 1981 TOTAL 2454.29 MEAN 6.72 MAX 139 MIN .80 CFSM .76 IN 10.29
WTR YR 1982 TOTAL 3860.06 MEAN 10.6 MAX 312 MIN .64 CFSM 1.20 IN 16.19

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 (8.8 km) northeast of Logansport, and 7.4 miles (11.9 km) upstream from mouth.

DRAINAGE AREA.--789 mi² (2,044 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 621.50 ft (189.433 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 16, 1956, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--39 years, 738 ft³/s (20.90 m³/s), 12.70 in/yr (323 mm/yr).

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

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0700	5760	163	8.12	2.475	Apr. 18	0200	5410	153	7.92	2.414
Mar. 14	1700	*13400	379	*11.74	3.578						

Minimum daily discharge, 190 ft³/s (5.38 m³/s) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	509	514	430	2150	1170	1500	673	3720	483	252	205
2	369	454	478	470	1850	1760	1300	647	3920	442	261	208
3	325	420	444	584	1550	1890	1210	621	2740	435	259	202
4	284	398	411	3300	1350	1630	1360	596	1910	457	259	201
5	261	381	394	5220	1130	2650	1240	579	1340	753	259	192
6	328	364	385	3440	980	2490	1060	568	1010	639	253	191
7	374	344	369	2430	830	1700	978	590	848	517	249	198
8	447	332	360	1630	710	1130	957	680	781	448	253	196
9	372	319	344	1130	600	886	980	680	729	405	254	205
10	322	305	328	800	540	796	1110	615	699	399	255	201
11	295	295	316	660	520	2980	1560	573	747	416	248	193
12	277	290	309	560	490	7120	2480	546	693	424	241	190
13	265	286	305	510	465	10500	3480	530	616	428	234	190
14	261	281	294	470	440	13200	2870	514	560	397	230	193
15	262	281	290	435	430	12200	2030	504	548	375	222	193
16	257	278	282	405	1530	10100	1530	509	721	356	221	192
17	255	274	282	380	3130	10000	3750	562	738	338	216	191
18	272	273	278	365	4300	9760	4760	541	654	330	210	199
19	298	274	223	355	3250	7940	3280	483	694	326	207	203
20	310	319	202	350	2800	7770	2560	510	941	330	218	206
21	305	450	240	345	3100	7320	1910	602	939	317	221	200
22	328	649	290	365	3300	5460	1510	569	1040	311	241	197
23	525	553	320	410	2890	4120	1210	687	753	305	231	196
24	850	499	355	455	3570	3370	1050	1090	612	307	243	201
25	634	547	400	520	3390	2950	952	802	537	294	261	210
26	504	645	380	470	2340	2810	881	667	498	285	264	206
27	483	757	360	435	1690	2370	904	740	510	276	235	212
28	1190	987	464	410	1280	1970	828	1200	597	274	215	214
29	1120	754	475	395	-----	1750	748	1140	659	279	209	222
30	741	593	470	1950	-----	1610	700	1200	546	269	206	223
31	590	-----	440	2650	-----	1560	-----	1100	-----	261	205	----
TOTAL	13394	13111	11002	32329	50605	142962	50688	21318	31300	11876	7332	6030
MEAN	432	437	355	1043	1807	4612	1690	688	1043	383	237	201
MAX	1190	987	514	5220	4300	13200	4760	1200	3920	753	264	223
MIN	255	273	202	345	430	796	700	483	498	261	205	190
CFSM	.55	.55	.45	1.32	2.29	5.85	2.14	.87	1.32	.49	.30	.26
IN.	.63	.62	.52	1.52	2.39	6.74	2.39	1.01	1.48	.56	.35	.28

CAL YR 1981 TOTAL 298547 MEAN 818 MAX 6970 MIN 181 CFSM 1.04 IN 14.08
WTR YR 1982 TOTAL 391947 MEAN 1074 MAX 13200 MIN 190 CFSM 1.36 IN 18.48

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 (46 m) downstream from Cicott Street bridge in Logansport, 1,000 ft (305 m) downstream from Eel River, and at mile 353.7 (569.1 km).

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

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

REVISED RECORDS.--WSP 783: 1934. WSP 1335: 1904, 1925(M), 1926-30, 1931(M), 1932-35, 1937-39, 1948. WSP 1385: 1903, 1905-6, 1923-25. WSP 1505: 1906(M). WSP 2109: Drainage area. WRD IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 573.28 ft (174.736 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1705 for history of changes prior to Oct. 1, 1927.

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

AVERAGE DISCHARGE.--59 years (1923 to current year), 4,819 ft³/s (136.5 m³/s), 11.92 in/yr (303 mm/yr).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,100 ft³/s (966 m³/s) Mar. 13, gage height, 12.90 ft (3.932 m); minimum daily, 419 ft³/s (11.9 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	2990	2620	3120	9000	7730	16700	1840	9020	2400	505	429
2	1200	2570	1820	3480	7300	10400	16800	1780	9390	1760	533	433
3	1130	2510	1340	3850	7200	11200	14100	1690	6410	1280	505	460
4	1050	2440	1360	11100	7100	11600	14900	1510	4840	1080	487	487
5	1020	2090	1230	14600	6900	14000	15600	1370	3870	1260	483	469
6	1110	1970	1140	11600	6000	15000	15100	1310	3450	1270	488	467
7	1170	1840	1110	10200	5200	12200	14700	1370	3170	1110	487	462
8	1360	1790	1100	9030	5800	10600	14500	1520	2990	1020	512	440
9	1240	1660	1080	8270	6400	10300	14200	1540	2980	953	503	459
10	1110	1600	1040	5760	6300	9730	14900	1450	3260	942	503	447
11	1060	1590	983	4130	6100	16800	16400	1860	3310	982	502	476
12	1010	1590	946	5430	6000	22600	20000	1790	2970	893	483	1330
13	993	1560	937	7040	5700	31300	21500	1650	2780	856	457	1130
14	1010	1550	920	7360	5100	32100	19000	1440	2640	810	518	584
15	1020	1570	866	6000	4400	26200	17000	1310	2610	809	553	419
16	1290	1570	856	4940	4500	22400	14800	1290	2310	794	651	532
17	1280	1580	865	4000	6600	24100	17300	1380	3060	767	556	539
18	1340	1580	866	4200	8800	22800	16000	1390	3590	729	541	542
19	1400	1580	722	4800	8900	21200	13000	1520	4200	712	548	522
20	1490	1700	650	4300	9000	19700	8710	2380	4220	739	613	501
21	1580	1790	780	2700	9700	22600	7560	2940	4010	758	599	459
22	1690	2050	1200	1800	11000	21500	6700	3130	4330	726	655	437
23	2260	1980	1960	2500	12000	19600	6260	3930	3430	749	592	433
24	2910	2120	4030	4400	14800	19500	6070	3890	2390	863	700	458
25	2560	2490	4200	4600	13400	19700	5720	3050	1620	847	682	490
26	2000	2740	4600	4300	10600	20300	5490	2830	1340	790	987	497
27	1690	3340	5090	4200	9880	19500	4440	2750	1190	776	883	563
28	3170	3630	5840	3800	8870	18300	4290	3460	1300	684	755	578
29	4700	3180	5960	3300	------	17700	3000	4310	1450	617	594	599
30	4060	2490	5300	6400	------	17100	2000	5080	2000	581	514	569
31	2900	-----	4230	14500	------	15700	------	4600	------	537	468	-----
TOTAL	52953	63140	65641	185710	222550	563460	366740	71360	104130	29094	17857	16211
MEAN	1708	2105	2117	5991	7948	18180	12220	2302	3471	939	576	540
MAX	4700	3630	5960	14600	14800	32100	21500	5080	9390	2400	987	1330
MIN	993	1550	650	1800	4400	7730	2000	1290	1190	537	457	419
CFSM	.45	.56	.56	1.59	2.10	4.81	3.23	.61	.92	.25	.15	.14
IN.	.52	.62	.65	1.83	2.19	5.55	3.61	.70	1.03	.29	.18	.16

CAL YR 1981 TOTAL 1196563 MEAN 3278 MAX 20600 MIN 441 CFSM .87 IN 11.78
WTR YR 1982 TOTAL 1758846 MEAN 4819 MAX 32100 MIN 419 CFSM 1.28 IN 17.31

03329400 RATTLESNAKE CREEK NEAR PATTON, IN

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

DRAINAGE AREA.--6.83 mi^2 (17.69 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 644.97 ft (196.587 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 28, 1979, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 7.00 ft^3/s (0.198 m^3/s), 13.92 in/yr (354 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 456 ft^3/s (12.91 m^3/s) June 5, 1981, gage height, 5.12 ft (1.56 m); maximum gage height, 5.30 ft (1.615 m) June 14, 1975; minimum daily discharge, 0.14 ft^3/s (0.004 m^3/s) Sept. 23, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 65 ft^3/s (1.84 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	0800	73	2.07	3.45	1.052	Mar. 19	1700	78	2.21	3.55	1.082
Jan. 30	1500	65	1.84	3.27	0.997	Apr. 17	0400	75	2.12	3.50	1.067
Mar. 11	1700	100	2.83	3.97	1.210	May 22	1600	*366	10.4	*4.92	1.500
Mar. 13	0400	137	3.88	4.33	1.320	May 27	1100	75	2.12	3.50	1.067
Mar. 16	0900	87	2.46	3.74	1.140	May 31	2400	83	2.35	3.66	1.116

Minimum daily discharge, 0.29 ft^3/s (0.009 m^3/s) Sept. 9-11, 16, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	1.2	2.0	1.4	9.9	28	7.3	3.6	47	1.3	.60	.35
2	1.1	1.2	1.5	2.3	6.6	32	7.3	3.3	17	1.3	.59	.33
3	.99	1.1	1.3	8.1	4.7	28	8.2	3.3	10	1.7	.55	.31
4	1.1	1.2	1.3	55	4.0	28	6.5	3.2	7.5	1.3	.55	.31
5	1.1	1.2	1.2	26	3.7	32	6.9	3.2	5.9	1.2	.53	.30
6	1.4	1.2	1.3	15	3.3	31	7.5	3.2	4.9	1.2	.51	.31
7	1.3	.99	1.5	10	3.0	25	6.0	3.3	4.4	1.1	.56	.33
8	1.2	.99	1.1	8.4	2.8	19	6.5	3.0	4.0	1.0	.59	.31
9	1.2	.78	1.1	6.3	2.5	15	7.5	2.8	3.9	.95	.51	.29
10	1.4	.85	1.1	4.8	2.1	21	10	2.8	4.4	1.9	.49	.29
11	1.3	.85	1.1	3.5	1.9	80	20	2.8	3.2	4.3	.48	.29
12	1.3	.99	.99	3.0	1.8	53	27	2.8	3.0	2.1	.44	.30
13	1.3	.85	1.1	2.7	1.8	81	19	2.6	2.7	1.8	.43	.32
14	1.4	1.2	1.1	2.4	2.7	36	13	2.6	2.4	1.6	.41	.32
15	1.5	.92	.99	2.3	1.3	32	11	2.4	4.3	1.6	.39	.31
16	1.5	.92	.92	2.1	10	55	10	2.4	5.3	1.4	.38	.29
17	1.7	.85	.99	2.0	20	31	46	2.3	3.2	1.4	.36	.32
18	3.0	.78	.85	2.0	18	22	22	2.3	2.7	1.4	.35	.39
19	2.0	1.1	.78	1.9	16	43	15	2.3	5.7	1.6	.34	.30
20	1.7	4.0	.92	1.8	35	51	11	2.1	3.2	1.4	.51	.29
21	1.6	2.1	1.1	1.8	50	30	8.6	2.2	2.5	1.2	.40	.31
22	2.9	1.5	1.9	1.8	39	22	7.5	72	2.3	1.7	.36	.38
23	3.4	1.7	2.0	4.7	55	18	6.5	39	1.9	1.2	.37	.32
24	2.2	5.3	1.7	4.6	75	15	6.1	21	1.8	1.1	1.1	.80
25	2.2	4.1	1.7	3.2	47	15	5.6	14	1.8	.98	.62	.85
26	1.9	3.3	1.7	2.4	34	14	4.9	14	1.7	.96	.35	.39
27	3.0	2.2	2.7	2.0	28	12	4.3	37	1.7	.90	.35	.36
28	3.0	1.8	2.3	1.8	26	11	4.0	22	1.7	.82	.32	.33
29	2.2	1.6	1.8	1.7	-----	9.5	3.9	17	1.6	.72	.32	.33
30	1.8	1.6	1.6	44	-----	8.4	3.7	14	1.4	.68	.33	.34
31	1.4	-----	1.5	46	-----	7.8	-----	18	-----	.64	.35	-----
TOTAL	54.08	48.37	43.14	275.0	505.1	905.7	322.8	326.5	163.1	42.45	14.44	10.67
MEAN	1.74	1.61	1.39	8.87	18.0	29.2	10.8	10.5	5.44	1.37	.47	.36
MAX	3.4	5.3	2.7	55	75	81	46	72	47	4.3	1.1	.85
MIN	.99	.78	.78	1.4	1.3	7.8	3.7	2.1	1.4	.64	.32	.29
CFSM	.26	.24	.20	1.30	2.64	4.28	1.58	1.54	.80	.20	.07	.05
IN.	.29	.26	.23	1.50	2.75	4.93	1.76	1.78	.89	.23	.08	.06

CAL YR 1981 TOTAL 2177.92 MEAN 5.97 MAX 169 MIN .48 CFSM .87 IN 11.86
WTR YR 1982 TOTAL 2711.35 MEAN 7.43 MAX 81 MIN .29 CFSM 1.09 IN 14.77

03329700 DEER CREEK NEAR DELPHI, IN

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

DRAINAGE AREA.--274 mi^2 (710 km^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 (168.801 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark, levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--39 years, 241 ft^3/s (6.825 m^3/s), 11.94 in/yr (303 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft^3/s (408 m^3/s) June 10, 1958, gage height, 18.26 ft (5.566 m); minimum daily, 6.2 ft^3/s (0.18 m^3/s) Sept. 25-28, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 19.8 ft (6.035 m), from floodmarks, discharge, 18,000 ft^3/s (510 m^3/s), from rating curve extended above 8,000 ft^3/s (227 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s (56.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 30	1300	ice jam		*8.51	2.594	Mar. 13	1500	*3370	95.4	8.37	2.551
Jan. 31	1400	2190	62.0	6.71	2.045	Mar. 20	1000	2470	70.0	7.10	2.164
Feb. 21	----	[a]2050	58.1	-----	-----	Mar. 31	1000	2040	57.8	6.51	1.984
Feb. 24	0300	2930	83.0	7.77	2.368	Apr. 18	0700	2880	81.6	7.70	2.347
Mar. 6	0100	2240	63.4	6.79	2.070						

Minimum daily discharge, 36 ft^3/s (1.02 m^3/s) Sept. 21.

[a]Daily discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	238	121	232	1400	714	803	178	1280	114	57	58
2	94	210	122	221	860	1290	555	169	841	101	55	56
3	85	185	111	273	500	1080	513	162	508	110	56	51
4	79	170	105	1280	340	1080	451	155	359	105	55	48
5	75	166	101	1600	260	1990	370	148	283	96	65	47
6	81	158	96	990	210	1820	330	146	237	88	91	44
7	74	145	97	644	180	1060	306	160	207	82	80	46
8	74	136	99	468	162	662	293	169	188	77	167	44
9	74	126	95	378	150	490	316	153	289	74	171	44
10	72	114	89	275	138	541	352	142	401	86	105	42
11	68	109	86	230	130	2170	647	136	226	116	79	40
12	65	106	84	200	122	2980	1190	130	178	114	66	39
13	63	101	83	180	118	3220	1160	126	160	90	60	38
14	62	98	82	170	113	2620	725	120	142	426	55	39
15	62	96	81	155	110	1560	531	118	215	153	51	38
16	64	96	86	135	230	1810	430	116	320	108	49	37
17	63	95	79	115	735	1730	2230	118	226	90	47	37
18	85	92	74	102	640	1170	2430	116	186	191	44	39
19	188	92	70	94	680	1250	1130	204	196	555	42	37
20	153	107	63	95	1000	2340	791	261	201	212	49	37
21	123	100	60	98	2050	1670	569	550	183	138	138	36
22	154	91	81	104	1850	1120	434	486	167	112	86	40
23	403	90	162	371	2110	841	352	814	144	98	62	37
24	392	114	451	657	2510	678	303	442	130	86	164	39
25	279	167	396	420	1420	607	273	283	122	76	536	52
26	226	172	310	280	800	709	252	355	116	70	220	44
27	235	158	303	195	680	603	243	390	110	66	124	46
28	606	139	323	165	600	486	212	678	120	77	88	44
29	519	129	272	140	-----	430	196	438	174	76	72	41
30	373	119	194	370	-----	401	188	1340	138	66	63	40
31	288	----	238	1950	-----	1530	-----	905	----	61	60	----
TOTAL	5279	3919	4614	12587	20098	40652	18575	9708	8047	3914	3057	1280
MEAN	170	131	149	406	718	1311	619	313	268	126	98.6	42.7
MAX	606	238	451	1950	2510	3220	2430	1340	1280	555	536	58
MIN	62	90	60	94	110	401	188	116	110	61	42	36
CFSM	.62	.48	.54	1.48	2.62	4.79	2.26	1.14	.98	.46	.36	.16
IN.	.72	.53	.63	1.71	2.73	5.52	2.52	1.32	1.09	.53	.42	.17

CAL YR 1981 TOTAL 78024 MEAN 214 MAX 2280 MIN 38 CFSM .78 IN 10.59
WTR YR 1982 TOTAL 131730 MEAN 361 MAX 3220 MIN 36 CFSM 1.32 IN 17.88

03330500 TIPPECANOE RIVER AT OSWEGO, IN

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

DRAINAGE AREA.--113 mi^2 (293 km^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 (252.984 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1953, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--33 years, 101 ft^3/s (2.860 m^3/s), 12.14 in/yr (308 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 950 ft^3/s (26.9 m^3/s) Mar. 21, 1982, gage height, 9.25 ft (2.819 m); minimum daily, 0.08 ft^3/s (0.002 m^3/s) Aug. 4, 5, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 950 ft^3/s (26.9 m^3/s) Mar. 21, gage height, 9.25 ft (2.819 m); minimum daily, 21 ft^3/s (0.59 m^3/s) Aug. 12-19, Sept. 23-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	76	82	70	126	220	479	211	254	40	23	22
2	98	78	84	69	128	219	437	194	288	25	23	23
3	91	78	88	72	132	214	395	181	313	164	23	22
4	73	79	88	77	135	215	374	169	327	226	23	22
5	22	78	86	91	139	220	361	156	333	240	23	22
6	41	77	85	106	161	213	347	144	333	245	23	22
7	93	82	83	120	177	203	332	140	330	236	23	23
8	88	90	81	132	185	195	319	116	311	225	62	23
9	85	86	80	142	177	189	310	65	289	215	78	23
10	82	81	79	146	162	181	299	65	265	206	74	22
11	79	80	78	149	151	179	292	67	248	198	37	22
12	75	78	78	151	141	191	287	69	229	181	21	22
13	70	77	76	151	134	274	283	72	209	165	21	23
14	67	77	75	149	130	356	284	74	194	149	21	24
15	65	76	74	146	127	444	283	71	178	105	21	24
16	62	75	74	142	123	549	283	69	168	60	21	24
17	64	73	74	137	124	657	295	67	157	58	21	24
18	69	71	73	133	124	753	301	65	147	57	21	53
19	68	69	72	127	129	836	317	66	141	57	21	64
20	64	69	71	121	134	918	327	67	135	57	22	61
21	62	68	71	118	140	944	331	69	118	47	22	59
22	60	65	72	113	146	935	330	69	102	39	23	48
23	61	64	75	111	154	905	323	81	98	36	23	21
24	64	65	74	108	166	865	317	117	95	24	23	21
25	43	64	74	105	174	822	310	119	85	24	39	21
26	31	64	72	101	181	765	302	131	55	24	40	21
27	35	69	73	97	193	694	283	159	55	25	22	22
28	44	73	73	93	211	641	261	178	54	31	22	28
29	72	77	73	90	----	597	244	196	88	57	22	50
30	78	80	71	102	----	548	228	204	92	54	22	49
31	77	----	71	115	----	510	----	213	----	35	22	----
TOTAL	2087	2239	2380	3584	4204	15452	9534	3664	5691	3305	882	905
MEAN	67.3	74.6	76.8	116	150	498	318	118	190	107	28.5	30.2
MAX	104	90	88	151	211	944	479	213	333	245	78	64
MIN	22	64	71	69	123	179	228	65	54	24	21	21
CFSM	.60	.66	.68	1.03	1.33	4.41	2.81	1.04	1.68	.95	.25	.27
IN.	.69	.74	.78	1.18	1.38	5.09	3.14	1.21	1.87	1.09	.29	.30

CAL YR 1981 TOTAL 55231 MEAN 151 MAX 617 MIN 20 CFSM 1.34 IN 18.18
WTR YR 1982 TOTAL 53927 MEAN 148 MAX 944 MIN 21 CFSM 1.31 IN 17.75

03331110 WALNUT CREEK NEAR WARSAW, IN

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

DRAINAGE AREA.--19.6 mi^2 (50.8 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 823.00 ft (250.850 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Flow occasionally regulated by lakes upstream.

AVERAGE DISCHARGE.--13 years, 17.4 ft^3/s (0.493 m^3/s), 12.06 in/yr (306 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 561 ft^3/s (15.9 m^3/s) June 13, 1981, gage height, 5.38 ft (1.622 m); minimum daily, 0.49 ft^3/s (0.014 m^3/s) Sept. 11, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 411 ft^3/s (11.6 m^3/s) Mar. 13, gage height, 4.72 ft (1.439 m); minimum daily, 1.2 ft^3/s (0.034 m^3/s) Sept. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	11	13	7.4	68	32	50	14	61	7.1	2.5	1.6
2	7.4	9.3	13	8.0	49	34	44	13	61	6.7	2.5	1.6
3	6.7	8.1	12	9.8	32	33	44	12	48	6.4	2.5	1.5
4	6.1	7.4	12	32	23	32	44	12	35	6.4	2.4	1.4
5	6.4	7.1	12	52	20	39	39	11	27	6.7	2.3	1.4
6	7.4	7.1	14	47	18	39	37	11	22	6.7	2.2	1.4
7	6.7	6.7	13	34	16	33	37	13	19	5.9	2.2	1.4
8	9.7	6.4	11	26	15	28	36	12	16	5.2	2.5	1.5
9	8.1	6.1	9.9	21	14	24	36	12	14	4.8	2.1	1.4
10	6.4	5.8	9.1	18	14	22	37	12	14	4.5	1.9	1.4
11	5.5	5.5	8.3	16	13	59	39	11	13	4.7	1.9	1.4
12	4.7	5.2	7.8	14	13	122	52	11	12	4.5	1.9	1.6
13	4.2	5.0	7.5	13	12	342	73	10	11	4.5	1.9	1.4
14	4.7	5.0	7.3	13	12	365	65	10	9.6	4.5	1.9	1.4
15	5.8	5.0	7.1	12	12	301	57	9.6	9.0	4.3	1.9	1.4
16	5.8	4.7	6.9	11	13	270	50	9.3	9.3	4.0	1.9	1.4
17	5.2	4.5	6.7	11	22	243	77	9.0	8.9	3.7	1.9	1.4
18	5.8	4.2	6.0	10	40	179	81	8.9	8.9	3.4	1.8	1.7
19	7.4	4.2	5.2	9.8	50	143	66	9.6	9.5	3.4	1.7	1.5
20	7.8	7.8	4.2	9.6	46	155	59	10	9.7	3.3	2.2	1.3
21	8.5	12	5.2	9.4	50	139	50	11	9.6	3.1	2.0	1.3
22	9.7	12	6.1	9.2	53	116	41	14	8.6	3.2	1.8	1.2
23	14	12	7.3	25	52	101	31	17	7.3	3.1	1.7	1.2
24	13	12	6.8	32	67	89	27	17	6.4	3.0	1.8	1.4
25	10	13	6.6	24	68	83	23	16	6.6	2.9	1.8	1.6
26	7.8	15	6.4	18	57	78	21	15	6.7	2.8	1.7	1.4
27	11	18	6.5	15	45	70	19	21	6.6	2.7	1.7	1.6
28	19	19	7.5	13	37	62	17	31	6.1	2.7	1.7	1.6
29	18	18	8.1	11	----	58	16	30	7.6	2.9	1.7	1.4
30	15	16	7.6	20	----	56	15	27	7.8	2.7	1.7	1.3
31	13	-----	7.4	92	----	56	----	23	-----	2.5	1.7	----
TOTAL	269.3	273.1	261.5	643.2	931	3403	1283	442.4	491.2	132.3	61.4	43.1
MEAN	8.69	9.10	8.44	20.7	33.3	110	42.8	14.3	16.4	4.27	1.98	1.44
MAX	19	19	14	92	68	365	81	31	61	7.1	2.5	1.7
MIN	4.2	4.2	4.2	7.4	12	22	15	8.9	6.1	2.5	1.7	1.2
CFSM	.44	.46	.43	1.06	1.70	5.61	2.18	.73	.84	.22	.10	.07
IN.	.51	.52	.50	1.22	1.77	6.46	2.43	.84	.93	.25	.12	.08

CAL YR 1981 TOTAL 10133.3 MEAN 27.8 MAX 389 MIN 3.4 CFSM 1.42 IN 19.23
WTR YR 1982 TOTAL 8234.5 MEAN 22.6 MAX 365 MIN 1.2 CFSM 1.15 IN 15.63

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 highway bridge, 1.0 mile (1.6 km) upstream from Bartee ditch, 1.3 miles (2.1 km) southwest of Ora, and at mile 78.5 (126.3 km).

DRAINAGE AREA.--856 mi² (2,217 km²).

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

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

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

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

AVERAGE DISCHARGE.--39 years, 828 ft³/s (23.45 m³/s), 13.14 in/yr (334 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,660 ft³/s (245 m³/s) June 15, 1981, gage height, 15.08 ft (4.596 m); minimum daily, 87 ft³/s (2.46 m³/s) Sept. 13, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft³/s (65.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	1100	2480	70.2	10.56	3.219	Mar. 15	1400	*8460	240	*14.98	4.566
Feb. 21	1300	3400	96.3	11.59	3.533	Apr. 14	1100	2740	77.6	10.85	3.307
Feb. 25	1500	2960	83.8	11.11	3.386	Apr. 19	0200	2990	84.7	11.15	3.398

Minimum daily discharge, 225 ft³/s (6.37 m³/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	474	587	661	500	1080	2020	3040	1340	1610	666	297	242
2	507	573	643	580	1000	1980	2890	1260	1970	610	302	243
3	485	552	619	750	930	2080	2800	1190	1910	587	299	246
4	453	533	605	1090	880	1960	2650	1130	1700	661	282	240
5	433	521	593	2010	840	1950	2480	1070	1640	763	274	232
6	450	516	584	2440	820	1950	2370	1020	1610	759	268	226
7	485	499	573	2170	800	1850	2250	1010	1520	733	270	225
8	450	488	561	1480	780	1690	2160	1030	1420	691	342	231
9	420	474	547	1150	770	1500	2110	990	1300	649	378	238
10	408	456	533	1000	750	1370	2090	956	1210	625	394	245
11	408	450	519	940	740	1550	2090	908	1150	656	379	242
12	395	443	502	920	730	2860	2190	841	1080	664	364	238
13	384	433	491	890	720	5000	2510	786	1030	634	346	232
14	372	422	483	870	710	7480	2720	743	958	623	315	230
15	372	420	477	850	710	8370	2620	714	884	620	283	231
16	377	415	466	840	1020	8120	2410	686	846	589	271	232
17	379	411	458	820	1560	7840	2470	674	801	552	256	240
18	408	406	448	810	2150	7520	2840	664	784	502	244	264
19	445	404	360	800	2820	7150	2970	658	810	454	237	271
20	474	458	320	780	3140	6670	2790	640	798	432	238	267
21	491	555	370	770	3310	6640	2590	640	775	414	240	279
22	491	611	440	760	2820	6210	2370	750	757	402	242	294
23	505	613	460	740	2590	5600	2130	1090	718	390	249	272
24	527	608	440	720	2700	5040	1960	1210	681	378	246	264
25	521	616	415	700	2930	4650	1810	1090	637	361	264	268
26	510	646	460	690	2810	4360	1720	973	603	342	263	258
27	496	695	510	670	2470	4110	1650	1120	606	316	261	254
28	524	750	520	660	2230	3820	1570	1400	596	329	259	260
29	578	733	490	650	-----	3550	1480	1550	645	313	265	246
30	590	686	465	1000	-----	3340	1410	1520	736	304	249	244
31	590	-----	440	1280	-----	3180	-----	1470	-----	297	241	----
TOTAL	14402	15974	15453	30330	44810	131410	69140	31123	31785	16316	8818	7454
MEAN	465	532	498	978	1600	4239	2305	1004	1060	526	284	248
MAX	590	750	661	2440	3310	8370	3040	1550	1970	763	394	294
MIN	372	404	320	500	710	1370	1410	640	596	297	237	225
CFSM	.54	.62	.58	1.14	1.87	4.95	2.69	1.17	1.24	.61	.33	.29
IN.	.63	.69	.67	1.32	1.95	5.71	3.00	1.35	1.38	.71	.38	.32

CAL YR 1981 TOTAL 456683 MEAN 1251 MAX 8450 MIN 282 CFSM 1.46 IN 19.85
WTR YR 1982 TOTAL 417015 MEAN 1143 MAX 8370 MIN 225 CFSM 1.34 IN 18.12

03333000 TIPPECANOE RIVER NEAR DELPHI, IN

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

DRAINAGE AREA.--1,865 mi^2 (4,830 km^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 (168.253 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Mar. 14, 1903, to July 20, 1906, and Nov. 2 to Dec. 31, 1908, nonrecording gage at site 5.5 miles (8.8 km) downstream at different datum.

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

AVERAGE DISCHARGE.--43 years (water years 1940 to current year), 1,656 ft^3/s (46.90 m^3/s), 12.06 in/yr (306 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,900 ft^3/s (479 m^3/s) Mar. 16, gage height, 12.89 ft (3.929 m); minimum daily, 230 ft^3/s (6.51 m^3/s) Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	1090	1530	1210	2300	5280	4220	2390	7320	1150	557	467
2	1050	1250	1510	1200	2150	5970	4330	2080	5350	1000	727	404
3	904	1220	1400	1530	2200	5330	4190	2090	3960	1180	642	360
4	1080	1100	1480	4020	2100	4660	3760	1990	3640	1290	553	230
5	1060	1090	1380	5550	2000	5110	4150	1990	2910	907	482	327
6	1500	1150	1300	4550	1950	4580	3440	1820	2840	1220	523	475
7	1470	1080	1450	3900	1900	4190	3550	1910	2550	1250	729	513
8	1160	924	1290	2880	1700	3760	3460	1910	2400	889	704	307
9	1110	1220	1160	2530	1600	3140	3460	1710	2050	1100	639	411
10	984	840	1140	1250	1750	3020	3510	1810	1840	1060	639	430
11	1110	910	1370	1550	1500	8640	3890	1670	1840	1360	652	321
12	943	1080	1170	1900	1580	11900	5270	1670	1630	1030	618	404
13	854	830	1170	1950	1450	13900	6180	1460	1730	1010	638	405
14	758	1130	1100	1900	1500	13500	4930	1510	1660	1470	498	405
15	982	816	1060	1900	1370	12900	4510	1560	1520	1210	480	402
16	876	880	1040	1920	1660	15300	4250	1420	1620	1000	474	306
17	881	918	1130	1850	3550	15300	6150	1710	1370	1010	466	289
18	1070	850	950	1750	5040	12700	5920	1360	1360	1010	464	539
19	1180	900	779	1700	5130	12400	4910	1330	1530	919	405	483
20	1140	1230	603	1650	5600	14800	4620	1490	1390	1000	440	358
21	1240	1430	592	1550	8430	12900	4240	1400	1400	806	546	357
22	1270	1410	1000	1500	8860	10500	3600	1840	1330	828	332	529
23	980	1400	1010	1250	9070	9000	3530	2400	1220	781	391	463
24	1170	1560	955	1320	10700	8120	3270	2130	1190	789	636	431
25	1170	1710	1120	1300	7900	7310	2930	2030	1200	683	602	816
26	1160	1630	1120	1450	6900	6840	2860	2030	1280	631	384	1270
27	1160	1610	1250	1350	6300	6090	2540	2660	953	638	469	1570
28	1130	1620	1290	1200	5700	5640	2440	3200	1120	680	296	654
29	1310	1600	1290	1400	------	5300	2370	2720	1160	594	409	477
30	1270	1560	872	1800	------	4760	2400	3060	1270	510	500	358
31	1250	-----	1190	2200	------	4890	------	3000	-----	557	501	-----
TOTAL	34302	36038	35701	63010	111890	257730	118880	61350	62633	29562	16396	14761
MEAN	1107	1201	1152	2033	3996	8314	3963	1979	2088	954	529	492
MAX	1500	1710	1530	5550	10700	15300	6180	3200	7320	1470	729	1570
MIN	758	816	592	1200	1370	3020	2370	1330	953	510	296	230
CFSM	.59	.64	.62	1.09	2.14	4.46	2.13	1.06	1.12	.51	.28	.26
IN.	.68	.72	.71	1.26	2.23	5.14	2.37	1.22	1.25	.59	.33	.29

CAL YR 1981 TOTAL 818417 MEAN 2242 MAX 18400 MIN 578 CFSM 1.20 IN 16.32
WTR YR 1982 TOTAL 842253 MEAN 2308 MAX 15300 MIN 230 CFSM 1.24 IN 16.80

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 (0.8 km) downstream from Mud Creek, 1.5 miles (2.4 km) southeast of Jerome, and at mile 79.9 (128.6 km).

DRAINAGE AREA.--146 mi² (378 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 820.04 ft (249.948 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--21 years, 131 ft³/s (3.710 m³/s), 12.18 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,140 ft³/s (174 m³/s) June 3, 1980; gage height, 13.34 ft (4.066 m); minimum daily, 0.89 ft³/s (0.025 m³/s) Jan. 24-26, 1977.

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1900	1680	47.6	8.20	2.499	Mar. 6	0200	1290	36.5	7.12	2.170
Jan. 31	0100	2020	57.2	8.96	2.731	Mar. 11	2400	*3060	86.7	*10.65	3.246
Feb. 22	0300	1330	37.7	7.23	2.204	Mar. 16	2200	1250	35.4	7.01	2.137
Feb. 24	0600	1730	49.0	8.32	2.536	Mar. 20	1200	2050	58.1	9.01	2.746

Minimum daily discharge, 6.0 ft³/s (0.170 m³/s) Sept. 20-22, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	141	88	130	500	455	138	63	405	48	10	17
2	29	120	78	121	320	885	121	59	313	41	9.4	16
3	27	108	65	263	230	640	202	57	170	43	9.4	14
4	24	100	60	1300	160	625	206	55	117	41	8.8	12
5	24	96	54	1120	130	1200	154	51	93	35	22	11
6	64	90	49	635	108	1090	135	51	73	30	27	9.4
7	143	80	54	421	86	573	127	58	64	29	25	9.4
8	104	72	54	283	77	341	127	60	59	28	133	8.4
9	75	65	47	214	71	235	148	52	55	25	105	7.6
10	62	57	43	122	66	241	193	47	65	26	48	7.2
11	52	56	41	110	62	1780	573	45	51	32	29	6.6
12	45	51	41	99	59	2370	672	43	44	29	21	6.8
13	41	48	39	90	57	2120	498	41	41	29	16	6.9
14	39	47	39	82	54	1380	306	38	36	26	14	7.1
15	38	46	39	72	70	917	225	37	37	22	11	7.4
16	38	47	37	59	143	1030	200	36	214	20	10	7.2
17	36	45	36	49	460	1010	750	35	477	18	9.4	6.4
18	41	43	35	46	787	667	640	44	267	17	8.2	6.4
19	56	42	33	42	806	724	379	151	279	32	7.7	6.1
20	48	47	29	43	782	1830	267	123	363	49	8.8	6.0
21	44	43	29	46	1180	1150	189	76	221	29	43	6.0
22	49	37	38	63	1250	695	146	65	146	22	47	6.0
23	206	36	438	448	1270	500	121	57	107	20	23	6.2
24	170	69	428	370	1510	381	108	49	85	17	96	6.0
25	121	94	247	210	844	313	100	44	72	15	386	6.0
26	97	84	175	130	570	361	91	42	64	14	172	6.5
27	148	140	257	100	465	291	82	44	57	14	77	7.5
28	549	121	302	80	400	229	72	47	52	14	46	7.9
29	377	94	204	68	-----	200	67	49	82	12	31	6.9
30	247	84	150	975	-----	186	66	251	66	11	24	6.4
31	177	----	131	1150	-----	170	----	243	----	11	20	-----
TOTAL	3203	2203	3360	8941	12517	24589	7103	2113	4175	799	1497.7	244.3
MEAN	103	73.4	108	288	447	793	237	68.2	139	25.8	48.3	8.14
MAX	549	141	438	1300	1510	2370	750	251	477	49	386	17
MIN	24	36	29	42	54	170	66	35	36	11	7.7	6.0
CFSM	.71	.50	.74	1.97	3.06	5.43	1.62	.47	.95	.18	.33	.06
IN.	.82	.56	.86	2.28	3.19	6.27	1.81	.54	1.06	.20	.38	.06

CAL YR 1981 TOTAL 44690.8 MEAN 122 MAX 1070 MIN 4.3 CFSM .84 IN 11.39
WTR YR 1982 TOTAL 70745.0 MEAN 194 MAX 2370 MIN 6.0 CFSM 1.33 IN 18.03

03333450 WILDCAT CREEK NEAR JEROME, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
06...	1245	46	16.5	101	13	70
JAN						
06...	1630	604	4.0	41	67	--

03333600 KOKOMO CREEK NEAR KOKOMO, IN

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

DRAINAGE AREA.--24.7 mi² (64.0 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 807.68 ft (246.181 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--23 years, 21.6 ft³/s (0.612 m³/s), 11.88 in/yr (302 mm/yr).

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1100	403	11.4	5.74	1.750	Mar. 16	1400	341	9.66	5.23	1.594
Jan. 30	1700	457	12.9	6.17	1.881	Mar. 20	0800	488	13.8	6.42	1.957
Feb. 23	2400	361	10.2	5.40	1.646	Apr. 17	0400	593	16.8	7.23	2.204
Mar. 4	2000	398	11.3	5.70	1.737	Aug. 24	2300	397	11.2	5.69	1.734
Mar. 11	1900	*710	20.1	*8.08	2.463						

Minimum daily discharge, 1.5 ft³/s (0.042 m³/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	25	13	19	52	69	21	9.6	154	6.2	3.3	4.0
2	12	21	11	17	38	134	20	9.6	44	5.9	3.5	4.0
3	9.6	17	8.6	45	30	64	30	8.8	28	6.9	3.7	3.3
4	8.4	17	8.6	329	24	197	25	8.0	24	6.2	7.5	2.8
5	8.4	16	7.4	177	22	267	22	8.0	20	5.3	11	2.6
6	24	15	7.2	79	19	166	20	8.0	17	4.7	7.1	2.3
7	26	13	8.1	44	17	62	19	10	14	4.5	21	2.4
8	18	11	7.7	32	15	44	20	10	13	4.2	37	2.3
9	15	10	6.5	25	15	34	21	8.4	12	4.0	23	2.3
10	12	8.8	6.1	17	13	43	27	8.0	11	5.3	14	2.1
11	10	9.2	5.9	15	13	526	68	7.6	9.2	8.0	9.2	2.1
12	8.8	8.0	5.9	17	12	477	110	7.2	8.8	5.3	6.5	2.0
13	8.8	7.2	5.7	17	12	468	59	6.9	8.4	4.2	4.7	2.0
14	10	7.2	5.7	15	12	222	38	6.5	7.6	4.0	3.8	2.3
15	11	7.2	5.6	14	13	144	29	6.2	8.4	3.5	3.1	2.3
16	11	7.2	5.1	11	21	258	40	5.9	15	3.3	2.9	2.1
17	14	6.5	5.1	8.0	55	172	440	5.9	21	3.3	2.8	2.0
18	26	6.2	5.0	8.4	66	78	144	6.5	15	3.5	2.4	2.0
19	28	6.5	4.3	9.8	63	194	62	43	21	6.5	2.3	1.9
20	32	6.9	3.9	10	94	421	44	50	21	6.2	3.1	1.8
21	28	5.9	4.2	10	214	190	32	24	18	4.5	3.8	1.8
22	45	5.6	6.3	11	202	85	24	26	13	4.0	4.2	1.7
23	74	5.9	97	70	227	56	21	31	10	4.0	3.5	1.7
24	45	14	51	47	235	44	18	20	9.2	3.5	48	1.5
25	35	14	33	29	76	42	16	15	8.4	3.3	204	1.7
26	29	14	21	21	53	45	14	12	7.6	3.1	34	1.8
27	67	16	27	17	44	36	12	14	7.2	18	18	2.5
28	112	14	26	15	42	31	11	18	8.4	12	10	2.4
29	64	12	20	13	----	28	10	30	13	5.4	6.9	2.2
30	41	11	18	296	----	26	10	65	8.0	4.2	5.3	2.1
31	32	-----	18	182	----	25	----	45	-----	3.7	4.5	----
TOTAL	881.0	338.3	457.9	1620.2	1699	4648	1427	534.1	575.2	166.7	514.1	68.0
MEAN	28.4	11.3	14.8	52.3	60.7	150	47.6	17.2	19.2	5.38	16.6	2.27
MAX	112	25	97	329	235	526	440	65	154	18	204	4.0
MIN	8.4	5.6	3.9	8.0	12	25	10	5.9	7.2	3.1	2.3	1.5
CFSM	1.15	.46	.60	2.12	2.46	6.07	1.93	.70	.78	.22	.67	.09
IN.	1.33	.51	.69	2.44	2.56	7.00	2.15	.80	.87	.25	.77	.10

CAL YR 1981 TOTAL 7455.4 MEAN 20.4 MAX 296 MIN 1.5 CFSM .83 IN 11.23
WTR YR 1982 TOTAL 12929.5 MEAN 35.4 MAX 526 MIN 1.5 CFSM 1.43 IN 19.47

03333700 WILDCAT CREEK AT KOKOMO, IN

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

DRAINAGE AREA.--242 mi² (627 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 775.62 ft (236.409 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--27 years, 230 ft³/s (6.514 m³/s), 12.91 in/yr (328 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,110 ft³/s (230 m³/s) June 4, 1980; 12.01 ft (3.661 m); minimum daily, 7.2 ft³/s (0.20 m³/s) Sept. 30, 1956.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0400	2440	69.1	6.64	2.024	Mar. 17	0600	2140	60.6	6.19	1.887
Feb. 24	0800	2560	72.5	6.82	2.079	Mar. 20	1800	3360	95.2	7.89	2.405
Mar. 5	2400	2240	63.4	6.34	1.932	Apr. 17	0800	2700	76.5	7.02	2.140
Mar. 12	1000	*4860	138	*9.51	2.899						

Minimum daily discharge, 23 ft³/s (0.65 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	252	126	247	1040	665	337	121	987	104	40	58
2	105	217	133	238	593	1280	288	111	705	88	47	72
3	93	192	122	378	390	1250	366	102	416	102	40	54
4	84	172	112	1890	294	1260	452	98	285	83	66	44
5	81	163	96	2210	225	2040	370	95	225	77	58	38
6	124	139	90	1190	185	2060	310	94	178	77	45	43
7	148	137	87	731	159	1260	285	159	155	76	204	46
8	212	124	87	555	157	736	282	112	144	75	180	47
9	174	127	88	378	150	529	327	98	129	75	104	38
10	139	94	79	225	122	447	362	92	120	105	70	38
11	114	94	77	219	117	2160	745	87	119	90	53	36
12	96	112	71	197	115	4470	1150	83	104	68	45	35
13	90	187	67	178	109	4040	940	79	93	70	36	38
14	84	178	68	159	102	3110	657	75	88	62	36	37
15	81	169	70	141	126	1790	480	72	117	61	31	38
16	81	155	68	124	207	1830	540	69	209	60	32	36
17	77	72	67	93	504	1940	2260	68	540	53	33	35
18	72	83	70	87	768	1280	1450	80	461	79	32	35
19	90	122	58	80	820	1370	854	252	411	104	33	33
20	81	86	53	86	904	3020	615	370	509	72	67	28
21	76	79	55	87	1620	2530	470	225	399	61	36	27
22	80	79	117	101	2100	1380	351	247	270	66	32	28
23	340	86	456	577	2150	929	282	261	198	57	40	27
24	290	112	736	615	2520	727	247	176	159	51	190	31
25	210	141	465	395	1800	657	222	146	133	47	529	27
26	180	152	324	241	987	653	214	142	120	50	395	23
27	424	155	334	176	718	599	178	167	107	67	187	30
28	787	199	456	156	615	490	150	165	109	90	110	29
29	674	165	351	131	-----	416	132	258	152	57	77	27
30	438	146	267	1160	-----	403	130	582	137	56	66	24
31	317	----	247	1950	-----	386	-----	636	----	54	60	----
TOTAL	5968	4199	5497	14994	19597	45697	15446	5322	7780	2237	2974	1102
MEAN	193	140	177	484	700	1474	515	172	259	72.2	95.9	36.7
MAX	787	252	736	2210	2520	4470	2260	636	987	105	529	72
MIN	72	72	53	80	102	386	130	68	88	47	31	23
CFSM	.80	.58	.73	2.00	2.89	6.09	2.13	.71	1.07	.30	.40	.15
IN.	.92	.65	.84	2.30	3.01	7.02	2.37	.82	1.20	.34	.46	.17

CAL YR 1981 TOTAL 75943 MEAN 206 MAX 1610 MIN 19 CFSM .85 IN 11.54
WTR YR 1982 TOTAL 130813 MEAN 358 MAX 4470 MIN 23 CFSM 1.48 IN 20.11

03334500 SOUTH FORK WILDCAT CREEK NEAR LAFAYETTE, IN

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

DRAINAGE AREA.--243 mi² (629 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 566.60 ft (172.700 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark). Prior to July 29, 1954, nonrecording gage at site 40 ft (12 m) downstream at same datum.

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

AVERAGE DISCHARGE.--39 years, 240 ft³/s (6.797 m³/s), 13.41 in/yr (341 mm/yr).

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

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 30	2200	ice jam		*12.19	3.716	Mar. 12	0300	3200	90.6	8.65	2.636
Feb. 24	0400	3290	93.2	8.76	2.670	Apr. 17	1000	*4080	116	9.63	2.935
Mar. 5	0200	3090	87.5	8.51	2.594						

Minimum daily discharge, 38 ft³/s (1.076 m³/s) Sept. 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	361	296	147	180	1050	586	395	178	730	111	59	60
2	236	261	145	200	750	938	346	169	582	102	58	59
3	179	238	135	266	520	854	374	161	406	119	57	55
4	153	224	133	1720	390	1230	357	152	317	116	59	52
5	140	214	131	1430	280	2350	320	147	264	99	62	50
6	233	203	126	895	230	1750	317	145	221	88	57	49
7	386	188	128	608	200	961	299	161	192	94	68	54
8	293	173	129	450	185	611	294	182	176	86	163	51
9	226	161	121	390	170	481	312	161	178	83	160	48
10	190	145	113	300	160	443	336	147	161	83	93	46
11	167	140	111	250	150	1460	633	138	140	124	73	45
12	145	134	108	228	140	2840	894	133	128	109	62	44
13	136	128	105	208	133	2730	706	128	120	87	56	42
14	129	124	103	190	130	1920	503	123	112	77	49	41
15	129	122	102	175	127	1320	415	120	114	72	46	40
16	124	121	99	148	180	1390	366	117	397	80	44	42
17	119	119	92	128	650	1370	2820	117	449	71	42	47
18	134	114	86	117	810	943	1430	122	338	75	41	46
19	144	116	82	108	600	1010	808	116	507	452	40	43
20	126	136	77	110	830	2590	575	116	566	284	42	41
21	117	124	82	113	1800	1680	424	151	396	161	64	40
22	138	113	88	120	1600	1020	355	154	290	224	53	42
23	498	109	270	370	1990	766	307	182	241	154	45	39
24	406	155	508	740	2500	637	274	147	194	110	86	39
25	299	179	375	450	1170	582	250	123	169	94	487	40
26	251	169	286	300	714	615	236	135	165	81	242	61
27	290	169	296	220	561	540	241	171	163	78	144	45
28	848	167	310	180	527	461	212	284	134	71	67	4
29	644	153	250	160	-----	424	194	271	143	70	77	51
30	458	145	200	260	-----	430	188	952	134	66	67	42
31	354	----	160	1600	-----	513	-----	787	----	62	63	----
TOTAL	8053	4840	5098	12614	18547	35445	15181	6190	8137	3586	2737	1471
MEAN	260	161	164	407	662	1143	506	200	271	116	88.3	45.8
MAX	848	296	508	1720	2500	2840	2820	952	730	452	487	61
MIN	117	109	77	108	127	424	188	116	112	62	42	39
CFSM	1.07	.66	.68	1.68	2.72	4.70	2.08	.82	1.12	.48	.36	.19
IN.	1.23	.74	.78	1.93	2.84	5.43	2.32	.95	1.25	.55	.42	.23

CAL YR 1981 TOTAL 80209 MEAN 220 MAX 5000 MIN 35 CFSM .91 IN 12.30
WTR YR 1982 TOTAL 121805 MEAN 334 MAX 2840 MIN 39 CFSM 1.37 IN 18.68

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN

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

DRAINAGE AREA.--794 mi² (2,056 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 527.66 ft (160.831 m) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark). Nonrecording gage prior to June 13, 1957, and August 31, 1974, to May 20, 1976, at present site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--28 years, 763 ft³/s (21.61 m³/s), 13.05 in/yr (331 mm/yr).

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

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

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 18	1200	ice jam		*14.68	4.474	Mar. 13	2000	*9350	265	13.91	4.240
Feb. 24	2100	6720	190	11.68	3.560	Mar. 20	1400	6980	198	11.92	3.633
Mar. 5	0500	6480	184	11.46	3.493	Apr. 17	1500	7830	222	12.68	3.865

Minimum daily discharge, 138 ft³/s (3.91 m³/s) Sept. 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	795	985	473	580	3700	2400	1440	558	3600	493	170	303
2	576	825	473	666	2500	3040	1130	525	2620	430	166	267
3	497	737	453	830	1700	3460	1160	493	1680	501	171	257
4	449	694	438	2060	1150	3550	1160	477	1110	446	168	247
5	382	638	430	5890	835	6080	1100	465	805	385	178	218
6	375	620	408	3810	700	5800	1050	457	689	350	382	200
7	607	550	396	2590	610	4470	959	497	620	335	675	195
8	638	533	396	1690	520	2820	932	610	558	320	2110	190
9	584	497	375	1230	480	1930	1010	546	554	315	795	183
10	509	469	354	890	460	1540	1120	477	611	310	473	173
11	434	430	354	780	445	3060	1690	438	461	446	333	171
12	386	408	347	690	435	6610	2880	426	435	446	273	171
13	357	393	323	640	425	8660	2880	408	410	316	234	168
14	337	415	333	575	420	8390	2120	396	380	270	215	161
15	323	493	320	520	415	6830	1610	392	390	263	193	154
16	316	457	300	446	880	5560	1390	385	1340	300	168	156
17	316	446	286	390	1790	5200	5480	425	2200	260	152	154
18	434	386	265	332	2580	4270	5960	470	1760	250	152	152
19	521	357	230	325	2300	3770	3690	430	1600	914	149	149
20	411	453	215	320	2750	6640	2340	1030	1980	766	149	147
21	361	415	225	342	4600	6530	1730	746	1250	485	144	144
22	419	378	320	362	4200	5370	1380	780	975	493	171	142
23	1260	347	689	800	5530	3350	1110	881	751	364	193	138
24	1280	434	1850	2250	6350	2400	1010	680	625	273	300	138
25	985	533	1970	1350	5650	2040	917	521	537	244	1940	142
26	830	481	1530	890	3500	2100	810	700	476	225	1880	142
27	815	584	1290	700	2500	1900	795	920	438	209	1040	154
28	1930	722	1500	545	2200	1540	727	900	419	231	670	142
29	1880	567	1200	1250	-----	1340	616	1110	509	333	381	142
30	1530	505	900	2350	-----	1290	584	1800	650	222	382	142
31	1240	-----	740	5800	-----	1790	-----	2450	-----	188	326	----
TOTAL	21777	15752	19383	41893	59625	123730	50780	21393	30433	11383	14733	5242
MEAN	702	525	625	1351	2129	3991	1693	690	1014	367	475	175
MAX	1930	985	1970	5890	6350	8660	5960	2450	3600	914	2110	303
MIN	316	347	215	320	415	1290	584	385	380	188	144	138
CFSM	.88	.66	.79	1.70	2.68	5.03	2.13	.87	1.28	.46	.60	.22
IN.	1.02	.74	.91	1.96	2.79	5.80	2.38	1.00	1.43	.53	.69	.25

CAL YR 1981 TOTAL 262347 MEAN 719 MAX 8890 MIN 118 CFSM .91 IN 12.29
WTR YR 1982 TOTAL 416124 MEAN 1140 MAX 8660 MIN 138 CFSM 1.44 IN 19.50

03335500 WABASH RIVER AT LAFAYETTE, IN

LOCATION.--Lat 40°25'19", long 86°53'49", in NE¼SW¼ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on right bank 20 ft (6 m) downstream from Brown Street in Lafayette, 0.2 mile (0.3 km) upstream from Main Street bridge, 0.3 mile (0.5 km) downstream from Harrison Memorial Bridge, 5.1 miles (8.2 km) downstream from Wildcat Creek, and at mile 311.9 (501.8 km).

DRAINAGE AREA.--7,267 mi² (18,820 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1901 to January 1902, March to December 1902, January to May 1903 (gage heights only), October 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at present site since October 1913 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1335: 1929, 1932-33, 1936. WSP [illegible]: [illegible]. WSP 1555: 1928(M). WSP 2109: Drainage area. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 504.14 ft (153.662 m) National Geodetic Vertical Datum of 1929. Prior to May 2, 1923, nonrecording gage 0.5 mile (0.8 km) upstream at different datum. Oct. 7, 1923, to Nov. 20, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for the winter period which are fair. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--59 years (1923 to current year), [illegible] ft³/s ([illegible] m³/s), 12.00 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 171,000 ft³/s (4,840 m³/s) May 19, 1943, gage height, 28.47 ft (8.678 m); minimum daily, 300 ft³/s (11.3 m³/s) Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 33.1 ft (10.09 m), from floodmark determined by National Weather Service, discharge, 190,000 ft³/s (5,380 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57,400 ft³/s (1,630 m³/s) Mar. 14, gage height, 21.15 ft (6.446 m); minimum daily, 1,160 ft³/s (32.8 m³/s) Sept. 17.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to 1981 (Discontinued).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3900	5670	4750	6130	22000	18000	25700	6250	18200	4980	1750	1690
2	3440	5290	4670	8450	17000	[illegible]	25000	5770	23600	4720	1690	1520
3	3120	4470	3480	6707	13600	[illegible]	24500	5610	16900	4170	1990	1420
4	3250	4930	3500	14000	13200	22900	22500	5360	12800	3430	1730	1310
5	3000	4590	3520	26800	11800	27500	22900	5010	9930	3430	1770	1220
6	3080	4230	3150	26100	11000	30300	22900	4820	8530	3560	1920	1340
7	3560	4110	3120	20800	9500	28200	21700	4640	7780	3660	2390	1510
8	3680	3750	3040	16000	8600	22400	21400	5030	7180	3270	3770	1440
9	3620	3720	2930	11700	8900	18400	21100	4840	7150	3080	2990	1170
10	3360	3530	2790	8160	9500	16500	21200	4690	7340	3040	2360	1440
11	3050	3260	2780	7110	8700	22900	23200	4600	7090	3530	2060	1240
12	2900	3360	2770	7550	9500	38600	28200	4890	6500	3590	1860	1280
13	2650	3170	2640	10900	6300	46900	32500	4600	6170	2310	1840	2410
14	2560	3320	2610	10600	7700	55300	32600	4120	5930	3290	1670	2180
15	2540	3300	2500	10500	7300	53100	28700	4150	5870	3560	1590	1530
16	2610	3130	2730	9800	7600	47700	25500	3790	7600	2920	1600	1250
17	2780	4170	2730	6400	14700	46900	29900	4180	6200	2840	1630	1160
18	3020	4040	2190	6600	11400	44300	36700	4090	7020	3020	1600	1400
19	3550	3010	1500	7300	19500	40700	31600	3840	8110	4380	1450	1540
20	3630	3300	1410	6700	21000	44000	24300	4380	8510	3670	1540	1380
21	3590	3710	1870	5600	30600	44600	15400	5890	9120	3120	1340	1250
22	3790	3760	2790	4500	32000	42400	15500	6240	7760	2900	1360	1250
23	4610	3910	3070	6800	37200	34100	13500	8420	7140	2720	1610	1420
24	5640	4060	3460	7400	39900	34800	12900	9390	6170	2640	1970	1260
25	5670	4660	6920	8000	38300	33000	11800	7210	5030	2490	4310	1640
26	5510	4900	6000	7400	30400	33500	11200	6790	4370	2400	4370	1790
27	5170	5170	7390	6700	27700	31300	11400	7790	3470	2250	[illegible]	[illegible]
28	5680	5510	7960	5900	27300	40000	9360	9540	3710	2330	[illegible]	[illegible]
29	7870	5740	9380	6200	------	29400	9170	9360	[illegible]	2270	[illegible]	1570
30	6310	6320	9310	15400	------	27100	7170	12400	4330	1940	1890	1460
31	6920	------	[illegible]	27100	------	27700	------	13500	------	1790	1820	-----
TOTAL	126210	123490	122470	323140	497750	1240500	640200	190220	212410	[illegible]	[illegible]	[illegible]
MEAN	4071	4113	3951	10427	17760	34760	21340	6136	7080	[illegible]	[illegible]	[illegible]
MAX	6310	5740	9380	27100	39900	55300	36700	13500	23600	[illegible]	[illegible]	[illegible]
MIN	2540	3010	1410	4500	7000	16500	7170	3790	3710	[illegible]	[illegible]	1160
CFSM	.56	.57	.54	1.43	2.44	4.62	2.94	.84	1.11	.44	.30	.31
IN.	.65	.63	.63	1.65	2.55	5.33	3.28	.97	1.24	.50	.34	.34

CAL YR 1981 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible]

03335500 WABASH RIVER AT LAFAYETTE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
03...	1700	4840	66	862	71

03335690 MUD PINE CREEK NEAR OXFORD, IN

LOCATION.--Lat 40°31'24", long 87°20'30", in NE¼SE¼ sec.17, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on right bank 5 ft (2 m) downstream from county road bridge, 0.3 mile (0.5 km) north of Chase, 2 miles (3 km) east of Boswell, and 5 miles (8 km) west of Oxford.

DRAINAGE AREA.--39.4 mi² (102.0 km²).

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

REVISED RECORD.--WDR IN-80-1: 1971-79 (P).

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft (218.846 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years (1972 to current year), 40.9 ft³/s (1.158 m³/s), 14.10 in/yr (358 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft³/s (96.9 m³/s) June 2, 1980, gage height, 11.67 ft (3.557 m); minimum daily, 0.25 ft³/s (0.007 m³/s) Sept. 24, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 11	1015	931	26.4	8.71	2.655	June 1	0530	*1810	51.3	*10.14	3.091
Mar. 13	0600	989	28.0	8.83	2.691						

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	27	29	9.9	230	94	54	26	917	10	2.4	3.0
2	19	28	23	15	130	126	53	25	178	10	2.2	2.9
3	17	29	22	36	76	107	90	24	119	16	2.2	2.6
4	18	29	22	226	54	93	63	24	91	12	2.1	2.0
5	17	31	21	156	39	86	58	23	74	10	2.7	1.9
6	58	29	22	114	31	73	69	23	60	9.5	2.3	1.9
7	37	26	23	84	26	62	48	25	49	8.9	17	2.0
8	30	24	19	63	23	54	48	22	42	8.0	68	1.9
9	26	21	18	49	21	51	48	21	38	7.4	19	1.7
10	23	20	17	41	20	127	58	20	32	11	8.6	1.6
11	21	20	17	35	19	733	97	20	26	37	6.0	1.4
12	19	18	16	30	18	319	158	19	25	13	4.6	1.4
13	19	18	16	28	17	570	132	19	22	9.7	3.5	1.5
14	19	17	16	26	16	185	92	18	21	8.5	3.0	1.5
15	18	17	14	24	19	180	75	18	22	8.6	2.7	1.4
16	17	17	13	21	45	352	72	18	25	7.4	2.3	1.3
17	19	16	11	19	280	184	335	18	20	7.2	2.0	1.4
18	51	15	10	18	150	144	141	17	19	6.7	1.9	2.8
19	33	16	9.9	17	105	332	108	19	18	28	1.8	1.8
20	29	23	9.6	17	370	367	90	16	17	11	1.8	1.3
21	24	18	10	16	385	178	71	16	16	7.8	1.7	1.3
22	33	16	15	15	320	137	57	20	15	7.1	1.6	1.3
23	41	19	23	33	440	119	48	16	14	6.3	1.7	1.3
24	35	39	17	28	340	104	44	15	13	5.1	51	1.3
25	31	32	15	20	135	101	39	15	13	4.6	75	1.5
26	28	31	18	15	106	94	35	17	12	4.1	13	1.4
27	33	28	16	14	90	82	33	321	17	3.9	7.9	1.4
28	39	25	13	13	79	75	29	111	13	3.6	5.3	1.3
29	36	24	11	20	----	70	29	141	13	3.2	4.1	1.2
30	32	24	11	225	----	68	27	175	13	3.0	3.6	1.2
31	29	----	9.9	210	----	62	----	146	----	2.6	3.4	----
TOTAL	876	697	507.4	1637.9	3584	5329	2301	1408	1954	291.2	324.4	50.5
MEAN	28.3	23.2	16.4	52.8	128	172	76.7	45.4	65.1	9.39	10.5	1.68
MAX	58	39	29	226	440	733	335	321	917	37	75	3.0
MIN	17	15	9.6	9.9	16	51	27	15	12	2.6	1.6	1.2
CFSM	.72	.59	.42	1.34	3.25	4.37	1.95	1.15	1.65	.24	.27	.04
IN.	.83	.66	.48	1.55	3.38	5.03	2.17	1.33	1.84	.27	.31	.05

CAL YR 1981 TOTAL 18332.01 MEAN 50.2 MAX 1670 MIN .69 CFSM 1.27 IN 17.31
WTR YR 1982 TOTAL 18960.40 MEAN 51.9 MAX 917 MIN 1.2 CFSM 1.32 IN 17.90

03335700 BIG PINE CREEK NEAR WILLIAMSPORT, IN

LOCATION.--Lat 40°19'03", long 87°17'26", in SW¼SE¼ sec.26, T.22 N., R.8 W., Warren County, Hydrologic Unit 05120108, on downstream side of county road bridge, 1.6 miles (2.6 km) north of city limits of Williamsport, and 3.7 miles (6.0 km) upstream from mouth.

DRAINAGE AREA.--323 mi^2 (837 km^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 (155.960 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to May 19, 1967, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--27 years, 269 ft^3/s (7.618 m^3/s), 11.31 in/yr (287 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft^3/s (357 m^3/s) Feb. 10, 1959, from rating curve extended above 8,000 ft^3/s (227 m^3/s) on basis of contracted-opening measurement, gage height, 16.00 ft (4.877 m), from floodmark; minimum daily, 6.5 ft^3/s (0.18 m^3/s) Oct. 6-8, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft^3/s (79.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 13	1500	3190	90.3	8.87	2.704	Apr. 17	0400	4000	113	9.86	3.005
Mar. 20	0800	3860	109	9.60	2.926	May 31	1800	*7790	221	*13.06	3.981

Minimum daily discharge, 14 ft^3/s (0.396 m^3/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	233	287	130	2050	789	478	215	4210	129	29	38
2	237	219	304	247	1030	1050	441	202	2780	117	27	34
3	193	223	247	439	660	922	541	193	1660	200	25	30
4	174	223	233	1700	480	770	523	181	1100	167	24	26
5	185	233	228	1400	350	710	473	174	707	125	31	23
6	393	223	219	1030	280	620	434	174	546	115	27	22
7	374	198	219	720	235	520	428	189	460	105	140	23
8	293	185	215	540	205	450	413	166	398	98	441	22
9	242	181	181	410	185	418	434	155	351	86	252	20
10	206	210	148	350	170	504	464	148	309	110	114	18
11	185	206	142	305	160	2040	686	142	252	234	77	17
12	166	193	138	270	152	2750	984	135	228	157	56	16
13	152	177	132	242	145	2980	1050	132	210	114	44	17
14	148	170	129	228	140	2270	787	126	185	105	38	17
15	148	163	123	205	142	1630	639	123	293	98	32	16
16	138	163	105	182	200	1950	594	148	428	92	28	15
17	138	152	92	168	1700	1840	2640	142	328	85	24	16
18	393	132	86	150	1120	1430	1620	126	261	79	23	26
19	393	129	82	147	760	1710	1080	126	396	184	21	23
20	298	193	80	142	2400	3180	772	132	259	162	20	18
21	252	202	82	138	2500	2160	599	202	212	93	20	15
22	346	166	125	136	1900	1470	495	233	193	78	19	15
23	449	155	215	180	2300	1100	418	215	171	69	19	15
24	379	369	181	215	2600	910	374	159	154	62	140	15
25	333	455	130	160	1780	823	346	138	145	54	590	16
26	293	418	166	126	1230	800	324	189	138	49	170	16
27	309	374	219	116	740	696	287	675	135	45	105	15
28	337	315	170	110	540	614	252	434	140	42	61	15
29	319	272	130	125	-----	575	242	783	140	38	51	14
30	282	252	94	2360	-----	556	228	712	186	35	43	14
31	252	----	82	1900	-----	532	-----	3800	-----	32	40	----
TOTAL	8326	6784	4984	14571	26154	38769	19046	10669	16975	3159	2731	587
MEAN	269	226	161	470	934	1251	635	344	566	102	88.1	19.6
MAX	449	455	304	2360	2600	3180	2640	3800	4210	234	590	38
MIN	138	129	80	110	140	418	228	123	135	32	19	14
CFSM	.83	.70	.50	1.46	2.89	3.87	1.97	1.07	1.75	.32	.27	.06
IN.	.96	.78	.57	1.68	3.01	4.47	2.19	1.23	1.96	.36	.31	.07

CAL YR 1981 TOTAL 117461 MEAN 322 MAX 4310 MIN 18 CFSM 1.00 IN 13.53
WTR YR 1982 TOTAL 152755 MEAN 419 MAX 4210 MIN 14 CFSM 1.30 IN 17.59

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 (4.7 km) downstream from Oppossum Run, 3.6 miles (5.8 km) upstream from Spring Creek, and at mile 271.1 (436.2 km).

DRAINAGE AREA.--8,218 mi² (21,285 km²).

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at site 0.4 mile (0.6 km) downstream January 1927 to December 1930, and near center span of old U.S. Highway 136 bridge prior to September 1979, and at present site since are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1275: Drainage area. WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 473.97 ft (144.466 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for winter periods and periods of no gage-height record, which are fair. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--43 years, 7,365 ft³/s (208.6 m³/s), 12.17 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 147,000 ft³/s (4,160 m³/s) May 20, 1943, gage height, 32.44 ft (9.888 m); minimum daily, 487 ft³/s (13.8 m³/s) Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 35.1 ft (10.70 m), from floodmark determined by National Weather Service, discharge, 200,000 ft³/s (5,600 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 58,600 ft³/s (1,660 m³/s) Mar. 16, gage height, 25.47 ft (7.763 m); maximum gage height, 25.98 ft (7.919 m) Feb. 24, result of ice jam; minimum daily discharge, 1,520 ft³/s (43.0 m³/s) Sept. 18.

NOTE.--No gage-height record Dec. 17 to Jan. 5, May 5 to June 14, and July 28 to Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5250	7380	5950	8000	29000	26000	27600	8030	27000	5140	2100	2160
2	4650	6640	5700	6400	27000	25000	27000	7050	30000	5500	2000	2070
3	4070	6290	5380	8000	24000	24100	25700	6550	29000	5400	2150	1890
4	3730	6000	4590	15000	16000	25400	24300	6270	22000	5000	2200	1780
5	3650	5750	4370	22000	14000	26200	23600	5900	17000	4500	2350	1690
6	4060	5450	4270	25200	13000	28000	22800	5700	13000	3950	2350	1600
7	4250	5140	3960	26100	11500	29400	22400	5400	11000	4020	2800	1690
8	4540	4920	3980	22000	10300	28800	22300	5300	10000	4020	5000	1800
9	4270	4590	3820	16000	10000	25300	22100	5200	8600	3640	4400	1730
10	4110	4550	3690	12000	9600	21500	21800	5200	8200	3500	3200	1560
11	3740	4250	3540	8900	9500	21200	22300	5200	7800	3780	2600	1700
12	3570	4080	3590	8700	9200	26200	24100	5200	7600	4150	2300	1580
13	3320	4140	3450	10000	8800	34800	26200	5200	7200	3900	2200	1670
14	3130	3940	3350	11600	8600	46100	27600	5100	6810	3370	2100	2410
15	3090	4110	3260	11300	8400	55600	28600	4700	6670	3690	2000	2210
16	3080	3990	3170	10000	8000	56400	27700	4600	7750	3820	1950	1750
17	3140	3860	3000	8100	11000	52000	27200	4500	8280	3280	2000	1560
18	3730	3910	2700	7300	15000	49200	28500	4400	7690	3160	2000	1520
19	4000	3820	2100	7500	22000	44800	30300	4400	9410	4180	2000	1690
20	4380	3880	1800	7300	26000	44100	29300	5200	10500	5500	1800	1770
21	4220	4310	2300	6600	29000	45500	25500	6400	10000	4450	2000	1650
22	4470	4570	3500	5500	35000	45400	21700	8000	9350	3690	2200	1580
23	5530	4690	4000	6700	40000	42600	17700	9400	9020	3660	1900	1600
24	6440	4890	4800	7700	44000	38400	15100	9500	8060	3190	2100	1710
25	6830	5270	6000	8400	44000	34300	13800	8500	7020	2990	4500	1610
26	6610	5780	7400	8000	41000	32900	12700	8000	5720	2840	6000	1890
27	6200	5940	9000	7400	35000	31800	11900	9000	5070	2720	4500	2090
28	6200	6320	9800	6600	28000	31200	10700	10000	4640	2700	3800	2720
29	8000	6590	10000	6100	------	30300	9950	12000	4540	2500	3200	2290
30	9350	6500	9600	16000	------	29200	8710	14000	5070	2300	2700	1810
31	8730	------	9400	24000	------	28300	------	17000	------	2200	2500	-----
TOTAL	150340	151550	151470	354400	586900	1080000	659160	220900	324000	116740	84900	54780
MEAN	4850	5052	4886	11430	20960	34840	21970	7126	10800	3766	2739	1826
MAX	9350	7380	10000	26100	44000	56400	30300	17000	30000	5500	6000	2720
MIN	3080	3820	1800	5500	8000	21200	8710	4400	4540	2200	1800	1520
CFSM	.59	.62	.60	1.39	2.55	4.24	2.67	.87	1.31	.46	.33	.22
IN.	.68	.69	.69	1.60	2.66	4.89	2.98	1.00	1.47	.53	.38	.25

CAL YR 1981 TOTAL 2974030 MEAN 8148 MAX 43000 MIN 1300 CFSM .99 IN 13.46
WTR YR 1982 TOTAL 3935140 MEAN 10780 MAX 56400 MIN 1520 CFSM 1.31 IN 17.81

03339108 EAST FORK COAL CREEK NEAR HILLSBORO, IN

LOCATION.--Lat 40°06'06", long 87°07'54", in NW¼SW¼ sec.8, T.19 N., R.6 W., Fountain County, Hydrologic Unit 05120108, at center pier on downstream side of bridge on County Road 700 East, 1.5 miles (2.4 km) east of Hillsboro, 3.7 miles (6.0 km) northwest of Waynetown, and 9.6 miles (15.4 km) upstream from mouth.

DRAINAGE AREA.--33.4 mi^2 (86.5 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 673.76 ft (205.362 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--14 years, 38.8 ft^3/s (1.099 m^3/s), 15.78 in/yr (401 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,610 ft^3/s (73.9 m^3/s) Oct. 1, 1977, gage height, 10.33 ft (3.149 m); minimum daily, 3.5 ft^3/s (0.099 m^3/s) Jan. 16, 17, Feb. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (19.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 6	0345	817	23.1	6.02	1.835	May 29	2200	*1720	48.7	*8.42	2.566
Feb. 20	2000	1410	39.9	7.66	2.335	Jun. 15	2030	951	26.9	6.40	1.951
Mar. 4	1515	1020	28.9	6.58	2.006	Jun. 19	0600	773	21.9	5.88	1.792
May 27	1200	730	20.7	5.74	1.750						

Minimum daily discharge, 7.6 ft^3/s (0.215 m^3/s) Sept. 30.

NOTE.--No gage-height record Nov. 17 to Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	36	22	26	150	63	49	23	355	36	16	13
2	19	33	21	27	100	79	44	22	110	30	15	16
3	17	32	20	39	73	69	58	21	73	98	15	14
4	16	31	19	250	54	510	47	21	58	48	28	12
5	19	30	19	130	41	225	41	21	48	33	105	11
6	369	29	18	83	34	102	41	31	45	29	47	10
7	77	27	19	68	29	68	47	22	44	27	39	10
8	45	25	18	56	26	52	47	23	44	25	41	10
9	39	24	17	47	24	45	53	23	39	23	40	9.5
10	31	22	16	40	23	47	83	21	36	43	29	9.1
11	26	21	16	36	22	181	105	21	31	131	21	9.1
12	24	20	15	32	21	131	75	20	29	39	19	8.6
13	22	20	15	29	21	312	53	19	27	29	17	9.1
14	21	19	14	27	20	116	47	18	25	25	16	9.5
15	20	18	14	25	20	151	43	18	242	25	15	9.5
16	20	17	14	21	31	231	40	18	300	23	15	8.6
17	20	16	14	19	240	116	233	20	112	22	14	8.6
18	20	15	13	17	160	81	83	19	66	22	13	9.1
19	20	17	12	17	88	173	56	63	324	68	13	8.6
20	19	20	11	18	585	200	49	105	95	48	13	8.6
21	19	18	12	20	423	102	45	273	63	41	12	8.1
22	52	17	13	24	310	71	40	233	48	58	12	8.1
23	56	16	41	112	334	59	34	75	41	47	12	8.6
24	40	21	77	93	192	52	32	52	36	32	25	8.1
25	38	27	50	64	83	56	30	47	32	25	45	9.1
26	34	24	40	45	64	58	29	91	30	21	32	8.6
27	68	25	49	32	56	49	26	304	66	31	23	8.6
28	63	23	44	26	55	45	25	102	137	44	18	8.6
29	43	21	37	23	----	41	24	341	68	20	15	8.1
30	40	20	28	37	----	45	23	485	64	18	13	7.6
31	38	----	24	215	----	73	----	179	----	16	12	-----
TOTAL	1363	684	742	1698	3279	3603	1602	2731	2688	1177	750	287.4
MEAN	44.0	22.8	23.9	54.8	117	116	53.4	88.1	89.6	38.0	24.2	9.58
MAX	369	36	77	250	585	510	233	485	355	131	105	16
MIN	16	15	11	17	20	41	23	18	25	16	12	7.6
CFSM	1.32	.68	.72	1.64	3.50	3.47	1.60	2.64	2.68	1.14	.73	.29
IN.	1.52	.76	.83	1.89	3.65	4.01	1.78	3.04	2.99	1.31	.84	.32

CAL YR 1981 TOTAL 14737.2 MEAN 40.4 MAX 677 MIN 5.0 CFSM 1.21 IN 16.41
WTR YR 1982 TOTAL 20604.4 MEAN 56.5 MAX 585 MIN 7.6 CFSM 1.69 IN 22.95

03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN

LOCATION.--Lat 40°02'56", long 86°53'58", in SW¼NW¼ sec.32, T.19 N., R.4 W., Montgomery County, Hydrologic Unit 05120110, on left bank 327 ft (100 m) upstream from Crawfordsville Electric Light and Power Co.'s dam at Crawfordsville, 0.5 mile (0.8 km) upstream from bridge on U.S. Highway 231 (corrected), 1.0 mile (1.6 km) downstream from Walnut Fork Sugar Creek, and at mile 40.4 (65.0 km).

DRAINAGE AREA.--509 mi² (1,318 km²).

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 (200.488 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--44 years, 489 ft³/s (13.85 m³/s), 13.05 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft³/s (745 m³/s) June 28, 1957, gage height, 14.48 ft (4.414 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Sept. 24-27, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 17.3 ft (5.27 m) from information by local resident, discharge, about 36,000 ft³/s (1,020 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1800	5450	154	5.01	1.527	Mar. 4	2000	6490	184	5.59	1.704
Jan. 30	2300	6050	171	5.34	1.628	Mar. 11	2100	6380	181	5.52	1.682
Feb. 21	0100	*7190	204	6.05	1.844	Mar. 20	1100	4410	125	4.48	1.366
Feb. 22	0500	debris on control		*6.60	2.012	May 30	0200	4250	120	4.40	1.341
Feb. 24	0100	6330	179	5.49	1.673						

Minimum daily discharge, 34 ft³/s (0.96 m³/s) Sept. 22, 23, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	510	507	227	220	1300	1250	488	263	2550	228	96	66
2	332	439	230	270	580	1920	437	246	1630	197	89	63
3	251	396	208	752	370	1870	636	232	951	328	83	61
4	212	370	196	4610	225	3550	785	223	669	289	92	49
5	197	358	193	3870	180	4940	570	218	521	216	515	45
6	577	335	185	1990	170	3010	567	212	417	182	188	44
7	619	302	191	1320	160	1700	556	252	360	187	128	44
8	397	276	194	760	150	1070	573	329	362	491	210	43
9	307	255	178	580	145	793	655	280	354	682	167	41
10	258	228	160	400	140	702	882	246	310	339	109	40
11	222	218	155	310	135	3910	1720	226	274	502	93	39
12	201	211	150	260	130	5700	1540	213	248	332	84	37
13	186	200	150	230	127	5120	1140	202	231	230	74	36
14	176	193	146	200	124	3970	790	192	210	189	68	38
15	176	190	145	190	120	2890	624	187	355	163	64	39
16	167	190	137	170	340	3510	551	183	1620	143	60	37
17	157	188	131	160	2600	3300	2260	186	2370	130	59	37
18	176	178	123	150	4100	1980	1860	190	1180	132	56	39
19	245	175	115	140	3800	1970	1150	358	1790	324	52	36
20	211	190	100	130	4650	4160	863	581	1460	275	56	37
21	185	183	150	125	6660	2830	632	808	940	183	88	35
22	214	161	200	120	5800	1740	503	1050	640	842	76	34
23	681	158	650	600	5330	1290	435	1120	470	475	58	34
24	613	213	1100	1100	5670	1050	396	619	373	232	70	36
25	438	240	930	460	2750	905	370	428	325	171	124	38
26	369	232	770	290	1660	1040	349	467	294	139	104	39
27	583	277	697	200	1260	871	322	931	268	139	72	39
28	1860	264	784	180	1140	698	288	1250	265	322	60	37
29	1230	232	530	175	-----	621	270	1150	278	171	54	36
30	841	216	270	3100	-----	575	266	3840	281	126	53	34
31	626	----	220	3700	-----	573	-----	2130	-----	107	52	----
TOTAL	13217	7575	9615	26762	49816	69508	22478	18812	21996	8466	3154	1233
MEAN	426	253	310	863	1779	2242	749	607	733	273	102	41.1
MAX	1860	507	1100	4610	6660	5700	2260	3840	2550	842	515	66
MIN	157	158	100	120	120	573	266	183	210	107	52	34
CFSM	.84	.50	.61	1.70	3.50	4.41	1.47	1.19	1.44	.54	.20	.08
IN.	.97	.55	.70	1.96	3.64	5.08	1.64	1.37	1.61	.62	.23	.09

CAL YR 1981 TOTAL 170742 MEAN 468 MAX 12300 MIN 25 CFSM .92 IN 12.48
WTR YR 1982 TOTAL 252632 MEAN 692 MAX 6660 MIN 34 CFSM 1.36 IN 18.46

03340500 WABASH RIVER AT MONTEZUMA, IN

LOCATION.--Lat 39°47'33", long 87°22'26", in SE¼NE¼ sec.35, T.16 N., R.9 W., Parke County, Hydrologic Unit 05120108, on downstream side of first pier from left bank of bridge on U.S. Highway 36 at Montezuma, 2.0 miles (3.2 km) upstream from Raccoon Creek, 4.9 miles (7.9 km) downstream from Sugar Creek, and at mile 240.0 (386.0 km).

DRAINAGE AREA.--11,118 mi^2 (28,796 km^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. WRD Ind. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 457.75 ft (139.522 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1927, to July 12, 1950, nonrecording gage at same site and datum.

REMARKS.--Records good except periods of no gage-height record, which are fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--55 years, 9,774 ft^3/s (277 m^3/s), 11.93 in/yr (303 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 184,000 ft^3/s (5,210 m^3/s) May 20, 1943, gage height, 32.83 ft (10.007 m); minimum daily, 571 ft^3/s (16.2 m^3/s) Sept. 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 34.0 ft (10.36 m), from floodmarks, discharge, 230,000 ft^3/s (6,510 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 79,200 ft^3/s (2,240 m^3/s) Mar. 17, gage height, 26.68 ft (8.132 m); minimum daily, 2,040 ft^3/s (57.8 m^3/s) Sept. 23.

NOTE.--No gage-height record Dec. 18 to Jan. 3, Jan. 9-30 and Feb 2-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13400	11500	8230	9500	35000	45000	35500	11300	29900	7980	4340	3140
2	12000	10100	7780	9100	37500	39500	34300	10600	34500	7510	4090	3040
3	10000	9440	7610	12000	34500	37200	33500	10000	35700	9200	3900	2870
4	8000	8950	7020	21800	28000	37700	32600	9300	33400	10800	3830	2670
5	7500	8730	6390	30900	22200	40900	31600	8800	27400	11000	5220	2540
6	7500	8410	6190	32100	19500	40300	30500	8600	19400	7780	11400	2390
7	9600	8060	5910	32800	17700	39600	29700	8400	14900	6510	8830	2310
8	10400	7680	5740	31600	16000	38900	29200	8160	14800	6370	6800	2400
9	8850	7260	5680	27000	14700	37300	28800	8100	13500	6110	6440	2480
10	7780	6890	5450	21000	13800	34000	28500	8030	11800	6030	6540	2340
11	7000	6630	5220	15000	13300	32400	28800	7740	11600	7190	6090	2190
12	6610	6230	5070	12000	12900	37300	29800	7420	11000	7990	5190	2330
13	6310	6120	5090	10900	12500	41400	31400	7280	10600	7120	4600	2180
14	5730	6090	4950	11400	12200	50800	33600	7230	10300	5790	4190	2490
15	5520	5950	4840	11600	11700	61700	35500	6890	9910	5210	3900	3010
16	5470	6070	4670	10800	12400	74800	36300	6610	13100	5290	3470	2690
17	5510	5870	4520	9400	15000	78400	36600	6460	16800	5010	3150	2310
18	5700	5800	4200	8200	21000	74000	39000	6420	13200	4620	3300	2160
19	6550	5760	3700	7800	28000	69300	41400	6460	14000	11200	3110	2120
20	7300	5760	2500	7700	35800	69600	42400	7030	16100	18200	2930	2250
21	7140	5970	3000	7200	44000	70600	40700	9830	14500	15900	2800	2260
22	6730	6250	5200	6700	53500	69600	36400	13200	12600	11600	3000	2090
23	8290	6320	6000	7300	60000	65300	30000	13900	11200	11400	3180	2040
24	9890	6520	6800	8200	70100	57800	23900	13100	10600	10600	2980	2110
25	10100	6880	7600	8600	75300	51800	20400	12400	9910	9290	3720	2220
26	9920	7470	8400	8500	71400	46800	18200	11500	8360	7260	5800	2110
27	9620	7880	10000	7800	61300	43200	16600	15400	7260	6090	5910	2460
28	10600	8120	10900	7100	52200	41000	15100	20000	8050	6470	4860	2760
29	11700	8370	11100	8200	------	39400	13600	19200	7670	5860	4160	3280
30	12700	8450	10700	16000	------	38100	12500	23000	8250	5170	3680	2770
31	12700	------	10100	29000	------	36800	------	25600	------	4740	3280	-----
TOTAL	266120	219530	200560	447200	901500	1540500	896400	337960	460310	251290	144690	74010
MEAN	8585	7318	6470	14430	32200	49690	29880	10900	15340	8106	4667	2467
MAX	13400	11500	11100	32800	75300	78400	42400	25600	35700	18200	11400	3280
MIN	5470	5760	2500	6700	11700	32400	12500	6420	7260	4620	2800	2040
CFSM	.77	.66	.58	1.30	2.90	4.47	2.69	.98	1.38	.73	.42	.22
IN.	.89	.73	.67	1.50	3.02	5.15	3.00	1.13	1.54	.84	.48	.25

CAL YR 1981 TOTAL 4322160 MEAN 11840 MAX 61600 MIN 1800 CFSM 1.07 IN 14.46
WTR YR 1982 TOTAL 5740070 MEAN 15730 MAX 78400 MIN 2040 CFSM 1.42 IN 19.21

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN

LOCATION.--Lat 39°48'45", long 86°57'14", in NW¼SW¼ sec.22, T.16 N., R.5 W., Putnam County, Hydrologic Unit 05120108, on left bank at downstream side of county road bridge, 1.6 miles (2.6 km) upstream from Ramp Creek, 3.1 miles (5.0 km) west of Fincastle, and at mile 48.8 (78.5 km).

DRAINAGE AREA.--139 mi² (360 km²).

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 (209.102 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--25 years, 142 ft³/s (4.021 m³/s), 13.87 in/yr (352 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s (428 m³/s) Jan. 26, 1962; maximum gage height, 15.68 ft (4.779 m) Jan. 26, 1962 (ice jam); minimum daily discharge, 1.8 ft³/s (0.051 m³/s) Sept. 16, 17, and Oct. 5, 6, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.10 ft (5.822 m), discharge, 39,900 ft³/s (1,130 m³/s), from slope-area measurement.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1500	1960	55.5	8.94	2.725	Mar. 11	2100	2420	68.5	9.85	3.002
Jan. 30	2400	3410	96.6	11.29	3.441	May 21	1200	2750	77.9	10.40	3.170
Feb. 21	0500	2780	78.7	10.45	3.185	Aug. 5	1600	*3860	109	*11.76	3.584

Minimum daily discharge, 7.6 ft³/s (0.22 m³/s) Sept. 21-24, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	70	43	90	403	216	124	63	879	55	27	19
2	20	63	46	90	319	289	110	60	447	51	25	25
3	15	58	42	274	212	314	316	58	278	174	24	21
4	13	54	40	1510	150	806	240	55	208	99	22	16
5	13	52	38	690	130	771	172	54	174	68	1670	13
6	15	50	35	408	125	411	198	52	146	58	232	12
7	15	46	36	281	115	263	204	75	131	51	92	11
8	15	43	38	200	110	160	190	99	208	92	66	11
9	12	40	35	140	100	125	202	76	174	156	52	10
10	12	36	30	80	95	115	236	66	127	87	45	10
11	12	32	26	72	90	1290	278	59	102	132	40	9.2
12	11	32	30	66	85	1070	224	56	92	96	35	9.2
13	11	30	30	62	80	1020	183	52	86	66	31	9.2
14	12	30	25	58	80	590	139	50	76	54	27	9.2
15	11	28	25	56	80	610	119	47	71	47	26	10
16	12	30	24	54	204	995	121	46	287	43	24	8.4
17	15	30	23	52	1080	657	442	54	383	38	22	8.4
18	46	28	21	50	1240	386	337	46	196	37	20	13
19	62	26	20	48	810	426	226	60	147	141	19	10
20	40	30	18	48	1090	758	177	94	127	71	18	9.2
21	28	28	25	50	1950	452	136	1370	113	50	20	7.6
22	30	25	35	54	1030	296	113	992	92	41	19	7.6
23	63	23	323	900	995	232	99	604	80	272	17	7.6
24	67	30	476	630	981	194	93	347	71	97	18	7.6
25	54	35	270	270	424	202	87	248	66	59	23	9.2
26	48	32	200	170	278	289	83	301	64	45	20	9.2
27	80	47	274	130	221	210	78	601	60	72	18	8.4
28	232	50	301	120	202	166	70	447	103	59	17	8.4
29	151	43	190	110	-----	147	66	316	72	43	15	8.4
30	105	38	125	1570	-----	137	64	1020	67	36	16	7.6
31	82	----	100	1520	-----	146	----	439	----	31	18	-----
TOTAL	1328	1159	2944	9853	12679	13743	5127	7907	5127	2421	2718	325.4
MEAN	42.8	38.6	95.0	318	453	443	171	255	171	78.1	87.7	10.8
MAX	232	70	476	1570	1950	1290	442	1370	879	272	1670	25
MIN	11	23	18	48	80	115	64	46	60	31	15	7.6
CFSM	.31	.28	.68	2.29	3.26	3.19	1.23	1.84	1.23	.56	.63	.08
IN.	.36	.31	.79	2.64	3.39	3.68	1.37	2.12	1.37	.65	.73	.09

CAL YR 1981 TOTAL 36457.4 MEAN 99.9 MAX 1550 MIN 5.6 CFSM .72 IN 9.76
WTR YR 1982 TOTAL 65331.4 MEAN 179 MAX 1950 MIN 7.6 CFSM 1.29 IN 17.48

03340870 CECIL M. HARDEN LAKE AT FERNDALE, IN

LOCATION.--Lat 39°43'02", long 87°04'20", in SE¼NE¼ sec.28, T.15 N., R.6 W., Parke County, Hydrologic Unit 05120108, in discharge tower of reservoir on Big Raccoon Creek at Ferndale, 4.4 miles (7.1 km) upstream from Rocky Fork Creek, 6.1 miles (9.8 km) northeast of Mansfield, and at mile 33.8 (54.4 km).

DRAINAGE AREA.--216 mi^2 (559 km^2).

PERIOD OF RECORD.--December 1960 to current year. Published as "Mansfield Reservoir" prior to October 1970 and as "Mansfield Lake" October 1970 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4 ft (1.22 m) wide and 8 ft (2.44 m) high, in semi-elliptical concrete conduit through dam. Minimum design capacity is 16,180 acre-ft (19.9 hm^3), elevation, 640 ft (195.1 m). Seasonal pool capacity is 49,300 acre-ft (60.8 hm^3), elevation, 661 ft (201.5 m). Capacity at uncontrolled spillway elevation, 690 ft (210.3 m) is 133,000 acre-ft (164 hm^3). Reservoir is used for flood control and recreation. Reservoir put in operation on Dec. 6,1960.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 87,510 acre-ft (107 hm^3) May 4, 1964, elevation, 676.52 ft (206.203 m); minimum, 16,080 acre-ft (19.8 hm^3), many times, elevation, 639.9 ft (195.04 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 72,360 acre-ft (89.22 hm^3) Mar. 29, elevation, 670.98 ft (204.515 m); minimum, 16,270 acre-ft (20.06 hm^3) Dec. 11, elevation, 640.08 ft (195.096 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	660.22	47,670	
Oct. 31	654.06	36,100	-11,570
Nov. 30	640.64	16,890	-19,210
Dec. 31	640.51	16,750	-140
CAL YR 1981			+570
Jan. 31	652.82	34,000	+17,250
Feb. 28	663.06	53,600	+19,600
Mar. 31	669.32	68,160	+14,560
Apr. 30	660.11	47,450	-20,710
May 31	666.17	60,580	+13,130
June 30	661.24	49,750	-10,830
July 31	661.22	49,710	-40
Aug. 31	660.98	49,200	-510
Sept. 30	659.69	46,610	-2,590
WTR YR 1982			-1,060

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 (1.8 km) southwest of Ferndale, 1.8 miles (2.9 km) northeast of Mansfield, 2.0 miles (3.2 km) upstream from Rocky Fork Creek, 2.2 miles (3.5 km) downstream from Cecil M. Harden Lake, and at mile 31.6 (50.8 km).

DRAINAGE AREA.--222 mi^2 (575 km^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 (177.503 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Oct. 1, 1974, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Cecil M. Harden Lake (See sta 03340870). Daily discharge computed from relation between discharge, head, and gate openings for Cecil M. Harden Lake beginning Oct. 1, 1974.

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

AVERAGE DISCHARGE.--26 years, 229 ft^3/s (6.485 m^3/s), 14.01 in/yr (356 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft^3/s (1,150 m^3/s) June 28, 1957, gage height, 19.87 ft (6.056 m), from rating curve extended above 5,000 ft^3/s (142 m^3/s) on basis of records for station at Big Raccoon Creek at Mansfield; minimum daily, 2.7 ft^3/s (0.076 m^3/s) Oct. 11, 1956; no flow Aug. 23, 24, 1977, due to regulation.

EXTREMES FOR CURRENT YEAR:--Maximum daily discharge, 1,340 ft^3/s (37.9 m^3/s) Mar. 10; minimum daily, 27 ft^3/s (0.76 m^3/s) Sept. 5, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	582	294	378	72	739	1180	28	88	100	48	28
2	130	579	110	219	72	1150	870	28	80	100	48	28
3	130	575	135	124	73	1240	670	28	80	110	48	28
4	130	429	175	129	73	402	931	28	80	110	48	28
5	130	356	105	134	262	634	979	28	89	110	49	27
6	130	406	53	136	526	1000	714	28	89	411	51	28
7	130	439	53	137	524	996	1160	28	89	261	498	28
8	130	437	53	483	721	1130	1150	28	89	119	787	28
9	130	435	53	876	968	1310	1140	28	90	120	782	28
10	130	432	53	935	955	1340	1140	28	678	130	777	28
11	130	430	39	920	942	539	1130	28	1050	242	773	29
12	130	427	32	903	927	377	1120	28	1040	288	590	27
13	130	425	32	886	912	498	1110	28	1030	150	222	28
14	130	423	32	867	897	503	1110	29	1020	81	48	28
15	130	421	32	400	880	277	1100	41	941	81	48	89
16	278	418	32	142	781	164	1010	48	633	56	48	100
17	354	415	32	88	61	166	864	48	502	48	48	100
18	318	413	32	52	66	167	1010	49	780	48	49	100
19	357	410	32	51	70	168	492	122	1000	49	35	100
20	382	408	32	50	72	169	154	158	997	49	29	108
21	380	405	32	50	77	170	155	160	917	49	29	108
22	379	402	32	40	79	171	117	161	320	262	29	108
23	378	399	32	32	81	171	79	375	100	367	29	80
24	377	397	333	30	83	171	79	744	100	407	29	80
25	319	394	600	30	84	171	41	896	100	538	29	80
26	299	391	595	30	330	172	28	803	100	221	28	74
27	298	389	333	45	408	172	28	420	100	81	28	65
28	458	386	247	50	497	172	28	286	100	82	28	65
29	591	384	248	50	-----	671	28	86	100	464	28	65
30	588	381	412	63	-----	1100	28	86	100	476	28	65
31	585	-----	453	69	-----	1190	-----	87	-----	48	28	----
TOTAL	8291	12788	4788	8399	11592	17300	19645	4968	12581	5774	5341	1822
MEAN	267	426	154	271	414	558	655	160	419	186	172	60.7
MAX	591	582	600	935	968	1340	1180	896	1050	538	787	108
MIN	130	356	32	30	61	164	28	28	88	48	28	27
CFSM	1.20	1.92	.69	1.22	1.87	2.51	2.95	.72	1.89	.84	.78	.27
IN.	1.39	2.14	.80	1.41	1.94	2.90	3.29	.83	2.11	.97	.89	.31

CAL YR 1981 TOTAL 60873 MEAN 166 MAX 975 MIN 17 CFSM .75 IN 10.15
WTR YR 1982 TOTAL 113289 MEAN 310 MAX 1340 MIN 27 CFSM 1.40 IN 18.99

03341300 BIG RACCOON CREEK AT COXVILLE, IN

LOCATION.--Lat 39°39'09", long 87°17'37", in SW¼SW¼ sec.15, T.14 N., R.8 W., Parke County, Hydrologic Unit 05120108, on right bank at downstream side of covered bridge on county road at Coxville, 0.8 mile (1.3 km) upstream from Rock Run, 1.5 miles (2.4 km) downstream from Little Raccoon Creek, 2.1 miles (3.4 km) northwest of Rosedale, and at mile 13.1 (21.1 km).

DRAINAGE AREA.--448 mi² (1,160 km²).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Coxville.

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

GAGE.--Water-stage recorder. Datum of gage is 494.00 ft (150.571 m) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except those for periods of no gage height record, Jan. 12 to Feb. 19, which are fair. Flow regulated by Cecil M. Harden Lake (See sta 03340870).

AVERAGE DISCHARGE.--26 years, 487 ft³/s (13.79 m³/s), 14.76 in/yr (375 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108,000 ft³/s (3,060 m³/s) June 28, 1957, gage height, 21.23 ft (6.471 m), from rating curve extended above 35,000 ft³/s (991 m³/s) on basis of an estimate made by slope-area study; minimum daily, 6.5 ft³/s (0.18 m³/s) Oct. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,220 ft³/s (148 m³/s) Mar. 11, gage height, 12.33 ft (3.758 m); minimum daily, 83 ft³/s (2.35 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	732	477	609	1450	921	1430	222	1230	274	268	224
2	216	721	316	551	1040	1330	1350	209	815	258	232	252
3	203	713	248	763	789	1470	1380	196	568	925	207	143
4	193	671	269	2600	637	1700	1150	187	454	519	196	119
5	188	523	257	1280	719	1660	1470	179	392	374	551	108
6	193	509	221	895	933	1710	1180	172	342	372	1220	102
7	191	545	211	688	903	1520	1450	258	367	571	665	100
8	186	540	202	594	1070	1420	1500	270	2580	310	1040	96
9	180	531	193	1020	1290	1540	1520	209	964	272	967	92
10	177	511	185	1440	1310	1620	1490	186	702	292	931	89
11	174	485	179	1470	1340	3360	1480	172	1280	429	912	87
12	172	478	158	1350	1270	2060	1460	161	1270	418	883	84
13	171	472	152	1290	1210	2440	1440	152	1250	359	440	87
14	171	466	149	1260	1160	1570	1400	145	1230	226	262	87
15	172	461	147	679	1130	1480	1380	153	1220	205	207	83
16	173	458	139	531	1240	1930	1400	150	1330	191	186	120
17	296	453	138	403	2860	1500	1600	172	1180	165	172	134
18	345	447	142	407	2350	1070	1380	163	981	170	161	172
19	368	448	166	405	1640	1900	1340	187	1300	2400	150	156
20	419	449	324	405	1880	2230	659	354	1280	757	131	148
21	416	441	318	415	2880	1250	565	671	1360	402	125	143
22	431	428	313	429	1860	959	505	767	935	540	119	142
23	503	425	1010	2620	1680	821	402	767	400	668	120	140
24	486	441	923	1300	1690	726	347	830	352	574	137	148
25	469	439	1170	878	1050	790	302	1070	318	641	160	320
26	465	443	788	646	830	846	284	1200	298	629	113	180
27	567	497	770	873	956	702	266	1570	286	546	109	142
28	681	460	685	1040	913	626	252	1470	316	1270	102	128
29	785	441	545	688	-----	660	242	846	298	600	97	120
30	760	436	502	2540	-----	1250	230	912	312	890	193	115
31	742	-----	693	2350	-----	1470	-----	696	-----	387	191	----
TOTAL	10741	15064	11990	32419	38080	44531	30854	14696	25610	16634	11247	4061
MEAN	346	502	387	1046	1360	1436	1028	474	854	537	363	135
MAX	785	732	1170	2620	2880	3360	1600	1570	2580	2400	1220	320
MIN	171	425	138	403	637	626	230	145	286	165	97	83
CFSM	.77	1.12	.86	2.34	3.04	3.21	2.30	1.06	1.91	1.20	.81	.30
IN.	.89	1.25	1.00	2.69	3.16	3.70	2.56	1.22	2.13	1.38	.93	.34

CAL YR 1981 TOTAL 149217 MEAN 409 MAX 4120 MIN 40 CFSM .91 IN 12.39
WTR YR 1982 TOTAL 255927 MEAN 701 MAX 3360 MIN 83 CFSM 1.57 IN 21.25

03341500 WABASH RIVER AT TERRE HAUTE, IN

LOCATION.--Lat 39°28'00", long 87°25'08", in NE¼SW¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on left bank at upstream side of Wabash Avenue bridge at Terre Haute, 2.4 miles (3.9 km) upstream from Sugar Creek, 4.2 miles (6.8 km) downstream from Lost Creek, and at mile 214.4 (345.0 km).

DRAINAGE AREA.--12,265 mi² (31,766 km²).

PERIOD OF RECORD.--August 1902 to December 1903 (gage height only), February 1905 to July 1906, October 1927 to current year. Gage-height records collected at site 3,300 ft (1,010 m) upstream June 1891 to June 1897 and since December 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 205: 1905. WSP 1335: 1944. WDR Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.90 ft (134.996 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 27, 1928.

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

AVERAGE DISCHARGE.--55 years, 10,784 ft³/s (305.4 m³/s), 11.94 in/yr (303 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s (5,350 m³/s) May 20, 1943, gage height, 30.50 ft (9.296 m); minimum daily, 701 ft³/s (19.9 m³/s) Aug. 3, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 31.1 ft (9.48 m), present site and datum, discharge, 245,000 ft³/s (6,940 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 73,400 ft³/s (2,080 m³/s) Mar. 18, gage height, 24.76 ft (7.547 m); minimum daily, 2,200 ft³/s (62.3 m³/s) Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14300	11800	8120	11300	37000	50300	40300	13900	31300	9200	4850	5220
2	13700	10500	7770	10700	34200	46100	38900	12500	34500	8420	4400	5050
3	10800	9530	7390	10800	28900	42300	38400	11400	36400	14500	4130	3670
4	8570	8950	7020	21000	27000	40700	37700	10700	37000	16400	3900	3150
5	7600	8640	6300	31000	24300	42300	36800	10200	34900	12900	4500	2920
6	7560	8300	5900	33400	21200	43400	36100	9650	27500	9990	11300	2770
7	9750	7960	5660	34600	18300	42700	34700	9580	20700	8180	10400	2630
8	11200	7600	5380	34800	16400	41700	33800	9550	19600	7880	7380	2600
9	10200	7210	5300	33400	15300	40700	33300	9210	18500	7290	7200	2660
10	8650	6770	5060	27300	14200	38800	32700	9080	15000	6920	7470	2640
11	7700	6520	4790	22000	13200	37400	32400	8600	13800	9930	6820	2480
12	6970	6120	4560	18100	13000	38500	32600	8190	13300	11400	5690	2470
13	6680	5880	4480	15300	12800	40900	33400	8000	12500	9620	4800	2490
14	6120	5830	4450	13100	12700	45900	34500	7980	11500	7660	4100	2410
15	5660	5700	4270	11900	12600	51700	35700	7600	10900	6280	3740	2860
16	5480	5600	4100	11200	13000	61700	36800	7140	14100	6040	3500	2900
17	5520	5400	3960	10300	21700	68700	38100	6880	20300	5830	3310	2590
18	5690	5200	3770	9870	34200	72900	38900	6830	17600	5250	3270	2500
19	6330	5100	3590	9330	37300	71100	40900	7170	15100	11100	3310	2420
20	7220	5000	3030	8980	38600	71300	43300	7220	18300	24800	3120	2410
21	7600	5200	2200	8980	43900	70100	43800	10800	17700	24400	2950	2470
22	7250	5600	2240	11000	50000	68400	41900	13800	15500	16800	2930	2410
23	7820	5700	3780	16700	55300	66200	38000	16900	13300	14100	3130	2320
24	9940	5900	6560	17400	60000	62000	33500	15300	12000	13000	3180	2320
25	10700	5900	7280	13500	66300	56600	27700	14800	10700	10200	3260	2530
26	10800	6500	7590	11500	68400	52100	23900	13900	9500	8260	5010	2500
27	10600	7400	10400	10600	64000	48500	21300	17300	8380	7120	6160	2460
28	11300	7400	14400	10400	55800	46400	19500	22900	9220	7640	5400	2640
29	12500	7900	12500	11000	------	44800	17300	23000	9030	7250	4480	3020
30	13500	8100	11200	16200	------	43000	15600	24700	9340	6180	4120	2950
31	13900	------	11000	35500	------	41600	-------	28200	------	5740	3890	-----
TOTAL	281610	209210	194050	541160	909600	1588800	1011800	382980	537470	320280	151700	84460
MEAN	9084	6974	6260	17460	32490	51250	33730	12350	17920	10330	4894	2815
MAX	14300	11800	14400	35500	68400	72900	43800	28200	37000	24800	11300	5220
MIN	5480	5000	2200	8980	12600	37400	15600	6830	8380	5250	2930	2320
CFSM	.74	.57	.51	1.42	2.65	4.18	2.75	1.01	1.46	.84	.40	.23
IN.	.85	.63	.59	1.64	2.76	4.82	3.07	1.16	1.63	.97	.46	.26

CAL YR 1981 TOTAL 4569770 MEAN 12520 MAX 66000 MIN 1800 CFSM 1.02 IN 13.86
WTR YR 1982 TOTAL 6213120 MEAN 17020 MAX 72900 MIN 2200 CFSM 1.39 IN 18.84

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE¼SW¼ sec.30, T.7 N., R.10 W., Sullivan County, Hydrologic Unit 05120111, on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mile (0.8 km) downstream from Turtle Creek, and at mile 162.0 (260.7 km).

DRAINAGE AREA.--13,161 mi² (34,087 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to April 1939 monthly discharge only, published in WSP 1305. June 1911 to December 1914 (gage heights only) available in the Corps of Engineers office, Louisville, Ky.

REVISED RECORDS.--WSP 1335: 1939, 1950. WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.65 ft (126.385 m) National Geodetic Vertical Datum of 1929. Prior to July 17, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except period of no gage-height record, which is poor. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--44 years, 11,780 ft³/s (333.6 m³/s), 12.16 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 201,000 ft³/s (5,690 m³/s) May 21, 1943, gage height, 29.36 ft (8.949 m); minimum daily, 858 ft³/s (24.3 m³/s) Sept. 27-30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 28, 1913, reached a stage of 26.4 ft (8.05 m), from graph based on once-daily readings by Illinois Central Railroad Co., discharge, 250,000 ft³/s (7,080 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 83,500 ft³/s (2,360 m³/s) Mar. 20, gage height, 22.10 ft (6.736 m); minimum daily, 2,750 ft³/s (77.9 m³/s) Sept. 24-25.

NOTE.--No gage-height record Jan. 11 to Mar. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11600	12400	8880	12000	37000	68000	48500	16400	31200	10900	6660	7180
2	12500	11700	8890	12000	38000	65000	46300	14800	31600	10200	5980	11200
3	11900	10700	8340	12900	37000	62000	45500	13500	32600	11300	5590	7260
4	9800	9920	7980	19400	36000	57100	44500	12400	33800	18400	5340	4850
5	8270	9470	7550	26000	34000	53100	43300	11700	35300	16300	5170	4090
6	7660	9150	6940	28400	31000	50600	42100	11200	36000	13200	6410	3720
7	7910	8830	6580	30400	26000	49500	40400	11100	33700	10800	11400	3470
8	9440	8490	6340	31300	22000	48800	39100	11400	28800	9870	9990	3290
9	10200	8170	6100	32700	19000	48200	37900	10900	24400	9510	8010	3230
10	9430	7770	5970	33200	17000	47400	36600	10500	20400	8720	7930	3230
11	8290	7390	5770	32000	15500	46600	35600	10200	16600	10000	8100	3170
12	7520	7130	5550	28000	15000	45900	34600	9780	15000	12000	7400	3000
13	6980	6770	5370	20000	14500	45800	34200	9440	14100	11900	6510	2990
14	6700	6570	5320	14000	14000	46400	34000	9250	13200	10300	5850	2970
15	6250	6490	5250	10800	14000	48200	34200	9130	12300	8620	5280	2940
16	5910	6370	5120	11000	15000	52800	35100	8710	12400	7590	4950	3300
17	5840	6390	5020	11800	20000	60400	38000	8410	17500	7380	4720	3330
18	6030	6290	4840	12200	26000	68500	40700	8260	19700	7120	4530	3130
19	6100	6170	4690	12000	32000	76300	42000	8330	17300	7900	4490	2990
20	6540	6130	4490	10600	33000	82100	43400	8400	16100	17200	4450	2890
21	7180	6100	4070	10000	35000	82400	44900	9390	17800	23000	4260	2870
22	7360	6180	3530	11000	39000	80900	46600	12400	17200	21300	4090	2900
23	7200	6400	5330	18000	43000	79000	47300	14900	15400	16500	4060	2840
24	8020	6550	7170	21000	48000	77000	46100	15800	13800	14400	4220	2750
25	9430	6710	8150	19000	54000	74600	42800	14900	12500	12800	4400	2750
26	9950	6970	8330	16000	60000	71000	37200	14500	11300	10600	4490	2920
27	10000	7530	11000	14000	68000	66300	31100	15000	10300	9030	5940	2890
28	10100	8010	14500	12000	69000	61300	25700	19500	9710	8120	6660	2870
29	10800	8150	14700	13000	------	56900	21500	23400	10800	8710	6030	3010
30	11600	8340	12900	18000	------	53300	18500	27300	11000	8010	5440	3300
31	12300	------	11800	30000	------	50800	-------	28600	------	7170	5640	------
TOTAL	268810	233240	226470	582700	912000	1876200	1157700	409500	591810	358850	183990	111330
MEAN	8671	7775	7305	18800	32570	60520	38590	13210	19730	11580	5935	3711
MAX	12500	12400	14700	33200	69000	82400	48500	28600	36000	23000	11400	11200
MIN	5840	6100	3530	10000	14000	45800	18500	8260	9710	7120	4060	2750
CFSM	.66	.59	.56	1.43	2.48	4.60	2.93	1.00	1.50	.88	.45	.28
IN.	.76	.66	.64	1.65	2.58	5.30	3.27	1.16	1.67	1.01	.52	.31

CAL YR 1981	TOTAL	4671100	MEAN	12800	MAX	70300	MIN	2000	CFSM .97	IN 13.20
WTR YR 1982	TOTAL	6912600	MEAN	18940	MAX	82400	MIN	2750	CFSM 1.44	IN 19.54

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 (2.1 km) upstream from East Fork Busseron Creek, 1.9 miles (3.1 km) northwest of Hymera, 4.1 miles (6.6 km) upstream from West Fork Busseron Creek, and at mile 30.3 (48.8 km).

DRAINAGE AREA.--16.7 mi^2 (43.3 km^2).

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

REVISED RECORDS.--WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Concrete control since Sept. 12, 1969. Datum of gage is 480.00 ft (146.304 m) National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service benchmark).

REMARKS.--Records good except those of winter periods which are poor. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--16 years, 18.9 ft^3/s (0.535 m^3/s), 15.37 in/yr (390 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft^3/s (53.5 m^3/s) Sept. 12, 1974, gage height, 18.58 ft (5.761 m); maximum gage height, 19.16 ft (5.840 m) July 8, 1982; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft^3/s (51.8 m^3/s) July 8, gage height, 19.16 ft (5.840m); minimum daily, 0.06 ft^3/s (0.002 m^3/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.60	5.7	17	84	21	9.7	4.0	111	2.9	1.3	770
2	.12	.76	3.1	20	50	18	8.8	3.7	55	2.9	1.2	325
3	.09	.68	2.7	98	32	16	27	3.3	39	35	1.1	74
4	.06	.46	2.4	136	20	34	14	3.5	26	13	1.0	53
5	.07	.93	2.1	58	15	23	14	4.0	17	8.3	2.8	37
6	.53	1.0	1.9	44	13	18	14	3.4	12	5.8	3.8	23
7	.34	.76	1.8	34	11	14	11	19	35	5.6	2.4	12
8	.24	.76	1.6	27	9.5	10	11	13	29	647	2.0	6.2
9	.24	.84	1.4	17	8.5	8.1	14	8.3	17	148	1.5	3.3
10	.19	.68	1.4	12	8.1	8.1	12	6.4	12	106	1.3	2.8
11	.15	.68	1.2	8.2	7.7	40	11	4.9	8.3	104	1.6	2.7
12	.12	.60	1.1	6.7	7.2	32	11	3.8	5.7	61	1.2	2.4
13	.10	.60	1.0	5.4	6.8	86	11	3.0	4.4	44	1.0	2.1
14	.08	.53	.95	4.7	6.5	42	9.0	2.4	3.4	25	.76	1.9
15	.24	.53	.88	4.3	7.3	65	7.6	2.0	4.0	18	.58	1.5
16	.29	.68	.82	3.9	94	120	34	1.7	32	13	.48	1.2
17	1.7	.68	.76	3.7	291	54	100	1.4	22	8.3	.35	.97
18	3.6	.60	.71	3.5	205	45	47	1.5	14	5.8	.26	1.3
19	1.8	.68	.66	3.4	119	209	32	2.0	14	14	.23	.91
20	1.3	.93	.60	3.3	201	92	25	23	11	10	.20	.76
21	1.0	.76	2.4	4.8	193	53	17	36	8.7	5.6	.18	.55
22	1.0	.60	18	52	127	42	14	31	7.7	4.5	.17	.46
23	1.0	.84	99	276	97	34	11	11	6.7	3.5	.17	.40
24	.68	1.2	69	73	76	28	9.0	7.7	6.0	3.0	.20	.71
25	.60	1.0	39	47	55	32	7.5	5.5	4.6	2.7	2.3	1.2
26	.93	1.1	16	39	42	26	6.6	6.0	4.4	2.4	1.4	1.0
27	1.2	1.8	80	30	32	21	5.4	35	4.0	2.2	1.3	1.0
28	1.0	1.4	39	17	25	18	4.7	14	4.1	2.2	.97	.97
29	.84	1.3	25	16	------	16	4.5	310	4.8	2.0	.57	.62
30	.68	1.8	20	435	------	14	4.4	133	4.3	1.7	4.0	.63
31	.60	-----	13	215	------	12	-----	127	-----	1.5	3.4	-------
TOTAL	20.95	25.78	453.18	1714.9	1843.6	1251.2	507.2	830.5	527.1	1308.9	39.72	1329.58
MEAN	.68	.86	14.6	55.3	65.8	40.4	16.9	26.8	17.6	42.2	1.28	44.3
MAX	3.6	1.8	99	435	291	209	100	310	111	647	4.0	770
MIN	.06	.46	.60	3.3	6.5	8.1	4.4	1.4	3.4	1.5	.17	.40
CFSM	.04	.05	.87	3.31	3.94	2.42	1.01	1.61	1.05	2.53	.08	2.65
IN.	.05	.06	1.01	3.82	4.11	2.79	1.13	1.85	1.17	2.92	.09	2.96

CAL YR 1981 TOTAL 5394.76 MEAN 14.8 MAX 624 MIN .05 CFSM .89 IN 12.02
WTR YR 1982 TOTAL 9852.61 MEAN 27.0 MAX 770 MIN .06 CFSM 1.62 IN 21.95

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 (2.3 km) upstream from mouth, 1.5 miles (2.4 km) west of Hymera, and 3.7 miles (6.0 km) east of U.S. Highway 41.

DRAINAGE AREA.--14.4 mi^2 (37.3 km^2).

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 476.00 ft (145.085 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--16 years, 13.9 ft^3/s (0.394 m^3/s), 13.11 in/yr (333 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft^3/s (54.7 m^3/s) July 26, 1973, gage height, 13.23 ft (4.033 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft^3/s (14.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 29	2200	803	22.7	11.55	3.520	Sept. 1	1615	*1200	34.0	*12.19	3.716
July 8	1530	813	23.0	11.57	3.527						

Minimum daily discharge, .12 ft^3/s (0.003 m^3/s) Oct. 14, Aug. 23.

NOTE.--No gage-height record Dec. 9 to Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.76	6.6	14	66	17	8.5	3.5	69	2.2	.93	445
2	.26	1.0	5.0	18	40	15	7.5	3.3	14	2.3	.84	26
3	.20	.90	2.4	87	23	23	25	3.2	8.5	53	.80	7.6
4	.20	.70	2.1	118	15	29	12	2.9	6.8	7.7	.78	4.6
5	.23	1.4	1.9	52	12	15	9.0	2.8	5.8	4.2	.90	3.4
6	.44	1.5	1.7	36	10	11	15	2.7	4.5	3.1	1.6	2.8
7	.34	1.1	1.5	29	8.8	9.0	8.8	25	26	2.4	.68	2.5
8	.27	1.1	1.4	22	7.8	7.2	8.8	11	10	291	.50	3.0
9	.27	1.2	1.3	13	7.3	5.8	13	6.0	6.3	25	.45	2.7
10	.22	1.0	1.2	10	6.8	17	10	4.3	4.3	47	.55	2.4
11	.18	1.0	1.1	7.2	6.4	43	9.5	3.7	3.2	63	2.1	2.0
12	.15	.89	1.0	6.7	6.0	30	8.8	3.1	2.9	9.4	1.3	1.8
13	.13	.88	.92	4.6	5.6	68	8.2	2.6	2.7	6.0	.90	2.1
14	.12	.79	.83	4.0	6.5	45	6.9	2.3	2.3	4.6	.64	3.1
15	.37	.79	.75	3.6	7.7	60	6.0	2.2	2.4	3.8	.46	1.8
16	.45	1.0	.70	3.4	40	115	35	1.9	23	3.3	.35	1.1
17	1.3	1.0	.66	3.2	250	47	115	1.9	10	2.9	.27	.90
18	3.0	.90	.62	3.1	180	40	40	2.2	4.7	2.7	.22	3.8
19	2.3	1.1	.58	3.0	110	150	11	2.8	6.4	16	.19	1.7
20	1.7	1.4	.55	4.0	170	70	12	31	3.9	6.7	.17	.86
21	1.4	1.0	4.5	9.0	165	44	9.0	73	2.7	3.9	.15	.54
22	1.2	.90	17	45	130	32	7.0	63	2.2	4.3	.13	.41
23	1.1	1.3	87	230	88	27	7.2	12	1.9	3.3	.12	.36
24	.96	1.8	66	80	60	24	6.5	7.3	1.6	2.4	.16	.45
25	.88	1.5	35	31	42	28	6.0	5.9	1.5	2.1	4.0	1.0
26	1.4	1.6	16	15	30	15	5.0	8.9	1.4	2.0	1.3	.87
27	1.8	2.6	68	9.0	23	13	4.4	65	1.4	1.9	1.2	.82
28	1.5	2.0	32	5.0	19	12	4.0	14	2.4	2.5	1.0	.78
29	1.2	1.9	24	4.5	------	12	3.8	346	2.9	1.6	.56	.65
30	1.0	2.5	17	380	------	11	3.6	103	8.1	1.3	5.5	.55
31	.87	-----	12	175	------	9.6	-----	97	-----	1.1	3.6	------
TOTAL	25.94	37.51	411.31	1425.3	1535.9	1044.6	426.5	913.5	242.8	582.7	32.35	525.59
MEAN	.84	1.25	13.3	46.0	54.9	33.7	14.2	29.5	8.09	18.8	1.04	17.5
MAX	3.0	2.6	87	380	250	150	115	346	69	291	5.5	445
MIN	.12	.70	.55	3.0	5.6	5.8	3.6	1.9	1.4	1.1	.12	.36
CFSM	.06	.09	.92	3.19	3.81	2.34	.99	2.05	.56	1.31	.07	1.22
IN.	.07	.10	1.06	3.68	3.97	2.70	1.10	2.36	.63	1.51	.08	1.36

CAL YR 1981 TOTAL 4340.58 MEAN 11.9 MAX 677 MIN .02 CFSM .83 IN 11.21
WTR YR 1982 TOTAL 7204.00 MEAN 19.7 MAX 445 MIN .12 CFSM 1.37 IN 18.61

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 (1.6 km) northeast of Cass, and 2.9 miles (4.7 km) above mouth.

DRAINAGE AREA.--9.16 mi² (2.7 km²).

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 474.73 ft (144.698 m) National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 303 ft³/s (8.58 m³/s) Sept. 1, gage height, 7.98 ft (2.432 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Dec. 18-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	3.5	12	7.2	32	15	9.6	7.4	43	4.7	3.5	303
2	5.6	4.0	5.2	8.5	22	15	9.3	7.2	11	4.4	3.6	18
3	7.2	3.0	3.6	40	16	15	29	6.9	7.4	9.5	4.2	7.2
4	6.0	2.3	3.2	48	13	23	12	6.9	6.0	7.8	3.1	6.3
5	6.7	2.9	2.9	20	11	17	12	7.2	5.0	6.8	3.8	7.4
6	17	4.3	2.7	16	9.6	16	12	7.4	4.0	6.3	5.3	6.9
7	9.3	4.6	2.5	13	8.5	15	11	29	7.4	6.0	3.4	6.7
8	7.2	4.2	2.4	9.6	7.7	13	11	15	6.5	290	3.2	4.1
9	6.0	5.8	2.2	7.2	7.0	13	12	9.6	5.1	35	4.2	4.1
10	5.0	3.5	2.1	6.1	6.5	15	11	8.5	4.7	5.5	4.8	2.7
11	4.3	3.4	2.0	5.3	6.1	27	9.9	7.9	4.6	5.4	11	2.4
12	3.8	4.5	1.9	4.7	5.7	22	9.6	7.9	4.4	3.9	5.5	2.3
13	3.7	2.7	1.9	4.3	5.5	59	9.3	7.9	4.2	3.1	6.4	3.6
14	3.6	2.5	1.8	3.9	5.4	22	8.2	8.2	4.0	2.9	5.4	4.6
15	7.0	2.6	1.7	3.6	6.0	28	7.9	9.6	5.0	3.1	4.8	2.7
16	10	5.2	1.6	3.4	55	249	35	8.2	8.9	3.1	4.3	2.4
17	16	3.8	1.6	3.2	102	31	58	9.3	6.7	2.8	3.9	4.8
18	25	3.8	1.5	3.0	59	21	15	17	6.1	3.3	3.5	4.7
19	19	7.2	1.5	2.9	32	77	11	18	6.6	14	3.2	3.9
20	15	6.0	1.5	3.3	31	44	11	12	5.8	5.1	3.1	3.1
21	12	4.5	4.0	7.0	27	19	9.3	40	5.3	3.8	3.0	2.5
22	10	3.7	11	18	22	14	8.5	29	5.0	3.6	2.9	2.4
23	14	3.9	35	98	22	12	7.9	16	4.8	3.9	2.8	2.6
24	11	5.4	24	44	20	11	7.7	15	4.5	3.6	1.9	4.3
25	9.0	4.6	15	24	17	15	7.7	13	4.3	3.2	1.7	4.3
26	10	5.0	8.0	18	16	14	7.7	86	4.2	3.2	1.6	3.3
27	14	8.0	28	3.7	16	11	7.4	101	4.0	3.1	2.0	3.0
28	10	6.3	14	3.5	15	9.6	7.2	21	3.9	3.1	1.7	2.8
29	8.0	5.8	10	25	-----	9.6	7.9	246	4.2	3.5	1.8	2.7
30	6.0	6.8	7.8	155	-----	9.6	7.7	39	5.0	4.4	14	3.0
31	4.7	-----	6.0	77	-----	9.6	-----	119	-----	3.6	4.5	-----
TOTAL	291.7	133.8	218.6	686.4	596.0	871.4	382.8	936.1	201.6	461.7	128.1	431.8
MEAN	9.41	4.46	7.05	22.1	21.3	28.1	12.8	30.2	6.72	14.9	4.13	14.4
MAX	25	8.0	35	155	102	249	58	246	43	290	14	303
MIN	3.6	2.3	1.5	2.9	5.4	9.6	7.2	6.9	3.9	2.8	1.6	2.3
CFSM	1.03	.49	.77	2.41	2.33	3.07	1.40	3.30	.73	1.63	.45	1.57
IN.	1.18	.54	.89	2.79	2.42	3.54	1.55	3.80	.82	1.87	.52	1.75

WTR YR 1982 TOTAL 5340.0 MEAN 14.6 MAX 303 MIN 1.5 CFSM 1.59 IN 21.68

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 (2.4 km) southeast of Sullivan, 1.6 miles (2.6 km) east of intersection of U.S. Highway 41 and State Highway 54, 1.7 miles (2.7 km) upstream from Buttermilk Creek, and at mile 16.7 (26.9 km).

DRAINAGE AREA.--138 mi^2 (357 km^2).

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

REVISED RECORDS.--WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 440.00 ft (134.112 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records good. Flow affected by surface-mined areas and U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--16 years, 147 ft^3/s (4.163 m^3/s), 14.47 in/yr (368 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,050 ft^3/s (171 m^3/s) July 29, 1979, gage height, 16.28 ft (4.962 m); minimum daily, 0.9 ft^3/s (0.025 m^3/s) Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,790 ft^3/s (79.0 m^3/s) Feb. 1, gage height, 14.28 ft (4.353 m); minimum daily, 3.7 ft^3/s (0.105 m^3/s) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	11	62	138	2670	192	106	47	1190	74	9.0	593
2	20	11	54	126	1390	137	92	44	709	57	8.1	1320
3	18	12	35	465	800	123	206	40	387	166	7.8	1220
4	15	11	29	815	560	184	153	37	271	159	7.4	506
5	14	12	24	577	400	228	115	35	209	92	7.2	254
6	27	14	22	361	250	150	142	33	155	64	13	177
7	23	14	23	294	165	125	111	106	138	50	16	131
8	11	13	18	199	125	103	104	183	224	176	11	96
9	12	13	16	166	100	92	127	94	153	888	9.4	67
10	9.2	37	15	109	94	87	121	69	113	319	9.1	51
11	8.5	75	14	90	87	162	108	55	86	397	19	41
12	8.1	71	13	70	81	242	98	46	70	209	15	34
13	8.0	68	12	61	75	550	92	41	60	137	9.7	32
14	7.9	68	11	53	70	328	81	34	50	96	9.1	31
15	8.0	66	10	47	76	406	72	28	43	69	7.1	28
16	7.0	40	9.6	43	654	744	129	26	64	52	6.3	25
17	7.5	13	9.2	40	1490	647	652	23	130	41	5.8	21
18	34	13	8.8	38	1870	353	386	24	77	33	5.3	29
19	29	12	8.4	37	1640	853	229	68	64	67	4.8	23
20	15	26	8.0	36	1160	1250	190	48	60	72	4.3	20
21	11	19	16	50	1160	727	152	233	54	46	4.3	18
22	9.8	16	41	101	1030	405	121	301	42	33	4.1	15
23	15	13	694	987	701	293	100	199	37	32	3.7	14
24	14	18	664	1120	550	228	87	127	30	25	6.3	14
25	13	18	362	720	392	216	78	89	26	20	6.3	19
26	14	16	244	470	317	239	71	114	24	19	7.1	16
27	19	40	460	300	275	175	64	357	24	18	7.6	14
28	17	25	402	195	242	142	55	431	37	16	7.1	13
29	15	19	219	126	-----	127	51	442	56	14	9.1	12
30	13	17	145	732	-----	115	49	1310	127	12	17	11
31	11	----	125	1980	-----	123	----	1400	----	10	31	----
TOTAL	458.0	801	3774.0	10546	18424	9746	4142	6084	4710	3463	288.0	4845
MEAN	14.8	26.7	122	340	658	314	138	196	157	112	9.29	162
MAX	34	75	694	1980	2670	1250	652	1400	1190	888	31	1320
MIN	7.0	11	8.0	36	70	87	49	23	24	10	3.7	11
CFSM	.11	.19	.88	2.46	4.77	2.28	1.00	1.42	1.14	.81	.07	1.17
IN.	.12	.22	1.02	2.84	4.97	2.63	1.12	1.64	1.27	.93	.08	1.31

CAL YR 1981 TOTAL 48289.1 MEAN 132 MAX 3080 MIN 6.4 CFSM .96 IN 13.02
WTR YR 1982 TOTAL 67281.0 MEAN 184 MAX 2670 MIN 3.7 CFSM 1.33 IN 18.14

03342300 BUSSERON CREEK NEAR SULLIVAN, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 05...	1130	12	14.8	60	2.0	100
DEC 11...	1010	54	----	25	3.6	---

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 (3 m) downstream from bridge on State Highway 58, 1.5 miles (2.4 km) northwest of Carlisle, and 7.2 miles (11.6 km) upstream from mouth.

DRAINAGE AREA.--228 mi^2 (591 km^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 (129.650 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark). Prior to Nov. 8, 1950, nonrecording gage at same site and datum. Nov. 8, 1950, to Oct. 31, 1969, at site 200 ft (61 m) upstream at same datum.

REMARKS.--Records good. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures and surface-mined areas.

AVERAGE DISCHARGE.--39 years, 225 ft^3/s (6.372 m^3/s), 13.40 in/yr (340 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft^3/s (249 m^3/s) Jan. 5, 1950, gage height, 20.05 ft (6.111 m); maximum gage height, 20.30 ft (6.187 m) May 9, 1961; no flow many days in 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,200 ft^3/s (62.3 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 31	1400	*3780	107.0	*16.37	4.990	Sept. 1	2400	2370	67.1	13.98	4.261
Feb. 17	1600	2540	71.9	14.33	4.368						

Minimum daily discharge, 7.3 ft^3/s (0.21 m^3/s) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	19	193	235	3040	434	225	76	2080	156	14	1170
2	21	20	120	219	2840	336	190	71	1800	108	14	2050
3	20	23	80	753	2220	271	535	64	1140	215	13	1600
4	20	22	66	1250	1400	307	404	59	514	270	13	1380
5	18	22	58	1150	696	395	271	55	352	144	12	625
6	21	27	53	728	426	257	328	54	263	100	24	291
7	29	28	52	481	280	211	264	185	241	76	22	207
8	21	24	45	313	220	170	236	367	349	264	19	151
9	19	24	39	266	180	150	286	193	263	722	16	106
10	19	28	35	210	160	140	276	131	192	724	15	82
11	17	72	31	180	150	180	239	101	142	486	43	66
12	15	75	29	143	144	362	213	83	114	344	29	57
13	14	72	27	112	132	668	194	70	97	197	19	52
14	14	71	26	95	127	688	169	59	78	134	15	52
15	14	69	25	84	138	580	148	51	68	92	13	48
16	15	66	24	76	738	1220	254	46	91	66	12	44
17	18	30	23	72	2420	1300	944	41	177	52	10	38
18	51	24	22	68	2360	885	848	47	125	43	9.6	47
19	42	26	21	65	2190	1430	422	159	93	183	8.7	42
20	32	52	20	62	2040	1930	330	101	84	284	7.9	36
21	21	41	22	77	1750	1770	273	401	78	93	7.9	32
22	20	32	86	320	1510	1280	216	456	60	60	7.6	27
23	23	28	1230	1860	1330	756	182	333	51	48	7.3	24
24	25	46	1190	1510	1040	589	154	204	43	41	8.2	24
25	21	44	641	1510	704	529	134	145	38	32	10	33
26	23	39	319	1170	541	566	121	156	32	28	12	29
27	36	88	876	691	501	434	110	674	34	26	14	25
28	34	60	794	423	476	337	93	751	75	25	14	24
29	28	44	413	320	-----	282	83	756	144	23	12	22
30	24	41	250	1460	-----	243	79	1390	500	21	29	20
31	21	----	219	3400	-----	278	----	1790	----	18	48	----
TOTAL	720	1257	7029	19303	29753	18978	8221	9069	9318	5075	499.2	8404
MEAN	23.2	41.9	227	623	1063	612	274	293	311	164	16.1	280
MAX	51	88	1230	3400	3040	1930	944	1790	2080	724	48	2050
MIN	14	19	20	62	127	140	79	41	32	18	7.3	20
CFSM	.10	.18	1.00	2.73	4.66	2.68	1.20	1.29	1.36	.72	.07	1.23
IN.	.12	.21	1.15	3.15	4.85	3.10	1.34	1.48	1.52	.83	.08	1.37

CAL YR 1981 TOTAL 84376.0 MEAN 231 MAX 3580 MIN 13 CFSM 1.01 IN 13.77
WTR YR 1982 TOTAL 117626.2 MEAN 322 MAX 3400 MIN 7.3 CFSM 1.41 IN 19.19

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 (9.1 m) east of Illinois State Highway 33, 300 ft (91 m) upstream from Kelso Creek, 570 ft (174 m) downstream from U.S. Highway 50 bridge, 5.1 miles (8.2 km) downstream from Maria Creek, 7.5 miles (12.1 km) upstream from Embarras River and at mile 129.6 (208.5 km) .

DRAINAGE AREA.--13,706 mi² (35,498 km²).

PERIOD OF RECORD.--October 1929 to current year. Prior to December 1929 monthly discharge only, published in WSP 1305. Gage-height records for flood peaks in 1867 and 1883, intermittent records 1887-1904, and continuous since November 1904, collected at site 1.8 miles (2.9 km) downstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1173: 1943 (maximum gage height only). WSP 1335: 1930-31, 1933, 1936. WSP 1909: 1955. WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.43 ft (120.222 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1968, to June 19, 1979, recording gage at site 570 ft (174 m) upstream at same datum. Oct. 1, 1960, to September 30, 1968, nonrecording gage at site 1.8 miles (2.9 km) downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water-stage recorder at site 2.8 miles (4.5 km) upstream from base gage at datum 0.80 ft (0.244 m) lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

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

AVERAGE DISCHARGE.--53 years, 11,940 ft³/s (338.2 m³/s), 11.83 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s (5,350 m³/s) May 22, 23, 1943, gage height, 29.33 ft (8.940 m), at former site 1.8 miles (2.9 km) downstream and at present datum; minimum daily, 770 ft³/s (21.8 m³/s) Aug. 4, 5, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1913, reached a stage of 26.3 ft (8.02 m), at former site 1.8 miles (2.9 km) downstream and at present datum, from floodmarks, determined by Corps of Engineers, discharge, 255,000 ft³/s (7,220 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 76,000 ft³/s (2,150 m³/s) Mar 21, based on nonrecording gage at downstream site; minimum daily, 2,870 ft³/s (81.3 m³/s) Sep. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11800	12900	9090	12700	35900	66600	45000	18200	30000	13000	7200	7000
2	13100	12600	9560	12900	37400	63500	43000	16300	32000	11700	6500	14700
3	12600	11700	9060	13700	38200	59100	42000	14800	32900	10800	6300	12900
4	11700	10900	8460	18200	37900	54100	41000	13600	32900	10800	6100	8330
5	10300	10200	8010	24000	36700	49500	40000	12600	33100	15100	6100	6380
6	9100	9690	7430	27400	34400	46400	39000	11900	33300	17800	6500	5250
7	8600	9330	6960	29000	31200	44600	38000	11700	33500	15800	12000	4720
8	9800	9070	6670	30200	26800	43500	37000	12500	32200	12200	13200	4380
9	11200	8700	6400	30900	21800	42700	35700	12000	29000	11000	11700	4190
10	11200	8250	6220	31200	18800	42200	34800	11100	25000	11200	10000	4000
11	10000	7870	6030	30100	16800	41400	34000	10700	20500	12200	9300	3800
12	8800	7600	5790	25800	15400	41000	33300	10300	17600	13200	9100	3500
13	8100	7290	5540	16500	14700	42000	32700	9750	16300	12700	8800	3400
14	6900	6970	5410	12300	14500	43000	32200	9340	15300	11000	7900	3300
15	6650	6780	5370	11100	14300	46000	32000	9150	14200	10000	7000	3110
16	6210	6650	5220	11300	15300	49000	32200	8830	13700	8800	6300	3180
17	6010	6560	5120	12200	23000	52000	33900	8380	16300	8100	5600	3510
18	6110	6470	4860	12700	30100	56000	35900	8150	20700	7400	5200	3460
19	6200	6430	4690	12200	33400	62000	37600	8180	20500	7200	4700	3210
20	6360	6410	4500	10900	35900	70000	38600	8340	17900	11500	4600	3080
21	6900	6250	4270	10200	37000	75000	38800	8630	18600	22600	4500	2990
22	7410	6220	3820	10600	39000	74000	39500	11800	18800	24700	4300	2970
23	7400	6370	5720	18700	43000	72000	40500	14100	17500	21200	4200	2970
24	7500	6590	8140	24000	47000	70000	40900	15900	16700	17200	4300	2920
25	8910	6750	9130	23000	52000	66000	40000	15600	15300	15300	4500	2870
26	10100	6940	9340	19600	56000	63000	37600	15100	13800	13500	4600	2900
27	10500	7330	10900	16500	61000	59000	34200	15700	12000	11700	4590	3040
28	10600	7980	15400	13300	64000	56000	29700	18500	10300	10000	6130	2940
29	10900	8260	17000	12100	------	52000	25000	22000	11200	9100	6210	3010
30	11600	8420	15200	15400	------	49000	21000	25000	13200	8100	5570	3210
31	12300	------	13400	30900	------	47000	-------	28000	------	7700	5660	------
TOTAL	284860	243480	242710	579600	931500	1697600	1085100	416150	634300	392600	208660	135220
MEAN	9189	8116	7829	18700	33270	54760	36170	13420	21140	12660	6731	4507
MAX	13100	12900	17000	31200	64000	75000	45000	28000	33500	24700	13200	14700
MIN	6010	6220	3820	10200	14300	41000	21000	8150	10300	7200	4200	2870
CFSM	.67	.59	.57	1.36	2.43	4.00	2.64	.98	1.54	.92	.49	.33
IN.	.77	.66	.66	1.57	2.53	4.61	2.95	1.13	1.72	1.07	.57	.37

CAL YR 1981 TOTAL 4800020 MEAN 13150 MAX 59800 MIN 2100 CFSM .96 IN 13.03
WTR YR 1982 TOTAL 6851780 MEAN 18770 MAX 75000 MIN 2870 CFSM 1.37 IN 18.60

03347000 WHITE RIVER AT MUNCIE, IN

LOCATION.--Lat 40°12'15", long 85°23'14", in SE¼NW¼ Hackley Reserve, Delaware County, Hydrologic Unit 05120201, on right bank 200 ft (61 m) downstream from Walnut Street bridge in Muncie, 6 miles (10 km) upstream from Bell Creek, and at mile 315.8 (508.1 km).

DRAINAGE AREA.--241 mi² (624 km²).

PERIOD OF RECORD.--November 1930 to current year. Prior to October 1948, published as West Fork White River at Muncie. Daily gage heights from July 1923 to December 1929 are available from the district office.

REVISED RECORDS.--WSP 1335: 1931-32(M), 1936(M), 1938, 1948. WSP 1435: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 917.10 ft (279.532 m) National Geodetic Vertical Datum of 1929 (city of Muncie bench mark). See WSP 1705 for history of changes prior to Jan. 28, 1942. Jan. 28, 1942, to Apr. 27, 1964, water-stage recorder at present site at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Natural flow affected by regulation of Prairie Creek Reservoir and by diversion of municipal water supply by Muncie Water Works Co. Records of diversion available since October 1937.

AVERAGE DISCHARGE.--51 years (1931 to current year), 209 ft³/s (5.919 m³/s), 11.77 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft³/s (405 m³/s) Apr. 21, 1964, gage height, 14.98 ft (4.566 m) present datum; maximum gage height, 21.07 ft (6.422 m) Jan. 15, 1937, present datum; minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Sept. 16, 17, 23-25, 1954, and Oct. 10, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 22.6 ft (6.89 m) in March 1913, present datum, discharge, 20,000 ft³/s (566 m³/s).

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 31	0700	ice jam		*13.11	3.996	Mar. 17	0200	*2610	73.9	7.61	2.320
Feb. 24	1100	2520	71.4	7.51	2.289						

Minimum daily discharge, 7.0 ft³/s (0.198 m³/s) Sept. 19-22, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	36	29	156	904	586	392	96	561	120	23	15
2	36	25	26	138	542	1000	310	93	396	82	21	18
3	35	16	26	222	408	733	429	88	228	68	19	18
4	35	15	26	1460	300	811	472	86	161	63	18	21
5	34	15	26	1220	250	1580	335	85	132	54	18	18
6	34	15	26	557	210	749	307	82	109	43	33	14
7	33	15	26	365	190	412	296	101	93	53	42	13
8	35	16	21	260	170	293	342	300	85	47	43	13
9	36	15	23	200	150	240	416	303	77	42	42	13
10	37	19	30	170	130	246	528	201	193	45	33	13
11	37	15	31	170	115	1400	722	152	107	48	29	12
12	36	15	29	185	105	1910	561	126	78	46	26	10
13	35	13	29	190	90	1910	437	107	68	34	23	10
14	35	13	29	185	80	1310	384	95	60	29	22	12
15	35	13	28	175	70	782	388	88	68	27	23	12
16	35	13	29	155	120	1570	380	82	293	24	23	11
17	42	14	30	130	600	2020	490	83	638	22	19	9.0
18	49	14	29	135	1880	917	523	74	331	26	16	9.0
19	63	21	22	140	1400	794	380	85	201	32	18	7.0
20	56	21	20	140	1170	1960	222	116	152	30	23	7.0
21	43	21	24	135	2100	1260	185	396	130	26	24	7.0
22	51	22	30	130	1550	696	158	225	109	38	25	7.0
23	49	21	600	500	1650	499	143	147	90	47	24	7.5
24	49	30	1110	800	2200	404	134	114	75	32	23	7.0
25	48	35	404	600	972	361	130	93	68	25	25	8.4
26	48	43	228	400	504	412	124	82	63	21	30	11
27	75	48	228	300	384	376	116	95	59	16	19	20
28	100	42	234	260	380	321	105	324	56	32	20	18
29	87	33	175	240	-----	290	100	267	286	30	8.4	12
30	67	28	136	900	-----	290	98	280	228	29	8.0	8.6
31	40	----	136	1300	-----	523	----	255	----	24	14	-----
TOTAL	1433	662	3840	11918	18624	26655	9607	4721	5195	1255	734.4	361.5
MEAN	46.2	22.1	124	384	665	860	320	152	173	40.5	23.7	12.1
MAX	100	48	1110	1460	2200	2020	722	396	638	120	43	21
MIN	33	13	20	130	70	240	98	74	56	16	8.0	7.0
CFSM	.19	.09	.52	1.59	2.76	3.57	1.33	.63	.72	.17	.10	.05
IN.	.22	.10	.59	1.84	2.87	4.11	1.48	.73	.80	.19	.11	.06

CAL YR 1981 TOTAL 66954.0 MEAN 183 MAX 3520 MIN 13 CFSM .76 IN 10.33
WTR YR 1982 TOTAL 85005.9 MEAN 233 MAX 2200 MIN 7.0 CFSM .97 IN 13.12

03347500 BUCK CREEK NEAR MUNCIE, IN

LOCATION.--Lat 40°08'05", long 85°22'25", in SW¼SE¼ sec.34, T.20 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on left bank at downstream side of bridge on County Road 400 South, 1.0 mile (1.6 km) upstream from Muncie Water Works Co. pumping station, 4.2 miles (6.8 km) southeast of court house in Muncie, and at mile 10.6 (17.0 km).

DRAINAGE AREA.--35.5 mi^2 (91.9 km^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 (287.935 m) National Geodetic Vertical Datum of 1929. Prior to May 5, 1955, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--28 years, 36.0 ft^3/s (1.020 m^3/s), 13.77 in/yr (350 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft^3/s (50.4 m^3/s) Apr. 21, 1964, gage height, 13.96 ft (4.255 m); minimum daily, 4.7 ft^3/s (0.13 m^3/s) Jan. 17, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 15 ft (4.6 m), from information by local residents. Date unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	0800	450	12.7	7.75	2.362	Feb. 20	2400	468	13.3	7.90	2.408
Jan. 23	0900	740	21.0	9.82	2.993	Feb. 23	2300	614	17.4	8.99	2.740
Jan. 30	1600	574	16.3	8.72	2.658	Mar. 16	----	435	12.3	7.62	2.323
Feb. 17	0900	451	12.8	7.76	2.365	Aug. 7	1600	*865	24.5	*10.53	3.210

Minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Dec. 20, Sept. 12, 13, 19-26, 28-30.

NOTE.--No gage-height record Mar. 4 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	21	19	51	82	120	40	32	123	23	16	16
2	18	20	18	44	57	127	38	31	58	22	16	17
3	18	20	18	80	47	82	61	31	40	23	16	16
4	17	20	19	315	40	138	54	30	34	22	16	15
5	17	20	18	112	36	118	41	30	32	21	16	15
6	18	22	17	78	31	78	42	30	29	21	16	15
7	18	21	17	61	30	58	43	36	28	21	372	15
8	17	19	17	46	29	50	43	42	27	21	141	14
9	17	18	17	40	28	43	45	34	27	20	67	14
10	17	18	16	33	24	38	54	32	27	22	42	14
11	17	17	16	30	23	250	59	30	25	21	34	14
12	17	17	16	27	22	212	48	29	25	20	27	13
13	17	17	15	24	21	239	44	28	24	19	25	13
14	19	16	15	23	20	141	40	28	23	19	23	14
15	19	16	15	22	24	122	38	27	28	19	22	14
16	20	16	15	20	74	320	45	27	92	18	21	14
17	18	16	16	18	379	199	66	27	66	18	22	14
18	26	16	15	19	213	130	56	30	40	19	19	14
19	21	17	14	20	141	170	48	29	35	21	19	13
20	19	19	13	22	192	265	42	27	32	19	20	13
21	18	18	15	23	301	130	39	66	31	19	19	13
22	20	17	31	24	196	81	38	35	29	21	18	13
23	21	17	177	395	293	69	37	30	26	19	18	13
24	19	23	92	101	249	62	36	28	25	18	20	13
25	19	21	59	56	101	58	36	27	24	18	30	13
26	20	21	49	41	73	68	35	27	24	17	20	13
27	32	25	71	35	66	60	34	35	23	17	18	14
28	36	21	64	32	77	56	33	60	26	18	17	13
29	27	20	50	30	----	50	33	37	29	17	16	13
30	24	19	44	319	----	46	32	52	24	17	16	13
31	23	----	42	228	----	42	----	36	----	16	17	----
TOTAL	627	568	1020	2369	2869	3622	1300	1043	1076	606	1159	418
MEAN	20.2	18.9	32.9	76.4	102	117	43.3	33.6	35.9	19.5	37.4	13.9
MAX	36	25	177	395	379	320	66	66	123	23	372	17
MIN	17	16	13	18	20	38	32	27	23	16	16	13
CFSM	.57	.53	.93	2.15	2.87	3.30	1.22	.95	1.01	.55	1.05	.39
IN.	.66	.60	1.07	2.48	3.01	3.80	1.36	1.09	1.13	.64	1.21	.44

CAL YR 1981 TOTAL 12308 MEAN 33.7 MAX 440 MIN 10 CFSM .95 IN 12.90
WTR YR 1982 TOTAL 16677 MEAN 45.7 MAX 395 MIN 13 CFSM 1.29 IN 17.48

03347500 BUCK CREEK NEAR MUNCIE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC 09...	1136	163	3.5	42	18
JAN 20...	1126	22	2.0	115	6.9

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 (76 m) upstream from municipal water-supply plant in Anderson, 1 mile (2 km) upstream from Killbuck Creek, and at mile 293.3 (471.9 km).

DRAINAGE AREA.--406 mi² (1,052 km²).

PERIOD OF RECORD.--July 1925 to September 1926, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 950 ft (290 m) downstream December 1910 to February 1918, 250 ft (76 m) downstream from February 1918 to Sept. 14, 1973, and at present site since Sept. 15, 1973, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Anderson.

REVISED RECORDS.--WSP 1335: 1932, 1934-35, 1936(M), 1938-40. WSP 1385: 1950(P). WSP 1725: 1956 (P). WSP 1909: 1956. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 825.02 ft (251.466 m) National Geodetic Vertical Datum of 1929. Prior to May 12, 1934, nonrecording gage at present site and datum. May 12, 1934, to Sept. 14, 1973, nonrecording gage at site 250 ft (76 m) downstream at same datum. Sept. 15, 1973, to Sept. 23, 1976, nonrecording gage at present site and datum.

REMARKS.--Records good, except those for winter periods which are poor. Prior to Sept. 15, 1973, the City of Anderson diverted water for its municipal supply above the gage then in use.

AVERAGE DISCHARGE.--52 years, 381 ft³/s (10.79 m³/s), 12.74 in/yr (324 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s (530 m³/s) Apr. 21, 1964, gage height, 19.41 ft (5.916 m); maximum gage height, 19.96 ft (6.084 m) June 14, 1958; minimum daily discharge, 9.1 ft³/s (0.26 m³/s) Sept. 24, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23.6 (7.19 m) Mar. 25, 1913, at site 250 ft (76 m) downstream and at present datum, based on determination of National Weather Service at site then in use, discharge, 28,000 ft³/s (793 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft³/s (76.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	2300	3080	87.2	9.35	2.850	Mar. 5	0000	2980	84.4	9.25	2.819
Jan. 24	0700	ice jam		12.04	3.670	Mar. 12	0700	3690	105	9.90	3.018
Jan. 31	1100	ice jam		*13.55	4.130	Mar. 17	1100	3660	104	9.88	3.011
Feb. 17	2300	ice jam		11.91	3.630	Mar. 20	1500	3410	96.6	9.65	2.941
Feb. 24	1000	*3800	108	10.14	3.091						

Minimum daily discharge, 60 ft³/s (1.70 m³/s) Dec. 20, result of freeze up.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	134	112	334	1600	1040	895	247	863	245	111	85
2	107	129	112	309	1200	1820	654	244	827	186	108	89
3	104	126	107	398	850	1540	835	236	461	169	104	98
4	106	121	107	2210	600	1220	863	232	306	160	108	85
5	105	119	103	2360	450	2710	674	224	254	148	104	83
6	112	117	96	1190	350	1690	624	217	220	133	105	75
7	108	114	96	735	310	966	582	263	197	140	967	75
8	105	107	94	553	290	661	624	388	190	227	1350	77
9	106	103	91	400	260	531	737	534	184	141	431	74
10	107	100	91	290	240	478	950	391	218	131	269	74
11	108	100	90	290	225	1750	1200	310	237	139	207	73
12	109	94	90	310	210	3390	950	271	180	129	174	69
13	110	89	90	310	195	3000	780	252	168	120	153	69
14	109	89	89	300	185	2580	680	233	156	112	140	73
15	114	87	91	290	170	1640	640	227	171	106	126	74
16	114	89	90	260	220	2130	610	217	580	104	121	71
17	119	89	92	220	1000	3400	750	214	1110	100	119	69
18	169	87	92	220	2500	1980	1000	202	668	110	112	67
19	153	94	70	230	2380	1480	700	202	406	146	106	63
20	155	122	60	230	1980	3020	550	208	290	126	120	63
21	138	103	75	220	3290	2540	450	544	267	111	146	64
22	148	94	100	210	3000	1540	370	478	227	110	106	63
23	178	91	700	700	2740	1100	332	302	195	162	106	63
24	140	117	1370	1300	3630	868	314	248	181	128	114	65
25	134	117	685	900	2200	778	305	224	160	109	144	67
26	139	119	436	600	1210	838	298	202	160	104	126	68
27	219	144	457	420	874	778	285	197	154	100	114	103
28	263	139	536	380	801	647	266	444	167	108	98	100
29	220	124	391	350	-----	571	253	476	245	118	95	89
30	182	112	303	900	-----	543	240	467	413	110	88	72
31	157	----	264	2100	-----	1350	-----	455	----	116	87	----
TOTAL	4252	3270	7180	19519	32960	48578	18420	9749	9864	4157	6259	2260
MEAN	137	109	232	630	1177	1567	614	302	329	134	202	75.3
MAX	263	144	1370	2360	3630	3400	1200	544	1110	245	1350	103
MIN	104	87	60	210	170	478	240	197	154	100	87	63
CFSM	.34	.27	.57	1.55	2.90	3.86	1.51	.74	.81	.33	.50	.19
IN.	.39	.30	.66	1.79	3.02	4.45	1.69	.86	.90	.38	.57	.21

CAL YR 1981 TOTAL 120017 MEAN 329 MAX 4620 MIN 60 CFSM .81 IN 11.00
WTR YR 1982 TOTAL 166069 MEAN 455 MAX 3630 MIN 60 CFSM 1.12 IN 15.22

03348020 KILLBUCK CREEK NEAR GASTON, IN

LOCATION.--Lat 40°15'45", long 85°30'53", in SE¼SW¼ sec.16, T.21 N., R.9 E., Delaware County, Hydrologic Unit 05120201, on right bank 30 ft (9 m) upstream from bridge on County Road 500 North, 3.6 miles (5.8 km) southwest of Gaston, and at mile 15.6 (25.1 km).

DRAINAGE AREA.--25.5 mi^2 (66.0 km^2).

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

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

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

AVERAGE DISCHARGE.--14 years, 25.7 ft^3/s (0.728 m^3/s), 13.68 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1200 ft^3/s (34.0 m^3/s) June 2, 1980, gage height, 12.70 ft (3.871 m); minimum daily, 0.76 ft^3/s (0.022 m^3/s) Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft^3/s (7.08 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	1500	292	8.27	9.89	3.014	Mar. 11	2000	*454	12.9	*10.63	3.240
Jan. 31	0700	411	11.6	10.48	3.194	Mar. 16	2300	256	7.25	9.57	2.917
Feb. 24	----	270	7.65	unknown		Mar. 20	1000	297	8.41	9.93	3.027
Mar. 5	0500	259	7.33	9.60	2.926						

Minimum daily discharge, 1.5 ft^3/s (0.042 m^3/s) Sept. 24-27.

NOTE.--No gage-height record Feb. 1 to Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	13	8.5	36	185	122	55	16	35	17	4.4	2.3
2	4.5	11	8.2	32	96	180	43	15	27	13	4.2	2.3
3	4.6	10	7.3	66	64	118	50	14	20	12	4.1	2.1
4	4.7	9.8	6.8	270	39	137	38	13	17	11	4.0	2.0
5	4.6	9.0	6.6	191	27	236	51	13	15	9.7	3.9	1.9
6	5.1	8.6	6.2	98	24	171	35	12	13	8.8	3.8	1.8
7	5.7	7.9	6.4	60	22	75	34	13	12	8.8	5.1	1.8
8	5.6	7.3	6.3	40	20	55	38	22	12	9.0	4.6	1.8
9	5.2	6.6	5.9	30	19	47	43	18	11	8.0	5.6	1.7
10	4.9	6.0	5.5	25	18	51	63	15	11	7.7	4.6	1.6
11	4.8	5.8	5.2	22	17	335	120	13	9.7	7.9	4.0	1.6
12	4.4	5.6	5.4	19	16	414	67	12	9.3	7.3	3.7	1.6
13	4.3	5.4	5.2	17	15	323	52	12	9.0	6.9	3.5	1.6
14	4.2	6.4	5.4	15	15	219	41	12	8.4	6.6	3.5	1.7
15	4.2	6.4	5.2	14	24	138	36	12	8.4	6.5	3.3	2.0
16	4.1	6.6	5.4	13	45	189	36	12	18	6.2	3.2	2.1
17	4.2	6.6	5.2	13	130	187	140	12	48	5.9	3.0	2.1
18	5.3	6.3	5.1	13	200	109	88	11	25	5.8	2.9	2.2
19	5.8	6.4	4.7	14	150	134	52	11	18	6.3	2.8	2.4
20	4.9	6.6	4.3	15	130	283	42	11	16	6.6	3.0	2.2
21	4.0	6.3	4.4	15	180	180	35	17	44	5.8	3.3	1.8
22	3.9	5.6	5.1	16	210	105	31	18	26	5.6	3.2	1.7
23	6.2	5.6	106	130	190	70	28	18	17	6.7	3.1	1.6
24	5.2	11	91	170	250	58	26	13	13	5.8	3.2	1.5
25	4.2	12	48	110	170	55	24	11	11	5.4	3.6	1.5
26	3.9	11	33	54	110	68	23	9.7	9.9	5.1	3.7	1.5
27	13	11	54	25	72	54	21	9.6	9.1	4.9	3.3	1.5
28	54	10	59	22	60	46	19	9.6	12	5.1	3.0	1.8
29	30	8.5	38	20	----	43	17	13	60	5.4	2.7	1.9
30	22	8.0	30	200	----	40	17	25	30	4.8	2.5	1.7
31	16	-----	27	358	----	70	----	22	-----	4.5	2.4	----
TOTAL	258.0	240.3	614.3	2123	2498	4312	1365	434.9	574.8	230.1	111.2	55.3
MEAN	8.32	8.01	19.8	68.5	89.2	139	45.5	14.0	19.2	7.42	3.59	1.84
MAX	54	13	106	358	250	414	140	25	60	17	5.6	2.4
MIN	3.9	5.4	4.3	13	15	40	17	9.6	8.4	4.5	2.4	1.5
CFSM	.33	.31	.78	2.69	3.50	5.45	1.78	.55	.75	.29	.14	.07
IN.	.38	.35	.90	3.10	3.64	6.29	1.99	.63	.84	.34	.16	.08

CAL YR 1981 TOTAL 8871.3 MEAN 24.3 MAX 239 MIN 3.9 CFSM .95 IN 12.94
WTR YR 1982 TOTAL 12816.9 MEAN 35.1 MAX 414 MIN 1.5 CFSM 1.38 IN 18.70

03348350 PIPE CREEK AT FRANKTON, IN

LOCATION.--Lat 40°13'38", long 85°45'58", in SE¼NE¼ sec.31, T.21 N., R.7 E., Madison County, Hydrologic Unit 05120201, on right bank 20 ft (6 m) downstream from bridge on County Road 500 West, at northeast edge of Frankton.

DRAINAGE AREA.--113 mi² (293 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft (246.888 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--14 years, 106 ft³/s (3.002 m³/s), 12.74 in/yr (324 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft³/s (123 m³/s) June 7, 1980, gage height, 14.78 ft (4.505 m); minimum daily, 4.2 ft³/s (0.119 m³/s) Oct. 6, 7, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1958, reached a stage of 15.5 ft (4.72 m), from floodmark determined by State of Indiana, Department of Natural Resources, discharge, 4,900 ft³/s (139 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	2300	1130	32.0	9.08	2.768	Mar. 5	0600	1060	30.0	8.90	2.713
Jan. 30	2200	1960	55.5	10.92	3.328	Mar. 11	2400	*2340	66.3	*11.65	3.551
Feb. 18	0400	889	25.2	8.43	2.569	Mar. 16	2300	850	24.1	8.30	2.530
Feb. 24	0800	1140	32.3	9.09	2.771	Mar. 20	0900	1230	34.8	9.34	2.847

Minimum daily discharge, 7.2 ft³/s (0.20 m³/s) Sept. 20, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	29	25	84	780	314	244	42	144	53	20	11
2	13	26	25	105	300	613	160	41	114	36	17	11
3	12	24	22	234	180	459	302	39	62	33	15	10
4	12	23	21	814	120	447	232	38	45	30	15	9.7
5	12	22	20	928	80	885	146	38	38	26	14	9.2
6	12	21	18	389	68	685	126	37	33	24	14	8.9
7	12	20	18	200	62	363	113	45	30	25	83	9.1
8	12	19	19	110	58	236	126	59	30	28	470	9.3
9	12	18	18	84	54	171	140	55	28	25	260	9.1
10	12	17	17	64	50	194	264	46	29	24	112	8.9
11	12	16	16	56	48	1330	488	43	25	24	66	8.3
12	12	16	16	51	47	1720	358	40	24	22	44	8.0
13	12	16	15	47	46	1360	238	38	23	20	31	7.6
14	12	15	15	44	45	962	157	34	21	19	25	8.2
15	12	15	15	43	72	635	110	32	22	18	19	8.9
16	12	15	15	42	220	660	107	30	222	18	16	8.1
17	17	15	14	41	580	668	174	30	256	17	15	7.9
18	23	14	14	40	843	431	181	28	120	16	13	7.6
19	24	15	13	40	611	461	129	28	105	10	13	7.3
20	18	22	11	40	541	1070	106	28	105	21	12	7.2
21	14	21	14	40	827	682	87	26	160	15	17	7.3
22	19	18	22	41	870	417	76	26	92	14	13	7.4
23	26	17	320	470	928	317	67	26	59	11	12	7.6
24	24	29	722	620	1010	256	62	25	44	15	12	7.2
25	19	40	152	780	635	235	60	24	33	14	10	6.3
26	15	34	99	150	487	205	57	24	33	13	16	8.6
27	26	34	217	74	391	227	52	23	30	11	13	1.8
28	96	31	259	66	277	163	47	23	29	147	12	9.8
29	71	27	148	58	----	141	45	22	134	67	11	8.0
30	47	24	106	600	----	128	43	60	101	30	10	7.7
31	35	----	93	1530	----	747	----	59	----	26	11	-----
TOTAL	669	653	2108	7144	9878	16860	4500	1143	2205	887	1425	256.0
MEAN	21.6	21.8	68.0	230	353	544	150	36.9	73.5	28.6	46.0	8.56
MAX	96	40	320	1530	1010	1720	488	60	256	147	470	11
MIN	12	14	11	40	45	128	43	22	21	10	10	7.2
CFSM	.19	.19	.60	2.03	3.13	4.81	1.33	.33	.65	.25	.41	.08
IN.	.22	.21	.69	2.35	3.25	5.55	1.48	.38	.73	.29	.47	.08

CAL YR 1981 TOTAL 26733. MEAN

03349000 WHITE RIVER AT NOBLESVILLE, IN

LOCATION.--Lat 40°02'50", long 86°01'00", in SE¼SE¼ sec.36, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on right bank at downstream side of Logan Street bridge in Noblesville, 1.5 miles (2.4 km) upstream from Cicero Creek, 5.1 miles (8.2 km) downstream from dam at Clare, and at mile 263.5 (424.0 km).

DRAINAGE AREA.--858 mi² (2,222 km²).

PERIOD OF RECORD.--October 1946 to current year. Gage-height records collected at present site from December 1913 to December 1935, and after June 1951, and at site 400 ft (122 m) downstream January 1936 to May 1951, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Noblesville.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.16 ft (224.991 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--36 years, 841 ft³/s (23.82 m³/s), 13.31 in/yr (338 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,800 ft³/s (759 m³/s) Apr. 22, 1964, gage height, 21.31 ft (6.495 m); minimum daily, 44 ft³/s (1.25 m³/s) Sept. 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft³/s (170 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 22	0700	6730	191	13.13	4.002	Mar. 17	1900	6030	171	12.06	3.676
Feb. 24	2400	6950	197	13.35	4.069	Mar. 21	0500	6570	186	12.61	3.844
Mar. 12	2200	*8780	249	*14.66	4.468						

Minimum daily discharge, 130 ft³/s (3.68 m³/s) Sept. 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	352	251	794	4000	2020	2380	566	1630	613	224	177
2	229	304	250	862	2640	3470	1670	546	1600	433	209	185
3	209	285	237	1050	1920	3710	1980	521	966	384	203	190
4	205	273	228	3100	1450	2890	2200	503	745	348	200	184
5	206	261	221	4540	1140	4750	1680	487	588	315	217	167
6	216	253	207	3080	842	4970	1510	474	494	287	201	165
7	210	240	200	2040	657	3050	1410	523	431	320	242	157
8	196	229	200	1580	600	1830	1390	706	406	661	2110	155
9	194	217	199	1230	570	1350	1520	813	385	407	1200	157
10	197	207	189	1000	540	1120	1830	772	383	319	726	156
11	193	200	188	800	500	3570	2650	647	457	350	475	152
12	188	201	189	750	460	7880	2730	569	380	304	378	147
13	191	192	185	700	430	8230	2110	516	331	282	316	143
14	195	189	183	660	400	7310	1610	478	306	290	277	148
15	201	186	184	620	361	5140	1420	451	299	253	250	153
16	200	184	185	580	465	4340	1330	437	1020	240	230	150
17	202	185	191	550	2170	5710	1850	426	2650	233	222	143
18	246	183	187	520	4660	4890	2370	425	2020	231	213	142
19	280	185	145	500	4890	3390	1780	413	1240	325	203	137
20	260	221	131	463	4290	5370	1440	413	1080	334	213	130
21	257	239	164	433	5590	6160	1130	543	954	273	349	130
22	251	206	208	436	6600	4030	947	872	832	243	247	133
23	347	195	1100	1450	6120	2800	845	638	615	255	205	131
24	350	230	2320	2670	6820	2230	787	499	482	282	211	133
25	292	277	1730	2140	6100	1940	751	441	419	244	247	136
26	273	289	1170	1200	3450	2120	721	411	378	221	253	133
27	328	300	1210	869	2300	1980	693	422	349	217	226	140
28	894	318	1560	800	1870	1630	642	512	349	244	202	181
29	850	281	1290	730	-----	1420	603	803	498	339	183	172
30	582	253	966	2060	-----	1320	585	1040	790	278	181	154
31	432	----	807	4520	-----	2430	-----	993	-----	242	175	----
TOTAL	9139	7135	16475	42727	71835	113050	44564	17860	23077	9767	10788	4581
MEAN	295	238	531	1378	2566	3647	1485	576	769	315	348	153
MAX	894	352	2320	4540	6820	8230	2730	1040	2650	661	2110	190
MIN	188	183	131	433	361	1120	585	411	299	217	175	130
CFSM	.34	.28	.62	1.61	2.99	4.25	1.73	.67	.90	.37	.41	.18
IN.	.40	.31	.71	1.85	3.11	4.90	1.93	.77	1.00	.42	.47	.20

CAL YR 1981 TOTAL 254738 MEAN 698 MAX 6200 MIN 131 CFSM .81 IN 11.04
WTR YR 1982 TOTAL 370998 MEAN 1016 MAX 8230 MIN 130 CFSM 1.18 IN 16.09

03350700 STONY CREEK NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°01'44", long 85°59'42", in NE¼NE¼ sec.7, T.18 N., R.5 E., Hamilton County, Hydrologic Unit 05120201, on left bank at downstream side of county road bridge, 1.4 miles (2.3 km) upstream from mouth, and 1.4 miles (2.3 km) southeast of Noblesville.

DRAINAGE AREA.--50.8 mi² (131.6 km²).

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

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

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

AVERAGE DISCHARGE.--15 years, 48.6 ft³/s (1.376 m³/s), 12.99 in/yr (330 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft³/s (46.4 m³/s) Feb. 23, 1979; maximum gage height, 7.60 ft (2.316 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Aug. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1345	436	12.3	4.67	1.423	Mar. 11	2130	502	14.2	4.93	1.503
Jan. 23	1400	545	15.4	5.18	1.579	Mar. 13	1545	410	11.6	4.46	1.359
Jan. 30	1930	*1190	33.7	*7.60	2.316	Mar. 16	1915	406	11.5	4.43	1.350
Feb. 17	1715	404	11.4	4.51	1.375	Mar. 20	0700	382	10.8	4.30	1.311
Feb. 21	0100	690	19.5	5.82	1.774	Mar. 31	1145	359	10.2	4.17	1.271
Mar. 5	0015	344	9.74	4.08	1.244						

Minimum daily discharge, 5.7 ft³/s (0.161 m³/s) Sept. 21-23.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1981, superseding those published in the report for 1981 are given herein.

Sept. 21... 20		Sept. 23... 14		Sept. 25... 13		Sept. 27... 14		Sept. 29... 14	
22... 17		24... 13		26... 13		28... 13		30... 18	

Month	Total	Mean	Max	Min	Cfsm	In.
September 1981	1063	35.4	132	13	.70	.78
Wtr Yr 1981	12825.7	35.1	598	7.0	.69	9.39

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	29	16	59	250	183	184	31	124	28	8.7	7.2
2	13	25	16	51	150	230	134	31	82	19	8.7	7.6
3	13	22	14	112	100	182	207	29	44	20	8.6	7.2
4	13	20	13	377	70	218	144	27	34	17	8.3	6.9
5	13	19	13	209	60	257	118	27	29	15	8.6	6.4
6	13	18	13	142	56	187	115	27	25	13	8.1	6.2
7	12	17	13	113	52	139	109	36	24	14	9.5	6.6
8	11	17	13	91	48	117	108	54	24	95	10	6.4
9	11	16	13	70	45	105	115	46	23	98	9.1	6.3
10	10	14	12	50	30	106	140	43	20	46	8.7	6.5
11	11	14	12	40	27	331	126	30	18	54	8.5	6.4
12	11	13	12	35	25	366	109	29	18	33	7.0	5.9
13	10	13	12	30	21	363	101	26	18	23	6.9	5.9
14	11	13	12	27	20	259	83	25	15	18	6.7	6.1
15	9.3	14	12	23	21	218	68	24	16	16	6.6	5.9
16	8.8	14	10	20	54	315	68	22	53	14	6.3	6.1
17	9.0	13	11	18	338	273	94	21	91	12	6.2	6.3
18	11	13	10	18	307	181	88	20	42	12	6.3	6.3
19	11	13	9.0	18	254	193	74	20	33	31	6.4	6.1
20	9.7	15	8.2	20	361	345	63	20	30	36	11	5.8
21	8.9	15	7.3	22	566	227	53	51	38	19	12	5.7
22	9.2	14	12	25	445	167	50	37	24	15	8.2	5.7
23	15	13	178	250	470	143	47	29	19	13	7.6	5.7
24	15	16	134	200	478	125	44	23	17	12	8.5	6.6
25	14	17	98	130	228	127	43	21	16	11	11	6.8
26	13	15	76	80	166	148	43	21	16	10	8.6	6.6
27	22	16	126	55	147	120	39	30	15	9.6	8.1	6.9
28	99	16	125	47	148	108	37	33	17	10	7.8	7.7
29	68	15	95	40	---	102	36	29	85	9.4	7.4	6.8
30	38	15	76	230	---	103	32	48	46	8.9	7.1	6.1
31	31	---	64	450	---	305	---	38	---	8.9	6.9	---
TOTAL	559.9	484	1235.5	3052	4937	6243	2672	948	1056	740.8	253.4	192.7
MEAN	18.1	16.1	39.9	98.5	176	201	89.1	30.6	35.2	23.9	8.17	6.42
MAX	99	29	178	450	566	366	207	54	124	98	12	7.7
MIN	8.8	13	7.3	18	20	102	32	20	15	8.9	6.2	5.7
CFSM	.36	.32	.79	1.94	3.47	3.96	1.75	.60	.69	.47	.16	.13
IN.	.41	.35	.90	2.23	3.62	4.57	1.96	.69	.77	.54	.19	.14

CAL YR 1981	TOTAL	14278.3	MEAN 39.1	MAX 598	MIN 7.0	CFSM .77	IN 10.46	
WTR YR 1982	TOTAL	22374.3	MEAN 61.3	MAX 566	MIN 5.7	CFSM 1.21	IN 16.38	

03350700 STONY CREEK NEAR NOBLESVILLE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV					
09...	1350	16	10.0	39	1.7
JAN					
22...	1050	22	.5	22	1.3

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 (3 km) east of Nora, 14 miles (23 km) upstream from Fall Creek, and at mile 247.9 (398.9 km).

DRAINAGE AREA.--1,219 mi² (3,157 km²).

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Prior to October 1948, published as West Fork White River near Nora.

REVISED RECORDS.--WSP 1335: 1930-31, 1934(m), 1936, 1941, 1943, 1945, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 710.94 ft (216.695 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 26, 1929 to July 29, 1942, at site 200 ft (61 m) downstream at same datum. Supplemental water-stage recorder 4.5 miles (7.2 km) downstream.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow slightly regulated by Morse Reservoir.

AVERAGE DISCHARGE.--53 years, 1,101 ft³/s (31.18 m³/s), 12.27 in/yr (312 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s (918 m³/s) May 19, 1943; maximum gage height, 18.65 ft (5.685 m) Apr. 23, 1964; minimum daily discharge, 49 ft³/s (1.39 m³/s) Sept. 17, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 22.4 ft (6.83 m), from floodmark, determined by State Highway Department of Indiana, discharge, 58,500 ft³/s (1,660 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s (198 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	1700	7380	209	9.72	2.963	Mar. 13	1000	*12100	343	*12.63	3.850
Feb. 24	1900	10000	283	11.45	3.490	Mar. 21	1300	8510	241	10.51	3.203
Mar. 6	0800	7410	210	9.74	2.969						

Minimum daily discharge, 157 ft³/s (4.45 m³/s) Sept. 21.

NOTE.--No gage-height record Jan. 11 to Feb. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	720	397	1130	5800	3170	3340	750	2920	889	278	226
2	401	609	395	1180	3900	4510	2410	723	3070	651	261	218
3	345	545	384	1500	2800	5300	2710	686	2100	586	244	227
4	314	502	376	4720	1900	4390	3110	661	1420	545	240	217
5	307	469	364	7090	1400	6050	2480	641	1030	484	238	204
6	322	466	329	5680	1200	7040	2210	623	846	431	251	198
7	339	419	318	3290	1000	4890	2000	713	731	440	236	190
8	343	397	341	2320	900	3140	1930	924	850	959	1290	182
9	324	393	325	1900	850	2430	2070	929	680	1060	1640	181
10	304	358	317	1370	800	2100	2420	945	658	667	847	181
11	297	336	290	1100	740	4230	3180	794	663	803	575	178
12	286	340	294	1040	700	9860	3690	702	634	684	433	177
13	273	328	293	980	640	11800	3040	647	539	535	364	173
14	272	321	293	930	600	10500	2380	607	483	502	322	171
15	274	314	295	880	600	7640	1980	575	447	414	295	175
16	278	314	292	840	1600	6000	1890	564	1130	372	273	173
17	279	314	305	800	3000	7160	2510	612	3370	344	253	170
18	322	310	305	750	5700	6820	3570	559	3070	328	247	170
19	370	300	261	700	6710	4750	2790	556	2110	518	236	168
20	352	344	237	680	6110	6430	2240	703	1960	535	242	163
21	336	382	261	660	7900	8240	1810	824	1780	432	336	157
22	345	321	347	700	9450	6010	1490	1030	1560	368	316	158
23	450	300	1470	2500	9270	4050	1240	889	1110	336	250	160
24	593	338	3280	3500	9750	3200	1090	710	856	364	285	158
25	524	394	2680	3000	9200	2820	1020	617	729	332	316	160
26	459	420	1800	2000	5600	2970	973	561	654	304	285	161
27	498	440	1790	1400	3790	2850	945	582	595	282	272	158
28	1270	456	2280	1100	3150	2390	854	669	587	286	246	166
29	1720	435	1990	1000	------	2110	798	945	769	356	232	191
30	1220	400	1520	2500	------	1970	767	1590	895	340	220	175
31	887	-----	1220	6400	------	3080	-----	1830	-----	297	218	----
TOTAL	14731	11985	25049	63640	105060	157900	62937	24161	38246	15444	11741	5386
MEAN	475	400	808	2053	3752	5094	2098	779	1275	498	379	180
MAX	1720	720	3280	7090	9750	11800	3690	1830	3370	1060	1640	227
MIN	272	300	237	660	600	1970	767	556	447	282	218	157
CFSM	.39	.33	.66	1.68	3.08	4.18	1.72	.64	1.05	.41	.31	.15
IN.	.45	.37	.76	1.94	3.21	4.82	1.92	.74	1.17	.47	.36	.16

CAL YR 1981 TOTAL 344792 MEAN 945 MAX 6860 MIN 190 CFSM .78 IN 10.52
WTR YR 1982 TOTAL 536280 MEAN 1469 MAX 11800 MIN 157 CFSM 1.21 IN 16.37

03351310 CROOKED CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'47", long 86°12'22", in NW¼SE¼ sec.16, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank 150 ft (46 m) downstream from 42nd Street bridge in Indianapolis, and at mile 1.6 (2.6 km).

DRAINAGE AREA.--17.9 mi² (46.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft (216.713 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

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

AVERAGE DISCHARGE.--13 years, 18.8 ft³/s (0.532 m³/s), 14.26 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft³/s (156 m³/s) June 26, 1978, gage height, 13.31 ft (4.057 m); minimum daily, 0.47 ft³/s (0.013 m³/s) Dec. 2, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0300	*562	15.9	*5.14	1.567	Feb. 16	2315	406	11.5	4.66	1.420
Jan. 30	1745	495	14.0	4.93	1.503						

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	2.8	9.8	13	26	30	27	6.9	51	3.6	1.9	6.2
2	2.7	2.6	6.8	14	19	39	20	6.5	19	3.1	1.8	4.6
3	2.3	2.5	4.2	59	14	41	83	6.3	12	17	1.7	2.2
4	2.1	2.5	7.0	172	13	79	31	6.1	9.4	7.5	1.7	1.6
5	1.9	2.6	5.5	43	12	62	28	5.9	8.2	4.7	2.3	1.4
6	5.9	3.2	3.7	29	11	39	41	5.9	6.8	3.7	2.2	1.3
7	3.1	2.7	3.1	20	10	28	30	44	6.2	25	1.8	1.3
8	2.1	2.0	3.1	16	9.0	19	26	25	9.7	9.6	1.9	1.3
9	1.8	1.8	3.1	13	8.3	18	34	12	11	4.6	1.7	1.4
10	1.7	1.7	2.2	8.0	8.0	22	34	8.9	8.2	12	1.5	1.4
11	1.7	1.6	2.1	9.0	6.2	125	28	7.6	6.3	21	1.6	1.4
12	2.0	1.6	2.0	8.0	5.9	75	21	6.5	5.2	7.1	1.7	1.4
13	2.1	1.6	2.0	7.0	5.6	93	18	5.8	4.5	4.8	1.5	1.4
14	2.2	1.6	2.0	6.5	5.8	47	15	5.2	3.8	3.9	1.4	1.4
15	2.5	1.6	2.0	6.0	13	59	14	4.8	4.6	4.1	1.5	1.4
16	2.6	1.6	1.9	5.6	122	131	37	5.5	50	3.5	1.5	1.3
17	8.9	1.5	2.2	5.3	292	63	66	13	24	3.1	1.4	1.3
18	15	1.6	1.9	5.0	120	37	31	5.5	11	2.9	1.3	2.2
19	4.9	2.8	1.6	5.0	81	71	22	6.0	8.8	36	1.3	1.5
20	2.7	11	1.3	5.0	145	98	22	12	8.2	11	1.9	1.3
21	2.1	5.2	1.7	6.0	144	52	17	49	12	5.7	3.0	1.2
22	6.1	2.8	20	19	103	32	14	15	5.6	4.4	1.6	1.3
23	6.6	2.4	111	203	117	26	17	9.6	4.5	3.6	1.6	1.3
24	3.4	11	56	43	87	22	13	7.3	4.0	2.9	22	1.3
25	2.4	5.8	36	20	42	34	12	6.2	3.5	2.5	14	1.5
26	2.9	4.8	18	13	30	34	12	6.4	3.4	2.3	3.5	1.5
27	13	11	52	11	26	22	8.3	17	3.3	13	2.2	1.6
28	9.8	4.2	30	10	26	18	7.4	9.6	16	5.6	1.8	1.6
29	5.0	2.9	20	16	------	16	7.1	21	8.8	3.0	1.6	1.5
30	3.7	2.6	11	278	------	15	6.9	77	5.2	2.2	3.3	1.5
31	3.1	-----	12	66	------	77	-----	22	-----	2.2	3.5	----
TOTAL	130.1	103.6	435.2	1134.4	1501.8	1524	742.7	439.5	334.2	235.6	91.7	51.6
MEAN	4.20	3.45	14.0	36.6	53.6	49.2	24.8	14.2	11.1	7.60	2.96	1.72
MAX	15	11	111	278	292	131	83	77	51	36	22	6.2
MIN	1.7	1.5	1.3	5.0	5.6	15	6.9	4.8	3.3	2.2	1.3	1.2
CFSM	.24	.19	.78	2.05	2.99	2.75	1.39	.79	.62	.43	.17	.10
IN.	.27	.22	.90	2.36	3.12	3.17	1.54	.91	.69	.49	.19	.11

CAL YR 1981 TOTAL 5199.0 MEAN 14.2 MAX 502 MIN 1.0 CFSM .79 IN 10.80
WTR YR 1982 TOTAL 6724.4 MEAN 18.4 MAX 292 MIN 1.2 CFSM 1.03 IN 13.97

03351400 SUGAR CREEK NEAR MIDDLETOWN, IN

LOCATION.--Lat 40°02'27", long 85°31'30", in NW¼SE¼ sec.5, T.18 N., R.9 E., Henry County, Hydrologic Unit 05120201, on right bank 90 ft (27 m) upstream from bridge on County Road 750 North, 1 mile (2 km) southeast of Middletown.

DRAINAGE AREA.--5.80 mi² (15.02 km²).

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

REVISED RECORDS.--WDR IN-75-1: 1969-74.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft (289.560 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--14 years, 6.03 ft³/s (0.171 m³/s), 14.12 in/yr (359 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) April 28, 1975, gage height, 7.72 ft (2.353 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Aug. 30 to Sept. 2, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft³/s (3.40 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0530	*564	16.0	*7.52	2.292	Feb. 23	1815	150	4.25	5.33	1.625
Jan. 30	1015	231	6.54	5.92	1.804	Mar. 16	0845	132	3.74	5.17	1.576

Minimum daily discharge 0.10 ft³/s (0.003 m³/s) Sept. 5-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	1.6	1.9	8.4	10	22	4.1	2.3	22	1.3	.17	.18
2	.92	1.4	1.7	6.3	6.5	21	3.9	2.1	7.0	.97	.17	.16
3	.80	1.2	1.3	24	5.1	12	8.8	1.9	4.3	.96	.17	.14
4	.80	1.2	1.3	75	3.9	34	5.2	1.8	3.4	.86	.25	.12
5	.74	1.1	1.1	22	3.6	21	5.1	1.7	2.8	.64	.40	.10
6	.74	1.1	1.0	12	3.4	11	5.8	1.6	2.2	.53	.28	.10
7	.74	.98	1.0	8.2	3.3	6.9	5.8	2.4	1.9	.49	5.6	.10
8	.74	.86	1.0	6.0	3.2	5.1	5.9	2.6	1.8	.50	1.1	.10
9	.69	.80	.98	5.1	3.0	4.3	6.2	2.0	1.7	.45	.51	.10
10	.69	.74	.74	3.8	2.8	6.7	8.0	1.6	1.6	.39	.34	.10
11	.69	.74	.69	3.4	2.6	48	7.9	1.5	1.4	.38	.30	.10
12	.69	.74	.69	3.0	2.5	33	6.3	1.4	1.3	.36	.27	.10
13	.69	.74	.69	2.8	2.5	44	5.3	1.3	1.3	.30	.25	.10
14	.69	.74	.69	2.4	2.4	19	4.4	1.2	1.3	.28	.25	.10
15	.92	.74	.69	2.1	2.4	15	4.1	1.1	2.2	.26	.24	.11
16	1.3	.74	.69	1.8	8.0	64	4.7	1.1	14	.24	.25	.11
17	1.8	.74	.68	1.5	83	27	8.1	1.0	9.2	.22	.22	.11
18	3.2	.74	.67	1.4	42	14	6.0	.94	4.7	.22	.19	.11
19	1.7	.98	.65	1.4	31	30	5.0	.94	4.0	.61	.19	.11
20	1.1	1.3	.63	1.5	57	49	4.3	.94	3.3	.55	.45	.11
21	.80	.98	.75	1.6	51	20	3.6	.94	2.8	.28	.46	.11
22	.98	.80	3.0	5.1	31	12	3.4	.88	2.2	.22	.36	.11
23	1.3	.80	35	208	65	8.9	3.4	.86	1.8	.24	.31	.11
24	1.1	2.3	14	26	37	7.0	3.4	.83	1.6	.21	1.2	.11
25	.98	1.9	9.1	13	14	6.4	3.4	.80	1.5	.19	4.1	.11
26	.98	2.5	6.8	5.8	8.9	8.0	3.3	.98	1.5	.17	1.2	.11
27	5.8	4.6	16	3.7	6.6	6.7	2.9	2.4	1.5	.17	.58	.14
28	6.0	2.8	12	3.0	12	5.7	2.7	2.5	1.7	.17	.36	.14
29	3.5	2.3	7.4	2.8	-----	5.2	2.6	2.1	3.2	.17	.27	.12
30	2.4	1.9	6.1	100	-----	4.9	2.6	4.6	2.1	.17	.22	.11
31	1.9	-----	5.7	29	-----	4.7	-----	4.7	-----	.17	.19	----
TOTAL	46.30	40.06	134.64	590.1	503.7	576.5	146.2	53.01	111.3	12.67	20.85	3.43
MEAN	1.49	1.34	4.34	19.0	18.0	18.6	4.87	1.71	3.71	.41	.67	.11
MAX	6.0	4.6	35	208	83	64	8.8	4.7	22	1.3	5.6	.18
MIN	.69	.74	.63	1.4	2.4	4.3	2.6	.80	1.3	.17	.17	.10
CFSM	.26	.23	.75	3.28	3.10	3.21	.84	.30	.64	.07	.12	.02
IN.	.30	.26	.86	3.78	3.23	3.70	.94	.34	.71	.08	.13	.02

CAL YR 1981 TOTAL 1577.13 MEAN 4.32 MAX 110 MIN .12 CFSM .75 IN 10.11
WTR YR 1982 TOTAL 2238.76 MEAN 6.13 MAX 208 MIN .10 CFSM 1.06 IN 14.36

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 (30 m) downstream from bridge on State Highway 238, 0.2 mile (0.3 km) downstream from Lick Creek, 2 miles (3 km) northwest of Fortville, and at mile 26.1 (42.0 km).

DRAINAGE AREA.--169 mi^2 (437 km^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 (240.009 m) National Geodetic Vertical Datum of 1929 (levels by Indianapolis Water Co.). Prior to June 27, 1942, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--41 years, 167 ft^3/s (4.729 m^3/s), 13.42 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft^3/s (248 m^3/s) Apr. 21, 1964, gage height, 9.88 ft (3.011 m); minimum daily, 5.0 ft^3/s (0.14 m^3/s) Sept. 23, 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 12 ft (3.7 m) March 1913 (information by local resident).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft^3/s (36.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 24	0200	1890	53.5	6.55	1.996	Feb. 21	1300	1540	43.6	6.25	1.905
Jan. 31	0800	*2430	68.8	*7.17	2.185	Feb. 24	1200	1800	51.0	6.59	2.009
Feb. 18	0200	1950	55.2	6.76	2.060	Mar. 17	0800	1300	36.8	5.86	1.786

Minimum daily discharge, 30 ft^3/s (0.85 m^3/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	87	74	191	800	484	251	124	287	80	43	45
2	45	79	73	189	500	619	226	119	237	70	42	45
3	43	75	67	263	350	555	328	114	157	74	42	42
4	44	71	64	1020	250	474	328	113	130	71	41	39
5	44	69	61	878	210	738	258	109	117	64	41	38
6	45	66	58	434	190	511	272	107	105	59	41	37
7	44	63	58	321	180	387	261	123	98	56	41	38
8	44	59	59	237	165	314	252	150	197	61	138	37
9	43	57	56	200	150	272	259	128	162	68	82	36
10	43	55	54	170	120	249	288	113	125	61	60	34
11	43	54	52	150	120	566	286	105	105	68	53	34
12	43	53	51	130	110	1040	256	99	94	62	45	32
13	42	52	51	120	110	937	236	95	88	54	42	32
14	42	51	51	115	110	818	205	91	81	52	39	33
15	44	51	50	110	117	574	188	88	79	49	38	33
16	44	51	49	100	176	753	186	86	190	47	36	33
17	45	51	51	95	1280	1080	402	85	332	46	34	32
18	57	50	50	90	1580	593	384	80	212	45	33	32
19	70	51	45	90	959	495	292	81	156	135	32	31
20	61	68	40	90	844	1010	251	82	139	121	48	31
21	55	65	47	95	1460	831	210	85	154	81	93	30
22	56	57	60	100	1250	524	182	84	122	67	56	31
23	67	55	600	900	1190	418	168	79	102	65	45	31
24	65	66	580	700	1630	362	162	76	88	59	69	31
25	59	75	332	400	813	326	156	72	81	55	177	34
26	60	71	237	250	507	366	152	72	75	52	106	33
27	94	94	305	180	428	329	145	90	72	50	69	35
28	227	101	367	160	422	278	134	129	80	52	56	37
29	163	83	257	140	-----	256	127	117	101	49	49	35
30	121	75	199	800	-----	243	125	165	109	46	45	33
31	99	----	176	1700	-----	279	----	147	----	45	45	----
TOTAL	2003	1955	4274	10418	16021	16681	6970	3208	4075	1964	1781	1044
MEAN	64.6	65.2	138	336	572	538	232	103	136	63.4	57.5	34.8
MAX	227	101	600	1700	1630	1080	402	165	332	135	177	45
MIN	42	50	40	90	110	243	125	72	72	45	32	30
CFSM	.38	.39	.82	1.99	3.39	3.18	1.37	.61	.81	.38	.34	.21
IN.	.44	.43	.94	2.29	3.53	3.67	1.53	.71	.90	.43	.39	.23

CAL YR 1981 TOTAL 48880 MEAN 134 MAX 2260 MIN 30 CFSM .79 IN 10.76
WTR YR 1982 TOTAL 70394 MEAN 193 MAX 1700 MIN 30 CFSM 1.14 IN 15.49

03352500 FALL CREEK AT MILLERSVILLE, IN

LOCATION.--Lat 39°51'07", long 86°05'15", in NE¼NE¼ sec.9, T.16 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Emerson Way bridge at Millersville, and 9.2 miles (14.8 km) upstream from mouth.

DRAINAGE AREA.--298 mi² (772 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharges only for some periods, published in WSP 1305. Twice-daily chain gage readings at former site from July 1925 to September 1926 are available from the district office.

REVISED RECORDS.--WSP 1335: 1930-31, 1933, 1936-38, 1942-43. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 722.16 ft (220.114 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1961, water-stage recorder at site 500 ft (152 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Geist Reservoir (See sta 03351700).

AVERAGE DISCHARGE.--53 years, 284 ft³/s (8.043 m³/s), 12.94 in/yr (329 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft³/s (365 m³/s) May 28, 1956, gage height, 13.53 ft (4.124 m); minimum daily, 7.8 ft³/s (0.22 m³/s) Sept. 28, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.3 ft (4.97 m) Mar. 26, 1913, from floodmarks, discharge, 22,000 ft³/s (623 m³/s) by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,870 ft³/s (81.3 m³/s) Feb. 22, gage height, 8.07 ft (2.460 m); minimum daily, 48 ft³/s (1.36 m³/s) Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	131	112	338	1450	868	554	197	768	141	69	68
2	69	122	102	333	805	1000	474	192	647	113	64	67
3	73	112	107	515	596	1030	699	173	435	133	59	61
4	70	101	102	1760	455	968	738	170	291	130	63	56
5	71	92	94	1740	366	1200	624	166	227	110	64	54
6	77	85	87	1040	330	1020	579	159	187	96	62	54
7	72	80	85	715	300	811	547	224	162	84	60	54
8	70	76	84	529	280	653	515	282	432	91	63	53
9	69	101	87	428	260	567	526	233	388	90	62	53
10	69	69	83	350	250	522	550	192	276	102	61	56
11	73	78	81	300	230	1090	572	171	201	121	58	57
12	73	79	76	270	210	1820	522	154	160	99	48	57
13	73	75	72	240	190	1920	474	145	141	99	53	57
14	71	69	72	221	176	1610	435	144	122	96	56	54
15	61	66	70	207	177	1170	376	145	119	82	56	52
16	60	66	67	191	328	1600	376	132	325	76	56	53
17	67	65	85	180	1630	1930	590	132	554	73	66	53
18	94	65	76	175	2650	1310	718	124	463	74	65	52
19	72	68	64	165	2230	1030	594	121	345	177	65	49
20	69	82	80	160	1800	1740	501	150	267	219	67	49
21	68	90	89	150	2610	1630	419	472	276	151	69	49
22	79	88	142	170	2720	1100	346	282	231	110	68	49
23	81	84	872	1160	2450	863	301	193	190	100	64	50
24	73	98	1080	1200	2740	723	278	158	154	72	81	54
25	68	91	759	740	2060	666	268	142	131	68	93	55
26	68	92	529	449	1120	688	261	130	125	66	67	54
27	91	107	622	318	895	649	271	163	123	64	61	55
28	118	123	710	276	821	552	233	203	177	76	59	54
29	131	117	573	242	-----	500	199	291	262	69	56	51
30	135	112	434	926	-----	458	188	516	190	64	56	49
31	142	----	363	2400	-----	558	-----	424	----	64	59	----
TOTAL	2481	2684	7859	17888	30129	32246	13728	6380	8369	3110	1950	1629
MEAN	80.0	89.5	254	577	1076	1040	458	206	279	100	62.9	54.3
MAX	142	131	1080	2400	2740	1930	738	516	768	219	93	68
MIN	60	65	64	150	176	458	188	121	119	64	48	49
CFSM	.27	.30	.85	1.94	3.61	3.49	1.54	.69	.94	.34	.21	.18
IN.	.31	.34	.98	2.23	3.76	4.03	1.71	.80	1.04	.39	.24	.20

CAL YR 1981 TOTAL 86149 MEAN 236 MAX 3930 MIN 45 CFSM .79 IN 10.75
WTR YR 1982 TOTAL 128453 MEAN 352 MAX 2740 MIN 48 CFSM 1.18 IN 16.04

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 (4.2 km) downstream from Fall Creek, and at mile 230.3 (370.6 km).

DRAINAGE AREA.--1,635 mi² (4,235 km²).

PERIOD OF RECORD.--March 1904 to July 1906 and April 1930 to current year. Gage-height record published in reports of National Weather Service for site 1.1 miles (1.8 km) upstream Feb. 8, 1911, to Mar. 25, 1913, and at site 2.3 miles (3.7 km) upstream since Oct. 16, 1913. Prior to October 1948, published as West Fork White River at Indianapolis.

REVISED RECORDS.--WSP 1335: 1932-33, 1937, 1939-41. WSP 1505: 1938. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 662.26 ft (201.857 m) National Geodetic Vertical Datum of 1929. March 1904 to July 1906, nonrecording gage at railroad bridge 0.8 mile (1.3 km) upstream at datum approximately 2.9 ft (0.88 m) higher. April 1930 to July 20, 1931, nonrecording gage at Indianapolis sanitation plant, 2.5 miles (4.0 km) downstream at datum 660.00 ft (201.168 m) lower. July 21, 1931 to Mar. 2, 1932, nonrecording gage and March 3, 1932, to September 30, 1960, water-stage recorder at present site at datum 660.00 ft (201.168 m) lower.

REMARKS.--Records good. Natural flow affected by regulation of Morse Reservoir and Geist Reservoir, and by diversion of municipal water supply by the Indianapolis Water Company.

AVERAGE DISCHARGE.--53 years (water years 1905, 1931 to current year), 1,399 ft³/s (39.62 m³/s), 11.62 in/yr (295 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s (1,050 m³/s) May 18, 1943; maximum gage height, 21.57 ft (6.575 m) Jan. 16, 1937; minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 30.0 ft (9.14 m), from floodmarks determined by Indianapolis Water Company, discharge, 70,000 ft³/s (1,980 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,500 ft³/s (241 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	2300	8650	245	10.13	3.088	Mar. 13	1500	*15100	428	*13.12	3.999
Jan. 31	0400	9540	270	10.60	3.231	Mar. 21	1400	10000	283	10.83	3.301
Feb. 23	0200	13000	368	12.23	3.728						

Minimum daily discharge, 109 ft³/s (3.09 m³/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	798	472	1500	8110	3890	3970	977	3500	1020	275	365
2	380	661	409	1600	5390	4940	3060	925	3750	744	267	273
3	346	588	401	2480	3580	6170	3860	870	2700	921	241	178
4	297	522	392	6960	2580	5450	3960	846	1790	673	220	169
5	284	473	381	8450	1960	6740	3330	817	1320	565	209	169
6	363	447	334	7300	1670	8000	3010	785	1020	470	213	155
7	300	439	314	4380	1350	6050	2660	1150	946	424	192	153
8	306	402	306	3010	1210	4060	2520	1400	1210	1210	458	138
9	298	372	319	2380	1150	3160	2640	1210	1140	1460	1800	130
10	275	375	304	1900	1070	2720	2940	1220	1040	1060	915	129
11	265	312	290	1460	969	4870	3510	1040	822	1430	613	127
12	267	314	270	1300	930	11200	4160	892	738	966	439	128
13	245	305	265	1240	880	14500	3630	800	643	738	340	132
14	239	302	261	1170	830	12700	2990	745	527	809	283	134
15	247	295	256	1100	850	9850	2390	705	636	599	244	124
16	240	288	261	1050	1930	8400	2370	677	1440	429	228	114
17	307	280	277	1000	5460	8880	3420	792	3450	370	200	117
18	635	264	306	940	8450	8500	4270	697	3590	403	199	142
19	366	284	259	880	9100	6190	3660	680	2620	1190	186	123
20	342	330	201	840	8930	7960	2950	902	2150	916	198	123
21	323	338	212	800	10900	9760	2350	1660	1990	630	265	109
22	384	323	932	900	12500	7650	1910	1460	1700	478	298	111
23	435	291	2610	4290	12300	5100	1680	1350	1320	410	252	120
24	540	342	4020	4410	12700	4050	1510	1050	977	373	292	142
25	545	348	3470	4250	11600	3640	1390	828	787	355	553	162
26	506	413	2410	2710	7250	3710	1360	710	712	323	297	128
27	579	480	2590	1830	4850	3620	1260	1020	625	634	253	120
28	884	461	2950	1450	3960	3100	1160	1010	1000	437	209	127
29	1570	462	2570	1280	---	2710	1050	1570	1250	356	194	135
30	1300	430	1930	3760	---	2490	996	2480	910	384	227	143
31	988	---	1650	8950	---	3310	---	2500	---	322	237	---
TOTAL	14491	11939	31622	85570	142459	193370	79966	33768	46303	21099	10797	4420
MEAN	467	398	1020	2760	5088	6238	2666	1089	1543	681	348	147
MAX	1570	798	4020	8950	12700	14500	4270	2500	3750	1460	1800	365
MIN	239	264	201	800	830	2490	996	677	527	322	186	109
CFSM	.29	.24	.62	1.69	3.11	3.82	1.63	.67	.94	.42	.21	.09
IN.	.33	.27	.72	1.95	3.24	4.40	1.82	.77	1.05	.48	.25	.10

CAL YR 1981 TOTAL 400269 MEAN 1097 MAX 10200 MIN 140 CFSM .67 IN 9.11
WTR YR 1982 TOTAL 675804 MEAN 1852 MAX 14500 MIN 109 CFSM 1.13 IN 15.38

03353120 PLEASANT RUN AT ARLINGTON AVENUE AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°03'50", in SW¼NW¼ sec.2, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank 46 ft (14 m) upstream from Arlington Avenue bridge in Indianapolis, 0.5 mile (0.8 km) downstream from small left-bank tributary, and at mile 7.9 (12.7 km).

DRAINAGE AREA.--7.58 mi^2 (19.63 km^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 (237.744 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--22 years (water years 1961 to current year), 7.67 ft^3/s (0.217 m^3/s), 13.74 in/yr (349 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft^3/s (73.6 m^3/s) June 25, 1978, gage height, 13.86 ft (4.225 m); no flow at times in 1960-62.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1956 reached a stage of 16.0 ft (4.88 m), from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	0130	*589	16.7	*6.54	1.993	July 13	1630	*589	16.7	*6.54	1.993
Mar. 16	0645	455	12.9	5.92	1.804						

Minimum daily discharge, 0.48 ft^3/s (0.014 m^3/s) Nov. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.63	5.4	7.9	11	5.2	5.6	1.4	27	2.1	1.1	15
2	.84	.69	1.3	11	7.4	6.5	3.8	1.2	5.5	1.7	1.1	4.3
3	.77	.70	.93	68	6.9	7.0	61	1.1	3.3	16	1.1	1.4
4	.65	.67	3.3	59	5.0	19	9.5	1.1	2.1	2.3	1.2	.88
5	.63	.66	1.0	11	2.8	8.7	14	1.0	1.8	1.5	1.6	.80
6	8.9	.65	.80	8.3	2.3	5.9	13	.98	1.3	1.3	1.0	.80
7	1.1	.61	.80	5.5	2.0	4.5	7.3	27	3.4	1.1	.98	.83
8	.82	.54	.80	3.8	1.8	3.4	7.5	6.2	1.8	1.1	3.6	.81
9	.68	.55	.80	2.5	1.6	5.2	14	2.2	1.8	1.0	1.2	.77
10	.64	.61	.80	1.8	1.4	6.3	8.8	1.6	1.2	22	.88	.79
11	.61	.63	.75	2.0	1.3	83	6.9	1.3	.91	7.2	.91	.75
12	.58	.65	.75	1.5	1.2	17	5.5	1.3	.94	1.9	.82	.71
13	.59	.59	.69	1.3	1.2	50	4.4	1.7	.86	52	.80	.81
14	.68	.61	.75	1.1	1.1	10	3.5	1.1	.82	6.9	.73	.84
15	.89	.51	.75	1.0	1.1	23	3.2	1.9	38	2.7	.70	.77
16	.65	.48	.63	.90	120	97	12	.93	44	1.8	.75	.80
17	9.4	.61	.75	.85	103	14	38	.94	7.6	1.4	.79	.87
18	19	.55	.70	.80	29	8.2	7.8	1.8	3.1	4.6	.74	2.8
19	1.5	10	.60	.80	19	54	5.4	2.2	23	67	.77	.66
20	.83	3.0	.55	.80	74	46	5.9	10	9.9	6.7	4.9	.69
21	.69	1.0	.65	.90	39	12	3.3	24	5.1	3.6	1.5	.67
22	9.0	.75	60	5.0	26	8.0	3.1	2.7	2.2	2.3	.75	.67
23	2.8	6.9	64	121	25	6.3	2.4	1.4	1.6	1.9	1.1	.65
24	.81	5.8	13	12	15	5.2	2.2	1.1	1.3	1.4	24	1.5
25	.91	1.3	5.5	6.2	8.0	16	2.0	.95	1.2	1.2	4.8	2.0
26	3.0	13	4.6	3.0	6.0	8.9	2.0	1.5	1.1	1.1	1.4	.85
27	15	5.4	35	2.5	5.0	5.5	1.8	15	.93	22	.90	1.2
28	3.2	1.5	8.7	2.2	4.6	4.0	1.6	2.3	47	3.1	.81	.70
29	1.1	.93	5.0	2.0	-----	3.5	1.5	66	20	1.7	.68	.70
30	.87	2.5	3.8	150	-----	4.6	1.6	15	3.6	1.3	6.3	.63
31	.70	-----	5.3	18	-----	19	-----	43	------	1.1	1.6	-----
TOTAL	88.84	63.02	228.40	512.65	521.7	566.9	258.6	239.90	262.36	243.0	69.51	45.65
MEAN	2.87	2.10	7.37	16.5	18.6	18.3	8.62	7.74	8.75	7.84	2.24	1.52
MAX	19	13	64	150	120	97	61	66	47	67	24	15
MIN	.58	.48	.55	.80	1.1	3.4	1.5	.93	.82	1.0	.68	.63
CFSM	.38	.28	.97	2.18	2.45	2.41	1.14	1.02	1.15	1.03	.30	.20
IN.	.44	.31	1.12	2.52	2.56	2.78	1.27	1.18	1.29	1.19	.34	.22

CAL YR 1981 TOTAL 2374.99 MEAN 6.51 MAX 140 MIN .48 CFSM .86 IN 11.65
WTR YR 1982 TOTAL 3100.53 MEAN 8.49 MAX 150 MIN .48 CFSM 1.12 IN 15.21

03353180 BEAN CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°43'45", long 86°07'14", in NW¼SW¼ sec.20, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank 80 ft (24 m) upstream from Keystone Avenue bridge and west edge of Sarah Shank Golf Course in Indianapolis, and at mile 1.8 (2.9 km).

DRAINAGE AREA.--4.40 mi² (11.40 km²).

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

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

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

AVERAGE DISCHARGE.--12 years, 5.26 ft³/s (0.149 m³/s), 16.23 in/yr (412 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 770 ft³/s (21.8 m³/s) June 25, 1978, gage height, 7.77 ft (2.368 m); minimum daily, 0.54 ft³/s (0.015 m³/s) Jan. 18, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft³/s (3.40 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 22	2215	139	3.94	3.79	1.155	Mar. 16	0615	169	4.79	4.05	1.234
Jan. 23	0145	*270	7.65	*4.85	1.478	May 31	2045	151	4.28	3.90	1.189
Jan. 30	unknown	150	4.25	unknown		July 19	0630	135	3.82	3.76	1.146
Feb. 16	2115	151	4.28	3.90	1.189	July 27	1315	193	5.47	4.25	1.295
Mar. 11	0900	127	3.60	3.69	1.125						

Minimum daily discharge, 0.80 ft³/s (0.023 m³/s) Oct. 11, Nov. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.86	3.8	3.0	7.0	4.3	3.0	2.6	16	3.6	1.7	8.6
2	.99	.95	2.6	4.4	5.4	4.8	2.8	2.3	4.0	3.2	1.8	1.8
3	1.1	1.1	2.5	26	4.7	4.8	19	2.3	3.1	11	1.8	1.6
4	.99	1.1	3.4	30	4.3	9.5	5.2	2.4	2.9	3.5	1.8	1.2
5	1.1	1.2	2.4	6.8	4.0	5.4	6.9	2.4	2.4	3.2	1.7	.98
6	2.9	1.2	2.1	5.5	3.7	4.3	6.6	2.4	2.0	3.1	1.7	.93
7	.90	1.1	2.2	4.4	3.5	3.9	4.9	11	4.0	3.0	1.7	1.2
8	.90	.99	2.3	4.0	3.7	3.4	5.3	3.7	2.4	2.9	2.1	1.8
9	.96	1.0	2.2	3.2	3.4	3.7	6.5	2.3	3.5	2.7	1.7	1.6
10	.90	1.2	2.2	2.5	3.1	4.1	5.1	2.3	2.3	11	1.6	1.9
11	.80	1.2	2.2	2.7	2.7	36	4.6	2.2	2.0	4.5	1.6	1.6
12	.89	1.1	2.1	2.4	2.4	11	4.1	2.1	2.0	2.7	1.5	1.3
13	1.0	1.2	1.9	2.1	2.1	20	4.0	2.1	1.8	18	1.5	1.5
14	1.1	1.2	1.6	1.9	2.1	7.3	3.9	2.0	1.9	5.4	1.5	1.8
15	1.1	.98	1.6	1.8	3.2	13	3.6	1.9	20	2.8	1.4	1.7
16	.96	1.0	1.4	1.7	33	44	6.9	1.7	30	2.5	1.4	1.8
17	3.4	1.1	1.7	1.6	35	11	14	1.9	7.6	2.2	1.5	1.9
18	8.2	1.1	1.5	1.5	7.0	6.5	5.0	1.9	4.7	5.5	1.6	1.8
19	.89	3.3	1.3	1.5	4.5	24	4.3	3.4	9.2	30	1.6	.92
20	.83	2.0	1.2	1.5	23	21	5.4	3.6	5.1	4.2	2.9	1.1
21	.83	.95	2.0	1.7	16	7.8	3.7	4.2	4.5	2.9	1.8	1.4
22	2.7	.80	24	23	12	5.4	3.4	2.1	3.5	2.5	1.4	1.4
23	1.3	2.3	20	56	12	4.9	3.4	1.7	3.2	2.2	1.8	1.4
24	.93	3.8	3.3	7.2	10	4.4	3.3	1.8	3.2	2.1	4.3	4.6
25	.92	1.5	2.6	5.0	6.5	8.7	3.1	2.0	3.2	2.0	2.1	2.0
26	1.6	3.5	2.4	4.2	5.2	5.3	2.9	2.2	3.2	2.0	1.8	.92
27	3.6	3.3	11	3.5	4.8	4.0	2.8	6.8	3.2	36	1.8	1.0
28	1.4	2.0	3.4	3.2	4.3	3.4	2.6	2.7	15	6.3	1.5	.96
29	1.0	1.8	2.4	3.0	-----	3.3	2.3	17	13	3.1	1.4	.92
30	.93	2.2	2.2	35	-----	3.4	2.5	12	5.1	2.4	4.9	.92
31	.93	-----	2.4	10	-----	4.9	-----	22	-----	2.0	2.2	-----
TOTAL	46.97	47.03	117.9	260.3	228.6	297.5	151.1	131.0	184.8	188.5	59.1	52.55
MEAN	1.52	1.57	3.80	8.40	8.16	9.60	5.04	4.23	6.16	6.08	1.91	1.75
MAX	8.2	3.8	24	56	35	44	19	22	30	36	4.9	8.6
MIN	.80	.80	1.2	1.5	2.1	3.3	2.3	1.7	1.8	2.0	1.4	.92
CFSM	.35	.36	.86	1.91	1.86	2.18	1.15	.96	1.40	1.38	.43	.40
IN.	.40	.40	1.00	2.20	1.93	2.51	1.28	1.11	1.56	1.59	.50	.44

CAL YR 1981 TOTAL 1588.87 MEAN 4.35 MAX 93 MIN .80 CFSM .99 IN 13.43
WTR YR 1982 TOTAL 1765.35 MEAN 4.84 MAX 56 MIN .80 CFSM 1.10 IN 14.92

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'56", long 86°15'22", in SW¼NW¼ sec.1, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of bridge on State Highway 334 at Zionsville, 200 ft (61 m) upstream from Long Branch, and at mile 24.7 (39.7 km).

DRAINAGE AREA.--103 mi² (267 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 816.85 ft (248.976 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for August and September, which are poor. Low flow is affected by the Zionsville well field located on the right bank below the gage.

AVERAGE DISCHARGE.--25 years, 100 ft³/s (2.832 m³/s), 13.18 in/yr (335 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s (351 m³/s) Apr. 20, 1964, gage height, 14.64 ft (4.462 m); no flow at times during 1959, 1963-68, 1970, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.20 ft (5.852 m), from floodmark.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1000	2210	62.6	8.23	2.509	Mar. 11	1600	2440	69.1	8.49	2.588
Jan. 30	2100	*3430	97.1	*9.68	2.950	Apr. 17	0700	1710	48.4	7.16	2.182
Feb. 20	2300	2010	56.9	7.79	2.374	June 1	0400	2150	60.9	8.07	2.460
Feb. 23	2200	1840	52.1	7.43	2.265	July 8	1100	2670	75.6	8.81	2.685

Minimum daily discharge, 0.90 ft³/s (0.03 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	83	43	95	500	279	159	36	1320	45	13	6.0
2	67	74	43	85	344	394	129	33	383	38	11	4.7
3	46	69	36	199	172	327	600	31	217	85	11	3.8
4	39	63	36	1540	120	680	258	30	157	62	10	3.3
5	35	60	33	417	100	576	186	29	123	40	11	3.0
6	33	60	31	243	84	369	182	28	96	33	10	2.8
7	31	53	34	172	74	219	180	41	79	105	10	2.6
8	27	47	34	134	70	166	172	44	206	1210	9.0	2.4
9	25	43	29	100	65	134	195	32	219	273	8.4	2.2
10	23	38	26	75	61	136	267	28	252	604	8.0	2.0
11	20	37	25	65	57	1390	267	27	121	640	7.7	1.9
12	19	34	25	58	55	864	199	24	87	191	7.2	1.9
13	18	32	24	52	53	1030	157	22	67	127	6.8	1.8
14	19	31	23	47	52	544	123	20	54	129	6.6	2.3
15	18	30	24	43	60	530	110	18	48	82	6.2	1.7
16	18	30	22	41	200	777	199	18	548	62	5.9	1.6
17	20	29	23	39	1200	487	1010	25	504	48	5.6	2.1
18	39	27	20	38	994	298	271	23	224	45	5.4	1.7
19	44	27	17	37	675	483	171	48	197	105	5.2	1.5
20	34	32	16	36	979	777	130	100	180	79	7.0	1.4
21	29	29	20	35	1260	398	95	201	238	51	6.3	1.3
22	38	26	34	40	969	249	77	230	125	40	5.6	1.2
23	142	25	320	700	1110	199	67	184	90	36	4.8	1.1
24	96	39	260	200	892	170	61	114	71	29	5.6	1.2
25	76	42	150	120	391	204	56	83	57	26	8.0	1.1
26	64	40	110	100	255	255	52	73	51	23	6.0	1.1
27	144	46	180	80	210	182	46	276	44	20	5.0	1.0
28	249	44	168	69	210	149	40	204	106	20	4.2	.98
29	157	38	123	54	-----	132	37	210	129	19	3.9	.94
30	119	36	112	1810	-----	123	37	627	67	15	5.0	.90
31	96	----	96	1040	-----	258	----	358	----	14	4.1	-----
TOTAL	1891	1264	2137	7764	11212	12779	5533	3217	6060	4296	223.5	61.52
MEAN	61.0	42.1	68.9	250	400	412	184	104	202	139	7.21	2.05
MAX	249	83	320	1810	1260	1390	1010	627	1320	1210	13	6.0
MIN	18	25	16	35	52	123	37	18	44	14	3.9	.90
CFSM	.59	.41	.67	2.43	3.88	4.00	1.79	1.01	1.96	1.35	.07	.02
IN.	.68	.46	.77	2.80	4.05	4.62	2.00	1.16	2.19	1.55	.08	.02

CAL YR 1981 TOTAL 30704.80 MEAN 84.1 MAX 2220 MIN 4.2 CFSM .82 IN 11.09
WTR YR 1982 TOTAL 56438.02 MEAN 155 MAX 1810 MIN .90 CFSM 1.51 IN 20.38

03353450 EAGLE CREEK RESERVOIR NEAR INDIANAPOLIS, IN

LOCATION.--Lat 39°49'20", long 86°18'11", in NW¼NW¼ sec. 22, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, in outlet structure of reservoir on Eagle Creek, 800 ft (240 m) upstream from Interstate Highway 74, 0.5 mile (0.8 km) downstream from School Branch, 1.0 mile (1.6 km) northeast of Clermont, and 2 miles (3 km) west of Indianapolis.

DRAINAGE AREA.--162 mi^2 (419 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft (237.744 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth-fill dam. Low flow is controlled through a 48-inch (1,219 mm) diameter conduit. Spillway elevation, 783 ft (238.7 m) is an ogee section with 6 taintor gates, each 40 ft (12.2 m) wide and 25 ft (7.6 m) high. Permanent pool capacity is 24,000 acre-ft (29.6 hm^3), elevation, 790.00 ft (240.792 m). Reservoir is used for flood control, low-flow maintenance, water supply, and recreation. Reservoir put into operation Nov. 27, 1969.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Indianapolis Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,350 acre-ft (33.7 hm^3) June 26, 1978, elevation, 792.39 ft (241.520 m); minimum, 13,750 acre-ft (17.0 hm^3) Nov. 28, 1971, elevation, 781.25 ft (238.125 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 25,740 acre-ft (31.7 hm^3) Feb. 21, elevation, 791.24 ft (241.170 m); minimum, 18,280 acre-ft (22.5 hm^3) Oct. 1, elevation, 785.48 ft (239.414 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	785.48	18,280	
Oct. 31	788.67	22,270	+3,990
Nov. 30	790.00	24,000	+1,730
Dec. 31	789.97	23,960	-40
CAL YR 1981			-450
Jan. 31	790.05	24,070	+110
Feb. 28	789.51	23,360	-710
Mar. 31	789.60	23,480	+120
Apr. 30	789.59	23,470	-10
May 31	790.19	24,270	+800
June 30	790.05	24,070	-200
July 31	789.87	23,830	-240
Aug. 31	788.77	22,400	-1,430
Sept. 30	787.69	21,000	-1,400
WTR YR 1982			+2,720

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 (183 m) south of intersection of West 10th Street and Lynhurst Drive, 0.5 mile (0.8 km) downstream from West 10th Street bridge, 1.0 mile (1.6 km) upstream from Vermont Street bridge, 3.0 miles (4.8 km) upstream from Little Eagle Creek, and 7.1 miles (11.4 km) from mouth.

DRAINAGE AREA.--174 mi² (451 km²).

PERIOD OF RECORD.--November 1938 to current year.

REVISED RECORDS.--WSP 953: 1939. WSP 1625: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 699.00 ft (213.055 m) National Geodetic Vertical Datum of 1929. Aug. 8, 1957 to June 30, 1958, temporary site during reconstruction of bridge on Lynhurst Drive, a nonrecording gage on downstream side of 10th Street bridge. Mar. 10, 1966 to Aug. 16, 1967, during channelization of Eagle Creek, a nonrecording gage on downstream side of Lynhurst Drive bridge. Prior to Oct. 1, 1967, at datum 7.21 ft (2.198 m) higher.

REMARKS.--Records fair. Flow regulated since November 1969 by Eagle Creek Reservoir, 4.7 miles (7.6 km) upstream (See sta 03353450).

AVERAGE DISCHARGE.--43 years (water years 1940 to current year), 156 ft³/s (4.418 m³/s), 12.18 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,800 ft³/s (816 m³/s) June 28, 1957, gage height, 23.59 ft (7.190 m), from rating curve extended above 9,000 ft³/s (255 m³/s) on basis of a combined current-meter measurement and slope-area measurement; no flow for several days in August 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 23.2 ft (7.07 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,640 ft³/s (131 m³/s) June 1, gage height, 6.69 ft (2.039 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Nov. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	5.8	29	117	469	433	304	57	2060	31	31	18
2	7.7	6.1	31	117	271	664	212	54	676	30	29	12
3	7.8	6.0	31	233	279	520	955	54	355	133	19	11
4	6.7	8.7	29	2070	183	898	492	54	203	58	19	12
5	5.7	7.6	29	780	300	1300	329	54	198	30	15	12
6	6.2	6.4	28	519	200	693	375	53	123	29	17	12
7	6.5	6.3	28	288	30	227	345	84	69	51	15	11
8	6.7	6.1	27	220	30	332	286	55	320	1400	14	11
9	6.1	5.0	27	127	200	240	253	39	153	400	14	12
10	6.8	6.2	27	40	30	218	425	35	492	552	15	13
11	6.4	5.6	27	120	200	1590	468	33	154	847	14	10
12	5.9	5.4	27	35	30	1840	353	33	148	350	14	11
13	5.6	5.5	27	100	120	2130	201	33	34	200	13	11
14	5.5	6.5	27	100	30	993	259	32	27	43	13	10
15	5.9	6.5	27	30	30	958	182	31	47	192	13	11
16	5.2	5.9	28	30	380	1420	209	37	345	32	13	10
17	15	5.3	29	30	1340	840	1640	33	869	31	12	11
18	17	5.9	28	30	1380	563	730	31	229	41	12	11
19	7.5	7.5	27	128	836	700	447	32	249	190	12	11
20	7.1	6.2	25	29	1220	1540	357	210	236	140	13	11
21	5.3	6.2	30	31	2400	652	215	439	227	32	12	11
22	10	6.2	70	98	1850	412	154	372	225	36	13	11
23	6.8	7.1	477	1050	1900	409	97	279	132	31	12	10
24	5.9	7.5	366	257	2120	254	149	161	33	31	18	11
25	5.7	6.4	176	178	678	354	65	112	32	31	12	11
26	5.8	5.6	165	140	326	464	163	103	113	30	12	11
27	10	6.4	267	100	513	371	61	261	33	48	11	11
28	6.7	18	299	60	439	208	60	350	176	36	12	11
29	5.4	29	176	40	-----	222	58	238	181	34	14	11
30	5.3	27	127	1290	-----	202	55	968	33	31	15	11
31	6.0	-----	149	1980	-----	393	----	577	----	30	12	----
TOTAL	219.5	243.9	2860	10367	17784	22040	9899	4904	8172	5150	460	340
MEAN	7.08	8.13	92.3	334	635	711	330	158	272	166	14.8	11.3
MAX	17	29	477	2070	2400	2130	1640	968	2060	1400	31	18
MIN	5.2	5.0	25	29	30	202	55	31	27	29	11	10
CFSM	.04	.05	.53	1.92	3.65	4.09	1.90	.91	1.56	.95	.09	.07
IN.	.05	.05	.61	2.22	3.80	4.71	2.12	1.05	1.75	1.10	.10	.07

CAL YR 1981 TOTAL 43979.7 MEAN 120 MAX 2710 MIN 4.0 CFSM .69 IN 9.40
WTR YR 1982 TOTAL 82439.4 MEAN 226 MAX 2400 MIN 5.0 CFSM 1.30 IN 17.62

03353600 LITTLE EAGLE CREEK AT SPEEDWAY, IN

LOCATION.--Lat 39°47'15", long 86°13'41", in NE¼SW¼ sec.32, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of 16th Street bridge in Speedway, 0.6 mile (1.0 km) upstream from Dry Run, and 2.3 miles (3.7 km) upstream from mouth.

DRAINAGE AREA.--23.9 mi^2 (61.9 km^2) including 5.57 mi^2 (14.43 km^2) from Dry Run basin. Since June 1964 part of the flow from the 5.57 mi^2 (14.43 km^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 (215.744 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to June 13, 1975, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records poor. High-water flow is diverted from Dry Run basin into Little Eagle Creek above gage.

AVERAGE DISCHARGE.--18 years (water years 1965 to current year) 20.7 ft^3/s (0.586 m^3/s), 11.76 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft^3/s (94.3 m^3/s) July 28, 1979, gage height, 12.13 ft (3.697 m); no flow at times in 1960-64, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	0430	1030	29.2	6.62	2.018	Feb. 20	2015	474	13.4	4.78	1.457
Jan. 30	1415	*1650	46.7	*8.22	2.505						

Minimum daily discharge, 0.40 ft^3/s (0.011 m^3/s) Oct. 12.

NOTE.--No gage height record Sept. 1-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.1	13	16	80	43	31	5.8	62	3.8	2.2	10
2	1.5	3.7	6.2	22	51	52	20	5.2	19	2.8	1.9	3.9
3	1.2	3.5	4.7	74	13	58	101	4.9	12	29	1.8	2.1
4	1.0	3.6	7.6	165	13	89	38	4.5	8.2	5.7	1.9	1.3
5	.68	4.0	5.7	70	13	70	35	4.6	7.8	3.0	2.3	.90
6	5.5	4.6	4.3	40	12	52	48	4.2	6.7	2.8	3.0	.82
7	1.7	3.5	4.1	31	11	37	34	77	7.8	7.4	1.9	.72
8	.92	2.8	3.7	23	12	30	27	49	7.0	16	1.6	.72
9	.57	2.6	3.1	19	11	29	36	19	5.7	3.6	1.4	.72
10	.53	2.3	2.9	8.0	9.6	32	37	12	5.1	7.8	1.6	.72
11	.43	2.1	2.6	9.0	8.4	160	28	9.0	4.3	33	1.5	.68
12	.40	1.8	2.4	7.2	7.0	94	20	7.4	4.8	5.4	1.4	.68
13	.44	1.7	2.3	6.2	7.2	137	16	7.0	4.6	4.1	1.5	.68
14	.66	1.5	2.2	5.5	8.4	65	13	6.3	3.8	2.2	1.4	.68
15	.48	1.4	2.2	5.0	20	81	11	7.0	9.9	2.1	1.3	.68
16	.46	1.3	2.5	4.7	129	175	50	18	67	2.2	1.3	.70
17	17	1.0	2.7	4.5	321	70	80	31	24	2.3	1.2	.80
18	39	1.1	1.6	4.3	164	46	35	13	9.0	4.8	1.0	1.3
19	6.8	7.4	1.0	4.3	110	92	29	9.9	11	49	1.0	1.1
20	3.1	8.3	.66	4.3	207	130	24	9.0	7.0	7.8	6.0	.90
21	2.3	4.1	1.0	5.8	186	60	19	50	11	3.8	2.7	.80
22	15	2.4	4.6	25	141	44	15	15	5.4	1.9	1.2	.80
23	16	3.6	153	423	141	34	17	9.0	4.1	2.1	1.4	.80
24	6.2	9.7	55	14	106	29	14	6.6	3.2	1.9	20	.80
25	4.3	3.7	25	25	54	41	11	8.5	3.0	1.6	18	1.2
26	5.4	6.4	16	15	46	45	9.4	12	2.7	1.5	2.7	.96
27	22	11	59	12	38	28	8.2	22	2.7	32	2.0	1.0
28	22	5.5	30	11	38	20	7.5	12	22	11	1.2	1.2
29	8.7	3.4	17	10	------	16	6.8	41	16	3.8	1.0	.90
30	5.8	3.3	10	987	------	13	6.4	90	5.4	3.2	4.1	.90
31	4.7	-----	12	209	------	70	-----	27	-----	2.5	2.7	-----
TOTAL	197.77	115.4	458.06	2259.8	1957.6	1942	827.3	596.9	362.2	260.1	94.2	39.46
MEAN	6.38	3.85	14.8	72.9	69.9	62.6	27.6	19.3	12.1	8.39	3.04	1.32
MAX	39	11	153	987	321	175	101	90	67	49	20	10
MIN	.40	1.0	.66	4.3	7.0	13	6.4	4.2	2.7	1.5	1.0	.68
CFSM	.27	.16	.62	3.05	2.93	2.62	1.16	.81	.51	.35	.13	.06
IN.	.31	.18	.71	3.52	3.05	3.02	1.29	.93	.56	.40	.15	.06

CAL YR 1981 TOTAL 6584.42 MEAN 18.0 MAX 661 MIN .40 CFSM .75 IN 10.25
WTR YR 1982 TOTAL 9110.79 MEAN 25.0 MAX 987 MIN .40 CFSM 1.05 IN 14.18

03353620 LICK CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°42'21", long 86°06'13", in NE¼NE¼ sec.32, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank at upstream side of Sherman Drive bridge in Indianapolis, and at mile 6.2 (10.0 km).

DRAINAGE AREA.--15.6 mi² (40.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 742.00 ft (226.162 m) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

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

AVERAGE DISCHARGE.--12 years, 19.4 ft³/s (0.549 m³/s), 16.89 in/yr (429 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) June 25, 1978, gage height, 9.61 ft (2.929 m); minimum daily, 0.46 ft³/s (0.013 m³/s) Aug. 15, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 23	0015	596	16.9	4.64	1.414	Feb. 16	2245	438	12.4	4.20	1.280
Jan. 4	0200	454	12.9	4.25	1.295	Mar. 16	0800	438	12.4	4.20	1.280
Jan. 23	----	*730	20.7	*5.98[a]	1.823	July 13	1830	547	15.5	4.51	1.375
Jan. 30	----	350	9.91	4.15[a]	1.265	July 27	1500	308	8.72	3.78	1.152

Minimum daily discharge, 0.46 ft³/s (0.013 m³/s) Aug. 15.

[a]Ice jam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.2	2.1	19	44	16	12	3.5	68	3.8	1.9	18
2	2.9	1.3	1.1	30	26	19	9.8	3.3	16	2.9	1.5	5.2
3	1.8	1.3	.86	123	16	18	82	2.8	7.2	29	1.2	1.3
4	1.2	1.3	1.3	227	12	40	23	2.6	8.3	6.3	1.4	.90
5	1.2	1.3	.96	59	11	28	25	2.7	4.5	3.4	1.0	.75
6	4.9	1.2	.80	38	10	16	30	2.8	2.9	2.5	.96	.74
7	1.7	1.0	.79	25	8.7	14	16	32	18	2.3	.82	.69
8	1.1	.87	.82	14	9.8	14	15	17	8.2	2.2	.78	.54
9	.98	.89	.76	9.0	8.7	9.8	24	6.0	13	1.8	1.8	.54
10	1.0	.89	.74	8.0	7.0	11	19	2.7	11	30	.82	.57
11	1.0	.88	.70	9.0	6.0	145	16	2.3	5.2	15	.75	.56
12	1.2	.87	.69	6.0	5.3	64	13	1.9	3.1	6.6	2.0	.47
13	1.3	.80	.70	5.0	5.3	105	11	2.0	2.5	128	1.8	.51
14	1.5	.80	.74	4.2	7.3	38	9.3	1.4	2.0	58	.64	1.5
15	2.2	.79	.70	3.7	20	61	8.7	1.9	41	16	.46	.71
16	1.5	.79	.68	3.4	200	272	19	1.4	97	7.3	.47	.58
17	5.4	.81	.79	3.2	263	90	54	1.3	34	4.7	.53	.54
18	25	.79	.70	3.0	108	51	16	7.0	14	11	.54	.82
19	2.4	7.0	.60	3.0	73	120	11	9.6	24	87	.55	.70
20	1.2	3.9	.55	3.0	171	132	11	4.1	10	21	1.2	.61
21	.97	1.2	.80	3.5	143	53	6.8	16	12	9.8	2.4	.62
22	3.4	.74	47	10	101	32	5.7	2.8	5.4	6.5	.83	.61
23	4.2	1.7	201	300	98	22	4.9	2.0	3.9	4.4	.85	.60
24	1.5	3.3	65	50	67	17	4.6	1.6	4.6	3.1	2.1	2.8
25	1.1	1.0	30	25	33	35	4.8	2.9	2.8	2.3	5.0	3.3
26	2.9	1.1	12	15	22	32	4.6	1.6	2.1	2.1	2.3	.73
27	7.8	3.0	64	9.0	16	20	4.3	7.4	1.9	99	1.5	.63
28	4.5	.92	26	8.5	15	14	4.0	3.3	25	29	.79	.56
29	2.0	.77	15	7.0	------	12	5.7	57	29	8.1	.70	.55
30	1.4	.91	11	250	------	13	3.6	44	11	4.1	4.5	.54
31	1.3	-----	12	98	------	22	-----	34	-----	2.7	3.2	-----
TOTAL	91.95	43.32	500.88	1371.5	1507.1	1535.8	473.8	280.9	487.6	609.9	45.29	47.17
MEAN	2.97	1.44	16.2	44.2	53.8	49.5	15.8	9.06	16.3	19.7	1.46	1.57
MAX	25	7.0	201	300	263	272	82	57	97	128	5.0	18
MIN	.97	.74	.55	3.0	5.3	9.8	3.6	1.3	1.9	1.8	.46	.47
CFSM	.19	.09	1.04	2.83	3.45	3.17	1.01	.58	1.05	1.26	.09	.10
IN.	.22	.10	1.19	3.27	3.59	3.66	1.13	.67	1.16	1.45	.11	.11

CAL YR 1981 TOTAL 5404.51 MEAN 14.8 MAX 406 MIN .55 CFSM .95 IN 12.89
WTR YR 1982 TOTAL 6995.21 MEAN 19.2 MAX 300 MIN .46 CFSM 1.23 IN 16.68

03353700 WEST FORK WHITE LICK CREEK AT DANVILLE, IN

LOCATION.--Lat 39°45'36", long 86°30'47", in NW¼NE¼ sec.10, T.15 N., R.1 W., Hendricks County, Hydrologic Unit 05120201, on downstream side of bridge on U.S. Highway 36, 0.1 mile (0.2 km) east of city limits of Danville, 0.5 mile (0.8 km) upstream from small left-bank tributary and 7 miles (11.3 km) west of Avon.

DRAINAGE AREA.--28.8 mi^2 (74.6 km^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 (252.627 m) 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.--Records good except those for periods of no gage-height record, which are poor. Low flow affected by releases from Danville Filtration Plant.

AVERAGE DISCHARGE.--24 years, 29.5 ft^3/s (0.835 m^3/s), 13.91 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft^3/s (94.3 m^3/s) July 14, 1962, gage height, 11.32 ft (3.450 m); maximum gage height, 12.13 ft (3.697 m) July 13, 1979; no flow at times during 1961-67, 1970, 1971, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 16.0 ft (4.88 m), from floodmarks, discharge, 6,660 ft^3/s (189 m^3/s), from contracted-opening measurement .

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft^3/s (19.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 20	1915	*820	23.2	*5.49	1.673
May 20	2400	755	21.4	5.20	1.585

Minimum daily discharge, 0.03 ft^3/s (0.001 m^3/s) Sept. 15, 16, 22, 29.

NOTE.--No gage-height record January 8 to February 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.0	5.0	25	80	48	21	12	184	7.0	3.7	3.8
2	1.1	3.8	5.7	24	60	71	21	11	55	5.8	2.7	1.3
3	.99	3.5	3.4	123	48	71	128	9.6	28	34	2.1	.42
4	.97	3.3	3.8	433	40	127	54	9.2	21	15	1.7	.21
5	1.1	3.8	3.0	156	30	105	43	8.8	16	8.4	5.6	.13
6	1.5	3.4	3.9	99	25	67	49	8.8	12	5.5	2.9	.09
7	1.2	2.9	3.6	68	22	43	45	18	20	6.4	1.7	.10
8	1.0	3.7	2.9	43	20	32	40	17	15	6.9	1.5	.09
9	1.0	2.6	2.3	30	18	27	41	12	31	4.9	1.0	.08
10	1.1	2.0	2.0	22	16	31	51	9.6	43	6.7	.90	.07
11	1.1	1.9	2.0	19	15	230	47	8.8	15	7.3	.84	.07
12	1.1	1.8	2.0	16	14	174	37	8.0	12	4.3	.61	.05
13	1.1	1.9	1.9	14	13	257	29	7.3	8.8	3.2	.48	.05
14	1.2	1.8	2.1	12	13	120	24	6.7	7.0	2.6	.41	.04
15	1.4	1.9	2.1	12	19	152	21	6.4	11	2.2	.34	.03
16	1.4	2.0	1.8	11	40	232	37	5.8	107	1.8	.30	.03
17	2.0	2.0	1.6	10	100	118	211	5.8	71	1.6	.32	.18
18	2.1	1.8	1.4	9.4	246	72	96	12	27	1.7	.22	.24
19	1.9	1.9	1.2	9.0	173	100	60	26	18	29	.17	.09
20	1.4	2.5	1.0	8.7	382	154	43	77	15	13	.13	.09
21	1.2	2.4	1.2	9.0	359	80	30	226	13	5.9	.16	.04
22	1.8	2.1	2.0	10	262	52	25	79	9.6	4.3	.18	.03
23	2.4	2.3	210	250	274	41	21	33	8.4	16	.44	.04
24	2.2	2.8	60	100	197	33	20	22	7.0	6.7	1.0	.06
25	1.9	2.5	40	45	92	38	18	17	6.4	3.5	.67	.09
26	2.1	4.3	31	30	65	48	17	17	6.1	2.5	.46	.05
27	5.2	2.9	48	26	49	34	15	33	7.0	53	.25	.06
28	13	3.4	43	23	46	28	13	25	29	74	.14	.04
29	8.6	2.2	31	22	----	25	12	29	27	19	.10	.03
30	6.3	2.2	25	350	----	25	13	145	10	9.0	.77	.04
31	4.8	----	24	240	----	25	----	88	-----	5.7	.48	----
TOTAL	75.76	79.6	567.9	2249.1	2718	2660	1282	993.8	840.3	366.9	32.27	7.64
MEAN	2.44	2.65	18.3	72.6	97.1	85.8	42.7	32.1	28.0	11.8	1.04	.25
MAX	13	4.3	210	433	382	257	211	226	184	74	5.6	3.8
MIN	.97	1.8	1.0	8.7	13	25	12	5.8	6.1	1.6	.10	.03
CFSM	.09	.09	.64	2.52	3.37	2.98	1.48	1.12	.97	.41	.04	.009
IN.	.10	.10	.73	2.90	3.51	3.44	1.66	1.28	1.09	.47	.04	.01

CAL YR 1981 TOTAL 8942.66 MEAN 24.5 MAX 390 MIN .72 CFSM .85 IN 11.55
WTR YR 1982 TOTAL 11873.27 MEAN 32.5 MAX 433 MIN .03 CFSM 1.13 IN 15.34

03353800 WHITE LICK CREEK AT MOORESVILLE, IN

LOCATION.--Lat 39°36'28", long 86°22'56", in NE¼SE¼ sec.35, T.14 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on State Highway 42 at Mooresville, 0.9 mile (1.4 km) downstream from McCracken Creek, 2.0 miles (3.2 km) upstream from East Fork White Lick Creek, and at mile 11.4 (18.3 km).

DRAINAGE AREA.--212 mi² (549 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft (196.486 m) National Geodetic Vertical Datum of 1929. Dec. 10, 1963 to Sept. 30, 1964, nonrecording gage at bridge 1,950 ft (594 m) upstream at datum 1.39 ft (0.424 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--25 years, 222 ft³/s (6.287 m³/s), 14.22 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft³/s (538 m³/s) July 13, 1979, gage height, 23.31 ft (7.105 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Dec. 24, 25, 1960, Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 22.5 ft (6.86 m), from levels to high-water mark by State of Indiana, Department of Natural Resources.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	0900	3410	96.6	16.60	5.060	Jan. 30	2000	*4440	126	*18.40	5.608
Jan. 23	0700	3180	90.1	16.17	4.929	Feb. 20	2400	3850	109	17.38	5.297

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Sept. 24, 29, 30.

CORRECTION.--Daily discharge for 1981 water year published in error. Corrected figures are as follows:

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	37	55	35	32	144	55	604	493	57	153	83
2	30	35	54	32	50	131	52	359	416	58	136	148
3	30	32	52	32	38	118	52	255	362	58	124	158
4	29	30	46	23	30	124	73	204	325	83	118	113
5	28	28	42	19	26	268	87	222	297	119	186	88
6	27	28	41	21	24	266	77	1000	290	136	285	72
7	26	27	39	21	24	196	62	533	259	85	194	60
8	25	28	41	21	23	160	58	322	235	67	142	55
9	25	27	54	21	23	141	56	271	220	59	121	47
10	24	26	83	21	67	129	61	836	222	54	148	43
11	23	24	81	20	325	119	244	1580	204	51	144	39
12	22	24	68	18	97	109	370	1060	283	49	104	37
13	22	24	62	19	95	100	307	656	468	47	92	35
14	22	24	55	20	78	92	255	1380	239	106	85	38
15	22	25	52	21	100	84	176	1780	178	124	109	38
16	22	25	52	21	897	83	142	888	144	169	104	38
17	29	26	49	21	712	78	134	604	127	100	84	48
18	60	29	46	21	422	76	123	2130	116	73	75	46
19	45	28	41	21	341	73	104	1730	106	64	70	40
20	34	27	32	24	317	72	112	937	99	107	66	37
21	30	25	27	25	259	70	97	637	97	119	62	33
22	27	25	30	27	222	66	100	493	102	84	60	32
23	25	25	32	28	224	63	630	416	89	65	57	30
24	24	25	35	28	257	61	343	455	81	60	55	28
25	37	25	29	29	208	59	220	2330	81	56	55	28
26	46	25	31	32	176	57	200	1120	73	53	53	28
27	41	42	31	34	156	59	178	3730	68	1260	59	28
28	46	82	30	32	149	58	146	1690	65	578	71	28
29	51	70	34	28	----	57	692	915	61	338	95	33
30	42	61	34	25	----	64	582	1090	59	239	104	47
31	39	----	34	24	----	62	----	688	----	184	89	----
TOTAL	983	959	1392	764	5372	3239	5788	30915	5859	4702	3300	1578
MEAN	31.7	32.0	44.9	24.6	192	104	193	997	195	152	106	52.6
MAX	60	82	83	35	897	268	692	3730	493	1260	285	158
MIN	22	24	27	18	23	57	52	204	59	47	53	28
CFSM	.15	.15	.21	.12	.91	.49	.91	4.70	.92	.72	.50	.25
IN.	.17	.17	.24	.13	.94	.57	1.02	5.42	1.03	.83	.58	.28

WTR YR 1981 TOTAL 64851 MEAN 178 MAX 3730 MIN 18 CFSM .84 IN 11.38

03353800 WHITE LICK CREEK AT MOORESVILLE, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	46	40	200	594	401	268	125	970	122	49	41
2	30	42	43	186	436	467	227	118	461	97	44	41
3	23	38	40	488	360	488	613	108	281	407	40	27
4	23	38	40	2560	289	539	467	102	205	198	37	22
5	20	35	40	895	200	712	330	98	173	125	69	20
6	25	35	35	587	175	494	375	95	144	97	62	18
7	22	34	34	451	155	372	335	164	237	83	40	18
8	18	31	35	300	140	292	302	225	235	170	34	17
9	18	30	31	200	135	263	313	146	161	89	31	17
10	16	27	29	160	125	255	344	120	215	102	29	17
11	16	25	27	140	120	1570	332	108	166	114	29	16
12	14	22	23	125	115	1070	286	97	125	85	27	16
13	14	20	23	115	110	1350	253	89	106	69	26	15
14	29	20	26	100	110	778	215	82	91	60	25	16
15	17	20	26	93	130	800	196	78	97	54	23	16
16	14	20	22	88	504	1440	305	74	319	51	22	15
17	16	20	25	82	1950	854	958	76	419	47	22	14
18	95	20	20	80	1540	558	600	76	220	49	20	18
19	62	21	16	77	1010	891	404	131	201	155	18	20
20	38	30	13	74	1740	1260	335	184	161	152	20	17
21	27	30	14	76	2350	695	258	865	220	85	23	14
22	29	26	29	80	1440	494	218	344	141	66	18	14
23	44	23	691	1720	1370	404	193	247	108	62	18	13
24	40	34	482	501	1260	346	179	168	91	60	21	12
25	37	37	300	290	667	352	170	137	82	49	25	18
26	37	34	253	210	488	416	164	146	76	44	27	16
27	44	38	324	180	413	332	152	227	72	83	25	14
28	76	35	335	160	392	281	137	201	491	273	21	14
29	91	31	253	148	---	255	127	378	300	135	18	12
30	69	29	170	2400	---	240	127	574	175	80	21	12
31	55	----	180	1750	---	281	---	360	---	59	27	---
TOTAL	1105	891	3619	14516	18318	18950	9183	5943	6743	3322	911	540
MEAN	35.6	29.7	117	468	654	611	306	192	225	107	29.4	18.0
MAX	95	46	691	2560	2350	1570	958	865	970	407	69	41
MIN	14	20	13	74	110	240	127	74	72	44	18	12
CFSM	.17	.14	.55	2.21	3.09	2.88	1.44	.91	1.06	.51	.14	.09
IN.	.19	.16	.64	2.55	3.21	3.33	1.61	1.04	1.18	.58	.16	.09

CAL YR 1981 TOTAL 67132 MEAN 184 MAX 3730 MIN 13 CFSM .87 IN 11.78
WTR YR 1982 TOTAL 84041 MEAN 230 MAX 2560 MIN 12 CFSM 1.09 IN 14.75

03353800 WHITE LICK CREEK AT MOORESVILLE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC 14...	0930	24	1.0	51	3.3

03354000 WHITE RIVER NEAR CENTERTON, IN

LOCATION.--Lat 39°29'51", long 86°24'02", in NE¼NE¼ sec.10, T.12 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at upstream side of bridge on Blue Bluff Road, 0.8 mile (1.3 km) downstream from White Lick Creek, 1 mile (1.6 km) south of Centerton, and at mile 199.3 (321.0 km).

DRAINAGE AREA.--2,444 mi² (6,330 km²).

PERIOD OF RECORD.--July 1925 to September 1930 (gage heights only), October 1930 to March 1932, October 1946 to current year. Monthly discharge only for October and November 1946, published in WSP 1305. Published as West Fork White River at Martinsville prior to March 1932, and as West Fork White River near Centerton October 1946 to September 1948.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 1909: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.44 ft (181.490 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark), levels by Indianapolis Power and Light Co. See WSP 1725 for history of changes prior to July 1953. July 1953 to Aug. 7, 1975, water-stage recorder at site 0.4 mile (0.6 km) downstream at same datum.

REMARKS.--Records good except for periods of no gage-height record, which are poor. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--37 years (1930-31, 1946 to current year), 2,418 ft³/s (68.48 m³/s), 13.43 in/yr (341mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft³/s (1,430 m³/s) Apr. 22, 1964, gage height, 17.57 ft (5.355 m) at site 0.4 mile (0.6 km) downstream; minimum daily, 131 ft³/s (3.71 m³/s) Nov. 15, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft (6.95 m) at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft (6.68 m) at site 0.4 mile (0.6 km) downstream (from information by Corps of Engineers), discharge, 90,000 ft³/s (2,550 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s (269 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	----	14000	396	unknown		Feb. 19	----	*19500	552	*13.70	4.176
Jan. 31	----	14000	396	unknown		Mar. 14	1300	19200	544	13.58	4.139

Minimum daily discharge, 322 ft³/s (9.12 m³/s) Sept. 23.

NOTE.--No gage-height record Dec. 23 to Jan. 17, Jan. 29 to Mar. 9 and May 16 to June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	922	1410	922	2300	19000	6400	5370	1790	4500	1750	801	651
2	810	1230	856	2500	17000	7500	4700	1720	5800	1600	755	915
3	738	1110	828	5000	9000	8200	5860	1640	4800	2140	737	624
4	678	1020	810	11000	5600	8300	6130	1590	3600	1890	652	524
5	637	941	792	13000	4000	9400	5080	1540	2950	1400	985	470
6	712	846	721	11000	3500	10000	4890	1480	2550	1180	738	510
7	730	783	662	6500	2900	7500	4230	1760	1880	1060	612	490
8	645	730	637	4500	2500	5600	3900	2550	2080	1620	537	460
9	645	695	629	3500	2200	4700	3990	2120	2120	2800	1540	431
10	613	695	621	2800	2000	4270	4160	1960	2090	2400	1670	418
11	581	662	605	2200	1900	7200	4540	1810	2010	2520	1230	407
12	581	613	565	2000	1800	12400	5080	1600	1800	2340	978	383
13	573	613	565	1800	1700	16600	4990	1470	1530	1880	828	383
14	558	605	565	1700	1600	18800	4330	1390	1250	1520	711	397
15	558	597	541	1600	1600	16700	3580	1310	1080	1360	620	400
16	541	581	533	1550	3000	16400	3380	1260	1800	1190	568	381
17	565	589	541	1500	9000	14700	5680	1320	3800	960	544	364
18	1310	589	550	1480	13000	12400	6170	1290	4650	820	483	386
19	837	621	550	1450	18000	11500	5520	1260	4100	1370	477	394
20	721	765	490	1430	16000	13100	4540	1400	3650	1930	484	354
21	678	730	441	1420	17800	12900	3720	2200	3350	1600	616	359
22	704	712	498	1410	18200	12300	3160	2700	3050	1380	609	379
23	922	662	3000	9800	18000	8750	2810	2300	2700	980	640	322
24	884	738	5600	6430	17000	6350	2520	2000	2290	835	591	329
25	990	721	6000	5670	15000	5550	2420	1600	1650	770	928	435
26	970	747	4000	4410	12000	5680	2300	1450	1320	720	766	390
27	1070	912	4100	3110	9000	5330	2240	1350	1200	940	614	354
28	1360	922	4500	2540	6000	4700	2100	1500	1900	1760	556	362
29	2130	931	3900	4000	---	4160	1950	1800	2600	1070	487	364
30	2010	856	2900	7000	---	3840	1840	3500	2050	935	506	401
31	1630	---	2500	13000	---	4430	---	4000	---	880	673	---
TOTAL	27303	23626	50422	137600	248300	285660	121180	56660	80150	45600	22936	13037
MEAN	881	788	1627	4439	8868	9215	4039	1828	2672	1471	740	435
MAX	2130	1410	6000	13000	19000	18800	6170	4000	5800	2800	1670	915
MIN	541	581	441	1410	1600	3840	1840	1260	1080	720	477	322
CFSM	.36	.32	.67	1.82	3.63	3.77	1.65	.75	1.09	.60	.30	.18
IN.	.42	.36	.77	2.09	3.78	4.35	1.84	.86	1.22	.69	.35	.20

CAL YR 1981 TOTAL 745134 MEAN 2041 MAX 21200 MIN 310 CFSM .84 IN 11.34
WTR YR 1982 TOTAL 1112474 MEAN 3048 MAX 19000 MIN 322 CFSM 1.25 IN 16.93

03354500 BEANBLOSSOM CREEK AT BEANBLOSSOM, IN

LOCATION.--Lat 39°15'45", long 86°14'55", in SW¼NW¼ sec.31, T.10 N., R.3 E., Brown County, Hydrologic Unit 05120202, on right bank 15 ft (5 m) downstream from bridge on State Highway 135, 0.3 mile (0.5 km) south of Beanblossom, 2.7 miles (4.3 km) upstream from North Fork Beanblossom Creek, and at mile 42.1 (67.7 km).

DRAINAGE AREA.--14.6 mi² (37.8 km²).

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1965, published as Bean Blossom Creek at Bean Blossom.

REVISED RECORDS.--WSP 1555: 1952, 1953(M), 1956-57. WSP 1705: 1952(P). WDR IN-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 673.65 ft (205.329 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--31 years, 15.8 ft³/s (0.447 m³/s), 14.70 in/yr (373 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft³/s (231 m³/s) June 23, 1960, gage height, 11.78 ft (3.591 m), from curve extended above 2,000 ft³/s (56.6 m³/s) on basis of contracted-opening measurement at gage height 11.78 ft (3.591 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 23	0015	706	20.0	6.36	1.939	Jan. 31	0915	*1090	30.9	*8.17	2.490
Jan. 23	0245	1020	28.9	7.84	2.390						

Minimum daily discharge, 0.25 ft³/s (0.007 m³/s) Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	.36	3.1	9.0	88	9.0	34	6.2	108	5.3	.88	17
2	.56	.36	2.4	12	36	8.6	25	5.1	27	3.9	.77	12
3	.50	.36	2.0	56	33	9.9	92	4.5	18	17	.67	5.1
4	.50	.36	2.0	141	25	26	36	3.9	14	8.6	.67	2.8
5	.56	.36	1.9	33	18	24	30	3.3	10	5.8	2.9	1.9
6	1.7	.36	1.5	22	14	18	34	3.1	7.0	3.9	1.2	1.4
7	.58	.31	1.5	12	12	18	25	16	18	2.9	.88	1.2
8	.42	.31	1.4	8.4	10	14	23	29	17	6.2	.67	1.1
9	.50	.50	1.2	7.0	9.2	12	24	17	13	5.1	.67	1.0
10	.50	.58	1.1	5.6	8.6	11	22	13	8.6	8.2	.58	.87
11	.50	.42	1.1	4.8	8.2	22	21	9.4	6.2	20	1.6	.73
12	.42	.42	1.0	4.0	8.0	22	18	7.0	5.1	9.4	.80	.67
13	.42	.36	1.0	3.4	7.8	51	16	5.4	4.5	5.8	.51	.67
14	.36	.36	1.0	2.9	4.2	28	14	4.2	3.6	4.2	.39	.72
15	.36	.36	1.0	2.6	10	56	12	3.3	4.2	3.1	.34	.67
16	.36	.36	.88	2.4	209	109	16	2.9	18	2.4	.35	.62
17	.42	.36	.88	2.3	197	47	61	2.7	15	1.9	.38	.54
18	.77	.36	.86	2.3	57	45	35	2.2	10	1.9	.32	.81
19	.58	5.4	.82	2.4	33	243	26	2.2	8.6	6.6	.25	.63
20	.50	6.2	.65	2.4	28	94	23	1.9	7.0	3.6	.39	.57
21	.36	2.4	.70	3.1	24	43	18	10	9.9	2.2	.83	.50
22	.42	1.7	48	70	19	27	16	5.8	6.6	2.7	.35	.50
23	.58	1.7	120	396	18	23	14	6.2	5.4	2.4	.29	.49
24	.58	2.4	19	35	18	22	12	4.5	4.5	1.7	1.6	.72
25	.50	2.0	12	20	17	26	11	3.3	3.9	1.5	1.8	1.1
26	.88	1.9	9.9	15	14	30	10	2.9	3.3	1.4	.65	.76
27	.77	2.0	29	7.8	12	23	9.0	7.0	3.1	1.9	.76	.67
28	.58	1.7	19	6.6	10	21	7.4	7.8	56	2.4	.53	.65
29	.42	1.5	10	4.8	-----	18	6.6	13	22	1.9	.37	.61
30	.36	1.5	8.0	277	-----	17	6.6	16	10	1.2	19	.58
31	.36	-----	7.0	583	-----	95	-----	49	-----	1.0	9.8	-----
TOTAL	17.07	37.26	309.89	1753.8	948.0	1212.5	697.6	267.8	447.5	146.1	51.20	57.58
MEAN	.55	1.24	10.0	56.6	33.9	39.1	23.3	8.64	14.9	4.71	1.65	1.92
MAX	1.7	6.2	120	583	209	243	92	49	108	20	19	17
MIN	.36	.31	.65	2.3	4.2	8.6	6.6	1.9	3.1	1.0	.25	.49
CFSM	.04	.09	.69	3.88	2.32	2.68	1.60	.59	1.02	.32	.11	.13
IN.	.04	.09	.79	4.47	2.42	3.09	1.78	.68	1.14	.37	.13	.15

CAL YR 1981 TOTAL 5840.73 MEAN 16.0 MAX 536 MIN .05 CFSM 1.10 IN 14.88
WTR YR 1982 TOTAL 5946.30 MEAN 16.3 MAX 583 MIN .25 CFSM 1.12 IN 15.15

03354500 BEAN BLOSSOM CREEK AT BEANBLOSSOM, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 26...	1410	.85	9.0	5	.01
DEC 07...	1450	1.5	3.5	4	.02

03357350 PLUM CREEK NEAR BAINBRIDGE, IN

LOCATION.--Lat 39°45'42", long 86°43'46", in SW¼SE¼ sec.3, T.15 N., R.3 W., Putnam County, Hydrologic Unit 05120203, on right upstream wingwall of bridge on U.S. Highway 36, 0.5 mile (0.8 km) west of Groveland, and 4.5 miles (7.2 km) east of Bainbridge.

DRAINAGE AREA.--3.00 mi^2 (7.77 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 828.44 ft (252.509 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--13 years, 3.77 ft^3/s (0.107 m^3/s), 17.06 in/yr (433 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft^3/s (21.1 m^3/s) June 30, 1977, gage height, 5.75 ft (1.753 m); no flow at times during 1970, 1975-77.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft^3/s (4.25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 30	0900	317	8.98	3.85	1.173	July 18	0645	228	6.46	3.47	1.058
Feb. 20	1730	169	4.79	3.27	0.997	Aug. 5	0645	*441	12.5	*4.45	1.356

Minimum daily discharge, 0.07 ft^3/s (0.002 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	.64	.93	4.4	8.2	5.5	2.1	1.3	17	.26	.75	4.2
2	.57	.60	.88	3.3	4.4	6.4	2.8	1.2	4.7	5.3	.63	1.2
3	.45	.60	.69	14	3.0	6.1	21	1.0	3.0	1.2	.53	.53
4	.34	.64	.59	63	2.1	21	6.4	.86	2.1	.62	1.2	.33
5	.28	.60	.54	15	1.8	10	6.8	.79	1.7	.42	118	.24
6	.57	.54	.53	10	1.6	6.8	8.8	.76	1.2	13	11	.20
7	.47	.60	.55	5.0	1.6	4.6	5.8	3.9	3.7	8.9	5.2	.20
8	.36	.45	.57	3.2	1.5	3.4	4.4	2.6	2.7	2.0	2.9	.16
9	.29	.37	.47	2.2	1.3	3.1	4.9	1.4	1.6	6.6	1.8	.13
10	.22	.34	.45	1.5	1.2	3.7	4.9	1.1	1.7	8.7	1.3	.11
11	.16	.33	.43	1.3	1.0	32	4.9	.73	.97	1.8	1.1	.10
12	.13	.33	.40	1.2	1.0	15	5.2	.56	.84	1.1	.82	.10
13	.14	.30	.39	1.0	1.0	32	3.6	.47	.71	.83	.67	.10
14	.14	.29	.42	.94	1.1	10	3.2	.41	.55	.68	.54	.10
15	.13	.32	.40	.88	1.5	16	2.9	.36	2.0	.60	.45	.12
16	.11	.32	.37	.85	2.5	18	18	.34	5.4	.53	.37	.10
17	.19	.34	.40	.81	30	9.3	32	.79	2.5	1.6	.30	.20
18	.54	.29	.38	.78	22	6.1	13	.59	1.4	42	.25	1.3
19	.22	.49	.35	.75	15	14	9.6	1.1	1.1	5.7	.22	.32
20	.14	.82	.29	.73	58	16	7.5	5.8	.97	2.1	4.7	.25
21	.10	.59	.39	.72	29	7.5	4.9	16	.79	8.5	1.8	.19
22	.31	.50	.67	1.5	22	5.5	3.6	4.0	.67	1.8	.52	.15
23	.54	.58	15	25	25	4.4	3.2	2.7	.53	1.1	.44	.13
24	.29	1.0	6.0	8.8	13	3.6	2.9	1.7	.45	.87	2.0	.12
25	.24	.75	4.5	3.0	7.2	6.1	2.7	1.2	.41	.74	1.1	.19
26	.23	.78	3.5	1.7	5.2	6.1	2.5	1.7	.37	.64	.44	.17
27	2.6	.82	10	1.5	4.6	4.1	1.8	9.9	.43	20	.35	.14
28	2.1	.63	7.9	1.5	4.4	3.4	1.5	3.2	.44	7.8	.25	.13
29	1.2	1.1	5.1	1.4	-----	3.2	1.4	8.6	.36	2.4	.18	.09
30	.76	.85	4.0	136	-----	3.1	1.4	13	.27	1.4	.83	.07
31	.66	-----	3.8	15	-----	2.7	-----	13	-----	.97	1.0	-----
TOTAL	15.24	16.81	70.89	326.96	270.2	288.7	193.7	101.06	60.56	150.16	161.64	11.37
MEAN	.49	.56	2.29	10.5	9.65	9.31	6.46	3.26	2.02	4.84	5.21	.38
MAX	2.6	1.1	15	136	58	32	32	16	17	42	118	4.2
MIN	.10	.29	.29	.72	1.0	2.7	1.4	.34	.27	.26	.18	.07
CFSM	.16	.19	.76	3.50	3.22	3.10	2.15	1.09	.67	1.61	1.74	.13
IN.	.19	.21	.88	4.05	3.35	3.58	2.40	1.25	.75	1.86	2.00	.14

CAL YR 1981 TOTAL 1101.23 MEAN 3.02 MAX 69 MIN .03 CFSM 1.01 IN 13.65
WTR YR 1982 TOTAL 1667.29 MEAN 4.57 MAX 136 MIN .07 CFSM 1.52 IN 20.67

03357420 BIG WALNUT CREEK AT GREENCASTLE, IN

LOCATION.--Lat 39°40'01", long 86°51'57", in NW¼SW¼ sec.9, T.14 N., R.4 W., Putnam County, Hydrologic Unit 05120203, on left bank, 80 ft (24.4 m) downstream from concrete dam at the Greencastle Waterworks, 0.2 mile (0.3 km) downstream from Snyder Branch, 0.3 mile (0.5 km) upstream from bridge on U.S. Highway 231, 1.1 miles (1.8 km) north of Greencastle, and at mile 21.1 (33.9 km).

DRAINAGE AREA.--216 mi^2 (559 km^2).

PERIOD OF RECORD.--October 1974 to current year (discontinued).

REVISED RECORDS.--WDR IN-79-1: 1975, 1978.

GAGE.--Water-stage recorder. Datum of the gage is 665.00 ft (202.692 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Sept. 9, 1979, water-stage recorder at site 110 ft (33.5 m) upstream at same datum.

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

AVERAGE DISCHARGE.--8 years, 232 ft^3/s (6.570 m^3/s), 14.59 in/yr (371 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft^3/s (184 m^3/s), Mar. 4, 1979, gage height, 13.96 ft (4.255 m); minimum daily, 3.1 ft^3/s (0.088 m^3/s) Oct. 18, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 24.1 ft (7.35 m), from flood profile by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft^3/s (51.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	1000	3270	92.6	9.74	2.969	Mar. 13	----	2300	65.1	----	-----
Jan. 31	----	*3700	105	----	-----	Mar. 19	----	3000	85.0	----	-----
Feb. 17	----	2300	65.1	----	-----	May 21	1200	2440	69.1	8.64	2.633
Feb. 21	----	3300	93.5	----	-----	July 19	0800	2160	61.2	8.24	2.512
Feb. 23	----	2000	56.6	----	-----	Aug. 5	1200	2860	81.0	9.21	2.807
Mar. 11	----	3000	85.0	----	-----						

Minimum daily discharge, 12 ft^3/s (0.340 m^3/s) Sept. 30.

NOTE.--No gage-height record Jan. 25 to Mar. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	85	67	165	600	440	345	132	1100	84	60	79
2	114	80	73	160	520	500	274	128	600	74	55	67
3	43	52	69	527	400	530	700	122	470	396	52	41
4	37	68	68	2710	330	850	550	118	270	182	48	30
5	38	66	69	1140	250	1100	388	115	213	112	1460	25
6	56	65	66	664	210	700	442	111	169	87	536	23
7	55	61	65	450	190	550	387	184	187	284	192	21
8	41	58	59	300	175	400	347	198	288	333	117	20
9	51	55	53	220	165	350	349	148	185	311	85	20
10	51	52	49	168	160	310	365	125	226	253	70	20
11	51	52	44	140	150	1700	387	115	146	268	63	21
12	49	50	40	130	145	1710	337	108	121	154	55	20
13	49	48	46	115	140	1800	294	101	107	108	48	20
14	42	45	51	110	135	1100	240	95	93	88	44	19
15	36	45	46	105	130	1000	207	90	86	77	40	18
16	35	45	35	100	350	1200	324	84	221	69	36	17
17	38	45	39	97	2000	1000	1300	89	378	62	34	14
18	54	45	37	94	1700	700	822	81	226	59	31	22
19	53	46	34	92	1200	1500	529	117	163	967	29	20
20	48	54	27	90	1300	1600	402	142	182	302	27	16
21	42	53	30	93	2700	800	308	589	188	158	48	13
22	50	49	37	100	1700	600	254	458	118	145	31	13
23	56	46	500	1480	1900	450	220	325	98	198	27	13
24	60	55	450	582	1700	360	200	221	84	105	27	13
25	64	57	300	400	1000	400	185	163	79	81	40	15
26	66	56	230	280	650	540	176	139	74	70	33	14
27	110	59	354	230	500	400	161	295	74	238	27	15
28	150	65	360	180	450	290	147	316	194	250	24	13
29	140	62	230	160	-----	280	139	287	137	132	22	14
30	120	58	190	1500	-----	262	136	700	112	84	28	12
31	95	----	170	3000	-----	415	-----	550	----	67	33	----
TOTAL	2028	1677	3888	15582	20850	23837	10915	6446	6589	5798	3422	668
MEAN	65.4	55.9	125	503	745	769	364	208	220	187	110	22.3
MAX	150	85	500	3000	2700	1800	1300	700	1100	967	1460	79
MIN	35	45	27	90	130	262	136	81	74	59	22	12
CFSM	.30	.26	.58	2.33	3.45	3.56	1.69	.96	1.02	.87	.51	.10
IN.	.35	.29	.67	2.68	3.59	4.11	1.88	1.11	1.13	1.00	.59	.12

CAL YR 1981 TOTAL 71097 MEAN 195 MAX 2960 MIN 16 CFSM .90 IN 12.24
WTR YR 1982 TOTAL 101700 MEAN 279 MAX 3000 MIN 12 CFSM 1.29 IN 17.51

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN

LOCATION.--Lat 39°32'11", long 86°58'35", in NW¼SW¼ sec.28, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank at downstream side of county highway bridge, 1.5 miles (2.4 km) southwest of Reelsville, and 4.1 miles (6.6 km) upstream from Mill Creek.

DRAINAGE AREA.--326 mi² (844 km²).

PERIOD OF RECORD.--July 1949 to current year. Published as Eel River near Reelsville, October 1952 to September 1956.

REVISED RECORDS.--WSP 1335: 1950. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.24 ft (179.296 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Dec. 10, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow partly regulated by Soil Conservation Service control structures on tributaries to Little Walnut Creek beginning in 1971.

AVERAGE DISCHARGE.--33 years, 348 ft³/s (9.855 m³/s), 14.50 in/yr (368 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s (776 m³/s) June 28, 1957, gage height, 18.63 ft (5.678 m), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of slope-conveyance method; minimum daily, 1.4 ft³/s (0.040 m³/s) Sept. 8, 1954.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1000	4950	140	11.69	3.563	Mar. 11	1500	4690	133	11.36	3.463
Jan. 31	0100	*5640	160	*12.55	3.825	Mar. 13	1200	3540	100	9.80	2.987
Feb. 17	2400	3570	101	9.84	2.999	Mar. 19	1700	4630	131	11.28	3.438
Feb. 21	0400	5020	142	11.78	3.591	June 8	0900	3640	103	9.94	3.030
Feb. 24	0600	3040	86.1	9.06	2.761						

Minimum daily discharge, 26 ft³/s (0.74 m³/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	142	126	290	1400	646	516	201	1630	141	136	142
2	159	131	121	275	840	750	413	191	915	122	119	150
3	112	125	110	872	675	830	1000	179	559	625	103	87
4	83	117	113	4080	525	1380	877	168	400	309	89	62
5	77	114	112	1980	420	1710	635	159	330	200	802	53
6	88	112	104	1130	330	1070	780	151	271	156	1100	47
7	89	106	100	858	290	805	614	261	384	303	360	44
8	82	99	98	500	260	598	537	309	1340	676	224	41
9	81	96	92	400	250	503	537	227	465	391	171	38
10	79	96	86	350	240	467	515	187	393	456	148	36
11	78	92	81	290	230	2620	532	165	303	636	127	35
12	75	92	75	260	220	2610	480	150	247	423	115	34
13	74	87	75	230	210	2800	424	138	217	200	108	33
14	69	85	80	210	200	1760	362	130	187	160	92	33
15	61	84	77	190	200	1510	316	126	168	130	84	34
16	59	91	71	180	450	1870	519	120	400	110	77	32
17	61	84	80	170	2800	1600	1660	116	491	100	70	31
18	93	81	75	165	2850	1050	1240	117	345	89	66	34
19	89	82	65	160	1810	2290	801	133	274	566	62	33
20	81	93	50	155	2170	2390	637	242	233	758	59	31
21	70	96	55	160	4190	1430	506	1240	440	423	67	29
22	70	87	80	170	2620	998	417	612	231	331	63	28
23	95	83	800	2100	2490	789	363	429	184	302	56	28
24	100	99	700	1200	2550	658	326	304	153	249	63	28
25	107	102	470	640	1380	674	301	238	135	200	75	38
26	110	101	360	420	946	804	282	241	124	156	62	29
27	168	133	673	330	768	652	261	480	117	331	55	28
28	258	118	560	275	666	526	237	501	240	636	48	27
29	239	109	401	250	-----	464	219	576	189	302	46	26
30	193	103	330	2990	-----	427	209	1060	212	200	89	26
31	162	----	300	4100	-----	540	-----	806	-----	156	79	----
TOTAL	3356	3040	6520	25380	31980	37221	16516	9957	11577	9837	4815	1317
MEAN	108	101	210	819	1142	1201	551	321	386	317	155	43.9
MAX	258	142	800	4100	4190	2800	1660	1240	1630	758	1100	150
MIN	59	81	50	155	200	427	209	116	117	89	46	26
CFSM	.33	.31	.64	2.51	3.50	3.68	1.69	.99	1.18	.97	.48	.14
IN.	.38	.35	.74	2.90	3.65	4.25	1.88	1.14	1.32	1.12	.55	.15

CAL YR 1981 TOTAL 112153 MEAN 307 MAX 3860 MIN 35 CFSM .94 IN 12.80
WTR YR 1982 TOTAL 161516 MEAN 443 MAX 4190 MIN 26 CFSM 1.36 IN 18.43

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV						
03...	1625	119	16.5	22	7.2	78
DEC						
12...	1630	76	1.5	29	6.0	--

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 (5 km) east of Cataract, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--245 mi² (635 km²).

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

REVISED RECORDS.--WSP 1505: 1956(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.40 ft (215.311 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1949, nonrecording gage, and Nov. 8, 1949, to Sept. 22, 1968, water-stage recorder at site 100 ft (30 m) upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--33 years, 263 ft³/s (7.448 m³/s), 14.58 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) June 24, 1960, gage height, 22.58 ft (6.882 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 7, 28, 1954.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0400	3230	91.5	13.70	4.176	Feb. 21	2300	3480	98.6	14.10	4.298
Jan. 31	----	2800	79.3	unknown		Mar. 20	2000	2950	83.5	13.21	4.026
Feb. 18	0500	*3890	110	*14.75	4.496						

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Sept. 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	67	79	220	2100	306	187	91	1590	141	28	171
2	37	61	90	220	810	350	169	86	597	103	25	255
3	29	58	68	1020	427	369	997	79	276	1010	24	76
4	27	56	65	2820	301	426	529	75	193	597	22	42
5	26	55	65	2770	250	619	319	71	169	233	855	30
6	37	57	58	842	210	393	411	68	147	150	1370	25
7	38	51	58	549	190	305	310	122	208	113	311	22
8	29	47	57	342	170	230	266	297	754	532	137	23
9	25	44	51	250	160	204	281	163	274	357	94	19
10	24	42	44	200	150	197	272	116	196	178	66	18
11	24	40	42	160	145	1130	254	96	136	183	61	17
12	24	39	40	150	135	2010	219	83	109	123	63	16
13	23	37	44	135	132	1710	201	74	96	87	51	16
14	26	36	44	120	130	1010	167	66	81	72	36	16
15	27	36	40	115	155	710	151	61	74	61	32	15
16	30	36	31	105	817	1760	219	57	737	53	29	15
17	34	36	33	100	2830	1690	1040	52	681	49	27	13
18	175	34	32	95	3640	570	516	51	262	46	24	16
19	119	34	29	92	2130	1080	321	72	192	540	22	17
20	64	43	24	88	1730	2690	262	109	192	313	21	15
21	48	45	25	92	3160	1690	208	483	532	124	36	13
22	42	38	42	95	2830	562	171	196	225	93	32	11
23	66	35	1440	1800	1900	404	149	117	159	96	22	11
24	70	43	1420	1600	1490	328	139	86	110	64	24	11
25	57	50	445	470	647	309	129	73	90	51	110	15
26	55	46	319	290	424	418	125	66	79	44	33	18
27	81	56	561	225	346	310	115	109	70	45	24	15
28	155	57	522	180	314	251	100	105	801	90	21	13
29	116	49	335	165	-----	226	93	330	485	51	17	12
30	92	48	210	1220	-----	207	92	628	228	38	30	12
31	76	----	220	2700	-----	219	----	342	----	32	70	----
TOTAL	1732	1376	6533	19230	27723	22683	8412	4424	9743	5669	3717	968
MEAN	55.9	45.9	211	620	990	732	280	143	325	183	120	32.3
MAX	175	67	1440	2820	3640	2690	1040	628	1590	1010	1370	255
MIN	23	34	24	88	130	197	92	51	70	32	17	11
CFSM	.23	.19	.86	2.53	4.04	2.99	1.14	.58	1.33	.75	.49	.13
IN.	.26	.21	.99	2.92	4.21	3.44	1.28	.67	1.48	.86	.56	.15

CAL YR 1981 TOTAL 102884 MEAN 282 MAX 4310 MIN 20 CFSM 1.15 IN 15.62
WTR YR 1982 TOTAL 112210 MEAN 307 MAX 3640 MIN 11 CFSM 1.25 IN 17.04

03358000 MILL CREEK NEAR CATARACT, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: November 1978 to September 1982 (discontinued).
SPECIFIC CONDUCTANCE: November 1978 to September 1982 (discontinued).

INSTRUMENTATION.--Water-quality monitor.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 29.0°C July 11, 1981; minimum, 0.0°C on many days during winter periods.
SPECIFIC CONDUCTANCE: Maximum, 677 micromhos July 13, 1982; minimum, 111 micromhos Dec. 24, 1981.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 26.0°C July 17, Aug. 4; minimum, 0.0°C Dec. 23, Jan. 5, 8-17.
SPECIFIC CONDUCTANCE: Maximum, 677 micromhos July 13; minimum, 111 micromhos Dec. 24.

REMARKS.--Mean water temperature figure for Apr. 11-17 published in IN-81-1 not valid. No record for those days.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	559	496	572				---	353	462	560	475
2	570	560	497	584				---	473	523	564	307
3	573	534	499	585				---	521	550	570	314
4	579	557	505	376				---	540	410	573	392
5	580	532	514	354				---	544	449	574	414
6	562	553	523	364				---	560	464	243	435
7	545	551	524	385				---	560	531	434	458
8	534	534	527	399				---	463	551	485	489
9	511	555	536	419				---	491	400	486	506
10	520	537	546	432				---	544	419	487	519
11	533	534	552	448				---	539	492	519	525
12	540	528	556	467				---	558	655	541	529
13	546	521	555	474				---	568	677	545	527
14	546	537	557	483				---	577	588	549	527
15	550	535	559	495				---	578	465	549	524
16	556	527	556	503				---	568	468	550	516
17	547	525	558	504				---	434	488	547	520
18	535	514	536	---				---	487	514	542	519
19	475	524	553	---				---	529	559	530	515
20	488	506	587	---				---	528	462	525	517
21	508	519	583	---				---	457	462	521	516
22	533	504	588	---				---	428	527	525	519
23	534	529	579	---				---	525	519	531	521
24	545	512	319	---				---	533	515	534	531
25	547	511	395	---				---	560	519	510	540
26	571	504	485	---				567	570	525	286	547
27	573	509	502	---				574	574	539	335	551
28	571	507	520	---				521	575	559	359	547
29	566	514	539	---				528	371	554	430	541
30	561	514	558	---				426	420	557	451	539
31	560	---	560	---				487	---	558	472	---
MEAN	546	528	528	461				517	514	515	494	496
MAX	580	560	588	585				574	578	677	574	551
MIN	475	504	319	354				426	353	400	243	307

WTR YR 1982 MEAN 513 MAX 677 MIN 243

03358000 MILL CREEK NEAR CATARACT, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	567	558	495	566				---	265	414	556	441
2	568	548	496	577				---	431	486	559	258
3	570	532	497	551				---	503	324	564	293
4	576	527	501	347				---	530	355	569	365
5	569	521	508	337				---	538	388	501	389
6	543	525	519	346				---	553	442	206	417
7	535	530	522	377				---	549	516	281	447
8	526	528	524	392				---	283	417	479	475
9	507	532	530	407				---	427	371	484	495
10	514	525	540	428				---	523	390	486	512
11	524	529	548	439				---	530	482	504	519
12	536	519	551	460				---	549	548	528	523
13	544	513	552	470				---	563	627	539	524
14	544	514	554	479				---	571	522	545	525
15	544	519	555	489				---	575	445	544	521
16	548	513	554	499				---	358	456	542	510
17	539	503	553	504				---	355	477	537	511
18	520	495	534	---				---	468	502	533	512
19	468	495	548	---				---	476	521	523	509
20	479	500	576	---				---	473	460	512	514
21	496	498	582	---				---	334	459	514	514
22	520	497	582	---				---	393	474	515	516
23	529	506	374	---				---	482	507	524	517
24	537	496	296	---				---	527	511	520	527
25	545	500	353	---				---	545	515	432	536
26	555	494	442	---				565	564	520	253	544
27	571	504	494	---				551	571	528	303	547
28	569	503	511	---				482	352	553	345	543
29	563	503	529	---				458	329	552	384	537
30	560	507	547	---				376	382	552	434	530
31	559	---	558	---				455	---	554	465	---
MEAN	540	514	514	451				481	467	480	474	486
MAX	576	558	582	577				565	575	627	569	547
MIN	468	494	296	337				376	265	324	206	258

WTR YR 1982 MEAN 493 MAX 627 MIN 206

03358000 MILL CREEK NEAR CATARACT, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	557	493	556				---	208	376	552	369
2	566	535	493	573				---	364	456	555	222
3	565	529	495	429				---	476	190	558	269
4	574	505	498	333				---	513	296	566	317
5	561	487	505	326				---	525	350	252	373
6	534	489	513	329				---	544	429	176	411
7	525	493	519	366				---	494	471	210	437
8	510	491	521	386				---	228	238	441	464
9	504	528	524	398				---	332	346	483	490
10	511	508	531	413				---	494	377	485	508
11	519	524	540	429				---	525	423	488	514
12	532	501	545	450				---	539	490	519	518
13	539	500	548	467				---	559	559	533	521
14	540	495	549	474				---	567	457	539	523
15	541	496	547	484				---	569	429	536	515
16	544	497	550	495				---	221	437	528	504
17	528	492	531	502				---	271	466	529	502
18	478	468	532	---				---	438	489	525	506
19	464	482	537	---				---	425	460	514	505
20	469	498	555	---				---	426	458	493	510
21	489	487	580	---				---	252	456	508	509
22	508	490	569	---				---	307	461	503	514
23	527	495	245	---				---	437	497	515	512
24	531	467	111	---				---	522	507	504	521
25	543	489	320	---				---	529	512	265	532
26	545	481	398	---				561	560	517	240	539
27	569	498	484	---				435	569	523	281	542
28	566	479	503	---				430	195	540	336	538
29	562	460	521	---				317	297	549	359	531
30	558	496	539	---				324	345	548	421	519
31	558	---	555	---				320	---	551	453	---
MEAN	533	497	495	436				398	424	447	447	475
MAX	574	557	580	573				561	569	559	566	542
MIN	464	460	111	326				317	195	190	176	222

WTR YR 1982 MEAN 470 MAX 580 MIN 111

03358000 MILL CREEK NEAR CATARACT, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	12.5	5.0	2.5				----	20.0	21.0	25.0	21.0
2	15.0	13.5	5.5	3.0				----	19.0	20.5	25.0	22.5
3	15.5	14.0	5.5	3.0				----	20.5	20.5	25.5	21.5
4	13.5	14.0	5.0	3.0				----	19.5	22.0	26.0	22.5
5	15.5	13.5	5.0	2.0				----	18.5	23.5	25.0	22.5
6	14.5	13.0	4.5	3.0				----	19.5	24.0	24.0	20.0
7	15.0	11.5	4.0	3.0				----	19.5	24.0	25.0	20.0
8	14.5	10.0	3.5	1.5				----	19.0	24.0	24.5	22.0
9	13.5	9.0	4.0	1.0				----	21.0	22.5	24.5	22.0
10	12.5	8.5	4.5	1.0				----	22.0	22.5	23.5	23.0
11	13.5	8.0	3.0	.5				----	21.0	22.5	22.0	23.5
12	14.0	7.5	3.0	.5				----	20.5	22.0	22.5	23.0
13	14.0	6.5	3.0	.5				----	20.5	22.0	22.5	22.5
14	12.5	7.0	2.0	.0				----	20.5	23.0	23.0	24.5
15	13.0	6.5	3.0	.0				----	21.5	24.0	24.0	24.0
16	14.0	6.0	2.0	.0				----	21.0	25.0	23.0	23.0
17	13.5	7.0	1.5	.0				----	18.0	26.0	24.5	23.5
18	13.5	7.0	1.5	---				----	20.0	25.5	25.0	22.5
19	11.5	7.5	1.5	---				----	20.0	24.5	25.0	21.5
20	10.5	6.5	1.5	---				----	19.5	24.0	23.5	20.0
21	11.5	5.0	1.0	---				----	19.0	24.5	24.5	19.5
22	10.0	5.5	4.5	---				----	20.0	24.5	23.0	18.0
23	9.5	3.5	.5	---				----	19.5	23.0	22.0	19.0
24	8.0	3.5	.5	---				----	19.0	23.5	21.5	17.0
25	7.0	4.0	1.5	---				----	20.0	24.5	21.5	16.0
26	7.0	6.0	3.0	---				20.5	20.5	25.0	22.0	16.5
27	8.0	7.0	2.5	---				21.0	21.5	25.0	21.5	17.0
28	9.0	6.0	2.5	---				21.5	22.0	24.5	22.0	18.0
29	9.0	6.5	2.5	---				21.0	21.0	24.5	22.5	19.0
30	10.5	5.0	3.0	---				19.5	22.0	25.0	20.5	19.5
31	11.5	----	2.0	---				22.0	----	24.5	20.5	----
MEAN	12.0	8.0	3.0	1.5				21.0	20.0	23.5	23.5	21.0
MAX	16.0	14.0	5.5	3.0				22.0	22.0	26.0	26.0	24.5
MIN	7.0	3.5	.5	.0				19.5	18.0	20.5	20.5	16.0

WTR YR 1982 MEAN 15.0 MAX 26.0 MIN .0

03358000 MILL CREEK NEAR CATARACT, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	12.0	4.5	2.0				----	19.0	20.5	23.5	20.0
2	13.5	13.0	5.0	2.5				----	18.5	19.5	24.0	21.5
3	13.5	13.5	5.5	2.5				----	19.0	20.0	24.5	21.0
4	12.5	13.5	4.5	2.0				----	18.5	21.5	25.0	20.5
5	14.0	13.0	4.0	.5				----	18.0	22.5	24.0	20.5
6	14.0	11.5	3.5	2.5				----	18.5	22.5	23.5	19.5
7	13.5	10.0	3.5	2.5				----	18.5	23.5	24.0	19.5
8	13.0	9.0	3.5	.5				----	18.5	21.5	24.0	20.0
9	12.5	8.0	3.5	.0				----	20.0	22.0	24.0	20.5
10	12.0	6.5	3.5	.5				----	21.0	21.5	22.5	21.5
11	12.0	6.5	2.5	.0				----	20.5	21.5	21.5	22.0
12	12.0	6.0	2.0	.5				----	20.0	21.5	21.0	22.0
13	12.5	5.0	2.0	.0				----	20.0	22.0	20.5	22.0
14	12.0	5.0	2.0	.0				----	20.0	22.5	21.0	23.0
15	12.5	5.0	2.0	.0				----	20.5	23.0	22.0	23.0
16	13.0	5.5	1.5	.0				----	19.0	24.0	22.0	21.5
17	12.5	6.0	1.5	.0				----	17.5	25.0	23.0	21.5
18	12.5	6.0	1.0	---				----	18.5	25.0	23.0	21.0
19	10.5	7.0	1.0	---				----	19.0	23.5	23.0	20.0
20	9.5	6.0	1.5	---				----	19.0	23.0	22.5	19.0
21	10.0	4.5	1.0	---				----	18.5	23.5	22.5	17.5
22	9.5	4.5	1.5	---				----	19.0	23.5	22.0	17.0
23	9.0	3.0	.5	---				----	19.0	22.0	21.5	17.0
24	7.0	3.5	.5	---				----	18.5	23.0	21.0	16.5
25	6.0	3.5	1.0	---				----	19.5	23.5	21.0	16.0
26	6.5	5.0	2.0	---				20.0	20.0	24.0	21.0	16.0
27	7.5	5.5	2.5	---				20.5	21.0	24.5	21.0	16.0
28	8.5	5.5	2.5	---				21.0	20.5	24.5	20.5	16.5
29	8.5	5.0	2.5	---				20.5	20.5	24.0	21.0	17.5
30	9.5	4.5	2.5	---				19.0	21.0	24.0	20.0	18.0
31	10.5	----	2.0	---				20.5	----	24.0	20.0	----
MEAN	11.0	7.0	2.5	1.0				20.5	19.5	23.0	22.5	19.5
MAX	15.0	13.5	5.5	2.5				21.0	21.0	25.0	25.0	23.0
MIN	6.0	3.0	.5	.0				19.0	17.5	19.5	20.0	16.0

WTR YR 1982 MEAN 14.0 MAX 25.0 MIN .0

03358000 MILL CREEK NEAR CATARACT, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	11.0	4.5	2.0				----	18.5	19.5	22.5	20.0
2	13.0	12.5	4.5	2.0				----	17.5	19.5	22.5	20.5
3	12.0	12.5	5.0	2.0				----	17.5	18.5	23.0	20.5
4	12.0	12.5	4.0	.5				----	18.0	21.0	24.5	19.5
5	12.5	13.0	4.0	.0				----	17.5	21.0	23.5	18.5
6	13.5	10.0	3.5	2.0				----	17.5	21.5	23.0	18.5
7	12.5	9.0	3.0	1.5				----	16.5	23.5	23.5	19.0
8	12.0	8.0	3.0	.0				----	18.5	19.0	23.5	18.5
9	11.5	6.5	3.0	.0				----	18.5	21.5	23.5	18.5
10	11.5	5.5	2.5	.0				----	19.5	21.5	21.5	19.5
11	11.5	5.0	2.0	.0				----	19.5	21.0	21.0	20.0
12	11.0	4.5	2.0	.0				----	19.5	20.5	20.0	21.5
13	11.0	4.0	1.5	.0				----	19.0	21.5	19.0	21.5
14	12.0	4.0	1.5	.0				----	19.0	22.0	19.0	22.0
15	12.0	4.0	1.5	.0				----	19.5	22.5	19.5	22.0
16	12.0	5.0	1.5	.0				----	18.0	23.0	21.5	20.5
17	12.0	5.0	1.0	.0				----	17.0	24.0	21.0	19.5
18	11.5	4.5	1.0	---				----	17.0	24.5	21.0	20.0
19	9.5	6.5	1.0	---				----	18.5	22.5	21.0	19.0
20	8.5	5.0	1.0	---				----	18.0	22.5	22.0	18.0
21	9.0	4.0	1.0	---				----	18.0	22.5	21.5	16.5
22	9.5	3.5	.5	---				----	18.0	21.0	20.5	16.0
23	7.5	3.0	.0	---				----	18.0	21.0	21.0	15.0
24	5.5	3.0	.5	---				----	18.0	22.5	20.0	16.0
25	5.0	3.0	.5	---				----	19.0	22.5	20.5	15.5
26	6.0	4.0	1.0	---				19.5	20.0	23.0	20.0	15.0
27	7.0	5.0	2.5	---				19.5	20.0	24.0	20.0	15.5
28	8.0	5.0	2.5	---				20.0	19.5	24.0	19.5	14.5
29	8.0	4.5	2.5	---				19.0	20.0	23.0	19.0	15.5
30	9.0	4.0	2.0	---				19.0	20.5	23.0	20.0	16.5
31	10.0	----	2.0	---				19.5	----	23.0	19.5	----
MEAN	10.5	6.0	2.0	.5				19.5	18.5	22.0	21.0	18.5
MAX	14.0	13.0	5.0	2.0				20.0	20.5	24.5	24.5	22.0
MIN	5.0	3.0	.0	.0				19.0	16.5	18.5	19.0	14.5

WTR YR 1982 MEAN 13.5 MAX 24.5 MIN .0

03358900 CAGLES MILL LAKE NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'14", long 86°55'02", in NE¼NW¼ sec.13, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, in discharge tower of reservoir on Mill Creek, 1.5 miles (2.4 km) upstream from Deer Creek, 2.7 miles (4.3 km) above mouth, and 5.8 miles (9.3 km) south of Manhattan.

DRAINAGE AREA.--293 mi^2 (759 km^2).

PERIOD OF RECORD.--July 1953 to current year. Prior to September 1970, published as Cagles Mill "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1975, at datum 18.17 ft (5.538 m) lower.

REMARKS.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by three gates, 5 ft (1.5 m) wide and 10 ft (3.0 m) high, in 12 ft (3.7 m) by 12 ft (3.7 m) concrete-lined tunnel 496 ft (151.2 m) long through right abutment. Minimum design capacity is 27,110 acre-ft (33.4 hm^3), elevation, 636 ft (193.9 m). Capacity at uncontrolled spillway elevation, 704 ft (214.6 m) is 228,000 acre-ft (218 hm^3). Reservoir is used for flood control and recreation. Reservoir put in operation on July 6, 1953.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 165,210 acre-ft (204 hm^3) Aug. 30, 1979, elevation, 689.61 ft (210.193 m); minimum, 21,700 acre-ft (26.8 hm^3) Oct. 21-26, 1964, elevation, 631.89 ft (192.600 m). Pool lowered to elevation, 597.57 ft (182.139 m) Oct. 23, 1971 (contents, dry) due to drainage of lake to kill fish.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 116,300 acre-ft (143.39 hm^3) Mar. 24, elevation, 675.77 ft (205.975 m); minimum, 25,960 acre-ft (32.01 hm^3) Jan. 18 elevation, 635.16 ft (193.597 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	637.70	29,560	
Oct. 31	637.58	29,380	-180
Nov. 30	637.59	29,400	+20
Dec. 31	640.30	33,530	+4,130
CAL YR 1981			+4,190
Jan. 31	650.45	51,950	+18,420
Feb. 28	668.60	95,020	+43,070
Mar. 31	671.65	103,700	+8,680
Apr. 30	648.30	47,670	-56,030
May 31	638.62	30,930	-16,740
June 30	637.65	29,480	-1,450
July 31	636.52	27,850	-1,630
Aug. 31	636.57	27,920	+70
Sept. 30	636.12	27,280	-640
WTR YR 1982			-2,280

03359000 MILL CREEK NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'22", long 86°55'50", in SW¼SE¼ sec.11, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank 200 ft (61 m) downstream from Cagles Mill, 0.7 mile (1.1 km) downstream from Cagles Mill Lake, 0.8 mile (1.3 km) upstream from Deer Creek, 5.8 miles (9.3 km) south of Manhattan, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--294 mi^2 (761 km^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 (177.342 m) National Geodetic Vertical Datum of 1929. May 12, 1941 to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. See WSP 1725 for history of changes prior to May 12, 1941.

REMARKS.--Flow regulated by Cagles Mill Lake (See sta 03358900). Daily discharge computed from relation between discharge, head, and gate openings for Cagles Mill Lake beginning Oct. 1, 1974.

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

AVERAGE DISCHARGE.--44 years (1938 to current year), 306 ft^3/s (8.666 m^3/s), 14.13 in/yr (359 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft^3/s (254 m^3/s) Jan. 5, 1950, gage height, 18.38 ft (5.602 m); no flow Aug. 7, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,050 ft^3/s (58.1 m^3/s) May 1; minimum daily, 18 ft^3/s (0.51 m^3/s) Jan. 19-22, Sept. 25-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	106	89	934	65	967	1710	2050	273	871	77	85
2	68	106	161	1060	66	1550	1370	2010	278	259	114	87
3	33	83	104	938	66	1660	862	1970	278	157	114	217
4	33	69	65	275	66	1090	1010	1920	640	375	63	292
5	33	69	89	107	66	907	1330	1800	870	482	56	161
6	33	69	112	224	66	974	1080	842	983	839	58	52
7	57	69	89	497	66	972	654	131	734	956	967	36
8	69	69	89	722	66	1210	1150	210	286	558	1030	32
9	42	69	76	1220	341	1520	1560	210	216	822	529	32
10	33	57	69	1390	838	1610	1660	332	758	1020	79	32
11	33	50	62	1380	1030	796	1650	340	1040	458	85	32
12	33	50	50	1360	1320	275	1640	209	1030	206	73	32
13	33	50	50	1340	1480	278	1630	209	486	173	57	32
14	33	50	50	1320	1460	281	1610	209	124	66	47	32
15	33	63	50	1290	1440	282	1780	209	124	79	40	32
16	33	50	50	1270	1100	285	1210	113	125	85	32	31
17	33	50	50	1240	192	288	549	122	91	76	32	31
18	88	50	50	64	66	289	271	208	890	66	32	31
19	117	50	50	18	68	291	768	207	1030	68	32	31
20	117	62	50	18	69	294	1080	207	729	71	32	31
21	116	69	50	18	70	297	1420	207	505	567	32	31
22	116	60	50	18	72	298	1750	208	620	899	32	31
23	116	50	54	70	73	298	1820	257	220	444	32	31
24	162	64	58	77	74	367	1800	256	76	195	47	22
25	89	69	351	74	74	721	1780	254	104	85	41	18
26	89	69	497	59	305	1040	1910	254	110	85	47	18
27	89	69	498	59	501	1040	1960	256	110	72	47	18
28	152	69	500	59	445	1300	1940	256	114	95	47	18
29	209	65	500	59	-----	1450	1910	256	425	211	38	18
30	116	89	499	60	-----	1620	2010	262	882	139	49	18
31	97	----	634	63	-----	1720	-----	265	-----	47	79	----
TOTAL	2395	1964	5146	17283	11545	25970	42874	16239	14151	10526	4040	1564
MEAN	77.3	65.5	166	558	412	838	1429	524	472	340	130	52.1
MAX	209	106	634	1390	1480	1720	2010	2050	1040	1020	1030	292
MIN	33	50	50	18	65	275	271	113	76	47	32	18
CFSM	.26	.22	.57	1.90	1.40	2.85	4.86	1.78	1.61	1.16	.44	.18
IN.	.30	.25	.65	2.19	1.46	3.29	5.42	2.05	1.79	1.33	.51	.20

CAL YR 1981 TOTAL 124214 MEAN 340 MAX 2050 MIN 18 CFSM 1.16 IN 15.72
WTR YR 1982 TOTAL 153697 MEAN 421 MAX 2050 MIN 18 CFSM 1.43 IN 19.45

03360000 EEL RIVER AT BOWLING GREEN, IN

LOCATION.--Lat 39°22'58", long 87°01'14", in NE¼NE¼ sec.24, T.11 N., R.6 W., Clay County, Hydrologic Unit 05120203, on left bank 500 ft (152 m) downstream from bridge on State Highway 46 at Bowling Green, 0.2 mile (0.3 km) downstream from Jordan Creek, and at mile 38.4 (61.8 km).

DRAINAGE AREA.--830 mi² (2,150 km²).

PERIOD OF RECORD.--January 1931 to current year. Prior to October 1934, published as "near Centerpoint".

REVISED RECORDS.--WSP 893: 1935, 1937-39. WSP 973: 1937-38, 1939(M). WSP 1335: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 548.02 ft (167.036 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1725 for history of changes prior to Dec. 1, 1949.

REMARKS.--Records good. Flow regulated by Cagles Mill Lake (See sta 03358900).

AVERAGE DISCHARGE.--51 years, 874 ft³/s (24.75 m³/s), 14.30 in/yr (363 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s (963 m³/s) Jan. 4, 1950, gage height, 23.53 ft (7.172 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 7, 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 30.0 ft (9.14 m) in 1875, present datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft³/s (295 m³/s) Jan. 31, gage height, 18.58 ft (5.663 m); minimum daily, 84 ft³/s (2.38 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	390	314	256	1270	6100	1470	2330	2200	3040	1100	271	188
2	332	298	314	1410	3000	1860	2200	2160	1860	969	245	241
3	287	287	368	2360	2000	2120	2210	2100	1180	920	224	261
4	226	254	275	4870	1000	2300	2280	2040	1020	1260	206	276
5	186	241	271	4370	700	2570	2040	1990	1330	953	258	290
6	180	249	267	1770	580	2390	2430	1620	1280	831	500	276
7	188	241	256	1700	500	2000	1540	653	1780	885	694	223
8	190	230	249	1310	450	1800	1700	982	2180	2340	769	184
9	184	222	243	1660	680	1970	2150	724	1420	1380	825	160
10	165	216	222	1620	1000	2080	2330	636	1020	1650	613	145
11	156	212	210	1520	1400	3390	2320	706	1500	2000	335	135
12	150	194	192	1560	1600	5010	2290	466	1380	875	282	128
13	146	186	148	1580	1650	3770	2210	407	1140	653	245	125
14	142	182	182	1550	1700	3340	2120	380	461	466	214	123
15	136	176	184	1520	1740	2170	2070	358	415	405	196	121
16	130	172	178	1480	1750	3310	2080	342	940	375	184	118
17	128	174	170	1440	4450	2930	3130	300	1460	346	172	114
18	282	170	163	1270	6050	1820	2260	451	1300	314	163	112
19	287	169	150	474	3340	2030	1580	585	1460	1300	154	111
20	245	172	140	415	2720	5130	2020	636	1390	1920	140	112
21	228	194	150	402	4160	2880	1950	866	1320	837	132	111
22	216	206	180	440	4580	1780	2170	1330	1130	969	128	110
23	239	194	1300	1230	3830	1410	2230	869	885	1050	128	108
24	269	180	1200	1560	3730	1230	2160	697	438	769	128	105
25	262	202	989	1460	2370	1430	2110	593	397	516	147	104
26	239	216	1020	1260	1590	2170	2110	482	383	392	155	103
27	271	224	1460	1270	1570	2020	2210	627	363	351	161	99
28	440	262	1480	1250	1460	1900	2140	946	622	566	161	93
29	538	247	1100	1020	-----	2070	2090	1210	794	627	159	88
30	484	237	800	2030	-----	2060	2090	2050	898	538	155	84
31	325	----	840	9560	-----	2230	-----	1860	-----	323	170	----
TOTAL	7641	6521	14957	56631	65700	74640	64550	31266	34786	27880	8314	4448
MEAN	246	217	482	1827	2346	2408	2152	1009	1160	899	268	148
MAX	538	314	1480	9560	6100	5130	3130	2200	3040	2340	825	290
MIN	128	169	140	402	450	1230	1540	300	363	314	128	84
CFSM	.30	.26	.58	2.20	2.83	2.90	2.59	1.22	1.40	1.08	.32	.18
IN.	.34	.29	.67	2.54	2.94	3.35	2.89	1.40	1.56	1.25	.37	.20

CAL YR 1981 TOTAL 325347 MEAN 891 MAX 8670 MIN 90 CFSM 1.07 IN 14.58
WTR YR 1982 TOTAL 397334 MEAN 1089 MAX 9560 MIN 84 CFSM 1.31 IN 17.81

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 (0.6 km) upstream from bridge on State Highway 57 at Newberry, 1.9 miles (3.1 km) downstream from Doans Creek, and at mile 113.0 (181.8 km).

DRAINAGE AREA.--4,688 mi^2 (12,142 km^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 (141.912 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1982, gage was 0.3 mile (0.5 km) downstream at same datum. Gage was nonrecording prior to Oct. 21, 1928.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--54 years, 4,716 ft^3/s (134 m^3/s), 13.67 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft^3/s (2,180 m^3/s) May 21, 1943, gage height, 24.19 ft (7.373 m); minimum daily, 200 ft^3/s (5.66 m^3/s) Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 27.5 ft (8.38 m) Mar. 27, 1913, from floodmarks by Indiana State Highway Commission; discharge, 130,000 ft^3/s (3,680 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 31,000 ft^3/s (878 m^3/s) Mar. 19, estimated from graph based on ADR readings; minimum daily, 710 ft^3/s (20.1 m^3/s) Sep. 30.

NOTE.--No gage-height record Jan. 11-20, Jan. 24 to Mar. 3, Mar. 12-20, and July 3 to Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	2150	1520	4980	25000	12500	9780	5440	11000	4650	1710	9450
2	1430	1940	1680	5090	26500	11000	9750	5320	12000	4100	1590	15700
3	1290	1780	1620	7130	21000	10500	10700	5230	11000	4720	1500	7730
4	1170	1640	1580	12000	12500	11000	11800	5100	8540	4920	1460	3560
5	1070	1540	1460	14200	8400	12200	12300	4960	7520	4250	1750	2400
6	1050	1460	1390	15900	6800	13100	12000	4820	6390	3600	2010	1960
7	1060	1380	1350	16600	5580	13400	11000	4670	5580	3350	3240	1650
8	1060	1330	1310	14600	4900	13400	9650	4740	5870	4700	3090	1390
9	1020	1310	1240	10900	4950	12800	8790	4990	7150	5500	3100	1270
10	973	1260	1190	7570	5000	10300	8750	4950	6760	5950	3070	1210
11	948	1210	1150	6050	4900	8920	8790	4100	5330	5850	2860	1150
12	905	1180	1120	5100	4980	9390	8800	3400	4250	5200	2500	1090
13	875	1130	1080	4900	5150	11800	8950	3050	3800	4100	2150	1060
14	859	1080	1050	4680	5250	18000	9080	2800	3200	3450	1830	1030
15	851	1060	1030	4420	5300	20400	8700	2650	2950	3120	1600	1010
16	841	1050	1010	4250	7300	23800	8130	2470	3580	2650	1470	965
17	856	1050	1020	4180	20000	28000	8960	2350	4090	2480	1380	912
18	929	1020	971	3900	24000	30000	10500	2670	5630	2280	1300	875
19	1150	1040	950	3050	25000	31000	11600	2790	6310	3750	1250	868
20	1370	1280	860	2620	24000	28000	11400	2810	6650	4900	1190	830
21	1260	1250	900	2650	24000	24400	10200	2830	6480	3900	1150	815
22	1140	1230	1000	2950	26000	23200	8860	4000	6400	3650	1110	770
23	1100	1190	5000	7800	26000	21400	7980	4900	5920	3300	1150	740
24	1100	1220	8950	14000	26000	18500	7340	4250	5150	2800	1040	750
25	1210	1210	7860	14500	25000	14900	6830	3960	4380	2280	1130	750
26	1260	1250	6960	12000	22000	11500	6430	3640	3790	1970	1340	750
27	1330	1370	7580	8200	18000	11000	6090	3660	3440	1820	1300	750
28	1400	1360	7850	6200	14500	10400	5950	3980	3890	2320	1220	740
29	1570	1390	7590	5200	------	9530	5820	4480	5130	2650	1070	720
30	1830	1350	6640	8000	------	8930	5630	6740	5000	2350	2030	710
31	2210	-----	5470	18000	------	9630	------	9400	------	1820	3680	-----
TOTAL	36347	39710	90381	251620	428010	492900	270560	131150	177180	112380	56270	63605
MEAN	1172	1324	2916	8117	15290	15900	9019	4231	5906	3625	1815	2120
MAX	2210	2150	8950	18000	26500	31000	12300	9400	12000	5950	3680	15700
MIN	841	1020	860	2620	4900	8920	5630	2350	2950	1820	1040	710
CFSM	.25	.28	.62	1.73	3.26	3.39	1.92	.90	1.26	.77	.39	.45
IN.	.29	.32	.72	2.00	3.40	3.91	2.15	1.04	1.41	.89	.45	.50

CAL YR 1981 TOTAL 1568262 MEAN 4297 MAX 37300 MIN 540 CFSM .92 IN 12.44
WTR YR 1982 TOTAL 2150113 MEAN 5891 MAX 31000 MIN 710 CFSM 1.26 IN 17.06

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW¼SW¼ sec.18, T.15 N., R.9 E., Rush County, Hydrologic Unit 05120204, on right bank 300 ft (91 m) upstream from highway bridge, 0.5 mile (0.8 km) northwest of Carthage, 2.2 miles (3.5 km) downstream from Three Mile Creek, and at mile 50.7 (81.6 km).

DRAINAGE AREA.--184 mi² (477 km²).

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 (261.924 m) National Geodetic Vertical Datum of 1929. Prior to July 19, 1951, nonrecording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Flow partly regulated by Big Blue River Conservancy District control structures on tributaries to Big Blue River beginning in 1969.

AVERAGE DISCHARGE.--32 years, 199 ft³/s (5.636 m³/s), 14.69 in/yr (373 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft³/s (365 m³/s) Mar. 4, 1963, gage height, 14.62 ft (4.456 m), from floodmarks, from rating curve extended above 6,200 ft³/s (176 m³/s); minimum daily, 17 ft³/s (0.48 m³/s) Jan. 18, Aug. 5, 1977.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	1600	2700	76.5	8.35	2.545	Feb. 21	0500	2140	60.6	7.38	2.249
Jan. 31	0600	2520	71.4	8.05	2.454	Mar. 16	2000	2090	59.2	7.29	2.222
Feb. 17	1200	*3470	98.3	*9.29	2.832						

Minimum daily discharge, 55 ft³/s (1.56 m³/s) Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	78	76	181	725	365	349	135	1200	124	66	75
2	60	76	73	163	437	398	287	129	555	109	65	74
3	59	73	71	268	332	368	371	126	361	110	64	71
4	59	73	72	1180	264	421	313	124	283	103	63	69
5	59	71	70	603	217	583	270	121	236	95	67	66
6	66	71	68	396	186	373	352	118	200	91	61	64
7	62	68	69	308	160	293	303	188	184	89	93	64
8	61	66	69	233	150	244	277	345	560	90	193	63
9	62	66	67	170	140	224	280	212	334	87	127	62
10	64	65	69	130	135	213	288	167	228	90	96	61
11	63	64	67	140	130	600	292	149	179	94	82	60
12	62	63	66	130	125	743	264	137	158	84	73	60
13	62	62	61	120	120	921	245	129	145	81	69	60
14	62	61	69	110	118	618	220	123	132	79	66	61
15	64	61	69	102	125	503	208	118	128	77	63	60
16	63	60	68	97	435	1260	218	113	365	75	62	59
17	64	59	71	90	2940	1060	283	109	516	73	61	58
18	102	58	69	90	1880	551	248	109	290	71	59	56
19	81	62	56	100	868	515	221	147	228	205	58	55
20	71	86	60	110	894	1250	209	129	191	116	126	55
21	69	72	70	110	1670	694	187	485	292	90	164	57
22	69	68	130	120	891	477	175	249	187	83	77	57
23	75	69	620	1860	1020	398	167	175	154	82	69	57
24	69	87	367	755	1140	347	164	146	137	77	128	57
25	68	82	222	347	541	329	160	135	126	74	555	63
26	83	80	167	243	407	359	158	181	119	72	167	60
27	116	79	205	207	350	313	154	433	112	80	106	67
28	163	76	217	172	340	277	145	267	116	81	85	64
29	108	73	167	147	---	259	141	589	194	73	77	60
30	95	72	138	930	---	248	143	1020	161	70	76	58
31	83	---	132	1940	---	406	---	446	---	68	78	---
TOTAL	2307	2101	3795	11552	16740	15610	7092	7054	8071	2793	3196	1853
MEAN	74.4	70.0	122	373	598	504	236	228	269	90.1	103	61.8
MAX	163	87	620	1940	2940	1260	371	1020	1200	205	555	75
MIN	59	58	56	90	118	213	141	109	112	68	58	55
CFSM	.40	.38	.66	2.03	3.25	2.74	1.28	1.24	1.46	.49	.56	.34
IN.	.47	.42	.77	2.34	3.38	3.16	1.43	1.43	1.63	.56	.65	.37

CAL YR 1981 TOTAL 56215 MEAN 154 MAX 2030 MIN 55 CFSM .84 IN 11.37
WTR YR 1982 TOTAL 82164 MEAN 225 MAX 2940 MIN 55 CFSM 1.22 IN 16.61

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: July 1973 to September 1977, November 1979 to September 1982 (discontinued).
WATER TEMPERATURE: November 1974 to September 1977, November 1979 to September 1982 (discontinued).
SUSPENDED SEDIMENT DISCHARGE: October 1977 to August 1981.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Water-quality record fair.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 26.5°C July 11, 1976; minimum, 0.0°C on many days during winter periods.
SPECIFIC CONDUCTANCE: Maximum, 996 micromhos Feb. 7, 1977; minimum, 114 micromhos Jan. 27, 1976.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 25.5°C Aug 5; minimum, 0.0°C Feb. 6-8, 10-12.
SPECIFIC CONDUCTANCE: Maximum, 843 micromhos Jan. 22; minimum 251 micromhos May 30.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	735	719	---	441	472	596	607	352	667	667	698
2	770	730	733	---	512	500	598	611	392	686	658	730
3	780	734	734	---	544	540	594	596	432	684	646	767
4	782	741	731	---	567	597	560	623	455	---	657	766
5	765	742	741	---	595	486	574	626	472	---	717	732
6	771	738	737	---	619	553	570	627	487	---	718	715
7	820	750	731	---	649	588	576	631	499	---	710	709
8	802	734	741	---	634	610	589	570	501	734	692	714
9	807	728	744	---	656	637	592	590	458	740	638	724
10	798	728	---	---	772	657	605	610	509	741	627	734
11	784	754	---	---	778	659	593	621	525	702	650	747
12	783	761	---	---	681	461	630	627	535	664	655	741
13	791	759	---	---	689	474	633	644	564	668	669	735
14	792	744	---	---	691	477	624	645	550	708	684	733
15	805	734	---	---	715	506	616	667	561	706	683	740
16	799	718	---	---	786	512	617	677	533	704	676	744
17	793	714	---	---	317	478	604	683	545	704	684	711
18	781	734	---	---	329	515	587	681	597	703	723	708
19	693	735	---	---	377	531	584	676	624	699	739	712
20	712	741	---	---	387	521	607	662	619	663	746	702
21	736	739	---	---	331	520	604	661	600	709	551	692
22	743	731	---	843	366	561	602	618	681	713	643	719
23	770	712	---	564	372	588	604	665	688	712	683	719
24	767	736	---	462	386	612	605	686	716	728	708	731
25	728	736	---	528	426	627	602	688	708	736	478	717
26	726	735	---	587	454	639	614	691	709	747	538	713
27	748	735	---	623	467	652	615	555	719	741	595	691
28	686	722	---	644	470	664	603	562	698	684	615	698
29	686	709	---	694	---	691	598	565	664	662	656	702
30	727	705	---	696	---	701	605	310	637	676	671	694
31	735	---	---	357	---	673	---	379	---	673	675	---
MEAN	764	734	735	600	536	571	600	615	568	702	660	721
MAX	820	761	744	843	786	701	633	691	719	747	746	767
MIN	686	705	719	357	317	461	560	310	352	662	478	691

WTR YR 1982 MEAN 648 MAX 843 MIN 310

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	785	731	708	---	407	466	589	600	328	650	663	688
2	763	724	729	---	485	470	595	599	373	675	650	715
3	769	726	729	---	530	521	564	586	415	665	641	750
4	774	729	727	---	561	561	554	608	445	---	650	750
5	751	733	738	---	585	442	569	610	464	---	691	723
6	762	731	733	---	609	532	556	617	483	---	703	704
7	799	742	725	---	631	582	572	611	491	---	678	704
8	778	731	723	---	630	604	582	526	419	720	563	710
9	798	720	740	---	641	629	587	575	425	722	605	717
10	781	715	---	---	706	646	592	601	490	723	615	726
11	778	740	---	---	682	559	589	615	516	686	639	737
12	775	755	---	---	679	448	608	619	525	658	647	730
13	784	747	---	---	683	442	622	632	552	671	660	726
14	778	734	---	---	686	458	614	638	544	692	672	724
15	791	725	---	---	699	498	608	654	553	703	676	735
16	790	710	---	---	654	450	607	667	493	699	668	727
17	783	706	---	---	276	450	595	671	492	698	670	700
18	739	721	---	---	296	502	580	675	583	699	699	703
19	656	731	---	---	354	527	580	662	615	590	713	705
20	688	732	---	---	366	472	597	644	609	611	676	693
21	724	726	---	---	318	510	599	513	522	688	477	676
22	738	723	---	817	350	544	595	591	658	705	613	703
23	742	709	---	408	355	579	597	643	684	705	665	715
24	735	712	---	404	359	604	598	678	702	719	678	722
25	725	728	---	496	408	620	595	683	689	725	400	710
26	716	731	---	565	441	625	603	672	695	737	512	704
27	708	728	---	609	462	647	604	544	709	725	569	683
28	665	716	---	631	468	661	595	556	676	673	605	688
29	674	707	---	669	---	683	590	449	628	658	637	694
30	709	703	---	513	---	691	600	276	628	669	663	689
31	729	---	---	318	---	626	---	356	---	669	663	---
MEAN	748	726	728	543	511	550	591	593	547	686	634	712
MAX	799	755	740	817	706	691	622	683	709	737	713	750
MIN	656	703	708	318	276	442	554	276	328	590	400	676

WTR YR 1982 MEAN 630 MAX 817 MIN 276

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	766	724	701	---	361	460	575	593	302	637	657	679
2	757	719	721	---	448	451	589	581	354	668	644	702
3	761	722	724	---	512	512	530	574	395	652	635	732
4	756	722	723	---	547	484	544	584	435	---	643	734
5	765	723	732	---	569	408	561	596	455	---	651	714
6	754	722	728	---	598	497	550	602	474	---	694	696
7	772	737	721	---	619	564	562	565	486	---	667	695
8	763	727	719	---	621	597	577	478	360	695	534	707
9	779	716	735	---	623	620	582	554	392	694	564	707
10	768	710	---	---	645	639	580	590	462	701	600	716
11	772	728	---	---	656	424	584	608	508	660	625	731
12	765	752	---	---	677	436	590	611	512	652	642	724
13	780	740	---	---	679	419	606	617	538	662	651	721
14	768	728	---	---	682	442	599	630	538	668	663	720
15	777	720	---	---	684	489	594	641	541	697	669	721
16	781	705	---	---	325	400	597	658	436	690	662	710
17	771	701	---	---	267	427	580	660	437	692	659	691
18	703	712	---	---	270	488	570	668	553	694	670	697
19	626	727	---	---	332	516	572	643	600	477	691	700
20	667	720	---	---	317	455	585	629	598	539	260	679
21	712	721	---	---	306	500	589	382	442	667	311	669
22	733	713	---	714	334	531	584	556	607	700	556	695
23	731	706	---	311	342	570	584	621	678	698	647	711
24	717	701	---	346	342	592	585	668	637	709	376	715
25	722	722	---	467	389	616	583	680	675	716	274	704
26	698	724	---	530	430	618	589	546	677	729	483	692
27	683	720	---	590	456	642	590	527	691	684	544	672
28	658	710	---	621	466	656	582	549	660	656	595	673
29	662	705	---	646	---	672	577	291	603	655	621	688
30	688	701	---	317	---	672	589	251	617	659	655	685
31	724	---	---	289	---	588	---	318	---	665	650	---
MEAN	735	719	723	483	482	529	579	564	522	667	587	703
MAX	781	752	735	714	684	672	606	680	691	729	694	734
MIN	626	701	701	289	267	400	530	251	302	477	260	669

WTR YR 1982 MEAN 608 MAX 781 MIN 251

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	15.5	8.0		1.5	6.0	12.5	16.0	19.0	21.5	22.5	20.5
2	18.0	15.5	7.5		3.0	6.0	12.0	18.0	18.5	19.5	22.5	22.5
3	16.0	16.5	7.0		3.0	4.5	12.0	17.5	19.0	21.0	24.0	20.5
4	15.5	16.0	6.5		2.5	5.0	8.5	18.5	18.0	----	25.0	19.5
5	17.5	15.5	5.5		2.0	4.0	7.5	19.0	19.0	----	25.5	19.5
6	17.5	13.5	4.5		1.5	4.0	5.5	19.5	19.0	----	25.0	18.0
7	15.5	10.0	6.0		.5	4.0	6.5	18.5	18.0	----	24.0	19.5
8	13.5	10.0	6.0		1.5	4.0	6.0	18.0	19.5	----	24.0	20.0
9	13.5	10.5	4.5		2.5	4.5	6.0	19.5	19.5	----	23.0	20.0
10	13.5	8.0	---		.5	6.0	8.5	19.5	20.5	----	20.5	20.5
11	15.0	8.5	---		.5	6.5	10.0	20.5	20.0	----	20.5	21.0
12	15.0	8.0	---		1.5	7.5	9.5	21.0	19.0	----	20.5	21.5
13	15.0	8.0	---		3.0	8.0	9.5	21.5	20.5	----	20.5	20.5
14	14.0	8.0	---		4.0	8.0	11.5	20.5	20.0	23.0	21.0	22.5
15	14.5	8.0	---		5.0	7.5	13.5	21.5	20.0	23.0	21.5	21.5
16	15.5	8.0	---		---	11.0	13.0	21.5	19.0	24.0	22.0	20.5
17	14.0	9.5	---		---	10.0	13.0	22.0	19.0	25.0	22.5	19.5
18	14.5	9.0	---		---	10.0	13.5	20.5	19.5	23.5	22.5	19.5
19	12.0	10.5	---		3.0	10.0	13.5	20.5	18.5	23.5	22.0	17.5
20	12.0	10.0	---		4.0	9.0	14.5	22.0	19.0	25.0	21.0	16.0
21	14.0	6.0	---		2.5	9.0	13.5	20.5	19.5	24.5	21.5	15.0
22	13.0	5.0	---		4.0	7.0	14.0	20.0	19.0	22.5	20.0	14.0
23	11.0	4.5	---		5.0	8.5	14.5	19.0	19.0	23.0	19.5	15.5
24	8.0	6.0	---		3.5	10.0	15.5	18.5	19.5	23.5	20.5	14.5
25	9.0	6.0	---		3.5	9.5	14.0	20.0	20.5	24.0	21.0	16.0
26	11.0	9.5	---		4.0	6.0	15.5	18.5	21.0	24.0	20.0	16.0
27	11.5	9.0	---		5.0	6.5	16.0	18.5	22.0	23.0	20.5	15.5
28	11.5	7.0	---		5.5	8.0	15.5	19.0	21.0	23.5	20.5	17.0
29	12.5	6.0	---		---	9.5	13.0	18.5	22.0	23.0	19.5	18.0
30	13.5	5.0	---		---	12.0	14.0	19.0	22.5	23.0	18.5	18.0
31	14.5	----	---		---	12.5	----	19.5	----	23.0	20.5	----
MEAN	14.0	9.5	6.0		3.0	7.5	11.5	19.5	19.5	23.0	21.5	18.5
MAX	20.5	16.5	8.0		5.5	12.5	16.0	22.0	22.5	25.0	25.5	22.5
MIN	8.0	4.5	4.5		.5	4.0	5.5	16.0	18.0	19.5	18.5	14.0

WTR YR 1982 MEAN 14.5 MAX 25.5 MIN .5

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	14.5	6.5		1.0	5.0	10.5	14.5	18.5	20.0	21.0	20.0
2	16.0	14.5	6.5		2.0	5.5	11.0	15.5	17.5	19.0	21.0	21.0
3	14.0	15.0	6.0		2.5	4.0	9.0	16.0	18.0	20.0	22.0	19.5
4	14.5	15.0	6.5		2.0	4.0	6.5	16.5	17.0	---	23.5	18.0
5	17.5	14.5	5.0		2.0	3.5	6.5	17.0	17.5	---	24.0	17.5
6	17.0	11.5	3.5		.5	3.5	4.5	18.0	18.0	---	24.0	17.5
7	14.0	9.0	4.5		.0	3.0	5.0	17.0	17.5	---	23.0	18.0
8	12.5	9.0	5.5		1.0	3.0	5.5	16.0	18.5	---	22.5	18.5
9	12.0	9.5	4.0		1.5	3.5	5.5	17.5	19.0	---	22.0	18.5
10	13.0	6.5	---		.0	4.5	7.0	18.0	19.5	---	20.0	19.0
11	14.0	7.5	---		.5	6.0	8.0	18.5	18.5	---	19.0	19.5
12	13.5	7.0	---		.5	6.0	7.5	19.0	18.5	---	18.5	20.0
13	13.5	7.0	---		2.0	7.5	9.0	19.5	18.5	---	18.5	20.5
14	13.5	7.0	---		3.0	7.0	9.0	19.5	18.5	21.5	19.0	21.0
15	14.0	7.0	---		4.5	6.5	11.0	20.0	19.0	21.5	20.0	21.0
16	14.5	7.0	---		---	8.0	12.5	20.0	18.0	22.0	20.5	19.5
17	13.0	8.5	---		---	9.5	12.5	20.5	18.0	23.0	21.0	18.0
18	13.5	8.0	---		---	9.0	11.5	19.5	18.5	23.0	20.5	18.5
19	11.0	9.0	---		2.5	8.5	12.5	19.0	18.0	22.0	20.0	16.5
20	10.5	8.0	---		3.0	7.5	13.0	20.0	17.5	23.5	20.0	15.5
21	12.0	5.0	---		2.0	8.5	11.5	19.5	18.0	23.0	20.0	14.0
22	12.0	4.0	---		3.0	6.5	12.0	19.0	18.0	22.0	19.0	13.5
23	9.5	3.5	---		3.5	7.0	12.0	18.5	17.5	21.5	19.0	14.0
24	7.0	5.5	---		3.0	8.5	13.0	17.5	18.0	21.5	19.5	14.5
25	7.5	5.0	---		3.0	8.0	13.0	18.0	19.0	22.0	20.5	15.0
26	10.0	7.5	---		3.0	5.5	14.0	18.0	19.5	22.5	19.5	15.5
27	11.5	8.0	---		4.0	5.0	14.5	18.0	20.5	22.0	19.5	15.5
28	10.5	6.0	---		4.5	6.0	13.5	18.0	20.0	22.0	19.5	15.5
29	11.0	5.5	---		---	7.0	12.5	18.0	20.5	21.5	18.0	16.5
30	12.0	4.5	---		---	10.0	13.0	18.5	21.5	21.5	18.0	17.0
31	13.0	----	---		---	11.5	----	18.5	----	21.5	19.5	----
MEAN	13.0	8.5	5.5		2.0	6.5	10.0	18.0	18.5	21.5	20.5	17.5
MAX	19.5	15.0	6.5		4.5	11.5	14.5	20.5	21.5	23.5	24.0	21.0
MIN	7.0	3.5	3.5		.0	3.0	4.5	14.5	17.0	19.0	18.0	13.5

WTR YR 1982 MEAN 13.5 MAX 24.0 MIN .0

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.5	13.5	4.5		.5	4.0	9.0	12.5	18.0	18.5	19.5	19.5
2	14.5	14.0	6.0		1.5	5.0	9.5	13.5	16.0	18.0	19.5	20.0
3	12.5	14.5	5.0		1.5	3.0	7.0	13.5	17.0	18.5	20.5	18.0
4	13.0	14.0	5.5		1.0	3.5	5.0	14.0	16.5	---	21.5	16.0
5	----	13.5	4.5		1.5	2.5	5.5	15.0	16.0	---	22.5	16.0
6	15.5	10.0	3.0		.0	3.0	3.5	16.5	16.5	---	22.5	16.0
7	13.0	8.0	3.5		.0	2.5	3.0	15.0	17.0	---	21.5	17.0
8	11.0	7.5	4.5		.0	1.5	4.5	14.0	17.0	---	21.5	17.0
9	11.0	8.0	3.5		.5	2.0	4.0	15.0	18.5	---	21.0	17.0
10	12.0	6.0	---		.0	4.0	5.0	16.0	18.5	---	19.0	18.0
11	13.0	6.5	---		.0	6.0	6.0	16.5	17.5	---	18.0	18.0
12	12.5	6.0	---		.0	5.0	7.0	17.0	18.0	---	17.0	19.0
13	12.5	6.0	---		1.0	7.0	8.5	18.0	17.0	---	17.0	20.0
14	13.0	6.0	---		1.5	5.5	6.5	18.0	16.5	19.5	17.0	20.0
15	13.5	5.5	---		3.0	6.0	8.5	18.5	17.5	20.0	18.0	20.5
16	13.5	6.0	---		---	6.0	12.0	18.5	17.5	20.5	18.5	18.0
17	12.0	7.5	---		---	9.0	11.0	18.5	16.5	21.5	19.5	16.5
18	12.0	7.5	---		---	7.5	9.0	18.5	17.0	22.0	19.5	17.5
19	10.0	8.0	---		2.0	7.0	11.0	17.5	17.5	21.0	18.0	15.5
20	8.5	6.0	---		2.0	6.0	12.0	18.5	16.0	22.5	19.0	15.0
21	11.0	4.0	---		1.0	7.5	9.5	19.0	17.0	21.0	19.0	13.5
22	11.0	3.5	---		2.5	6.0	10.0	18.0	17.0	21.0	17.5	13.0
23	8.0	2.5	---		2.5	6.0	9.5	18.0	16.0	20.0	18.5	12.5
24	6.0	4.5	---		2.5	6.5	11.0	17.0	16.5	19.5	18.5	14.0
25	6.0	4.5	---		2.0	6.0	12.0	17.0	17.0	20.5	20.5	14.5
26	9.0	5.5	---		2.0	5.0	12.5	17.0	18.5	21.0	18.5	15.0
27	11.0	7.0	---		3.0	3.5	13.0	17.5	18.5	21.5	19.0	15.0
28	9.5	5.5	---		3.0	4.0	11.0	17.5	19.5	21.0	18.0	14.0
29	10.0	5.0	---		---	5.0	11.0	17.5	19.0	20.0	16.5	15.0
30	11.0	4.0	---		---	8.0	12.0	18.0	20.5	19.5	17.5	15.5
31	12.0	----	---		---	10.5	----	18.0	----	20.0	18.5	----
MEAN	11.5	7.5	4.5		1.5	5.5	8.5	16.5	17.5	20.5	19.0	16.5
MAX	17.5	14.5	6.0		3.0	10.5	13.0	19.0	20.5	22.5	22.5	20.5
MIN	6.0	2.5	3.0		.0	1.5	3.0	12.5	16.0	18.0	16.5	12.5

WTR YR 1982 MEAN 12.0 MAX 22.5 MIN .0

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE¼SE¼ sec.31, T.13 N., R.7 E., Shelby County, Hydrologic Unit 05120204, on left bank 0.2 mile (0.3 km) downstream from bridge on State Highway 9 at Shelbyville, 0.6 mile (1.0 km) downstream from Little Blue River, and at mile 23.9 (38.4 km).

DRAINAGE AREA.--421 mi² (1,090 km²).

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 (224.842 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1953, nonrecording gage at bridge 0.2 mile (0.3 km) upstream at datum 3.5 ft (1.07 m) higher.

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

AVERAGE DISCHARGE.--39 years, 465 ft³/s (13.17 m³/s), 15.00 in/yr (381 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s (447 m³/s) Mar. 5, 1963, gage height, 17.70 ft (5.395 m); minimum daily, 27 ft³/s (0.76 m³/s) Jan. 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 20.2 ft (6.16 m) from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,400 ft³/s (96.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	2100	3480	98.6	11.11	3.386	Feb. 18	1200	*7700	218	*15.34	4.676
Jan. 31	1900	6490	184	14.39	4.386						

Minimum daily discharge, 66 ft³/s (1.87 m³/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	128	114	328	4500	728	1030	275	1980	300	112	112
2	101	121	117	388	2180	764	797	260	1690	241	108	105
3	97	114	112	536	1380	768	839	248	952	226	107	98
4	98	112	110	2040	911	723	874	245	670	212	105	92
5	99	110	110	2250	675	1240	677	236	529	191	104	88
6	104	106	104	1260	540	974	729	227	436	177	108	84
7	104	106	100	939	450	749	712	248	383	170	102	82
8	99	104	102	701	400	592	634	463	455	230	137	81
9	98	102	100	560	350	521	610	446	658	202	207	80
10	99	100	100	350	325	484	597	354	590	179	190	79
11	101	100	100	400	310	982	606	309	432	196	162	77
12	99	98	98	340	295	2060	571	284	345	196	133	76
13	99	98	98	300	285	2050	530	260	309	169	115	74
14	100	96	94	270	278	2040	471	245	276	155	107	75
15	101	96	98	240	281	1470	428	233	258	146	100	75
16	102	94	98	220	1100	1960	427	218	343	139	94	74
17	103	96	100	200	5370	2990	632	210	972	134	90	71
18	110	94	95	200	7180	1760	611	202	682	128	89	71
19	141	112	80	210	3490	1460	511	218	463	158	86	69
20	122	137	85	210	2070	2420	465	242	404	332	85	66
21	113	132	100	220	3020	2280	415	462	407	205	157	67
22	111	114	160	260	2730	1450	376	539	377	164	174	68
23	112	110	697	2300	2110	1090	355	396	314	152	115	68
24	115	112	1170	2000	2220	901	342	315	272	144	101	69
25	111	128	766	1000	1620	784	333	269	246	133	305	73
26	119	126	471	600	1090	828	327	236	230	125	373	75
27	139	128	411	450	879	760	317	506	217	136	194	73
28	199	121	570	400	768	648	298	638	212	163	140	78
29	192	114	434	357	-----	586	285	697	267	142	115	75
30	175	112	312	1720	-----	551	278	2100	363	126	109	71
31	140	----	285	5600	-----	884	-----	1630	-----	117	109	----
TOTAL	3612	3321	7391	26849	46807	37497	16077	13211	15732	5488	4233	2346
MEAN	117	111	238	866	1672	1210	536	426	524	177	137	78.2
MAX	199	137	1170	5600	7180	2990	1030	2100	1980	332	373	112
MIN	97	94	80	200	278	484	278	202	212	117	85	66
CFSM	.28	.26	.57	2.06	3.97	2.87	1.27	1.01	1.25	.42	.33	.19
IN.	.32	.29	.65	2.37	4.14	3.31	1.42	1.17	1.39	.48	.37	.21

CAL YR 1981 TOTAL 123838 MEAN 339 MAX 5370 MIN 79 CFSM .81 IN 10.94
WTR YR 1982 TOTAL 182564 MEAN 500 MAX 7180 MIN 66 CFSM 1.19 IN 16.13

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 (3 m) downstream from bridge on County Road 450 West, 0.5 mile (0.8 km) south of New Palestine, 3.1 miles (5.0 km) upstream from Little Sugar Creek, and 37.3 miles (60.0 km) upstream from mouth.

DRAINAGE AREA.--93.9 mi² (243.2 km²).

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

REVISED RECORDS.--WDR IN-76-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 786.00 ft (239.573 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--15 years, 103 ft³/s (2.917 m³/s), 14.90 in/yr (378 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s (52.4 m³/s) June 23, 1974, gage height, 9.12 ft (2.780 m); maximum gage height, 10.34 ft (3.152 m) Feb. 23, 1979 (ice jam); minimum daily discharge, 3.2 ft³/s (0.091 m³/s) Oct. 7, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s (26.9 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	1100	1550	43.9	8.47	2.582	Feb. 18	1600	*1720	48.7	*8.85	2.697
Jan. 31	0300	1120	31.7	7.41	2.259						

Minimum daily discharge, 6.1 ft³/s (0.17 m³/s) Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	44	31	86	540	244	101	50	170	45	13	18
2	12	38	30	90	350	287	91	49	209	37	13	16
3	12	34	29	181	239	279	142	48	126	36	12	14
4	12	31	28	662	208	273	136	46	85	33	12	12
5	11	29	25	623	126	351	112	45	68	30	11	11
6	12	28	23	462	110	282	112	44	58	27	11	11
7	12	25	22	244	90	196	109	51	51	25	10	11
8	12	25	22	167	80	150	104	55	77	23	10	9.8
9	11	23	22	121	70	125	105	50	221	22	11	9.1
10	11	22	21	78	65	114	111	46	155	22	9.6	8.9
11	11	21	20	84	60	329	116	42	89	24	9.9	8.5
12	11	20	19	76	58	526	110	40	65	23	10	8.4
13	10	19	19	70	58	606	100	38	54	21	9.2	7.7
14	10	19	19	60	57	511	88	36	46	19	8.5	7.7
15	11	19	18	52	55	380	78	37	43	17	8.1	7.4
16	11	19	18	45	121	644	76	32	185	16	6.6	7.3
17	11	18	20	40	1210	652	127	31	300	15	7.2	6.6
18	23	18	18	40	1550	449	157	30	210	16	6.8	7.1
19	22	19	15	40	1420	334	122	36	134	57	6.4	7.1
20	36	26	16	41	982	577	104	35	106	81	7.1	6.8
21	22	24	18	42	888	567	88	204	97	54	7.4	6.6
22	18	22	30	60	899	341	76	103	118	34	49	6.1
23	18	22	350	809	801	233	70	68	78	27	23	6.4
24	17	23	300	400	828	184	66	48	61	23	15	7.1
25	16	24	190	250	636	159	64	40	51	20	83	8.1
26	18	30	130	170	334	164	62	36	45	18	177	7.9
27	22	35	150	140	242	150	59	35	41	37	71	7.0
28	51	41	180	120	224	126	56	40	39	26	42	7.5
29	96	36	140	106	-----	113	53	130	47	18	28	7.5
30	67	32	110	510	-----	107	51	213	51	16	23	7.0
31	53	----	84	918	-----	109	----	152	----	14	20	-----
TOTAL	672	786	2117	6787	12301	9562	2846	1910	3080	876	730.8	266.6
MEAN	21.7	26.2	68.3	219	439	308	94.9	61.6	103	28.3	23.6	8.89
MAX	96	44	350	918	1550	652	157	213	300	81	177	18
MIN	10	18	15	40	55	107	51	30	39	14	6.4	6.1
CFSM	.23	.28	.73	2.33	4.68	3.28	1.01	.66	1.10	.30	.25	.10
IN.	.27	.31	.84	2.69	4.87	3.79	1.13	.76	1.22	.35	.29	.11

CAL YR 1981 TOTAL 26679.0 MEAN 73.1 MAX 1250 MIN 9.0 CFSM .78 IN 10.57
WTR YR 1982 TOTAL 41934.4 MEAN 115 MAX 1550 MIN 6.1 CFSM 1.23 IN 16.61

03361850 BUCK CREEK AT ACTON, IN

LOCATION.--Lat 39°39'25", long 85°57'27", in NW¼SE¼ sec.15, T.14 N., R.5 E., Marion County, Hydrologic Unit 05120204, on left bank 30 ft (9 m) downstream from McGregor Road bridge, 0.5 mile (0.8 km) east of Acton, and 4.1 miles (6.6 km) upstream from mouth.

DRAINAGE AREA.--78.8 mi² (204.1 km²).

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

REVISED RECORDS.--WDR IN-79-1: 1969 (M).

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

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

AVERAGE DISCHARGE.--15 years, 93.0 ft³/s (2.634 m³/s), 16.03 in/yr (407 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,140 ft³/s (202 m³/s) July 20, 1969, gage height, 14.99 ft (4.569 m); minimum daily, 0.60 ft³/s (0.017 m³/s) Oct. 1, 4, 1967.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1100	1410	39.9	8.50	2.591	Feb. 21	0145	1510	42.8	8.57	2.612
Jan. 23	1230	1450	41.1	ice jam		Mar. 11	1700	1260	35.7	7.90	2.408
Jan. 30	2300	*1960	55.5	*9.76	2.975	Mar. 16	1545	1730	49.0	9.10	2.774
Feb. 17	0700	1650	46.7	8.92	2.719	Mar. 20	0500	1100	31.2	7.44	2.268

Minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	7.1	13	63	298	160	81	24	225	18	12	9.3
2	15	5.3	14	55	167	180	71	22	131	15	6.2	12
3	8.5	5.6	15	197	116	179	162	23	74	29	4.6	2.8
4	7.8	10	7.7	1120	75	197	124	25	55	23	8.4	4.2
5	14	10	5.9	430	60	252	93	24	44	13	5.5	4.8
6	22	10	4.5	216	52	167	108	24	32	15	7.5	2.2
7	16	6.2	4.5	151	46	125	88	38	30	13	8.3	1.2
8	12	4.8	9.4	85	43	97	81	47	40	13	7.3	1.2
9	11	6.8	5.3	55	40	84	89	29	59	8.8	5.2	3.8
10	10	11	3.1	45	37	86	98	28	68	16	3.6	4.7
11	5.3	10	5.3	40	35	627	95	26	32	21	7.6	4.6
12	3.1	9.8	5.9	35	34	527	82	21	22	11	4.5	4.6
13	5.0	9.8	5.9	31	34	678	73	16	19	13	2.5	1.9
14	15	6.2	5.9	28	33	340	59	20	20	41	6.7	1.3
15	20	4.0	5.9	25	36	295	52	19	22	15	6.6	1.3
16	19	3.6	5.3	24	165	1010	54	17	256	13	3.1	3.4
17	18	7.1	6.2	23	1530	529	152	11	216	7.6	1.9	5.3
18	27	5.6	5.9	22	823	257	122	12	94	12	3.7	5.3
19	12	6.4	3.8	21	503	342	90	22	75	55	5.2	4.9
20	6.1	16	1.8	21	648	808	76	24	64	39	2.9	2.2
21	8.6	6.2	2.0	21	1120	348	59	72	56	21	6.8	1.2
22	9.0	3.3	6.8	22	750	206	50	62	39	16	5.5	1.0
23	14	2.7	390	1000	744	153	44	36	29	9.0	2.7	3.3
24	10	11	240	340	703	126	44	21	22	12	1.7	5.3
25	6.5	13	102	120	300	119	42	18	20	10	9.6	7.8
26	4.3	10	67	65	194	147	38	19	21	4.8	8.5	5.6
27	8.4	18	140	50	160	115	32	17	20	74	2.9	2.1
28	25	17	141	43	155	94	32	27	18	70	4.2	1.4
29	19	9.4	85	33	----	84	31	154	55	25	4.8	1.3
30	14	8.4	60	927	----	79	30	309	32	13	2.7	3.8
31	13	----	53	1100	----	87	----	138	----	14	4.2	-----
TOTAL	397.6	254.3	1421.1	6408	8901	8498	2252	1345	1890	660.2	166.9	113.8
MEAN	12.8	8.48	45.8	207	318	274	75.1	43.4	63.0	21.3	5.38	3.79
MAX	27	18	390	1120	1530	1010	162	309	256	74	12	12
MIN	3.1	2.7	1.8	21	33	79	30	11	18	4.8	1.7	1.0
CFSM	.16	.11	.58	2.63	4.04	3.48	.95	.55	.80	.27	.07	.05
IN.	.19	.12	.67	3.03	4.20	4.01	1.06	.63	.89	.31	.08	.05

CAL YR 1981 TOTAL 25019.9 MEAN 68.5 MAX 1800 MIN 1.4 CFSM .87 IN 11.81
WTR YR 1982 TOTAL 32307.9 MEAN 88.5 MAX 1530 MIN 1.0 CFSM 1.12 IN 15.25

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 (0.8 km) southwest of Amity, 2.0 miles (3.2 km) upstream from mouth, and 5 miles (8 km) northwest of Edinburgh.

DRAINAGE AREA.--107 mi² (277 km²).

PERIOD OF RECORD.--October 1942 to current year. Prior to December 1942 monthly discharge only, published in WSP 1305. 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 (204.277 m) National Geodetic Vertical Datum of 1929. Prior to June 30, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--40 years, 107 ft³/s (3.030 m³/s), 13.58 in/yr (245 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) Jan. 27, 1952, gage height, 13.4 ft (4.08 m); minimum daily, 0.5 ft³/s (0.014 m³/s) Sept. 29, Oct. 20, 21, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	1300	1670	47.3	7.71	2.350	Feb. 17	1400	2930	83.0	9.54	2.908
Jan. 31	1500	*3700	105	*10.19	3.106	Mar. 16	2315	1670	47.3	7.71	2.350

Minimum daily discharge, 3.4 ft³/s (0.096 m³/s) Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	8.8	13	95	1500	111	197	40	524	21	10	14
2	5.7	8.3	14	90	378	130	142	37	212	20	8.9	19
3	4.6	8.8	13	200	279	120	390	35	122	40	8.2	11
4	4.1	8.8	12	873	150	120	240	34	85	43	7.6	8.4
5	3.6	9.4	11	463	110	250	165	33	67	26	7.8	5.4
6	8.3	8.3	10	283	90	170	180	32	54	20	7.8	4.5
7	6.8	7.8	9.4	214	74	130	138	46	49	18	8.2	4.4
8	5.1	7.8	9.4	140	64	110	123	82	55	21	7.2	4.2
9	4.8	7.3	9.4	90	58	92	123	55	45	42	6.3	4.1
10	4.6	7.8	9.4	70	53	84	117	42	41	29	6.1	4.0
11	4.0	7.8	8.8	60	50	400	110	37	34	42	6.8	3.9
12	3.7	7.3	7.8	52	49	583	102	35	31	33	5.9	3.9
13	3.6	6.8	7.3	46	48	695	95	32	30	22	5.3	3.7
14	3.4	6.8	7.3	42	48	433	81	29	26	18	5.0	4.0
15	4.2	6.8	7.8	38	74	379	72	27	25	16	4.8	3.8
16	4.5	8.3	7.8	36	579	1090	73	25	68	14	4.6	3.9
17	4.4	8.3	8.3	34	2320	857	125	28	232	13	4.8	3.8
18	17	6.8	8.8	33	1130	344	108	26	108	13	4.8	4.4
19	14	10	7.8	33	513	436	91	26	70	18	4.3	4.1
20	9.1	19	6.3	33	636	882	82	26	61	15	4.3	3.8
21	6.9	17	6.8	33	881	426	69	34	151	13	5.8	4.1
22	5.8	11	14	69	467	264	60	29	77	11	5.6	3.9
23	7.0	8.8	460	1550	372	200	55	24	52	10	4.3	3.9
24	6.1	11	276	500	322	163	53	21	39	9.1	5.4	4.3
25	5.5	11	154	250	240	148	52	21	33	8.4	8.6	6.5
26	10	11	113	140	175	173	52	21	30	7.8	6.9	5.5
27	17	11	152	100	140	139	49	24	28	56	6.4	4.8
28	24	11	173	84	119	117	43	25	33	79	5.3	4.8
29	20	9.4	119	76	-----	109	40	39	34	30	4.5	4.1
30	14	8.8	97	945	-----	105	42	270	26	19	9.3	3.9
31	11	-----	90	3120	-----	294	----	144	----	13	15	-----
TOTAL	250.0	281.0	1843.4	9792	10919	9554	3269	1379	2442	740.3	205.8	164.1
MEAN	8.06	9.37	59.5	316	390	308	109	44.5	81.4	23.9	6.64	5.47
MAX	24	19	460	3120	2320	1090	390	270	524	79	15	19
MIN	3.4	6.8	6.3	33	48	84	40	21	25	7.8	4.3	3.7
CFSM	.08	.09	.56	2.95	3.65	2.88	1.02	.42	.76	.22	.06	.05
IN.	.09	.10	.64	3.40	3.80	3.32	1.14	.48	.85	.26	.07	.06

CAL YR 1981 TOTAL 34005.8 MEAN 93.2 MAX 2420 MIN 3.4 CFSM .87 IN 11.82
WTR YR 1982 TOTAL 40839.6 MEAN 112 MAX 3120 MIN 3.4 CFSM 1.05 IN 14.20

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 (15 m) upstream from highway bridge in Camp Atterbury, 1.3 miles (2.1 km) upstream from confluence with Blue River, 1.5 miles (2.4 km) northwest of Edinburgh, and at mile 1.3 (2.1 km).

DRAINAGE AREA.--474 mi² (1,228 km²).

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 (196.971 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1952, nonrecording gage on downstream side of old highway bridge, 100 ft (30 m) downstream at same datum.

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

AVERAGE DISCHARGE.--40 years, 491 ft³/s (13.91 m³/s), 14.07 in/yr (357 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft³/s (782 m³/s) May 29, 1956, gage height, 18.38 ft (5.602 m); minimum daily, 9.2 ft³/s (0.26 m³/s) Sept. 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,200 ft³/s (119 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 24	0100	4370	124	10.29	3.136	Feb. 22	0300	4320	122	10.23	3.118
Jan. 31	2400	*8890	252	*13.66	4.164	Mar. 17	0700	4600	130	10.54	3.213
Feb. 18	0600	7000	198	12.58	3.834						

Minimum daily discharge, 25 ft³/s (0/71 m³/s) Sept. 17, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	107	88	392	7200	822	816	217	1240	189	77	72
2	68	90	90	397	2900	855	627	207	988	146	72	83
3	64	80	90	565	1610	894	992	198	664	155	64	74
4	58	76	90	2340	973	890	1080	193	450	183	59	57
5	55	76	83	3130	714	1240	752	191	347	146	60	46
6	62	74	76	1880	555	1110	730	187	282	120	60	42
7	63	72	72	1260	500	882	649	203	240	110	56	39
8	66	70	70	866	430	680	582	292	240	108	56	35
9	62	68	70	600	400	572	568	266	271	136	53	32
10	58	64	70	350	338	510	547	218	440	119	51	30
11	58	64	66	370	320	1020	553	199	350	133	54	33
12	57	66	64	330	300	2810	522	185	243	134	48	35
13	53	64	64	300	286	2670	486	172	196	108	47	34
14	50	64	62	260	265	2710	428	160	170	102	45	36
15	49	62	62	230	278	1850	379	154	158	119	41	32
16	53	58	62	200	911	2660	360	150	234	96	44	28
17	54	58	64	180	4970	4350	468	144	1190	89	43	25
18	68	56	62	180	6620	2430	641	137	845	84	36	32
19	82	68	52	180	4430	1800	548	133	532	91	33	33
20	90	83	56	190	3230	3400	468	146	421	160	37	32
21	77	85	60	195	4010	3040	403	156	444	172	43	33
22	74	80	70	230	3940	1800	346	370	343	133	39	28
23	70	70	700	3000	3060	1250	313	255	302	106	62	25
24	70	70	1400	3200	2820	987	294	193	231	90	74	28
25	69	70	1050	1500	2290	837	286	157	191	83	63	36
26	75	80	714	800	1470	881	277	139	170	77	88	44
27	60	85	585	660	1070	815	263	140	164	88	198	45
28	83	90	822	580	888	676	241	144	165	276	117	43
29	110	98	678	500	-----	595	228	163	166	187	83	37
30	159	88	496	1980	-----	549	223	1120	216	116	78	32
31	123	----	420	6940	-----	899	-----	976	-----	88	81	----
TOTAL	2211	2236	8408	33785	56778	46484	15070	7565	11893	3944	1962	1181
MEAN	71.3	74.5	271	1090	2028	1499	502	244	396	127	63.3	39.4
MAX	159	107	1400	6940	7200	4350	1080	1120	1240	276	198	83
MIN	49	56	52	180	265	510	223	133	158	77	33	25
CFSM	.15	.16	.57	2.30	4.28	3.16	1.06	.52	.84	.27	.13	.08
IN.	.17	.18	.66	2.65	4.46	3.65	1.18	.59	.93	.31	.15	.09

CAL YR 1981 TOTAL 147245 MEAN 403 MAX 7750 MIN 49 CFSM .85 IN 11.56
WTR YR 1982 TOTAL 191517 MEAN 525 MAX 7200 MIN 25 CFSM 1.11 IN 15.03

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 just downstream from highway bridge, 0.8 mile (1.3 km) downstream from confluence of Big Blue River and Sugar Creek, 1.5 miles (2.4 km) southwest of Edinburgh, and at mile 14.1 (22.7 km).

DRAINAGE AREA.--1,060 mi² (2,745 km²).

PERIOD OF RECORD.--October 1940 to current year. Prior to July 1941 monthly discharge only, published in WSP 1305. 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 (194.155 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--42 years, 1,153 ft³/s (32.65 m³/s), 14.77 in/yr (375 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft³/s (1,147 m³/s) Mar. 6, 1963, gage height, 16.97 ft (5.172); minimum daily, 38 ft³/s (1.08 m³/s) Sept. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 20.3 ft (6.19 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s (198 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 1	unknown	14000	396	unknown		Mar. 17	1800	8120	230	11.59	3.533
Feb. 18	1400	*15100	428	*14.13	4.307	Mar. 21	0500	7330	208	10.91	3.325

Minimum daily discharge, 135 ft³/s (3.82 m³/s) Sept. 23.

NOTE.--No gage-height record Jan. 9 to Feb. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	337	294	860	13000	2230	2470	675	3340	615	275	226
2	226	310	290	916	10000	2220	2100	650	3730	523	262	228
3	218	293	291	1080	6000	2330	2400	626	2560	501	252	210
4	212	282	285	3710	3500	2260	2800	606	1660	509	244	192
5	211	275	273	6070	2500	2950	2200	587	1240	462	240	179
6	226	269	263	4830	2000	3060	1950	572	998	425	242	173
7	220	262	256	3110	1700	2400	1820	587	857	404	231	169
8	225	258	251	2290	1400	1880	1700	748	808	396	226	166
9	218	256	249	1700	1200	1570	1600	894	1070	458	282	163
10	216	249	248	1200	1100	1410	1520	753	1200	407	275	160
11	215	246	242	1300	1000	2020	1450	660	1120	416	270	157
12	214	245	241	1000	900	5460	1400	611	825	425	240	157
13	211	244	238	850	850	5760	1300	572	686	388	225	154
14	209	241	237	800	800	6210	1200	544	608	367	225	154
15	213	238	234	720	815	4830	1120	530	563	371	195	151
16	213	234	234	680	1780	5220	1060	511	611	347	188	148
17	218	234	244	640	8790	7790	1270	493	2060	334	180	145
18	229	231	230	600	14700	6600	1630	480	2110	331	175	145
19	249	249	194	600	12800	4620	1410	471	1360	335	174	142
20	288	301	198	650	7620	6430	1240	498	1040	479	174	140
21	262	307	214	700	7470	6960	1110	507	998	483	175	138
22	252	292	241	800	8190	5040	996	1040	929	401	241	136
23	247	272	900	4500	6940	3500	929	839	798	354	213	135
24	244	268	2400	6200	6320	2800	888	655	658	330	214	137
25	244	274	2310	4500	5860	2390	850	553	578	313	205	141
26	256	294	1570	2300	3960	2350	828	507	534	298	454	146
27	267	300	1200	1800	2940	2250	806	540	519	300	429	148
28	291	299	1540	1440	2450	1900	763	815	514	469	295	142
29	384	300	1390	1300	------	1660	722	850	508	406	238	145
30	432	289	990	2500	------	1540	701	2340	631	323	244	140
31	377	----	800	10000	------	2090	-----	3440	-----	289	233	----
TOTAL	7721	8149	18547	69646	136585	109730	42233	24154	35113	12459	7516	4767
MEAN	249	272	598	2247	4878	3540	1408	779	1170	402	242	159
MAX	432	337	2400	10000	14700	7790	2800	3440	3730	615	454	228
MIN	209	231	194	600	800	1410	701	471	508	289	174	135
CFSM	.24	.26	.56	2.12	4.60	3.34	1.33	.74	1.10	.38	.23	.15
IN.	.27	.29	.65	2.44	4.79	3.85	1.48	.85	1.23	.44	.26	.17

CAL YR 1981 TOTAL 345828 MEAN 947 MAX 14000 MIN 180 CFSM .89 IN 12.14
WTR YR 1982 TOTAL 476620 MEAN 1306 MAX 14700 MIN 135 CFSM 1.23 IN 16.73

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE¼NE¼ sec.9, T.11 N., R.8 E., Shelby County, Hydrologic Unit 05120205, on right bank 500 ft (152 m) downstream from highway bridge, 0.8 mile (1.3 km) southwest of St. Paul, 1.5 miles (2.4 km) downstream from Mill Creek, and at mile 34.4 (55.3 km).

DRAINAGE AREA.--303 mi² (785 km²).

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1958, published as Flatrock Creek at St. Paul.

REVISED RECORDS.--WSP 853: 1934-36. WSP 973: 1942. WSP 1335: 1933, 1936. WSP 1725: 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.84 ft (233.123 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 21, 1938, nonrecording gage at site 500 ft (152 m) upstream at same datum.

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

AVERAGE DISCHARGE.--52 years, 319 ft³/s (9.034 m³/s), 14.30 in/yr (363 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft³/s (524 m³/s) Jan. 5, 1949, gage height, 10.60 ft (3.231 m); maximum recorded gage height, 12.37 ft (3.770 m) May 24, 1968; minimum daily discharge, 0.6 ft³/s (0.017 m³/s) Aug. 7, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of approximately 20.5 ft (6.25 m), from information by local residents.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0800	4570	129	5.84	1.780	Feb. 18	0100	7170	203	7.52	2.292
Jan. 31	2200	*8770	248	*8.44	2.573						

Minimum daily discharge, 13 ft³/s (0.37 m³/s) Sept. 23.

NOTE.--No gage-height record Dec. 19 to Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	33	39	170	5110	330	786	163	1170	282	44	37
2	17	30	48	252	2290	323	615	162	807	175	41	31
3	16	28	41	351	1460	343	940	161	545	167	38	27
4	16	28	39	1440	931	379	937	161	399	138	36	24
5	16	28	38	1450	531	617	663	162	322	114	41	22
6	19	27	34	1240	420	642	632	166	257	102	60	21
7	19	27	33	764	396	468	621	203	225	90	39	23
8	19	27	33	556	387	350	529	360	212	183	33	20
9	19	27	31	400	282	303	484	419	525	234	39	18
10	19	27	30	250	374	281	440	319	455	131	56	18
11	19	27	28	260	465	603	432	264	308	267	43	18
12	18	26	28	200	331	1310	411	240	212	212	34	17
13	17	24	28	180	255	1700	375	225	175	124	30	17
14	16	26	30	160	244	1500	309	210	149	96	28	17
15	18	26	28	150	228	1290	285	197	134	85	26	17
16	19	24	36	140	1840	1540	278	183	187	72	24	16
17	20	26	31	130	5560	1580	336	166	352	67	22	15
18	22	24	30	120	5160	1350	378	153	399	60	21	15
19	20	26	27	116	2190	1230	333	145	252	152	20	15
20	20	36	25	120	1170	1660	298	357	207	308	20	15
21	21	50	27	150	1220	1670	261	891	175	167	23	14
22	22	41	50	248	1540	1140	233	935	203	105	62	14
23	24	34	206	3210	1030	771	216	459	163	85	35	13
24	23	34	627	1570	1020	623	207	316	138	70	28	14
25	23	36	602	1420	945	555	203	241	118	60	27	16
26	35	36	388	783	574	603	203	235	111	54	149	22
27	50	41	246	423	453	556	194	798	108	54	73	20
28	47	41	290	357	374	466	177	703	156	203	45	18
29	44	38	257	296	---	409	167	997	455	102	35	18
30	39	36	210	2100	---	376	165	1680	468	65	34	17
31	36	---	180	6830	---	581	---	1900	---	50	35	---
TOTAL	731	934	3740	25836	36780	25549	12108	13571	9387	4074	1241	569
MEAN	23.6	31.1	121	833	1314	824	404	438	313	131	40.0	19.0
MAX	50	50	627	6830	5560	1700	940	1900	1170	308	149	37
MIN	16	24	25	116	228	281	165	145	108	50	20	13
CFSM	.08	.10	.40	2.75	4.34	2.72	1.33	1.45	1.03	.43	.13	.06
IN.	.09	.11	.46	3.17	4.52	3.14	1.49	1.67	1.15	.50	.15	.07

CAL YR 1981 TOTAL 93937 MEAN 257 MAX 3160 MIN 16 CFSM .85 IN 11.53
WTR YR 1982 TOTAL 134520 MEAN 369 MAX 6830 MIN 13 CFSM 1.22 IN 16.52

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN 19...	1230	116	.5	47	15	30

03363900 FLATROCK RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°14'06", long 85°55'36", in NE¼SW¼ sec.12, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at downstream side of bridge on U.S. Highway 31 (bypass), 0.2 mile (0.3 km) northwest of Columbus city limits, and 2.6 miles (4.2 km) upstream from mouth.

DRAINAGE AREA.--534 mi² (1,383 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 610.14 ft (185.971 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--15 years, 602 ft³/s (17.05 m³/s), 15.31 in/yr (389 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s) May 25, 1968, gage height, 15.87 ft (4.837 m), from inside high-water mark; minimum daily, 22 ft³/s (0.62 m³/s) Oct. 5, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s (99.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 24	unknown	6500	184	unknown		Feb. 17	1700	10400	295	13.14	4.005
Feb. 1	1900	*13500	382	*14.21	4.331						

Minimum daily discharge, 43 ft³/s (1.22 m³/s) Sept. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	81	92	339	13100	798	1100	309	1670	389	114	83
2	62	78	93	410	7410	748	1030	299	1060	277	105	82
3	60	75	98	504	3060	748	1090	282	801	236	97	74
4	59	72	97	1740	1840	753	1350	273	596	226	92	67
5	59	71	93	2480	1200	952	1100	263	489	204	89	63
6	68	70	89	1850	1000	1110	956	254	419	187	87	61
7	63	69	86	1250	890	975	929	263	372	175	110	59
8	60	68	83	917	790	823	865	333	351	169	91	57
9	60	69	81	705	705	724	802	418	359	253	82	57
10	59	69	79	570	600	668	739	412	524	285	80	55
11	58	69	78	600	500	714	698	349	474	221	109	53
12	58	68	76	500	450	1760	677	311	357	323	95	52
13	59	67	75	440	410	2240	647	286	300	252	83	52
14	58	66	75	400	400	2480	600	267	267	197	78	51
15	58	65	74	370	420	2110	543	252	244	173	74	50
16	57	67	74	340	1200	2090	514	241	246	160	69	48
17	57	66	76	310	7630	2560	618	230	291	149	66	47
18	59	65	75	300	8760	2180	733	218	439	144	63	46
19	60	69	65	300	5030	1700	657	212	390	149	61	45
20	60	71	60	330	2760	2680	583	205	308	217	60	45
21	58	86	66	350	2110	2660	525	454	284	279	60	44
22	59	97	71	500	2230	2120	470	912	260	205	57	43
23	63	93	193	2500	1920	1450	436	672	259	166	77	43
24	62	87	954	3500	1630	1160	412	446	234	149	79	44
25	61	84	874	2500	1530	1010	400	361	216	137	75	45
26	66	85	602	1500	1220	1010	388	305	202	126	66	44
27	73	88	462	945	989	988	379	499	195	128	143	45
28	89	92	555	700	878	873	356	723	200	121	116	47
29	91	95	500	675	-----	771	330	655	251	210	87	47
30	89	91	395	1140	-----	713	319	1500	396	160	85	45
31	85	----	349	8640	-----	841	-----	1800	-----	130	92	----
TOTAL	1993	2293	6640	37605	70662	42409	20246	14004	12454	6197	2642	1594
MEAN	64.3	76.4	214	1213	2524	1368	675	452	415	200	85.2	53.1
MAX	91	97	954	8640	13100	2680	1350	1800	1670	389	143	83
MIN	57	65	60	300	400	668	319	205	195	121	57	43
CFSM	.12	.14	.40	2.27	4.73	2.56	1.26	.85	.78	.38	.16	.10
IN.	.14	.16	.46	2.62	4.92	2.95	1.41	.98	.87	.43	.18	.11

CAL YR 1981	TOTAL	156088	MEAN 428	MAX	6950	MIN 57	CFSM .80	IN 10.87	
WTR YR 1982	TOTAL	218739	MEAN 599	MAX	13100	MIN 43	CFSM 1.12	IN 15.24	

03364000 EAST FORK WHITE RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°12'00", long 85°55'32", in NE¼NW¼ sec.25, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at abutment of abandoned bridge at west end of Second Street in Columbus, 0.6 mile (1.0 km) downstream from confluence of Driftwood River and Flatrock River, 1.3 miles (2.1 km) upstream from Haw Creek, and at mile 238.7 (384.1 km).

DRAINAGE AREA.--1,707 mi² (4,421 km²).

PERIOD OF RECORD.--October 1947 to current year. Prior to January 1948 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 2109: Drainage area.

GAGE.--Water-stage recorder above concrete control. Datum of gage is 603.12 ft (183.831 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1952, nonrecording gage 600 ft (183 m) upstream at same datum.

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

AVERAGE DISCHARGE.--35 years, 1,850 ft³/s (52.39 m³/s), 14.72 in/yr (374 mm/yr).

EXTREMES FOR PERIOD OF RECORD.---Maximum discharge, 52,300 ft³/s (1,480 m³/s) Mar. 6, 1963, gage height, 16.23 ft (4.947 m); minimum daily, 87 ft³/s (2.46 m³/s) Sept. 29, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 10,000 ft³/s (283 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 24	0900	10900	309	5.7	1.74	Feb. 18	2300	22600	640	10.60	3.231
Feb. 1	1900	*28600	810	*12.06	3.676	Mar. 18	0300	10300	292	5.38	1.640

Minimum daily discharge, 213 ft³/s (6.03 m³/s) Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	428	395	1420	26900	2890	3450	952	4900	1080	421	394
2	315	392	391	1560	21300	2800	2980	936	4470	881	403	403
3	304	364	395	1910	10400	2880	3370	906	3440	799	385	364
4	295	348	390	4920	5180	2900	3910	881	2270	787	373	331
5	286	336	374	7380	3890	3510	3110	863	1750	720	367	302
6	352	331	355	6680	3300	4060	2760	849	1450	644	357	290
7	307	320	342	4780	2810	3370	2650	890	1250	601	372	282
8	300	315	332	3560	2360	2690	2420	1180	1170	584	347	278
9	307	320	326	2720	2000	2270	2270	1360	1300	708	373	272
10	300	310	325	1900	1700	2100	2150	1230	1630	729	402	263
11	293	302	318	2000	1600	2340	2060	1070	1600	660	434	255
12	293	300	313	1600	1500	5680	1970	969	1210	756	392	251
13	293	300	309	1400	1400	6950	1890	898	1010	670	358	248
14	286	294	308	1300	1310	8090	1740	842	904	581	332	245
15	280	291	305	1200	1350	6610	1570	801	852	549	315	242
16	273	286	301	1100	3040	6120	1480	766	852	514	303	236
17	267	284	319	1050	13100	9370	1820	736	1700	478	294	229
18	262	280	308	1000	20500	9390	2230	708	2400	471	282	230
19	273	303	253	1000	19400	6460	2020	688	1770	492	268	222
20	338	362	255	1050	12600	8140	1750	694	1360	606	272	222
21	332	383	282	1100	8900	9650	1520	966	1300	830	277	217
22	324	402	317	1190	10300	7220	1370	1760	1200	657	324	214
23	309	371	976	7070	9170	5210	1270	1540	1090	561	349	213
24	293	356	2890	10700	7060	3680	1190	1150	936	491	364	219
25	297	346	3420	8000	6650	3090	1180	954	829	463	363	226
26	318	372	2570	5100	5000	3110	1150	837	769	440	480	230
27	333	389	2020	3310	3820	2980	1100	982	746	446	651	239
28	367	393	2270	2530	3200	2600	1040	1440	839	533	510	242
29	427	393	2210	2160	------	2280	1010	1490	835	675	412	238
30	510	388	1690	3730	------	2100	966	3130	1050	515	448	232
31	479	-----	1500	17700	------	2850	-----	4840	-----	450	456	----
TOTAL	9928	10259	26759	112120	209740	143390	59396	37308	46882	19371	11684	7829
MEAN	320	342	863	3617	7491	4625	1980	1203	1563	625	377	261
MAX	510	428	3420	17700	26900	9650	3910	4840	4900	1080	651	403
MIN	262	280	253	1000	1310	2100	966	688	746	440	268	213
CFSM	.19	.20	.51	2.12	4.39	2.71	1.16	.71	.92	.37	.22	.15
IN.	.22	.22	.58	2.44	4.57	3.12	1.29	.81	1.02	.42	.25	.17

CAL YR 1981 TOTAL 530976 MEAN 1455 MAX 18800 MIN 253 CFSM .85 IN 11.57
WTR YR 1982 TOTAL 694666 MEAN 1903 MAX 26900 MIN 213 CFSM 1.12 IN 15.14

03364200 HAW CREEK NEAR CLIFFORD, IN

LOCATION.--Lat 39°16'04", long 85°51'22", in NW¼SW¼ sec.34, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, on left bank 20 ft (6.10 m) downstream from bridge on County Road 450 North, 1.2 miles (1.9 km) southeast of Clifford, 5.8 miles (9.3 km) northeast of Columbus, and 7.6 miles (12.2 km) upstream from mouth.

DRAINAGE AREA.--47.5 mi^2 (123.0 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 643.00 ft (195.986 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--15 years, 50.3 ft^3/s (1.424 m^3/s), 14.38 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,560 ft^3/s (72.5 m^3/s) May 24, 1968, gage height, 13.9 ft (4.24 m), from floodmark; no flow at times during September and October 1967 due to diversion for irrigation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1200 ft^3/s (34.0 m^3/s) and maximum (*).

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	0600	2290	64.9	13.35	4.069	Feb. 16	2200	1950	55.2	12.37	3.770
Jan. 31	1500	*2430	68.8	*13.70	4.176						

Minimum daily discharge, 1.4 ft^3/s (0.040 m^3/s) Sept. 12-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	4.6	9.0	31	546	35	87	20	22	8.5	4.4	3.9
2	3.7	4.4	9.4	29	167	35	67	19	17	7.5	4.1	3.7
3	3.0	4.1	7.6	102	158	36	227	18	15	12	3.9	2.6
4	2.5	4.1	7.2	460	118	52	110	17	14	10	3.7	2.1
5	2.2	4.6	6.6	125	82	73	80	16	13	8.0	3.7	1.8
6	3.9	4.4	6.3	85	58	55	77	16	13	7.0	3.5	1.7
7	3.3	4.4	6.0	60	51	45	60	23	12	6.2	3.3	1.5
8	2.7	4.6	6.0	45	44	35	54	82	14	7.6	3.3	1.5
9	2.4	4.9	6.0	35	40	33	54	44	13	5.7	3.1	1.5
10	2.2	5.1	5.7	25	37	32	49	29	12	5.8	3.1	1.5
11	2.0	5.1	5.4	27	35	90	45	23	10	6.3	3.4	1.5
12	1.9	4.9	5.4	23	34	127	40	21	10	5.9	3.2	1.4
13	1.8	4.6	5.1	21	33	165	37	18	10	5.6	2.8	1.4
14	1.8	4.6	5.1	19	33	108	28	17	9.4	5.2	2.7	1.4
15	2.1	4.6	5.1	17	44	157	30	17	9.2	5.4	2.5	1.4
16	2.2	5.1	5.4	16	751	208	52	16	16	5.1	2.5	1.4
17	3.5	5.4	6.0	15	755	130	119	15	14	5.0	2.4	1.5
18	8.4	5.1	5.0	14	176	95	70	14	11	4.9	2.2	1.8
19	6.0	6.6	4.5	14	137	453	52	14	11	11	1.9	1.6
20	4.8	11	4.0	15	119	279	42	13	10	7.8	1.9	1.6
21	3.7	6.9	4.5	15	115	170	33	21	23	5.9	2.1	1.7
22	3.2	6.0	10	205	91	107	29	17	15	5.3	2.1	1.7
23	3.7	5.4	200	1450	83	89	27	14	12	5.0	2.0	1.5
24	3.1	5.4	84	170	76	76	27	13	10	4.6	2.1	1.5
25	4.0	5.4	44	90	59	77	26	13	9.0	4.1	3.4	1.7
26	6.0	5.7	31	60	48	100	25	12	8.4	3.9	2.4	1.7
27	8.4	9.4	66	50	44	74	23	12	8.0	21	2.3	1.5
28	11	7.6	65	45	37	61	21	15	14	14	2.1	1.7
29	5.7	6.6	38	40	----	56	20	27	12	6.6	2.1	1.6
30	5.4	6.0	30	918	----	51	20	68	10	5.3	35	1.7
31	4.9	-----	24	2140	----	141	----	29	-----	4.8	21	----
TOTAL	124.1	166.6	717.3	6361	3971	3245	1631	693	377.0	221.0	138.2	53.1
MEAN	4.00	5.55	23.1	205	142	105	54.4	22.4	12.6	7.13	4.46	1.77
MAX	11	11	200	2140	755	453	227	82	23	21	35	3.9
MIN	1.8	4.1	4.0	14	33	32	20	12	8.0	3.9	1.9	1.4
CFSM	.08	.12	.49	4.32	2.99	2.21	1.15	.47	.27	.15	.09	.04
IN.	.10	.13	.56	4.98	3.11	2.54	1.28	.54	.30	.17	.11	.04

CAL YR 1981 TOTAL 13644.2 MEAN 37.4 MAX 1130 MIN 1.8 CFSM .79 IN 10.69
WTR YR 1982 TOTAL 17698.3 MEAN 48.5 MAX 2140 MIN 1.4 CFSM 1.02 IN 13.86

03364500 CLIFTY CREEK AT HARTSVILLE, IN

LOCATION.--Lat 39°16'25", long 85°42'10", in NW¼NW¼ sec.36, T.10 N., R.7 E., Bartholomew County, Hydrologic Unit 05120206, at downstream side of left abutment of highway bridge, 0.2 mile (0.3 km) north of Hartsville, 5.9 miles (9.5 km) upstream from Duck Creek, and at mile 20.0 (32.2 km).

DRAINAGE AREA.--91.4 mi^2 (236.7 km^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 (206.453 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and those below 10 ft^3/s (0.28 m^3/s), which are poor.

AVERAGE DISCHARGE.--34 years, 96.8 ft^3/s (2.741 m^3/s), 14.38 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s (320 m^3/s) Jan. 21, 1959, gage height, 14.29 ft (4.356 m); no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached an elevation of 702.4 ft (214.09 m) National Geodetic Vertical Datum of 1929, from floodmarks, upstream from bridge.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft^3/s (36.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	1000	1650	46.7	5.70	1.737	Feb. 17	0600	2410	68.3	7.02	2.140
Jan. 31	1700	*4340	123	*9.50	2.906						

Minimum daily discharge, 0.01 ft^3/s (<0.001 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.0	8.3	144	941	73	143	31	435	22	3.8	2.1
2	2.5	4.4	23	140	225	73	115	28	149	14	3.2	1.7
3	2.0	3.8	13	256	275	80	313	26	94	14	2.7	1.6
4	1.4	3.6	8.3	1190	228	109	207	26	70	24	2.4	1.1
5	1.0	3.4	6.0	386	134	220	149	25	57	15	2.2	.74
6	1.6	3.6	4.7	248	90	149	145	25	45	9.7	2.0	.62
7	.95	3.2	3.8	226	80	118	121	50	39	7.2	1.8	.51
8	.87	3.0	3.8	160	70	93	110	236	41	6.5	1.6	.46
9	.87	3.1	3.6	130	65	87	109	156	35	6.4	1.4	.36
10	.87	3.6	3.0	70	60	85	96	98	31	8.7	1.3	.21
11	.87	3.8	2.7	80	56	257	90	72	26	8.2	1.7	.19
12	.87	3.7	2.6	60	52	392	82	58	23	8.4	1.7	.19
13	.87	3.7	2.4	50	48	513	78	50	22	6.6	1.4	.19
14	1.2	3.7	2.6	45	46	299	65	44	20	4.6	1.2	.16
15	1.6	3.7	2.2	40	88	323	59	41	19	3.6	1.0	.13
16	1.3	3.7	2.0	35	1060	453	62	37	36	3.2	1.0	.10
17	1.2	3.6	2.4	32	1480	330	81	35	40	3.0	.74	.05
18	1.3	3.6	2.0	30	286	233	68	33	27	2.8	.74	.05
19	1.3	4.4	1.6	30	220	522	59	31	21	214	.62	.02
20	1.7	11	1.4	33	187	584	54	31	20	214	.56	.02
21	2.0	17	1.5	40	200	299	48	476	23	69	.87	.02
22	2.1	7.3	3.0	300	157	202	43	272	20	31	.80	.02
23	2.4	4.7	430	2350	146	151	40	118	15	27	.74	.02
24	2.6	4.7	270	306	152	136	39	77	13	19	.68	.02
25	3.3	4.7	182	150	121	133	39	57	10	13	.68	.02
26	7.7	6.4	135	100	98	184	40	48	9.4	9.2	.80	.02
27	9.7	8.3	168	70	90	148	38	69	8.9	8.3	1.2	.02
28	7.3	16	196	65	77	121	33	57	11	10	1.1	.02
29	5.6	9.4	139	60	----	109	31	334	72	8.8	.94	.02
30	4.7	6.4	110	1350	----	102	31	455	53	6.8	2.4	.01
31	4.0	-----	103	3800	----	168	----	152	------	4.7	1.8	-----
TOTAL	78.27	165.5	1836.9	11976	6732	6746	2588	3248	1485.3	802.7	45.07	10.69
MEAN	2.52	5.52	59.3	386	240	218	86.3	105	49.5	25.9	1.45	.36
MAX	9.7	17	430	3800	1480	584	313	476	435	214	3.8	2.1
MIN	.87	3.0	1.4	30	46	73	31	25	8.9	2.8	.56	.01
CFSM	.03	.06	.65	4.22	2.63	2.39	.94	1.15	.54	.28	.02	.004
IN.	.03	.07	.75	4.87	2.74	2.75	1.05	1.32	.60	.33	.02	.00

CAL YR 1981 TOTAL 22230.27 MEAN 60.9 MAX 923 MIN .87 CFSM .67 IN 9.05
WTR YR 1982 TOTAL 35714.43 MEAN 97.8 MAX 3800 MIN .01 CFSM 1.07 IN 14.54

03365000 SAND CREEK NEAR BREWERSVILLE, IN

LOCATION.--Lat 39°05'03", long 85°39'32", in NW¼NE¼ sec.5, T.7 N., R.8 E., Jennings County, Hydrologic Unit 05120206, on left bank at downstream side of county highway bridge, 2.5 miles (4.0 km) west of Brewersville, 5.7 miles (9.2 km) upstream from Wyaloosing Creek, and 16.0 miles (25.7 km) upstream from mouth.

DRAINAGE AREA.--155 mi^2 (401 km^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 (191.759 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1952, nonrecording gage at site 1.7 miles (2.7 km) upstream at datum approximately 8 ft (2.4 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--34 years, 173 ft^3/s (4.899 m^3/s), 15.16 in/yr (385 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,900 ft^3/s (564 m^3/s) Jan. 21, 1959, gage height, 21.70 ft (6.614 m) inside, 22.20 ft (6.767 m) outside, from rating curve extended above 6,500 ft^3/s (184 m^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 discharge above base of 2,900 ft^3/s (82.1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	0700	3820	108	10.37	3.161	Feb. 17	0300	3080	87.2	9.25	2.819
Jan. 23	0700	*9810	278	*16.04	4.889	May 22	0100	4190	119	10.87	3.313
Jan. 31	2000	8280	234	14.96	4.560						

Minimum daily discharge, 3.0 ft^3/s (0.085 m^3/s) Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	12	112	186	1570	89	282	46	1000	73	16	41
2	9.5	11	126	157	400	87	188	44	289	50	14	35
3	9.9	10	68	389	513	99	926	42	165	71	13	20
4	9.9	9.5	51	2220	552	241	359	40	120	73	12	12
5	9.9	9.0	44	555	243	359	215	37	101	45	11	8.0
6	25	11	36	295	150	196	211	37	84	34	10	6.0
7	56	11	32	260	120	158	160	58	71	29	9.0	5.2
8	18	10	31	164	110	126	141	828	296	34	12	4.6
9	12	11	28	110	100	124	154	336	205	77	14	4.2
10	11	15	24	60	91	114	149	183	88	41	20	4.0
11	10	18	22	62	85	443	132	130	67	60	17	3.9
12	9.5	15	20	58	75	487	119	104	56	51	18	3.8
13	9.0	14	19	54	70	869	109	84	51	30	18	3.7
14	9.4	13	17	50	70	402	96	71	45	23	14	3.6
15	9.8	12	17	46	100	830	86	63	40	19	10	3.5
16	10	12	17	43	1200	993	86	53	130	17	8.0	3.4
17	11	11	18	40	1730	462	123	128	171	16	7.2	3.3
18	12	11	16	37	433	277	118	76	77	15	6.6	3.2
19	12	34	13	37	328	1230	89	56	53	167	6.0	4.0
20	12	353	11	40	262	1040	80	48	45	182	10	3.5
21	13	90	13	45	279	858	72	757	82	59	26	3.3
22	17	45	34	680	214	310	63	1460	52	38	13	3.2
23	17	32	800	5980	184	223	62	262	55	285	10	3.0
24	16	31	362	626	184	186	60	150	35	65	9.0	3.8
25	17	43	177	250	156	162	56	112	29	36	13	5.1
26	22	35	127	150	118	211	56	140	29	26	17	6.3
27	40	38	267	120	107	174	55	386	26	25	81	8.5
28	47	54	295	100	99	140	51	223	259	149	20	7.9
29	31	32	189	90	----	123	47	152	545	41	12	6.4
30	17	31	117	1540	----	112	45	789	140	24	15	5.5
31	14	------	115	6140	----	808	----	266	----	18	28	-----
TOTAL	526.4	1033.5	3218	20584	9543	11933	4390	7161	4406	1873	489.8	228.9
MEAN	17.0	34.5	104	664	341	385	146	231	147	60.4	15.8	7.63
MAX	56	353	800	6140	1730	1230	926	1460	1000	285	81	41
MIN	9.0	9.0	11	37	70	87	45	37	26	15	6.0	3.0
CFSM	.11	.22	.67	4.28	2.20	2.48	.94	1.49	.95	.39	.10	.05
IN.	.13	.25	.77	4.94	2.29	2.86	1.05	1.72	1.06	.45	.12	.05

CAL YR 1981 TOTAL 51452.7 MEAN 141 MAX 5470 MIN 5.1 CFSM .91 IN 12.35
WTR YR 1982 TOTAL 65386.6 MEAN 179 MAX 6140 MIN 3.0 CFSM 1.16 IN 15.69

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW¼NE¼ sec.7, T.6 N., R.6 E., Jackson County, Hydrologic Unit 05120206, on left bank 1,700 ft (518 m) downstream from highway bridge, 1 mile (2 km) north of Seymour, 9.5 miles (15.3 km) downstream from Sand Creek, and at mile 214.6 (345.3 km).

DRAINAGE AREA.--2,341 mi² (6,063 km²).

PERIOD OF RECORD.--October 1927 to current year. Yearly maximum discharge only for water years 1924-27 published in WSP 1305. Daily gage heights from May 1923 to September 1927 are available in the district office.

REVISED RECORDS.--WSP 743: 1928-29, 1931-32, WSP 783: 1934. WSP 873: 1938. WSP 1335: 1928(M), 1929-30, 1932-33(M), 1937(M), 1942. WSP 1435: 1949. WSP 1705: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 550.67 ft (167.844 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1927 to July 2, 1931, nonrecording gage 1,700 ft (518 m) upstream at datum 7.61 ft (2.320 m) higher. July 3, 1931 to July 16, 1934, nonrecording gage at site 100 ft (30 m) downstream at present datum.

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

AVERAGE DISCHARGE.--55 years, 2,449 ft³/s (69.36 m³/s), 14.21 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,500 ft³/s (2,220 m³/s) Jan. 5, 1949, gage height, 19.67 ft (5.995 m); minimum daily, 86 ft³/s (2.44 m³/s) Sept. 28, 30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 21.0 ft (6.40 m), from information by Corps of Engineers and Indiana State Highway Commission, discharge, 120,000 ft³/s (3,400 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 12,000 ft³/s (340 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 24	0100	30600	867	17.11	5.215	Feb. 19	1500	27000	765	16.66	5.078
Feb. 1	0800	*47000	1330	*18.38	5.602	Mar. 21	1600	15800	447	14.87	4.532

Minimum daily discharge, 286 ft³/s (8.10 m³/s) Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	386	538	566	1890	45000	3900	5220	1510	6350	1440	615	709
2	388	503	708	1980	33800	3610	4530	1470	6590	1310	580	624
3	387	477	667	2240	22500	3560	5760	1420	5050	1190	553	574
4	381	454	617	6110	12300	3690	7130	1380	3520	1180	535	501
5	371	440	569	9830	6500	4430	5320	1340	2660	1110	518	452
6	400	430	534	9490	5000	5040	4300	1310	2200	1030	508	418
7	450	419	510	7920	4000	4660	3950	1330	1910	960	505	396
8	444	413	496	5050	3500	3830	3660	2240	1910	931	501	380
9	392	420	477	3550	3000	3280	3460	2740	3590	950	488	367
10	376	416	466	2760	2650	2970	3330	2180	2200	1100	521	355
11	363	404	453	2350	2350	2890	3140	1850	2100	1080	559	344
12	357	400	441	2100	2200	5580	3030	1640	1860	1010	557	337
13	354	402	430	1900	2080	8750	2890	1510	1580	1030	510	333
14	351	396	427	1800	1980	10600	2690	1420	1410	935	486	330
15	347	388	428	1700	1900	11000	2480	1340	1310	866	464	327
16	344	382	422	1500	3540	10800	2330	1290	1390	834	446	321
17	344	382	439	1400	13800	11400	2590	1260	1770	788	429	313
18	355	379	434	1350	24000	12400	3020	1260	2490	757	413	313
19	348	401	384	1400	26100	12000	2910	1200	2330	843	400	302
20	362	686	361	1500	21600	13100	2620	1150	1860	1890	386	298
21	410	706	392	1600	13400	14600	2370	2210	1740	1210	403	297
22	408	600	431	1830	11400	12400	2160	4580	1670	1050	402	291
23	404	549	1030	13700	12200	9090	2000	3060	1530	1110	438	286
24	387	520	3220	21700	10500	6480	1900	2110	1390	886	447	292
25	378	497	3680	10900	9380	5020	1830	1690	1240	722	476	294
26	418	508	3290	7870	8550	4580	1780	1470	1150	652	452	296
27	426	530	2820	5640	6000	4530	1740	1960	1090	613	647	295
28	470	553	3220	3890	4500	4050	1680	2000	1280	900	768	299
29	507	566	2960	3320	------	3590	1600	2020	1940	904	594	302
30	539	545	2400	4470	------	3300	1540	4230	1460	828	527	301
31	572	-----	1970	26000	------	4530	-----	5270	-----	688	960	-----
TOTAL	12419	14304	35242	168740	313730	209660	92960	61440	68570	30797	16088	10947
MEAN	401	477	1137	5443	11200	6763	3099	1982	2286	993	519	365
MAX	572	706	3680	26000	45000	14600	7130	5270	6590	1890	960	709
MIN	344	379	361	1350	1900	2890	1540	1150	1090	613	386	286
CFSM	.17	.20	.49	2.33	4.78	2.89	1.32	.85	.98	.42	.22	.16
IN.	.20	.23	.56	2.68	4.99	3.33	1.48	.98	1.09	.49	.26	.17

CAL YR 1981 TOTAL 758380 MEAN 2078 MAX 29400 MIN 344 CFSM .89 IN 12.05
WTR YR 1982 TOTAL 1034897 MEAN 2835 MAX 45000 MIN 286 CFSM 1.21 IN 16.45

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: October 1954 to September 1979.
SEDIMENT DISCHARGE: July 1966 to September 1981 (discontinued).

REMARKS.--Some regulation of low flow and temperatures by Seymour Water Co. at dam 500 ft (152 m) upstream. Sediment samples collected at highway bridge, 1,700 ft (518 m) upstream.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 31.0°C July 13, 14, 1966; minimum, 0.0°C on many days during most winter periods. Maximum of 32.0°C was observed on July 19, 1954.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,560 mg/L Apr. 18, 1981; minimum daily, 2 mg/L Jan. 3 to Feb. 11, 1977.
SEDIMENT DISCHARGE: Maximum daily load, 179,000 tons (162,000 tonnes) May 25, 1968; minimum daily, 0.91 ton (0.83 tonnes) Jan. 19, 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
02...	1300	388	----	93	97	60
05...	1830	362	----	76	74	93
06...	0700	380	18.0	64	66	57
08...	0815	445	----	97	117	74

03366200 HARBERTS CREEK NEAR MADISON, IN

LOCATION.--Lat 38°46'55", long 85°29'08", in SW¼SE¼ sec.14, T.4 N., R.9 E., Jefferson County, Hydrologic Unit 05120207, attached to left downstream wingwall of bridge on County Road 533 West, 0.2 mile (0.3 km) west of Smyrna, 3.7 miles (6.0 km) upstream from Big Creek, and 4 miles (6 km) northwest of Madison.

DRAINAGE AREA.--9.31 mi² (24.11 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 725.75 ft (221.209 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those below 1.0 ft³/s (0.028 m³/s), which are poor.

AVERAGE DISCHARGE.--14 years, 12.9 ft³/s (0.365 m³/s), 18.82 in/yr (478 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,540 ft³/s (43.6 m³/s) Apr. 2, 1970, gage height, 7.89 ft (2.405 m); no flow at times many years.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0300	973	27.6	6.64	2.024	June 28	2200	*1100	31.2	*6.93	2.112
Jan. 31	0900	912	25.8	6.50	1.981	July 19	1800	626	17.7	5.77	1.759
May 27	0200	836	23.7	6.32	1.926						

Minimum daily discharge, no flow Oct. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.05	28	11	54	4.2	21	2.4	69	9.0	.66	10
2	.00	.03	4.1	6.0	22	4.0	12	2.2	14	5.6	.52	8.3
3	.00	.02	2.1	28	48	4.8	218	1.9	7.7	7.0	.45	3.3
4	.00	.02	1.6	112	31	25	26	1.8	5.9	4.4	.40	1.6
5	.00	.03	1.4	17	18	15	15	1.6	5.6	2.4	.40	1.2
6	3.0	.07	1.1	10	12	11	22	1.5	3.8	1.8	.35	.94
7	1.0	.03	.99	7.4	10	9.0	11	2.6	3.0	1.3	.66	.84
8	.35	.02	.89	4.5	8.0	8.0	9.0	31	4.1	3.5	.45	.75
9	.16	2.4	.76	3.2	7.0	7.0	21	9.0	5.1	2.1	9.0	.66
10	.12	1.6	.68	2.4	6.0	6.0	14	4.7	4.7	2.2	1.1	.66
11	.09	.26	.62	2.0	5.2	80	9.3	3.3	2.4	3.5	1.2	.59
12	.07	.12	.59	1.7	4.8	48	7.4	2.4	3.3	1.5	.94	.52
13	.05	.08	.54	1.5	4.4	80	6.2	2.1	3.8	1.1	.40	.66
14	.04	.05	.58	1.4	4.0	24	5.1	1.8	1.9	.84	.30	.75
15	.03	.03	.56	1.3	12	170	4.4	1.6	1.8	.66	.22	.66
16	.03	.03	.48	1.2	112	48	4.1	1.5	42	.59	4.4	.59
17	.03	.03	.56	1.1	106	22	13	1.3	20	.52	1.5	.52
18	.06	.02	.54	1.0	31	13	8.7	2.1	6.2	.45	.45	1.5
19	.17	.03	.22	1.0	23	107	5.9	2.1	3.8	140	.30	1.2
20	.14	.14	.23	1.1	16	158	4.7	1.4	2.8	29	4.4	.75
21	.11	.16	.31	1.3	13	97	3.8	8.3	5.4	6.2	8.7	.75
22	.12	.12	7.6	260	9.7	22	3.0	9.3	2.4	11	.94	.59
23	.26	.08	47	416	8.3	13	2.6	24	1.9	8.0	.59	.59
24	.13	1.0	7.3	32	7.7	10	3.3	5.4	1.6	3.3	.59	1.6
25	.06	.40	4.5	13	6.2	8.3	2.8	3.0	1.4	1.9	.66	2.2
26	.13	.16	3.3	8.0	5.4	7.7	7.4	16	1.3	1.4	.45	1.3
27	.27	1.1	6.3	5.6	4.7	6.2	5.4	200	1.2	5.9	6.2	.94
28	.51	.40	7.2	4.5	4.4	5.4	3.5	21	185	3.5	1.5	.84
29	.19	.19	7.2	5.0	-----	4.4	2.8	155	382	1.3	.66	.66
30	.10	.14	4.2	254	-----	4.1	2.6	158	24	.94	6.7	.66
31	.08	----	4.6	568	-----	140	-----	19	-----	.75	7.0	-----
TOTAL	7.30	8.81	146.05	1782.2	593.8	1162.1	475.0	697.3	817.1	261.65	62.09	46.12
MEAN	.24	.29	4.71	57.5	21.2	37.5	15.8	22.5	27.2	8.44	2.00	1.54
MAX	3.0	2.4	47	568	112	170	218	200	382	140	9.0	10
MIN	.00	.02	.22	1.0	4.0	4.0	2.6	1.3	1.2	.45	.22	.52
CFSM	.03	.03	.51	6.18	2.28	4.03	1.70	2.42	2.92	.91	.22	.17
IN.	.03	.04	.58	7.12	2.37	4.64	1.90	2.79	3.26	1.05	.25	.18

CAL YR 1981 TOTAL 2260.11 MEAN 6.19 MAX 205 MIN .00 CFSM .67 IN 9.03
WTR YR 1982 TOTAL 6059.52 MEAN 16.6 MAX 568 MIN .00 CFSM 1.78 IN 24.21

03366500 MUSCATATUCK RIVER NEAR DEPUTY, IN

LOCATION.--Lat 38°48'15", long 85°40'26", in SW¼NE¼ sec.7, T.4 N., R.8 E., Jefferson County, Hydrologic Unit 05120207, on left bank at downstream side of highway bridge, 1.4 miles (2.3 km) northwest of Deputy, 1.9 miles (3.1 km) upstream from Coffee Creek, 2.4 miles (3.9 km) downstream from confluence of Graham Creek and Big Creek, and at mile 50.0 (80.4 km).

DRAINAGE AREA.--293 mi^2 (759 km^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 541.17 ft (164.949 m) National Geodetic Vertical Datum of 1929. Prior to June 22, 1955, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--34 years (water years 1949 to current year), 346 ft^3/s (9.799 m^3/s), 16.04 in/yr (407 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,200 ft^3/s (1,480 m^3/s) Jan. 21, 1959, from rating curve extended above 25,000 ft^3/s (708 m^3/s) on basis of contracted-opening measurement of peak flow, gage height, 33.1 ft (10.09 m), from floodmarks; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,500 ft^3/s (212 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	1500	15400	436	23.24	6.582
Jan. 31	1200	*20500	581	*25.25	7.151

Minimum daily discharge, 1.3 ft^3/s (0.037 m^3/s) Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	5.1	195	300	5770	129	875	88	1210	279	27	160
2	3.0	4.4	425	414	1020	119	469	78	753	160	22	241
3	2.7	4.1	221	640	850	123	4280	67	347	195	18	171
4	2.6	4.2	119	3140	1200	167	1630	58	213	239	15	80
5	2.5	4.3	81	1250	766	587	676	50	165	146	15	52
6	2.2	4.1	64	544	460	414	673	43	128	99	14	38
7	2.2	3.9	56	250	310	274	558	45	101	69	12	27
8	2.0	3.7	48	150	240	211	403	1470	213	77	12	23
9	1.9	4.6	43	100	190	171	466	904	1990	78	19	20
10	1.6	18	39	75	160	149	536	372	630	70	48	16
11	1.6	23	35	60	140	564	429	210	313	106	27	14
12	1.5	17	32	50	130	1990	339	138	167	141	21	11
13	1.5	13	30	45	120	1480	274	100	129	99	17	10
14	1.4	12	29	42	110	1200	218	76	100	66	14	10
15	1.5	9.9	28	38	204	2940	173	58	76	55	11	9.5
16	1.5	8.1	26	34	974	1670	156	46	280	48	10	8.5
17	1.3	6.4	23	31	3470	1070	296	36	627	28	21	7.6
18	3.9	5.4	24	29	1210	632	402	32	281	25	24	8.0
19	6.6	7.5	19	30	803	1040	287	42	146	340	13	8.5
20	6.2	29	16	33	655	2130	223	38	99	1620	9.0	8.5
21	5.6	89	17	37	565	1990	181	47	99	271	126	8.0
22	5.7	68	23	1520	462	902	150	2280	161	136	66	7.6
23	11	44	1000	13400	344	565	118	792	88	181	33	7.2
24	7.3	40	700	2500	290	426	97	347	60	144	17	8.0
25	3.2	37	350	450	242	337	88	172	46	99	15	9.0
26	4.4	36	220	300	191	290	118	119	36	65	14	9.0
27	12	47	350	230	160	245	211	1070	27	48	19	9.5
28	20	47	540	190	141	196	184	782	119	70	43	9.5
29	12	49	411	160	---	164	125	725	3100	50	57	9.5
30	8.3	43	288	1640	---	147	101	1660	681	36	91	9.0
31	5.4	---	198	17000	---	1090	---	592	---	35	299	---
TOTAL	145.8	687.7	5650	44682	21177	23412	14736	12537	12385	5075	1149.0	1009.9
MEAN	4.70	22.9	182	1441	756	755	491	404	413	164	37.1	33.7
MAX	20	89	1000	17000	5770	2940	4280	2280	3100	1620	299	241
MIN	1.3	3.7	16	29	110	119	88	32	27	25	9.0	7.2
CFSM	.02	.08	.62	4.92	2.58	2.58	1.68	1.38	1.41	.56	.13	.12
IN.	.02	.09	.72	5.67	2.69	2.97	1.87	1.59	1.57	.64	.15	.13

CAL YR 1981 TOTAL 84390.7 MEAN 231 MAX 3600 MIN 1.3 CFSM .79 IN 10.71
WTR YR 1982 TOTAL 142646.4 MEAN 391 MAX 17000 MIN 1.3 CFSM 1.33 IN 18.11

03368000 BRUSH CREEK NEAR NEBRASKA, IN

LOCATION.--Lat 39°04'13", long 85°29'10" in NW¼NE¼ sec.11, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on right bank at downstream side of county road bridge, 1.5 miles (2.4 km) northwest of Nebraska, 2.9 miles (4.7 km) northeast of Butlerville, and 3.6 miles (5.8 km) upstream from Brush Creek Dam.

DRAINAGE AREA.--11.4 mi^2 (29.5 km^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 (218.593 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--27 years, 13.1 ft^3/s (0.371 m^3/s), 15.61 in/yr (396 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,360 ft^3/s (265 m^3/s) June 10, 1981, gage height, 12.99 ft (3.959 m), from rating curve extended above 550 ft^3/s (15.6 m^3/s) on basis of slope-area measurement of peak flow and a contracted-opening measurement at gage height, 10.20 ft (3.109 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft^3/s (26.9 $^3/s$) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 22	2400	*1420	40.2	*8.61	2.624
Jan. 31	unknown	1250	35.4	unknown	

Minimum daily discharge, no flow Oct. 2, 19-24, Sept. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.37	12	20	100	4.7	17	2.1	99	2.1	.37	4.0
2	.00	.31	3.9	11	17	4.7	11	2.1	12	1.5	.27	2.9
3	.01	.21	2.4	87	33	6.2	136	1.9	7.2	21	.23	1.1
4	.01	.17	2.1	203	24	50	17	1.8	5.3	3.2	.19	.59
5	.01	.15	1.7	17	17	20	12	1.7	4.6	1.9	.18	.42
6	.15	.15	1.5	10	13	10	13	1.6	3.3	1.3	.21	.29
7	.04	.14	1.4	9.2	9.5	8.5	8.8	22	3.1	1.1	.65	.29
8	.04	.12	1.3	5.4	7.0	6.8	7.8	147	29	1.0	.25	.22
9	.04	.35	1.2	4.5	5.2	6.5	11	16	10	1.0	.26	.17
10	.04	.99	1.1	3.2	3.8	5.9	10	8.9	4.6	1.4	.22	.14
11	.04	.70	1.0	2.4	3.5	105	8.5	6.3	2.9	1.3	.87	.08
12	.04	.56	.92	2.1	3.2	34	6.5	4.8	2.6	.87	.71	.06
13	.05	.42	.84	1.9	3.0	94	5.4	3.7	2.4	.70	.36	.05
14	.05	.37	.84	1.7	3.0	20	4.5	3.0	1.9	.61	.20	.05
15	.07	.35	.84	1.5	32	101	4.3	2.6	2.3	.56	.14	.05
16	.04	.25	.76	1.4	167	55	4.5	42	10	.54	.12	.03
17	.02	.23	.76	1.3	84	19	25	18	5.4	.49	.11	.01
18	.02	.15	.53	1.2	26	12	9.6	5.7	2.7	.46	.08	.04
19	.00	3.2	.37	1.4	24	79	6.8	4.2	2.3	.75	.06	.12
20	.00	7.1	.29	1.6	20	60	5.4	2.8	2.1	1.2	.09	.03
21	.00	2.0	.35	1.8	18	69	4.5	145	7.2	.96	1.4	.01
22	.00	1.2	1.8	430	11	16	3.9	30	4.2	.71	.45	.00
23	.00	1.0	141	388	10	11	3.7	9.2	3.7	.69	.19	.00
24	.00	1.6	27	16	9.6	7.8	3.3	5.8	2.0	.59	.15	.09
25	.01	1.5	14	8.0	6.8	6.5	3.0	4.3	1.5	.48	1.4	.21
26	.83	1.2	9.2	6.8	5.7	6.5	3.3	33	1.2	.43	.62	.10
27	2.0	1.7	32	5.8	5.4	5.4	3.0	65	1.1	31	19	.09
28	1.3	1.4	18	4.9	4.9	4.7	2.5	12	30	4.7	1.9	.08
29	.92	1.1	15	4.3	-----	4.3	2.2	32	7.4	1.2	.72	.05
30	.60	1.0	8.5	50	-----	4.1	2.2	22	3.0	.70	7.2	.03
31	.46	-----	10	520	-----	144	-----	49	-----	.52	5.2	-----
TOTAL	6.80	29.99	312.60	1822.4	666.6	981.6	355.7	705.5	274.0	84.96	43.80	11.30
MEAN	.22	1.00	10.1	58.8	23.8	31.7	11.9	22.8	9.13	2.74	1.41	.38
MAX	2.0	7.1	141	520	167	144	136	147	99	31	19	4.0
MIN	.00	.12	.29	1.2	3.0	4.1	2.2	1.6	1.1	.43	.06	.00
CFSM	.02	.09	.89	5.16	2.09	2.78	1.04	2.00	.80	.24	.12	.03
IN.	.02	.10	1.02	5.95	2.18	3.20	1.16	2.30	.89	.28	.14	.04

CAL YR 1981 TOTAL 4587.15 MEAN 12.6 MAX 1030 MIN .00 CFSM 1.11 IN 14.97
WTR YR 1982 TOTAL 5295.25 MEAN 14.5 MAX 520 MIN .00 CFSM 1.27 IN 17.28

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 (0.5 km) downstream from Muscatatuck State School dam, 1.1 miles (1.8 km) downstream from Brush Creek, 2 miles (3 km) northwest of Butlerville, and at mile 50.6 (81.4 km).

DRAINAGE AREA.--85.9 mi² (222.5 km²).

PERIOD OF RECORD.--February 1942 to current year. Prior to October 1960, published as North Fork of Vernon Fork near Butlerville, 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 (204.033 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water supply for the Muscatatuck State School is diverted and the sewage effluent returned above station. Flow regulated by Brush Creek Reservoir.

AVERAGE DISCHARGE.--40 years, 94.3 ft³/s (2.671 m³/s), 14.91 in/yr (379 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s (742 m³/s) Jan. 21, 1959, gage height, 25.41 ft (7.745 m) from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area measurement at gage height 25.41 ft (7.745 m); no flow at times during 1944, 1945, 1949, and 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0600	*7630	216	*15.35	4.679
Jan. 31	1300	6730	191	14.31	4.362

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Oct. 3-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	3.6	88	103	494	42	191	21	702	27	5.3	20
2	35	2.9	50	68	176	41	144	20	141	19	4.2	22
3	1.2	2.6	28	240	285	51	858	17	74	39	3.4	13
4	1.2	2.2	22	1640	215	188	219	16	51	37	3.0	7.8
5	36	2.4	18	217	136	206	125	15	44	20	2.6	5.2
6	51	2.4	15	122	90	103	105	14	35	14	3.0	3.8
7	19	2.1	14	70	62	79	79	37	30	10	13	2.7
8	6.7	2.1	13	40	52	60	72	741	58	10	8.9	2.3
9	3.9	3.7	11	27	43	58	84	193	99	16	13	1.8
10	3.1	3.6	10	20	36	52	84	91	43	14	14	1.6
11	2.9	4.1	9.3	16	31	413	77	50	30	14	8.7	1.6
12	2.6	4.3	8.3	14	27	304	66	41	23	12	13	1.6
13	2.8	3.4	8.0	12	23	546	58	35	20	7.7	6.0	2.4
14	3.6	2.8	8.0	11	26	215	49	29	16	5.8	3.4	2.2
15	5.2	2.9	8.0	10	59	556	44	25	14	4.8	2.3	1.8
16	5.4	2.1	7.6	9.0	796	501	43	21	49	4.1	1.8	1.5
17	5.4	2.0	8.5	8.4	838	248	101	94	74	3.7	1.5	1.7
18	7.3	1.7	6.2	8.0	224	137	80	38	30	3.4	1.3	2.4
19	6.7	47	4.6	8.5	183	546	58	29	21	9.7	1.3	2.2
20	6.0	188	3.5	9.8	154	416	49	22	18	32	2.3	2.1
21	5.8	35	3.9	14	163	778	42	1040	32	9.9	3.9	2.0
22	6.2	18	7.8	430	118	190	36	539	22	130	6.4	1.7
23	7.6	14	402	3690	100	130	32	131	24	146	3.8	1.4
24	6.4	15	173	258	99	97	30	74	14	23	2.8	2.0
25	7.3	18	79	124	85	80	29	51	11	12	3.2	2.1
26	6.9	14	57	71	50	91	29	62	9.1	8.0	2.6	1.7
27	11	14	173	62	48	69	28	245	8.1	22	24	1.7
28	18	17	145	51	45	54	25	130	335	82	10	1.7
29	8.0	13	97	45	----	49	22	178	143	20	5.0	1.8
30	5.6	11	51	1270	----	47	21	236	47	11	8.3	2.0
31	4.3	-----	50	4590	----	793	----	90	------	7.0	16	-----
TOTAL	317.1	454.9	1579.7	13258.7	4658	7140	2880	4325	2217.2	773.1	198.0	117.8
MEAN	10.2	15.2	51.0	428	166	230	96.0	140	73.9	24.9	6.39	3.93
MAX	51	188	402	4590	838	793	858	1040	702	146	24	22
MIN	1.2	1.7	3.5	8.0	23	41	21	14	8.1	3.4	1.3	1.4
CFSM	.12	.18	.59	4.98	1.93	2.68	1.12	1.63	.86	.29	.07	.05
IN.	.14	.20	.68	5.74	2.02	3.09	1.25	1.87	.96	.33	.09	.05

CAL YR 1981 TOTAL 27908.65 MEAN 76.5 MAX 4870 MIN .77 CFSM .89 IN 12.09
WTR YR 1982 TOTAL 37919.50 MEAN 104 MAX 4590 MIN 1.2 CFSM 1.21 IN 16.42

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 (2 km) southwest of Vernon, 3.1 miles (5.0 km) downstream from Otter Creek, and at mile 36.4 (58.6 km).

DRAINAGE AREA.--198 mi^2 (513 km^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 587.30 ft (179.009 m) National Geodetic Vertical Datum of 1929, (levels by State of Indiana, Department of Natural Resources). Prior to Jan. 14, 1940, and June 23 to Nov. 13, 1967, nonrecording gage, and Jan. 14, 1940, to June 22, 1967, water-stage recorder at site on right bank at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Diversion above station for municipal water supply of North Vernon and Vernon. Part of this diversion returned above gage as sewage effluent by North Vernon Sewage Treatment Plant. Some regulation at times at low flow by Old Timbers Lake on Jefferson Proving Grounds.

AVERAGE DISCHARGE.--43 years, 221 ft^3/s (6.259 m^3/s), 15.16 in/yr (385 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,800 ft^3/s (1,610 m^3/s) Jan. 21, 1959, from rating curve extended above 24,000 ft^3/s (680 m^3/s) on basis of slope-area measurement of peak flow, gage height, 32.83 ft (10.007 m), from high-water mark. No flow at times in 1940, 1943-44.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft^3/s (170 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	0800	13500	382	17.94	5.458
Jan. 31	1300	*13900	394	*18.17	5.538

Minimum daily discharge, 1.5 ft^3/s (0.042 m^3/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	10	148	204	1380	85	440	50	1540	52	14	46
2	18	8.2	159	180	478	82	270	48	362	35	10	59
3	19	6.3	73	414	553	86	1770	44	194	96	9.0	38
4	3.4	5.5	50	2850	649	218	546	39	126	91	7.3	25
5	1.5	4.6	41	549	343	527	320	37	102	47	6.3	17
6	25	3.8	35	279	240	225	291	35	81	31	5.3	12
7	36	2.7	31	150	156	172	212	62	65	24	4.9	9.0
8	16	2.3	28	90	130	134	180	1830	315	20	15	7.8
9	6.8	5.5	26	60	110	118	212	502	386	20	17	5.8
10	3.4	13	23	43	98	108	221	277	147	31	18	4.5
11	1.9	13	21	37	99	709	190	156	88	46	23	4.2
12	1.8	10	20	32	90	860	167	116	64	27	17	3.3
13	1.7	8.7	18	28	77	1120	141	92	55	22	18	3.1
14	3.8	8.7	18	26	72	527	118	76	44	16	14	4.3
15	5.9	7.7	17	23	96	1280	104	63	37	13	8.9	4.3
16	7.3	8.2	17	21	1070	924	99	54	77	11	6.6	3.0
17	9.2	7.7	18	19	2010	599	208	168	196	9.3	5.7	2.6
18	12	6.3	14	18	549	336	216	105	88	9.5	4.1	3.4
19	13	24	11	20	417	772	145	80	54	206	3.0	5.3
20	12	301	9.0	22	338	973	121	62	43	175	3.7	2.8
21	13	105	10	25	341	1420	104	670	83	43	14	3.8
22	14	47	15	798	251	457	86	1480	67	39	12	4.2
23	14	33	700	7820	200	298	76	305	44	276	6.3	4.4
24	13	33	454	724	188	229	68	168	41	57	7.1	6.1
25	16	33	198	315	168	185	65	115	30	28	6.4	8.6
26	21	33	128	202	115	182	69	88	24	21	5.7	5.6
27	23	37	231	140	98	159	76	414	22	19	51	4.7
28	19	33	354	128	91	124	64	240	151	140	77	5.0
29	26	31	221	99	-----	112	56	180	399	61	26	4.2
30	17	27	128	1920	-----	102	53	515	98	29	20	4.1
31	13	-----	112	9900	-----	1250	----	231	----	19	71	-----
TOTAL	392.2	869.2	3328.0	27136	10407	14373	6688	8302	5023	1713.8	507.3	311.1
MEAN	12.7	29.0	107	875	372	464	223	268	167	55.3	16.4	10.4
MAX	36	301	700	9900	2010	1420	1770	1830	1540	276	77	59
MIN	1.5	2.3	9.0	18	72	82	53	35	22	9.3	3.0	2.6
CFSM	.06	.15	.54	4.42	1.88	2.34	1.13	1.35	.84	.28	.08	.05
IN.	.07	.16	.63	5.10	1.96	2.70	1.26	1.56	.94	.32	.10	.06

CAL YR 1981 TOTAL 62955.4 MEAN 172 MAX 9010 MIN 1.5 CFSM .87 IN 11.83
WTR YR 1982 TOTAL 79050.6 MEAN 217 MAX 9900 MIN 1.5 CFSM 1.10 IN 14.85

03371500 EAST FORK WHITE RIVER NEAR BEDFORD, IN

LOCATION.--Lat 38°46'10", long 86°24'30", in SW¼NE¼ sec.21, T.4 N., R.1 E., Lawrence County, Hydrologic Unit 05120208, on downstream side of center pier of bridge on county road, 0.4 mile (0.6 km) upstream from Mill Creek, 2.9 miles (4.7 km) downstream from Sugar Creek, 3.9 miles (6.3 km) northeast of Mitchell, 7.8 miles (12.6 km) southeast of Bedford, and at mile 153.3 (246.7 km).

DRAINAGE AREA.--3,861 mi² (10,000 km²).

PERIOD OF RECORD.--May 1939 to current year (high-water records only October 1943 to September 1957).

REVISED RECORDS.--WSP 2109: Drainage area. WRD Ind. 1973: 1972.

GAGE.--Water-stage recorder. Datum of gage is 473.59 ft (144.350 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage, and Feb. 6, 1940, to Sept. 24, 1957, water-stage recorder, at site 9.8 miles (15.8 km) downstream at datum 4.39 ft (1.338 m) lower.

REMARKS.--Records good except those for no gage-height record, which are fair.

AVERAGE DISCHARGE.--29 years (1939-43, 1957 to current year), 3,888 ft³/s (110.1 m³/s), 13.67 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,700 ft³/s (2,140 m³/s) Mar. 12, 1964; maximum gage height, 35.97 ft (10.964 m) May 11, 1961; minimum daily discharge, 138 ft³/s (3.91 m³/s) Sept. 7, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 47.5 ft (14.48 m), from floodmark determined by Corps of Engineers, discharge, 155,000 ft³/s (4,390 m³/s) at former site.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 13,000 ft³/s (368 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 28	1000[a]	19400	549	22.2[a]	6.77	Feb. 21	----	24500	694	unknown	
Feb. 3	0600[a]	*42400	1200	*29.9[a]	9.11	Mar. 21	0300	18700	530	21.72	6.620

Minimum daily discharge, 462 ft³/s (13.1 m³/s) Sep. 23-25, 30.

[a]Estimated from graph constructed from fragmentary gage-height record.

NOTE.--No gage-height, or a fragmentary gage-height record, for Jan. 10 to Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	554	681	1280	3390	21200	6200	6120	2510	8000	5000	1230	4330
2	540	705	1440	3070	31000	5400	7670	2400	9400	4460	1050	4490
3	539	698	1420	3390	42000	5000	9420	2310	9600	3650	927	3350
4	535	672	1580	5550	36000	4800	9930	2220	8140	2900	846	2600
5	532	648	1360	7210	29900	5370	10100	2130	6430	2490	815	1990
6	543	614	1110	8460	23000	6060	10700	2050	4680	2310	883	1510
7	537	596	966	9840	19000	6700	10200	2010	3880	2040	896	1160
8	551	582	871	10800	15000	6540	9350	2180	3410	2040	815	953
9	574	588	809	10400	11000	5840	8350	3350	3320	2110	766	827
10	587	618	766	8000	8400	5120	7020	5270	4760	2020	713	748
11	575	637	730	5600	6000	4860	6170	5470	5340	1950	707	683
12	550	622	701	4300	5000	5930	5690	4450	4440	2010	730	637
13	533	603	677	3500	4500	7470	5250	3320	3660	1960	760	602
14	521	591	660	3100	4000	9420	4860	2740	2990	1840	742	580
15	515	586	642	2900	4000	12400	4470	2420	2560	1720	695	560
16	510	581	625	2500	7000	14900	4140	2210	2470	1570	660	540
17	505	574	631	2200	11000	15500	4140	2050	2620	1370	642	525
18	511	564	600	2100	12000	15400	4470	1940	2830	1230	620	525
19	500	660	540	2200	15000	16200	4900	1910	3350	1150	591	510
20	498	939	500	2300	19000	18200	4900	1890	3590	1150	591	495
21	496	970	520	2300	24000	18600	4470	1820	3360	2650	791	485
22	502	1080	550	4000	21000	18200	4030	1990	2900	3590	689	471
23	530	1110	2260	12000	17000	17900	3660	3910	2640	2880	672	462
24	543	1070	2610	24000	14000	16800	3370	5730	2500	2950	677	462
25	542	1020	3910	17000	12000	14200	3150	4860	2320	2630	666	462
26	551	926	4840	15000	9600	11200	2980	3540	2120	1990	637	475
27	584	943	4740	18000	8500	8800	2880	2760	1930	1550	648	490
28	603	952	4360	19000	7000	6920	2820	2710	1810	1260	648	485
29	599	946	4300	17000	------	6050	2770	3520	2210	1130	778	471
30	619	958	4370	14600	------	5430	2660	3940	4500	1230	1280	462
31	652	-----	3960	18100	------	5420	------	5030	------	1310	3120	-----
TOTAL	16931	22734	54328	261810	437100	306830	170640	94640	121760	68140	26285	32340
MEAN	546	758	1753	8445	15610	9898	5688	3053	4059	2198	848	1078
MAX	652	1110	4840	24000	42000	18600	10700	5730	9600	5000	3120	4490
MIN	496	564	500	2100	4000	4800	2660	1820	1810	1130	591	462
CFSM	.14	.20	.45	2.19	4.04	2.56	1.47	.79	1.05	.57	.22	.28
IN.	.16	.22	.52	2.52	4.21	2.96	1.64	.91	1.17	.66	.25	.31

CAL YR 1981 TOTAL 1057735 MEAN 2898 MAX 21700 MIN 370 CFSM .75 IN 10.19
WTR YR 1982 TOTAL 1613538 MEAN 4421 MAX 42000 MIN 462 CFSM 1.15 IN 15.55

03371520 BACK CREEK AT LEESVILLE, IN

LOCATION.--Lat 38°50'48", long 86°18'06", in SW¼SE¼ sec.21, T.5 N., R.2 E., Lawrence County, Hydrologic Unit 05120208, on left bank at downstream side of county road bridge, 0.9 mile (1.4 km) west of Leesville, 2.5 miles (4.0 km) upstream from Jones Defeat Hollow, and 7 miles (11 km) above mouth.

DRAINAGE AREA.--24.1 mi^2 (62.4 km^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 (175.260 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--12 years, 34.4 ft^3/s (0.974 m^3/s), 19.38 in/yr (492 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft^3/s (433 m^3/s) July 21, 1973, gage height, 14.0 ft (4.27 m), from floodmarks, from rating extended above 550 ft^3/s (15.6 m^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 and 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached a stage of 18.1 ft (5.52 m) from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	0100	1060	30.0	5.23	1.594	Feb. 16	0400	2420	68.5	6.96	2.121
Jan. 22	2330	2300	65.1	ice jam		May 31	2145	1250	35.4	5.52	1.682
Jan. 31	0100	3630	103	8.08	2.463	Aug. 30	1700	*4370	124	*8.67	2.643

Minimum daily discharge, 0.10 ft^3/s (0.003 m^3/s) Aug, 4, 5, 22-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	1.2	33	38	193	16	63	6.8	112	6.3	.30	36
2	.68	1.2	19	36	147	14	52	5.9	33	4.7	.22	28
3	.68	1.1	14	102	169	18	198	4.7	17	42	.16	12
4	.68	.93	12	299	60	44	95	3.9	11	11	.10	6.9
5	.68	.93	10	85	43	45	72	3.3	8.9	6.3	.10	4.5
6	.93	.93	8.9	59	32	35	59	2.6	6.3	4.7	.80	3.0
7	1.1	.80	8.3	45	26	30	44	10	5.4	3.6	1.1	2.2
8	.93	.80	7.3	33	23	25	41	18	7.8	3.3	.58	1.6
9	.80	1.6	6.3	24	21	22	49	9.4	11	3.3	.30	1.2
10	.80	2.9	5.9	17	20	21	44	6.8	10	2.9	.22	.88
11	.80	2.9	5.4	14	19	38	40	5.4	6.3	5.9	.93	.71
12	.68	2.1	5.4	11	18	45	35	4.7	5.0	3.3	1.6	.63
13	.68	1.9	5.0	10	17	117	30	3.9	4.3	2.4	.80	.52
14	.68	1.6	5.0	8.4	17	85	24	3.6	3.6	1.9	.58	.54
15	.68	1.4	5.0	7.6	20	253	21	2.9	3.9	1.6	.40	.48
16	.80	1.4	4.4	7.0	935	167	24	2.6	8.9	1.2	.30	.36
17	.93	1.2	4.4	6.4	231	106	72	2.1	8.3	1.1	.22	.27
18	1.2	1.2	4.3	6.7	133	76	53	2.1	5.0	.93	.22	.34
19	1.1	3.6	4.0	6.9	101	231	45	2.1	3.9	3.9	.16	.26
20	.93	11	3.5	7.0	71	231	36	1.9	3.6	11	.16	.22
21	.80	5.9	4.0	8.0	50	137	29	2.6	2.9	3.3	.16	.22
22	.93	4.7	40	400	40	87	24	5.0	2.4	2.1	.10	.22
23	1.1	4.3	226	665	39	65	20	2.4	1.9	1.6	.10	.20
24	1.2	6.8	72	108	34	49	16	1.9	1.6	1.4	.10	.27
25	1.1	7.3	46	59	26	44	16	1.4	1.4	1.1	.16	.45
26	1.6	7.3	36	42	22	38	14	1.2	1.2	.93	.22	.42
27	3.3	10	101	34	21	30	12	1.9	68	.80	.40	.50
28	2.9	8.9	68	24	17	24	9.4	1.4	85	.68	.48	.55
29	2.1	7.8	50	23	----	22	8.3	3.9	11	.58	.48	.42
30	1.6	8.9	39	622	----	20	7.8	8.3	10	.48	544	.32
31	1.4	------	35	1760	----	119	------	127	-----	.40	47	------
TOTAL	34.59	112.59	888.1	4568.0	2545	2254	1253.5	259.7	460.6	134.70	602.45	104.18
MEAN	1.12	3.75	28.6	147	90.9	72.7	41.8	8.38	15.4	4.35	19.4	3.47
MAX	3.3	11	226	1760	935	253	198	127	112	42	544	36
MIN	.68	.80	3.5	6.4	17	14	7.8	1.2	1.2	.40	.10	.20
CFSM	.05	.16	1.19	6.10	3.77	3.02	1.73	.35	.64	.18	.81	.14
IN.	.05	.17	1.37	7.05	3.93	3.48	1.93	.40	.71	.21	.93	.16

CAL YR 1981 TOTAL 8257.62 MEAN 22.6 MAX 457 MIN .40 CFSM .94 IN 12.75
WTR YR 1982 TOTAL 13217.41 MEAN 36.2 MAX 1760 MIN .10 CFSM 1.50 IN 20.40

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN

LOCATION.--Lat 39°10'11", long 86°25'07", in NE¼NW¼ sec.4, T.8 N., R.1 E., Monroe County, Hydrologic Unit 05120208, on downstream side of right pier of bridge on State Highway 46, 0.2 mile (0.3 km) downstream from Kerr Creek, 4.0 miles (6.4 km) west of Belmont, and 6.1 miles (9.8 km) east of Bloomington.

DRAINAGE AREA.--10.9 mi² (28.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 550.00 ft (167.640 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--12 years, 13.9 ft³/s (0.394 m³/s), 17.32 in/yr (440 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft³/s (153 m³/s) July 13, 1979, gage height, 13.18 ft (4.017 m) from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of contracted-opening measurements at gage heights of 11.52 ft (3.511 m) and 13.18 ft (4.017 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 350 ft³/s (9.91 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 22	2030	610	17.3	8.80	2.682	Feb. 16	2130	493	14.0	8.30	2.530
Jan. 4	0030	511	14.5	8.38	2.554	Apr. 3	0315	495	14.0	8.31	2.533
Jan. 31	0815	*871	24.7	*9.65	2.941	July 22	1945	554	15.7	8.57	2.612

Minimum daily discharge, 0.51 ft³/s (0.014 m³/s) Aug. 20-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	1.5	10	12	60	8.2	35	4.5	12	3.8	.92	34
2	.92	1.3	7.4	21	31	7.4	25	4.3	6.3	2.9	.78	14
3	1.0	1.2	6.0	84	24	8.6	136	3.8	4.0	33	.70	6.3
4	1.0	1.1	5.4	152	15	17	44	3.6	3.1	12	.70	3.3
5	.92	1.0	4.5	35	12	19	32	3.3	2.6	6.7	1.2	2.4
6	6.3	.92	3.8	21	11	17	29	3.1	2.1	4.5	2.1	1.8
7	1.3	.85	3.6	15	9.5	15	23	24	13	3.3	1.0	1.5
8	.92	.85	3.1	10	8.5	13	21	30	9.1	24	.85	1.2
9	.85	.92	2.9	8.4	7.8	11	20	16	6.0	12	2.0	1.0
10	.78	.92	2.8	7.3	7.4	11	19	11	4.0	17	1.1	.85
11	.78	.92	2.4	6.2	7.1	13	18	8.2	2.9	23	3.8	.85
12	.85	.85	2.3	5.0	6.8	13	17	6.0	2.6	11	2.0	.78
13	.85	.85	2.1	4.2	6.7	30	15	4.5	2.1	6.3	1.4	.78
14	1.0	.85	2.0	3.7	6.6	25	13	3.6	1.7	4.3	1.0	.78
15	.92	.78	2.0	3.3	9.0	37	11	2.9	1.6	3.1	.85	.78
16	1.2	.70	1.8	3.1	163	85	15	2.6	5.4	2.6	.70	.78
17	1.4	.70	1.8	3.0	127	47	53	2.3	4.3	2.0	.70	.70
18	1.8	.63	1.7	3.0	54	41	33	2.0	2.8	2.9	.57	.92
19	2.0	9.5	1.6	3.0	36	129	24	1.8	2.3	13	.57	.92
20	1.7	10	1.5	3.0	30	65	19	1.5	8.2	5.4	.51	.92
21	1.7	5.7	1.6	4.0	24	38	15	1.6	17	3.6	.51	.85
22	1.8	4.5	121	10	19	26	13	1.6	7.4	54	.51	.78
23	2.0	3.8	99	115	17	20	11	1.4	4.8	33	.51	.70
24	2.0	5.4	30	45	15	16	10	1.3	3.6	9.5	6.0	.85
25	2.0	4.8	19	17	12	19	9.1	1.2	2.9	4.5	2.6	1.5
26	2.6	4.8	11	12	11	21	7.8	1.1	2.4	2.8	1.1	1.0
27	3.6	6.3	28	10	10	18	6.7	2.1	2.0	2.1	1.0	.85
28	2.9	5.1	19	9.0	9.1	16	5.7	2.4	6.7	1.7	.85	.78
29	2.4	4.3	13	7.5	-----	14	4.8	15	6.7	1.3	.70	.78
30	2.0	4.0	10	229	-----	14	4.5	11	5.4	1.1	14	.70
31	1.7	-----	9.1	376	-----	80	-----	6.3	-----	1.0	5.7	-----
TOTAL	52.11	85.04	429.4	1237.7	749.5	894.2	689.6	184.0	155.0	307.4	56.93	83.35
MEAN	1.68	2.83	13.9	39.9	26.8	28.8	23.0	5.94	5.17	9.92	1.84	2.78
MAX	6.3	10	121	376	163	129	136	30	17	54	14	34
MIN	.78	.63	1.5	3.0	6.6	7.4	4.5	1.1	1.6	1.0	.51	.70
CFSM	.15	.26	1.28	3.66	2.46	2.64	2.11	.55	.47	.91	.17	.26
IN.	.18	.29	1.47	4.22	2.56	3.05	2.35	.63	.53	1.05	.19	.28

CAL YR 1981 TOTAL 4850.84 MEAN 13.3 MAX 491 MIN .26 CFSM 1.22 IN 16.55
WTR YR 1982 TOTAL 4924.23 MEAN 13.5 MAX 376 MIN .51 CFSM 1.24 IN 16.80

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC 08...	1425	3.1	5.5	0	.00

03372400 MONROE LAKE NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'24", long 86°30'56", in SW¼SW¼ sec.27, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, in discharge tower of reservoir on Salt Creek, 1.3 miles (2.1 km) upstream from Clear Creek, 2.2 miles (3.5 km) southeast of Harrodsburg, and 26.1 miles (42.0 km) upstream from mouth.

DRAINAGE AREA.--432 mi² (1,119 km²).

PERIOD OF RECORD.--April 1966 to current year. Prior to September 1970 published as Monroe "Reservoir".

GAGE.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by three gates, 3.75 ft (1.143 m) wide and 12.0 ft (3.66 m) high, in semi-elliptical concrete conduit through dam. Minimum design capacity is 22,300 acre-ft (27.5 hm³), elevation, 515 ft (157.0 m). Seasonal pool capacity is 182,000 acre-ft (224.4 hm³), elevation 538.0 ft (164.0 m). Capacity at uncontrolled spillway elevation, 556 ft (169.5 m) is 446,000 acre-ft (550 hm³). Reservoir is used for flood control, water supply of Bloomington, and recreation. Reservoir put in operation on Apr. 26, 1966.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 348,700 acre-ft (430 hm³) May 2, 1973, elevation, 550.60 (167.823 m); minimum, 149,500 acre-ft (184 hm³) Nov. 7, 1966, elevation, 534.77 ft (163.000 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 325,270 acre-ft (401 hm³) Mar. 25, elevation 549.09 ft (167.362 m); minimum, 172,310 acre-ft (212 hm³) Nov. 20, elevation 537.06 ft (163.696 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	537.75	179,580	
Oct. 31	537.32	175,030	-4,550
Nov. 30	537.27	174,500	-530
Dec. 31	538.69	189,760	+15,260
CAL YR 1981			+21,880
Jan. 31	545.03	267,200	+77,440
Feb. 28	548.67	318,940	+51,740
Mar. 31	548.19	311,800	-7,140
Apr. 30	544.94	265,990	-45,810
May 31	538.24	184,840	-81,150
June 30	538.37	186,250	+1,410
July 31	538.20	184,410	-1,840
Aug. 31	538.54	188,110	+3,700
Sept. 30	538.45	187,120	-990
WTR YR 1982			+7,540

03372500 SALT CREEK NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'16", long 86°30'31", in NE¼NW¼ sec.34, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, on right bank 0.35 mile (0.56 km) downstream from Monroe Lake, 0.9 mile (1.4 km) upstream from Clear Creek, 2.2 miles (3.5 km) southeast of Harrodsburg, and 25.7 miles (41.4 km) upstream from mouth.

DRAINAGE AREA.--432 mi² (1,119 km²).

PERIOD OF RECORD.-May 1955 to current year.

REVISED RECORDS.--WSP 1705: 1959. WSP 1725: 1956(M). WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 480.00 ft (146.304 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1960, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1960, nonrecording gage at site 0.7 mile (1.1 km) upstream at datum 2.41 ft (0.735 m) higher.

REMARKS.--Flow regulated by Monroe Lake (See sta 03372400). Daily discharge computed from relation between discharge, head, and gage openings for Monroe Lake beginning Oct. 1, 1974.

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

AVERAGE DISCHARGE.--27 years, 489 ft³/s (13.85 m³/s), 15.37 in/yr (390 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s (623 m³/s) June 25, 1960, gage height, 32.76 ft (9.985 m) site and datum then in use; maximum gage height at present site and datum, 35.35 ft (10.775 m) May 9, 1961; no flow Sept. 29 to Dec. 2, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,100 ft³/s (59.5 m³/s) Mar. 30; minimum daily, 28 ft³/s (0.79 m³/s) Oct. 3-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	36	41	502	54	1290	1780	1470	332	852	54	64
2	29	36	41	502	55	1520	1510	1470	93	492	54	64
3	28	36	41	503	55	1510	1060	1460	93	201	54	64
4	28	36	41	507	55	1510	1490	1460	93	201	54	64
5	28	35	41	511	55	1690	1770	1450	93	201	54	64
6	28	35	41	511	55	1860	1760	1630	238	201	148	64
7	28	35	40	512	55	1860	1760	1740	683	201	194	64
8	28	35	40	787	55	1850	1760	1740	1060	201	194	64
9	28	35	40	997	369	1850	1760	1730	772	201	194	64
10	28	35	40	995	834	1840	1840	1730	500	201	194	64
11	28	35	40	992	1290	1840	1930	1730	499	201	194	64
12	28	35	40	990	1520	1840	1930	1720	417	201	194	64
13	28	35	40	987	1510	1830	1920	1710	333	201	194	64
14	28	34	40	985	1510	1840	1920	1710	191	201	194	64
15	28	34	39	983	1510	1040	1600	1700	88	97	194	64
16	28	34	39	981	1390	209	1440	1690	162	54	194	64
17	28	33	39	978	559	53	1440	1690	201	54	129	64
18	28	32	39	976	206	167	1470	1680	201	54	64	64
19	28	32	39	973	206	226	1490	1670	201	54	63	64
20	28	32	39	969	207	203	1490	1670	201	54	63	64
21	28	49	39	727	207	192	1490	1660	200	54	63	64
22	28	44	39	239	207	192	1480	1650	200	54	63	64
23	28	42	41	135	207	192	1480	1650	134	54	63	64
24	28	41	41	139	207	379	1490	1640	54	54	63	64
25	35	41	41	80	207	848	1490	1450	54	54	63	64
26	46	41	41	51	207	1210	1490	1310	54	54	63	64
27	46	41	41	51	207	1590	1490	1180	54	54	63	64
28	45	41	41	51	606	1760	1480	866	54	54	63	64
29	43	41	330	51	-----	1960	1480	651	163	54	63	64
30	42	41	503	51	-----	2100	1470	651	570	54	63	64
31	40	----	502	52	-----	936	-----	650	----	54	64	----
TOTAL	977	1112	2459	17768	13605	37387	47960	46208	7988	4717	3371	1920
MEAN	31.5	37.1	79.3	573	486	1206	1599	1491	266	152	109	64.0
MAX	46	49	503	997	1520	2100	1930	1740	1060	852	194	64
MIN	28	32	39	51	54	53	1060	650	54	54	54	64
CFSM	.07	.09	.18	1.33	1.13	2.79	3.70	3.45	.62	.35	.25	.15
IN.	.08	.10	.21	1.53	1.17	3.22	4.13	3.98	.69	.41	.29	.17

CAL YR 1981 TOTAL 103257 MEAN 283 MAX 1990 MIN 28 CFSM .66 IN 8.89
WTR YR 1982 TOTAL 185472 MEAN 508 MAX 2100 MIN 28 CFSM 1.18 IN 15.97

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 (104 m) upstream from Baltimore and Ohio Railroad bridge, 0.9 mile (1.4 km) upstream from Beaver Creek, 6.6 mi (10.6 km) downstream from Indian Creek, and at mile 105.3 (169.4 km).

DRAINAGE AREA.--4,927 mi^2 (12,761 km^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 (134.798 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 26, 1932.

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

AVERAGE DISCHARGE.--68 years (1903-5, 1909-16, 1923 to current year), 5,429 ft^3/s (153.7 m^3/s), 14.96 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft^3/s (4,530 m^3/s) Mar. 28, 1913, gage height, 42.2 ft (12.86 m), from rating curve extended above 100,000 ft^3/s (2,830 m^3/s); minimum daily, 64 ft^3/s (1.81 m^3/s) Oct. 6, 1935, as a result of filling Williams Reservoir.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 20,000 ft^3/s (566 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 24	1300	25900	733	17.45	5.319	Feb. 22	1600	26300	745	17.68	5.389
Feb. 6	0400	*48900	1380	*26.86	8.187	Mar. 21	0600	24900	705	16.83	5.130

Minimum daily discharge, 525 ft^3/s (14.9 m^3/s) Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	734	1560	4850	34700	9850	10200	4240	8880	5370	1460	8250
2	579	763	2120	4260	35100	8510	10600	4090	10200	6100	1330	12800
3	569	780	2150	4720	35800	7590	13200	3990	9500	5120	1200	9230
4	562	780	2000	8160	42300	7160	15900	3880	9730	4300	1100	4350
5	560	753	1990	11600	47800	7540	14600	3800	8880	3370	1070	3170
6	581	717	1760	10900	48300	8400	14600	3700	6550	2910	1420	2420
7	572	689	1520	11500	43900	9300	14500	3820	4870	2540	1930	1930
8	587	667	1330	12600	35900	9670	13600	4280	4480	2330	1440	1590
9	585	684	1200	13300	25900	9140	12700	4900	4830	2440	1270	1370
10	595	725	1080	11900	16300	8230	11400	6520	4650	2410	1200	1220
11	615	767	1030	7450	11600	7540	10000	7900	6080	2510	1180	1080
12	612	779	968	5850	8440	8120	9430	7540	5890	2630	1190	1010
13	589	751	932	4670	6630	10100	8750	6130	4650	2420	1200	956
14	560	720	896	4200	5920	12900	8080	5060	3720	2160	1180	896
15	542	693	861	4050	5600	16300	7520	4450	3130	2020	1120	849
16	534	680	838	3480	6920	19300	6830	4150	2800	1820	1060	794
17	533	679	849	2960	13500	19700	6810	3950	2960	1590	1030	752
18	536	665	805	2800	15800	19300	7560	3800	3130	1460	981	742
19	528	686	721	3000	15700	20200	7590	3700	3420	1400	849	742
20	535	949	616	3080	19500	23700	7700	3680	3800	2150	763	711
21	532	1570	616	3110	23400	24700	7270	3660	3680	2410	794	680
22	525	1480	661	3720	25900	23700	6570	3700	3250	3440	908	661
23	535	1440	3060	18500	25700	22500	5990	4280	2940	3440	861	634
24	543	1490	6100	25300	22100	21600	5550	6980	2760	3020	815	643
25	568	1470	4480	21500	17900	19800	5210	7770	2510	3000	805	661
26	607	1450	5370	17300	15100	16800	4940	6220	2310	2540	838	661
27	649	1370	6220	18800	12800	13900	4720	4700	2150	2000	838	661
28	693	1380	6700	21300	11300	11400	4560	4030	2630	1650	815	661
29	730	1400	5800	21700	------	9710	4450	4150	3760	1440	805	643
30	714	1330	5660	20600	------	8880	4350	5170	3580	1360	993	625
31	705	-----	5530	27600	------	9450	------	5760	------	1420	8060	-----
TOTAL	18175	29041	75423	334760	629810	424990	265180	150000	141720	82770	40505	61392
MEAN	586	968	2433	10800	22490	13710	8839	4839	4724	2670	1307	2046
MAX	730	1570	6700	27600	48300	24700	15900	7900	10200	6100	8060	12800
MIN	525	665	616	2800	5600	7160	4350	3660	2150	1360	763	625
CFSM	.12	.20	.49	2.19	4.57	2.78	1.79	.98	.96	.54	.27	.42
IN.	.14	.22	.57	2.53	4.76	3.21	2.00	1.13	1.07	.62	.31	.46

CAL YR 1981 TOTAL 1489361 MEAN 4080 MAX 24100 MIN 470 CFSM .83 IN 11.25
WTR YR 1982 TOTAL 2253766 MEAN 6175 MAX 48300 MIN 525 CFSM 1.25 IN 17.02

03373700 LOST RIVER NEAR WEST BADEN SPRINGS, IN

LOCATION.--Lat 38°35'10", long 86°38'03", in SW¼SE¼ sec.21, T.2 N., R.2 W., Orange County, Hydrologic Unit 05120208, on left bank 20 ft (6 m) downstream from bridge on U.S. Highway 150, 1.7 miles (2.7 km) northwest of West Baden Springs, 3.8 miles (6.1 km) downstream from Lick Creek, and at mile 34.8 (56.0 km).

DRAINAGE AREA.--287 mi^2 (743 km^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 (139.574 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good.

AVERAGE DISCHARGE.--17 years, 365 ft^3/s (10.34 m^3/s), 17.27 in/yr (439 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,540 ft^3/s (214 m^3/s) July 27, 1979, gage height, 25.71 ft (7.826 m); minimum daily, 7.5 ft^3/s (0.21 m^3/s) Oct. 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 28.1 ft (8.56 m), from floodmarks, discharge, 14,500 ft^3/s (411 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s (56.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	1600	*6800	193	*25.30	7.711	Mar. 16	1300	2160	61.2	20.42	6.224
Jan. 31	2100	6650	188	25.21	7.684	Mar. 21	1100	2450	69.4	21.39	6.520

Minimum daily discharge, 24.0 ft^3/s (0.68 m^3/s) Oct. 4, 5, 14, 15, Aug. 19, 20, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	38	548	330	5730	317	482	171	1100	274	40	1060
2	25	35	564	305	3450	303	418	163	1000	183	38	1770
3	25	33	361	476	2300	309	1440	160	540	158	36	1470
4	24	32	256	1460	2000	404	1780	150	372	176	35	754
5	24	31	195	1560	1720	614	1350	145	298	130	34	350
6	38	31	158	1100	1360	553	925	140	239	116	82	240
7	46	31	140	692	1060	464	680	140	197	105	94	180
8	38	30	127	496	879	405	569	320	213	246	51	140
9	31	34	113	407	791	371	545	430	360	492	39	120
10	28	66	101	339	698	350	511	300	263	289	35	100
11	26	80	92	272	634	401	449	250	185	316	36	90
12	25	64	84	240	586	743	409	210	153	252	36	76
13	25	54	80	220	548	1070	376	190	138	147	35	72
14	24	48	77	199	517	1230	342	170	124	114	31	74
15	24	45	74	182	544	1790	314	160	114	95	28	72
16	26	44	71	165	1040	2130	313	150	256	81	26	70
17	28	42	69	143	1560	2040	850	135	378	73	25	62
18	39	41	68	132	1410	1540	920	130	287	68	25	54
19	44	73	61	130	1080	1700	646	125	192	67	24	52
20	41	407	58	125	813	2110	496	120	152	116	24	48
21	34	273	57	128	710	2370	402	120	130	275	33	44
22	31	150	107	670	628	2080	341	170	115	173	39	42
23	32	111	1350	5460	547	1680	300	180	104	106	31	40
24	30	146	1330	5290	498	1210	277	175	95	81	27	40
25	31	183	786	3040	445	826	256	150	88	69	25	41
26	39	157	502	2050	397	643	242	130	83	62	24	44
27	72	183	546	1520	361	541	225	130	79	57	29	58
28	93	194	648	1050	337	471	207	150	145	51	34	74
29	64	150	552	752	-----	424	191	160	579	48	32	46
30	47	130	435	1110	-----	389	181	1900	466	45	150	40
31	41	----	360	4760	-----	431	-----	1300	----	43	962	----
TOTAL	1120	2936	9970	34803	32643	29909	16437	8324	8445	4508	2160	7323
MEAN	36.1	97.9	322	1123	1166	965	548	269	282	145	69.7	244
MAX	93	407	1350	5460	5730	2370	1780	1900	1100	492	962	1770
MIN	24	30	57	125	337	303	181	120	79	43	24	40
CFSM	.13	.34	1.12	3.91	4.06	3.36	1.91	.94	.98	.51	.24	.85
IN.	.15	.38	1.29	4.51	4.23	3.88	2.13	1.08	1.09	.58	.28	.95

CAL YR 1981 TOTAL 67863.1 MEAN 186 MAX 1850 MIN 9.0 CFSM .65 IN 8.80
WTR YR 1982 TOTAL 158578.0 MEAN 434 MAX 5730 MIN 24 CFSM 1.51 IN 20.55

03373980 WHITE RIVER ABOVE PETERSBURG, IN

LOCATION.--Lat 38°31'42", long 87°15'14", in NE¼SW¼ sec.12, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 100 ft (30 m) upstream from intake structure of Indianapolis Power and Light Company's generating plant, 1.5 miles (2.4 km) downstream from East Fork White River, 2.2 miles (3.5 km) upstream from State Highway 61, 2.8 miles (4.5 km) northeast of Petersburg, and at mile 48.0 (77.2 km).

DRAINAGE AREA.--11,123 mi^2 (28,809 km^2).

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.52 ft (122.383 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Discharges below 1500 cfs only published. Flow conditions did not fall below 1500 ft^3/s (42.5 m^3/s) for the 1982 water year. For a complete record of White River in this vicinity use records of White River at Petersburg, Ind. (sta. no. 03374000), 2.3 miles (3.7 km) 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 (91 m) downstream from bridge on State Highway 61, 0.4 mile (0.6 km) upstream from Prides Creek, 1.4 miles (2.3 km) north of Petersburg, and at mile 45.7 (73.5 km).

DRAINAGE AREA.--11,125 mi² (28,814 km²).

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1305. Published as "at Hazleton" October 1927 to September 1938. Records published for both sites October 1937 to September 1938. Gage-height records collected at present site and datum since January 1935 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Apr. 1, 1941.

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

AVERAGE DISCHARGE.--55 years, 11,720 ft³/s (331.9 m³/s), 14.31 in/yr (363 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183,000 ft³/s (5,180 m³/s) Jan. 22, 1937, gage height, 28.3 ft (8.63 m) present datum, 31.58 ft (9.626 m) site and datum then in use; minimum daily, 573 ft³/s (16.2 m³/s) Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 29.5 ft (8.99 m), present site and datum, from floodmarks by Corps of Engineers. Discharge, 235,000 ft³/s (6,66 0 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85,600 ft³/s (2,420 m³/s) Feb. 5, gage height, 24.21 ft (7.379 m); minimum daily, 1,620 ft³/s (45.9 m³/s) Dec. 20, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	2730	3660	12300	60800	38300	22400	11500	22100	10000	4000	12100
2	2040	2880	3800	11000	70700	34400	22700	11200	24200	10400	3780	21300
3	2240	2800	4230	11400	81900	29100	23900	10900	25100	10600	3530	26200
4	2250	2680	4320	16200	81700	23600	27200	10600	23800	10800	3300	23600
5	2170	2580	3970	21700	83800	21500	30200	10300	21500	11600	3280	14200
6	2380	2510	3770	25000	76000	21500	31000	10100	18200	10400	3260	8980
7	2200	2380	3520	25900	65000	22600	30500	10000	14000	8410	3370	6660
8	2030	2280	3300	26800	58000	23400	29100	10300	12600	8000	4580	5410
9	2000	2270	3050	27800	49000	23800	27100	10600	15800	7610	5200	4610
10	2000	2340	2850	27900	39500	23400	24600	11300	16000	9650	4520	4050
11	1960	2320	2680	22200	32500	22000	22700	11700	13700	10500	4580	3660
12	1920	2240	2550	13100	25000	20500	21300	12400	11800	9540	4340	3360
13	1890	2220	2460	9830	19000	21300	20400	11800	11300	9220	4110	3150
14	1830	2170	2390	9190	15500	25100	19700	10300	10300	8270	3800	3230
15	1780	2090	2320	8600	13400	32100	19100	8620	9200	6810	3490	3090
16	1740	2040	2240	7900	17000	38400	18400	7800	8300	5920	3230	2860
17	1720	2020	2220	7300	26000	43100	19200	7230	7900	5470	3020	2620
18	1790	1980	2230	6460	32000	47000	20100	6770	10200	5090	2830	2600
19	1780	2010	1850	6300	36000	54100	21700	6770	11000	4990	2690	2550
20	1790	3120	1620	6100	39000	62300	22300	6680	10500	5690	2580	2400
21	1930	2950	1690	6000	41500	63300	22000	6440	10500	7590	2610	2310
22	2070	3340	1930	9340	44500	62400	20400	6620	10500	8300	2280	2220
23	2030	3160	5360	30400	51500	58600	18100	7900	10200	7800	2230	2140
24	1940	3070	11000	36800	58300	54900	16200	8300	9200	7300	2260	2100
25	1910	3070	15700	39400	56300	51800	14900	9500	8130	6660	2240	2140
26	1980	3040	14400	41800	51700	47200	14000	10300	7110	6000	2190	2130
27	2120	3150	14100	41400	46600	40300	13300	9800	6260	5370	2440	2120
28	2180	3170	15300	40100	42100	32700	12700	9400	6120	4770	2510	2080
29	2230	3100	16000	38000	-------	26800	12300	10300	9390	4200	2410	2060
30	2360	3060	14700	37300	-------	23100	11900	12900	11100	4060	2290	2000
31	2510	-----	13500	47800	-------	21800	------	15800	------	4320	3400	------
TOTAL	62790	78770	182710	671320	1314300	1110400	629400	304130	386010	235340	100350	177930
MEAN	2025	2626	5894	21660	46940	35820	20980	9811	12870	7592	3237	5931
MAX	2510	3340	16000	47800	83800	63300	31000	15800	25100	11600	5200	26200
MIN	1720	1980	1620	6000	13400	20500	11900	6440	6120	4060	2190	2000
CFSM	.18	.24	.53	1.95	4.22	3.22	1.89	.88	1.16	.68	.29	.53
IN.	.21	.26	.61	2.24	4.39	3.71	2.10	1.02	1.29	.79	.34	.59

CAL YR 1981 TOTAL 3515300 MEAN 9631 MAX 65000 MIN 1240 CFSM .87 IN 11.75
WTR YR 1982 TOTAL 5253450 MEAN 14390 MAX 83800 MIN 1620 CFSM 1.29 IN 17.57

03374100 WHITE RIVER AT HAZLETON, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°29'23", long 87°33'00", in SE¼NW¼ sec.29, T.1 N., R.10 W., Gibson County, Hydrologic Unit 05120202, on downstream side of county road bridge (Old U.S. 41) at Hazleton, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--11,305 mi² (29,280 km²).

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1981. Records published in water-data report IN-80-1 are unreliable and should not be used.
CHEMICAL ANALYSES: February 1973 to current year.
WATER TEMPERATURE: October 1973 to September 1981. Records published in water-data report IN-80-1 are unreliable and should not be used.
SEDIMENT DISCHARGE: October 1973 to current year.
WATER DISCHARGE: October 1927 to September 1938.

REMARKS.--Water discharge obtained from station White River at Petersburg (See sta 03374000).

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 33.5°C Aug. 14, 1976; 0.0°C on several days during winter period 1975-76.
SPECIFIC CONDUCTANCE: Maximum, 882 micromhos July 21, 1977; minimum, 192 micromhos Nov. 6, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 15...	0900	1790	620	7.9	19.0	---	16.7	----	3640	---	--
JAN 06...	1300	22800	354	7.8	4.1	130	----	----	----	118	7
MAR 15...	1700	34000	365	7.4	8.2	---	11.1	----	3700	---	--
MAY 18...	1400	6730	481	7.7	24.5	20	9.2	----	----	217	55
JUL 23...	0735	6030	383	7.3	27.2	140	5.3	2300	3500	165	41
SEP 23...	1830	2130	550	7.9	20.4	15	----	260	813	219	69

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	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 15...	--	----	--	--	--	---	--	----	---	---	---
JAN 06...	43	2.5	13	18	.5	3.0	11	5.0	<.1	7.5	73
MAR 15...	--	----	--	--	--	---	--	----	---	---	---
MAY 18...	57	18	13	11	.3	2.5	43	22	.2	2.7	321
JUL 23...	43	14	11	12	.3	3.0	32	14	.2	4.4	263
SEP 23...	53	21	21	17	.6	3.2	67	32	.3	.7	323

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	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)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
OCT 15...	---	---	----	.77	.050	.06	.160	.49	.020	<.010	---
JAN 06...	151	.09	4494	2.6	.160	.20	.220	.67	.060	.020	.06
MAR 15...	---	---	----	2.5	.180	.23	.220	.67	.070	.050	.15
MAY 18...	255	.43	5833	1.3	.050	.06	.120	.37	.030	<.010	---
JUL 23...	196	.35	4282	1.3	.030	.03	.400	1.2	.050	.040	.12
SEP 23...	288	.43	1858	.31	.020	.02	.020	.06	.020	<.010	---

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 15...	--	--	--	----	---	--	--	--	--	--	--
JAN 06...	1	0	1	100	60	42	1	<1	10	0	10
MAR 15...	--	--	--	----	---	--	--	--	--	--	--
MAY 18...	2	1	1	<100	---	55	1	<1	10	--	<10
JUL 23...	2	1	1	200	200	50	1	<1	20	10	10
SEP 23...	2	0	2	100	40	58	<1	<1	10	0	10

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)
OCT 15...	--	--	--	---	---	--	----	----	--	--	--
JAN 06...	5	4	1	120	120	2	9100	9100	44	11	10
MAR 15...	--	--	--	---	---	--	----	----	--	--	--
MAY 18...	9	6	3	16	11	5	1900	1900	12	9	8
JUL 23...	6	--	<1	18	13	5	9700	9700	22	16	14
SEP 23...	<1	--	1	4	1	3	870	850	16	4	--

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)
OCT 15...	--	---	---	--	--	--	--	--	--	--	--
JAN 06...	1	660	650	8	.2	.1	.1	16	13	3	1
MAR 15...	--	---	---	--	--	--	--	--	--	--	--
MAY 18...	1	160	160	2	.3	.0	.3	4	0	4	<1
JUL 23...	2	450	---	<1	.3	.2	.1	10	--	<1	<1
SEP 23...	<1	170	170	4	.3	.0	.3	6	3	3	<1

03374100 WHITE RIVER AT HAZELTON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)
OCT 15...	--	--	--	---	--	--	----	--	----	---	----
JAN 06...	<1	<1	<1	50	40	8	<.10	--	<.01	---	<.10
MAR 15...	--	--	--	---	--	--	<.10	11	<.01	<.1	<.10
MAY 18...	<1	<1	<1	30	--	<4	----	--	----	---	----
JUL 23...	<1	<1	<1	140	--	<4	----	--	----	---	----
SEP 23...	<1	<1	1	110	--	<4	----	--	----	---	----

DATE	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL (UG/L)
OCT 15...	----	----	--	----	---	----	---	---	----	---	----
JAN 06...	----	<.01	--	<.01	---	<.01	---	.02	<.01	---	<.01
MAR 15...	<1.0	<.01	.1	<.01	<.1	<.01	<.1	.01	<.01	1.1	<.01
MAY 18...	----	----	--	----	---	----	---	---	----	---	----
JUL 23...	----	----	--	----	---	----	---	---	----	---	----
SEP 23...	----	----	--	----	---	----	---	---	----	---	----

DATE	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 15...	---	----	---	----	----	---	----	---	----	---
JAN 06...	---	<.01	---	<.01	<.01	---	<.01	---	<.01	---
MAR 15...	<.1	<.01	<.1	<.01	<.01	<.1	<.01	<.1	<.01	<.1
MAY 18...	---	----	---	----	----	---	----	---	----	---
JUL 23...	---	----	---	----	----	---	----	---	----	---
SEP 23...	---	----	---	----	----	---	----	---	----	---

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MIREX, TOTAL (UG/L)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)
OCT 15...	----	----	---	----	----	----	----	----	---	----	----
JAN 06...	<.01	<.01	---	<.01	<.01	<.10	----	<.01	---	<.01	<.01
MAR 15...	<.01	<.01	<.1	<.01	<.01	<.10	<1.0	<.01	<.1	<.01	<.01
MAY 18...	----	----	---	----	----	----	----	----	---	----	----
JUL 23...	----	----	---	----	----	----	----	----	---	----	----
SEP 23...	----	----	---	----	----	----	----	----	---	----	----

DATE	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 15...	-----	--	---	----	---	----	----	----	90	435	97
JAN 06...	-----	<1	---	<.01	.01	<.01	<.01	<.01	457	28100	92
MAR 15...	<1.00	<1	<10	<.01	.02	<.01	<.01	<.01	334	30700	92
MAY 18...	-----	--	---	----	---	----	----	----	73	1330	--
JUL 23...	-----	--	---	----	---	----	----	----	417	6790	--
SEP 23...	-----	--	---	----	---	----	----	----	107	615	--

03374455 PATOKA RIVER NEAR HARDINSBURG, IN

LOCATION.--Lat 38°26'41", long 86°23'14", in NW¼SE¼ sec.10, T.1 S., R.1 E., Orange County, Hydrologic Unit 05120209, on downstream edge of center pier of county road bridge, 0.3 mile (0.5 km) downstream from Fudge Creek, 0.7 mile (1.1 km) northeast of Valeene, 6.0 miles (9.7 km) southwest of Hardinsburg, and at mile 158.0 (254.2 km).

DRAINAGE AREA.--12.8 mi² (33.2 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.89 ft (184.980 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 25.6 ft³/s (0.725 m³/s), 27.2 in/yr (691 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,270 ft³/s (263 m³/s) July 26, 1979, gage height, 11.35 ft (3.459 m) no flow for several days in 1971, 1972, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 23	0030	1090	30.9	6.61	2.015	Apr. 3	0430	1380	39.1	7.27	2.216
Jan. 4	0130	1330	37.7	7.16	2.182	May 29	2200	*1870	53.0	*8.13	2.478
Jan. 22	2100	1190	33.7	6.86	2.091	May 31	2230	1210	34.3	6.90	2.103
Jan. 31	0900	1630	46.2	7.76	2.365	Aug. 30	1800	1060	30.0	6.54	1.993
Mar. 15	0415	1200	34.0	6.88	2.097	Sept. 1	1430	935	26.5	6.23	1.899

Minimum daily discharge, 0.19 ft³/s (0.005 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	5.5	162	26	156	10	21	7.0	260	8.6	.54	194
2	1.0	4.5	47	23	64	10	19	6.4	50	6.1	.49	53
3	.97	4.0	27	105	103	14	436	5.8	27	4.8	.38	15
4	.96	3.4	19	452	76	44	70	5.3	19	3.8	.28	5.0
5	.97	3.2	14	75	46	41	48	5.3	14	3.0	.28	2.9
6	3.5	2.9	13	46	33	29	49	5.0	11	3.2	.73	2.2
7	1.7	3.2	11	30	25	24	41	6.1	8.3	2.7	.43	1.8
8	1.4	2.5	8.3	22	20	18	35	31	8.0	2.9	.38	1.6
9	1.2	2.9	6.1	18	17	16	34	23	8.3	2.5	.49	1.3
10	1.1	4.0	5.3	14	15	15	33	16	6.1	2.5	.22	1.2
11	.92	3.6	4.8	12	13	31	30	12	4.8	5.3	.88	1.1
12	.88	3.2	4.0	11	11	46	27	8.3	4.8	3.0	.73	1.0
13	.88	2.9	3.6	9.5	10	103	24	6.4	4.3	2.1	.73	5.0
14	.90	2.5	3.6	8.5	10	55	21	5.5	3.4	1.8	.60	4.0
15	.96	2.4	3.4	8.0	15	467	18	4.8	3.2	1.7	.54	3.2
16	.96	2.4	3.0	7.0	82	88	18	4.3	37	1.6	.97	2.5
17	1.8	2.4	3.5	6.3	86	49	151	3.8	28	1.5	.73	2.2
18	8.7	2.1	3.0	5.8	48	44	59	3.6	13	1.6	.49	6.8
19	4.6	7.0	2.7	5.6	35	119	44	3.6	8.6	2.5	.28	4.5
20	2.6	28	2.5	5.6	31	86	35	3.2	6.4	12	.43	3.5
21	2.2	16	3.0	5.6	28	105	28	4.0	5.0	3.0	1.2	2.7
22	1.9	13	87	271	23	49	23	9.4	4.0	2.2	.49	2.1
23	2.0	11	352	430	21	43	19	22	3.2	2.1	.33	1.9
24	1.5	20	65	118	19	33	17	8.6	2.7	1.8	.60	3.7
25	1.6	16	37	48	16	27	14	5.5	2.5	1.4	.49	9.0
26	25	14	27	33	14	24	12	4.5	2.4	1.2	.19	44
27	48	19	54	22	13	22	11	4.0	2.5	1.1	1.4	4.8
28	21	15	43	19	11	20	9.8	3.2	164	.97	.97	2.1
29	14	11	34	16	----	18	8.3	375	50	.97	.67	1.6
30	10	17	25	388	----	16	7.6	249	17	.80	112	1.4
31	7.0	-----	23	1070	----	24	------	202	-----	.73	19	-----
TOTAL	171.05	244.6	1096.8	3310.9	1041	1690	1362.7	1053.6	778.5	89.47	147.94	385.1
MEAN	5.52	8.15	35.4	107	37.2	54.5	45.4	34.0	26.0	2.89	4.77	12.8
MAX	48	28	352	1070	156	467	436	375	260	12	112	194
MIN	.85	2.1	2.5	5.6	10	10	7.6	3.2	2.4	.73	.19	1.0
CFSM	.43	.64	2.77	8.36	2.91	4.26	3.55	2.66	2.03	.23	.37	1.00
IN.	.50	.71	3.19	9.62	3.03	4.91	3.96	3.06	2.26	.26	.43	1.12

CAL YR 1981 TOTAL 5057.25 MEAN 13.9 MAX 352 MIN .15 CFSM 1.09 IN 14.70
WTR YR 1982 TOTAL 11371.66 MEAN 31.2 MAX 1070 MIN .19 CFSM 2.44 IN 33.05

03374498 PATOKA LAKE NEAR CUZCO, IN

LOCATION.--Lat 38°25'58", long 86°42'30", in SW¼NE¼ sec.14, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, in discharge tower of reservoir on Patoka River, 2.9 miles south of Cuzco and 5.0 miles upstream from Dillon Creek, and at river mile 118.2.

DRAINAGE AREA.--168 mi^2 (435 km^2).

PERIOD OF RECORD.--February 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth and rock fill dam. Releases normally controlled by two gates, 8.0 ft (2.44 m) wide and 12.0 ft (3.66 m) high, in an oblong concrete conduit through dam. Minimum pool capacity is 12,211 acre-ft (15.1 hm^3), elevation 506 ft (154.2 m). Seasonal pool capacity is 178,730 acre-ft (220.4 hm^3), elevation, 536 ft (163.4 m). Capacity at uncontrolled spillway elevation, 548 ft (167.0 m) is 298,380 acre-ft (367.9 hm^3). Reservoir is used for flood control, water supply, water quality, and recreation. Reservoir put in operation on Feb. 13, 1978.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 275,300 acre-ft (339 hm^3) Aug. 3, 4, 1979, elevation, 545.97 ft (166.412 m); minimum, 26,330 acre-ft (32.5 hm^3) June 12, 1978, elevation, 511.57 ft (155.926 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 232,800 acre-ft (287 hm^3) Feb. 10, elevation, 541.84 ft (165.153 m); minimum, 169,600 acre-ft (209 hm^3) Jan. 22, elevation, 534.98 ft (163.062 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	536.39	182,100	
Oct. 31	535.50	174,200	-7,900
Nov. 30	535.36	172,900	-1,300
Dec. 31	535.32	172,600	-300
CAL YR 1981			+12,900
Jan. 31	540.91	223,800	+51,200
Feb. 28	539.98	215,100	-8,700
Mar. 31	538.30	199,300	-15,800
Apr. 30	536.50	183,100	-16,200
May 31	536.70	184,900	+1,800
June 30	537.50	192,100	+7,200
July 31	537.10	188,500	-3,600
Aug. 31	536.82	186,000	-2,500
Sept. 30	537.38	191,000	+5,000
WTR YR 1982			+8,900

03374500 PATOKA RIVER NEAR CUZCO, IN

LOCATION.--Lat 38°26'29", long 86°43'31", in SW¼SE¼ sec.10, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, on right bank 200 ft (61 m) upstream from county road bridge, 2.1 miles (3.4 km) downstream from Patoka Lake, 2.2 miles (3.6 km) southwest of Cuzco, 2.8 miles (4.5 km) upstream from Dillon Creek, and at mile 116.1 (186.8 km).

DRAINAGE AREA.--171 mi^2 (443 km^2).

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

GAGE.--None. Datum of gage was 477.00 ft (145.390 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1961, nonrecording gage on downstream side of bridge, 200 ft (61 m) downstream at same datum. Oct. 1, 1961 to Sept. 30, 1981, water-stage recorder at site described in "LOCATION" paragraph. Prior to October 1979, published as "near Ellsworth".

REMARKS.--Flow regulated by Patoka Lake (See sta 03374498). Daily discharge computed from relation between discharge, head, and gate openings for Patoka Lake beginning Oct. 1, 1981.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--21 years, 222 ft^3/s (6.287 m^3/s), 17.63 in/yr (448 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft^3/s (416 m^3/s) Mar. 10, 1964, gage height, 20.02 ft (6.102 m); no flow Oct. 30, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.1 ft (5.82 m) according to information by local resident, discharge, 12,300 ft^3/s (348 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,060 ft^3/s (30.0 m^3/s) Apr. 7, 8; minimum daily, 33 ft^3/s (0.934 m^3/s) July 21-22, Sept. 2-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	97	49	604	52	917	1040	324	49	66	66	44
2	146	97	49	604	52	1010	552	323	49	66	66	33
3	146	79	49	604	52	742	198	323	49	66	66	33
4	146	49	49	607	52	716	467	323	49	66	65	33
5	146	49	49	297	52	790	626	323	49	66	65	33
6	146	79	49	97	52	789	915	162	82	66	65	33
7	146	97	49	176	52	788	1060	64	66	66	65	33
8	146	97	49	202	115	913	1060	50	49	66	65	33
9	186	97	49	202	204	1000	1050	82	49	66	65	54
10	227	97	49	202	447	1000	1050	68	49	66	65	66
11	227	97	49	343	605	998	1050	49	49	66	65	66
12	227	97	49	413	604	890	1050	49	49	66	65	66
13	231	97	49	412	604	826	1050	49	49	66	65	66
14	103	97	49	412	603	704	1050	49	49	66	65	66
15	81	97	49	413	603	251	1040	49	49	66	65	66
16	97	97	49	414	603	50	823	49	49	66	65	66
17	97	97	190	413	603	150	535	49	49	66	65	66
18	65	97	369	413	603	310	484	49	49	66	65	66
19	98	97	501	412	603	283	504	49	49	66	65	66
20	178	97	500	412	603	328	504	49	49	44	65	66
21	194	97	556	412	602	420	503	49	49	33	65	66
22	133	97	604	193	713	539	503	49	49	33	65	66
23	133	169	606	50	779	639	502	49	49	54	65	66
24	194	193	607	50	778	763	502	49	49	66	65	131
25	137	193	606	50	836	981	502	49	60	66	65	196
26	97	101	606	50	864	1050	501	49	66	66	65	147
27	97	49	606	50	863	1050	501	49	66	66	65	66
28	97	49	606	50	862	1050	390	49	66	66	65	66
29	97	49	605	50	---	1050	324	49	66	66	65	66
30	97	49	605	50	---	1040	346	49	66	66	65	66
31	97	---	605	51	---	1040	---	49	---	66	65	---
TOTAL	4336	2854	9956	8708	13461	23077	20682	3071	1616	1946	2018	1991
MEAN	140	95.1	289	281	481	744	689	99.1	53.9	62.8	65.1	66.4
MAX	231	193	607	607	864	1050	1060	324	82	66	66	196
MIN	65	49	49	50	52	50	198	49	49	33	65	33
CFSM	.82	.56	1.69	1.64	2.81	4.35	4.03	.58	.32	.37	.38	.39
IN.	.94	.62	1.95	1.89	2.93	5.02	4.50	.67	.35	.42	.44	.43

CAL YR 1981 TOTAL 36557.9 MEAN 100 MAX 607 MIN 1.6 CFSM .59 IN 7.95
WTR YR 1982 TOTAL 92716.0 MEAN 254 MAX 1060 MIN 33 CFSM 1.49 IN 20.17

03375500 PATOKA RIVER AT JASPER, IN

LOCATION.--Lat 38°24'49", long 86°52'36", in NW¼SE¼ sec.20, T.1 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on left bank 0.3 mile (0.5 km) upstream from unnamed outlet of Jasper Lake, 1.0 mile (1.6 km) downstream from Coon Seitz bridge, 1.2 miles (1.9 km) downstream from Beaver Creek, 3.3 miles (5.3 km) northeast of Jasper, and at mile 91.5 (147.2 km).

DRAINAGE AREA.--262 mi² (679 km²).

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 446.00 ft (135.941 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Nonrecording gage at bridge 5.6 miles (9.0 km) downstream, used for high-water periods when flow exceeds about 2,500 ft³/s (70.8 m³/s), at datum 0.34 ft (0.104 m) lower. Prior to Sept. 18, 1956, nonrecording gage at bridge 5.6 miles (9.0 km) downstream at datum 0.34 ft (0.104 m) lower.

REMARKS.--Records good. Flow regulated by Beaver Creek Reservoir beginning Oct. 11, 1955, and by Patoka Lake beginning Feb. 13, 1978 (See sta 03374498).

AVERAGE DISCHARGE.--34 years (water years 1949 to current year), 361 ft³/s (10.22 m³/s), 18.71 in/yr (475 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Mar. 11, 1964, gage height, 15.17 ft (4.624 m) at downstream gage; maximum gage height at upstream gage, 21.20 ft (6.462 m) Mar. 11, 1964, from floodmarks; no flow at times during 1948, 1952-56, 1963-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 15.9 ft (4.85 m) at downstream site, from floodmark furnished by local residents, discharge 16,000 ft³/s (453 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,990 ft³/s (84.7 m³/s) Jan. 24, gage height, 15.81 ft (4.819 m); minimum daily, 56 ft³/s (1.59 m³/s) Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	117	316	557	2460	943	1190	442	897	93	80	578
2	107	115	273	550	1910	952	1200	361	687	84	79	1040
3	123	117	143	681	1280	978	1270	352	221	81	79	528
4	124	109	106	953	680	1020	1210	348	137	80	78	158
5	125	75	91	1050	330	1010	923	345	111	78	78	96
6	157	56	83	739	229	987	769	341	96	76	81	79
7	149	63	78	288	175	976	830	238	101	75	78	72
8	128	98	75	243	168	957	943	153	142	78	81	67
9	123	116	71	259	185	948	1010	121	184	85	80	65
10	154	123	71	250	330	975	1060	123	115	79	77	66
11	222	119	88	250	519	1030	1110	128	85	112	82	84
12	226	117	88	330	664	1080	1150	97	75	99	81	87
13	228	113	86	438	660	1180	1160	92	73	80	77	115
14	225	112	86	413	649	1260	1160	89	69	75	77	171
15	144	111	86	391	674	1520	1160	87	65	74	77	150
16	71	111	84	420	867	1400	1170	86	114	75	76	125
17	96	114	86	450	1050	1150	1210	84	138	75	76	106
18	118	112	182	480	1120	737	1220	87	101	79	76	115
19	108	133	354	550	1080	642	1080	92	80	98	75	121
20	84	199	432	570	947	901	789	88	71	192	75	105
21	175	158	442	571	827	1070	639	85	66	156	75	102
22	214	133	544	992	748	1180	595	155	63	111	75	96
23	180	126	953	2000	755	1150	575	165	60	92	75	93
24	152	195	1070	2900	826	980	561	104	58	69	75	96
25	218	246	931	1800	854	901	553	90	58	84	75	133
26	203	236	706	950	870	946	550	86	60	86	75	191
27	156	207	687	450	902	1010	543	93	70	84	82	163
28	144	119	712	229	928	1080	535	96	132	82	82	98
29	128	90	652	189	-----	1120	528	253	279	81	75	88
30	119	88	591	547	-----	1150	525	990	136	82	77	86
31	117	----	564	1700	-----	1180	-----	918	----	81	187	----
TOTAL	4619	3828	10731	22190	22687	32413	27218	6789	4544	2776	2516	5074
MEAN	149	128	346	716	810	1046	907	219	151	89.5	81.2	169
MAX	228	246	1070	2900	2460	1520	1270	990	897	192	187	1040
MIN	71	56	71	189	168	642	525	84	58	69	75	65
CFSM	.57	.49	1.32	2.73	3.09	3.99	3.46	.84	.58	.34	.31	.65
IN.	.66	.54	1.52	3.15	3.22	4.60	3.86	.96	.65	.39	.36	.72

CAL YR 1981 TOTAL 57298 MEAN 157 MAX 1070 MIN 29 CFSM .60 IN 8.14
WTR YR 1982 TOTAL 145385 MEAN 398 MAX 2900 MIN 56 CFSM 1.52 IN 20.64

03375800 HALL CREEK NEAR ST. ANTHONY, IN

LOCATION.--Lat 38°21'45", long 86°49'43", in NW¼NW¼ sec.11, T.2 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on downstream side of right pier of bridge on County Road 125 South, 0.7 mile (1.1 km) upstream from Grassy Fork, 3.3 miles (5.3 km) north of St. Anthony, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--21.8 mi² (56.5 km²).

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

REVISED RECORDS.--WDR IN-75-1: 1971-74.

GAGE.--Water-stage recorder. Datum of gage is 459.22 ft (139.969 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--12 years, 33.4 ft³/s (0.946 m³/s), 20.81 in/yr (529 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) July 26, 1979, gage height, 15.30 ft (4.663 m) from contracted-opening and flow-over-the road measurements at gage height of 15.30 ft (4.663 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s (26.9 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 22	2000	*2960	83.8	*11.87	3.618	Apr. 3	0600	992	28.1	10.48	3.194
Jan. 31	0400	1760	49.8	11.27	3.435	Sept. 1	1900	1920	54.4	11.37	3.466
Mar. 15	0500	1290	36.5	10.92	3.328						

Minimum daily discharge, 0.30 ft³/s (0.008 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	1.4	106	19	95	10	14	5.2	62	3.1	1.1	758
2	.70	1.3	34	46	49	9.8	15	4.7	14	2.5	.94	147
3	.68	1.2	18	122	66	12	380	4.4	7.8	2.9	.85	33
4	.66	1.1	14	286	49	45	78	3.9	6.2	2.5	.78	13
5	.70	1.2	10	60	34	31	54	3.6	5.4	1.8	.72	7.1
6	1.7	1.3	8.4	42	24	25	44	3.5	4.2	1.4	.76	4.7
7	1.5	1.1	7.8	27	22	21	31	7.6	3.6	1.4	.93	3.6
8	1.4	1.1	6.4	19	21	17	29	6.0	10	5.4	1.9	2.9
9	1.3	1.3	5.6	17	19	15	34	4.4	7.8	2.9	1.6	2.5
10	1.2	1.6	5.0	14	16	14	29	3.8	5.6	2.4	1.4	2.2
11	1.1	1.3	4.7	12	14	34	24	3.3	3.9	26	2.2	2.0
12	1.0	1.2	4.8	10	13	45	20	3.1	3.8	3.2	1.6	1.9
13	.96	1.2	4.7	9.2	12	188	17	2.7	3.8	2.4	1.2	190
14	.92	1.1	4.2	8.6	11	109	15	2.5	3.1	1.9	.98	148
15	.98	1.1	4.1	8.2	51	610	13	2.3	2.9	1.7	.81	66
16	1.4	1.4	3.5	7.7	216	123	12	2.3	37	1.6	.67	21
17	2.4	2.2	5.6	7.0	112	70	158	2.2	9.2	4.8	.57	12
18	3.5	1.6	4.2	6.6	60	51	57	3.1	5.2	10	.49	14
19	1.5	40	3.6	6.3	41	155	34	3.1	4.1	3.5	.43	8.6
20	1.3	15	3.1	6.7	35	81	24	3.6	3.3	175	.64	6.4
21	1.1	4.8	4.0	8.2	33	72	17	2.7	2.9	13	.70	5.2
22	1.0	3.6	179	1100	23	48	13	13	2.5	10	.56	4.7
23	.97	4.8	238	1110	20	36	11	8.9	2.3	4.8	.45	4.1
24	.93	14	58	71	18	26	9.8	4.5	2.0	3.2	.38	7.3
25	.86	5.8	35	35	14	21	9.5	3.8	1.9	2.4	.34	18
26	4.3	20	28	20	13	18	8.9	4.8	1.8	2.0	.30	8.6
27	6.6	34	66	15	12	15	7.3	8.9	1.8	1.7	13	6.6
28	2.4	10	43	9.8	11	13	6.2	4.4	55	1.6	1.3	5.0
29	1.8	6.9	28	8.1	----	13	5.8	21	11	1.4	1.0	4.2
30	1.5	89	19	577	----	13	5.6	27	4.4	1.4	1.0	3.6
31	1.4	-----	18	1080	----	23	------	59	-----	1.2	2.7	------
TOTAL	48.49	271.6	973.7	4768.4	1104	1963.8	1176.1	233.3	288.5	308.1	42.30	1511.2
MEAN	1.56	9.05	31.4	154	39.4	63.3	39.2	7.53	9.62	9.94	1.36	50.4
MAX	6.6	89	238	1110	216	610	380	59	62	175	13	758
MIN	.66	1.1	3.1	6.3	11	9.8	5.6	2.2	1.8	1.2	.30	1.9
CFSM	.07	.42	1.44	7.06	1.81	2.90	1.80	.35	.44	.46	.06	2.31
IN.	.08	.46	1.66	8.14	1.88	3.35	2.01	.40	.49	.53	.07	2.58

CAL YR 1981 TOTAL 5430.24 MEAN 14.9 MAX 424 MIN .09 CFSM .68 IN 9.27
WTR YR 1982 TOTAL 12689.49 MEAN 34.8 MAX 1110 MIN .30 CFSM 1.60 IN 21.65

03376260 FLAT CREEK NEAR OTWELL, IN

LOCATION.--Lat 38°26'12", long 87°07'52", in SE¼SE¼ sec.12, T.1 S., R.7 W., Pike County, Hydrologic Unit 05120209, on right bank at upstream side of bridge on State Highway 56, 2.2 miles (3.5 km) west of intersection of State Highways 56 and 257, 2.5 miles (4.0 km) southeast of Otwell, 6.2 miles (10.0 km) east of intersection of State Highways 56 and 61, and at mile 10.9 (17.5 km).

DRAINAGE AREA.--21.3 mi^2 (55.2 km^2).

PERIOD OF RECORD.--October 1964 to April 1982 (discontinued).

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 448.00 ft (136.550 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--17 years, (1965-81), 22.8 ft^3/s (0.646 m^3/s), 14.54 in/yr (369 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft^3/s (47.6 m^3/s) May 12, 1978, gage height, 12.34 ft (3.761 m); no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 12.58 ft (3.834 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 23	0100	*1110	31.4	*12.22	3.725
Jan. 31	0700	1110	31.4	12.21	3.722

Minimum daily discharge, 1.0 ft^3/s (0.028 m^3/s) Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.5	42	25	118	14	15					
2	1.2	1.6	15	29	75	14	14					
3	1.2	1.6	8.0	117	54	19	49					
4	1.2	1.6	6.0	198	45	47	28					
5	1.2	1.7	5.0	50	30	31	23					
6	16	1.7	4.5	37	21	25	29					
7	2.1	1.5	5.4	15	17	23	18					
8	1.6	1.5	4.0	8.0	14	18	16					
9	1.3	2.5	3.7	6.0	13	17	---					
10	1.2	2.9	3.1	5.0	12	18	---					
11	1.1	1.7	3.3	4.5	11	74	---					
12	1.1	1.6	3.3	4.3	10	57	---					
13	1.2	1.5	2.7	4.0	9.5	113	---					
14	1.0	1.5	2.9	3.8	9.0	68	---					
15	1.2	1.7	3.0	3.7	15	256	---					
16	1.4	2.0	2.2	3.5	208	73	---					
17	2.8	2.5	2.9	3.4	125	45	---					
18	5.8	2.0	2.3	3.3	75	33	---					
19	2.5	39	1.8	3.2	55	207	---					
20	1.5	22	1.5	3.2	50	156	---					
21	1.3	4.0	1.9	4.0	49	148	---					
22	1.2	2.0	102	306	36	53	---					
23	2.2	3.0	199	618	31	37	---					
24	1.7	12	62	50	26	29	---					
25	1.4	3.3	28	30	19	25	---					
26	3.6	3.3	25	20	16	25	---					
27	6.9	16	84	15	16	18	---					
28	2.2	3.4	54	12	15	14	---					
29	1.8	1.7	43	9.5	------	14	---					
30	1.5	8.2	24	394	------	14	---					
31	1.4	-----	21	862	------	20	---					
TOTAL	73.0	150.5	766.5	2847.4	1174.5	1705	---					
MEAN	2.35	5.02	24.7	91.9	41.9	55.0	---					
MAX	16	39	199	862	208	256	---					
MIN	1.0	1.5	1.5	3.2	9.0	14	---					
CFSM	.11	.24	1.16	4.32	1.97	2.58	---					
IN.	.13	.26	1.34	4.97	2.05	2.98	---					

CAL YR 1981 TOTAL 6246.36 MEAN 17.1 MAX 687 MIN .77 CFSM .80 IN 10.91

03376350 SOUTH FORK PATOKA RIVER NEAR SPURGEON, IN

LOCATION.--Lat 38°17'50", long 87°15'39", in SE¼NE¼ sec.35, T.2 S., R.8 W., Pike County, Hydrologic Unit 05120209, on right bank at downstream side of bridge on State Highway 61, 0.5 mile (0.8 km) north of Enos Corner, 3.1 miles (5.0 km) north of Spurgeon, and at mile 8.0 (12.9 km).

DRAINAGE AREA.--42.8 mi² (110.9 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-75-1: 1965-74(P).

GAGE.--Water-stage recorder. Datum of gage is 420.88 ft (128.284 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Regulation by coal-washing operation and strip-mining above gage.

AVERAGE DISCHARGE.--18 years, 50.0 ft³/s (1.416 m³/s), 15.86 in/yr (403 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s (167 m³/s) June 9, 1979, gage height, 15.07 ft (4.593 m) from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of contracted-opening and flow over-the-road measurements at gage height of 15.07 ft (4.593 m); no flow Jan. 20-31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 13.09 ft (3.99 m), from floodmarks, discharge, 4,000 ft³/s (113 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.32 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 23	0200	2600	73.6	11.97	3.648	June 8	1700	2000	56.6	11.21	3.417
Jan. 31	0500	2970	84.1	12.38	3.773	Sept. 13	2100	*3040	86.1	*12.45	3.795
Mar. 15	0400	1350	38.2	10.00	3.048						

Minimum daily discharge, 4.0 ft³/s (0.113 m³/s) Oct. 3, 4, 21, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	4.9	104	22	259	39	52	24	83	12	8.1	246
2	4.6	5.6	37	37	156	35	55	23	26	12	6.0	285
3	4.0	5.3	26	145	139	35	189	23	17	19	7.6	62
4	4.0	5.3	23	288	118	66	77	21	16	13	8.1	27
5	4.6	5.3	19	67	95	57	72	20	17	11	6.8	21
6	9.4	5.6	19	48	74	44	66	20	16	10	9.0	15
7	8.0	5.6	21	33	56	46	52	90	14	10	8.5	13
8	7.0	6.8	18	27	47	39	58	50	537	23	10	11
9	6.2	10	15	23	39	33	58	29	158	12	9.5	11
10	6.0	7.2	14	20	33	33	48	23	61	12	6.8	10
11	5.6	5.6	12	18	29	105	48	23	36	25	12	9.0
12	5.3	6.0	11	16	26	94	43	21	28	12	6.0	8.5
13	5.6	5.6	10	14	25	171	38	18	24	10	6.4	640
14	5.6	6.0	9.6	13	24	149	35	16	19	8.9	6.4	396
15	6.0	6.8	9.1	12	30	588	33	17	17	8.3	5.6	94
16	6.4	15	8.6	11	342	160	80	17	95	7.2	13	44
17	12	16	9.0	11	259	101	247	16	33	10	7.2	27
18	21	6.8	8.4	10	151	81	85	16	21	14	6.4	27
19	6.0	68	7.7	10	105	258	60	23	18	11	6.4	22
20	4.3	26	7.1	10	90	156	52	19	15	10	7.2	19
21	4.0	11	8.6	13	86	200	40	32	13	9.5	10	19
22	4.6	7.6	143	929	66	98	35	60	14	8.5	8.1	14
23	6.0	14	212	1080	57	81	32	23	13	8.5	14	13
24	4.0	23	62	160	52	67	31	18	12	8.1	12	20
25	4.0	12	34	80	44	62	32	16	11	9.5	7.2	43
26	12	17	28	67	39	60	33	16	12	8.5	6.0	22
27	15	31	87	50	36	52	31	17	11	6.8	51	19
28	6.8	13	48	41	39	50	26	15	43	8.1	9.5	17
29	10	9.5	32	36	----	47	23	35	26	9.0	8.5	14
30	7.2	24	21	742	----	47	25	26	16	7.2	10	12
31	5.3	-----	20	1730	----	70	----	95	----	8.1	205	------
TOTAL	215.4	385.5	1084.1	5763	2516	3124	1756	862	1422	342.2	498.3	2180.5
MEAN	6.95	12.9	35.0	186	89.9	101	58.5	27.8	47.4	11.0	16.1	72.7
MAX	21	68	212	1730	342	588	247	95	537	25	205	640
MIN	4.0	4.9	7.1	10	24	33	23	15	11	6.8	5.6	8.5
CFSM	.16	.30	.82	4.35	2.10	2.36	1.37	.65	1.11	.26	.38	1.70
IN.	.19	.34	.94	5.01	2.19	2.72	1.53	.75	1.24	.30	.43	1.90

CAL YR 1981 TOTAL 10010.2 MEAN 27.4 MAX 502 MIN 4.0 CFSM .64 IN 8.70
WTR YR 1982 TOTAL 20149.0 MEAN 55.2 MAX 1730 MIN 4.0 CFSM 1.29 IN 17.51

03376500 PATOKA RIVER NEAR PRINCETON, IN

LOCATION.--Lat 38°23'30", long 87°32'55", in Location 107, T.1 S., R.10 W., Gibson County, Hydrologic Unit 05120209, on left bank 75 ft (23 m) upstream from dam of Princeton Water and Lighting Co., 0.1 mile (0.2 km) downstream from bridge on State Highway 65, 0.6 mile (1.0 km) downstream from Indian Creek, 2 miles (3 km) northeast of Princeton, and at mile 21.5 (34.6 km).

DRAINAGE AREA.--822 mi^2 (2,129 km^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 (120.134 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). See WSP 1725 for history of changes prior to Jan. 21, 1941.

REMARKS.--Records good. Flow regulated by Patoka Lake (See sta 03374498).

AVERAGE DISCHARGE.--48 years, 1,013 ft^3/s (28.69 m^3/s), 16.74 in/yr (425 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft^3/s (530 m^3/s) Jan. 26, 1937, gage height, 26.80 ft (8.169 m), site and datum then in use; no flow Aug. 29 to Sept. 12, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,330 ft^3/s (236 m^3/s) Feb. 2, gage height, 18.45 ft (5.624 m); minimum daily, 63 ft^3/s (1.78 m^3/s) Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	197	685	1610	7440	2250	2420	600	1810	1210	71	1730
2	118	172	818	1510	8250	2110	2270	500	1780	1120	68	1860
3	118	161	878	1550	8080	1980	2240	440	1810	799	66	1830
4	118	157	872	1720	7760	1900	2150	380	1820	491	66	1920
5	121	154	748	1680	7440	1820	2130	340	1730	382	63	2000
6	161	154	542	1750	7140	1760	2090	320	1350	348	71	2040
7	176	147	397	1780	6550	1730	2090	300	687	361	96	2060
8	214	130	331	1800	6010	1710	2100	480	834	342	143	2060
9	201	118	286	1750	5390	1690	2100	520	1660	339	339	1990
10	188	137	257	1720	4730	1670	2100	520	1740	402	150	1730
11	161	154	228	1600	4070	1710	2080	450	1820	427	168	1090
12	150	184	210	1500	3410	1760	2040	300	1710	416	134	409
13	184	184	197	1350	2880	1960	1980	230	1260	416	124	245
14	241	176	205	1100	2490	2030	1900	184	578	387	104	1220
15	257	168	210	880	2420	2480	1830	147	337	249	84	1540
16	265	168	210	720	2360	2570	1820	137	701	118	78	1610
17	249	201	205	650	2710	2700	2060	124	925	101	86	1640
18	214	214	200	640	2780	2810	2080	115	920	104	89	1530
19	192	338	190	620	2860	3200	2130	115	685	137	84	1140
20	197	585	180	610	2900	3330	2150	184	427	197	68	628
21	180	690	250	600	2950	3510	2130	201	316	168	73	488
22	147	648	755	850	2900	3540	2100	433	237	323	172	313
23	130	481	1290	2600	2900	3570	2050	409	188	257	154	256
24	176	423	1100	4100	2800	3540	1960	497	157	154	110	236
25	233	419	1220	4200	2600	3470	1820	377	137	107	86	317
26	228	450	1570	4100	2590	3370	1600	257	118	84	86	310
27	249	537	1710	4000	2500	3230	1380	205	110	71	273	334
28	352	595	1750	3900	2380	3070	1150	214	143	76	257	350
29	356	609	1760	4240	------	2910	950	526	922	78	273	333
30	286	519	1730	4960	------	2750	750	1250	1140	78	157	250
31	233	----	1690	7270	------	2600	-----	1450	-----	73	374	-----
TOTAL	6222	9270	22674	67360	119290	78730	57650	12205	28052	9815	4167	33459
MEAN	201	309	731	2173	4260	2540	1922	394	935	317	134	1115
MAX	356	690	1760	7270	8250	3570	2420	1450	1820	1210	374	2060
MIN	118	118	180	600	2360	1670	750	115	110	71	63	236
CFSM	.23	.35	.83	2.46	4.83	2.88	2.18	.45	1.06	.36	.15	1.26
IN.	.26	.39	.96	2.84	5.03	3.32	2.43	.51	1.18	.41	.18	1.41

CAL YR 1981 TOTAL 213553 MEAN 585 MAX 4320 MIN 57 CFSM .66 IN 9.01
WTR YR 1982 TOTAL 448894 MEAN 1230 MAX 8250 MIN 63 CFSM 1.40 IN 18.93

03377500 WABASH RIVER AT MOUNT CARMEL, IL

LOCATION.--Lat 38°24'07", long 87°45'10", in SE¼NW¼ sec.28, T.1 S., R.12 W., Wabash County, Illinois, Hydrologic Unit 05120113, on right bank on downstream side of Southern Railway bridge at Mount Carmel, 0.2 mile (0.3 km) downstream from Patoka River, and at mile 94.4 (151.9 km).

DRAINAGE AREA.--28,635 mi² (74,165 km²).

PERIOD OF RECORD.--January 1908 to September 1913 (gage heights only), October 1927 to current year. Gage-height records collected in this vicinity November 1874 to December 1878, are contained in files of Louisville office of the Corps of Engineers and since June 1884, are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 369.46 ft (112.611 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1949, to Feb. 8, 1977, datum 2.00 ft (0.610 m) higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

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

AVERAGE DISCHARGE.--55 years, 27,350 ft³/s (774.6 m³/s), 12.96 in/yr (329 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 305,000 ft³/s (8,640 m³/s) May 25, 1943, maximum gage height, 30.62 ft (9.333 m) Feb. 5, 6, 1969, present datum; minimum daily discharge, 1,650 ft³/s (46.7 m³/s) Sept. 27, 28, 1941. 1874-78, 1884 to current year: Maximum discharge, 428,000 ft³/s (12,100 m³/s), from rating curve extended above 310,000 ft³/s (8,780 m³/s) Mar. 30, 1913, gage height, 33.0 ft (10.06 m), present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 154,000 ft³/s (4,360 m³/s) Mar. 23, gage height, 28.20 ft (8.595 m); minimum daily, 5,980 ft³/s (169 m³/s) Sep. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12500	16900	14900	30600	91400	137000	81900	35300	56600	27300	12800	13100
2	15000	17300	16000	29000	101000	132000	77600	32300	59900	25800	11800	30900
3	16400	16600	16400	29800	113000	126000	75100	30100	61900	25300	10800	41500
4	16200	15600	16300	35300	121000	116000	74200	28100	62500	26700	10000	40000
5	14200	15100	15300	44900	124000	102000	74700	26600	61700	32700	9430	33100
6	12700	14300	14200	52400	122000	90200	75200	25300	59400	33500	9300	23000
7	11600	13600	13100	57500	110000	82500	74300	25000	55700	29900	10500	17000
8	11600	13100	12200	60100	100000	78500	72700	26500	52600	25900	15100	14100
9	13000	12700	11400	61900	88000	75900	70400	26400	53300	25600	15800	12300
10	13700	12300	10900	62400	70000	74100	67500	25400	50500	25400	14500	11000
11	12900	11900	10400	59400	61000	72000	64100	24700	44800	26900	13600	9730
12	11700	11400	10000	53000	56000	69600	61200	24600	38500	26400	13800	8600
13	10700	11000	9570	40500	50000	68800	58800	24000	34900	27800	12600	7940
14	10100	10600	9250	29800	46000	70800	56900	22500	32200	27400	11300	8490
15	9760	10200	9050	25700	43000	76600	55600	20600	28800	24100	10200	9820
16	9250	10000	8870	25400	42000	82000	55000	18900	26900	20100	9270	8620
17	9000	9880	8750	25000	42000	89000	56800	17400	26500	17100	8650	8460
18	8930	9770	8460	24500	55000	97700	59500	16300	30700	15500	8110	8490
19	9000	9790	7970	24100	64000	112000	62600	16200	35200	14500	7730	7910
20	9130	10700	7540	23600	74000	128000	65500	16500	34900	16300	7490	7120
21	9620	11200	7330	22500	86000	143000	66300	15800	32600	27000	7350	6630
22	10300	11100	7420	23700	94000	151000	65100	18500	33000	33800	7180	6410
23	10700	11300	12600	43500	98200	154000	63700	22900	32000	33500	6870	6280
24	10400	11300	20000	59400	111000	152000	62400	25800	29400	28800	6820	6250
25	11300	11300	27200	64200	125000	147000	61000	28200	26400	25600	6850	6130
26	13100	11500	30300	64300	135000	141000	58700	28900	24000	22900	6850	5980
27	14000	12000	30100	63800	141000	135000	55300	29400	21600	19600	7120	6100
28	14300	12800	35100	62000	141000	126000	50600	31000	20500	16800	8550	6110
29	15000	13200	39000	58400	-------	113000	45000	33000	22900	14900	9470	5990
30	15600	13500	37700	59200	-------	99400	39600	42400	26500	14500	9130	6030
31	16300	------	33500	76000	-------	88500	-------	49400	-------	13700	8640	------
TOTAL	377990	371940	510810	1391900	2504600	3330600	1907300	808900	1176400	745300	307610	383090
MEAN	12190	12400	16480	44900	89450	107400	63580	26090	39210	24040	9923	12770
MAX	16400	17300	39000	76000	141000	154000	81900	49400	62500	33800	15800	41500
MIN	8930	9770	7330	22500	42000	68800	39600	15800	20500	13700	6820	5980
CFSM	.43	.43	.58	1.57	3.12	3.75	2.22	.91	1.37	.84	.35	.45
IN.	.49	.48	.66	1.81	3.25	4.33	2.48	1.05	1.53	.97	.40	.50

CAL YR 1981 TOTAL 9241960 MEAN 25320 MAX 122000 MIN 4200 CFSM .88 IN 12.01
WTR YR 1982 TOTAL 13816440 MEAN 37850 MAX 154000 MIN 5980 CFSM 1.32 IN 17.95

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 (82.9 km).

DRAINAGE AREA.--29,234 mi² (75,716 km²). Flood of March 1913 reached a stage of 27.7 ft (8.44 m). Flood of Jan. 31, 1937, reached a stage of 24.4 ft (7.44 m).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1980.
SEDIMENT DISCHARGE: October 1974 to current year.
WATER DISCHARGE: October 1938 to September 1947.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, Ill. (See sta 03377500). Code 80010-U.S. Geological Survey; code 17002-Illinois Environmental Protection Agency.

EXTREMES FOR PERIOD OF RECORD.--
WATER DISCHARGE: Maximum, 339,000 ft³/s (9,600 m³/s) May 26, 1943, gage height, 23.84 ft (7.266 m); minimum daily discharge, 1,800 ft³/s (51.0 m³/s) Sept. 29, 30, 1941.
SPECIFIC CONDUCTANCE: Maximum conductance, 805 micromhos Feb. 15, 1977; minimum, 200 micromhos 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 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER)	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML)
OCT												
14...	1330	80010	80010	10000	610	8.0	----	17.0	---	15.5	--	----
JAN												
07...	1200	17002	17002	57800	400	7.3	-3.0	3.0	---	----	41	K400
07...	1300	80010	80010	58000	400	7.3	----	3.0	160	----	--	----
MAR												
16...	1130	80010	80010	81800	393	7.6	22.0	9.2	---	10.2	--	----
MAY												
19...	1100	17002	17002	16100	539	8.0	31.0	24.0	35	9.3	36	K30
19...	1200	80010	80010	16100	539	8.0	----	23.8	23	9.3	--	----
JUL												
22...	1500	80010	80010	34400	482	7.3	----	27.7	110	5.0	--	----
SEP												
23...	1200	17002	17002	6210	592	7.7	19.0	19.0	---	10.4	31	----
23...	1500	80010	80010	6310	592	7.7	26.5	18.8	18	10.4	--	----

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	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)
OCT											
14...	-----	-----	---	--	---	--	--	--	--	--	--
JAN											
07...	-----	-----	196	75	.00	62	52	20	16	11	11
07...	-----	-----	188	78	---	--	49	--	16	--	14
MAR											
16...	-----	6500	---	--	---	--	--	--	--	--	--
MAY											
19...	-----	-----	247	67	.00	70	61	25	23	16	17
19...	-----	-----	240	69	---	--	60	--	22	--	16
JUL											
22...	K1600	14300	208	55	---	--	52	--	19	--	15
SEP											
23...	-----	-----	259	88	.00	60	59	26	27	28	29
23...	K53	K1770	232	88	---	--	55	--	23	--	25

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	POTASSIUM, DISSOLVED (MG/L AS K)	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, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT											
14...	--	--	---	---	--	--	--	--	---	---	---
JAN											
07...	10	.3	3.9	3.2	48	21	.2	--	---	---	---
07...	13	.4	---	4.4	40	21	--	.2	6.9	267	218
MAR											
16...	--	--	---	---	--	--	--	--	---	---	---
MAY											
19...	12	.4	2.5	2.3	64	27	.2	--	---	---	---
19...	12	.4	---	2.3	67	27	--	.2	.8	348	298
JUL											
22...	13	.4	---	2.8	55	21	--	.2	4.2	339	261
SEP											
23...	19	.8	3.4	3.4	82	36	.2	--	---	---	---
23...	18	.7	---	3.1	81	37	--	.3	1.1	347	312

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	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)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
OCT											
14...	---	-----	---	--	----	3.4	-----	.060	.07	----	.64
JAN											
07...	---	-----	280	32	3.2	----	.360	----	---	2.2	2.60
07...	.36	41812	---	--	----	3.4	-----	.100	.12	----	1.80
MAR											
16...	---	-----	---	--	----	3.0	-----	.230	.29	----	1.60
MAY											
19...	---	-----	105	22	1.4	----	<.100	----	---	----	1.70
19...	.47	15128	---	--	----	1.4	-----	.040	.05	----	.60
JUL											
22...	.46	31486	---	--	----	2.0	-----	.010	.01	----	.60
SEP											
23...	---	-----	70	19	.22	----	.130	----	---	1.1	1.30
23...	.47	5912	---	--	----	.16	-----	.020	.02	----	1.20

DATE	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	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)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)
OCT											
14...	----	-----	.180	.55	.100	.090	.27	--	--	--	----
JAN											
07...	5.8	25	.490	----	.110	-----	---	<1	--	--	112
07...	----	-----	.400	1.2	.100	.040	.12	2	1	1	100
MAR											
16...	----	-----	.290	.89	.080	.060	.18	--	--	--	----
MAY											
19...	3.1	13	.160	----	<.010	-----	---	2	--	--	58
19...	----	-----	.130	.40	<.010	<.010	---	2	1	1	<100
JUL											
22...	----	-----	.270	.83	.060	.050	.15	2	1	1	200
SEP											
23...	1.5	6.7	.110	----	.020	-----	---	2	--	--	61
23...	----	-----	.120	.37	.010	<.010	---	2	0	2	100

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)
OCT											
14...	---	--	--	--	---	---	--	--	--	--	--
JAN											
07...	---	42	<1	<1	35	33	<3	--	<3	<5	--
07...	40	56	--	--	---	---	1	0	1	20	10
MAR											
16...	---	--	--	--	---	---	--	--	--	--	--
MAY											
19...	---	38	<1	<1	71	72	<3	--	<3	6	--
19...	---	58	--	--	---	---	1	--	<1	10	--
JUL											
22...	100	59	--	--	---	---	1	0	1	20	10
SEP											
23...	---	53	<1	<1	102	102	<3	--	<3	<5	--
23...	40	62	--	--	---	---	2	--	<1	10	0

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT											
14...	---	--	--	--	--	--	--	-----	-----	---	---
JAN											
07...	<5	6	--	<5	15	--	<5	9254	-----	323	<50
07...	10	6	4	2	26	22	4	12000	12000	87	16
MAR											
16...	---	--	--	--	--	--	--	-----	-----	---	---
MAY											
19...	<5	<5	--	<5	47	--	6	2404	-----	11	<50
19...	<10	6	3	3	34	28	6	1800	1800	13	17
JUL											
22...	10	3	2	1	31	20	11	6700	6700	15	15
SEP											
23...	<5	<5	--	<5	<5	--	<5	687	-----	22	<50
23...	10	5	--	<1	4	--	<1	1000	980	20	8

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)
OCT											
14...	--	---	---	---	--	---	--	--	--	--	--
JAN											
07...	--	<50	506	---	22	<.1	--	--	11	--	<5
07...	--	<1	670	660	12	.5	.2	.3	16	15	1
MAR											
16...	--	---	---	---	--	---	--	--	--	--	--
MAY											
19...	--	<50	318	---	5	<.1	--	--	9	--	5
19...	15	2	210	210	3	.2	.1	.1	4	0	4
JUL											
22...	13	2	310	---	<1	.3	.2	.1	9	6	3
SEP											
23...	--	<50	269	---	<5	<.1	--	--	9	--	<5
23...	7	1	250	250	3	.1	.0	.1	4	1	3

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, TOTAL (UG/L AS V)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT											
14...	--	--	--	--	---	---	-----	-----	-----	--	-----
JAN											
07...	--	--	<3	<3	174	154	13	<5.0	<200	--	-----
07...	1	<1	<1	<1	---	---	-----	-----	60	50	9
MAR											
16...	--	--	--	--	---	---	-----	-----	-----	--	-----
MAY											
19...	--	--	5	<3	222	210	<5.0	<5.0	<200	--	<200
19...	<1	<1	<1	<1	---	---	-----	-----	50	--	<4
JUL											
22...	<1	<1	<1	<1	---	---	-----	-----	100	--	<4
SEP											
23...	--	--	<3	<3	224	225	<5.0	<5.0	<100	--	<100
23...	<1	<1	<1	1	---	---	-----	-----	170	--	<4

DATE	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
14...	-----	--	--	110	3000	98
JAN						
07...	<.01	<5	<1	---	-----	--
MAR						
16...	-----	--	--	347	76600	76
MAY						
19...	-----	<5	1	---	-----	--
19...	-----	--	--	98	4260	--
JUL						
22...	-----	--	--	448	41600	--
SEP						
23...	<.01	<5	3	---	-----	--
23...	-----	--	--	98	1670	--

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 (1.0 km) northwest of Blairsville, and 1.6 miles (2.6 km) southeast of Wadesville.

DRAINAGE AREA.--104 mi² (269 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft (112.776 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor.

AVERAGE DISCHARGE.--17 years, 112 ft³/s (3.172 m³/s), 14.62 in/yr (371 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,610 ft³/s (216 m³/s) Apr. 24, 1975, gage height, 19.72 ft (6.011 m); no flow at times most years.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	unknown	2160	61.2	16.33	4.977	Mar. 15	0500	3000	85.0	17.23	5.252
Jan. 22	unknown	4500	127	unknown		May 31	2200	2920	82.7	17.17	5.233
Jan. 31	0900	*7570	214	*18.99	5.788	Sept. 1	1900	4390	124	17.94	5.468

Minimum daily discharge, 0.09 ft³/s (0.003 m³/s) Oct. 5-7.

NOTE.--No gage-height record Nov. 17 to Jan. 8, Jan. 11 to Jan. 28, Feb. 1 to Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	1.9	140	18	1290	52	65	17	641	2.4	1.1	2470
2	.17	2.3	25	60	640	51	52	15	56	1.8	1.0	2900
3	.14	2.3	15	300	400	48	483	13	29	227	.94	534
4	.11	2.2	11	1500	150	95	97	12	21	53	.88	48
5	.09	2.2	9.4	350	100	82	72	11	16	4.0	.79	16
6	.09	2.2	8.0	145	75	62	74	10	12	2.5	1.7	8.5
7	.09	2.0	6.8	82	56	57	49	174	9.8	1.9	1.5	5.7
8	.12	1.9	6.0	58	45	44	51	70	230	10	.97	4.3
9	.12	2.1	5.4	40	38	42	69	28	151	57	20	3.3
10	.12	3.0	4.8	30	34	46	56	21	19	12	2.5	2.8
11	.12	2.9	4.4	23	31	124	46	17	9.1	17	1.9	2.4
12	.23	2.4	4.2	19	28	131	41	14	7.3	3.5	1.9	2.1
13	.27	2.1	3.8	16	26	386	37	11	6.5	2.0	1.2	2.3
14	.27	2.0	3.6	13	25	242	28	8.9	5.1	1.6	.94	406
15	.27	1.9	3.6	11	45	1990	20	7.9	4.7	1.3	.84	313
16	.27	3.1	3.7	9.9	800	441	173	7.1	384	1.2	.84	21
17	.42	12	6.0	8.8	620	180	955	6.4	26	1.1	.79	8.3
18	16	5.0	4.0	8.0	378	130	150	5.8	9.8	3.2	.75	6.4
19	10	60	3.5	7.5	311	580	94	117	6.4	33	.94	3.9
20	1.8	26	3.3	8.0	270	205	74	19	4.7	78	.97	3.0
21	.97	14	6.0	20	246	391	49	8.3	3.9	208	.88	2.3
22	.91	7.0	100	3500	156	122	40	47	3.2	216	.75	1.9
23	1.0	15	620	2000	134	95	33	13	2.8	10	52	1.7
24	.94	30	150	600	108	81	32	6.7	2.4	3.8	36	18
25	.94	10	35	100	77	70	30	5.7	2.2	2.6	4.3	150
26	3.8	18	20	70	65	62	28	6.5	2.2	4.5	1.9	22
27	22	40	200	62	64	52	23	42	2.0	3.0	698	8.5
28	8.7	13	45	60	57	47	19	12	43	2.2	48	4.9
29	3.3	8.0	28	62	----	47	18	265	36	1.7	3.8	3.2
30	2.6	25	18	1720	----	46	18	129	4.0	1.4	4.9	2.5
31	2.2	-----	14	6440	----	142	----	565	------	1.3	323	------
TOTAL	78.26	319.5	1507.5	17341.2	6269	6143	2976	1685.3	1750.1	968.0	1215.98	6976.0
MEAN	2.52	10.7	48.6	559	224	198	99.2	54.4	58.3	31.2	39.2	233
MAX	22	60	620	6440	1290	1990	955	565	641	227	698	2900
MIN	.09	1.9	3.3	7.5	25	42	18	5.7	2.0	1.1	.75	1.7
CFSM	.02	.10	.47	5.38	2.15	1.90	.95	.52	.56	.30	.38	2.24
IN.	.03	.11	.54	6.20	2.24	2.20	1.06	.60	.63	.35	.43	2.50

CAL YR 1981 TOTAL 26809.86 MEAN 73.5 MAX 4120 MIN .09 CFSM .71 IN 9.59
WTR YR 1982 TOTAL 47229.84 MEAN 129 MAX 6440 MIN .09 CFSM 1.24 IN 16.89

03378550 BIG CREEK NEAR WADESVILLE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
06...	1400	.10	28.0	76	.02	97
NOV						
17...	1715	15	10.5	78	3.2	--

04093000 DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART , IN

LOCATION.--Lat 41°32'10", long 87°15'25", in NW¼NW¼ sec.32, T.36 N., R.7 W., Lake County, Hydrologic Unit 04040001, on left bank at upstream side of bridge on Center Street in Hobart, 300 ft (91 m) upstream from Duck Creek, and 400 ft (122 m) downstream from Lake George Dam.

DRAINAGE AREA.--124 mi^2 (321 km^2).

PERIOD OF RECORD.--April 1947 to current year.

REVISED RECORDS.--WSP 1337: 1953. WSP 1507: 1956. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft (179.274 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 29, 1952, nonrecording gage, and July 30, 1952, to July 20, 1955, water-stage recorder at site 400 ft (122 m) upstream at datum 11.80 ft (3.597 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow occasionally regulated by Lake George Dam.

AVERAGE DISCHARGE.--35 years, 106 ft^3/s (3.002 m^3/s), 11.61 in/yr (295 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s (113 m^3/s) June 14, 1981 (bridge construction); maximum gage height, 19.48 ft (5.938 m), 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 discharge above base of 700 ft^3/s (19.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	1100	867	24.6	9.29	2.832	Mar. 20	1700	920	26.1	9.52	2.902
Feb. 24	0700	717	20.3	8.63	2.630	Apr. 18	0600	739	20.9	8.73	2.661
Mar. 13	2000	*2600	73.6	14.80	4.511						

Minimum daily discharge 11.0 ft^3/s (0.31 m^3/s) Aug. 23, Sep. 12, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	50	275	54	60	290	450	68	174	59	18	18
2	198	52	261	54	58	357	330	63	168	56	19	19
3	157	54	225	70	55	368	375	59	126	113	19	15
4	131	54	202	214	53	314	400	55	101	88	21	12
5	113	65	192	502	51	258	320	53	84	61	23	12
6	100	71	163	544	48	204	260	50	71	46	20	13
7	94	70	142	392	46	177	215	49	60	39	21	19
8	80	64	128	250	44	168	200	48	54	33	44	19
9	72	61	114	175	42	165	200	46	52	29	62	17
10	67	62	101	125	41	153	220	44	46	30	41	15
11	62	52	92	92	40	305	235	42	40	46	29	12
12	59	50	85	73	39	1100	325	41	36	46	22	11
13	56	48	79	64	39	2300	430	40	34	35	19	12
14	58	48	77	61	39	2000	375	37	33	30	17	12
15	62	47	74	60	41	1350	280	38	34	27	16	12
16	61	46	68	58	50	1200	240	38	35	26	15	11
17	60	46	65	54	68	1200	525	29	36	37	14	18
18	111	44	61	52	106	940	710	33	32	32	14	53
19	159	44	60	50	149	740	570	48	33	39	14	46
20	128	191	57	49	177	890	440	46	35	39	13	28
21	96	347	56	48	303	820	340	44	29	31	13	24
22	82	255	57	52	485	700	280	122	27	42	14	32
23	75	174	59	56	615	577	200	92	27	48	11	31
24	67	163	57	51	640	480	150	77	24	36	12	23
25	62	210	56	49	587	450	125	67	22	28	12	19
26	59	287	54	47	482	380	110	59	21	23	12	17
27	59	805	55	46	373	325	100	79	22	24	12	17
28	57	726	55	45	309	275	90	94	41	35	12	16
29	55	482	53	46	----	230	82	91	87	30	13	15
30	54	319	48	53	----	220	74	223	75	23	13	13
31	52	----	52	62	----	420	----	180	----	19	13	----
TOTAL	2815	4987	3123	3548	5040	19356	8651	2055	1659	1250	598	581
MEAN	90.8	166	101	114	180	624	288	66.3	55.3	40.3	19.3	19.4
MAX	269	805	275	544	640	2300	710	223	174	113	62	53
MIN	52	44	48	45	39	153	74	29	21	19	11	11
CFSM	.73	1.34	.82	.92	1.45	5.03	2.32	.54	.45	.33	.16	.16
IN.	.84	1.50	.94	1.06	1.51	5.81	2.60	.62	.50	.37	.18	.17

CAL YR 1981 TOTAL 67131 MEAN 184 MAX 3370 MIN 12 CFSM 1.48 IN 20.14
WTR YR 1982 TOTAL 53663 MEAN 147 MAX 2300 MIN 11 CFSM 1.19 IN 16.10

04093500 BURNS DITCH AT GARY, IN

LOCATION.--Lat 41°34'30", long 87°17'20", in SE¼NW¼ sec.13, T.36 N., R.8 W., Lake County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on Central Avenue, 0.4 mile (0.6 km) east of Gary, and 0.4 mile (0.6 km) downstream from confluence of Deep River and Little Calumet River.

DRAINAGE AREA.--160 mi² (414 km²). During times of floods flow may leave the basin by flowing west through Little Calumet River into the western portion of Calumet River basin; or during times of floods on Hart ditch, flow may enter the basin from western portion of the Little Calumet River basin.

PERIOD OF RECORD.--October 1943 to current year (October 1950 to September 1955, October 1973 to September 1976, and October 1978 to September 1981, high-water records only).

REVISED RECORDS.--WSP 1034: 1944. WSP 1337: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 577.04 ft (175.882 m) National Geodetic Vertical Datum of 1929. Prior to July 28, 1955, nonrecording gage at same site and datum.

REMARKS.--Records 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 ft³/s (3.965 m³/s), 11.88 in/yr (302 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft³/s (97.1 m³/s) Oct. 11, 1954; maximum gage height, 16.44 ft (5.011 m) Mar. 16, 1944, from graph based on gage readings; minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Oct. 14, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,700 ft³/s (76.5 m³/s) Mar. 13; minimum daily, 18 ft³/s (0.510 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	65	435	76	78	440	617	100	255	76	31	28
2	335	66	408	72	73	520	490	94	240	74	32	33
3	202	68	360	103	70	550	507	88	205	179	33	26
4	152	68	334	300	68	470	581	86	170	147	37	21
5	131	95	308	500	63	400	479	79	140	87	40	19
6	139	130	262	620	60	330	398	72	115	67	34	22
7	123	91	223	500	58	280	333	73	94	64	35	32
8	110	84	222	350	56	260	308	73	85	55	56	32
9	100	87	203	225	54	250	310	69	78	49	82	23
10	90	77	177	170	53	240	334	64	72	52	64	21
11	82	71	144	135	52	550	365	62	62	65	49	19
12	76	67	124	108	51	1300	453	61	57	63	41	18
13	71	61	108	90	51	2700	581	60	55	58	35	19
14	74	63	99	83	51	2300	581	60	51	52	30	20
15	78	64	101	78	52	1950	466	58	65	47	26	20
16	77	62	89	75	63	1650	394	62	65	43	23	19
17	76	61	84	70	88	1600	670	56	53	53	22	32
18	205	59	80	64	122	1580	923	50	57	54	21	81
19	257	77	76	61	200	1250	846	74	64	63	20	52
20	192	370	71	60	260	1600	661	71	52	67	20	45
21	150	486	68	62	350	1300	534	68	53	56	20	41
22	120	417	70	64	560	1150	380	180	52	67	19	52
23	100	286	72	71	850	1000	282	150	48	75	19	38
24	91	255	71	67	940	840	218	130	43	63	19	34
25	85	292	67	63	840	700	182	105	44	47	19	32
26	79	354	69	60	720	580	168	89	52	46	19	29
27	76	870	72	58	600	480	155	112	49	49	19	28
28	73	1070	70	58	460	400	132	140	58	64	19	26
29	71	827	68	59	----	329	114	133	100	47	21	25
30	69	559	64	72	----	305	108	320	105	41	21	25
31	67	----	63	90	----	525	-----	260	----	35	21	----
TOTAL	3946	7202	4662	4464	6943	27829	12570	3099	2639	2005	947	912
MEAN	127	240	150	144	248	898	419	100	88.0	64.7	30.5	30.4
MAX	395	1070	435	620	940	2700	923	320	255	179	82	81
MIN	67	59	63	58	51	240	108	50	43	35	19	18
CFSM	.79	1.50	.94	.90	1.55	5.61	2.62	.63	.55	.40	.19	.19
IN.	.92	1.67	1.08	1.04	1.61	6.47	2.92	.72	.61	.47	.22	.21

CAL YR 1981 TOTAL 90460 MEAN 248 MAX 3200 MIN 30 CFSM 1.55 IN 21.03
WTR YR 1982 TOTAL 77218 MEAN 212 MAX 2700 MIN 18 CFSM 1.33 IN 17.95

04094000 LITTLE CALUMET RIVER AT PORTER, IN

LOCATION.--Lat 41°37'18", long 87°05'13", in NE¼NE¼ sec.34, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, on right bank at downstream end of county road bridge, 200 ft (61 m) upstream from bridge on U.S. Highway 20, 0.8 mile (1.3 km) northwest of Porter, and 4.5 miles (7.2 km) upstream from Salt Creek.

DRAINAGE AREA.--66.2 mi^2 (171.5 km^2).

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

REVISED RECORDS.--WSP 1084: 1945. WSP 1337: 1946-47. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 603.48 ft (183.941 m) National Geodetic Vertical Datum of 1929. Prior to June 26, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 73.7 ft^3/s (2.087 m^3/s), 15.12 in/yr (384 mm/yr).

REMARKS.--Records good except those for period of no gage-height record, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft^3/s (88.1 m^3/s) Oct. 10, 1954, gage height, 11.66 ft (3.554 m); minimum daily, 17 ft^3/s (0.48 m^3/s) Aug. 24, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft^3/s (19.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 21	0200	788	22.3	7.73	2.356	Mar. 13	2000	*2030	57.5	*9.57	2.917
Nov. 27	1400	832	23.6	7.82	2.384	Mar. 17	0500	769	21.8	7.69	2.344

Minimum daily discharge, 31 ft^3/s (0.88 m^3/s) Sept. 5.

NOTE.--No gage-height record Jan. 11 to Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	54	118	62	79	113	237	65	228	42	45	35
2	129	56	138	62	76	158	148	63	289	41	119	36
3	92	68	104	89	73	136	209	62	141	135	97	33
4	76	63	107	232	70	117	218	60	111	125	137	32
5	68	80	115	563	67	100	135	57	90	90	134	31
6	68	76	92	293	65	91	113	56	76	61	84	34
7	66	66	84	178	63	85	114	59	68	54	69	37
8	59	62	78	137	61	79	121	62	63	49	78	35
9	56	58	71	105	60	73	131	56	59	46	68	34
10	52	55	72	95	59	77	162	54	58	64	58	35
11	51	54	67	89	59	206	167	54	54	119	53	35
12	51	54	65	81	58	571	202	55	52	80	50	35
13	50	55	62	75	58	1500	184	53	50	60	48	36
14	52	52	62	71	58	1380	131	52	47	54	45	36
15	62	50	61	68	66	646	106	49	50	50	43	41
16	60	50	56	66	76	549	121	51	52	48	42	40
17	59	50	54	65	86	675	291	53	49	51	41	44
18	140	48	54	63	104	371	267	52	47	48	40	88
19	166	49	52	62	105	287	146	91	52	54	39	55
20	97	304	50	62	111	552	114	83	50	51	38	46
21	76	642	53	61	172	454	96	67	45	46	37	45
22	67	297	58	62	178	271	85	241	45	50	37	63
23	62	164	61	66	172	206	79	299	43	48	36	57
24	59	126	59	71	190	171	76	136	42	44	39	48
25	58	148	56	69	187	147	72	95	40	42	39	48
26	58	181	58	66	133	126	71	78	40	41	36	51
27	59	646	59	64	112	111	69	115	41	59	35	47
28	57	391	59	63	109	103	66	196	52	103	35	45
29	56	191	58	63	----	97	65	162	51	63	34	42
30	54	122	58	70	----	107	65	245	46	52	34	41
31	54	----	59	78	----	345	----	250	----	48	34	----
TOTAL	2370	4312	2200	3251	2707	9904	4061	3071	2131	1918	1724	1285
MEAN	76.5	144	71.0	105	96.7	319	135	99.1	71.0	61.9	55.6	42.8
MAX	256	646	138	563	190	1500	291	299	289	135	137	88
MIN	50	48	50	61	58	73	65	49	40	41	34	31
CFSM	1.16	2.18	1.07	1.59	1.46	4.82	2.04	1.50	1.07	.94	.84	.65
IN.	1.33	2.42	1.24	1.83	1.52	5.57	2.28	1.73	1.20	1.08	.97	.72

CAL YR 1981 TOTAL 40538 MEAN 111 MAX 2010 MIN 36 CFSM 1.68 IN 22.78
WTR YR 1982 TOTAL 38934 MEAN 107 MAX 1500 MIN 31 CFSM 1.62 IN 21.88

04094500 SALT CREEK NEAR McCOOL, IN

LOCATION.--Lat 41°35'48", long 87°08'40", in SE¼SE¼ sec.6, T.36 N., R.6 W., Porter County, Hydrologic Unit 04040001, on left bank on downstream side of highway bridge, 50 ft (15 m) downstream from New York Central Railroad bridge, 1.2 miles (1.9 km) north of McCool, and 1.5 miles (2.4 km) upstream from Little Calumet River.

DRAINAGE AREA.--74.6 mi^2 (193.2 km^2).

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

REVISED RECORDS.--WSP 1337: 1946-48(M), 1950(M). WSP 1911: 1958. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 594.10 ft (181.082 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 25, 1955, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--37 years, 73.6 ft^3/s (2.084 m^3/s), 13.40 in/yr (340 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,180 ft^3/s (90.1 m^3/s) Oct. 11, 1954, gage height, 14.12 ft (4.304 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft^3/s (17.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 27	1500	664	18.8	5.93	1.807	Mar. 14	0400	ice jam		*9.52	2.902
Mar. 13	unknown	*1200	34.0	unknown		Mar. 17	0500	729	20.6	6.25	1.905

Minimum daily discharge, 34 ft^3/s (0.963 m^3/s) Sept. 5, 6, 13-16.

NOTE.--No gage-height record June 25 to Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	58	110	64	76	130	207	62	237	47	46	39
2	109	60	124	64	75	194	144	61	217	45	67	39
3	93	70	91	94	73	138	223	60	177	112	51	37
4	80	60	106	297	72	113	200	60	135	100	56	35
5	75	82	99	433	71	103	139	59	107	75	43	34
6	72	73	80	367	69	98	127	58	91	65	43	34
7	70	68	75	193	68	94	129	60	80	58	43	35
8	68	65	72	120	66	91	132	62	74	52	57	36
9	65	63	69	108	65	90	136	59	69	50	58	36
10	64	62	67	100	65	93	161	57	63	68	53	36
11	63	61	66	94	64	298	170	56	60	94	46	35
12	63	59	65	86	64	655	191	55	57	79	43	35
13	62	58	64	82	64	1050	215	54	49	69	42	34
14	62	57	64	80	63	1020	159	53	48	62	40	34
15	68	57	64	78	70	680	129	52	50	56	39	34
16	65	56	61	76	88	599	129	57	52	53	38	34
17	65	55	60	77	107	653	281	73	49	52	38	37
18	193	56	60	77	135	431	331	77	49	52	38	56
19	117	56	59	77	130	329	212	172	54	57	38	41
20	78	266	59	78	144	398	135	121	51	53	39	37
21	72	390	60	79	248	388	98	101	48	50	39	36
22	69	270	63	79	249	284	84	227	48	53	37	39
23	66	124	64	76	245	227	75	168	47	51	36	41
24	64	126	62	75	261	188	72	127	46	49	37	37
25	64	179	60	74	240	149	68	110	46	47	37	37
26	62	239	60	74	176	130	68	107	45	46	37	37
27	63	564	62	75	138	120	67	135	47	50	37	37
28	62	365	61	76	124	115	64	144	52	81	39	36
29	61	179	59	77	----	113	62	130	51	62	38	36
30	59	104	57	84	----	130	62	239	49	54	37	35
31	58	----	62	94	----	311	----	190	----	49	38	----
TOTAL	2443	3982	2185	3508	3310	9412	4270	3046	2248	1891	1330	1109
MEAN	78.8	133	70.5	113	118	304	142	98.3	74.9	61.0	42.9	37.0
MAX	211	564	124	433	261	1050	331	239	237	112	67	56
MIN	58	55	57	64	63	90	62	52	45	45	36	34
CFSM	1.06	1.78	.95	1.52	1.58	4.08	1.90	1.32	1.00	.82	.58	.50
IN.	1.22	1.99	1.09	1.75	1.65	4.69	2.13	1.52	1.12	.94	.66	.55

CAL YR 1981 TOTAL 42176 MEAN 116 MAX 2250 MIN 35 CFSM 1.56 IN 21.03
WTR YR 1982 TOTAL 38734 MEAN 106 MAX 1050 MIN 34 CFSM 1.42 IN 19.31

04095050 DUNES CREEK AT PORTER, IN

LOCATION.--Lat 41°39'12", long 87°03'46", in NE¼SW¼ sec.13, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, on right bank 20 ft (6 m) upstream of culvert on State Highway 49, 200 ft (61 m) south of entrance to Indiana Dunes State Park, 800 ft (244 m) north of North Road, 0.7 mile (1.1 km) north of U.S. Highway 12, and 1.0 mile (1.6 km) north of Porter.

DRAINAGE AREA.--3.40 mi^2 (8.81 km^2).

PERIOD OF RECORD.--October 1978 to January 1982 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 585.00 ft (178.308 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100 ft^3/s (2.83 m^3/s), June 13, 1981, gage height, 6.06 ft (1.847 m); maximum gage height, 6.63 ft (2.021 m) Mar. 4, 1979, (backwater from ice); no flow at times during 1979, 1980.

EXTREMES FOR CURRENT PERIOD (October to January 1982).--Maximum discharge, 46 ft^3/s (1.30 m^3/s), Nov. 20, gage height, 4.76 ft (1.451 m); minimum daily, 0.50 ft^3/s (0.014 m^3/s) Dec. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	1.8	8.4	.60								
2	3.2	3.2	9.8	1.0								
3	2.5	4.3	7.4	14								
4	1.9	3.9	8.6	27								
5	1.8	6.2	7.2	19								
6	2.4	5.3	5.7	12								
7	2.0	4.0	5.1	7.7								
8	1.7	3.2	4.5	4.3								
9	1.4	2.6	4.0	3.3								
10	1.2	2.1	3.8	3.1								
11	1.1	1.8	3.6	3.1								
12	.92	1.6	3.5	3.0								
13	.86	1.5	3.4	3.1								
14	1.2	1.4	3.5	3.0								
15	2.6	1.4	3.4	2.9								
16	2.7	1.4	2.7	2.9								
17	3.4	1.4	2.3	2.8								
18	12	1.3	2.1	2.8								
19	9.2	1.5	2.0	2.8								
20	6.4	32	2.2	2.6								
21	4.7	18	2.6	2.5								
22	3.4	11	3.1	2.4								
23	2.7	6.6	2.8	2.3								
24	2.2	8.4	2.4	2.2								
25	2.1	8.6	2.1	2.2								
26	2.0	14	1.8	2.2								
27	2.2	21	1.2	2.5								
28	2.1	12	1.1	2.9								
29	2.0	8.0	1.0	3.4								
30	1.9	5.8	.70	3.9								
31	1.9	-----	.50	3.2								
TOTAL	89.48	195.3	112.50	150.70								
MEAN	2.89	6.51	3.63	4.86								
MAX	12	32	9.8	27								
MIN	.86	1.3	.50	.60								
CFSM	.85	1.92	1.07	1.43								
IN.	.98	2.14	1.23	1.65								

CAL YR 1981 TOTAL 1377.98 MEAN 3.78 MAX 55 MIN .03 CFSM 1.11 IN 15.07

04095300 TRAIL CREEK AT MICHIGAN CITY, IN

LOCATION.--Lat 41°43'00", long 86°51'35", in SW¼NE¼ sec.27, T.38 N., R.4 W., LaPorte County, Hydrologic Unit 04040001, on left downstream wingwall of bridge on Springland Avenue in Michigan City, 1.0 mile (1.6 km) upstream from Otter Creek, and 4.2 miles (6.8 km) upstream from mouth.

DRAINAGE AREA.--54.1 mi² (140.1 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 584.02 ft (178.009 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--13 years, 71.3 ft³/s (2.019 m³/s), 17.90 in/yr (455 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s (53.2 m³/s) Mar. 4, 1979, gage height, 11.40 ft (3.475 m); minimum daily, 20 ft³/s (0.57 m³/s) Aug. 1, 1977.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 20	1600	812	23.0	8.75	2.667	Mar. 13	1000	*1350	38.2	*10.54	3.213
Nov. 27	0600	706	20.0	8.04	2.451	Mar. 16	1700	569	16.1	6.99	2.131
Jan. 4	1600	540	15.3	6.79	2.070	Mar. 20	1500	1070	30.3	9.89	3.014

Minimum daily discharge, 31 ft³/s (0.88 m³/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	52	127	73	64	100	160	62	200	37	42	35
2	74	58	122	72	63	122	112	60	230	36	95	36
3	67	62	98	113	61	97	221	58	110	108	78	34
4	63	58	133	407	60	86	142	56	90	86	111	32
5	60	67	125	301	59	82	110	56	76	70	93	31
6	72	62	98	152	58	80	102	57	68	60	82	33
7	59	57	89	105	57	69	110	72	63	53	62	35
8	57	56	84	72	56	64	118	71	60	47	68	33
9	53	54	78	69	55	66	129	65	57	44	61	33
10	51	53	76	67	54	72	152	64	55	65	54	32
11	50	53	75	66	53	207	162	62	52	94	50	32
12	50	52	72	65	53	434	193	55	51	62	46	32
13	50	51	72	65	52	1110	172	53	50	51	43	33
14	54	51	74	65	52	800	116	52	48	46	41	34
15	60	51	72	64	64	386	95	51	50	45	40	36
16	55	51	67	64	75	463	121	52	48	44	39	39
17	57	51	66	63	86	361	253	54	46	47	39	50
18	139	51	65	63	100	220	141	52	43	45	38	70
19	100	58	65	63	103	256	102	75	40	51	37	52
20	72	601	67	63	117	823	92	65	48	47	36	45
21	66	372	68	63	158	350	80	60	48	44	36	43
22	60	152	70	64	156	192	76	190	47	47	36	50
23	58	106	73	63	165	144	73	235	46	44	35	47
24	56	120	70	63	170	122	72	110	45	41	39	45
25	57	123	66	62	133	111	70	85	44	39	36	43
26	56	213	66	62	106	107	69	75	43	38	35	45
27	56	511	64	63	103	100	64	110	42	60	34	42
28	55	192	63	64	93	93	64	155	48	81	34	39
29	53	125	62	65	----	93	62	128	52	60	33	38
30	53	100	61	70	----	133	62	190	45	48	33	37
31	53	----	66	76	----	376	----	180	----	44	33	----
TOTAL	1963	3663	2454	2787	2426	7719	3495	2710	1954	1684	1539	1186
MEAN	63.3	122	79.2	89.9	86.6	249	117	87.4	65.1	54.3	49.6	39.5
MAX	139	601	133	407	170	1110	253	235	230	108	111	70
MIN	50	51	61	62	52	64	62	51	42	36	33	31
CFSM	1.17	2.26	1.46	1.66	1.60	4.60	2.16	1.62	1.20	1.00	.92	.73
IN.	1.35	2.52	1.69	1.92	1.67	5.31	2.40	1.86	1.34	1.16	1.06	.82

CAL YR 1981	TOTAL	33901	MEAN 92.9	MAX 953	MIN 31	CFSM 1.72	IN 23.31	
WTR YR 1982	TOTAL	33580	MEAN 92.0	MAX 1110	MIN 31	CFSM 1.70	IN 23.09	

04096100 GALENA RIVER NEAR LAPORTE, IN

LOCATION.--Lat 41°44'54", long 86°40'30", in SE¼NW¼ sec.17, T.38 N., R.2 W., LaPorte County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on County Road 125 East, 1.3 miles (2.1 km) upstream from Indiana-Michigan State line, and 9.8 miles (15.8 km) north of Courthouse in LaPorte.

DRAINAGE AREA.--17.2 mi² (44.5 km²) of which 2.30 mi² (5.96 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WDR IN-80-1: 1970, 1972, 1973: 1970-1976, 1978 (P).

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft (190.500 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--13 years, 25.2 ft³/s (0.714 m³/s), 19.90 in./yr (505 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft³/s (18.4 m³/s) Mar. 7, 1979, gage height, 7.02 ft (2.140 m); minimum daily, 6.7 ft³/s (0.19 m³/s) Sept. 13, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 20	2100	122	3.46	4.61	1.405	Mar. 16	2100	158	4.47	4.91	1.497
Nov. 27	0700	147	4.16	4.97	1.515	Mar. 20	1200	222	6.29	5.56	1.695
Jan. 4	1700	124	3.51	4.73	1.442	Mar. 31	0500	120	3.40	4.38	1.335
Mar. 12	0200	119	3.37	4.44	1.353	June 1	1000	139	3.94	4.69	1.430
Mar. 13	0700	*560	15.9	*6.87	2.094						

Minimum daily discharge, 10 ft³/s (0.28 m³/s) Aug. 17, 18, 22-24, 29-31, Sept. 4, 5, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	35	18	21	34	50	22	105	15	11	12
2	25	22	34	18	20	36	41	21	49	14	29	12
3	22	24	29	24	19	32	64	21	38	42	20	11
4	20	21	37	90	18	32	47	20	33	31	29	10
5	19	21	35	64	18	29	40	20	28	23	24	10
6	21	21	29	37	18	27	41	19	25	18	18	11
7	19	20	28	30	18	24	42	23	23	17	16	14
8	19	20	27	26	17	22	43	23	21	15	28	13
9	19	19	26	23	17	21	46	20	20	14	17	11
10	17	18	25	22	17	23	51	19	20	25	14	11
11	16	18	24	22	17	68	51	18	18	49	14	10
12	16	18	23	21	18	106	57	17	20	26	13	11
13	16	18	23	21	18	336	51	17	18	20	12	11
14	21	18	23	21	18	164	41	17	16	18	11	11
15	22	18	23	21	18	96	37	16	18	17	11	12
16	20	18	22	21	19	116	39	16	19	16	11	12
17	20	18	21	21	22	110	57	17	17	16	10	20
18	48	18	20	20	28	82	44	17	17	15	10	47
19	38	18	20	20	32	71	37	47	23	17	11	25
20	30	87	20	20	35	163	34	42	20	16	11	17
21	26	87	21	20	42	92	30	32	17	14	11	25
22	24	46	22	20	39	62	28	57	17	16	10	45
23	23	34	21	20	42	51	26	39	16	16	10	23
24	23	35	21	20	45	46	26	31	16	14	10	21
25	22	34	20	20	40	43	25	27	15	12	12	20
26	22	46	20	20	37	40	25	26	15	12	11	19
27	22	110	19	20	34	39	24	40	15	13	11	20
28	21	51	19	21	31	36	23	40	15	14	11	18
29	21	36	19	22	----	35	24	30	17	13	10	16
30	22	30	18	23	----	46	22	29	16	12	10	15
31	20	----	17	22	----	92	----	29	----	11	10	----
TOTAL	703	964	741	788	718	2174	1166	812	707	571	436	513
MEAN	22.7	32.1	23.9	25.4	25.6	70.1	38.9	26.2	23.6	18.4	14.1	17.1
MAX	48	110	37	90	45	336	64	57	105	49	29	47
MIN	16	18	17	18	17	21	22	16	15	11	10	10
CFSM	1.32	1.87	1.39	1.48	1.49	4.08	2.26	1.52	1.37	1.07	.82	.99
IN.	1.52	2.08	1.60	1.70	1.55	4.70	2.52	1.76	1.53	1.23	.94	1.11

CAL YR 1981 TOTAL 10273 MEAN 28.1 MAX 266 MIN 12 CFSM 1.63 IN 22.22
WTR YR 1982 TOTAL 10293 MEAN 28.2 MAX 336 MIN 10 CFSM 1.64 IN 22.26

04097970 LIME LAKE OUTLET AT PANAMA, IN

LOCATION.--Lat 41°42'46", long 85°07'10", in NW¼NW¼ sec.35, T.38 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on right bank 10 ft (3 m) downstream from dam for Lime Lake, 30 ft (9 m) upstream from bridge on Orland Road, and 0.7 mile (1.1 km) northwest of Panama.

DRAINAGE AREA.--17.5 mi^2 (45.3 km^2), of which 3.68 mi^2 (9.53 km^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 (289.560 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional regulation by control structure for Lime Lake.

AVERAGE DISCHARGE.--13 years, 7.44 ft^3/s (0.211 m^3/s), 5.77 in/yr (146 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46 ft^3/s (1.30 m^3/s) Apr. 3, 1982, gage height, 4.85 ft (1.478 m); no flow at times during 1971 and 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft^3/s (1.30 m^3/s) Apr. 3, gage height, 4.85 ft (1.478 m); minimum daily, 0.22 ft^3/s (0.006 m^3/s) Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.3	6.0	13	12	11	43	22	17	24	2.5	1.3
2	11	7.3	5.7	12	12	11	42	21	18	14	3.8	1.2
3	10	7.3	5.5	12	12	12	44	20	20	7.2	4.2	1.1
4	10	7.3	5.8	13	12	12	43	20	29	8.4	3.9	1.1
5	10	7.1	6.0	13	12	13	43	19	27	9.1	3.7	1.0
6	10	6.5	6.0	13	12	12	43	18	25	9.5	3.4	.99
7	10	6.2	5.8	13	12	12	42	17	24	8.8	3.2	.97
8	6.0	6.2	5.5	13	12	12	41	17	22	7.5	4.5	.99
9	.22	5.8	5.3	12	12	12	41	15	21	6.6	4.2	1.0
10	.29	5.8	5.3	12	12	12	40	14	20	6.9	3.6	1.0
11	.38	5.7	5.7	12	12	13	39	14	13	7.6	3.3	1.1
12	.49	5.5	5.7	12	12	13	39	13	6.9	6.7	3.0	1.1
13	.61	5.3	14	12	12	14	37	12	7.2	6.2	2.8	1.2
14	.80	5.3	18	12	13	15	36	12	7.6	6.9	2.8	1.1
15	1.0	5.3	16	12	13	16	35	7.4	8.6	7.1	2.7	1.1
16	1.2	5.2	15	12	12	18	35	.35	19	6.8	2.6	1.0
17	1.9	5.2	15	12	12	20	38	.50	24	10	2.4	1.1
18	2.7	5.0	14	12	12	23	37	.64	12	9.6	2.2	1.5
19	2.9	5.3	14	12	12	25	37	.75	7.7	9.1	2.1	1.4
20	3.4	5.7	13	12	12	31	36	.84	9.2	8.5	1.9	1.3
21	3.5	5.8	13	12	12	33	34	1.1	10	7.9	1.7	1.2
22	4.2	5.7	13	12	12	35	33	1.8	15	7.1	1.7	1.3
23	4.7	5.5	14	12	12	37	31	2.8	27	6.5	1.6	1.4
24	5.2	5.7	13	12	12	39	30	3.0	24	5.8	1.6	1.4
25	5.2	5.8	13	12	12	40	29	3.4	12	5.4	1.5	1.5
26	5.2	6.0	13	12	12	41	28	3.9	5.3	5.1	1.5	1.5
27	6.0	5.8	13	12	12	41	27	5.3	6.0	4.8	1.4	3.3
28	6.9	5.7	13	12	11	41	26	7.5	7.9	4.1	1.3	3.9
29	7.1	5.7	13	12	----	41	24	9.8	26	3.7	1.3	3.8
30	7.1	5.7	13	12	----	42	23	12	27	3.2	1.2	3.6
31	7.3	-----	13	12	----	43	----	14	-----	2.8	1.2	-----
TOTAL	156.29	177.7	331.3	378	337	740	1076	309.08	498.4	236.9	78.8	45.45
MEAN	5.04	5.92	10.7	12.2	12.0	23.9	35.9	9.97	16.6	7.64	2.54	1.52
MAX	11	7.3	18	13	13	43	44	22	29	24	4.5	3.9
MIN	.22	5.0	5.3	12	11	11	23	.35	5.3	2.8	1.2	.97
CFSM	.29	.34	.61	.70	.69	1.37	2.05	.57	.95	.44	.15	.09
IN.	.33	.38	.70	.80	.72	1.57	2.29	.66	1.06	.50	.17	.10

CAL YR 1981 TOTAL 4367.39 MEAN 12.0 MAX 37 MIN .22 CFSM .69 IN 9.28
WTR YR 1982 TOTAL 4364.92 MEAN 12.0 MAX 44 MIN .22 CFSM .69 IN 9.28

04099510 PIGEON CREEK NEAR ANGOLA, IN

LOCATION.--Lat 41°38'04", long 85°06'35", in NW¼SE¼ sec.26, T.37 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on left bank 5 ft (2 m) upstream from bridge on U.S. Highway 20, 1.3 miles (2.1 km) downstream from outlet of Hogback Lake, 1.3 miles (2.1 km) southeast of Flint, and 5.8 miles (9.3 km) west of Angola.

DRAINAGE AREA.--106 mi^2 (275 km^2), of which 22.5 mi^2 (58.3 km^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 (286.512 m) National Geodetic Vertical Datum of 1929. Prior to October 1947, nonrecording gage at site 0.3 mile (0.5 km) downstream at different datum. October 1947 to Aug. 3, 1953, nonrecording gage at site 1.2 miles (1.9 km) upstream at same datum. Aug. 4, 1953, to Apr. 3, 1974, recording gage at site 1.3 miles (2.1 km) upstream at same datum. Apr. 18, 1974, to Sept. 2, 1974, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--37 years, 77.9 ft^3/s (2.206 m^3/s), 9.98 in/yr (253 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 795 ft^3/s (22.5 m^3/s) Mar. 22, 1982, gage height, 13.90 ft (4.237 m); minimum daily, 3.4 ft^3/s (0.096 m^3/s) Oct. 25-27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 795 ft^3/s (22.5 m^3/s) Mar. 22, gage height, 13.90 ft (4.237 m); minimum daily, 25 ft^3/s (0.71 m^3/s) Sept. 13-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	102	105	55	73	109	544	161	188	103	45	28
2	149	99	101	55	76	109	514	151	206	110	46	28
3	157	96	96	56	81	106	487	144	209	118	47	27
4	152	92	94	61	85	105	462	138	204	125	46	27
5	140	91	91	76	87	101	443	129	195	126	46	26
6	130	85	91	106	87	98	421	120	180	121	45	26
7	117	83	88	139	84	95	398	119	165	112	44	26
8	106	80	87	154	81	91	375	120	149	103	44	26
9	99	76	83	156	80	88	355	119	136	94	44	26
10	92	74	80	147	78	85	339	117	127	91	44	26
11	85	73	76	136	75	87	326	112	122	96	43	26
12	81	73	74	121	73	118	318	108	114	97	42	26
13	76	71	71	112	71	208	317	103	105	95	41	25
14	73	69	69	104	70	356	320	98	97	91	40	25
15	70	69	67	96	69	470	322	95	94	88	39	25
16	67	68	65	91	68	552	312	94	92	85	38	25
17	66	67	63	84	70	650	317	92	92	85	37	25
18	65	67	61	78	71	705	321	90	90	83	36	27
19	65	67	60	74	75	732	317	89	91	79	35	28
20	63	69	59	71	78	766	308	87	91	76	34	26
21	62	76	58	69	80	789	293	85	91	73	32	26
22	63	87	58	68	87	794	278	85	92	70	32	26
23	65	99	58	67	94	794	261	88	92	67	32	26
24	67	109	57	65	104	786	245	92	91	64	31	26
25	69	112	56	65	112	770	231	95	90	61	31	27
26	70	112	56	63	117	747	218	96	87	58	31	28
27	73	112	57	62	115	716	205	99	84	56	31	32
28	80	108	57	61	114	684	193	119	82	54	30	37
29	88	108	56	60	----	647	180	148	85	52	29	39
30	96	106	55	63	----	611	169	167	92	50	29	38
31	101	----	55	68	----	579	----	174	----	48	28	----
TOTAL	2810	2600	2204	2683	2355	13548	9789	3534	3633	2631	1172	829
MEAN	90.6	86.7	71.1	86.5	84.1	437	326	114	121	84.9	37.8	27.6
MAX	157	112	105	156	117	794	544	174	209	126	47	39
MIN	62	67	55	55	68	85	169	85	82	48	28	25
CFSM	.86	.82	.67	.82	.79	4.12	3.08	1.08	1.14	.80	.36	.26
IN.	.99	.91	.77	.94	.83	4.75	3.44	1.24	1.27	.92	.41	.29

CAL YR 1981 TOTAL 46231 MEAN 127 MAX 423 MIN 34 CFSM 1.20 IN 16.22
WTR YR 1982 TOTAL 47788 MEAN 131 MAX 794 MIN 25 CFSM 1.24 IN 16.77

04099750 PIGEON RIVER NEAR SCOTT, IN

LOCATION.--Lat 41°44'56", long 85°34'35", in SE¼NW¼ sec.14, T.38 N., R.8 E., Lagrange County, Hydrologic Unit 04050001, on right bank 20 ft (6 m) downstream from bridge on County Road 750 North, 1,200 ft (366 m) downstream from Page ditch, 0.7 mile (1.1 km) south of Indiana-Michigan State line, and 1.2 miles (1.9 km) northwest of Scott.

DRAINAGE AREA.--361 mi^2 (935 km^2), of which 53.9 mi^2 (139.6 km^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 (248.412 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except period of no gage-height record, which is poor.

AVERAGE DISCHARGE.--14 years, 358 ft^3/s (10.14 m^3/s), 13.47 in/yr (342 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft^3/s (67.1 m^3/s) Mar. 21, 1982, gage height, 7.85 ft (2.393 m); minimum daily, 42 ft^3/s (1.19 m^3/s) Oct. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,370 ft^3/s (67.1 m^3/s) Mar. 21, gage height, 7.85 ft (2.393 m); minimum daily, 158 ft^3/s (4.47 m^3/s) Sept. 12, 16.

NOTE.--No gage-height record Jan. 6 to Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	735	394	397	285	390	610	1650	635	675	354	224	186
2	787	394	397	293	410	600	1550	610	787	342	241	189
3	668	394	394	296	440	580	1480	589	812	437	286	175
4	606	391	397	367	460	570	1420	564	741	489	264	168
5	582	388	406	452	480	560	1360	547	712	450	249	163
6	564	388	397	560	490	540	1280	540	678	420	242	163
7	554	379	382	700	480	530	1220	537	641	400	235	171
8	520	370	376	820	470	510	1180	551	604	379	285	173
9	491	356	367	840	450	490	1140	554	560	354	295	168
10	468	348	353	820	440	480	1110	537	544	351	261	163
11	446	339	342	730	430	480	1090	510	526	459	245	160
12	427	334	331	670	420	600	1070	485	492	475	238	158
13	415	328	328	600	420	900	1060	475	463	427	230	169
14	400	323	328	560	410	1200	1060	465	436	405	223	163
15	394	317	325	520	410	1600	980	455	431	420	218	160
16	385	312	317	480	410	1900	992	445	428	420	208	158
17	376	306	309	460	410	2150	1030	440	420	407	200	160
18	385	306	304	430	410	2220	1100	430	405	448	195	194
19	403	304	290	400	420	2190	1090	425	419	422	189	193
20	394	356	280	390	440	2250	1040	415	469	403	189	176
21	373	427	300	380	460	2340	1010	410	452	365	195	170
22	362	412	312	370	490	2330	973	430	449	341	194	174
23	359	382	315	360	540	2240	925	495	421	331	196	178
24	365	373	342	360	580	2160	875	496	396	313	196	179
25	359	376	334	350	620	2100	831	452	384	295	199	191
26	353	382	304	340	640	2020	792	437	372	283	198	189
27	359	415	296	330	630	1940	747	475	362	269	198	216
28	394	427	301	330	620	1840	698	575	364	267	225	243
29	412	412	296	320	-----	1760	675	605	363	253	189	229
30	403	400	290	340	-----	1700	657	565	361	239	184	212
31	394	-----	288	370	-----	1680	-----	563	-----	223	180	----
TOTAL	14133	11033	10398	14523	13270	43070	32085	15712	15167	11441	6871	5391
MEAN	456	368	335	468	474	1389	1070	507	506	369	222	180
MAX	787	427	406	840	640	2340	1650	635	812	489	295	243
MIN	353	304	280	285	390	480	657	410	361	223	180	158
CFSM	1.26	1.02	.93	1.30	1.31	3.85	2.96	1.40	1.40	1.02	.62	.50
IN.	1.46	1.14	1.07	1.50	1.37	4.44	3.31	1.62	1.56	1.18	.71	.56

CAL YR 1981 TOTAL 193863 MEAN 531 MAX 1920 MIN 211 CFSM 1.47 IN 19.98
WTR YR 1982 TOTAL 193094 MEAN 529 MAX 2340 MIN 158 CFSM 1.47 IN 19.90

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 (4.6 m) downstream from bridge on County Road 16, 0.1 mile (0.2 km) east of Middlebury, and 1.7 mi (2.7 km) downstream from Rowe Eden ditch.

DRAINAGE AREA.--97.6 mi² (252.8 km²), of which 5.89 mi² (15.26 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft (246.888 m) National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft³/s (47.9 m³/s), July 26, 1981, gage height 9.58 ft (2.920 m); minimum daily, 34 ft³/s (0.962 m³/s) Aug. 7, Nov. 26, 1980.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 14	1900	1470	41.6	9.27	2.825
Mar. 17	0100	*1560	44.2	*9.40	2.865

Minimum daily discharge, 42 ft³/s (1.19 m³/s) Sep. 12, 13.

REVISIONS.--Revised maximum discharges for water years 1980-81 and revised daily discharges, in cubic feet per second, for high-water periods in these years, are given below. These figures supersede those published in the reports for 1980-81.

Water Year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
1980	Dec. 24, 1979	1830	425	12.0	6.76	2.060
	Feb. 22, 1980	1600	335	9.49	6.33	1.929
	Mar. 17, 1980	1645	345	9.77	6.39	1.948
	Apr. 4, 1980	0530	*652	18.5	*7.57	2.307
1980	Apr. 9, 1980	0215	399	11.3	6.65	2.027
1981	June 14, 1981	0500	1490	42.2	9.29	2.832
	July 26, 1981	1645	*1690	47.9	*9.58	2.920

Dec. 1, 1979	88	Mar. 9, 1980	91	Mar. 31, 1980	152	Apr. 22, 1980	113
2	81	10	151	Apr. 1	140	23	108
6	88	11	152	2	139	24	104
7	85	12	105	3	160	25	98
8	88	13	91	4	460	26	97
23	94	14	82	5	260	27	94
24	244	15	88	6	196	28	96
25	343	16	116	7	170	29	93
26	216	17	260	8	187	30	89
27	166	18	216	9	313	June 9, 1981	365
28	140	19	168	10	237	10	462
29	124	20	150	11	198	13	462
30	114	21	193	12	185	14	1,260
31	106	22	162	13	164	15	718
Feb. 22, 1980	253	23	137	14	199	16	452
23	216	24	158	15	242	17	324
24	151	25	199	16	188	July 26	973
25	119	26	162	17	159	27	624
26	99	27	159	18	144	28	835
27	91	28	159	19	134	29	600
28	86	29	168	20	125	30	371
29	79	30	146	21	119		

Month	Ft³/s-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
December 1979	3233	343	60	104	1.07	1.23
February 1980	2182	253	48	75.2	.77	.83
March 1980	4029	260	65	130	1.33	1.54
April 1980	5011	460	89	167	1.71	1.91
Water year 1980	29998	460	34	82.0	.84	11.43
Calendar year 1980	28225	460	34	77.1	.79	10.75
June 1981	8038	1260	88	268	2.75	3.06
July 1981	5864	973	66	189	1.94	2.24
Water year 1981	42443	1260	34	116	1.19	16.18

04099808 LITTLE ELKHART RIVER AT MIDDLEBURY, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	76	102	73	71	99	248	130	253	84	50	48
2	146	75	98	73	70	104	222	126	168	79	64	48
3	123	77	94	83	70	93	237	124	138	136	62	47
4	113	77	99	200	69	96	222	121	128	126	61	46
5	106	76	101	212	68	97	212	119	120	98	59	45
6	106	76	96	187	68	92	198	117	113	88	57	46
7	101	74	94	152	77	89	196	123	107	83	58	47
8	97	73	90	120	82	84	193	122	104	78	80	46
9	93	72	87	102	77	82	195	116	102	75	65	44
10	90	70	83	91	86	83	207	112	100	76	61	43
11	87	70	80	82	76	145	211	109	97	84	59	43
12	85	69	79	72	78	309	247	106	95	78	57	42
13	82	68	78	68	77	1210	303	104	93	73	55	42
14	82	67	77	65	77	1410	230	102	90	72	53	43
15	82	66	76	64	80	1010	198	100	94	70	53	43
16	80	66	74	63	83	1000	193	102	93	68	52	43
17	82	65	73	62	89	1140	308	101	90	70	50	45
18	94	64	71	62	96	667	244	98	88	66	49	55
19	91	66	70	70	99	531	208	100	99	66	48	47
20	86	94	69	84	100	678	197	96	97	63	52	45
21	82	97	70	83	116	524	180	96	96	61	50	45
22	81	92	72	81	122	425	169	109	94	61	50	45
23	80	87	74	88	123	365	162	115	90	59	50	44
24	79	85	70	83	135	335	157	104	87	59	48	44
25	78	84	69	78	127	312	152	100	85	57	53	45
26	76	98	69	76	116	286	148	100	84	57	49	44
27	80	179	72	83	108	256	143	134	83	57	49	49
28	82	130	71	83	102	238	138	182	88	58	49	48
29	80	113	69	82	----	228	134	140	160	54	49	45
30	78	104	68	99	----	232	132	126	102	54	48	44
31	76	----	70	97	----	306	----	118	----	53	48	----
TOTAL	2887	2510	2465	2918	2542	12526	5984	3552	3238	2263	1688	1361
MEAN	93.1	83.7	79.5	94.1	90.8	404	199	115	108	73.0	54.5	45.4
MAX	189	179	102	212	135	1410	308	182	253	136	80	55
MIN	76	64	68	62	68	82	132	96	83	53	48	42
CFSM	.95	.86	.82	.96	.93	4.14	2.04	1.18	1.11	.75	.56	.47
IN.	1.10	.96	.94	1.11	.97	4.77	2.28	1.35	1.23	.86	.64	.52

CAL YR 1981 TOTAL 45048 MEAN 123 MAX 1260 MIN 41 CFSM 1.26 IN 17.17
WTR YR 1982 TOTAL 43934 MEAN 120 MAX 1410 MIN 42 CFSM 1.23 IN 16.75

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 (15.2 m) upstream from bridge on County Road 14, 0.3 mile (.48 km) east of the intersection of County Roads 17 and 14, and 3.1 miles (5.0 km) east of Elkhart.

DRAINAGE AREA.--31.0 mi² (80.3 km²), of which 8.75 mi² (22.7 km²) does not contribute directly to surface runoff (corrected).

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water stage recorder. Datum of gage 755.00 ft (230.12 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 509 ft³/s (14.4 m³/s) March 14, 1982, gage height 7.18 ft (2.188 m); maximum gage height 9.74 ft (2.969 m) July 26, 1981; minimum daily discharge, 3.8 ft³/s (0.108 m³/s) July 26, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 170 ft³/s (4.81 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 14	0045	*509	14.41	*7.18	2.188
Mar. 17	0330	381	10.79	6.55	1.996

Minimum daily discharge, 11 ft³/s (0.312 m³/s) Sept. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	15	19	15	21	19	47	27	58	25	14	15
2	24	15	20	15	19	20	41	26	39	23	20	14
3	22	15	19	18	19	19	48	25	34	58	19	13
4	20	15	20	47	18	18	44	25	31	44	17	13
5	19	15	20	47	18	20	41	25	29	32	16	13
6	19	15	19	38	19	19	38	25	27	28	15	13
7	18	14	19	30	22	18	38	27	27	26	15	14
8	17	14	19	26	23	17	37	27	26	24	26	14
9	17	14	18	23	22	16	38	25	26	23	22	13
10	16	13	17	21	23	15	43	25	25	22	19	13
11	16	13	16	20	22	32	42	24	24	25	17	11
12	15	13	16	19	21	58	50	24	24	23	16	11
13	15	13	16	18	21	279	58	24	24	22	15	11
14	15	13	15	17	20	354	43	24	23	22	15	13
15	15	13	16	17	20	166	37	25	26	21	15	13
16	15	13	16	16	21	186	38	24	25	21	14	13
17	15	13	16	16	22	283	59	25	23	33	14	14
18	20	14	16	15	23	127	47	24	21	24	13	16
19	21	17	15	17	24	100	39	25	23	21	13	13
20	19	31	15	20	26	144	36	25	23	20	16	13
21	18	33	15	22	26	100	33	24	24	19	14	13
22	18	26	16	20	24	76	31	31	23	19	14	12
23	17	23	16	21	23	67	30	37	23	18	15	12
24	17	22	16	20	26	61	30	29	23	17	14	12
25	16	22	15	19	24	55	29	27	23	16	16	13
26	16	25	15	18	22	50	28	26	23	16	15	12
27	17	47	15	19	20	46	28	40	23	18	14	14
28	17	26	15	20	19	43	26	64	27	19	14	13
29	17	22	15	21	----	41	26	43	40	17	14	12
30	16	20	15	24	----	42	26	36	28	16	13	12
31	16	----	15	23	----	60	----	35	----	15	14	----
TOTAL	551	564	515	682	608	2551	1151	893	815	727	488	388
MEAN	17.8	18.8	16.6	22.0	21.7	82.3	38.4	28.8	27.2	23.5	15.7	12.9
MAX	28	47	20	47	26	354	59	64	58	58	26	16
MIN	15	13	15	15	18	15	26	24	21	15	13	11
CFSM	.57	.61	.54	.71	.70	2.66	1.24	.93	.88	.76	.51	.42
IN.	.66	.68	.62	.82	.73	3.06	1.38	1.07	.98	.87	.59	.47

CAL YR 1981 TOTAL 8151.2 MEAN 22.3 MAX 156 MIN 5.5 CFSM .72 IN 9.78
WTR YR 1982 TOTAL 9933.0 MEAN 27.2 MAX 354 MIN 11 CFSM .88 IN 11.92

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN

LOCATION.--Lat 41°28'54", long 85°28'32", in NE¼NW¼ sec.22, T.35 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank at downstream side of bridge on County Road 900 North, 1,300 ft (396 m) downstream from Boyd ditch, 1.7 miles (2.7 km) upstream from Hustin ditch, and 3.1 miles (5.0 km) downstream from Waldron Lake.

DRAINAGE AREA.--142 mi² (368 km²).

PERIOD OF RECORD.--October 1971 to current year. October 1950 to September 1971 at site 3.1 miles (5.0 km) upstream, published as North Branch Elkhart River near Cosperville. Records may not be equivalent.

GAGE.--Water-stage recorder. Datum of gage is 880.12 ft (268.261 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated at times by dam at Waldron Lake.

AVERAGE DISCHARGE.--11 years, 136 ft³/s (3.852 m³/s), 13.01 in/yr (330 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 919 ft³/s (26.0 m³/s) Mar. 23, 1982, gage height, 8.12 ft (2.475 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Nov. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 919 ft³/s (26.0 m³/s) Mar. 23, gage height, 8.12 ft (2.475 m); minimum daily, 22 ft³/s (0.623 m³/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	118	192	105	121	190	598	267	233	115	77	29
2	114	117	181	103	127	185	564	256	269	110	58	32
3	110	124	173	111	130	181	536	240	276	146	73	33
4	105	137	167	135	135	174	520	228	275	183	79	31
5	100	145	161	147	138	170	501	216	272	196	77	28
6	104	147	157	169	140	167	479	203	261	195	76	26
7	106	149	153	171	140	164	456	201	249	190	69	27
8	105	148	147	173	138	162	436	205	235	186	74	28
9	99	145	144	162	135	160	418	201	224	177	92	27
10	95	145	139	150	131	160	408	196	212	176	85	25
11	87	150	133	142	127	175	395	188	187	200	77	24
12	83	153	128	136	125	240	389	178	189	216	69	23
13	81	151	125	130	124	428	391	170	176	218	66	22
14	78	148	122	123	130	589	391	162	166	213	61	22
15	78	142	118	119	140	683	383	153	159	204	63	24
16	76	136	116	116	156	752	375	150	153	193	56	23
17	77	128	113	114	169	854	401	150	147	181	51	23
18	87	124	110	114	174	854	420	147	140	171	49	32
19	96	131	106	116	175	814	420	142	137	170	47	34
20	99	159	103	118	181	860	418	138	136	175	51	32
21	99	184	101	119	193	896	410	135	140	170	49	28
22	100	194	103	120	201	916	399	137	140	164	39	27
23	104	198	108	121	207	913	383	147	136	156	43	26
24	106	198	110	120	214	896	367	150	128	146	54	29
25	106	194	107	118	214	870	355	148	120	135	45	49
26	103	194	107	116	214	833	340	144	111	124	40	50
27	109	203	109	112	201	788	328	154	104	116	35	57
28	119	206	109	109	199	738	313	181	99	108	31	67
29	122	204	107	108	----	692	299	188	106	100	28	64
30	122	199	102	111	----	656	282	188	117	93	27	58
31	120	----	103	113	----	632	-----	188	----	86	27	----
TOTAL	3103	4771	3954	3921	4479	16792	12375	5551	5297	5013	1768	1000
MEAN	100	159	128	126	160	542	413	179	177	162	57.0	33.3
MAX	122	206	192	173	214	916	598	267	276	218	92	67
MIN	76	117	101	103	121	160	282	135	99	86	27	22
CFSM	.70	1.12	.90	.89	1.13	3.82	2.91	1.26	1.25	1.14	.40	.24
IN.	.81	1.25	1.04	1.03	1.17	4.40	3.24	1.45	1.39	1.31	.46	.26

CAL YR 1981 TOTAL 68093 MEAN 187 MAX 566 MIN 35 CFSM 1.32 IN 17.84
WTR YR 1982 TOTAL 68024 MEAN 186 MAX 916 MIN 22 CFSM 1.31 IN 17.82

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
DEC 29...	1300	106	.5	103	29

04100252 FORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE¼NE¼ sec.12, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank 300 ft (91 m) downstream from bridge on State Highway 9, 400 ft (122 m) downstream from Miller Lake Outlet, 0.8 mile (1.3 km) northeast of Burr Oak, and 4.5 miles (7.2 km) south of Albion.

DRAINAGE AREA.--19.2 mi^2 (49.7 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 889.00 ft (270.967 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records good. Occasional regulation at Miller Lake Outlet.

AVERAGE DISCHARGE.--13 years, 17.5 ft^3/s (0.496 m^3/s), 12.38 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft^3/s (9.57 m^3/s) Mar. 14, 1982, gage height, 6.71 ft (2.045 m); minimum daily, 0.13 ft^3/s (0.004 m^3/s) Sept. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 338 ft^3/s (9.57 m^3/s) Mar. 14, gage height, 6.71 ft (2.045 m); minimum daily, .66 ft^3/s (0.019 m^3/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	15	34	9.2	25	30	43	16	84	5.5	3.2	1.6
2	10	14	28	9.1	29	27	38	15	115	5.3	5.9	1.6
3	11	13	24	11	30	25	39	14	108	50	7.1	1.6
4	12	11	21	28	30	23	40	13	88	96	6.5	1.4
5	13	11	19	50	28	22	42	13	71	114	6.4	1.2
6	25	10	18	67	25	20	42	12	59	101	6.0	.97
7	48	9.7	17	67	23	19	38	14	48	85	5.7	.87
8	62	9.1	16	58	21	19	35	15	39	71	8.0	.87
9	57	8.7	15	49	19	18	34	15	32	54	7.7	.80
10	47	8.2	15	40	17	17	34	15	28	48	6.8	.77
11	37	7.8	13	32	15	26	35	15	25	57	6.2	.72
12	28	6.9	13	26	14	50	41	13	23	58	5.5	.66
13	21	6.4	12	21	13	170	55	12	21	54	4.8	.68
14	15	6.2	11	17	12	304	68	11	18	46	5.1	.78
15	12	6.2	11	15	12	315	67	10	17	39	7.1	.86
16	11	6.1	10	13	13	295	61	10	16	32	6.0	.79
17	8.6	5.9	11	12	19	333	85	11	15	25	5.1	.78
18	9.0	5.9	10	11	23	304	100	10	13	21	4.4	1.7
19	7.0	6.8	9.8	10	28	236	91	9.4	16	21	3.9	1.5
20	5.6	15	9.1	9.1	31	204	74	9.3	18	19	3.6	1.4
21	5.6	26	9.4	8.7	36	178	60	9.5	19	16	2.1	1.3
22	7.0	32	9.8	8.5	39	145	49	12	18	15	.81	1.2
23	10	36	12	10	41	119	41	20	17	14	.87	1.2
24	13	36	11	10	46	100	34	23	15	12	.99	1.3
25	15	32	9.7	9.7	48	87	29	25	13	9.3	1.0	1.4
26	16	30	9.3	9.2	45	77	25	23	11	7.4	.98	1.5
27	17	34	11	8.9	40	68	23	24	8.2	6.9	.98	4.2
28	17	41	11	9.0	34	59	21	29	7.6	6.6	.90	5.0
29	17	43	10	8.8	----	53	20	32	7.5	5.5	1.1	4.6
30	16	40	9.6	13	----	48	18	33	6.6	4.4	1.6	4.3
31	16	-----	9.2	21	----	46	----	33	-----	3.6	1.6	-----
TOTAL	598.3	532.9	428.9	671.2	756	3437	1382	516.2	976.9	1102.5	127.93	47.55
MEAN	19.3	17.8	13.8	21.7	27.0	111	46.1	16.7	32.6	35.6	4.13	1.59
MAX	62	43	34	67	48	333	100	33	115	114	8.0	5.0
MIN	5.6	5.9	9.1	8.5	12	17	18	9.3	6.6	3.6	.81	.66
CFSM	1.01	.93	.72	1.13	1.41	5.78	2.40	.87	1.70	1.85	.22	.08
IN.	1.16	1.03	.83	1.30	1.46	6.66	2.68	1.00	1.89	2.14	.25	.09

CAL YR 1981 TOTAL 10318.60 MEAN 28.3 MAX 315 MIN 1.9 CFSM 1.47 IN 19.99
WTR YR 1982 TOTAL 10577.38 MEAN 29.0 MAX 333 MIN .66 CFSM 1.51 IN 20.49

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 (274.3 m) downstream from culvert on County Road 300 E, .75 mile (1.21 km) south of State Highway 8, 3.0 miles (4.83 km) east of intersection of State Road 9 and State Road 8 in Albion.

DRAINAGE AREA.--10.7 mi² (27.7 km²).

PERIOD OF RECORD.--November 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage 935.00 ft (284.99 m) National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 397 ft³/s (11.2 m³/s) April 14, 1981, gage height 12.82 ft (3.908 m), minimum daily, 0.14 ft³/s (.004 m³/s) many days during 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 13	1900	*360	10.2	*12.31	3.752	Mar. 20	0645	124	3.51	8.58	2.615
Mar. 16	1930	268	7.59	11.02	3.359	Apr. 17	0315	136	3.85	8.81	2.685

Minimum daily, 0.48 ft³/s (.019 m³/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	4.9	11	4.6	18	11	24	5.2	43	2.2	.71	.64
2	3.5	4.6	10	4.9	17	13	21	4.9	29	2.7	10	.75
3	2.6	4.3	9.1	5.4	15	12	30	4.5	16	42	5.8	.63
4	2.2	4.0	10	12	14	11	21	4.2	11	42	3.5	.58
5	6.4	3.8	11	23	13	9.6	19	4.1	8.3	39	2.8	.57
6	68	3.5	9.7	28	11	8.8	33	3.8	6.4	26	2.4	.53
7	24	3.3	9.0	22	10	8.2	15	6.2	5.3	17	2.0	.57
8	13	3.0	8.2	14	9.2	7.6	13	6.9	4.6	11	7.7	.57
9	9.4	2.8	7.0	11	8.3	7.2	13	5.3	4.2	7.8	6.5	.55
10	7.1	2.7	6.3	9.6	7.6	7.0	16	4.4	4.1	22	3.4	.53
11	5.7	2.6	5.5	8.6	7.3	63	19	3.8	3.4	39	2.7	.53
12	4.9	2.6	5.1	7.9	6.6	106	41	3.5	3.2	20	2.2	.49
13	4.2	2.5	4.8	7.4	6.1	312	63	3.1	3.0	13	1.9	.48
14	3.9	2.5	4.8	7.0	5.7	225	30	2.8	2.7	8.8	1.7	.57
15	3.6	2.4	4.9	6.5	5.5	143	20	2.7	2.7	7.1	1.5	.61
16	3.5	2.4	4.5	5.9	7.0	204	33	2.7	2.8	5.6	1.3	.57
17	3.4	2.4	4.4	5.2	13	190	97	2.7	2.7	4.1	1.2	.54
18	5.5	2.4	4.3	4.8	20	114	40	2.5	2.4	3.2	1.1	1.1
19	4.9	3.0	4.1	4.5	18	106	25	2.6	4.7	4.7	.99	.75
20	4.2	28	3.9	4.2	19	114	20	3.4	6.4	3.9	1.1	.61
21	3.7	24	4.0	4.2	30	87	15	3.0	10	2.7	.97	.55
22	9.6	18	4.6	4.3	25	71	12	4.9	5.2	2.3	.88	.53
23	14	13	5.5	5.6	25	60	10	7.1	3.7	2.1	.88	.53
24	8.8	12	5.1	5.2	32	51	9.0	5.0	3.0	1.7	.85	.53
25	6.6	12	4.7	4.9	25	46	8.4	4.1	2.5	1.5	.81	.53
26	5.4	27	4.4	4.6	21	40	7.8	3.8	2.4	1.2	.72	.53
27	9.3	40	4.2	4.5	16	31	6.8	8.5	2.2	1.5	.71	4.2
28	12	21	4.2	4.4	12	27	6.1	14	2.2	1.6	.67	2.9
29	8.8	15	4.2	4.4	-----	25	5.8	8.0	5.0	1.1	.62	1.6
30	6.7	12	4.3	6.5	-----	27	5.3	6.5	2.9	.95	.62	1.2
31	5.6	-----	4.6	10	-----	29	-----	8.6	-----	.80	.59	-----
TOTAL	276.7	281.7	187.4	255.1	417.3	2166.4	679.2	152.8	205.0	338.55	68.82	25.27
MEAN	8.93	9.39	6.05	8.23	14.9	69.9	22.6	4.93	6.83	10.9	2.22	.84
MAX	68	40	11	28	32	312	97	14	43	42	10	4.2
MIN	2.2	2.4	3.9	4.2	5.5	7.0	5.3	2.5	2.2	.80	.59	.48
CFSM	.84	.88	.57	.77	1.39	6.53	2.11	.46	.64	1.02	.21	.08
IN.	.96	.98	.65	.89	1.45	7.53	2.36	.53	.71	1.18	.24	.09

CAL YR 1981 TOTAL 4996.07 MEAN 13.7 MAX 289 MIN .32 CFSM 1.28 IN 17.37
WTR YR 1982 TOTAL 5054.24 MEAN 13.8 MAX 312 MIN .48 CFSM 1.29 IN 17.57

04100465 TURKEY CREEK AT SYRACUSE, IN

LOCATION.--Lat 41°25'35", long 85°45'16", in NE¼SE¼ sec.6, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, on right bank 75 ft (23 m) upstream from Main Street bridge in Syracuse and 1,500 ft (457 m) downstream from dam at outlet of Syracuse Lake.

DRAINAGE AREA.--43.8 mi² (113.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 848.00 ft (258.470 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow occasionally regulated by dam on Syracuse Lake.

AVERAGE DISCHARGE.--13 years, 36.6 ft³/s (1.037 m³/s), 11.35 in/yr (288 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 170 ft³/s (4.81 m³/s) June 14, 1981, gage height, 5.37 ft (1.637 m); minimum daily, 0.82 ft³/s (0.023 m³/s) Oct. 8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 154 ft³/s (4.36 m³/s) Mar. 19, gage height, 5.06 ft (1.542 m); minimum daily, 3.7 ft³/s (0.105 m³/s) Aug. 28, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	16	55	4.3	42	101	128	34	81	65	4.5	4.6
2	6.2	17	55	4.3	44	100	130	12	85	60	6.6	5.0
3	5.6	19	55	4.7	45	99	129	6.0	81	65	6.3	4.5
4	5.5	20	55	6.8	45	100	123	6.1	76	80	6.0	4.1
5	7.4	50	55	9.6	45	101	123	6.2	73	91	6.0	4.1
6	11	64	54	10	45	99	123	6.2	70	94	6.0	3.7
7	10	63	54	8.8	54	98	122	8.0	69	87	5.6	4.1
8	9.6	62	54	6.9	84	97	123	8.4	68	74	7.7	4.4
9	9.6	61	53	6.3	84	96	129	8.4	67	67	8.9	4.5
10	8.9	59	53	5.5	84	94	128	8.7	67	64	8.8	4.2
11	8.4	58	53	4.5	84	103	126	8.7	66	63	8.4	3.8
12	8.5	57	53	4.4	84	112	127	8.7	64	62	7.8	3.9
13	8.4	56	53	4.8	84	133	126	8.7	62	60	7.5	4.2
14	8.5	55	52	5.1	87	144	124	8.7	61	59	7.3	4.5
15	8.7	54	52	6.0	93	145	120	8.7	60	58	7.3	4.7
16	8.4	53	52	7.4	92	149	119	8.4	59	57	7.3	4.7
17	8.5	53	52	7.6	94	152	119	8.5	58	56	6.9	4.6
18	10	53	51	7.9	95	152	120	8.7	57	55	6.4	5.5
19	11	54	51	8.1	96	150	118	8.1	60	55	5.9	5.2
20	11	57	51	8.4	95	152	115	7.4	59	54	5.7	5.2
21	11	56	51	12	96	149	112	7.9	60	53	5.2	4.9
22	11	56	51	27	97	144	111	9.5	59	52	5.0	4.9
23	12	56	51	29	101	139	113	9.9	57	52	5.2	4.9
24	12	55	25	29	102	135	111	9.8	57	51	5.4	4.9
25	11	55	4.4	28	102	132	110	10	56	50	5.3	5.3
26	11	55	4.2	28	104	130	109	10	56	49	5.1	5.4
27	13	56	4.2	28	103	127	108	19	56	49	4.9	15
28	15	56	4.3	27	102	125	95	28	63	49	3.7	56
29	16	56	4.3	26	----	124	52	39	75	20	3.8	56
30	16	56	4.3	35	----	128	51	68	71	5.7	4.0	56
31	16	----	4.2	39	----	129	----	68	----	4.9	4.3	-----
TOTAL	316.2	1538	1270.9	439.4	2283	3839	3444	467.7	1953	1761.6	188.8	302.8
MEAN	10.2	51.3	41.0	14.2	81.5	124	115	15.1	65.1	56.8	6.09	10.1
MAX	16	64	55	39	104	152	130	68	85	94	8.9	56
MIN	5.5	16	4.2	4.3	42	94	51	6.0	56	4.9	3.7	3.7
CFSM	.23	1.17	.94	.32	1.86	2.83	2.63	.35	1.49	1.30	.14	.23
IN.	.27	1.31	1.08	.37	1.94	3.26	2.92	.40	1.66	1.50	.16	.26

CAL YR 1981 TOTAL 19986.5 MEAN 54.8 MAX 169 MIN 3.5 CFSM 1.25 IN 16.97
WTR YR 1982 TOTAL 17804.4 MEAN 48.8 MAX 152 MIN 3.7 CFSM 1.11 IN 15.12

04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE¼NE¼ sec.8, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 20 ft (6 m) downstream from River Avenue bridge at Goshen, 0.4 mile (0.6 km) upstream from Rock Run, and at mile 16.1 (25.9 km).

DRAINAGE AREA.--594 mi^2 (1,538 km^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 (234.522 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1931, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--51 years, 511 ft^3/s (14.47 m^3/s), 11.68 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,180 ft^3/s (175 m^3/s) Mar. 14, 1982, gage height, 11.94 ft (3.639 m); minimum daily, 7.0 ft^3/s (0.20 m^3/s) Aug. 11, 1964, result of extreme regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft^3/s (51.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 14	1400	*6180	175	*11.94	3.639	Mar. 31	2100	2160	61.2	6.03	1.838
Mar. 17	1100	5070	144	10.46	3.188	Apr. 18	0700	1810	51.3	5.45	1.661

Minimum daily discharge, 157 ft^3/s (4.45 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	630	472	683	430	517	895	2060	841	796	524	320	199
2	515	492	673	405	552	895	1870	793	1050	473	349	204
3	460	498	648	450	596	870	1770	739	944	743	343	196
4	437	487	637	717	650	824	1700	697	882	1240	328	202
5	421	480	641	1110	675	865	1600	675	866	1120	325	202
6	455	491	615	1130	685	844	1520	643	856	914	315	182
7	521	497	597	899	680	803	1430	645	844	847	333	184
8	483	498	584	702	660	763	1370	657	826	812	424	193
9	459	491	569	590	645	743	1350	633	797	786	394	186
10	456	481	545	450	630	729	1340	617	773	765	359	181
11	467	473	524	381	615	829	1330	605	733	780	340	191
12	468	474	500	433	600	1550	1380	592	695	770	325	166
13	463	469	500	487	585	3560	1580	581	659	737	309	157
14	448	464	491	470	579	5950	1550	565	621	719	296	162
15	439	459	480	450	588	5020	1350	545	596	743	285	168
16	428	451	464	435	606	4260	1280	536	575	715	285	171
17	422	443	453	425	638	4960	1490	543	553	653	268	172
18	434	434	448	415	695	4450	1760	521	529	611	250	213
19	452	433	425	410	743	3940	1540	511	559	597	242	209
20	451	527	367	420	778	4090	1440	485	546	590	263	198
21	437	641	362	445	865	3950	1380	475	546	571	255	191
22	420	655	421	468	970	3570	1340	519	548	558	245	187
23	426	615	412	478	1020	3270	1280	563	506	553	252	185
24	414	609	403	486	1050	3040	1230	542	484	506	240	181
25	409	608	393	495	1050	2860	1170	520	467	477	252	184
26	409	620	425	484	995	2700	1120	517	449	453	243	212
27	429	741	422	462	960	2510	1060	582	435	431	232	241
28	476	822	420	436	920	2330	1010	849	451	427	209	258
29	502	735	414	425	-----	2170	956	856	692	405	193	286
30	492	695	356	460	-----	2070	893	736	663	371	194	291
31	481	-----	391	490	-----	2110	-----	708	-----	337	196	----
TOTAL	14204	16255	15263	16338	20547	77420	42149	19291	19941	20228	8864	5952
MEAN	458	542	492	527	734	2497	1405	622	665	653	286	198
MAX	630	822	683	1130	1050	5950	2060	856	1050	1240	424	291
MIN	409	433	356	381	517	729	893	475	435	337	193	157
CFSM	.77	.91	.83	.89	1.24	4.20	2.37	1.05	1.12	1.10	.48	.33
IN.	.89	1.02	.96	1.02	1.29	4.85	2.64	1.21	1.25	1.27	.56	.37

CAL YR 1981 TOTAL 274029 MEAN 751 MAX 3120 MIN 254 CFSM 1.26 IN 17.16
WTR YR 1982 TOTAL 276452 MEAN 757 MAX 5950 MIN 157 CFSM 1.27 IN 17.31

04101000 ST. JOSEPH RIVER AT ELKHART, IN

LOCATION.--Lat 41°41'30", long 85°58'30", in SW¼NE¼ sec.5, T.37 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on left bank 200 ft (61 m) downstream from mouth of Elkhart River, 200 ft (61 m) upstream from Main Street bridge in Elkhart, 2,000 ft (610 m) downstream from Christiana Creek, 0.5 mile (0.8 km) downstream from Elkhart Hydroelectric Plant, and at mile 76.5 (123.1 km).

DRAINAGE AREA.--3,370 mi^2 (8,728 km^2).

PERIOD OF RECORD.--August 1947 to current year. Gage heights at site 0.8 mile (1.3 km) downstream at different datum from September 1924 to March 1926 are available from the district office.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. The flow is regulated by Elkhart Hydroelectric Plant.

AVERAGE DISCHARGE.--35 years, 3,160 ft^3/s (89.49 m^3/s), 12.73 in/yr (323 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft^3/s (527 m^3/s) Mar. 21, 1982, gage height, 27.91 ft (8.507 m); minimum daily, 336 ft^3/s (9.52 m^3/s) Aug. 5, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 18,600 ft^3/s (527 m^3/s) Mar. 21, gage height, 27.91 ft (8.507 m); minimum daily, 1,320 ft^3/s (37.4 m^3/s) Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4820	3550	3970	2820	3400	3960	11300	5280	6280	3650	2390	1770
2	4530	3170	3940	3080	3200	3990	10800	5090	6510	3670	2870	1720
3	4710	3510	3910	3140	3300	3920	10800	4970	6650	4270	2530	1660
4	5220	3620	3860	4020	3200	3920	10700	4740	6660	4820	2440	1380
5	5110	3380	3780	4540	3100	3780	10300	4550	6380	4770	2500	1430
6	4870	3410	3880	4770	3200	3800	9930	4690	6110	4470	2370	1530
7	4770	3320	3990	4600	3400	3800	9440	4690	5790	4250	2410	1820
8	4510	3580	3960	3970	3500	3730	9060	4520	5600	4010	2790	1720
9	4170	3610	3780	3600	3100	3750	8890	4440	5380	3880	2570	1740
10	4160	3150	3480	3300	3200	3750	8680	4470	5210	3590	2170	1880
11	4100	3260	3620	3100	3500	4240	8520	4420	4940	3770	2550	1500
12	3830	2640	3340	3000	3100	5490	8550	4260	5030	3740	2500	1440
13	4040	3140	3240	3000	3100	7720	8830	3980	4710	3630	2330	1700
14	3590	3060	2630	3200	3100	12700	8710	4010	4340	3530	2190	1590
15	2840	3050	3130	3400	3200	14600	8190	3830	4030	3550	2170	1620
16	3570	3120	3440	3600	3300	14500	8100	3810	4020	3630	2200	1550
17	3360	3040	2960	3600	3500	17100	8480	3770	4030	3600	1820	1590
18	3530	2900	3020	3700	3600	17800	8540	3630	3980	3510	1950	1580
19	4120	2820	3000	3700	3700	17400	7870	3690	3880	3880	1900	1550
20	3130	3450	2900	3600	3910	18100	7780	3770	3880	4050	1520	2040
21	3760	3620	2620	3500	4120	18500	7650	3650	3950	3980	1540	1880
22	3800	3750	3160	3500	4270	18100	7420	4060	3780	3710	1840	1510
23	3340	3760	2910	3400	4390	17400	7170	4760	3580	3630	2040	1610
24	3900	3800	2750	3300	4540	16600	6900	4950	3560	3550	1830	1800
25	3650	3830	2970	3200	4390	15900	6750	4920	3580	3450	2290	1500
26	3470	3800	3340	3200	4290	15100	6430	4870	3400	3620	2070	1720
27	3760	4180	3210	3200	4170	14300	6250	4990	3380	2640	1530	2290
28	3590	4240	3050	3200	4060	13500	5990	5740	3380	2600	1500	2480
29	3640	4200	3110	3200	------	12500	5800	5670	4010	2550	1590	1610
30	3490	4070	2820	3200	------	11800	5450	5640	4110	2680	1930	2180
31	3460	------	2930	3200	------	11700	------	5590	------	2410	1320	-----
TOTAL	122840	104030	102700	107840	100840	333450	249280	141450	140140	113090	65650	51390
MEAN	3963	3468	3313	3479	3601	10760	8309	4563	4671	3648	2118	1713
MAX	5220	4240	3990	4770	4540	18500	11300	5740	6660	4820	2870	2480
MIN	2840	2640	2620	2820	3100	3730	5450	3630	3380	2410	1320	1380
CFSM	1.18	1.03	.98	1.03	1.07	3.19	2.47	1.35	1.39	1.08	.63	.51
IN.	1.36	1.15	1.13	1.19	1.11	3.68	2.75	1.56	1.55	1.25	.72	.57

CAL YR 1981 TOTAL 1582770 MEAN 4336 MAX 10600 MIN 1960 CFSM 1.29 IN 17.47
WTR YR 1982 TOTAL 1632700 MEAN 4473 MAX 18500 MIN 1320 CFSM 1.33 IN 18.02

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE¼SW¼ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003, on left bank 6 ft (2 m) upstream from bridge on County Road 775 South, 0.5 mile (0.8 km) downstream from Hamilton Lake outlet, and 0.5 mile (0.8 km) southeast of Hamilton.

DRAINAGE AREA.--37.5 mi^2 (97.1 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft (267.005 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--13 years, 31.9 ft^3/s (0.903 m^3/s), 11.55 in/yr (293 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 603 ft^3/s (17.1 m^3/s) Mar. 17, 1982, gage height, 11.52 ft (3.511 m); minimum daily, 0.52 ft^3/s (0.015 m^3/s) Aug. 31, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 140 ft^3/s (3.96 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 17	1300	*603	17.1	*11.52	3.511	May 28	0900	157	4.45	6.59	2.009
Apr. 3	1800	142	4.02	6.35	1.935						

Minimum daily discharge, 2.3 ft^3/s (0.065 m^3/s) Sept. 5, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	25	31	23	54	43	96	31	119	22	3.0	2.9
2	80	23	29	22	46	45	81	30	92	19	4.8	3.0
3	53	21	26	27	44	43	122	28	67	43	4.8	2.7
4	39	20	31	81	41	46	130	23	52	50	4.7	2.4
5	33	19	32	108	37	47	102	22	46	40	4.2	2.3
6	35	20	29	98	34	42	96	24	39	31	4.0	2.4
7	30	15	29	79	32	39	81	37	33	26	3.8	2.9
8	25	14	29	60	29	37	73	44	31	22	8.1	2.9
9	22	14	25	49	28	36	74	40	34	17	6.7	2.7
10	19	11	23	41	26	33	78	34	51	32	4.8	2.7
11	17	11	18	34	24	59	85	31	40	48	4.1	2.7
12	15	10	18	30	23	127	92	29	32	38	3.6	2.6
13	14	9.8	17	27	22	324	120	27	28	29	3.4	2.6
14	13	9.8	17	25	21	525	105	25	24	24	3.2	2.6
15	13	10	16	23	21	541	83	24	22	20	3.0	2.9
16	12	11	15	23	25	512	73	27	24	16	3.0	2.6
17	11	11	16	21	33	596	115	28	23	13	3.1	2.4
18	17	10	15	20	36	550	109	26	21	12	2.9	3.8
19	15	12	15	19	39	459	86	24	34	11	2.7	3.0
20	12	70	14	17	41	448	76	26	32	10	2.9	2.7
21	11	68	17	17	52	430	64	29	37	7.5	2.7	2.4
22	20	54	20	16	57	342	55	39	36	6.8	2.8	2.4
23	30	43	27	23	62	274	49	52	29	5.6	3.2	2.5
24	25	41	23	22	71	235	45	42	24	4.8	3.1	2.3
25	23	34	21	20	65	205	42	38	22	4.1	3.6	2.6
26	22	33	19	18	57	177	41	33	19	4.1	3.2	2.7
27	29	42	23	17	51	139	39	58	18	3.8	3.2	7.1
28	35	38	23	16	46	114	35	151	19	3.7	3.1	7.0
29	33	34	21	15	----	101	32	124	33	3.4	2.9	6.0
30	30	31	19	20	----	98	31	93	29	3.4	2.9	5.1
31	28	-----	19	51	----	110	----	71	----	3.1	2.9	----
TOTAL	867	764.6	677	1062	1117	6777	2310	1310	1110	573.3	114.4	94.9
MEAN	28.0	25.5	21.8	34.3	39.9	219	77.0	42.3	37.0	18.5	3.69	3.16
MAX	106	70	32	108	71	596	130	151	119	50	8.1	7.1
MIN	11	9.8	14	15	21	33	31	22	18	3.1	2.7	2.3
CFSM	.75	.68	.58	.92	1.06	5.84	2.05	1.13	.99	.49	.10	.08
IN.	.86	.76	.67	1.05	1.11	6.72	2.29	1.30	1.10	.57	.11	.09

CAL YR 1981 TOTAL 16123.8 MEAN 44.2 MAX 332 MIN 3.1 CFSM 1.18 IN 15.99
WTR YR 1982 TOTAL 16777.2 MEAN 46.0 MAX 596 MIN 2.3 CFSM 1.23 IN 16.64

04178000 ST. JOSEPH RIVER NEAR NEWVILLE, IN

LOCATION.--Lat 41°23'08", long 84°48'06", in SW¼SW¼ sec.18, T.5 N., R.1 E., Defiance County, Ohio, Hydrologic Unit 04100003, on left bank at bridge on Ohio State Highway 249, 3.5 miles (5.6 km) northeast of Newville, 6.5 miles (10.5 km) northwest of Hicksville, Ohio, and at mile 42.3 (68.1 km).

DRAINAGE AREA.--610 mi² (1,580 km²).

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft (242.438 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--36 years, 519 ft³/s (14.7 m³/s), 11.55 in/yr (293 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,710 ft³/s (275 m³/s) Apr. 6, 1950, gage height, 17.05 ft (5.197 m); maximum gage height, 17.96 ft (5.474 m) Mar. 17, 1982; minimum daily discharge, 14 ft³/s (0.40 m³/s) Sept. 10, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,190 ft³/s (260 m³/s) Mar. 17, gage height, 17.96 ft (5.474 m); minimum daily, 43 ft³/s (1.22 m³/s) Aug. 22, Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	710	462	464	243	1000	860	2010	330	1300	746	82	55
2	710	395	427	283	900	782	1860	320	1200	798	86	56
3	730	353	401	352	800	715	1890	310	1150	1590	87	55
4	679	324	401	1110	700	657	1940	300	1100	1400	84	54
5	540	301	470	1730	650	631	1920	310	850	856	76	56
6	818	283	517	1780	600	611	1840	330	670	647	73	57
7	560	271	505	1400	550	575	1730	360	520	479	72	59
8	401	261	468	1100	500	542	1580	390	450	355	77	57
9	324	243	431	900	470	500	1410	430	400	281	85	59
10	278	229	387	760	430	462	1400	380	500	275	91	54
11	249	218	317	660	400	657	1520	350	1100	569	98	47
12	228	206	296	600	380	1700	1680	320	850	483	89	44
13	213	199	276	540	360	3450	1900	290	650	382	80	43
14	200	193	268	500	340	5930	1940	260	500	298	68	43
15	193	187	257	460	340	8010	1820	250	370	266	62	44
16	186	193	243	430	450	8900	1600	235	300	253	59	46
17	182	200	232	400	540	8960	1700	230	310	203	57	50
18	188	181	218	380	600	8200	1600	230	310	177	55	64
19	187	169	200	350	660	7350	1400	230	450	202	52	60
20	192	304	180	330	700	6810	1200	1500	520	195	52	50
21	194	611	197	320	800	6330	1000	1000	600	181	45	47
22	237	775	229	380	950	5750	850	700	600	232	43	46
23	446	765	216	470	1200	5120	700	800	600	217	62	45
24	458	641	223	430	1510	4560	600	700	520	179	95	46
25	437	536	229	380	1520	4110	540	580	383	147	81	47
26	371	468	228	340	1390	3760	490	500	308	125	71	64
27	400	584	228	320	1220	3310	440	650	258	112	64	94
28	752	602	230	304	1030	2860	400	2100	228	106	56	97
29	803	591	230	293	-----	2450	380	2000	239	102	54	93
30	733	532	214	356	-----	2190	350	1600	404	96	54	102
31	579	-----	218	600	-----	2200	-----	1300	-----	87	54	----
TOTAL	13178	11277	9400	18501	20990	108942	39690	19285	17640	12039	2164	1734
MEAN	425	376	303	597	750	3514	1323	622	588	388	69.8	57.8
MAX	818	775	517	1780	1520	8960	2010	2100	1300	1590	98	102
MIN	182	169	180	243	340	462	350	230	228	87	43	43
CFSM	.70	.62	.50	.98	1.23	5.76	2.17	1.02	.96	.64	.11	.10
IN.	.80	.69	.57	1.13	1.28	6.64	2.42	1.18	1.08	.73	.13	.11

CAL YR 1981 TOTAL 260396 MEAN 713 MAX 5500 MIN 109 CFSM 1.17 IN 15.88
WTR YR 1982 TOTAL 274840 MEAN 753 MAX 8960 MIN 43 CFSM 1.23 IN 16.76

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 (5 km) northwest of Cedarville, 5.8 miles (9.3 km) upstream from mouth, and 10 miles (16 km) south of Auburn.

DRAINAGE AREA.--270 mi^2 (699 km^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 (237.771 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 4, 1947, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--36 years, 240 ft^3/s (6.797 m^3/s), 12.07 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,340 ft^3/s (151 m^3/s) Mar. 14, 1982, gage height, 12.98 ft (3.956 m); minimum daily, 13 ft^3/s (0.37 m^3/s) Oct. 3, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s (56.6 m^3/s) and maximum (*).

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 14	2100	*5340	151	*12.98	3.956
July 4	1100	2720	77.0	8.12	2.475

Minimum daily discharge, 36 ft^3/s (1.02 m^3/s) Sept. 6, 13, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	433	150	196	114	430	305	590	204	959	261	76	41
2	270	140	188	130	380	318	507	193	1010	201	91	43
3	186	130	170	135	330	282	696	183	556	1260	107	41
4	145	121	165	905	290	256	749	180	380	2540	90	39
5	125	116	188	1490	260	394	563	173	302	1470	83	37
6	650	112	183	1070	240	343	479	169	252	777	78	36
7	601	103	170	680	220	295	464	198	218	506	73	49
8	356	97	163	487	200	249	440	247	198	377	86	46
9	249	90	147	360	185	229	444	210	195	304	91	42
10	191	84	135	280	175	218	518	188	532	315	81	40
11	160	82	125	230	160	524	636	175	396	790	72	38
12	137	80	112	195	150	1610	837	165	265	601	68	37
13	123	76	105	172	145	2940	1270	157	206	408	64	36
14	112	74	101	160	135	5030	972	150	173	318	61	39
15	107	72	99	147	130	4940	624	144	164	264	57	41
16	105	70	94	141	250	4250	511	150	180	228	55	40
17	99	70	92	134	300	4830	1360	180	188	199	55	38
18	103	70	88	124	365	4630	1450	160	158	175	52	61
19	107	69	80	118	380	3550	828	148	255	182	51	50
20	104	170	73	113	434	3200	611	454	324	214	54	41
21	99	383	74	109	570	2930	489	426	385	170	52	39
22	108	328	76	118	629	2340	404	405	275	153	48	42
23	266	241	90	142	613	1840	354	554	204	145	48	43
24	212	202	88	136	764	1530	320	409	166	130	50	40
25	162	202	86	126	701	1320	294	301	144	115	51	38
26	140	210	88	117	509	1200	277	246	142	105	48	36
27	135	563	90	108	408	964	259	365	156	101	47	75
28	334	416	90	101	340	802	236	1030	180	98	45	99
29	291	282	88	95	----	719	221	979	392	90	42	70
30	221	224	86	160	----	680	213	601	386	86	41	57
31	178	----	92	300	----	715	-----	413	----	81	43	----
TOTAL	6509	5027	3622	8697	9693	53433	17616	9557	9341	12664	1960	1374
MEAN	210	168	117	281	346	1724	587	308	311	409	63.2	45.8
MAX	650	563	196	1490	764	5030	1450	1030	1010	2540	107	99
MIN	99	69	73	95	130	218	213	144	142	81	41	36
CFSM	.78	.62	.43	1.04	1.28	6.39	2.17	1.14	1.15	1.52	.23	.17
IN.	.90	.69	.50	1.20	1.34	7.36	2.43	1.32	1.29	1.74	.27	.19

CAL YR 1981 TOTAL 117477 MEAN 322 MAX 3980 MIN 39 CFSM 1.19 IN 16.19
WTR YR 1982 TOTAL 139493 MEAN 382 MAX 5030 MIN 36 CFSM 1.42 IN 19.22

04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW¼SW¼ sec.27, T.28 N., R.14 E., Adams County, Hydrologic Unit 04100004, on right bank 10 ft (3 m) downstream from bridge on U.S. Highway 27, 0.5 mile (0.8 km) upstream from Holthouse ditch, 1.3 miles (2.1 km) north of Decatur, and at mile 29.1 (46.8 km).

DRAINAGE AREA.--621 mi² (1,608 km²).

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mile (0.8 km) upstream January 1932 to November 1954, and at present site thereafter are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft (231.782 m) National Geodetic Vertical Datum of 1929. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

AVERAGE DISCHARGE.--36 years, 495 ft³/s (14.02 m³/s), 10.82 in/yr (275 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s (320 m³/s) Feb. 10, 11, 1959; maximum gage height, 24.40 ft (7.437 m) Mar. 14, 1982; minimum daily discharge, 5.4 ft³/s (0.15 m³/s) Oct. 18, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s (82.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0100	3650	103	17.49	5.331	Mar. 6	1200	3220	91.2	16.55	5.044
Feb. 24	1200	5810	165	20.42	6.224	Mar. 14	0100	*10900	309	*24.40	7.437

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Oct. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	164	111	470	2090	1900	887	124	1470	210	34	28
2	23	132	101	630	1510	2050	668	114	1690	283	39	30
3	22	100	85	981	1190	2160	818	107	1440	269	39	30
4	21	77	74	2950	900	1920	916	101	1200	189	42	27
5	20	64	65	3500	755	2620	787	95	857	122	39	25
6	25	58	58	2780	615	3150	666	93	532	88	40	29
7	20	50	60	2410	515	2300	582	97	324	74	40	40
8	20	43	65	2120	440	1830	519	118	215	69	53	36
9	18	40	61	1610	400	1540	557	142	164	67	40	33
10	17	38	54	1170	365	1320	714	280	500	65	37	29
11	18	36	42	920	330	3320	1680	350	601	58	34	26
12	18	34	54	700	305	6190	2310	322	606	58	33	25
13	18	34	49	530	285	9540	2220	236	758	56	31	25
14	18	32	43	430	265	10200	2030	169	616	53	29	28
15	17	32	41	340	248	7880	1760	132	362	50	28	24
16	15	33	37	297	387	6010	1310	116	461	47	27	23
17	13	32	32	245	1100	5460	1460	103	1030	41	27	22
18	22	31	34	212	2040	4270	1170	101	750	38	27	22
19	15	34	32	192	2310	3690	840	94	549	92	24	21
20	16	42	30	173	2450	3800	750	98	459	183	26	20
21	12	49	32	157	3210	3350	612	115	350	240	22	20
22	32	47	43	148	4550	2430	458	105	246	212	28	21
23	50	46	1150	646	5430	1790	332	256	169	141	27	24
24	46	63	1660	1160	5770	1450	257	492	133	89	37	24
25	41	107	930	972	4600	1190	218	596	112	60	37	24
26	34	124	681	852	3750	1290	198	651	96	61	32	24
27	95	192	540	769	2900	902	194	605	81	100	30	34
28	411	185	660	690	2250	683	165	1800	74	87	29	28
29	292	153	580	650	-----	607	150	1320	121	60	29	28
30	202	125	500	1550	-----	535	136	1260	141	46	33	26
31	181	----	430	2760	-----	707	-----	1260	-----	38	30	----
TOTAL	1781	2197	8334	33014	50960	96084	25364	11452	16107	3246	1023	796
MEAN	57.5	73.2	269	1065	1820	3099	845	369	537	105	33.0	26.5
MAX	411	192	1660	3500	5770	10200	2310	1800	1690	283	53	40
MIN	12	31	30	148	248	535	136	93	74	38	22	20
CFSM	.09	.12	.43	1.72	2.93	4.99	1.36	.59	.87	.17	.05	.04
IN.	.11	.13	.50	1.98	3.05	5.76	1.52	.69	.96	.19	.06	.05

CAL YR 1981 TOTAL 156540 MEAN 429 MAX 6830 MIN 12 CFSM .69 IN 9.38
WTR YR 1982 TOTAL 250358 MEAN 686 MAX 10200 MIN 12 CFSM 1.11 IN 15.00

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 40°59'16", long 85°06'03", in A. LaFontaine Reserve, T.29 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 130 ft (40 m) downstream from Anthony Boulevard Extension, 0.8 mile (1.3 km) downstream from Houk ditch, 5 miles (8 km) south of Fort Wayne, and 10.8 miles (17.4 km) upstream from mouth.

DRAINAGE AREA.--762 mi^2 (1,974 km^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.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft (228.286 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on upstream highway bridge at same datum.

REMARKS.--Records fair except those for winter periods, which are poor. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal. During extreme floods, some water bypasses gage and flows through Houk ditch and Paul Trier ditch in to the Maumee River.

AVERAGE DISCHARGE.--52 years, 576 ft^3/s (16.31 m^3/s), 10.27 in/yr (261 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s (385 m^3/s) Feb. 11, 1959; maximum gage height, 19.66 ft. (5.992 m) Mar. 14, 1982; minimum daily discharge, 3.4 ft^3/s (0.010 m^3/s) Oct. 19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft^3/s (113 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 5	0300	4640	131	11.16	3.402	Mar. 14	unknown	*12600	357	*19.66	5.992
Feb. 25	unknown	6220	176	unknown							

Minimum daily discharge, 16 ft^3/s (0.45 m^3/s) Oct. 17.

REVISIONS.--The annual maximum discharges (*) for water years 1974, 1978, and 1979 have been revised as shown in the following table. They supersede figures published in the reports of 1974, 1978, and 1979.

Water year	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Water year	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
1974	Jan. 23, 1974	0800	*9,670	274	*16.94	5.163	1979	Mar. 5, 1979	1900	*9,120	258	*16.39	4.996
1978	Mar. 21, 1978	1700	*11,200	317	*18.39	5.605							

Revised daily discharges, in cubic feet per second, for high-water periods in these years, as well as one correction of a daily in 1973, are given below. They supersede those published in the 1973, 1974, 1978, and 1979 reports.

Sept. 5, 1973...	48	Jan. 24, 1974...	8,760	Mar. 22, 1978...	10,900	Mar. 25, 1978...	8,710
Jan. 22, 1974...	9,030	Mar. 20, 1978...	9,650	23.....	10,700	Mar. 5, 1979...	8,940
23.....	9,570	21.....	10,800	24.....	10,100	6.....	8,660

Month		Ft^3/s-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
September	1973	1137	64	31	37.9	0.05	0.06
January	1974	90291	9570	231	2913	3.82	4.41
March	1978	126163	10900	94	4070	5.34	6.16
March	1979	78627	8940	239	2536	3.33	3.84
Water year	1973	378615	5110	31	1037	1.36	18.48
Calendar year	1973	278889	5110	26	764	1.00	13.57
Water year	1974	288145	9570	21	789	1.04	14.07
Calendar year	1974	280329	9570	15	768	1.01	13.70
Water year	1978	295023	10900	17	808	1.06	14.40
Calendar year	1978	225760	10900	17	619	.81	11.00
Water year	1979	183479	8940	19	503	.66	8.96
Calendar year	1979	245596	8940	31	673	.88	11.94

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	198	153	720	3200	2800	900	156	1770	163	50	35
2	43	174	139	1060	1990	2300	880	144	1820	247	46	32
3	32	139	125	1400	1600	2320	850	132	1580	318	49	34
4	28	112	110	3300	1300	2480	990	128	1300	278	50	33
5	26	92	98	4400	1080	2520	900	120	995	187	49	31
6	28	81	87	3940	920	3100	770	115	666	130	49	29
7	35	74	81	3000	800	3120	660	117	438	99	49	33
8	30	68	83	2450	680	2370	610	129	297	83	69	43
9	26	61	80	1900	580	1900	620	138	226	78	72	41
10	23	58	74	1600	500	1600	1100	197	267	76	59	37
11	21	56	78	1300	430	3200	2000	332	661	73	50	34
12	23	55	68	1080	385	5600	2400	351	564	68	43	31
13	24	54	70	900	355	9000	2450	295	696	66	38	29
14	23	53	64	740	330	10400	2370	216	698	64	36	33
15	19	49	60	610	315	10500	2090	164	487	62	34	36
16	17	49	70	510	400	9850	1560	145	416	59	32	33
17	16	49	54	440	1280	9240	2470	125	882	56	29	30
18	25	51	50	370	2300	7980	2000	156	920	52	28	32
19	35	49	46	320	2800	6350	1500	193	640	49	27	29
20	31	66	43	280	2700	6060	1100	281	552	99	29	28
21	50	81	42	250	3300	5320	880	609	545	191	29	24
22	77	77	46	220	4500	3960	680	312	362	246	26	30
23	119	70	800	490	5400	2420	550	264	247	210	29	32
24	102	76	1950	1170	5800	1750	450	458	178	143	34	32
25	76	131	1370	1360	6000	1390	380	557	146	97	65	30
26	65	165	940	1160	5400	1540	320	646	127	70	47	28
27	66	218	770	1020	4500	1150	275	717	110	70	35	34
28	330	253	780	920	3700	837	225	1930	95	104	33	46
29	435	214	840	840	-----	710	191	1820	156	96	32	41
30	287	176	740	1550	-----	640	172	1470	145	73	32	32
31	218	----	660	2800	-----	720	-----	1320	-----	58	36	----
TOTAL	2370	3049	10571	42100	62545	123127	32343	13737	17986	3665	1286	992
MEAN	76.5	102	341	1358	2234	3972	1078	443	600	118	41.5	33.1
MAX	435	253	1950	4400	6000	10500	2470	1930	1820	318	72	46
MIN	16	49	42	220	315	640	172	115	95	49	26	24
CFSM	.10	.13	.45	1.78	2.93	5.21	1.42	.58	.79	.16	.05	.04
IN.	.12	.15	.52	2.06	3.05	6.01	1.58	.67	.88	.18	.06	.05

CAL YR 1981 TOTAL 196667 MEAN 539 MAX 7430 MIN 16 CFSM .71 IN 9.60
WTR YR 1982 TOTAL 313771 MEAN 860 MAX 10500 MIN 16 CFSM 1.13 IN 15.32

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 (15 m) upstream from bridge on Baer Road, at Fort Wayne, 3.2 miles (5.1 km) upstream from mouth. The stream name changes to Fairfield ditch 0.7 mile (1.1 km) downstream at bridge on Lower Huntington Road.

DRAINAGE AREA.--21.9 mi^2 (56.7 km^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 (1.1 km) downstream.

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

REMARKS.--Records poor.

AVERAGE DISCHARGE.--18 years, 18.0 ft^3/s (0.510 m^3/s), 11.16 in/yr (283 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 916 ft^3/s (25.9 m^3/s) June 13, 1981; maximum gage height, 12.25 ft (3.734 m) Mar. 14, 1982; minimum daily discharge, 0.06 ft^3/s (0.002 m^3/s) Oct. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft^3/s (7.08 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	0915	416	11.8	8.15	2.484	Mar. 30	2315	518	14.7	9.06	2.761
Mar. 14	----	*900	25.5	*12.25	3.734	Apr. 17	0515	332	9.40	7.27	2.216
Mar. 19	2130	337	9.54	7.32	2.231						

Minimum daily discharge, 0.24 ft^3/s (0.007 m^3/s) Sept. 6.

REVISIONS.--Several peak discharges for water years 1980 and 1981 and the annual maximum (*) stage and discharge, for 1981 have been revised as shown in the following table. They supersede figures published in reports of 1980 and 1981.

Water year	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Water year	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
1980	Dec. 24, 1979	1045	359	10.2	7.56	2.304	1981	May 14, 1981	1700	388	11.0	7.87	2.399
1980	Feb. 22, 1980	0300	360	10.2	7.57	2.307	1981	June 9, 1981	0100	355	10.1	7.52	2.292
1980	Apr. 3, 1980	2300	303	8.58	6.95	2.118	1981	June 13, 1981	1700	*916	25.9	*11.67	3.557
1981	Feb. 16, 1981	----	400	13.1	ice jam		1981	June 30, 1981	1700	448	12.7	8.45	2.576
1981	Apr. 14, 1981	0515	449	12.7	8.46	2.579							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	1.4	2.2	31	42	14	30	2.9	89	3.5	.75	.49
2	.68	1.3	2.0	16	29	55	21	2.7	35	3.8	7.6	.43
3	.57	1.2	1.9	69	20	24	35	2.6	14	11	1.2	.43
4	.48	1.3	2.4	309	15	82	20	2.5	8.2	4.1	.83	.43
5	3.0	1.2	1.8	93	11	76	18	2.6	6.0	2.7	.86	.33
6	9.6	1.1	1.5	47	8.2	48	27	2.5	4.7	2.3	.69	.24
7	1.6	1.3	1.6	23	7.0	23	19	2.6	3.7	2.4	.84	2.1
8	1.2	1.1	1.5	15	6.3	13	16	4.3	3.1	2.3	20	.75
9	.83	.98	1.4	8.4	5.3	8.2	14	3.5	2.8	2.3	5.2	.61
10	.77	.86	1.4	4.6	4.6	7.0	15	3.0	14	5.1	1.7	.61
11	.61	.80	1.2	3.1	4.0	78	52	2.6	6.4	2.8	.91	.49
12	.65	.94	1.1	2.7	3.6	170	155	2.3	4.1	2.0	.68	.61
13	.93	1.1	1.1	2.9	3.4	375	76	2.1	2.9	1.7	.61	.99
14	1.1	.94	1.2	3.0	3.2	790	35	2.0	2.5	1.6	.61	4.9
15	.97	.78	1.1	2.9	3.1	405	23	1.9	2.2	1.6	.55	1.6
16	.89	.85	1.1	2.8	10	530	20	2.6	13	1.3	.49	1.3
17	.99	.77	.94	2.7	33	240	206	2.5	9.8	1.3	.49	1.1
18	4.4	.83	.82	2.6	77	100	65	2.2	7.2	1.3	.55	2.8
19	1.7	1.3	.74	2.6	46	154	31	2.4	4.8	1.5	.43	.83
20	1.2	3.8	.66	2.5	34	242	22	15	5.2	1.2	4.9	.55
21	1.1	2.2	.85	2.5	72	95	14	13	19	1.3	.75	1.2
22	17	1.4	4.7	2.5	55	54	7.9	8.4	13	4.1	.38	1.3
23	4.6	1.2	65	18	85	36	4.5	17	8.2	1.7	.75	.91
24	2.5	4.1	23	13	48	26	3.8	8.0	5.6	1.5	11	.91
25	1.6	3.3	8.5	9.0	32	32	3.2	5.2	4.5	.99	4.4	1.4
26	1.4	3.2	5.7	7.2	21	37	6.4	3.9	3.8	.91	2.4	1.8
27	7.7	3.6	15	5.8	12	20	4.6	12	3.3	8.0	1.2	8.5
28	4.7	2.9	5.1	5.0	10	15	3.8	20	11	2.8	.83	4.0
29	2.9	2.2	2.9	4.4	-----	13	3.4	13	18	1.1	.61	1.9
30	2.1	2.2	2.4	155	-----	85	3.1	9.0	5.9	.99	.55	1.1
31	1.7	-----	7.4	71	-----	190	-----	140	-----	1.5	.49	-----
TOTAL	80.40	50.15	168.21	937.2	700.7	4037.2	954.7	314.3	330.9	80.69	73.25	44.61
MEAN	2.59	1.67	5.43	30.2	25.0	130	31.8	10.1	11.0	2.60	2.36	1.49
MAX	17	4.1	65	309	85	790	206	140	89	11	20	8.5
MIN	.48	.77	.66	2.5	3.1	7.0	3.1	1.9	2.2	.91	.38	.24
CFSM	.12	.08	.25	1.38	1.14	5.94	1.45	.46	.50	.12	.11	.07
IN.	.14	.09	.29	1.59	1.19	6.86	1.62	.53	.56	.14	.12	.08

CAL YR 1981 TOTAL 5752.60 MEAN 15.8 MAX 544 MIN .48 CFSM .72 IN 9.77
WTR YR 1982 TOTAL 7772.31 MEAN 21.3 MAX 790 MIN .24 CFSM .97 IN 13.20

04183000 MAUMEE RIVER AT NEW HAVEN, IN

LOCATION.--Lat 41°05'06", long 85°01'20", in SE¼NE¼ sec.2, T.30 N., R.13 E., Allen County, Hydrologic Unit 04100005, on left bank 600 ft (183 m) upstream from bridge on Landin Road, 1,400 ft (427 m) upstream from the Wabash Railroad bridge, 1.1 miles (1.8 km) northwest of New Haven, 2.8 miles (4.5 km) upstream from Sixmile Creek and at mile 129.0 (207.6 km).

DRAINAGE AREA.--1,967 mi² (5,095 km²).

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft (220.831 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1956, nonrecording gage and Sept. 7, 1956, to Sept. 14, 1965, water-stage recorder at site 500 ft (152 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 miles (16.6 km) upstream from station. Flow slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--26 years (1956 to current year), 1,639 ft³/s (46.4 m³/s), 11.32 in/yr (288 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft³/s (753 m³/s) Mar. 17, 1982, gage height, 25.49 ft (7.769 m); minimum daily, 48 ft³/s (1.36 m³/s) Oct. 6, 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s (269 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 17	unknown	*26600	753	25.49	7.769

Minimum daily discharge, 132 ft³/s (3.74 m³/s) Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	982	1070	1430	5710	4740	5560	958	5400	1120	295	166
2	1320	908	848	1380	4610	3910	4550	986	5100	1140	646	187
3	1010	823	1000	2060	3300	3770	4750	920	4130	3710	418	191
4	1060	758	817	6870	2900	3350	4990	854	3310	6510	324	182
5	896	616	780	8410	2500	4280	4380	841	2750	4980	352	191
6	1540	640	867	7840	2100	4830	4020	775	2300	2620	318	132
7	2250	496	926	6270	1800	4560	3810	971	1650	1820	265	271
8	1270	509	851	4200	1600	4190	3550	980	1030	1380	692	265
9	976	539	772	3000	1400	3970	3580	918	1540	902	405	185
10	769	477	798	1900	1300	3260	3620	969	1860	1040	354	145
11	629	454	639	1500	1200	4650	4470	1100	2720	1410	342	166
12	512	487	640	1300	1100	9780	6680	1150	1950	1860	332	166
13	517	382	541	1200	1040	17800	7610	1000	1790	1260	233	191
14	440	399	542	1100	1030	23000	6790	875	1670	1000	253	187
15	457	429	557	1040	1110	24200	5730	829	1450	840	286	204
16	404	380	519	1000	1340	25100	4780	845	1490	723	233	170
17	420	398	430	970	1940	26300	6930	781	1600	617	273	204
18	556	374	395	930	3040	26100	6780	808	1740	647	190	156
19	478	583	370	900	3810	24000	4860	732	1690	577	237	182
20	428	495	350	880	4090	21800	3770	1180	1880	1260	322	181
21	353	995	340	860	4840	19400	3260	3090	2340	794	295	155
22	799	1350	428	1460	5980	16800	2650	2420	1860	677	184	170
23	1000	1300	1210	2530	6930	14000	2230	2260	1360	867	250	162
24	1180	1280	2410	2640	8510	11200	2010	2080	1180	684	158	179
25	839	1120	2150	2790	8830	9380	1660	1830	936	603	386	153
26	860	1160	1320	2420	7930	8630	1460	1710	902	451	258	200
27	799	1640	1390	1950	6930	7660	1500	2390	882	555	235	307
28	1360	1770	1430	1890	5840	6580	1300	6780	779	602	244	304
29	1990	1390	1430	1850	------	5640	1220	6800	1890	371	155	313
30	1550	1160	984	3920	------	5100	1050	5690	1510	370	164	248
31	1310	-----	1150	6150	------	7140	------	4430	-----	412	213	----
TOTAL	29342	24294	27954	82640	102710	355120	119550	57942	60689	41802	9312	5913
MEAN	947	810	902	2666	3668	11460	3985	1869	2023	1348	300	197
MAX	2250	1770	2410	8410	8830	26300	7610	6800	5400	6510	692	313
MIN	353	374	340	860	1030	3260	1050	732	779	370	155	132
CFSM	.48	.41	.46	1.36	1.87	5.83	2.03	.95	1.03	.69	.15	.10
IN.	.55	.46	.53	1.56	1.94	6.72	2.26	1.10	1.15	.79	.18	.11

CAL YR 1981 TOTAL 697960 MEAN 1912 MAX 16600 MIN 189 CFSM .97 IN 13.20
WTR YR 1982 TOTAL 917268 MEAN 2513 MAX 26300 MIN 132 CFSM 1.28 IN 17.35

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN

LOCATION.--Lat 41°33'50", long 86°29'50", in NW¼NE¼ sec.23, T.36 N., R.1 W., St. Joseph County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on county highway named " New Road", 2.7 miles (4.3 km) upstream from Little Kankakee River, 4 miles (6 km) northwest of North Liberty, and at mile 126.9 (204.2 km).

DRAINAGE AREA.--174 mi^2 (451 km^2), of which 58.2 mi^2 (150.7 km^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 (207.276 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to June 26, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good below 300 cfs and poor above due to varying backwater conditions.

AVERAGE DISCHARGE.--31 years, 150 ft^3/s (4.248 m^3/s), 11.71 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 908 ft^3/s (25.7 m^3/s) Mar. 17, 1982, gage height 9.01 ft (2.746 m); maximum gage height, 9.04 ft (2.755 m) June 27, 1968; minimum daily discharge, 46 ft^3/s (1.30 m^3/s) Sept. 9, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 908 ft^3/s (25.7 m^3/s) Mar. 17, gage height, 9.01 ft (2.746 m); minimum daily, 93 ft^3/s (2.63 m^3/s) Sept. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	138	244	167	210	236	391	199	261	148	120	102
2	224	142	240	162	190	253	344	195	245	146	140	101
3	221	146	226	182	175	235	370	193	214	264	132	99
4	202	146	229	348	167	231	338	192	202	290	141	97
5	190	144	236	443	160	220	306	190	193	231	136	95
6	188	143	226	369	157	211	291	198	186	202	131	98
7	177	139	218	306	152	205	284	192	180	188	128	104
8	169	141	211	270	149	199	280	188	174	176	220	102
9	165	134	205	240	146	196	286	184	169	166	242	100
10	161	133	200	225	142	193	294	181	167	162	152	98
11	156	132	196	210	140	261	295	181	160	184	128	97
12	154	130	193	200	138	475	305	170	156	173	121	95
13	153	129	192	190	138	805	305	168	156	162	119	95
14	154	128	190	185	131	886	292	165	154	211	117	96
15	152	127	190	175	130	885	262	163	165	202	114	95
16	150	127	184	170	131	820	253	166	159	176	110	93
17	152	125	182	168	148	907	302	166	152	175	108	93
18	175	123	177	164	161	817	298	166	147	167	106	126
19	186	123	170	161	168	812	262	183	157	164	105	120
20	177	204	174	160	172	863	255	180	155	162	111	111
21	167	354	173	157	198	741	240	174	153	153	109	113
22	160	312	175	155	215	590	230	169	148	149	107	123
23	158	268	175	153	229	527	224	225	144	146	107	116
24	157	246	168	151	259	460	220	238	142	140	105	111
25	156	230	167	150	268	409	216	220	133	136	108	110
26	152	234	167	149	245	381	212	211	140	131	104	108
27	150	342	168	147	230	360	209	231	138	129	105	109
28	146	316	166	149	234	332	205	280	147	135	104	109
29	144	274	164	157	----	326	204	248	175	128	102	107
30	143	250	163	186	----	336	199	241	158	124	101	104
31	141	----	165	220	----	440	----	230	----	117	101	----
TOTAL	5247	5590	5943	6270	4981	14606	8162	6157	5032	5237	3834	3127
MEAN	169	186	192	202	178	471	272	199	168	169	124	104
MAX	244	354	244	443	259	907	391	280	261	290	242	126
MIN	141	123	163	147	130	193	199	163	133	117	101	93
CFSM	.97	1.07	1.10	1.16	1.02	2.71	1.56	1.14	.97	.97	.71	.60
IN.	1.12	1.19	1.27	1.34	1.06	3.12	1.74	1.32	1.08	1.12	.82	.67

CAL YR 1981 TOTAL 71439 MEAN 196 MAX 769 MIN 100 CFSM 1.13 IN 15.27
WTR YR 1982 TOTAL 74174 MEAN 203 MAX 907 MIN 93 CFSM 1.17 IN 15.86

05515400 KINGSBURY CREEK NEAR LAPORTE, IN

LOCATION.--Lat 41°32'49", long 86°43'48", in SW¼SE¼ sec.23, T.36 N., R.3 W., LaPorte County, Hydrologic Unit 07120001, on left bank at upstream side of bridge on County Road 400 South, 0.5 mile (0.8 km) east of State Highway 39, 1.5 miles (2.4 km) west of U.S. Highway 35, and 3 miles (5 km) south of LaPorte city limits.

DRAINAGE AREA.--7.08 mi² (18.34 km²), of which 4.07 mi² (10.54 km²) does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 753.00 ft (229.514 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years, 4.15 ft³/s (0.118 m³/s), 7.96 in/yr (202 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73 ft³/s (2.07 m³/s) July 26, 1981, gage height, 6.83 ft (2.082 m); minimum daily, 0.83 ft³/s (0.024 m³/s) Dec. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 30 ft³/s (0.850 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 20	0400	32	0.91	5.21	1.588	Mar. 30	1900	32	0.91	5.16	1.573
Mar. 13	0300	*63	1.78	*6.31	1.923	July 10	2200	32	0.91	5.12	1.561
Mar. 16	1800	35	0.99	5.33	1.625						

Minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	4.7	7.1	4.4	4.3	5.1	12	8.5	11	5.3	4.2	3.6
2	7.0	4.7	6.0	4.5	4.2	5.3	12	8.2	7.5	5.7	5.1	3.6
3	6.1	4.7	5.6	5.6	4.2	5.0	16	8.1	6.9	12	4.6	3.5
4	5.8	4.7	6.7	15	4.0	5.1	11	7.9	6.6	13	5.5	3.4
5	5.7	4.7	6.0	7.5	4.0	5.0	11	7.8	6.5	6.7	4.9	3.4
6	5.8	4.7	5.6	5.7	3.9	4.9	11	7.7	6.2	6.0	4.7	3.5
7	5.5	4.7	5.5	5.1	3.9	4.9	11	8.9	6.1	5.8	5.0	3.8
8	5.3	4.6	5.3	4.9	3.9	4.7	12	7.9	6.0	5.5	7.3	3.6
9	5.3	4.5	5.2	4.7	3.9	4.6	13	7.4	5.8	5.3	5.1	3.5
10	5.3	4.5	5.2	4.7	3.8	4.7	12	7.0	5.8	8.8	4.7	3.4
11	5.3	4.4	5.2	4.6	3.7	9.9	13	6.6	5.7	12	4.6	3.4
12	5.2	4.4	5.1	4.5	3.7	14	12	6.5	5.6	6.1	4.4	3.4
13	5.2	4.4	5.1	4.4	3.7	52	12	6.3	5.6	5.3	4.3	3.2
14	5.6	4.4	5.1	4.4	3.7	28	10	6.2	5.3	5.3	4.2	3.2
15	5.7	4.3	5.0	4.3	3.7	20	10	6.0	6.0	5.2	4.0	3.1
16	5.5	4.3	4.9	4.3	3.8	28	12	6.9	5.8	5.1	3.9	3.0
17	5.7	4.3	4.7	4.3	4.0	19	15	6.3	5.7	5.2	3.9	3.5
18	7.1	4.3	4.7	4.3	4.4	14	11	6.1	5.6	5.1	3.9	4.5
19	6.1	4.4	4.7	4.3	4.4	17	10	6.3	6.2	5.3	3.8	3.5
20	5.6	22	4.6	4.2	4.7	16	10	6.1	5.7	5.0	3.8	3.0
21	5.3	9.5	4.7	4.2	5.3	14	9.6	6.0	5.6	4.7	3.8	3.9
22	5.2	6.3	4.7	4.2	5.0	12	9.5	12	5.5	5.3	3.8	5.0
23	5.2	5.6	4.7	4.5	5.0	11	9.5	8.4	5.3	5.0	3.8	3.7
24	5.1	5.7	4.6	4.3	6.2	11	9.5	6.7	5.2	4.6	3.7	3.1
25	5.1	5.6	4.6	4.2	5.5	10	9.3	6.5	5.0	4.4	3.8	3.1
26	5.1	12	4.6	4.0	5.2	10	9.3	6.7	5.0	4.3	3.7	3.1
27	5.1	9.5	4.6	4.2	5.1	10	9.0	12	5.0	5.1	3.7	3.0
28	4.9	6.5	4.6	4.0	5.0	9.9	8.8	8.4	6.5	5.3	3.6	2.9
29	4.9	5.7	4.5	4.0	-----	9.8	8.6	7.0	7.4	4.6	3.6	2.8
30	4.9	5.6	4.3	4.9	-----	16	8.5	12	5.8	4.4	3.6	2.6
31	4.9	-----	4.3	4.6	-----	17	-----	7.9	-----	4.3	3.6	-----
TOTAL	172.2	179.7	157.5	152.8	122.2	397.9	327.6	236.3	181.9	185.7	132.6	102.3
MEAN	5.55	5.99	5.08	4.93	4.36	12.8	10.9	7.62	6.06	5.99	4.28	3.41
MAX	7.7	22	7.1	15	6.2	52	16	12	11	13	7.3	5.0
MIN	4.9	4.3	4.3	4.0	3.7	4.6	8.5	6.0	5.0	4.3	3.6	2.6
CFSM	.78	.85	.72	.70	.62	1.81	1.54	1.08	.86	.85	.61	.49
IN.	.90	.94	.83	.80	.64	2.09	1.72	1.24	.96	.98	.70	.54

CAL YR 1981 TOTAL 1747.2 MEAN 4.79 MAX 35 MIN 1.5 CFSM .68 IN 9.18
WTR YR 1982 TOTAL 2348.7 MEAN 6.43 MAX 52 MIN 2.6 CFSM .91 IN 12.34

05515500 KANKAKEE RIVER AT DAVIS, IN

LOCATION.--Lat 41°24'00", long 86°42'04", in SE¼NE¼ sec.13, T.34 N., R.3 W., Starke County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on U.S. Highway 30 at Davis, 0.5 mile (0.8 km) downstream from Mill Creek, 4 miles (6 km) east of Hanna, and at mile 110.9 (178.4 km).

DRAINAGE AREA.--537 mi^2 (1,391 km^2), of which 137 mi^2 (355 km^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 (202.594 m) National Geodetic Vertical Datum of 1929. July 13, 1905, to July 21, 1906, nonrecording gage at site 50 ft (15 m) downstream at different datum. July 28, 1925, to May 18, 1929, nonrecording gage on bridge 0.5 mile (0.8 km) downstream at different datum. Apr. 19, 1931, to Nov. 3, 1953, nonrecording gage at present site and datum.

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

AVERAGE DISCHARGE.--58 years, (1924 to current year), 500 ft^3/s (14.16 m^3/s), 12.64 in/yr (321 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft^3/s (54.4 m^3/s) Mar. 20, 1982; maximum gage height, 12.98 ft (3.956 m) Mar. 17, 1982: minimum daily discharge, 154 ft^3/s (4.36 m^3/s) Aug. 30 to Sept. 3, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,920 ft^3/s (54.4 m^3/s) Mar. 20; maximum gage height, 12.98 ft (3.956 m) Mar. 17; minimum daily discharge, 364 ft^3/s (10.31 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	916	521	802	558	587	800	1390	870	920	555	482	394
2	838	524	787	560	587	830	1350	839	975	526	507	396
3	793	544	763	593	582	800	1380	812	872	765	528	389
4	750	544	752	822	563	778	1430	792	792	960	523	380
5	705	541	757	1100	535	772	1390	768	742	883	541	373
6	688	544	742	1090	525	742	1360	741	698	773	519	371
7	672	540	722	1010	500	708	1310	735	664	695	504	394
8	641	531	702	898	495	675	1280	742	640	643	788	396
9	617	524	687	770	485	657	1270	721	620	597	1040	386
10	595	515	672	720	475	648	1260	701	608	572	943	378
11	580	506	656	680	475	790	1250	682	585	669	793	372
12	566	499	643	640	465	1230	1260	672	568	664	682	365
13	558	496	636	600	455	1680	1290	659	557	607	607	364
14	552	490	631	580	445	1730	1260	645	547	652	560	367
15	563	489	639	560	440	1720	1220	629	547	795	531	379
16	563	487	627	540	440	1750	1210	619	561	739	507	372
17	555	486	612	530	480	1780	1290	626	543	678	490	372
18	595	483	598	520	510	1850	1340	616	532	639	471	450
19	665	482	587	510	530	1880	1290	633	542	618	455	456
20	654	648	574	500	550	1920	1240	638	544	602	447	428
21	615	917	571	495	570	1800	1200	623	543	572	446	428
22	584	923	585	490	610	1720	1170	625	536	566	434	514
23	571	853	588	480	680	1650	1130	678	519	569	432	504
24	565	807	571	470	800	1640	1090	685	508	549	430	471
25	562	778	560	460	890	1630	1060	658	495	531	431	454
26	552	783	560	450	950	1600	1030	645	488	512	423	450
27	546	923	562	440	940	1560	999	674	487	501	417	468
28	541	960	565	450	880	1510	957	820	502	568	410	475
29	535	896	558	500	-----	1460	924	843	642	556	403	460
30	529	832	544	540	-----	1420	897	846	612	519	401	444
31	524	-----	552	570	-----	1430	-----	851	-----	496	399	-----
TOTAL	19190	19066	19805	19126	16444	41160	36527	22088	18389	19571	16544	12450
MEAN	619	636	639	617	587	1328	1218	713	613	631	534	415
MAX	916	960	802	1100	950	1920	1430	870	975	960	1040	514
MIN	524	482	544	440	440	648	897	616	487	496	399	364
CFSM	1.15	1.18	1.19	1.15	1.09	2.47	2.27	1.33	1.14	1.18	.99	.77
IN.	1.33	1.32	1.37	1.32	1.14	2.85	2.53	1.53	1.27	1.36	1.15	.86

CAL YR 1981 TOTAL 246505 MEAN 675 MAX 1570 MIN 391 CFSM 1.26 IN 17.08
WTR YR 1982 TOTAL 260360 MEAN 713 MAX 1920 MIN 364 CFSM 1.33 IN 18.04

05516500 YELLOW RIVER AT PLYMOUTH, IN

LOCATION.--Lat 41°20'25", long 86°18'16", in SE¼NW¼ sec.13, T.33 N., R.2 E., Marshall County, Hydrologic Unit 07120001, on left bank 50 ft (15 m) upstream from LaPorte Street footbridge in Plymouth, 1.1 miles (1.8 km) downstream from Elmer Seltenright (formerly Baker) ditch, 8.1 miles (13.0 km) upstream from Wolf Creek, and at mile 40.3 (64.8 km).

DRAINAGE AREA.--294 mi² (761 km²), of which 22 mi² (57 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1338: 1950-51. WSP 2115: Drainage area. WDR IN-73-1: 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 764.78 ft (233.105 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Aug. 27, 1959, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--34 years, 257 ft³/s (7.278 m³/s), 11.87 in/yr (301 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,390 ft³/s (153 m³/s) Oct. 12, 13, 1954, gage height, 17.13 ft (5.221 m); minimum daily, 13 ft³/s (0.37 m³/s) Dec. 3, 7, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,730 ft³/s (134 m³/s) Mar. 16, gage height, 16.37 ft (4.990 m); minimum daily, 47 ft³/s (1.33 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	802	171	348	190	261	387	586	188	708	118	76	58
2	520	167	337	199	250	466	484	182	1070	113	78	56
3	319	167	300	256	235	429	535	181	922	521	80	54
4	255	167	290	784	225	345	625	176	414	923	71	52
5	235	165	306	1240	216	426	484	168	300	1030	69	50
6	458	165	289	1530	193	373	421	165	245	619	68	49
7	499	161	274	1370	185	328	428	170	212	313	75	62
8	322	155	257	950	182	280	401	174	191	234	330	66
9	242	149	234	535	172	249	417	164	174	188	641	59
10	208	141	222	400	165	257	498	161	164	168	380	54
11	188	133	214	290	155	622	545	148	149	175	230	53
12	168	130	205	255	150	1340	693	142	139	172	170	49
13	156	125	197	246	147	2470	881	137	132	146	138	48
14	151	121	195	235	144	3530	877	134	124	240	118	50
15	155	122	192	225	152	4310	592	130	122	592	106	51
16	156	125	182	220	170	4630	469	127	121	492	96	51
17	155	121	173	205	232	4440	710	129	117	250	88	54
18	268	117	165	187	367	3960	1030	126	112	179	82	81
19	438	121	153	175	443	3430	916	127	121	158	75	74
20	380	205	141	172	483	2920	603	124	118	144	76	61
21	294	458	142	170	681	2570	467	119	129	126	80	53
22	244	565	166	169	830	2290	365	130	128	117	74	52
23	223	387	164	168	856	1920	322	158	112	152	69	51
24	201	326	148	165	884	1560	298	172	103	122	69	52
25	188	314	145	162	931	1270	273	146	98	97	71	49
26	181	328	153	151	775	1070	256	139	95	89	70	50
27	173	673	158	144	555	872	238	178	93	111	71	55
28	203	849	170	142	431	682	214	650	93	109	70	54
29	208	505	172	138	-----	593	201	625	110	97	65	52
30	192	393	143	178	-----	546	192	358	160	92	63	47
31	181	----	179	241	-----	591	-----	283	----	82	60	----
TOTAL	8363	7726	6414	11492	10470	49156	15021	6011	6776	7969	3809	1647
MEAN	270	258	207	371	374	1586	501	194	226	257	123	54.9
MAX	802	849	348	1530	931	4630	1030	650	1070	1030	641	81
MIN	151	117	141	138	144	249	192	119	93	82	60	47
CFSM	.92	.88	.70	1.26	1.27	5.40	1.70	.66	.77	.87	.42	.19
IN.	1.06	.98	.81	1.45	1.32	6.22	1.90	.76	.86	1.01	.48	.21

CAL YR 1981 TOTAL 139649 MEAN 383 MAX 2230 MIN 86 CFSM 1.30 IN 17.67
WTR YR 1982 TOTAL 134854 MEAN 369 MAX 4630 MIN 47 CFSM 1.26 IN 17.06

05516500 YELLOW RIVER AT PLYMOUTH, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
01...	0800	823	18.0	75	167
01...	1200	823	17.5	78	173
01...	1600	810	17.0	71	155
02...	0700	584	16.5	50	79
02...	1600	452	14.5	41	50
03...	0700	338	10.0	22	20
03...	1600	300	15.0	15	12
04...	0700	262	14.0	17	12
04...	1600	247	16.5	16	11
05...	0700	230	16.0	24	15
05...	1600	225	17.8	56	34
06...	1600	525	16.5	214	303
07...	0700	546	14.0	76	112
07...	1600	472	15.5	74	90
08...	0700	342	14.0	30	28
08...	1600	296	14.0	18	14
09...	0700	226	13.5	16	9.8
09...	1600	235	14.5	13	8.2
10...	0700	211	11.0	21	12
10...	1600	204	13.5	20	11
11...	0700	193	10.5	24	13
11...	1700	182	15.0	12	5.9
12...	0700	170	14.5	24	11
12...	1600	167	15.0	22	9.9
13...	0700	158	11.5	28	12
13...	1700	155	16.5	16	6.7
14...	0700	152	15.5	32	13
14...	1600	152	14.5	18	7.4
15...	0700	165	14.0	24	11
15...	1600	162	15.0	30	13
16...	0700	160	13.0	30	13
16...	1700	160	14.0	10	4.3
17...	0800	154	11.5	12	5.0
17...	1600	156	14.5	11	4.6
18...	0800	203	13.5	22	12
18...	1600	314	12.5	38	32
19...	0700	443	12.5	58	69
19...	1600	479	10.5	44	57
20...	0700	404	11.5	25	27

05516500 YELLOW RIVER AT PLYMOUTH, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT					
20...	1700	359	13.5	14	14
21...	0700	314	9.5	17	14
21...	1600	284	13.0	16	12
22...	0700	251	8.0	16	11
22...	1600	244	10.5	10	6.6
23...	0700	220	9.0	9	5.0
23...	1600	220	9.0	6	3.6
24...	0800	204	5.5	8	4.4
24...	1600	200	8.5	12	6.5
25...	0700	190	8.0	8	4.1
25...	1600	193	11.0	3	1.6
26...	0700	181	8.5	6	2.7
26...	1600	181	9.0	6	2.9
27...	0700	178	9.5	8	3.6
27...	1600	174	13.0	7	3.1
28...	0800	211	11.0	24	14
28...	1600	233	14.0	12	7.5
29...	0700	213	9.5	18	10
29...	1600	203	13.5	10	5.5
30...	0800	200	13.0	16	8.6
30...	1700	193	15.5	9	4.7
31...	0800	181	11.0	14	6.8
31...	1600	181	16.0	12	5.9
NOV					
01...	0800	174	14.0	18	8.5
01...	1600	173	15.5	12	5.6
02...	0830	167	14.5	14	6.3
02...	1600	165	14.0	14	6.2
03...	0800	165	14.0	22	9.8
03...	1600	173	17.0	12	5.6
04...	0700	167	12.5	12	5.4
04...	1600	173	16.5	10	4.7
05...	0830	168	14.5	16	7.3
05...	1600	168	14.5	13	5.9
06...	0700	164	10.0	24	11
06...	1600	167	10.0	9	4.1
07...	0830	162	8.5	6	2.6
07...	1600	160	9.5	6	2.6
08...	0800	154	8.5	9	3.7
08...	1600	158	10.0	8	3.4
09...	0700	152	7.5	9	3.7
09...	1600	148	11.0	8	3.2
10...	0900	149	5.5	15	6.0
10...	1600	134	10.0	4	1.4

05517000 YELLOW RIVER AT KNOX, IN

LOCATION.--Lat 41°18'10", long 86°37'14", in SW¼SW¼ sec.14, T.33 N., R.2 W., Starke County, Hydrologic Unit 07120001, on right bank 40 ft (12 m) upstream from bridge on U.S. Highway 35 in Knox, 1.4 miles (2.3 km) downstream from Eagle Creek, and at mile 11.6 (18.7 km).

DRAINAGE AREA.--435 mi² (1,127 km²), of which 51 mi² (132 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1905 to July 1906, August 1943 to current year.

REVISED RECORDS.--WSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft (207.243 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). August 1905 to July 1906, nonrecording gage at same site at different datum. August 1943 to July 17, 1952, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--39 years (water years 1944 to current year), 393 ft³/s (11.13 m³/s), 12.27 in/yr (312 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft³/s (160 m³/s) Oct. 15, 16, 1954, gage height, 13.75 ft (4.191 m); minimum daily, 50 ft³/s (1.42 m³/s) Jan. 21-31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,280 ft³/s (150 m³/s) Mar. 18, gage height, 13.25 ft (4.039 m); minimum daily, 126 ft³/s (3.57 m³/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	751	285	545	289	390	619	890	413	601	258	200	143
2	816	274	504	300	423	608	990	402	840	225	202	143
3	647	271	474	323	380	649	800	388	1040	277	209	138
4	465	271	460	515	323	604	1000	381	1040	597	200	136
5	397	274	455	914	304	577	900	371	632	819	196	133
6	380	274	441	1200	338	605	800	360	494	945	199	131
7	545	274	419	1540	322	551	740	374	431	705	193	133
8	569	267	405	1490	300	497	730	397	396	434	246	146
9	441	256	380	1000	285	452	720	379	362	347	470	146
10	375	250	359	580	279	424	730	357	342	306	605	141
11	334	240	342	470	287	536	750	341	324	304	470	133
12	304	236	331	420	280	1190	810	331	302	298	338	131
13	281	230	323	400	275	2170	890	319	288	284	281	126
14	271	227	315	390	270	3460	970	308	276	315	243	128
15	267	223	307	370	270	4110	1050	305	276	439	220	131
16	271	220	307	360	285	4620	920	295	264	642	208	128
17	271	223	296	335	330	5040	800	295	260	566	199	128
18	285	217	285	310	469	5250	900	291	254	390	187	148
19	392	217	265	295	579	5100	1000	287	258	328	173	157
20	520	267	240	285	621	4780	1170	282	262	301	167	148
21	484	410	246	280	715	4290	831	275	263	278	167	145
22	419	616	250	280	860	3720	690	295	268	260	164	138
23	380	637	250	280	965	3250	608	365	262	253	162	132
24	346	530	245	275	1040	2740	559	363	243	273	162	131
25	327	474	240	270	1100	2230	530	342	230	246	164	133
26	304	470	263	260	1070	1840	507	313	224	228	159	132
27	292	545	267	240	913	1620	481	328	219	220	156	135
28	292	730	274	235	716	1350	455	451	214	232	154	139
29	315	829	250	230	-----	1110	433	734	211	228	151	135
30	315	688	334	275	-----	995	423	730	229	217	143	130
31	296	-----	263	325	-----	959	-----	549	-----	207	143	----
TOTAL	12352	10925	10335	14736	14389	65946	23077	11621	11305	11422	6931	4098
MEAN	398	364	333	475	514	2127	769	375	377	368	224	137
MAX	816	829	545	1540	1100	5250	1170	734	1040	945	605	157
MIN	267	217	240	230	270	424	423	275	211	207	143	126
CFSM	.92	.84	.77	1.09	1.18	4.89	1.77	.86	.87	.85	.52	.32
IN.	1.06	.93	.88	1.26	1.23	5.64	1.97	.99	.97	.98	.59	.35

CAL YR 1981 TOTAL 203602 MEAN 558 MAX 3150 MIN 160 CFSM 1.28 IN 17.41
WTR YR 1982 TOTAL 197137 MEAN 540 MAX 5250 MIN 126 CFSM 1.24 IN 16.86

05517500 KANKAKEE RIVER AT DUNNS BRIDGE, IN

LOCATION.--Lat 41°13'17", long 86°57'52", in NE¼SE¼ sec.15, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank at downstream side of county highway bridge at Dunns Bridge, 1.8 miles (2.9 km) north of Tefft, 3.6 miles (5.8 km) upstream from Davis ditch, and at mile 90.8 (146.1 km).

DRAINAGE AREA.--1,352 mi² (3,502 km²), of which 192 mi² (497 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1728: 1954(m). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 649.65 ft (198.013 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 17, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, which are fair.

AVERAGE DISCHARGE.--34 years, 1,313 ft³/s (37.18 m³/s), 13.19 in/yr (335 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,870 ft³/s (166 m³/s) Mar. 23, 1982; maximum gage height, 13.38 ft (4.078 m) Mar. 20, 1982; minimum daily discharge, 280 ft³/s (7.93 m³/s) Jan. 25-29, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,870 ft³/s (166 m³/s) Mar. 23; maximum gage height, 13.38 ft (4.078 m) Mar. 20; minimum daily discharge, 548 ft³/s (15.5 m³/s) Sept. 14, 17.

NOTE.--No gage-height record Jan. 7 to Feb. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1970	1120	2040	1200	1240	2420	4830	2620	2110	1160	870	635
2	2090	1120	1970	1200	1310	2380	4680	2520	2260	1090	866	636
3	2100	1130	1900	1280	1340	2360	4510	2420	2350	1150	910	618
4	2040	1130	1820	1670	1330	2340	4380	2330	2400	1500	899	592
5	1910	1120	1780	2160	1300	2290	4290	2260	2380	1770	917	578
6	1810	1120	1730	2470	1230	2230	4200	2190	2210	1870	936	568
7	1750	1110	1710	2600	1180	2160	4070	2130	2000	1880	911	580
8	1740	1080	1660	2600	1150	2060	3940	2100	1830	1680	1110	608
9	1680	1070	1600	2450	1140	1930	3830	2010	1690	1480	1510	611
10	1590	1040	1550	2050	1110	1860	3710	1910	1590	1350	1750	590
11	1500	1030	1510	1730	1100	2100	3650	1810	1490	1370	1770	573
12	1430	1020	1470	1500	1080	2720	3620	1730	1410	1390	1560	558
13	1380	1020	1440	1400	1050	3330	3600	1640	1350	1320	1310	551
14	1330	1010	1400	1380	1020	3980	3580	1580	1290	1230	1140	548
15	1320	990	1390	1320	1020	4580	3550	1510	1250	1370	1040	554
16	1300	980	1370	1280	1020	5090	3530	1460	1250	1560	966	556
17	1300	987	1340	1200	1060	5240	3580	1460	1210	1650	914	548
18	1340	971	1310	1190	1130	5360	3570	1430	1180	1550	853	624
19	1450	958	1230	1180	1200	5520	3560	1420	1170	1410	808	711
20	1550	1120	1180	1160	1220	5660	3540	1430	1160	1320	783	690
21	1560	1500	1110	1130	1340	5540	3500	1430	1150	1220	762	567
22	1500	1720	1140	1120	1550	5700	3460	1450	1130	1170	737	657
23	1430	1820	1180	1100	1900	5850	3380	1550	1140	1120	728	724
24	1340	1830	1170	1100	2250	5800	3290	1580	1130	1090	717	705
25	1300	1800	1150	1090	2500	5750	3200	1560	1090	1060	719	674
26	1290	1780	1170	1070	2600	5690	3120	1530	1060	997	704	660
27	1260	1840	1200	1050	2610	5570	3030	1530	1030	954	687	658
28	1270	1990	1200	980	2540	5440	2930	1650	1040	970	667	686
29	1220	2050	1200	1000	-----	5280	2870	1820	1130	1020	649	683
30	1200	2080	1150	1080	-----	5140	2710	1960	1200	966	637	661
31	1160	-----	1180	1160	-----	4990	------	2040	-----	908	631	-----
TOTAL	47110	39536	44250	44900	40520	126360	109710	56060	44680	40575	29461	18604
MEAN	1520	1318	1427	1448	1447	4076	3657	1808	1489	1309	950	620
MAX	2100	2080	2040	2600	2610	5850	4830	2620	2400	1880	1770	724
MIN	1160	958	1110	980	1020	1860	2710	1420	1030	908	631	548
CFSM	1.12	.98	1.06	1.07	1.07	3.02	2.71	1.34	1.10	.97	.70	.46
IN.	1.30	1.09	1.22	1.24	1.11	3.48	3.02	1.54	1.23	1.12	.81	.51

CAL YR 1981 TOTAL 676859 MEAN 1854 MAX 4870 MIN 750 CFSM 1.37 IN 18.62
WTR YR 1982 TOTAL 641766 MEAN 1758 MAX 5850 MIN 548 CFSM 1.30 IN 17.66

05517530 KANKAKEE RIVER NEAR KOUTS, IN

LOCATION.--Lat 41°15'14", long 87°02'02", in SW¼NE¼ sec.6, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank, 20 ft (6 m) downstream from bridge on State Highway 49, 4.5 miles (7.2 km) south of Kouts, 0.7 mile (1.1 km) upstream from Cook ditch, and at mile 86.7 (139.5 km).

DRAINAGE AREA.--1,376 mi^2 (3,564 km^2), of which 194 mi^2 (502 km^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 (196.596 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--8 years, 1,460 ft^3/s (41.35 m^3/s), 14.41 in/yr (366 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,420 ft^3/s (182 m^3/s) Mar. 24, 1982, gage height, 14.52 ft (4.426 m); minimum daily, 335 ft^3/s (9.49 m^3/s) Sept. 12, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,420 ft^3/s (182 m^3/s) Mar. 24, gage height, 14.52 ft (4.426 m); minimum daily, 600 ft^3/s (17.0 m^3/s) Sept. 13.

NOTE.--No gage-height record Feb. 7 to Mar. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1940	1270	2140	1390	1220	2450	5030	2760	2200	1250	974	681
2	2060	1300	2080	1370	1300	2330	4830	2610	2330	1170	942	692
3	2110	1320	2020	1440	1350	2320	4630	2510	2390	1170	945	672
4	2020	1310	1970	1760	1360	2300	4450	2400	2430	1470	941	651
5	1900	1300	1940	2200	1320	2270	4260	2340	2450	1720	955	649
6	1820	1260	1890	2500	1250	2200	4190	2250	2290	1850	986	681
7	1770	1280	1910	2670	1200	2100	4100	2200	2070	1850	918	687
8	1770	1230	1860	2660	1170	2020	4010	2170	1880	1700	1110	713
9	1750	1200	1760	2400	1160	1930	3930	2110	1730	1530	1480	692
10	1650	1170	1710	2050	1150	1900	3850	1980	1630	1410	1700	650
11	1570	1170	1670	1800	1130	2150	3800	1870	1550	1420	1770	627
12	1500	1170	1640	1580	1100	2750	3770	1800	1470	1440	1590	612
13	1470	1150	1620	1450	1070	3200	3760	1690	1440	1350	1400	600
14	1430	1160	1580	1390	1050	3800	3720	1630	1350	1250	1210	603
15	1410	1120	1550	1340	1020	4210	3690	1580	1310	1350	1130	606
16	1390	1110	1530	1320	1040	4640	3660	1550	1310	1510	1020	616
17	1410	1090	1510	1260	1050	4850	3730	1560	1290	1630	958	601
18	1410	1080	1480	1220	1100	4810	3740	1530	1280	1600	906	666
19	1490	1060	1420	1190	1190	4920	3720	1520	1260	1490	890	756
20	1610	1230	1380	1170	1220	5060	3670	1500	1260	1410	860	747
21	1650	1610	1330	1160	1300	5400	3630	1490	1240	1320	812	673
22	1600	1830	1320	1140	1500	5760	3590	1500	1210	1290	810	748
23	1530	1910	1370	1130	1820	6090	3530	1590	1200	1230	820	825
24	1440	1910	1360	1120	2150	6410	3460	1620	1160	1150	798	814
25	1400	1910	1340	1110	2400	6390	3380	1620	1120	1110	787	737
26	1420	1940	1350	1100	2550	6280	3290	1610	1090	1040	797	714
27	1380	1990	1390	1090	2600	6160	3200	1600	1060	1020	789	710
28	1410	2100	1380	1050	2550	5950	3080	1680	1110	1060	761	734
29	1360	2130	1380	1000	-----	5720	2990	1830	1200	1100	720	735
30	1330	2160	1340	1050	-----	5490	2870	1980	1290	1030	704	710
31	1310	-----	1380	1150	-----	5250	------	2080	-----	970	683	-----
TOTAL	49310	43470	49600	46260	40320	127110	113560	58160	46600	41890	31166	20602
MEAN	1591	1449	1600	1492	1440	4100	3785	1876	1553	1351	1005	687
MAX	2110	2160	2140	2670	2600	6410	5030	2760	2450	1850	1770	825
MIN	1310	1060	1320	1000	1020	1900	2870	1490	1060	970	683	600
CFSM	1.16	1.05	1.16	1.08	1.05	2.98	2.75	1.36	1.13	.98	.73	.50
IN.	1.33	1.18	1.34	1.25	1.09	3.44	3.07	1.57	1.26	1.13	.84	.56

CAL YR 1981 TOTAL 691047 MEAN 1893 MAX 4610 MIN 730 CFSM 1.38 IN 18.68
WTR YR 1982 TOTAL 668048 MEAN 1830 MAX 6410 MIN 600 CFSM 1.33 IN 18.06

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 (4.6 m) upstream from bridge on County Road 50 West, 1.6 miles (2.6 km) upstream from mouth, and 3 miles (5 km) northwest of Kouts.

DRAINAGE AREA.--30.3 mi^2 (78.5 km^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 (198.730 m) National Geodetic Vertical Datum of 1929 (State Highway Commission bench mark). Prior to Oct. 19, 1978, water stage recorder at site 1.4 miles (2.3 km) downstream at same datum.

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

AVERAGE DISCHARGE.--14 years, 32.7 ft^3/s (0.926 m^3/s), 14.66 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 777 ft^3/s (22.0 m^3/s) Mar. 5, 1976, from flood mark at site then in use; maximum gage height at present site, 17.71 ft (5.398 m) Mar. 13, 1982 (backwater from ice); minimum daily discharge, 8.9 ft^3/s (0.25 m^3/s) Sept. 11, 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft^3/s (4.25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	2200	212	6.00	11.49	3.502	Apr. 17	0800	354	10.0	13.22	4.029
Mar. 13	----	*751	21.3	*17.71[a]	5.398	Jun. 1	0500	240	6.80	11.84	3.609
Mar. 19	2300	262	7.42	12.12	3.694	Aug. 8	0300	355	10.0	13.23	4.032
Apr. 12	2400	165	4.67	10.86	3.310						

Minimum daily discharge, 14.0 ft^3/s (0.40 m^3/s) Sept. 3-6, 9-17, 29, 30.

[a] Ice jam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	21	36	22	29	44	57	31	137	22	17	15
2	43	21	36	22	27	53	51	30	55	22	18	15
3	41	22	32	29	26	50	94	29	39	24	17	14
4	36	22	32	137	25	45	61	28	34	22	18	14
5	33	22	32	169	25	41	50	28	31	22	18	14
6	36	22	30	95	24	37	45	27	29	21	17	14
7	32	22	29	62	24	34	45	27	27	21	25	15
8	30	22	27	49	23	31	44	27	26	20	168	15
9	29	21	26	44	23	29	46	26	25	19	36	14
10	27	21	26	38	23	28	54	25	25	24	26	14
11	26	21	25	34	22	141	58	25	24	25	23	14
12	26	21	24	32	22	312	117	24	24	21	21	14
13	25	21	24	30	22	721	119	24	23	21	20	14
14	25	21	24	29	23	484	64	23	23	20	19	14
15	26	20	24	28	24	307	52	23	24	20	18	14
16	26	20	23	27	25	336	54	23	23	19	17	14
17	26	20	23	27	27	283	259	23	23	19	17	14
18	35	20	24	27	31	160	108	22	23	19	17	17
19	33	20	23	28	33	162	76	22	24	19	17	15
20	29	128	22	28	38	235	64	22	23	18	16	15
21	26	69	22	28	63	145	50	22	23	18	16	15
22	26	41	22	28	88	100	43	34	23	21	16	15
23	25	35	22	27	89	95	40	28	23	19	16	15
24	24	34	22	26	92	83	38	27	23	18	16	15
25	24	41	22	26	87	72	36	26	23	19	16	15
26	23	59	21	26	70	62	35	26	22	18	15	15
27	23	93	21	25	55	56	34	29	22	18	15	15
28	23	47	21	25	45	52	33	34	28	18	15	15
29	22	38	21	25	----	49	32	29	26	17	15	14
30	22	35	21	27	----	55	32	32	23	17	15	14
31	22	----	22	32	----	92	----	28	----	17	15	----
TOTAL	894	1020	779	1252	1105	4402	1891	824	898	617	715	437
MEAN	28.8	34.0	25.1	40.4	39.5	142	63.0	26.6	29.9	19.9	23.1	14.6
MAX	50	128	36	169	92	721	259	34	137	25	168	17
MIN	22	20	21	22	22	28	32	22	22	17	15	14
CFSM	.91	1.07	.79	1.27	1.25	4.48	1.99	.84	.94	.63	.73	.46
IN.	1.05	1.20	.91	1.47	1.30	5.17	2.22	.97	1.05	.72	.84	.51

CAL YR 1981 TOTAL 15236 MEAN 41.7 MAX 639 MIN 12 CFSM 1.32 IN 17.88
WTR YR 1982 TOTAL 14834 MEAN 40.6 MAX 721 MIN 14 CFSM 1.28 IN 17.41

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 (7.6 m) upstream from Monon Railroad bridge, 1 mile (2 km) south of Shelby, 7.7 miles (12.4 km) upstream from Beaver Lake ditch, and at mile 67.9 (109.2 km).

DRAINAGE AREA.--1,779 mi² (4,608 km²), of which 201 mi² (521 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1005: 1928(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 628.13 ft (191.454 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 19, 1934, nonrecording gage at highway bridge about 400 ft (122 m) upstream. Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft (15 m) downstream, and Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft (61 m) upstream. All at same datum.

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

AVERAGE DISCHARGE.--60 years, 1,609 ft³/s (45.57 m³/s), 12.28 in/yr (312 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,650 ft³/s (217 m³/s) Mar. 26, 1982; maximum gage height, 12.98 ft (3.956 m) Mar. 24, 1982; minimum daily discharge, 260 ft³/s (7.36 m³/s) Jan. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,650 ft³/s (217 m³/s) Mar. 26; maximum gage height, 12.98 ft (3.956 m) Mar. 24; minimum daily discharge, 666 ft³/s (18.9 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2350	1460	2620	1570	1610	3460	6800	3870	2710	1590	1290	761
2	2440	1460	2590	1570	1720	3350	6700	3750	2940	1540	1230	760
3	2510	1490	2510	1640	1800	3300	6500	3620	2990	1510	1160	753
4	2520	1490	2420	2000	1820	3350	6300	3490	2990	1570	1140	728
5	2420	1490	2360	2610	1800	3390	6210	3310	2980	1780	1120	714
6	2330	1450	2290	2980	1750	3320	6100	3240	2950	1970	1160	730
7	2240	1460	2260	3140	1650	3220	5950	3170	2820	2080	1140	742
8	2170	1430	2230	3200	1610	3090	5900	3070	2620	2080	1330	756
9	2120	1390	2140	3100	1600	2940	5800	2950	2400	1980	1550	751
10	2050	1350	2070	2800	1580	2810	5660	2820	2230	1870	1640	730
11	1940	1340	2020	2350	1550	3050	5580	2690	2120	1830	1840	701
12	1840	1340	1990	2110	1500	3860	5500	2570	2030	1830	1910	687
13	1760	1300	1970	1980	1460	4570	5410	2440	1950	1790	1750	675
14	1710	1320	1930	1900	1420	5070	5390	2310	1860	1720	1500	674
15	1680	1290	1880	1820	1410	5420	5290	2220	1760	1660	1340	670
16	1640	1280	1840	1750	1410	5620	5190	2160	1730	1710	1210	666
17	1630	1260	1810	1690	1480	5810	5230	2140	1700	1810	1100	671
18	1670	1270	1770	1630	1510	5990	5240	2120	1680	1890	1020	747
19	1750	1260	1700	1600	1600	6140	5230	2090	1650	1930	957	789
20	1820	1400	1680	1590	1680	6400	5130	2100	1620	1910	941	800
21	1890	1830	1630	1580	1810	6650	5030	2050	1610	1820	903	781
22	1880	2060	1590	1580	2050	6900	4970	2210	1580	1730	870	766
23	1820	2180	1590	1540	2320	7100	4870	2300	1540	1720	883	809
24	1730	2270	1580	1520	2700	7400	4770	2300	1490	1660	878	830
25	1660	2310	1560	1510	3050	7500	4670	2280	1450	1580	854	817
26	1660	2350	1540	1500	3310	7650	4570	2230	1400	1500	851	786
27	1620	2440	1560	1480	3560	7600	4450	2200	1340	1440	839	783
28	1610	2520	1580	1450	3510	7500	4320	2240	1380	1400	833	776
29	1580	2570	1560	1450	-----	7400	4170	2310	1530	1380	798	779
30	1540	2580	1520	1500	-----	7200	4020	2430	1590	1370	784	773
31	1510	-----	1540	1580	-----	7000	------	2520	-----	1340	769	-----
TOTAL	59090	50640	59330	59720	54270	164060	160950	81200	60640	52990	35590	22405
MEAN	1906	1688	1914	1926	1938	5292	5365	2619	2021	1709	1148	747
MAX	2520	2580	2620	3200	3560	7650	6800	3870	2990	2080	1910	830
MIN	1510	1260	1520	1450	1410	2810	4020	2050	1340	1340	769	666
CFSM	1.07	.95	1.08	1.08	1.09	2.98	3.02	1.47	1.14	.96	.65	.42
IN.	1.24	1.06	1.24	1.25	1.13	3.43	3.37	1.70	1.27	1.11	.74	.47

CAL YR 1981 TOTAL 892670 MEAN 2446 MAX 6200 MIN 920 CFSM 1.38 IN 18.67
WTR YR 1982 TOTAL 860885 MEAN 2359 MAX 7650 MIN 666 CFSM 1.33 IN 18.00

05519000 SINGLETON DITCH AT SCHNEIDER, IN

LOCATION.--Lat 41°12'44", long 87°26'44", in SW¼NW¼ sec.22, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on left bank 15 ft (5 m) upstream from bridge on Ackerman Avenue, 0.5 mile (0.8 km) upstream from Bruce ditch, 1.5 miles (2.4 km) downstream from Cedar Creek, 1.6 miles (2.6 km) north of Schneider, and at mile 10.1 (16. km).

DRAINAGE AREA.--123 mi^2 (319 km^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 (190.095 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1949, nonrecording gage at same site at datum 2.00 ft (0.610 m) higher. Oct. 1, 1949, to Aug. 13, 1951, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--34 years, 107 ft^3/s (3.030 m^3/s), 11.81 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft^3/s (101 m^3/s) Mar. 5 , 1976; maximum gage height, 12.37 ft (3.770 m) June 25, 1975; minimum daily discharge, 3.6 ft^3/s (0.102 m^3/s) Sept. 7, 8, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 730 ft^3/s (20.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 5	2000	824	23.3	6.45	1.966	Mar. 20	0400	1140	32.3	8.03	2.448
Mar. 13	0700	*1910	54.1	*11.41	3.478	Apr. 17	0800	1400	39.6	9.22	2.810
Mar. 16	1300	1390	39.4	9.18	2.798						

Minimum daily discharge, 18 ft^3/s (0.510 m^3/s) Sept. 5, 6, 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	59	143	70	74	306	230	115	132	52	27	22
2	112	61	148	79	70	397	220	109	125	50	27	24
3	97	63	129	84	66	321	290	104	106	57	26	20
4	94	63	125	287	62	253	255	99	99	52	24	19
5	90	70	124	701	59	240	225	96	91	47	23	18
6	100	72	117	553	58	203	212	94	83	45	24	18
7	96	71	113	261	56	182	215	94	79	48	26	21
8	89	71	107	195	54	162	226	90	74	45	107	21
9	85	68	99	156	51	151	238	85	72	42	63	20
10	80	63	94	126	48	155	260	83	70	44	42	19
11	76	63	90	100	47	930	325	79	66	57	35	19
12	73	62	86	84	46	1280	468	77	63	47	31	19
13	70	61	84	73	45	1770	485	75	61	42	29	19
14	69	58	83	69	45	1570	358	71	59	43	27	19
15	72	56	82	67	50	1430	292	68	60	46	25	18
16	71	55	79	64	94	1340	286	68	60	43	24	18
17	70	55	72	61	230	1240	1200	65	58	44	23	20
18	97	57	67	58	317	989	778	64	54	41	22	37
19	100	62	65	56	200	897	512	72	53	47	21	30
20	92	127	62	54	265	1120	391	67	53	45	21	27
21	84	152	66	55	527	945	303	64	51	39	20	26
22	78	123	74	58	582	718	248	84	50	49	20	28
23	75	115	88	67	576	586	215	78	47	47	21	29
24	72	139	80	65	504	500	184	72	47	38	21	28
25	70	167	74	62	389	400	170	82	46	35	21	27
26	69	152	71	60	315	325	159	69	47	33	20	27
27	67	234	73	58	272	275	147	87	46	32	20	27
28	64	192	79	57	254	240	134	105	58	31	20	26
29	63	167	75	56	----	220	125	86	63	30	19	26
30	61	149	73	67	----	235	119	94	56	28	19	25
31	59	----	71	76	----	260	----	88	----	27	19	----
TOTAL	2559	2907	2793	3879	5356	19640	9270	2584	2029	1326	867	697
MEAN	82.5	96.9	90.1	125	191	634	309	83.4	67.6	42.8	28.0	23.2
MAX	164	234	148	701	582	1770	1200	115	132	57	107	37
MIN	59	55	62	54	45	151	119	64	46	27	19	18
CFSM	.67	.79	.73	1.02	1.55	5.15	2.51	.68	.55	.35	.23	.19
IN.	.77	.88	.84	1.17	1.62	5.94	2.80	.78	.61	.40	.26	.21

CAL YR 1981 TOTAL 66197 MEAN 181 MAX 1750 MIN 38 CFSM 1.47 IN 20.02
WTR YR 1982 TOTAL 53907 MEAN 148 MAX 1770 MIN 18 CFSM 1.20 IN 16.30

05519000 SINGLETON DITCH AT SCHNEIDER, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 10...	1545	93	34	8.5	70

05521000 IROQUOIS RIVER AT ROSEBUD, IN

LOCATION.--Lat 41°02'00", long 87°10'49", in NW¼SW¼ sec.24, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank 100 ft (30 m) downstream from bridge on county road, 0.5 mile (0.8 km) north of Rosebud, 0.5 mile (0.8 km) downstream from confluence of Swain and Dexter ditches, 1.5 miles (2.4 km) upstream from Davidson ditch, 2 miles (3 km) east of Parr, and at mile 93.5 (150.4 km) .

DRAINAGE AREA.--35.6 mi^2 (92.2 km^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 (201.616 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1953, nonrecording gage on downstream side of county road bridge at same datum.

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

AVERAGE DISCHARGE.--34 years, 26.9 ft^3/s (0.762 m^3/s), 10.26 in/yr (262 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 454 ft^3/s (12.9 m^3/s) Mar. 13, 1982; maximum gage height, 8.86 ft (2.700 m) Feb. 10, 1959; minimum daily discharge, 0.5 ft^3/s (0.014 m^3/s) Oct. 11, 12, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft^3/s (4.25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 4	1100	160	4.53	3.27	0.997	Mar. 16	1900	314	8.89	4.52	1.378
Feb. 21	2300	203	5.75	3.66	1.116	Mar. 20	0500	313	8.86	4.51	1.375
Feb. 24	0500	186	5.27	3.51	1.070	Apr. 17	1300	159	4.50	3.26	0.994
Mar. 13	1400	*454	12.9	*5.42	1.652						

Minimum daily discharge, 3.5 ft^3/s (0.099 m^3/s) Sep. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	14	27	20	54	106	56	30	109	11	6.2	4.0
2	26	13	26	32	45	135	54	33	81	9.9	6.4	3.9
3	22	14	25	58	39	90	75	31	52	12	6.2	3.7
4	21	14	26	140	35	66	63	27	41	11	6.1	3.6
5	19	14	25	124	32	58	57	27	35	9.9	6.1	3.5
6	36	14	24	84	30	56	54	26	31	9.4	6.1	3.8
7	29	13	24	63	28	53	54	27	29	10	7.0	4.1
8	22	12	21	50	26	51	54	26	26	9.2	8.2	3.8
9	20	12	19	42	25	48	57	24	25	8.3	6.2	3.8
10	18	11	19	34	24	66	63	24	23	10	5.5	3.8
11	16	11	18	29	23	299	74	23	22	13	5.0	3.7
12	15	10	17	26	22	300	125	22	21	10	4.8	3.7
13	14	10	16	23	21	430	129	21	19	9.3	4.7	3.8
14	15	9.9	16	21	20	343	87	20	18	9.1	4.6	4.0
15	16	9.9	15	19	19	236	73	20	19	9.4	4.7	4.0
16	16	10	15	17	24	269	67	20	19	10	4.5	5.0
17	15	10	15	16	35	250	140	20	17	13	4.5	4.9
18	28	9.3	14	15	120	172	103	18	16	11	4.4	6.8
19	30	9.9	13	15	80	191	76	18	17	16	4.2	5.2
20	24	47	13	16	116	298	68	16	16	12	4.4	4.9
21	21	40	15	17	184	213	60	16	15	10	4.2	4.7
22	19	29	17	19	175	151	56	42	15	13	4.1	4.9
23	17	27	18	21	159	123	45	33	14	11	4.1	4.9
24	16	47	18	17	172	107	39	28	14	9.5	4.4	4.7
25	16	42	17	16	120	95	38	25	14	8.8	4.7	4.7
26	15	36	17	15	98	84	37	25	13	8.4	4.1	4.7
27	16	33	17	14	86	75	35	29	13	8.0	4.3	4.7
28	15	29	16	13	87	69	33	28	13	7.8	4.1	4.7
29	16	26	15	18	----	66	32	27	13	7.4	4.1	4.6
30	14	24	15	25	----	63	31	31	12	7.4	4.1	4.6
31	16	-----	15	38	----	65	----	30	----	7.0	4.0	-----
TOTAL	617	601.0	568	1057	1899	4628	1935	787	772	311.8	156.0	131.2
MEAN	19.9	20.0	18.3	34.1	67.8	149	64.5	25.4	25.7	10.1	5.03	4.37
MAX	36	47	27	140	184	430	140	42	109	16	8.2	6.8
MIN	14	9.3	13	13	19	48	31	16	12	7.0	4.0	3.5
CFSM	.56	.56	.51	.96	1.90	4.19	1.81	.71	.72	.28	.14	.12
IN.	.64	.63	.59	1.10	1.98	4.84	2.02	.82	.81	.33	.16	.14

CAL YR 1981 TOTAL 15040.0 MEAN 41.2 MAX 369 MIN 7.0 CFSM 1.16 IN 15.72
WTR YR 1982 TOTAL 13463.0 MEAN 36.9 MAX 430 MIN 3.5 CFSM 1.04 IN 14.07

05522000 IROQUOIS RIVER NEAR NORTH MARION, IN

LOCATION.--Lat 40°58'12", long 87°06'50", in NE¼NW¼ sec.16, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on downstream side of county highway bridge, 1.2 miles (1.9 km) upstream from Ryan ditch, 2 miles (3 km) east of North Marion, 3.5 miles (5.6 km) northeast of Rensselaer, and at mile 87.7 (141.1 km).

DRAINAGE AREA.--144 mi^2 (373 km^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 (197.108 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except for winter periods and discharge below 30 cfs, which are fair. Water from Oliver ditch, an upstream tributary, can be diverted to Ryan ditch and thus enter the Iroquois River below station.

AVERAGE DISCHARGE.--33 years (water years 1950 to current year), 132 ft^3/s (3.738 m^3/s), 12.45 in/yr (316 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft^3/s (57.8 m^3/s) June 10, 1958, gage height, 15.09 ft (4.599 m); minimum daily, 1.6 ft^3/s (0.045 m^3/s) Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,710 ft^3/s (48.4 m^3/s) Mar. 14, gage height, 13.12 ft (4.000 m); minimum daily, 12 ft^3/s (0.34 m^3/s) Sept. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	71	151	96	230	491	301	132	523	47	30	15
2	134	68	150	110	220	605	268	125	699	41	31	19
3	111	71	143	166	210	635	294	119	519	48	32	17
4	100	72	138	372	200	460	346	105	315	64	30	14
5	93	71	140	699	185	370	299	108	220	50	30	13
6	159	70	132	711	170	310	254	109	178	46	32	14
7	135	66	128	567	160	280	266	104	156	42	30	16
8	110	63	123	340	150	260	265	111	148	45	41	14
9	105	60	111	286	140	250	263	103	133	40	34	14
10	92	57	100	240	130	259	284	97	119	38	30	13
11	84	56	100	200	125	763	324	87	93	125	29	13
12	80	56	97	135	120	1250	445	85	95	106	27	12
13	76	62	91	115	115	1520	609	79	92	65	25	12
14	72	59	88	110	110	1690	567	69	87	57	23	12
15	77	55	87	102	110	1670	421	65	90	60	21	12
16	79	54	86	92	130	1560	325	69	103	47	18	13
17	77	56	77	70	250	1500	471	73	76	53	17	14
18	152	52	73	62	681	1350	609	73	70	49	15	18
19	187	53	70	68	828	1150	486	73	71	65	14	19
20	151	143	74	74	876	1200	363	73	74	59	13	18
21	127	217	87	78	1010	1280	298	73	71	48	14	17
22	111	178	99	80	1100	1170	248	138	60	72	13	16
23	100	143	108	84	1060	941	216	182	60	75	15	17
24	91	193	112	86	1030	731	196	137	61	59	18	17
25	85	238	108	91	941	576	181	127	56	50	18	17
26	82	216	104	76	744	471	172	115	53	42	17	17
27	83	205	99	73	579	394	163	131	50	38	17	16
28	81	191	96	72	493	347	151	154	48	39	16	18
29	78	170	93	73	-----	319	143	137	53	30	15	17
30	77	150	91	110	-----	306	135	149	65	36	15	16
31	74	----	89	215	-----	308	----	147	----	33	15	----
TOTAL	3343	3216	3345	5643	12096	24415	9363	3349	4428	1577	695	460
MEAN	108	107	108	182	432	788	312	108	148	54.1	22.4	15.3
MAX	187	238	151	711	1100	1690	609	182	699	125	41	19
MIN	72	52	70	62	110	250	135	65	48	33	13	12
CFSM	.73	.74	.73	1.26	3.00	5.47	2.17	.75	1.03	.38	.16	.11
IN.	.84	.83	.84	1.46	3.12	6.31	2.42	.87	1.14	.43	.19	.12

CAL YR 1981 TOTAL 75590 MEAN 207 MAX 1290 MIN 35 CFSM 1.44 IN 19.53
WTR YR 1982 TOTAL 71843 MEAN 197 MAX 1690 MIN 12 CFSM 1.37 IN 18.56

05522500 IROQUOIS RIVER AT RENSSELAER, IN

LOCATION.--Lat 40°56'00", long 87°07'44", in NW¼SE¼ sec.29, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on right bank 20 ft (6 m) downstream from bridge on State Highway 114, 0.8 mile (1.3 km) east of Rensselaer, 1.5 miles (2.4 km) downstream from Ryan ditch, 5.5 miles (8.8 km) upstream from Slough Creek, and at mile 84.9 (136.6 km).

DRAINAGE AREA.--203 mi^2 (526 km^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 (195.770 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 8, 1949, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--34 years, 168 ft^3/s (4.758 m^3/s), 11.24 in/yr (285 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft^3/s (72.2 m^3/s) June 10, 1958, gage height, 16.54 ft (5.041 m); minimum daily, 2.2 ft^3/s (0.062 m^3/s) Sept. 9, 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,010 ft^3/s (56.9 m^3/s) Mar. 14, gage height, 14.88 ft (4.535 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	90	187	100	256	644	328	158	807	58	40	18
2	149	88	182	110	246	793	290	151	834	53	41	23
3	117	93	171	121	235	802	359	145	585	73	42	19
4	103	92	170	221	219	581	393	134	366	77	38	16
5	101	93	170	649	206	450	329	136	263	59	36	16
6	271	89	159	817	190	400	285	136	213	54	40	16
7	188	81	158	728	180	350	309	136	189	53	32	19
8	137	78	148	561	170	315	296	138	175	57	49	17
9	118	73	133	368	160	271	301	128	160	46	46	16
10	104	71	124	282	150	353	333	122	141	56	37	16
11	93	71	125	250	145	1150	398	114	118	161	33	15
12	88	69	119	210	134	1550	610	110	120	109	30	15
13	81	77	113	190	131	1810	767	102	115	75	26	14
14	81	72	111	165	127	2000	648	89	109	69	26	15
15	97	68	110	150	122	1920	483	89	122	74	23	15
16	96	72	102	135	179	1780	378	94	123	60	22	15
17	95	73	96	120	376	1710	687	99	99	62	20	17
18	213	66	95	110	400	1550	728	96	92	57	17	23
19	225	71	92	103	600	1340	553	101	98	73	17	24
20	182	197	90	95	760	1490	420	97	98	70	16	21
21	154	250	88	88	900	1520	339	112	91	58	17	20
22	135	202	91	85	1000	1330	281	104	82	82	16	20
23	124	170	93	83	1130	1060	250	203	82	87	18	21
24	112	247	96	81	1280	810	230	156	83	70	22	20
25	107	280	102	79	1100	641	214	145	67	60	22	21
26	104	255	100	78	830	519	204	136	67	53	20	20
27	105	249	105	77	571	431	192	172	77	47	20	20
28	102	224	102	76	600	378	176	185	69	48	19	23
29	98	199	100	118	-----	352	168	173	78	49	18	20
30	97	179	93	170	-----	339	162	194	68	45	18	19
31	96	----	95	244	-----	355	-----	197	----	44	18	----
TOTAL	3989	3939	3726	6664	12397	28994	11111	4242	5591	2039	839	567
MEAN	129	131	120	215	443	935	370	137	186	65.8	27.1	18.9
MAX	271	280	187	817	1280	2000	767	203	834	161	49	24
MIN	81	66	88	76	122	271	162	89	67	44	16	14
CFSM	.64	.65	.59	1.06	2.18	4.61	1.82	.68	.92	.32	.13	.09
IN.	.73	.72	.68	1.22	2.27	5.31	2.04	.78	1.02	.37	.15	.10

CAL YR 1981 TOTAL 91694 MEAN 251 MAX 1640 MIN 42 CFSM 1.24 IN 16.56
WTR YR 1982 TOTAL 84084 MEAN 230 MAX 2000 MIN 14 CFSM 1.13 IN 15.41

05523000 BICE DITCH NEAR SOUTH MARION, IN

LOCATION.--Lat 40°52'00", long 87°05'32", in NE¼NW¼ sec.22, T.28 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on State Highway 16, 2.3 miles (3.7 km) upstream from mouth, 3 miles (5 km) southeast of South Marion, and 5 miles (8 km) southeast of Pensselaer.

DRAINAGE AREA.--21.8 mi^2 (56.5 km^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 (198.516 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1955, nonrecording gage, and Aug. 5, 1955, to Sept. 30, 1965, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--33 years (water years 1949 to current year), 17.1 ft^3/s (0.484 m^3/s), 10.65 in/yr (270 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft^3/s (30.6 m^3/s) Mar. 4, 1979; maximum gage height, 14.02 ft (4.273 m) June 13, 1958, at present datum; no flow at times during 1952, 1955, and 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 340 ft^3/s (9.63 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 17	1900	352	9.97	6.44	1.963	Mar. 13	0800	534	15.1	7.97	2.429
Feb. 20	2100	437	12.4	7.19	2.192	June 1	0700	*723	20.5	*9.34	2.847
Mar. 11	1100	435	12.3	7.17	2.185						

Minimum daily discharge, 0.17 ft^3/s (0.005 m^3/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	4.4	15	7.5	65	70	16	8.3	469	3.0	.85	.62
2	4.0	4.7	13	7.6	43	84	15	7.7	163	2.9	.92	.61
3	3.3	5.9	11	21	26	59	43	7.4	84	3.4	.89	.58
4	3.1	5.9	12	154	17	51	28	7.0	59	3.4	1.1	.47
5	3.2	5.7	11	98	13	45	23	6.9	40	2.8	4.7	.52
6	7.3	4.9	11	72	12	41	25	6.9	26	2.5	1.3	.31
7	5.1	4.1	11	55	11	37	24	7.9	18	2.3	1.0	.29
8	4.1	3.8	9.4	40	10	34	26	7.7	14	2.2	3.9	.31
9	3.5	3.4	12	20	10	30	32	7.1	12	1.9	2.0	.28
10	3.1	3.1	7.7	13	9.3	71	43	6.7	12	2.0	1.2	.27
11	2.7	3.2	7.3	8.2	8.8	369	59	6.3	9.0	2.7	.94	.28
12	2.6	2.9	6.9	7.5	8.4	193	113	6.0	8.1	2.5	.92	.35
13	2.5	2.9	6.6	6.9	8.0	350	103	5.7	7.3	1.9	.93	.37
14	2.6	2.8	6.7	6.4	7.9	131	66	5.5	6.6	1.7	.94	.45
15	2.8	3.1	6.7	6.0	8.5	104	51	5.4	6.5	1.9	.95	.39
16	2.9	2.9	6.1	5.8	18	175	42	5.5	7.4	1.8	.95	.34
17	4.0	2.8	5.6	5.5	207	110	139	5.8	6.7	1.7	.81	.33
18	17	3.0	5.2	5.4	193	77	73	5.4	5.8	1.5	.67	.40
19	9.3	3.2	4.9	5.4	150	151	53	5.4	6.2	1.7	.60	.37
20	6.9	16	4.7	5.3	234	194	45	5.3	6.0	1.7	.77	.30
21	5.3	10	4.9	5.3	291	101	28	6.0	5.1	1.4	.78	.22
22	5.9	7.1	5.2	5.1	242	71	21	27	4.3	1.5	.70	.21
23	7.0	7.0	5.5	5.3	219	58	17	19	4.1	1.4	.66	.21
24	5.4	29	5.2	5.0	223	50	15	12	4.0	1.2	.70	.19
25	5.1	22	5.1	4.8	95	50	13	9.5	3.8	1.1	1.6	.17
26	4.7	20	5.2	4.7	70	42	12	8.1	3.8	1.0	1.1	.18
27	5.6	22	5.3	4.6	59	32	9.7	10	3.6	.93	.85	.18
28	6.3	16	5.4	4.5	58	28	9.0	23	3.6	.93	.81	.19
29	5.7	13	5.5	4.4	------	27	8.8	24	3.6	.92	.78	.19
30	5.2	12	5.6	33	------	26	8.5	90	3.4	.90	.69	.19
31	4.7	-----	6.4	59	------	24	------	49	------	.91	.67	----
TOTAL	156.9	246.8	233.1	686.2	2316.9	2885	1161.0	416.5	1005.9	57.69	35.68	9.77
MEAN	5.06	8.23	7.52	22.1	82.7	93.1	38.7	13.4	33.5	1.86	1.15	.33
MAX	17	29	15	154	291	369	139	90	469	3.4	4.7	.62
MIN	2.5	2.8	4.7	4.4	7.9	24	8.5	5.3	3.4	.90	.60	.17
CFSM	.23	.38	.35	1.01	3.79	4.27	1.78	.62	1.54	.09	.05	.02
IN.	.27	.42	.40	1.17	3.95	4.92	1.98	.71	1.72	.10	.06	.02

CAL YR 1981 TOTAL 6676.40 MEAN 18.3 MAX 473 MIN 1.6 CFSM .84 IN 11.39
WTR YR 1982 TOTAL 9211.44 MEAN 25.2 MAX 469 MIN .17 CFSM 1.16 IN 15.72

05523500 SLOUGH CREEK NEAR COLLEGEVILLE, IN

LOCATION.--Lat 40°53'30", long 87°09'17", in SE¼NE¼ sec.12, T.28 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank at downstream side of bridge on State Highway 53, 1.5 miles (2.4 km) south of Collegeville, 2.2 miles (3.5 km) downstream from Bice ditch, 2.9 miles (4.7 km) upstream from Carpenter Creek, and 3.2 miles (5.1 km) upstream from mouth.

DRAINAGE AREA.--83.7 mi² (216.8 km²).

PERIOD OF RECORD.--July 1948 to December 1951, October 1952 to September 1982 (discontinued). Prior to October 1965, published as Big Slough Creek near Collegeville.

REVISED RECORDS.--WSP 1558: 1955(M), 1956(M), 1957. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 634.75 ft (193.472 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1955, nonrecording gage and Aug. 5, 1955, to Oct. 8, 1958, water-stage recorder at same site at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--33 years (water years 1949-51, 1953-82) 70.1 ft³/s (1.985 m³/s), 11.37 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,390 ft³/s (67.7 m³/s) Dec. 22, 1967, gage height, 16.88 ft (5.145 m); maximum gage height, 17.19 ft (5.240 m) Mar. 4, 1979; minimum daily discharge, 0.7 ft³/s (0.020 m³/s) Dec. 20-26, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 925 ft³/s (26.2 m³/s) Mar. 13, gage height, 14.89 ft (4.538 m); minimum daily, 3.3 ft³/s (0.093 m³/s) Sept. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	21	54	33	161	280	89	42	640	18	8.6	6.2
2	18	21	56	34	167	300	79	40	562	17	8.0	4.8
3	16	23	47	82	142	268	157	38	387	21	7.8	4.0
4	15	24	47	425	96	231	138	37	270	21	7.5	3.4
5	15	24	45	275	62	199	109	35	173	18	11	3.3
6	21	25	43	200	46	185	102	30	107	16	11	3.3
7	24	20	42	146	40	170	97	37	79	15	9.3	3.4
8	20	19	43	105	37	158	115	37	65	13	11	3.5
9	17	17	35	78	34	141	134	35	57	12	11	3.5
10	16	16	32	56	32	174	167	32	54	13	9.1	3.5
11	15	16	30	44	30	694	210	30	45	17	7.5	3.5
12	15	16	28	39	29	772	372	28	41	15	6.8	3.5
13	15	15	26	36	28	868	448	26	37	13	6.1	3.5
14	15	15	26	33	28	750	338	24	34	12	5.9	3.5
15	16	15	26	31	29	500	264	24	33	15	5.5	3.7
16	16	14	25	30	56	690	204	25	37	13	5.1	3.7
17	16	14	24	29	387	500	445	28	34	12	4.9	3.7
18	39	13	23	27	590	380	381	26	31	11	4.8	3.8
19	44	14	22	26	450	500	293	25	32	12	4.5	4.2
20	32	63	20	25	520	752	233	24	32	12	4.3	4.2
21	26	71	21	24	620	490	163	29	28	11	5.5	4.1
22	24	47	22	24	862	335	108	76	25	12	6.0	4.1
23	27	40	23	23	784	218	83	79	23	14	5.0	3.9
24	25	84	22	22	826	193	71	54	21	11	4.7	4.1
25	23	88	21	21	630	170	63	45	21	10	7.2	4.1
26	24	74	22	21	410	154	59	45	23	9.9	8.6	4.1
27	23	85	22	20	310	138	52	69	33	9.6	7.0	4.1
28	26	68	23	19	250	125	48	96	25	9.3	6.2	4.3
29	26	54	23	19	----	113	45	82	23	9.3	5.4	4.3
30	24	48	24	104	----	105	44	247	20	9.1	4.8	4.1
31	22	----	25	166	----	98	----	166	----	8.6	6.2	-----
TOTAL	678	1064	942	2217	7656	10651	5111	1611	2992	409.8	216.3	117.4
MEAN	21.9	35.5	30.4	71.5	273	344	170	52.0	99.7	13.2	6.98	3.91
MAX	44	88	56	425	862	868	448	247	640	21	11	6.2
MIN	15	13	20	19	28	98	44	24	20	8.6	4.3	3.3
CFSM	.26	.42	.36	.85	3.26	4.11	2.03	.62	1.19	.16	.08	.05
IN.	.30	.47	.42	.99	3.40	4.73	2.27	.72	1.33	.18	.10	.05

CAL YR 1981 TOTAL 22490.5 MEAN 61.6 MAX 750 MIN 7.8 CFSM .74 IN 10.00
WTR YR 1982 TOTAL 33665.5 MEAN 92.2 MAX 868 MIN 3.3 CFSM 1.10 IN 14.96

05524000 CARPENTER CREEK AT EGYPT, IN

LOCATION.--Lat 40°51'58", long 87°12'20", in SE¼SW¼ sec.15, T.28 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on left bank at downstream side of bridge on State Highway 16, 0.5 mile (0.8 km) north of Egypt, 4 miles (6 km) southwest of Collegeville, and at mile 4.0 (6.4 km).

DRAINAGE AREA.--44.8 mi^2 (116.0 km^2).

PERIOD OF RECORD.--July 1948 to December 1951, October 1952 to September 1982 (discontinued).

REVISED RECORDS.--WSP 1175: 1949(M). WSP 1558: 1955-57. WSP 1728: 1951(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 641.79 ft (195.618 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--33 years, (water years 1949-51, 1953-82), 38.3 ft^3/s (1.085 m^3/s), 11.61 in/yr (295 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,720 ft^3/s (105 m^3/s) June 10, 1958, gage height, 11.66 ft (3.554 m); no flow at times during 1953, 1955, 1956, 1959, 1963-66, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft^3/s (17.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 21	unknown	640	18.1	unknown		Mar. 13	1500	627	17.8	9.65	2.941
Mar. 11	2000	661	18.7	9.73	2.966	June 1	unknown	*851	24.1	*9.95	3.033

Minimum daily discharge, 0.37 ft^3/s (0.010 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	9.4	31	18	115	110	40	20	700	8.0	2.4	1.5
2	10	10	28	18	84	165	36	18	320	7.1	2.3	1.5
3	7.1	11	24	29	62	143	61	18	170	9.5	2.2	1.3
4	6.1	11	24	359	45	108	51	16	115	8.7	2.6	1.2
5	6.2	10	22	230	34	97	45	17	80	8.0	2.6	1.2
6	19	9.4	23	130	26	92	43	16	58	7.2	2.0	1.0
7	13	8.8	26	94	22	78	42	17	40	6.6	2.0	.95
8	9.0	8.5	23	58	19	70	41	17	34	6.0	6.4	.86
9	7.6	8.2	17	42	18	59	45	17	29	5.4	5.1	.78
10	7.0	8.2	15	32	17	100	49	16	24	6.1	3.6	.65
11	6.8	8.2	15	25	16	531	74	15	20	7.6	2.7	.65
12	6.6	8.0	14	23	15	461	232	14	18	6.5	2.2	.65
13	6.4	7.8	14	21	14	531	269	13	17	5.8	2.0	.57
14	6.3	7.6	14	20	13	333	150	12	15	5.0	1.8	.74
15	6.1	8.2	14	18	15	272	105	11	14	6.6	1.8	.82
16	6.0	7.7	11	17	90	324	82	12	16	5.9	1.7	.78
17	6.3	7.5	11	15	400	289	296	15	15	5.2	1.6	.78
18	53	7.4	10	16	340	203	190	14	14	4.6	1.5	1.1
19	37	8.5	10	15	300	240	117	13	14	5.0	1.3	1.1
20	24	20	9.7	15	370	393	88	12	14	4.7	1.5	.78
21	16	27	11	14	540	271	61	14	13	4.5	1.9	.65
22	13	21	12	14	470	185	49	22	12	5.0	1.6	.50
23	11	19	14	15	420	134	41	36	11	4.8	1.8	.74
24	10	42	14	14	440	104	35	31	9.6	3.6	2.2	.78
25	9.6	42	13	13	200	86	31	24	9.0	3.2	3.2	.82
26	9.2	39	13	13	125	79	28	20	8.8	3.0	3.3	.91
27	11	45	13	12	100	58	24	30	12	2.9	3.0	.65
28	12	38	12	11	86	49	23	48	11	3.1	1.8	.65
29	11	31	12	10	----	45	22	38	9.8	2.7	1.5	.57
30	10	28	12	121	----	44	20	148	8.8	2.6	1.3	.37
31	9.6	-----	14	130	----	53	----	105	------	2.4	1.3	-----
TOTAL	382.9	517.4	495.7	1562	4396	5707	2390	819	1832.0	167.3	72.2	25.55
MEAN	12.4	17.2	16.0	50.4	157	184	79.7	26.4	61.1	5.40	2.33	.85
MAX	53	45	31	359	540	531	296	148	700	9.5	6.4	1.5
MIN	6.0	7.4	9.7	10	13	44	20	11	8.8	2.4	1.3	.37
CFSM	.28	.38	.36	1.13	3.50	4.11	1.78	.59	1.36	.12	.05	.02
IN.	.32	.43	.41	1.30	3.65	4.74	1.98	.68	1.52	.14	.06	.02

CAL YR 1981 TOTAL 13689.60 MEAN 37.5 MAX 702 MIN 1.6 CFSM .84 IN 11.37
WTR YR 1982 TOTAL 18367.05 MEAN 50.3 MAX 700 MIN .37 CFSM 1.12 IN 15.25

05524500 IROQUOIS RIVER NEAR FORESMAN, IN

LOCATION.--Lat 40°52'14", long 87°18'24", in NE¼SE¼ sec.15, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on right bank at downstream side of bridge on State Highway 55, 0.2 mile (0.3 km) north of intersection of State Highways 16 and 55, 0.5 mile (0.8 km) downstream from Mosquito Creek, 0.6 mile (1.0 km) west of Foresman, 3 miles (4 km) east of Brook, and at mile 72.7 (117.0 km).

DRAINAGE AREA.--449 mi² (1,163 km²).

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

REVISED RECORDS.--WSP 1338: 1953. WSP 1438: 1955. WSP 1508: 1956. WSP 2115 : Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.00 ft (190.195 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1955, nonrecording gage 2.5 miles (4.0 km) upstream at datum 3.54 ft (1.079 m) higher.

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

AVERAGE DISCHARGE.--33 years (water years 1950 to current year), 380 ft³/s (10.76 m³/s), 11.49 in/yr (292 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,930 ft³/s (168 m³/s) June 14, 1958, gage height, 24.42 ft (7.443 m); minimum daily, 6.3 ft³/s (0.18 m³/s) Sept. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,650 ft³/s (132 m³/s) Mar. 15, gage height, 21.62 ft (6.590 m); minimum daily, 18 ft³/s (0.51 m³/s) Sept. 12, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	474	182	400	230	637	2130	751	284	1270	145	60	25
2	336	175	402	244	658	2000	654	267	1690	120	57	26
3	245	181	370	319	626	1880	702	250	1780	148	57	28
4	211	188	353	910	570	1700	810	232	1630	186	55	24
5	194	197	345	1400	516	1370	761	225	1400	145	53	21
6	342	200	331	1620	469	1180	674	219	1120	118	55	20
7	425	184	327	1630	438	980	646	218	823	104	71	22
8	318	171	316	1500	390	850	643	230	580	110	174	24
9	252	159	278	1300	355	760	660	213	444	97	116	22
10	217	148	251	1050	325	1250	711	198	388	93	73	20
11	191	146	241	861	305	2200	824	183	317	318	57	20
12	176	142	230	680	290	3100	1100	173	295	306	49	18
13	168	141	216	558	280	3800	1430	163	277	187	45	19
14	158	143	213	485	270	4300	1530	148	255	137	43	18
15	168	134	213	441	260	4500	1470	139	239	147	42	20
16	170	132	193	390	397	4100	1340	145	294	134	38	19
17	167	132	195	308	560	3670	1480	156	246	146	37	20
18	322	124	190	282	900	3420	1630	155	219	118	35	29
19	461	122	190	255	1400	3150	1600	154	217	127	32	35
20	392	256	188	235	2120	3310	1470	156	211	139	33	34
21	322	462	186	220	2800	3300	1290	175	193	113	31	26
22	273	412	189	200	3410	3060	1040	308	170	104	32	25
23	253	339	192	190	3720	2720	790	451	160	143	31	25
24	231	454	198	180	3980	2350	599	353	151	116	37	26
25	218	570	203	170	3830	1980	488	289	140	94	48	26
26	208	562	204	165	3390	1680	430	261	136	83	41	26
27	206	560	216	160	2890	1460	387	342	233	72	32	25
28	204	524	219	160	2460	1250	373	511	207	71	29	25
29	201	458	207	244	-----	1060	317	481	233	70	26	25
30	197	404	191	350	-----	910	298	828	196	68	25	24
31	191	----	204	586	-----	831	-----	892	-----	64	25	----
TOTAL	7891	8002	7651	17323	38246	70251	26898	8799	15514	4023	1539	717
MEAN	255	267	247	559	1366	2266	897	284	517	130	49.6	23.9
MAX	474	570	402	1630	3980	4500	1630	892	1780	318	174	35
MIN	158	122	186	160	260	760	298	139	136	64	25	18
CFSM	.57	.60	.55	1.25	3.04	5.05	2.00	.63	1.15	.29	.11	.05
IN.	.65	.66	.63	1.44	3.17	5.82	2.23	.73	1.29	.33	.13	.06

CAL YR 1981 TOTAL 178336 MEAN 489 MAX 3390 MIN 72 CFSM 1.09 IN 14.78
WTR YR 1982 TOTAL 206854 MEAN 567 MAX 4500 MIN 18 CFSM 1.26 IN 17.14

05536190 HART DITCH AT MUNSTER, IN

LOCATION.--Lat 41°33'40", long 87°28'50", in SE¼NW¼ sec.20, T.36 N., R.9 W., Lake County, Hydrologic Unit 07120003, on left bank at city limits of Munster, 0.2 mile (0.3 km) downstream from Ridge Road, and 0.4 mile (0.6 km) upstream from mouth.

DRAINAGE AREA.--70.7 mi² (183.1 km²).

PERIOD OF RECORD.--September 1942 to current year.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 591.27 ft (180.219 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Since Sept. 11, 1959, auxiliary water-stage recorder 1,200 ft (366 m) upstream from base gage, at same datum.

REMARKS.--Records good except those for winter periods and high-water periods, which are poor. High flow occasionally in backwater from Little Calumet River.

AVERAGE DISCHARGE.--40 years, 60.3 ft³/s (1.708 m³/s), 11.58 in/yr (294 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft³/s (75.6 m³/s) Apr. 28, 1959; maximum gage height, 8.04 ft (2.450 m) June 14, 1981; minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Dec. 24-26, 31, 1963, Jan. 1, 2, Sept. 4-9, 14-17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 13	2300	1390	39.4	*7.48	2.280	May 22	0100	*1880	53.2	6.42	1.957
Apr. 17	0600	827	23.4	3.66	1.116						

Minimum daily discharge, 7.0 ft³/s (0.198 m³/s) Aug. 21, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	19	100	23	23	120	115	37	220	21	11	26
2	52	26	96	27	22	160	121	35	119	56	19	10
3	41	23	77	54	21	130	263	33	83	63	11	7.0
4	39	39	98	283	21	100	161	31	68	33	39	7.8
5	37	68	93	165	21	80	115	29	50	24	12	7.8
6	35	46	70	110	21	70	98	29	41	19	11	15
7	31	34	63	87	21	60	106	30	36	37	25	15
8	29	27	56	60	21	52	111	27	32	20	33	9.5
9	26	24	47	47	21	47	129	25	29	16	27	8.6
10	24	19	41	42	21	72	169	24	27	71	19	7.8
11	23	19	39	38	21	200	212	23	23	35	15	7.8
12	21	18	35	34	21	500	298	23	23	22	12	8.6
13	21	17	36	31	20	1300	261	21	22	19	11	8.6
14	26	16	35	29	20	880	154	20	19	16	11	12
15	23	17	33	28	22	505	110	21	28	14	11	10
16	21	17	31	26	38	600	257	21	18	28	9.5	10
17	33	17	30	24	81	460	763	19	17	16	9.5	62
18	60	17	28	23	77	410	401	18	19	20	8.6	51
19	52	39	26	22	88	350	195	39	21	25	9.5	17
20	39	216	23	20	120	500	144	21	17	17	8.6	12
21	33	125	23	20	180	380	105	113	14	23	7.0	15
22	29	77	23	19	280	230	81	678	15	86	8.6	17
23	24	69	23	19	390	185	68	178	12	34	7.8	10
24	21	94	27	19	290	145	60	83	11	22	8.6	9.5
25	20	101	26	19	270	120	52	64	11	17	11	10
26	21	135	25	19	171	110	51	60	11	14	11	9.5
27	23	355	26	19	120	94	47	135	13	24	11	10
28	21	204	26	19	89	83	42	102	44	19	9.5	10
29	21	122	25	19	----	77	39	78	48	13	8.6	9.5
30	20	91	24	33	----	116	38	83	28	11	11	10
31	20	----	23	24	----	183	----	85	----	11	8.6	-----
TOTAL	960	2091	1328	1402	2511	8319	4766	2185	1119	846	415.4	424.0
MEAN	31.0	69.7	42.8	45.2	89.7	268	159	70.5	37.3	27.3	13.4	14.1
MAX	74	355	100	283	390	1300	763	678	220	86	39	62
MIN	20	16	23	19	20	47	38	18	11	11	7.0	7.0
CFSM	.44	.99	.61	.64	1.27	3.79	2.25	1.00	.53	.39	.19	.20
IN.	.51	1.10	.70	.74	1.32	4.38	2.51	1.15	.59	.45	.22	.22

CAL YR 1981 TOTAL 33853.1 MEAN 92.7 MAX 1850 MIN 9.2 CFSM 1.31 IN 17.81
WTR YR 1982 TOTAL 26366.4 MEAN 72.2 MAX 1300 MIN 7.0 CFSM 1.02 IN 13.87

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN

LOCATION.--Lat 41°34'07", long 87°31'18", in SE¼NW¼ sec.13, T.36 N., R.10 W., Lake County, Hydrologic Unit 07120003, on left bank 200 ft (61 m) upstream from Hohman Street bridge at north city limits of Munster, 0.4 mile (0.6 km) upstream from Indiana-Illinois State line, and 4.6 miles (7.4 km) upstream from mouth of Thorn Creek.

DRAINAGE AREA.--90.0 mi² (233 km²). During times of floods on Deep River, flow may enter basin from eastern portion of Little Calumet River basin; or during times of floods on Hart ditch, flow may leave the basin and enter eastern portion of the Little Calumet River basin.

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

GAGE.--Water-stage recorder. Datum of gage is 580.72 ft (177.003 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow from eastern portion of Little Calumet River basin is diverted to Lake Michigan by Burns ditch.

AVERAGE DISCHARGE.--24 years, 73.4 ft³/s (2.079 m³/s), 11.08 in/yr (281 mm/yr).

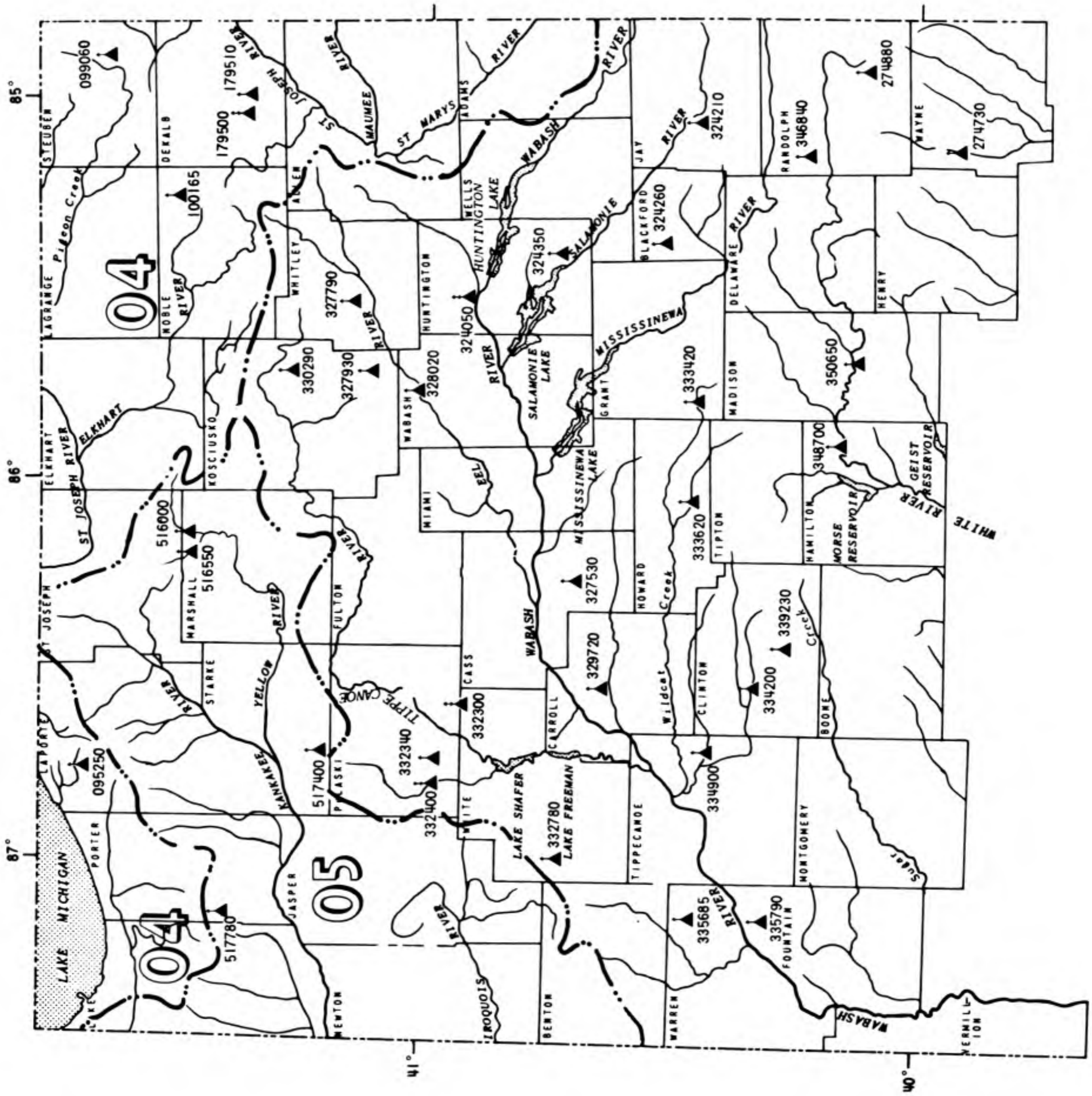
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s (42.8 m³/s) Apr. 28, 1959, gage height, 13.67 ft (4.167 m); maximum gage height, 16.40 ft (4.999 m) June 14, 1981; minimum daily discharge, 1.9 ft³/s (0.054 m³/s) Aug. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 903 ft³/s (25.6 m³/s) Mar. 14, gage height, 14.31 ft (4.362 m); minimum daily, 8.6 ft³/s (0.244 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	29	157	30	34	162	172	52	224	27	12	29
2	112	34	147	30	33	224	172	48	167	31	19	17
3	94	34	130	57	33	216	233	45	120	90	14	11
4	86	34	136	217	33	182	206	41	101	51	38	10
5	78	67	131	185	32	154	175	38	81	38	18	9.9
6	71	54	112	150	32	126	159	35	66	30	16	16
7	62	49	100	115	31	105	157	35	56	45	24	21
8	55	43	90	76	31	89	155	34	49	30	44	13
9	49	40	80	64	31	94	162	31	43	24	33	11
10	44	36	68	57	30	84	176	28	38	58	24	11
11	39	34	63	53	30	301	190	27	35	57	19	9.6
12	37	32	56	49	30	496	232	25	30	35	16	9.1
13	35	30	55	45	30	806	236	24	31	28	15	8.8
14	39	28	52	42	30	830	205	23	26	24	14	9.8
15	37	28	49	40	33	588	168	23	44	20	13	9.2
16	35	27	45	38	45	555	230	27	27	33	12	8.6
17	38	27	44	36	72	557	450	26	25	37	12	47
18	69	26	41	35	86	468	371	23	24	27	11	89
19	69	34	40	40	100	437	269	28	32	38	11	26
20	62	201	39	36	173	558	227	32	23	23	11	16
21	54	158	37	35	261	501	184	31	20	20	10	17
22	50	131	36	34	309	399	151	581	21	112	10	18
23	42	118	36	37	354	334	123	583	18	53	11	13
24	39	134	36	36	280	289	103	265	16	31	9.8	11
25	37	138	36	35	230	254	92	139	15	23	11	9.9
26	36	149	33	34	190	214	84	111	15	19	11	9.1
27	37	233	33	33	162	177	77	134	15	20	11	8.9
28	35	219	34	33	137	150	68	130	30	26	11	10
29	34	187	33	34	----	131	61	124	47	17	9.9	9.7
30	33	159	31	38	----	154	55	204	35	14	13	9.6
31	29	----	30	36	----	188	----	144	----	13	12	-----
TOTAL	1678	2513	2010	1780	2872	9823	5343	3091	1474	1094	495.7	498.2
MEAN	54.1	83.8	64.8	57.4	103	317	178	99.7	49.1	35.3	16.0	16.6
MAX	141	233	157	217	354	830	450	583	224	112	44	89
MIN	29	26	30	30	30	84	55	23	15	13	9.8	8.6
CFSM	.60	.93	.72	.64	1.14	3.52	1.98	1.11	.55	.39	.18	.18
IN.	.69	1.04	.83	.74	1.19	4.06	2.21	1.28	.61	.45	.20	.21

CAL YR 1981 TOTAL 39080.0 MEAN 107 MAX 749 MIN 16 CFSM 1.19 IN 16.15
WTR YR 1982 TOTAL 32671.9 MEAN 89.5 MAX 830 MIN 8.6 CFSM .99 IN 13.50


85°
86°
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41°
40°
04
05
LAKE MICHIGAN
ST JOSEPH RIVER
ELKHART
Pigeon Creek
MAUMEE RIVER
ST MARYS RIVER
WABASH RIVER
HUNTINGTON LAKE
SALAMONIE LAKE
MISSISSINEWA LAKE
MISSISSINEWA
SALAMONIE
EEL RIVER
TIPPECANOE RIVER
YELLOW RIVER
KANKAKEE RIVER
IROQUOIS RIVER
LAKE SHAFER
LAKE FREEMAN
Wildcat Creek
Sugar Creek
WHITE RIVER
GEIST RESERVOIR
MORSE RESERVOIR
DELAWARE RIVER
STEUBEN
LAGRANGE
ELKHART
ST JOSEPH
LAPORTE
PORTER
LAKE
DEKALB
NOBLE
KOSCIUSKO
MARSHALL
STARKE
JASPER
NEWTON
ALLEN
WHITLEY
HUNTINGTON
WABASH
MIAMI
FULTON
PULASKI
CASS
WHITE
BENTON
CARROLL
TIPPECANOE
WARREN
FOUNTAIN
VERMILLION
ADAMS
WELLS
JAY
BLACKFORD
GRANT
HOWARD
TIPTON
CLINTON
BOONE
MONTGOMERY
HAMILTON
MADISON
DELAWARE
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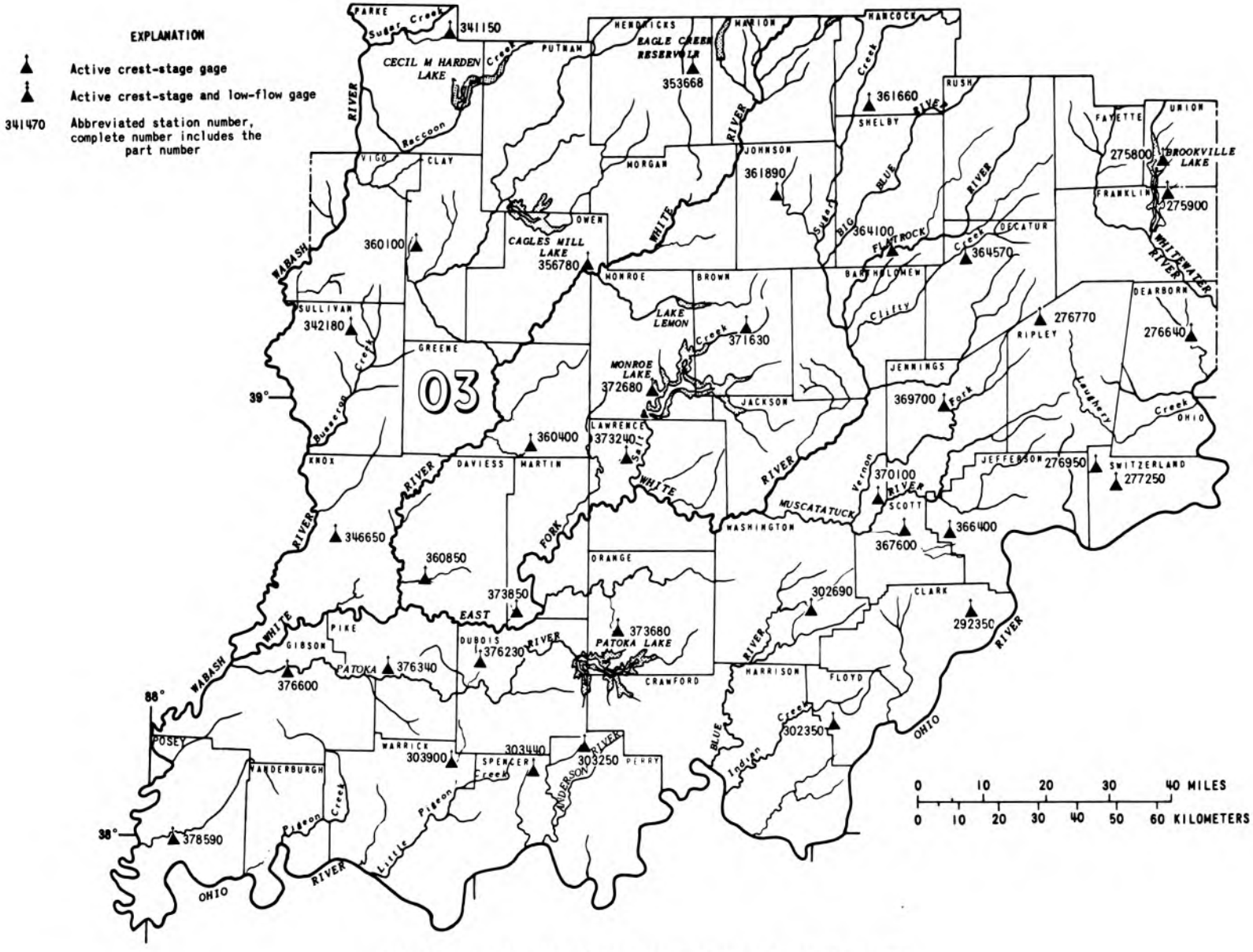

Figure 5.-- Location of partial-record stations in Indiana.

Crest-stage and high-flow, low-flow partial-record stations

The following table contains annual maximum discharges for crest-stage stations. Some of these are former continuous record-gaging stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		OHIO RIVER BASIN					
		Great Miami River basin					
03274730	Whitewater River tributary near Hagerstown, IN	Lat 39°54'38", long 85°08'57", in NE¼SE¼NE¼ sec.23, T.17 N., R.12 E., Wayne County, at culvert on State Highway 38, 0.7 mile east of Hagerstown.	0.12	1973-	08-24-82	6.84	26
03274880	Greens Fork tributary near Lynn, IN	Lat 40°01'14", long 84°56'24", in SW¼SW¼SW¼ sec.11, T.18 N., R.14 E., Randolph County, at culvert on U.S. Highway 27, 1.9 miles south of intersection of U.S. Highways 27 and 36 in Lynn.	.78	1973-	01-23-82	5.68	75
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.	.26	1973-	06-09-82	7.40	108
03275900	Templeton Creek near Fairfield, IN	Lat 39°31'20", long 84°56'51", in SW¼NW¼NW¼ sec.24, T.10 N., R.2 W., Franklin County, at culvert on State Highway 101, 0.25 mile south of Franklin-Union County	5.39	1973-	05-20-82	11.01	370
		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-	06-08-82	11.09	54
		Laughery Creek basin					
03276770	Laughery Creek tributary near Napoleon, IN	Lat 39°13'18", long 85°20'07", in SE¼SE¼SE¼ sec.18, T.9 N., R.11 E., Ripley County, at culvert on U.S. Highway 421, 1.1 miles north of Napoleon.	.11	1973-	05-21-82	7.21	42
03276950	Uhlman Creek tributary near Avonburg, IN	Lat 38°53'33", long 85°11'04", in NW¼NW¼SW¼ sec.10, T.4 N., R.12 E., Switzerland County, at culvert on State Highway 129, 1.5 miles north of State Highway 250 at Pleasant.	.16	1973-	06-08-82	8.51	86
		Indian Creek basin					
03277250	Indian Creek tributary near Bennington, IN	Lat 38°52'25", long 85°07'24", in NE¼NW¼NE¼ sec.5, T.4 N., R.3 W., Switzerland County, at culvert on State Highway 250, 3.7 miles east of State Highway 129 at Pleasant.	.16	1973-	04-03-82	5.68	23
		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-	01-23-82	6.20	19

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued					
		Indian Creek basin					
03302350	Georgetown Creek tributary near Georgetown, IN	Lat 38°17'30", long 85°56'26", in SW¼NW¼SW¼ sec.35, T.25 N., R.5 E., Floyd County, at culvert on State Highway 64, 1.8 miles east of Georgetown.	.56	1973-	01-23-82	6.98	105
		Blue River basin					
03302690	Middle Fork Blue River tributary near Farabee, IN	Lat 38°32'44", long 86°02'14", in NE¼SW¼SE¼ sec.2, T.1 N., R.4 E., Washington County, at culvert on State Highway 60, 3.3 miles west of State Highway 56.	.07	1973-	01-23-82	7.20	45
		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-	09-01-82	8.59	110
		Crooked Creek basin					
03303440	East Fork Crooked Creek tributary near Fulda, IN	Lat 38°05'18", long 86°49'12", in NW¼NW¼NE¼ sec.14, T.5 S., R.4 W., Spencer County, at culvert on State Highway 545, 1.6 miles south of Fulda.	.26	1973-	06-08-82	7.98	80
		Little Pigeon Creek basin					
03303900	Little Red Creek tributary near Heilman, IN	Lat 38°11'35", long 87°05'22", in NE¼SE¼SE¼ sec.5, T.4 S., R.6 W., Warrick County, at culvert on State Highway 161, 2.4 miles north of Heilman.	.25	1973-	06-08-82	7.57	65
		Wabash River basin					
03324210	Blaine Run at Blaine, IN	Lat 40°24'15", long 85°03'19", in NW¼SW¼NW¼ sec.35, T.23 N., R.13 E., Jay County, at culvert on State Highway 67, 0.1 mile northeast of Blaine.	.45	1973-	01-30-82	----	[a]38
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.	.86	1973-	03-11-82	7.52	123
03324350	Brook Creek tributary near Warren, IN	Lat 40°44'35", long 85°26'42", in SW¼SE¼SW¼ sec.31, T.27 N., R.10 E., Huntington County, at culvert on State Highway 5, 1.6 miles northwest of Interstate Highway 69.	.52	1972-	03-12-82	7.00	64
03327530	Minnow Creek tributary near Logansport, IN	Lat 40°43'46", long 86°17'48", in NW¼NW¼SW¼ sec.3, T.26 N., R.2 E., Cass County, at culvert on U.S. Highway 35, 4.0 miles southeast of State Highway 29 in Logansport.	.50	1973-	03-12-82	6.56	70
03327790	Eel River tributary near Columbia City, IN	Lat 41°07'01", long 85°31'21", in Beaver Reserve, Columbia Township, Whitley County, at culvert on State Highway 205, 3.8 miles southwest of U.S. Highway 30 in Columbia City.	.17	1973-	03-13-82	6.21	11

Crest-stage and high-flow, low-flow 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					
03327930	Koontz ditch near Sidney, IN	Lat 41°07'28", long 85°44'38", in NW¼NW¼SW¼ sec.22, T.31 N., R.7 E., Kosciusko County, at culvert on State Highway 13, 3.5 miles north of State Highway 14.	2.50	1973-	03-13-82	-----	e260
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-	03-13-82	6.79	175
03329720	Robinson Branch near Delphi, IN	Lat 40°37'10", long 86°37'01", in NE¼NW¼NW¼ sec.14, T.25 N., R.2 W., Carroll County, at culvert on State Highway 25, 2.0 miles northeast of State Highway 218, 3.9 miles northeast of State Highway 39 in Delphi.	5.62	1973-	03-12-82	7.24	165
03330290	Shanton ditch near Pierceton, IN	Lat 41°12'45", long 85°41'10, in NW¼NE¼SW¼ sec.22, T.32 N., R.7 E., Kosciusko County, at culvert on State Highway 13, 0.6 mile north of U.S. Highway 30.	.70	1973-	03-13-82	5.42	10
03332300	Little Indian Creek near Royal Center, IN	Lat 40°52'53", long 86°35'26", in NE¼NW¼ sec.13, T.28 N., R.2 W., White County, on right bank at downstream side of county road bridge, 2.9 miles upstream from mouth, 3.2 miles downstream from Fredericks ditch, and 4.8 miles northwest of Royal Center Post Office.	35	1959-73[b] 1974-[c]	03-13-82	6.75	329
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-	03-13-82	5.29	9
03332400	Big Monon Creek near Francesville, IN	Lat 40°59'03", long 86°51'43", in NW¼NE¼ sec.10, T.29 N., R.4 W., Pulaski County, on right bank at downstream side of county road bridge, 1.1 miles east of Francesville, 1.6 miles downstream from right bank tributary, and 10.2 miles upstream from mouth.	152	1959-73[b] 1974-[c]	03-13-82	15.66	1,910
03332780	Big Creek near Wolcott, IN	Lat 40°41'26", long 87°02'37", in SE¼NE¼NE¼ sec.24, T.26 N., R.6 W., White County, at culvert on U.S. Highway 231, 4.4 miles south of Wolcott.	1.35	1972-	05-22-82	10.96	250
03333420	Grassy Fork tributary at Point Isabel, IN	Lat 40°25'28", long 85°49'28", in NE¼SE¼SE¼ sec.22, T.23 N., R.6 E., Grant County, at culvert on State Highway 13, 1,100 ft north of State Highway 26 in Point Isabel.	.67	1973-	03-11-82	-----	a90
03333620	Scott Youngman ditch near Kokomo, IN	Lat 40°25'10", long 86°04'39", in NW¼NW¼NE¼ sec.28, T.23 N., R.4 E., Howard County, at culvert on State Highway 26, 2.4 miles west of State Highway 19.	.86	1973-	08-24-82	8.06	80

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued					
		Wabash River basin--Continued					
03334200	Prairie Creek tributary near Frankfort, IN	Lat 40°15'14", long 86°30'36", in NW¼SE¼NE¼ sec.22, T.21 N., R.1 W., Clinton County, at culvert on State Highways 38 and 39, 1.8 miles south of State Highway 28 in Frankfort.	2.61	1973-	05-29-82	8.22	95
03334900	South Fork Wildcat Creek tributary near Monitor, IN	Lat 40°25'13", long 86°46'22", in NE¼SE¼SE¼ sec.20, T.23 N., R.3 W., Tippecanoe County at culvert on State Highway 26, 0.4 mile northwest of Monitor Springs.	.10	1973-	05-29-82	-----	[a]10
03335685	Big Pine Creek tributary near Pine Village, IN	Lat 40°25'24", long 87°15'32", in SE¼NW¼SW¼ sec.19, T.23 N., T.7 W., Warren County, at culvert on State Highway 55, 1.9 miles south of State Highway 26 in Pine Village.	.21	1973-	02-20-82	6.10	75
03335790	Big Shawnee Creek tributary near Attica, IN	Lat 40°16'48, long 87°10'29", in NE¼NW¼SE¼ sec.11, T.21 N., R.7 W., Fountain County, at culvert on State Highway 28, 1.4 miles west of State Highway 341 and 4.3 miles east of Attica.	1.22	1973-	02-20-82	6.82	148
03339230	Woods ditch near Frankfort, IN	Lat 40°13'13", long 86°27'34", in NE¼NE¼SW¼ sec.31, T.21 N., R.1 E., Clinton County, at culvert on State Highway 38, 2.2 miles southeast of State Highway 39.	1.12	1972-	05-29-82	9.31	161
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-	05-29-82	7.35	52
03342180	Kettle Creek tributary near Shelburn, IN	Lat 39°10'36", long 87°22'27", in SW¼SE¼SE¼ sec.26, T.9 N., R.9 W., Sullivan County, at culvert on State Highway 28, 1.0 mile east of U.S. Highways 41 and 150.	.48	1973-	05-29-82	-----	140
03346650	River Deshee tributary near Frichton, IN	Lat 38°40'33", long 87°25'47", in SW¼ survey 29, Vincennes tract, Palmyra Township, Knox County, at culvert on new U.S. Highways 50 and 150, 0.5 mile southwest of Frichton.	.82	1973-	05-29-82	7.33	84
03346840	White River tributary at Parker City, IN	Lat 40°11'35", long 85°11'34", in SE¼SW¼SE¼ sec.9, T.20 N., R.12 E., Randolph County, at culvert on State Highway 32, 3.3 miles west of intersection of State Highways 1 and 32 in Farmland.	.20	1973-	01-23-82	-----	[a]14
03348700	White River tributary near Strawtown, IN	Lat 40°06'47", long 85°57'10", in NW¼SE¼NW¼ sec.10, T.19 N., R.5 E., Hamilton County, at culvert on State Highway 37, 0.9 mile south of intersection of State Highway 37 and Strawtown Avenue in Strawtown.	.42	1973-	01-30-82	7.65	56
03350650	Stony Creek tributary near Lapel, IN	Lat 40°05'18", long 85°49'22", in NE¼NW¼NW¼ sec.23, T.19 N., R.6 E., Madison County, at culvert on State Highway 32, 2.0 miles northeast of State Highways 13 and 32 in Lapel.	.46	1973-	01-30-82	6.85	90

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued					
		Wabash River basin--Continued					
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-	05-20-82	6.27	83
03356780	Limestone Creek tributary near Gosport, IN	Lat 39°21'12", long 86°40'58", in NE¼NW¼NW¼ sec.31, T.11 N., R.2 W., Owen County, at culvert on State Highway 67, 0.9 mile west of Gosport.	.72	1973-	09-01-82	5.74	68
03360100	Clear Branch at Cory, IN	Lat 39°23'20", long 87°11'58", in SE¼SW¼SW¼ sec.16, T.11 N., R.7 W., Clay County, at culvert on State Highway 46, 4.9 miles west of State Highway 59.	.27	1973-	09-01-82	7.26	58
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-	09-01-82	10.00	190
03360850	Veales Creek tributary at Washington, IN	Lat 38°37'16", long 87°11'00", in SW¼SW¼NW¼ sec.10, T.2 N., R.7 W., Daviess County, at culvert on State Highway 57, 2.3 miles south of U.S. Highway 50 in Washington.	.27	1973-	05-29-82	10.12	325
03361660	Little Sugar Creek tributary at Carrollton, IN	Lat 39°42'22", long 85°49'40", in SW¼SW¼NE¼ sec.35, T.15 N., R.6 E., Hancock County, culvert on U.S. Highway 52, 3.4 miles southeast of New Palestine.	.70	1973-	01-23-82	5.86	55
03361890	Gilmore Creek near Bargersville, IN	Lat 39°30'44", long 86°08'26", in NE¼NE¼SE¼ sec.1, T.12 N., R.3 E., Johnson County, at culvert on State Highway 144, 1.0 mile southeast of State Highway 135 east of Bargersville.	.71	1973-	06-01-82	7.55	84
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-	01-31-82	7.48	110
03364570	Fall Fork Clifty Creek tributary near Horace, IN	Lat 39°16'01", long 85°34'30", in SW¼SW¼NW¼ sec.31, T.10 N., R.9 E., Decatur County, at culvert on State Highway 3, 2.8 miles south of State Highway 46, 0.4 mile north of Horace.	.83	1973-	05-30-82	9.75	240
03366400	Lewis Creek tributary near Kent, IN	Lat 38°44'13", long 85°34'39", in NW¼NE¼NE¼ sec.2, T.3 N., R.8 E., Jefferson County, on State Highway 256, 2.8 miles west of Kent.	.16	1973-	05-21-82	6.79	89
03367600	Flat Creek tributary at New Frankfort, IN	Lat 38°44'18", long 85°42'50", in NE¼SE¼SW¼ sec.35, T.4 N., R.7 E., Scott County, at culvert on State Highway 256, 0.2 mile northwest of State Highway 203.	.34	1973-	05-21-82	5.88	57
03369700	Sixmile Creek tributary near North Vernon, IN	Lat 39°01'55", long 85°38'24", in NW¼SW¼SE¼ sec.21, T.7 N., R.8 E., Jennings County, at culvert on State Highway 3, 1.2 miles north of State Highway 7 in North Vernon.	.39	1973-	05-21-82	7.08	55

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum Date	Annual Maximum Gage height (ft)	Annual Maximum Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued					
		Wabash River basin--Continued					
03370100	Blau ditch tributary near Crothersville, IN	Lat 38°48'17", long 85°50'25", in SW¼SW¼NE¼ sec.10, T.4 N., R.6 E., Jackson County, at culvert on U.S. Highway 31, 1.4 miles north of Crothersville.	1.31	1973-	04-03-82	5.89	13
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-	01-31-82	6.57	22
03372680	Clear Creek tributary near Bloomington, IN	Lat 39°04'24", long 86°32'39", in SW¼SW¼NE¼ sec.5, T.7 N., R.1 W., Monroe County, at culvert on Old State Highway 37, 6.5 miles south of Bloomington.	.38	1973-	01-31-82	6.64	55
03373240	Spring Creek tributary near Springville, IN	Lat 38°54'41", long 86°39'09", in SE¼SW¼NE¼ sec.32, T.6 N., R.2 W., Lawrence County, at culvert on State Highway 58, 2.7 miles southwest of Springville.	.54	1973-	01-31-82	6.67	75
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-	04-03-82	8.54	200
03373850	Slate Creek tributary near Haysville, IN	Lat 38°33'30", long 86°54'10", in NE¼SW¼SW¼ sec.31, T.2 N., R.4 W., Martin County, at culvert on U.S. Highway 231, 5.5 miles north of intersection of U.S. Highway 231 and State Highway 56, in Haysville, 8.0 miles south of intersection of U.S. Highways 231, 150, and 50 in Loogootee.	.14	1973-	06-28-82	7.03	47
03376230	Shiloh Drain near Jasper, IN	Lat 38°24'26", long 86°58'47", in NW¼NW¼NW¼ sec.28, T.15 N., R.5 W., Dubois County, at culvert on State Highway 56, at Ireland 2.8 miles northwest of Jasper.	.57	1973-	05-31-82	8.58	180
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-	09-13-82	6.50	74
03376600	Patoka River tributary near Patoka, IN	Lat 38°23'08", long 87°35'21", in SE¼SW¼NW¼ sec.36, T.15 N., R.11 W., Gibson County, at culvert on old U.S. Highway 41, 1.2 miles south of Patoka River at Patoka.	.40	1973-	06-08-82	8.44	80
03378590	Olive Creek tributary near Solitude, IN	Lat 38°00'14", long 87°53'57, in NW¼SE¼NW¼ sec.17, T.6 S., R.13 W., Posey County, at culvert on State Highway 69, 0.65 mile south of Solitude.	.32	1973-	01-27-82	7.67	78

Crest-stage and high-flow, low-flow 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)
		STREAMS TRIBUTARY TO LAKE MICHIGAN					
		Trail Creek basin					
04095250	East Branch Trail Creek tributary near Springville, IN	Lat 41°41'22", long 86°46'42", in NE¼SE¼NE¼ sec.5, T.37 N., R.3 W., LaPorte County, at culvert on U.S. Highway 20, 1.4 miles east of U.S. Highway 35.	.17	1973-	03-20-82	6.53	30
		St. Joseph River basin					
04099060	Pigeon Creek tributary near Ellis, IN	Lat 41°37'43", long 84°54'56", in NW¼NW¼NW¼ sec.34, T.37 N., R.14 E., Steuben County, at culvert on State Highway 1, 0.25 mile south of U.S. Highway 20.	1.22	1973-	03-20-82	7.86	110
04100165	Wible Lake inlet near Kendallville, IN	Lat 41°29'15", long 85°16'13", in NW¼NW¼SW¼ sec.16, T.35 N., R.11 E., Noble County, at culvert on State Highway 3, 1.9 miles north of U.S. Highway 6 in Kendallville.	2.47	1973-	03-14-82	5.87	50
		STREAMS TRIBUTARY TO LAKE ERIE					
		Maumee River basin					
04179500	Cedar Creek at Auburn, IN	Lat 41°21'57", long 85°03'08", in NE¼NW¼ sec.32, T.34 N., R.13 E., DeKalb County, on right bank 15 ft downstream from Ninth Street bridge in Auburn, and 2 miles upstream from John Diehl ditch.	87.3	1943-73[b] 1974-[c]	03-14-82	10.63	2,100
04179510	Cecil Metcalf ditch near Auburn, IN	Lat 41°21'55", long 85°01'07", in SW¼NE¼NW¼ sec.34, T.34 N., R.13 E., DeKalb County, at culvert on State Highway 8, 2.0 miles east of State Highway 427 in Auburn.	.78	1973-	03-14-82	10.50	140
		UPPER MISSISSIPPI RIVER BASIN					
		Illinois River basin					
05516000	Yellow River near Bremen, IN	Lat 41°25'11", long 86°10'14", in NW¼NW¼ sec.10, T.34 N., R.3 E., Marshall County, on left bank at downstream side of bridge on East 4th Road, 0.5 mile downstream from Bunch ditch, 2 miles southwest of Bremen, and 4 miles upstream from Dausman ditch.	135	1955-73[b] 1974-[c]	03-16-82	15.17	2,800
05516150	Walt Kimble ditch near LaPaz, IN	Lat 41°26'59", long 86°14'16", in SW¼SE¼SE¼ sec.25, T.35 N., R.2 E., Marshall County, at culvert on U.S. Highway 6, 3.8 miles east of U.S. Highway 31.	1.50	1973-	03-13-82	10.08	290
05517400	West Arm Payne ditch near North Judson, IN	Lat 41°12'55", long 86°52'13", in SW¼SW¼SE¼ sec.16, T.32 N., R.4 W., Starke County, at bridge on State Highway 10, 1.3 miles east of U.S. Highway 421.	2.58	1973-	03-13-82	6.63	92
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-	03-13-82	9.46	81

[a]About.
[b]Recording.
[c]Nonrecording.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table

Discharge measurements made at miscellaneous sites during water year 1982

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				
Wabash River	Ohio River	Lat 40°24'10", long 86°58'37", in SW¼SW¼ sec.27, T.23 N., R.5 W., Tippecanoe County, 0.8 mile downstream from Ouiatenon Blockhouse, 1.0 mile north of Tippecanoe County Road 200 South, 1.3 miles southwest of the intersection of Base Line Road and Tippecanoe County Road 300 West, and 4.0 miles southwest of West Lafayette City Hall.	7,446		11-18-81 07-26-82 07-27-82	3,470 2,290 2,220
Wabash River	Ohio River	Lat 40°17'59", long 87°14'56", in NW¼NE¼ sec.6, T.21 N., R.7 W., at the Warren-Fountain County line, 150 ft upstream from the Wabash Railroad bridge, 0.4 mile northeast of the U.S. Highway 41 bridge and 0.5 mile north of the intersection of U.S. Highway 41 and Main Street in Attica.	7,682		11-18-81 07-27-82	3,360 2,320
Wabash River	Ohio River	Lat 39°24'05", long 87°29'40", in NW¼NW¼ sec.14, T.11 N., R.10 W., Vigo County, 325 ft southeast of Dresser Power Plant, 3.8 miles southwest of the Terre Haute Sewage Disposal Plant and 4.8 miles west of Southwood.	12,423		10-20-81 08-25-82	7,270 3,320
Wabash River	Ohio River	Lat 39°16'23", long 87°36'05", in NE¼NW¼ sec.35, T.10 N., R.11 W., at the Indiana-Illinois state line, 0.9 mile north of the Vigo-Sullivan County line, 1.0 miles downstream from the Darwin Ferry, and 5.6 miles west of Prairie Creek.			10-21-81 08-25-82	7,520 3,480
Pogues Run	White River	Lat 39°45'24", long 86°10'21", in NW¼SW¼ sec.11, T.15 N., R.3 E., Marion County, at mouth, and 1900 ft north of Morris Street Bridge, in Indianapolis.			10-07-81 08-17-83	2.74 2.00
White River tributary	White River	Lat 39°45'22", long 86°10'20", in NW¼SW¼ sec.11, T.15 N., R.3 E., Marion County, at mouth, 200 ft downstream from Pogues Run, and 1700 ft upstream from Morris Street bridge in Indianapolis.			10-07-81 08-17-82	<.10[a] 1.79
Pleasant Run	White River	Lat 39°43'39", long 86°10'05", in NE¼SW¼ sec.23, T.15 N., R.3 E., Marion County, at West Street bridge in Indianapolis and 0.4 mile upstream from mouth.	21	1952, 1953, 1954	10-07-81 08-17-82	3.17 2.88
Eagle Creek	White River	Lat 39°44'10", long 86°11'47", on line between sec.21 and 22, T.15 N., R.3 E., Marion County, at Raymond Street bridge in Indianapolis.			10-07-81 08-17-82	26.6 33.8
Lick Creek	White River	Lat 39°42'30", long 86°11'12", in SE¼SW¼ sec.27, T.15 N., R.3 E., Marion County, at Harding Street bridge in Indianapolis and 0.8 mile upstream from mouth.		1974	10-07-81 08-17-82	3.00 1.24

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
White River	Wabash River	Lat 39°42'30", long 86°12'31", in SE¼SW¼ sec.28, T.15 N., R.3 E., Marion County, 0.4 mile downstream from IPALCO dam in Indianapolis and 0.5 mile downstream from Lick Creek.	1,900		09-29-81 10-07-81 08-17-82	802 410 324
Haueisen ditch	White River	Lat 39°41'33", long 86°13'14", in SW¼SE¼ sec.32, T.15 N., R.3 E., Marion County, at U.S.S. of I465 bridge over White River at Indianapolis and 0.1 mile upstream from mouth.			10-07-81 08-17-82	0 12.3
White River	Wabash River	Lat 39°40'55", long 86°13'30", in NW¼SE¼ sec.5, T.14 N., R.3 E., Marion County, 0.7 mile downstream from I465 bridge over White River at Indianapolis, and 1.7 miles upstream from Little Buck Creek.			10-07-81 08-17-82	442 351
Little Buck Creek	White River	Lat 39°40'10", long 86°12'56", on line between secs.8 and 9, T.14 N., R.3 E., Marion County, 0.5 mile northeast of Southport WWTF, and 1.2 miles upstream from mouth.			10-07-81 08-17-82	1.64 .76
White River	Wabash River	Lat 39°39'47", long 86°14'10", on line between secs.7 and 18, T.14 N., R.3 E., Marion County, at Southport Road bridge, 0.25 mile downstream from Little Buck Creek and 0.7 mile west of Southport WWTF.	1,945	1965	08-17-82	401
Pleasant Run	White River	Lat 39°38'25", long 86°12'08", in NW¼SE¼ sec.21, T.14 N., R.3 E., Marion County, at S.R. 37 bridge, 2.3 miles upstream from mouth and 4.5 miles southwest of Southport.	21		10-07-81	4.12
Honey Creek	White River	Lat 39°36'30", long 86°13'00", in NE¼SE¼ sec.32, T.14 N., R.3 E., Johnson County, at State Highway 37, 1.1 miles west of Smith Valley and 4.2 miles northeast of Waverly.		1973	10-07-81	1.11
White River	Wabash River	Lat 39°36'23", long 86°14'30", in NW¼SW¼ sec.6, T.13 N., R.3 E., Johnson County, 0.9 miles downstream of Honey Creek, and 2.5 miles west of Smith Valley.			10-07-81 08-17-82	533 454
Goose Creek	White River	Lat 39°37'39", long 86°15'19", in SW¼NE¼ sec.25, T.14 N., R.2 E., Morgan County, at bridge on Mann Road, and 1.3 miles southeast of West Newton.			10-07-81	.22
White River	Wabash River	Lat 39°34'02", long 86°15'20", in NW¼SE¼ sec.13, T.13 N., R.2 E., Morgan County, at State Highway 144 bridge, and 1.1 miles northeast of Waverly.	2,026	1965, 1973, 1974	08-17-82	469
Bluff Creek	White River	Lat 39°33'31", long 86°15'55", in NW¼NW¼ sec. 24, T. 13 N., R.2 E., Morgan County, at old State Highway 37 bridge, at Waverly, and 0.3 mile above mouth.			10-07-81	.34
White River	Wabash River	Lat 39°31'54", long 86°18'25", on line between secs.27 and 28, T.13 N., R.2 E., Morgan County, 3500 ft upstream from Crooked Creek and 2.6 miles southwest of Waverly.			08-17-82	444

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
Crooked Creek	White River	Lat 39°30'57", long 86°18'07", in SW¼SW¼ sec.34, T.13 N., R.2 E., Morgan County, at State Highway 37, 0.8 mile above mouth and 3.2 miles southwest of Waverly.			10-07-81	.36
Stotts Creek	White River	Lat 39°30'01", long 86°19'57", in NE¼NE¼ sec.8, T.12 N., R.2 E., Morgan County, at New Harmony Road, 400 feet upstream from State Highway 37 bridge, 0.1 mile above mouth and 5 miles southwest of Waverly.	60.1	1954, 1968, 1969	10-07-81	1.56
White River	Wabash River	Lat 39°29'57", long 86°21'19", in NE¼NW¼ sec.7, T.12 N., R.2 E., Morgan County, at Henderson Road bridge, 1.4 miles downstream from Stotts Creek and 2.4 miles southeast of Centerton.		1974	08-17-82	537
White Lick Creek	White River	Lat 39°30'49", long 86°22'48", on line between secs.1 and 2, T.12 N., R.1 E., Morgan County, at County Road 590 North bridge, and 0.8 mile east of Centerton.	288	1974	10-07-81 08-17-82	40.8 37.2
Sycamore Creek	White River	Lat 39°29'34", long 86°25'47", in SE¼NW¼ sec.9, T.12 N., R.1 E., Morgan County, at State Highway 67 bridge, 0.5 mile above mouth, and 2.4 miles southwest of Centerton.			10-07-81	2.74
Highland Creek	White River	Lat 39°29'02", long 86°26'18", in NE¼NE¼ sec.17, T.12 N., R.1 E., Morgan County, at State Highway 67 bridge, 200 feet above mouth, and 3.1 miles southwest of Centerton.	7.9		10-07-81	.69
Susans Branch	White River	Lat 39°28'38", long 86°26'25", in NE¼SE¼ sec. 17, T.12 N., R.1 E., Morgan County, at State Highway 67 bridge, 1,000 feet above mouth, and 3.5 miles southwest of Centerton.			10-07-81	.07
White River	Wabash River	Lat 39°26'01", long 86°26'58", in NE¼SW¼ sec.32, T.12 N., R.1 E., Morgan County, at State Highway 39 bridge, and 1.3 miles northwest of Martinsville.	2,486	1925-27, 1930-32, 1946, 1948 1965, 1967 1970	08-17-82	616
Lambs Creek	White River	Lat 39°25'18", long 86°28'29", in SE¼NW¼ sec.1, T.11 N., R.1 W., Morgan County, at State Highway 67 bridge, 1.3 miles above mouth, and 2.6 miles west of Martinsville.			10-07-81	4.73
White River	Wabash River	Lat 39°24'12", long 86°27'43", in NW¼SE¼ sec.7, T.11 N., R.1 E., Morgan County, below Martinsville WWTF, and 2.4 miles southwest of Martinsville.			10-07-81 08-17-82	741 631
Indian Creek	White River	Lat 39°23'36", long 86°27'34", in SE¼NE¼ sec.18, T.11 N., R.1 E., Morgan County, at State Highway 37 bridge, 1.2 miles above mouth and 2.8 miles southwest of Martinsville.	25.2	1954	10-07-81	5.96
Little Indian Creek	White River	Lat 39°22'18", long 86°28'52", in NW¼SW¼ sec.24, T.11 N., R.1 W., Morgan County, at State Highway 37 bridge, and 4.8 miles southwest of Martinsville.	10.1	1969	10-07-81	.17

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		STREAMS TRIBUTARY TO LAKE MICHIGAN				
		St. Joseph River Basin				
White River	Wabash River	Lat 39°22'23", long 86°33'32", in NW¼SW¼ sec.20, T.11 N., R.1 W., Morgan County, at Paragon Bridge, 1,200 feet upstream from Bryant Creek and 1.5 miles south of Paragon.		1965	08-17-82	739
Fawn River	St. Joseph River	Lat 41°46'15", long 85°16'20", in SW¼SW¼ sec.17, T.8 S., R.8 W., Branch County, MI, 75 feet upstream of culvert on Gunthorp Road, 0.7 mile north of Indiana-Michigan state line, and 3.8 miles east of Fawn River, MI.	113		09-01-82	31.8
Himebaugh drain	St. Joseph River	Lat 41°46'53", long 85°17'51", in NW¼NE¼ sec.13, T.8 S., R.9 W., St. Joseph County, MI, 100 feet downstream of culvert on Round Lake Road, 1.3 miles west of Gunthorp Road, and 2.4 miles east of Fawn River, MI.	28.8		09-01-82	5.82
Fawn River	St. Joseph River	Lat 41°46'26", long 85°18'42", in NW¼SW¼ sec.13, T.8 S., R.9 W., St. Joseph County, MI, 100 feet upstream of bridge on Watt Road. 1.0 mile south of Fawn River Road, and 1.8 miles east of Fawn River, MI.	131		09-01-82	56.9
Fawn River tributary	Fawn River	Lat 41°47'20", long 85°18'43", in SE¼NE¼ sec.11, T.8 S., R.9 W., St. Joseph County, MI, upstream side of culvert of Fawn River Road, 0.1 mile west of Watt Road, and 1.7 miles east of Fawn River, MI.	6.12		09-01-82	1.24
Fawn River	St. Joseph River	Lat 41°46'33", long 85°21'34", in SW¼NE¼ sec.16, T.8 S., R.9 W., St. Joseph County, MI, 150 feet downstream of bridge on Kime Road, 0.4 mile south of Fawn River Road, and 0.9 mile southwest of Fawn River, MI.	142		09-01-82	30.4
Williams Lake outlet	Fawn River	Lat 41°46'53", long 85°22'40", in SW¼SE¼ sec.8, T.8 S., R.9 W., St. Joseph County, MI, upstream end of culvert on Fawn River Road, 2.5 miles south east of Sturges, MI, and 2.6 miles east of Michigan State Highway 78.	4.82		09-01-82	3.90
Cedar Lake inlet	Fawn River	Lat 41°43'57", long 85°21'51", in SE¼SW¼ sec.22, T.28 N., R.10 E., LaGrange County, 50 feet upstream of culvert on County Road 300 East, 0.2 mile north of County Road 600 North, and 3.0 miles east of Howe.	1.02		09-02-82	2.43
Cedar Lake outlet	Fawn River	Lat 41°44'26", long 85°22'24", in NE¼NE¼ sec.21, T.38 N., R.10 E., LaGrange County, 10 feet upstream from control structure for Cedar Lake, 150 feet north of road to Howe Military School Summer Camp, 0.2 mile south of County Road 700 North, and 2.9 miles northeast of Howe.	1.60		12-04-81 12-08-81 03-09-82 03-26-82 05-28-82 06-17-82 07-09-82 09-02-82	4.20 3.74 4.13 8.37 6.28 3.13 3.25 1.86
Fawn River tributary	Fawn River	Lat 41°44'37", long 85°22'24", in SE¼SE¼ sec.16, T.38 N., R.10 E., LaGrange County, downstream end of culvert on County Road 700 North, 0.9 mile west of County Road 375 East, and 3.0 miles northeast of Howe.	2.66		09-02-82 07-09-82 08-24-82	2.62 4.31 2.50

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		STREAMS TRIBUTARY TO LAKE MICHIGAN				
		St. Joseph River Basin				
Fawn River tributary	Fawn River	Lat 41°45'36", long 85°22'10", in SE¼NE¼ sec.20, T.8 S., R.9 W., St. Joseph County, MI, downstream end of culvert on Michigan-Indiana state line road, 0.8 mile west of Kime road, 2.0 miles southwest of Fawn River, MI.	1.11		09-02-82	5.58
Fawn River	St. Joseph River	Lat 11°45'49", long 85°23'21", in NE¼NE¼ sec.19, T.8 S., R.9 W., St. Joseph County, MI, downstream side of bridge on Bill Hill Road, 1.2 miles south of Fawn River Road, and 2.8 miles southeast of Sturgis, MI.	160		09-02-82	59.7
Fawn River	St. Joseph River	Lat 41°45'00", long 85°24'20", in NW¼SW¼, sec.17, T.38 N., R.10 E. LaGrange County, upstream side of bridge on County Road 125 East, 1.1 miles east of State Highway 9, and 2.3 miles northeast of Howe.	164		09-02-82	62.3
Fawn River	St. Joseph River	Lat 41°45'36", long 85°28'33", in SW¼NE¼ sec.21, T.8 S., R.10 W., St. Joseph County, MI, 60 feet upstream bridge on Bogen Road, 0.1 mile from north of Indiana-Michigan state line, and 4.0 miles southwest of Sturgis, MI.	173		08-31-82	32.9
Pigeon Creek	St. Joseph River	Lat 41°40'41", long 85°15'13", in NE¼SE¼ sec.9, T.37 N., R.11 E., Lagrange County, downstream side of bridge on County Road 900 East, 0.5 mile south of County Road 300 north, and 1.5 miles southeast of Mongo.	131		09-01-82	61.0
Pigeon Creek tributary	Pigeon Creek	Lat 41°40'28", long 85°15'13", in SW¼SW¼ sec.10, T.37 N., R.11 E., Lagrange County, 100 feet upstream of culvert on County Road 900 East, 0.8 mile south of County Road 300 North, and 1.6 miles southeast of Mongo.	9.26		09-01-82	28.5
Pigeon Creek tributary	Pigeon Creek	Lat 41°41'08", long 85°15'18", in SW¼SW¼ sec.4, T.37 N., R.11 E., Lagrange County, upstream end of culvert on County Road 300 North, 0.1 mile west of County Road 900 East, and 1.4 miles east of Mongo.	4.65		09-01-82	0
Turkey Creek	Pigeon Creek	Lat 41°39'49", long 85°16'22", in NW¼SW¼ sec.16, T.37 N., R.11 E., Lagrange County, 100 feet upstream of bridge on County Road 150 North, 0.1 mile east of State Highway 3, and 1.5 mile south of Mongo.	63.8		09-01-82	28.5
Pigeon River	St. Joseph River	Lat 41°41'08", long 85°16'54". in NW¼NE¼ sec.8, T.37 N., R.11 E., Lagrange County, 10 feet upstream of bridge on County Road 300 North, 0.1 mile west of State Highway 3, 0.1 mile downstream from Mongo Reservoir, and 0.1 mile west of Mongo.	213		09-01-82	101
Pigeon River	St. Joseph River	Lat 41°41'33", long 85°19'41", in SW¼NW¼ sec.1, T.37 N., R.10 E., Lagrange County, 100 feet upstream of bridge on County Road 525 East, 2.0 miles south of State Highway 120, and 2.5 miles west of Mongo.	226		09-01-82	111

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		STREAMS TRIBUTARY TO LAKE MICHIGAN				
		St. Joseph River Basin				
Curtis Creek	Pigeon River	Lat 41°41'50", long 85°20'44", in NW¼NW¼ sec. 2, T.37 N., R.10 E., Lagrange County, outlet of Curtis Creek Fish Hatchery, and 2 miles east of Ontario.	6.13		09-01-82	2.90
Causey Lake outlet	Pigeon River	Lat 41°42'22", long 85°21'26", in NW¼SE¼ sec.34, T.38 N., R.10 E., Lagrange County, upstream of culvert on unnamed road, 0.5 mile south of County Road 500 North, 1.3 miles west of County Road 475 East, and 2.6 miles southwest of Brighton.	1.02		09-01-82	.04
Lane Lake outlet	Pigeon River	Lat 41°42'32", long 85°22'44", in SW¼NE¼ sec.33, T.38 N., R.10 E., Lagrange County, at bridge on unnamed road, 0.2 mile north of Ontario, 0.3 mile east of County Road 225 East, and 0.5 mile south of State Highway 120.	.47		08-31-82	0
Pigeon River	St. Joseph River	Lat 41°42'25", long 85°23'01", in NW¼SW¼ sec.33, T.38 N., R.10 E., Lagrange County, 5 feet downstream of bridge on County Road 225 East, 0.1 mile north of Ontario, and 0.7 mile south of State Highway 120.	240		08-31-82	123
Fly Creek	Pigeon River	Lat 41°41'59", long 85°23'35", in SW¼SE¼ sec.32, T.38 N., R.10 E., Lagrange County, 10 feet downstream of bridge on County Road 400 N., 0.5 mile west of Ontario, and 1.7 miles east of State Highway 9.	43.1		08-31-82	22.0
Pigeon River	St. Joseph River	Lat 41°42'44", long 85°26'44", in NW¼NW¼ sec.36, T.38 N., R.9 E., Lagrange County, 30 feet upstream of bridge on County Road 100 West, 0.6 mile south of State Highway 120, and 1 mile west of Howe.	289		08-31-82	156
Turkey Creek	Elkhart River	Lat 41°26'03", long 85°47'53", in NE¼NW¼ sec.2, T.34 N., R.6 E., Kosciusko County, 40 feet downstream of bridge on County Road 250 East, 0.1 mile south of Elkhart-Koskiusko county line road, and 2.4 miles west of Syracuse.	50.7		08-31-82	5.88
Turkey Creek	Elkhart River	Lat 41°24'50", long 85°49'34", in SE¼NE¼ sec.9, T.34 N., R.6 E., Kosciusko County, 160 feet downstream of intersection of County Roads 1250 North and 100 East, 1.0 mile east of Milford, and 1.2 miles east of State Highway 15.	54.1		08-31-82	8.05
Hoopingarner ditch	Turkey Creek	Lat 41°24'28", long 85°48'42", in SW¼SE¼, sec.10, T.34 N., R.6 E., Kosciusko County, downstream side of bridge on County Road 175 east, 0.2 mile south of Beer Road, and 1.7 miles east of Milford.	3.42		08-31-82	.11
Wabee Lake outlet	Turkey Creek	Lat 41°24'10", long 85°51'12", in NW¼NE¼ sec.17, T.34 N., R.6 E., Kosciusko County, 40 feet downstream of bridge on State Highway 15, and 0.6 mile southwest of Milford.	15.8		08-31-82	4.75

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		STREAMS TRIBUTARY TO LAKE MICHIGAN				
		St. Joseph River Basin				
Turkey Creek	Elkhart River	Lat 41°24'48", long 85°51'52", in SW¼NW¼ sec.8, T.34 N., R.6 E., Kosciusko County, 100 feet downstream of bridge on County Road 1250 North, 0.8 mile west of State Highway 15, and 1 mile west of Milford.	75.9		09-01-82	16.3
Coppes ditch	Turkey Creek	Lat 41°24'48", long 85°52'30", in SE¼NW¼ sec.7, T.34 N., R.6 E., Kosciusko County, downstream end of culvert on County Road 1250 North, 1.3 miles west of State Highway 15, and 1.5 miles west of Milford.	21.4		09-02-82	10.1
Davisson ditch	Turkey Creek	Lat 41°24'48", long 85°52'49", in SE¼NW¼ sec.7, T.34 N., R.6 E., Kosciusko County, downstream end of culvet on County Road 1250 North, and 1.5 miles west of State Highway 15, 1.7 miles west of Milford.	4.60		09-02-82	2.36
Omar-Neff ditch	Turkey Creek	Lat 41°24'48", long 85°53'21", in NE¼SE¼ sec.12, T.34 N., R.5 E., Kosciusko County, 60 feet upstream of bridge on County Road 1250 North, 2.0 miles west of State Highway 15, and 2.2 miles west of Milford.	10.7		09-01-82	1.79
Turkey Creek	Elkhart River	Lat 41°25'39", long 85°53'25", in SE¼NE¼ sec.1, T.34 N., R.5 E., Kosciusko County, 30 feet downstream of bridge on County Road 1350 North, 2.2 miles west of State Highway 15, and 2.6 miles northwest of Milford.	115		09-02-82	37.2
Berlin Court ditch	Turkey Creek	Lat 41°26'09", long 85°54'19", in SE¼SE¼ sec.35, T.35 N., R.5 E., Elkhart County, 20 feet upstream of bridge on County Road 300 West, 0.8 mile south of U.S. Highway 6, and 5 miles east of Nappanee.	17.9		09-01-82	1.78
Turkey Creek	Elkhart River	Lat 41°27'01", long 85°51'53", in SW¼SW¼ sec.29, T.35 N., R.6 E., Elkhart County, 60 feet downstream of bridge on U.S. Highway 6, 1.1 miles west of State Highway 15, and 3 miles north of Milford.	139		09-01-82	37.7
Turkey Creek	Elkhart River	Lat 41°28'15", long 85°50'30", in NE¼SW¼ sec.21, T.35 N., R.6 E., Elkhart County, upstream side of bridge on County Road 50, 0.1 mile west of State Highway 15, and 4 miles north of Milford.	150		08-31-82	42.1
		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.30 N., R.12 E., Allen County, at bridge on Smith Road, 300 ft north of Engle Road, and 0.9 mile south of Covington Road.		1978	03-15-82 03-17-82	320 525
Trier ditch	Maumee River	Lat 41°01'05", long 85°05'15", in SE¼SW¼ sec.29, T.30 N., R.13 E., Allen County, at bridge on Tillman Ave., 0.4 mile east of Hessen Cassel Road, and 0.8 mile west of Wayne Trace.		1978	03-15-82	7.87

[a]Estimate.

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 Francesville	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	1981
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]
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]
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
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

[a]Continued as a crest-stage and low-flow partial-record station.
[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.
[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.

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 (mi^2)	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	60	--------	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	Muskelonge Lake near Warsaw	Kosciusko	11.8	32	842.67	300	+	1943-53, 1959-71
03331100	Carr Lake near Claypool	Kosciusko	2.27	79	848.88	1,340	+	1947-53
03331120	Sherburn Lake near Pierceton[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 mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
	WABASH RIVER BASIN--Continued							
03331160	Center Lake at Warsaw	Kosciusko	.73	120	803.86	2,060	+	1945-
03331180	Palestine Lake at Palestine	Kosciusko	32.4	290	--------	1,170	+	1954-
03331200	Crystal Lake near Atwood	Kosciusko	.45	76	789.69	930	+	1945-51
03331220	Hoffman Lake at Atwood	Kosciusko	8.07	180	785.85	3,160	+	1945-53
03331240	Beaver Dam Lake near Silver Lake	Kosciusko	2.83	146	868.95	3,280	+	1947-53
03331260	Loon Lake near Silver Lake	Kosciusko	3.59	40	865.74	670	+	1947-53
03331280	McClures Lake near Silver Lake	Kosciusko	1.29	32	865.85	410	+	1945-52
03331300	Hill Lake near Silver Lake	Kosciusko	0.85	67	871.50	1,300	+	1952-
03331320	Diamond Lake near Silver Lake	Kosciusko	3.92	79	--------	1,280	+	1954-
03331340	Yellow Creek Lake near Silver Lake	Kosciusko	11.1	151	860.50	4,730	+	1945-53
03331360	Rock Lake near Akron	Kosciusko	2.74	56	847.29	360	+	1946-66
03331370	Town Lake near Akron	Fulton	2.77	23	--------	220	+	1949-50
03331380	Lake Manitou at Rochester	Fulton	44.2	1,158	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	--------	3,490	+	1954-71, 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 mile)	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	--------	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 mile)	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
05515230	Stone Lake at LaPorte	LaPorte	[8]10.7	140	796.20	------	-	1980- 1946-75
05515240	Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1980- 1942-49, 1952-75
05515600	Koontz Lake at Koontz Lake	Starke	[8]6.25	346	714.56	3,170	+	1980- 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.
[xx]Elevation, 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

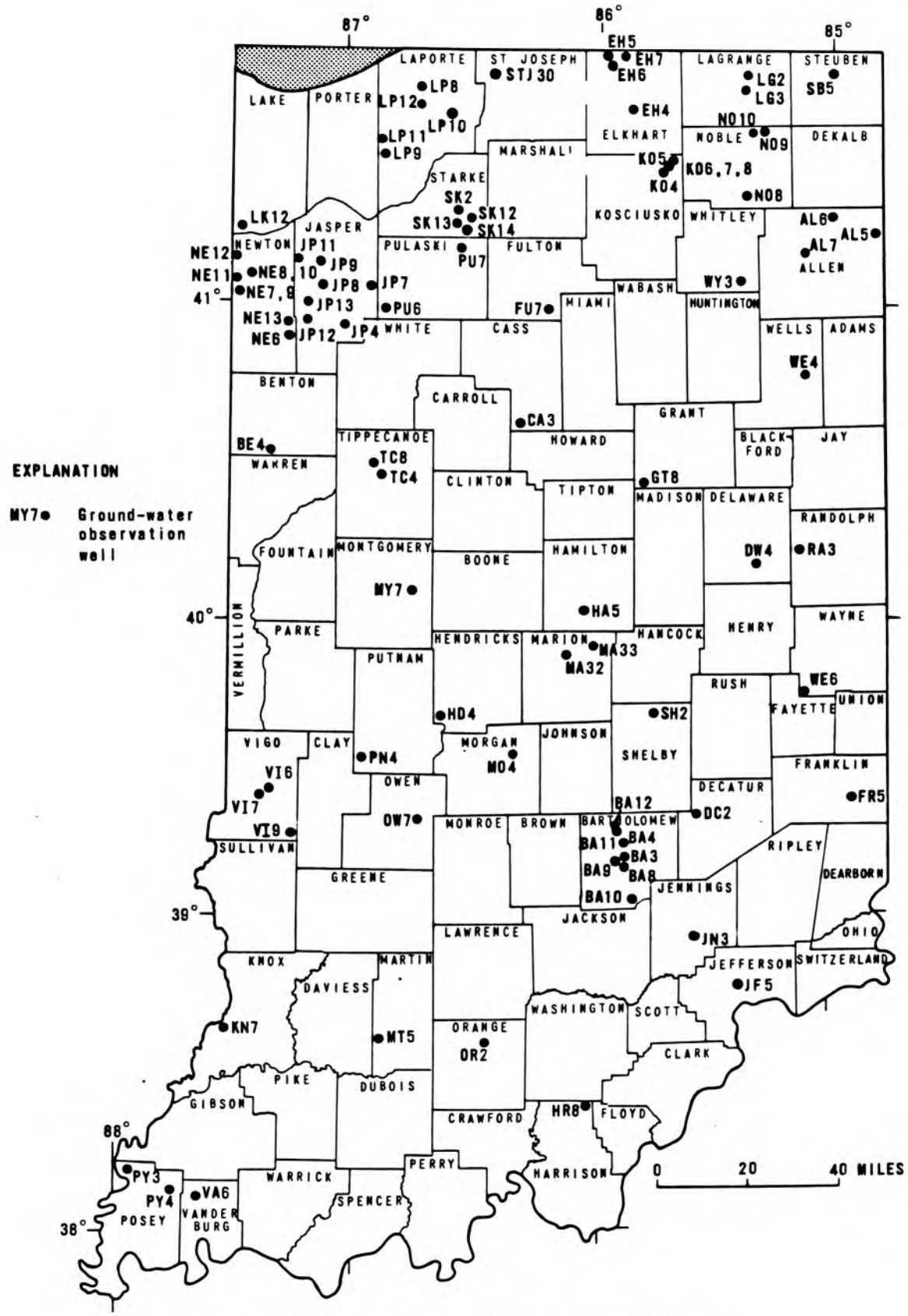

Figure 6.-- Location of ground-water observation wells.

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 (2.1 km) west of Edgerton.
Owner: Noel Gerig.

AQUIFER.--Limestone of Salina Formation of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in (102 mm), depth 97 ft (30 m), cased to 40 ft (12.2 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft (232 m). Measuring point: Top of floor of shelter 0.17 ft (0.05 m) above land-surface datum.

REMARKS.--Water level affected by nearby quarry operations.

PERIOD OF RECORD.--July 1962 to December 1971. January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.04 ft (3.06 m) below land-surface datum, July 8, 9, 1962; lowest, 38.41 ft (11.71 m) below land-surface datum, May 4, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.69	29.66	30.13	29.65	30.03	29.62	29.20	29.35	29.25	29.08	29.00	29.05
10	29.97	30.05	30.02	29.75	-----	29.69	29.35	29.35	29.30	28.99	29.05	29.12
15	29.60	29.73	29.86	29.84	29.92	29.63	29.32	29.40	29.08	29.15	29.02	29.09
20	29.88	29.28	29.88	29.92	29.85	29.28	29.27	29.29	29.01	28.94	28.98	28.87
25	29.89	29.75	29.89	29.90	30.07	29.38	29.26	29.33	29.00	29.13	28.84	28.83
EOM	30.06	29.54	29.60	29.83	29.95	29.19	29.51	-----	29.05	28.92	29.05	29.07
LOW	30.06	30.25	30.53	30.10	30.30	29.95	29.80	29.58	29.42	29.37	29.32	29.27
HIGH	29.53	29.26	29.34	29.56	29.60	29.10	29.00	29.07	29.00	28.92	28.84	28.83

WTR YR 1982 HIGH 28.83 SEP 25 LOW 30.53 DEC 30

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 (16.1 km) northeast of New Haven.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 84 ft (26 m), cased to 81.5 ft (24.8 m), screened to 83.5 ft (25.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft (232 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.63 ft (2.63 m) below land-surface datum, June 15, 1981; lowest, 14.77 ft (4.50 m) below land-surface datum, Oct. 29, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.41	11.72	11.24		-----	9.35		-----	9.40	10.05	11.66	12.81
10	12.26	11.84	11.29		-----	9.51		10.51	9.80	10.31	11.78	12.88
15	12.29	11.93	-----		-----	----		10.83	10.08	10.61	12.00	12.96
20	12.29	11.80	-----		10.30	----		10.85	10.07	10.83	12.26	13.00
25	12.03	11.65	-----		9.35	----		10.61	10.25	11.05	12.38	13.07
EOM	11.76	11.15	-----		9.38	----		9.03	10.38	-----	12.64	13.09
LOW	12.58	11.96	11.33		10.53	9.52		11.06	10.60	11.23	12.76	13.22
HIGH	11.76	11.15	11.05		9.35	9.34		8.96	9.06	10.05	11.66	12.65

WTR YR 1982 HIGH 8.96 MAY 30 LOW 13.22 SEP 29

ALLEN COUNTY

410817085084101. Local number, AL 7.

LOCATION.—Lat 41°08'17", long 85°08'41", in NW¼NW¼NE¼ sec.14, T.31 N., R.12 E., Allen County, Hydrologic Unit 04100004, along the east fence line of parking lot of the Ft. Wayne Community Schools, 300 ft (91.4 km) south of Cook Road, 0.4 miles (0.64 km) west of State Road 327.
Owner: City of Fort Wayne, Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in (127 mm), depth 148 ft (45.1 m), cased to 144 ft (43.9 m), screened to 148 ft (45.1 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 829 ft (253 m). Measuring point: Top of floor of shelter 4.0 ft (1.22 m) above land-surface datum.

PERIOD OF RECORD.--December 1980 to July 8, 1982 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.87 ft (11.54 m) below land-surface datum, Apr. 3, 1982; lowest, 40.02 ft (12.20 m) below land-surface datum, Aug. 26, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.02	38.85	39.03	38.91	38.90	38.42	37.96	38.35	38.34	38.43		
10	39.07	39.03	39.00	38.83	38.88	38.59	38.16	38.40	38.36	-----		
15	39.06	38.98	38.98	38.81	38.79	38.45	38.17	38.75	38.42	-----		
20	39.00	38.71	39.13	39.12	38.55	38.15	38.04	38.44	38.29	-----		
25	39.03	39.01	39.09	38.92	38.81	38.15	38.18	38.37	38.48	-----		
EOM	39.10	39.00	39.11	38.67	38.84	38.23	38.23	38.16	38.40	-----		
LOW	39.23	39.24	39.32	39.23	39.00	38.83	38.43	38.84	38.64	38.77		
HIGH	38.82	38.71	38.79	38.67	38.55	38.11	37.87	38.16	38.13	38.40		

WTR YR 1982 HIGH 37.87 APR 3 LOW 39.32 DEC 30

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 (152 mm), depth 123 ft (37.5 m), cased to 116 ft (35 m), screened to 121 ft (37 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 639.8 ft (195.0 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

REMARKS.--Water level affected by pumpage for water and sewage utilities.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.75 ft (5.11 m) below land-surface datum, Feb. 24, 25, 1975; lowest, 28.74 ft (8.76 m) below land-surface datum, Oct. 9, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.87	20.14	20.20	19.54	18.26	18.83	18.44	19.02	19.43	19.55	20.13	19.95
10	20.03	20.17	20.32	19.65	18.66	18.88	18.63	19.00	19.76	19.86	20.07	20.15
15	20.20	20.04	20.21	19.91	18.78	18.65	18.80	19.36	19.66	20.05	19.89	20.23
20	20.11	20.35	20.13	20.02	18.29	18.35	18.82	19.68	19.51	20.01	20.21	20.01
25	20.15	20.12	19.86	18.96	18.60	18.55	18.86	19.56	19.89	19.84	20.21	20.17
EOM	20.10	19.97	19.87	17.86	18.64	18.60	19.09	19.21	19.74	19.94	20.04	20.33
LOW	20.94	20.77	20.66	20.37	18.99	19.14	19.30	20.44	20.51	20.87	20.63	20.76
HIGH	19.85	19.97	19.75	17.86	17.64	18.34	18.44	18.99	19.20	19.53	19.80	19.86

WTR YR 1982 HIGH 17.64 FEB 1 LOW 20.94 OCT 22

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 AFB at the northern city limits of Columbus.
Owner: Bartholomew County.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 93 ft (28 m), cased to 85 ft (26 m), screened to 90 ft (27 m).
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 654.04 ft (199.351 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

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

REVISED RECORDS.--WRD IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.25 ft (4.34 m) below land-surface datum, Mar. 23, 1979; lowest, 21.15 ft (6.47 m) below land-surface datum, Feb. 11, 12, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.60	19.15	19.59	19.79	17.55	16.14	15.43	15.81	16.54	17.06	17.72	18.38
10	18.70	19.23	19.65	19.69	17.23	16.18	15.42	15.94	16.59	17.17	17.82	18.45
15	18.79	19.30	19.71	19.57	17.10	16.25	15.44	16.06	16.68	17.29	17.93	18.55
20	18.89	19.37	19.76	19.52	16.43	16.14	15.49	16.18	16.77	17.39	18.04	18.64
25	18.98	19.45	19.82	19.17	16.23	15.90	15.58	16.32	16.86	17.51	18.15	18.74
EOM	19.08	19.52	19.82	17.87	16.15	15.60	15.70	16.45	16.95	17.62	18.28	18.84
LOW	19.09	19.52	19.84	19.83	17.90	16.27	15.72	16.46	16.98	17.63	18.30	18.85
HIGH	18.51	19.09	19.52	17.87	16.15	15.60	15.39	15.72	16.47	16.98	17.64	18.30

WTR YR 1982 HIGH 15.39 APR 12-13 LOW 19.84 DEC 29

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 (6.4 km) south of Columbus.
Owner: Meadows Metal Products Co., Inc.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 49 ft (15 m), casing length unknown.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 615.48 ft (187.598 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.06 ft (2.46 m) below land -surface datum, June 3, 1968; lowest, 23.17 ft (7.06 m) below land-surface datum, Nov. 30, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.49	20.43	20.99	21.09	17.03	-----	14.14	15.06	16.35	16.86	17.82	18.77
10	19.64	20.55	21.06	20.86	16.15	-----	14.16	15.29	16.44	16.98	18.01	18.88
15	19.82	20.65	21.13	20.56	16.00	-----	14.20	15.54	16.55	17.12	18.19	19.01
20	19.99	20.71	21.22	20.40	-----	-----	14.38	15.79	16.69	17.26	18.37	19.15
25	20.14	20.82	21.27	19.85	-----	14.61	14.58	16.00	16.82	17.43	18.55	19.32
EOM	20.31	20.91	21.21	18.76	-----	14.31	14.83	16.20	16.79	17.64	18.66	19.47
LOW	20.33	20.91	21.27	21.22	18.66	14.90	14.86	16.21	16.90	17.67	18.76	19.50
HIGH	19.34	20.33	20.91	18.76	15.77	14.31	14.10	14.87	16.22	16.79	17.68	18.66

WTR YR 1982 HIGH 14.10 APR 12, 13 LOW 21.27 DEC 24-29

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 (4.8 km) south of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 115 ft (35 m), cased to 106 ft (32 m), screened to 111 ft (34 m).
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 621.58 ft (189.458 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.65 ft (0.50 m) above land-surface datum.

REMARKS.--Water level affected by pumpage from municipal supply well field.

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

REVISED RECORDS.--WDR IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.75 ft (3.89 m) below land-surface datum, Apr. 27-30, 1973; lowest, 38.75 ft (11.81 m) below land-surface datum, Sept. 15, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.42	31.02	31.30	31.13	27.79	25.82	24.70	25.42	26.45	26.79	28.00	28.65
10	30.61	31.01	31.28	31.28	27.31	25.71	24.56	25.58	26.54	27.21	28.51	29.06
15	30.69	31.02	31.31	31.20	27.12	25.61	24.48	25.77	26.71	27.55	28.73	29.10
20	30.67	31.19	31.35	31.32	26.38	25.53	24.46	26.31	26.58	27.75	29.24	29.08
25	30.55	31.18	31.19	30.43	26.04	25.22	24.74	26.25	26.76	27.75	29.07	29.14
EOM	30.76	31.20	31.01	29.74	25.84	24.86	24.92	26.12	26.92	28.13	28.88	29.34
LOW	32.26	32.70	32.78	32.75	30.77	27.23	26.35	28.07	28.45	29.46	30.75	30.81
HIGH	30.30	30.83	31.01	29.74	25.84	24.86	24.40	24.87	26.16	26.73	28.00	28.65

WTR YR 1982 HIGH 24.40 APR 19 LOW 32.78 DEC 4

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 (1.3 km) east of U.S. Highway 31A and 1.0 mi (1.6 km) southeast of Jonesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 85 ft (25.9 m), cased to 80 ft (24.4 m), screened to 85 ft (25.9 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 580 ft (177 m). Measuring point: Top of floor of shelter 3.5 ft (1.1 m) above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.67 ft (0.20 m) below land-surface datum, Apr. 14, 1979; lowest, 11.59 ft (3.53 m) below land-surface datum, Dec. 17, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.77	11.19	11.31	8.21	4.09	6.14	5.70	7.90	8.03	8.82	9.81	10.50
10	10.84	11.25	11.32	7.57	6.05	6.43	6.35	7.96	8.13	8.98	10.01	10.63
15	10.93	11.33	11.43	7.89	6.72	4.40	6.74	8.22	8.34	9.18	10.09	10.73
20	11.03	11.31	11.46	8.30	2.65	3.97	6.90	8.40	8.37	9.29	10.25	10.86
25	11.08	11.25	10.92	2.87	4.62	5.20	7.28	8.34	8.65	9.50	10.40	10.99
EOM	11.16	11.20	10.60	1.70	5.43	6.03	7.63	8.15	8.64	9.65	10.37	11.07
LOW	11.27	11.47	11.59	10.82	6.82	6.71	7.73	8.57	8.78	9.75	10.57	11.18
HIGH	10.61	11.18	10.60	1.70	1.15	3.85	5.70	7.68	7.97	8.68	9.68	10.36

WTR YR 1982 HIGH 1.15 FEB 1 LOW 11.59 DEC 17

BARTHOLOMEW COUNTY

391752085571001. Local number, BA 11.

LOCATION.--Lat 39°17'52", long 85°57'10", in NE¼SW¼NE¼ sec.22, T.10 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, at end of pavement on Mill Street, 100 ft (30 m) west of Fifth Street, in Taylorsville.
Owner: City of Taylorsville.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in (51 mm), depth 18 ft (5.5 m), cased to 15.5 ft (4.7 m), screened to 18 ft (5.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 655 ft (200 m). Measuring point: Lip of coupling at ground level.

PERIOD OF RECORD.--October 1978 to March 1982 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.58 ft (0.18 m) below land-surface datum, Mar. 4, 1982; lowest, 11.11 ft (3.39 m) below land-surface datum, Jan. 3-4, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.41		-----	11.10		.62						
10	9.55		-----	10.99		1.20						
15	9.69		-----	10.97		1.73						
20	9.85		-----	11.02		2.15						
25	9.98		-----	4.69		----						
EOM	10.07		11.09	-----		----						
LOW	10.07		11.09	11.11		2.32						
HIGH	9.35		11.07	1.03		.58						

WTR YR 1982 HIGH .58 MAR 4 LOW 11.11 JAN 3-4

BARTHOLOMEW COUNTY

391811085570901. Local number, BA 12.

LOCATION.--Lat 39°18'11", long 85°57'09", in NE¼NE¼NE¼ sec. 22, T.10 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, at the East Bartholomew Water Corporation well field, 0.5 mile (0.8 km) north of Taylorsville, Indiana.
Owner: U.S. Geological Survey.

AQUIFER.--Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water table well, diameter 6 in (152 mm), depth 101 ft (30.8 m), cased to 97 ft (29.6 m), screened to 101 ft (30.8 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 655 ft (200 m). Measuring point: Top of floor of shelter 3.64 ft (1.109 m) above land-surface datum.

REMARKS.--Water level affected by pumpage from production wells at East Bartholomew Water Corporation.

PERIOD OF RECORD.--October 1979 to March 1982 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.95 ft (2.738 m) below land surface datum, May 2, 1980; lowest, 15.73 ft (4.79 m) below land-surface datum, Dec. 28, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.56	14.26	-----	15.36	13.13	12.10						
10	13.77	-----	-----	15.16	13.22	12.13						
15	13.90	-----	-----	15.24	13.09	12.09						
20	-----	14.78	-----	15.31	12.29	11.80						
25	-----	-----	-----	14.77	-----	-----						
EOM	14.24	-----	15.33	13.73	-----	-----						
LOW	14.55	15.32	15.73	15.69	13.80	12.46						
HIGH	13.56	14.18	14.85	13.73	12.29	11.53						

WTR YR 1982 HIGH 11.53 MAR 22 LOW 15.73 DEC 28

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 (5.8 km) southeast of Boswell.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 310 ft (94 m), cased to 300 ft (91 m), screened to 305 ft (93 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land surface is 710 ft (216 m). Measuring point: Top of floor of shelter 2.15 ft (0.66 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.65 ft (3.25 m) below land-surface datum May 7, 1982; lowest, 16.11 (4.91 m) below land-surface datum, Feb. 13, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.13	12.88	12.82	12.73	12.45	12.04	10.94	10.71	11.05	11.39	-----	13.11
10	13.18	12.95	12.87	12.79	12.40	11.96	11.00	10.75	11.02	11.46	-----	13.24
15	13.19	12.80	12.84	12.53	12.30	11.81	10.93	10.82	10.96	11.70	12.51	13.35
20	13.09	12.57	12.87	12.59	12.19	11.56	10.80	10.84	11.04	11.76	12.60	13.40
25	13.06	12.70	12.83	12.47	12.43	11.41	10.75	10.97	11.25	-----	12.63	13.53
EOM	13.07	12.63	12.75	12.30	12.35	11.20	10.79	10.80	11.26	-----	12.93	13.75
LOW	13.29	13.09	12.97	12.95	12.54	12.35	11.29	11.00	11.37	11.88	12.96	13.79
HIGH	12.96	12.57	12.54	12.30	12.19	11.20	10.73	10.65	10.80	11.29	12.51	12.90

WTR YR 1982 HIGH 10.65 MAY 7 LOW 13.79 SEP 30

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 (4.0 km) east of Young America.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic Limestone of Devonian-Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 130 ft (40 m), cased to 78 ft (24 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 781.74 ft (238.274 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.65 ft (0.81 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.85 ft (1.17 m) below land-surface datum, Feb. 2, 1968; lowest, 7.95 ft (2.42 m) below land-surface datum, Feb. 11, 15, 16, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.14	5.97	6.04	5.21		----	5.01	5.45	5.59	5.88	6.05	6.01
10	6.16	6.01	5.97	5.72		----	5.18	5.61	5.60	5.94	6.04	5.96
15	6.16	6.00	5.95	5.70		----	5.14	5.75	5.60	5.93	5.90	6.01
20	6.16	5.85	6.03	5.49		----	4.98	5.52	5.58	5.67	5.94	6.01
25	6.10	6.02	6.00	5.74		----	5.17	5.65	5.82	5.95	5.68	6.05
EOM	6.10	5.88	5.84	----		4.57	5.34	5.30	5.82	6.00	5.93	6.14
LOW	6.29	6.17	6.11	6.04		5.48	5.54	5.84	5.92	6.11	6.13	6.24
HIGH	6.06	5.85	5.80	4.98		4.57	4.52	5.26	5.21	5.51	5.64	5.92

WTR YR 1982 HIGH 4.52 APR 17 LOW 6.24 SEP 30

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 (12.1 km) west of Greensburg. Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 49 ft (15 m), cased to 12.5 ft (3.8 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 840.8 ft (256.28 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.02 ft (0.92 m) 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 (0.05 m) below land-surface datum, Dec. 10, 1966; lowest, 9.25 ft (2.82 m) below land-surface datum, Feb. 9-11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.77	7.42	7.23	1.14	1.80	1.65	2.24	5.54	5.57	6.92	7.56	8.32
10	7.62	7.54	7.28	2.32	3.75	2.73	3.52	3.45	5.96	7.04	7.74	8.40
15	7.74	7.62	7.40	4.02	3.08	.84	4.08	4.29	6.28	7.17	7.90	8.46
20	7.78	7.58	7.50	4.69	1.48	.67	4.31	4.80	6.48	6.88	8.07	8.51
25	7.79	7.61	4.85	1.93	1.93	1.50	4.74	5.18	6.62	7.06	8.13	8.55
EOM	7.28	7.36	4.12	.54	2.92	2.59	5.17	5.33	6.80	7.35	8.20	8.57
LOW	7.82	7.67	7.53	4.91	4.40	3.32	5.23	5.71	6.85	7.39	8.31	8.59
HIGH	7.26	7.30	4.12	.54	1.09	.56	1.56	3.02	5.30	6.79	7.39	8.22

WTR YR 1982 HIGH .54 JAN 31 LOW 8.59 SEP 28-30

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 (13 km) south of Muncie. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 91 ft (28 m), cased to 89 ft (27 m), screened to 91 ft (28 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 1,005 ft (306 m). Measuring point: Top of floor of shelter 2.88 ft (0.88 m) above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 44.49 ft (13.56 m) below land-surface datum, Aug. 1, 1979; lowest, 49.50 ft (15.09 m) below land-surface datum, Oct. 13, 14, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.62	48.49	48.57	46.99	47.50	45.77	47.21	47.76	47.79	48.18	48.51	48.43
10	48.63	48.57	48.59	47.37	47.84	46.88	47.21	47.83	47.94	48.24	46.77	48.50
15	48.63	48.61	48.63	47.76	48.04	46.17	47.25	47.91	48.01	48.30	47.54	48.55
20	48.59	48.63	48.66	48.03	46.17	45.33	47.28	47.97	47.89	48.34	47.97	48.58
25	48.60	48.52	47.92	47.42	45.83	46.46	47.47	48.00	48.04	48.39	48.14	48.59
EOM	48.47	48.50	47.83	46.56	46.50	47.01	47.64	47.89	48.10	48.45	48.34	-----
LOW	48.65	48.64	48.66	48.13	48.06	47.08	47.66	48.03	48.13	48.46	48.53	48.61
HIGH	48.47	48.48	47.80	46.56	45.25	45.33	47.08	47.66	47.63	48.13	46.14	48.37

WTR YR 1982 HIGH 45.25 FEB 23 LOW 48.66 DEC 20

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 (152 mm), depth 62 ft (19 m), cased to 58 ft (18 m), screened to 60 ft (18 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 818 ft (249 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.83 ft (3.30 m) below land-surface datum, Mar. 23, 24, 1982; lowest, 16.18 ft (4.93 m) below land-surface datum, Dec. 1-5, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.36	12.78	13.05	13.22	13.13	13.11	10.99	11.36	11.74	12.15	13.08	13.68
10	12.39	12.84	13.08	13.14	13.17	13.18	11.15	11.47	11.78	12.20	13.13	13.76
15	12.47	12.90	13.10	13.05	13.23	11.34	11.21	11.58	11.86	12.27	13.26	13.84
20	12.56	12.93	13.13	13.01	13.19	10.87	11.20	11.68	11.96	12.38	13.45	13.91
25	12.64	12.98	13.18	13.02	13.09	10.84	11.19	11.76	12.06	12.68	13.49	13.98
EOM	12.73	12.98	13.21	13.03	13.06	10.88	11.28	11.67	12.14	12.97	13.60	14.04
LOW	12.75	13.03	13.24	13.26	13.25	13.21	11.29	11.79	12.16	13.05	13.61	14.05
HIGH	12.36	12.75	12.96	12.97	13.06	10.83	10.85	11.29	11.67	12.15	13.05	13.61

WTR YR 1982 HIGH 10.83 MAR 23, 24 LOW 14.05 SEP 30

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 (5.6 km) east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (38 mm), depth 13 ft (4 m), cased to 11 ft (3.4 m), screened to 13 ft (4 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft (235 m). Measuring point: Top of floor of shelter 2.10 ft (0.64 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.37 ft (0.42 m) below land-surface datum, Jun. 16, 1981; lowest, 5.57 ft (1.70 m) below land-surface datum, Jan. 28, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.27	3.54	3.39	3.20	3.51	3.51	2.51	2.56	2.73	3.17	3.44	4.11
10	3.41	3.60	3.44	3.27	3.58	3.61	2.52	2.55	3.00	3.30	3.38	4.21
15	3.47	3.69	3.47	3.28	3.68	2.26	2.55	2.54	3.15	3.27	3.50	4.31
20	3.38	3.50	3.53	3.41	3.57	1.47	2.54	2.54	3.17	3.11	3.70	4.22
25	3.43	3.49	3.56	3.46	3.50	1.86	2.56	2.53	3.25	3.27	3.82	4.21
EOM	3.51	3.38	3.60	3.46	3.52	2.43	2.55	2.53	3.25	3.43	3.97	4.33
LOW	3.52	3.71	3.60	3.61	3.69	3.62	2.56	2.57	3.27	3.45	3.97	4.34
HIGH	3.21	3.38	3.37	3.19	3.47	1.47	2.46	2.53	2.53	3.11	3.34	3.97

WTR YR 1982 HIGH 1.47 MAR 20 LOW 4.34 SEP 16, 17, 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 (6.4 km) east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (38 mm), depth 22 ft (6.7 m), cased to 20 ft (6.1 m), screened to 22 ft (6.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft (235 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.10 ft (1.55 m) below land-surface datum, Jun. 16-19, 1981; lowest, 10.43 ft (3.18 m) below land-surface datum, Nov. 10 to Dec. 3, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.82	8.24	8.36	8.23	8.33	8.37	5.91	6.53	6.28	7.17	7.68	----
10	7.86	8.36	8.25	8.13	8.36	8.45	6.05	6.65	6.46	7.29	7.81	----
15	8.05	8.39	8.25	7.98	8.45	7.02	6.13	6.81	6.70	7.35	7.94	----
20	8.04	8.37	8.34	8.01	8.46	5.75	6.13	6.93	6.84	7.34	8.28	----
25	8.08	8.37	8.38	8.09	8.46	5.40	6.26	6.92	6.99	7.40	8.43	----
EOM	8.20	8.37	8.46	8.24	8.45	5.71	6.39	6.75	7.09	7.61	8.65	----
LOW	8.21	8.39	8.46	8.49	8.47	8.45	6.39	6.96	7.14	7.64	8.65	8.70
HIGH	7.81	8.22	8.21	7.98	8.27	5.40	5.79	6.40	6.28	7.15	7.67	8.65

WTR YR 1982 HIGH 5.40 MAR 25, 26 LOW 8.70 SEP 4

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 (61 m) east of County Road 21, and 2.7 mi (4.3 km) 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 (152 mm), depth 61 ft (18.6 m), cased to 56 ft (17.1 m), screened to 61 ft (18.6 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 781 ft (238 m). Measuring point: Top of floor of shelter 3.70 ft (1.13 m) above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.72 ft (1.74 m) below land-surface datum, Mar. 17, 1982; lowest, 10.88 ft (3.32 m) below land-surface datum, Sept. 30, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.10	9.45	9.63	9.63	9.56	9.80	6.80	7.59	7.61	8.76	9.87	10.57
10	9.18	9.50	9.58	9.44	9.62	9.83	7.07	7.74	7.74	8.84	9.86	10.63
15	9.27	9.55	9.56	9.36	9.67	6.04	7.19	7.89	7.93	9.02	9.98	10.82
20	9.31	9.57	9.59	9.36	9.71	6.30	7.22	8.07	8.11	8.94	10.35	10.83
25	9.36	9.65	9.64	9.39	9.77	6.34	7.33	8.14	8.27	9.07	10.34	10.85
EOM	9.43	9.62	9.66	9.44	9.78	6.60	7.46	7.89	8.43	9.74	10.53	10.87
LOW	9.44	9.69	9.71	9.72	9.79	9.85	7.48	8.24	8.51	9.80	10.53	10.88
HIGH	9.10	9.44	9.56	9.34	9.49	5.72	6.60	7.48	7.58	8.52	9.80	10.53

WTR YR 1982 HIGH 5.72 MAR 17 LOW 10.88 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 (1.6 km) south of Brookville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 61 ft (19 m), cased to 57 ft (17 m), screened to 59 ft (18 m).
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 621.79 ft (189.52 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.70 ft (0.82 m) above land-surface datum.

PERIOD OF RECORD.--March 1968 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.95 ft (3.64 m) below land-surface datum, May 24, 1968; lowest, 27.32 ft (8.33 m) below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.78	25.76	26.26	24.45	21.14	22.86	23.06	25.45	23.94	25.36	26.27	26.47
10	26.80	25.70	26.45	24.49	21.90	23.76	23.52	25.08	23.94	25.69	26.31	26.57
15	26.77	25.94	26.57	25.12	23.29	23.14	24.02	25.45	24.72	25.85	26.36	26.65
20	26.51	26.09	26.66	25.60	21.66	21.69	24.48	25.63	24.95	25.78	26.48	26.72
25	26.31	26.21	25.95	23.35	21.69	22.59	24.86	24.89	25.26	25.90	26.35	26.78
EOM	25.91	26.26	25.62	19.00	22.16	23.29	25.20	23.94	24.99	26.08	26.29	26.78
LOW	26.83	26.26	26.70	25.71	23.48	24.02	25.25	25.67	25.48	26.11	26.52	26.79
HIGH	25.91	25.70	25.61	19.00	18.95	21.54	22.95	23.94	23.55	24.97	26.11	26.34

WTR YR 1982 HIGH 18.95 FEB 1 LOW 26.83 OCT 14, 15

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 (4.0 km) northwest of Fulton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 102 ft (31 m), cased to 96 ft (29 m), screened to 102 ft (31 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 776.45 ft (236.662 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.35 ft (1.94 m) below land-surface datum, Apr. 23-27, 1973; lowest, 12.60 ft (3.84 m) below land-surface datum, Feb. 7, 8, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.94	10.83	10.92	10.37	10.01	8.99		----	8.80	9.74	10.65	11.55
10	11.03	10.92	10.92	9.94	10.09	9.04		----	8.89	9.86	10.76	11.66
15	11.08	10.93	10.92	9.90	10.18	7.95		----	9.09	10.02	10.92	11.78
20	11.09	10.88	10.97	10.07	9.80	7.39		----	9.28	10.10	11.07	11.83
25	11.02	10.97	11.00	10.14	9.48	7.46		----	9.52	10.30	11.15	11.86
EOM	10.92	10.84	10.92	9.99	9.34	----		----	9.59	10.48	11.38	11.99
LOW	11.16	11.04	11.07	11.03	10.22	9.34		9.12	9.68	10.51	11.41	12.02
HIGH	10.91	10.83	10.77	9.89	9.34	7.34		9.12	8.80	9.65	10.51	11.40

WTR YR 1982 HIGH 7.34 MAR 21 LOW 12.02 SEP 30

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 (1.6 km) northwest of Rigdon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 35 ft (11 m), cased to 20 ft (6 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 880 ft (268 m). Measuring point: Top of floor of shelter 3.10 ft (0.94 m) above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.18 ft (0.36 m) below land-surface datum, Mar. 20, 21, 1982: lowest, 10.66 ft (3.25 m) below land-surface datum, Oct. 29, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.71	3.14	3.84	1.67	3.94	2.83	2.72	3.89	3.86	4.06	5.69	7.06
10	4.51	3.64	3.97	2.77	4.06	3.02	2.50	4.04	3.98	4.22	5.91	7.14
15	4.65	3.84	4.02	3.50	4.15	1.75	2.32	4.14	3.98	4.54	6.13	7.32
20	4.38	3.87	4.24	4.00	3.22	1.18	2.48	4.01	3.07	4.70	6.43	7.39
25	3.68	3.83	----	3.73	3.19	2.16	3.24	4.13	3.66	5.03	6.47	7.53
EOM	2.85	3.31	2.50	3.44	3.39	2.51	3.71	3.87	3.69	5.34	6.77	7.71
LOW	4.96	4.28	4.32	4.20	4.22	3.39	3.78	4.43	4.54	5.56	7.06	7.96
HIGH	2.65	2.96	2.50	1.55	2.94	1.18	1.74	3.77	3.07	3.85	5.42	6.78

WTR YR 1982 HIGH 1.18 MAR 20, 21 LOW 7.96 SEP 30

HAMILTON COUNTY

400000086023001. Local number, HA 5.

LOCATION.--Lat 40°00'00", long 86°02'30", in SW¼SW¼SE¼ sec.14, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on Gray Road, 1.2 mi (1.9 km) west of State Highway 234, and 3.5 mi (5.6 km) southwest of Noblesville.
Owner: Earlham College.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 100 ft (30 m), cased to 80 ft (24 m), screened to 85 ft (26 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 755.47 ft (230.267 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.76 ft (0.84 m) above land-surface datum.

PERIOD OF RECORD.--July 1965 to September 1971, July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.00 ft (2.44 m) below land-surface datum, Feb. 24, 25, 1982; lowest, 11.66 ft (3.55 m) below land-surface datum, Sept. 19, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.44	10.55	10.71	9.86	9.72	8.27	8.50	9.55	9.57	9.96	10.27	10.66
10	10.50	10.59	10.74	9.84	9.84	8.69	8.69	9.60	9.67	9.92	10.36	10.71
15	10.55	10.62	10.77	10.00	9.95	8.30	8.87	9.73	9.81	9.95	10.45	10.76
20	10.58	10.65	10.80	10.12	9.09	8.23	9.01	9.79	9.65	9.92	10.55	10.80
25	10.59	10.67	10.40	9.88	8.00	8.51	9.21	9.80	9.79	10.06	10.55	10.84
EOM	10.50	10.69	10.24	9.68	8.21	8.56	9.39	9.64	9.88	10.16	10.63	10.87
LOW	10.60	10.69	10.81	10.24	9.97	8.78	9.42	9.83	9.90	10.18	10.64	10.88
HIGH	10.35	10.51	10.24	9.68	8.00	8.22	8.47	9.42	9.52	9.90	10.18	10.63

WTR YR 1982 HIGH 8.00 FEB 24,25 LOW 10.88 SEP 30

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 (3.2 km) southeast of Palmyra.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 93 ft (28 m), cased to 54 ft (16 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 827 ft (252 m). Measuring point: Top of floor of shelter 3.10 ft (0.94 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.98 ft (0.30 m) below land-surface datum, Apr. 2, 1979; lowest, 19.71 ft (6.01 m) below land-surface datum, Nov. 5, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.15	17.49	15.30	10.03	3.82	4.16	2.87	7.86	6.56	8.69	11.63	13.21
10	16.46	17.75	15.27	9.47	4.67	4.53	3.94	7.91	6.74	9.36	12.22	13.39
15	16.82	17.98	15.45	9.64	5.27	2.58	4.73	8.42	7.38	8.58	12.76	13.72
20	17.09	18.03	15.78	10.31	3.10	2.34	5.16	9.18	7.42	9.40	13.26	14.04
25	17.34	17.75	13.52	7.12	3.86	3.26	6.10	9.50	8.38	10.24	13.77	14.33
EOM	17.34	17.02	12.55	4.67	4.31	3.65	6.99	7.51	8.11	11.04	14.15	14.61
LOW	17.42	18.16	16.99	12.57	5.43	4.77	7.15	9.97	8.96	11.16	14.19	14.67
HIGH	15.90	17.02	12.55	4.67	3.06	2.08	2.67	7.16	6.50	8.18	11.16	13.21

WTR YR 1982 HIGH 2.08 MAR 16 LOW 18.16 NOV 19

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 (1.6 km) south of Coatesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 85 ft (26 m), cased to 70 ft (21 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 860 ft (262 m). Measuring point: Top of floor of shelter 1.92 ft (0.59 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--October 1966 to September 1971. November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.65 ft (5.68 m) below land-surface datum, Jan. 30, 1976; lowest, 28.0 ft (8.53 m) below land-surface datum, January 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.66	22.74	22.99	20.77	21.52	21.03	20.09	21.80	21.68	21.52	22.39	23.26
10	22.89	22.83	22.91	20.60	21.73	20.85	20.11	21.97	21.28	21.77	22.15	23.29
15	22.99	22.92	23.05	20.87	21.82	20.29	20.30	21.86	21.39	21.86	22.44	23.60
20	23.03	22.82	23.08	21.35	21.57	19.71	20.27	21.94	21.31	21.92	22.75	23.63
25	22.97	22.98	22.31	21.48	21.44	19.95	20.54	21.92	21.36	21.97	22.88	23.76
EOM	22.96	23.06	21.24	21.28	21.24	20.16	21.74	21.64	21.39	22.21	23.18	24.03
LOW	23.26	23.54	23.22	21.70	21.99	21.32	22.45	22.40	21.96	22.37	23.51	24.24
HIGH	22.61	22.69	21.24	20.47	21.24	19.71	20.03	21.54	21.24	21.49	22.15	23.21

WTR YR 1982 HIGH 19.71 MAR 20 LOW 24.24 SEP 29

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 (1.4 km) east of Newland.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in (406 mm), depth 300 ft (91 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 676.93 ft (206.328 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 0.00 ft (0.00 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.95 ft (0.29 m) below land-surface datum, Apr. 9, 1962; lowest, 40.17 ft (12.24 m) below land-surface datum, July 25, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.57	4.16	----	3.16	2.84	2.25	1.70	3.65	3.36	12.23	14.37	10.05
10	8.15	4.08	3.50	3.04	2.83	2.13	1.92	3.53	3.17	15.69	11.47	10.20
15	6.43	3.89	3.41	2.83	2.68	1.86	1.90	6.34	7.21	10.11	10.55	10.17
20	5.42	3.65	3.38	2.97	2.46	1.69	1.83	5.20	9.57	9.04	11.17	9.68
25	4.83	----	3.34	2.88	2.64	1.72	1.90	4.21	11.25	8.19	10.31	10.20
EOM	4.54	----	3.16	2.74	2.40	1.66	2.39	3.53	13.77	9.49	9.77	10.34
LOW	8.46	4.62	3.71	3.52	3.12	2.52	2.68	6.70	13.99	20.46	17.82	10.55
HIGH	4.54	3.65	3.15	2.66	2.40	1.62	1.38	2.68	3.14	8.00	9.57	9.61

WTR YR 1982 HIGH 1.38 APR 3 LOW 20.46 JUL 2

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 (6.4 km) south of Tefft.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Middle Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 130 ft (39.6 m), cased to 94 ft (28.7 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 699.38 ft (213.171 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.75 ft (0.84 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--May 1967 to current year. (Semi-annual tape-down readings only September 1971 to May 1978).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft (1.87 m) below land-surface datum, Apr. 3, 1982; lowest, 9.25 ft (2.82 m) below land-surface datum, Oct. 11, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.31	7.34	7.61	7.18	7.29	6.95	6.57	6.85	7.12	7.34	7.62	7.97
10	7.46	7.52	7.46	7.20	7.32	6.88	6.84	6.99	7.04	7.15	7.63	7.92
15	7.49	7.35	7.35	7.10	7.09	6.84	6.82	7.06	6.97	7.48	7.65	8.01
20	7.41	7.05	7.37	7.37	6.93	6.68	6.75	6.99	7.07	7.37	7.69	7.98
25	7.41	7.31	7.35	7.22	7.50	6.78	6.77	7.04	7.36	7.53	7.66	7.96
EOM	7.61	7.06	7.11	7.02	7.21	6.63	7.04	6.93	7.26	7.50	7.84	8.13
LOW	7.69	7.81	7.70	7.68	7.60	7.36	7.23	7.26	7.54	7.63	8.08	8.29
HIGH	7.03	6.99	6.90	6.78	6.93	6.59	6.12	6.80	6.92	7.15	7.47	7.70

WTR YR 1982 HIGH 6.12 APR 3 LOW 8.29 SEP 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 (2.7 km) north of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 12 in (305 mm), depth 310 ft (94.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 686 ft (209 m). Measuring point: Lower lip of 2 in (51.8 mm) tapedown pipe, 2.10 ft (0.64 m) above land-surface datum.

REMARKS.--Water level may be affected by 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, 8.94 ft (2.72 m) below land-surface datum, Mar. 21, 1982; lowest, 25.11 ft (7.65 m) below land-surface datum, July 26, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.99	10.92	10.92	10.41	10.55	9.96	----	9.54	10.10		-----	13.39
10	11.05	10.98	10.91	-----	10.57	9.97	----	9.14	10.13		-----	13.13
15	11.05	11.00	10.89	-----	10.55	9.34	----	10.19	10.16		-----	13.02
20	10.96	10.87	10.92	-----	10.23	8.98	----	10.19	10.34		14.11	12.84
25	10.96	10.90	10.90	-----	10.05	9.05	----	10.18	10.90		13.90	12.71
EOM	10.99	10.79	10.81	10.47	10.05	9.18	9.65	10.11	-----		13.66	12.70
LOW	11.13	11.06	10.97	10.95	10.63	10.15	9.68	10.45	11.04		14.33	13.84
HIGH	10.88	10.77	10.72	10.41	10.05	8.94	9.12	9.14	10.08		13.40	12.67

WTR YR 1982 HIGH 8.94 MAR 21 LOW 14.33 AUG 22

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 (7.1 km) northwest of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Silurian Limestone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 18 in (457 mm), depth 260 ft (79 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 685 ft (209 m). Measuring point: Lower lip of 2 in (50.8 mm) tapedown pipe, 2.10 ft (0.64 m) above land-surface datum.

REMARKS.--Water level may be affected by 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 (1.27 m) below land-surface datum, Apr. 3, 1982; lowest, 30.23 ft (9.21 m) below land-surface datum, July 21, 22, 24, 25, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.37	6.41	6.36	6.11	6.15	5.32	4.37	5.00	5.41	9.23	11.71	10.33
10	6.44	6.60	6.39	6.11	6.09	5.31	4.50	5.16	5.46	10.96	11.91	9.37
15	6.45	6.48	6.33	5.98	6.04	4.85	4.50	5.31	5.55	9.03	9.64	8.97
20	6.38	6.29	6.43	6.05	5.92	4.47	4.44	5.33	5.69	8.07	13.19	8.62
25	6.41	6.37	6.38	6.01	5.97	4.39	4.64	5.38	11.52	8.83	14.09	8.39
EOM	6.53	6.23	6.31	5.97	5.82	4.35	4.92	5.30	12.92	8.31	12.54	8.37
LOW	6.55	6.68	6.51	6.45	6.21	5.82	4.94	5.40	14.49	13.07	16.71	12.50
HIGH	6.23	6.19	6.07	5.91	5.82	4.35	4.18	4.93	5.25	8.02	8.53	8.35

WTR YR 1982 HIGH 4.18 APR 3 LOW 16.71 AUG 28

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 (5.1 km) north of State Road 14, and 1.5 mi (2.4 km) southwest of Fair Oaks.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in (406 mm), depth 630 ft (192 m), cased to 63 ft (19.2 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 680 ft (207 m). Measuring point: Top of floor of shelter 3.50 ft (1.07 m) above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.04 ft (0.01 m) above land-surface datum, Apr. 3, 1982; lowest, 43.13 ft (13.15 m) below land-surface datum, Aug. 21, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		2.40	2.03	1.52	1.49	.81	.21	.79	1.43	15.56	-----	19.55
10		2.44	1.93	1.47	1.49	.79	.38	.93	1.40	-----	17.78	18.74
15		2.28	1.82	1.37	1.39	.42	.27	3.37	1.52	-----	17.71	13.96
20		2.05	1.80	1.53	1.19	.06	.22	2.07	2.51	-----	39.88	11.97
25		2.00	1.80	1.47	1.36	.06	.39	1.64	13.51	-----	23.20	9.89
EOM		1.78	1.65	1.32	1.07	.13	.61	1.38	13.84	-----	23.55	8.82
LOW		2.60	2.07	1.90	1.64	1.07	.64	5.77	26.62	28.52	43.13	29.64
HIGH		1.78	1.64	1.31	1.07	-0.02	-0.04	.62	1.38	15.56	15.57	8.82

WTR YR 1982 HIGH -0.04 APR 3 LOW 43.13 AUG 21

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 (61.0 m) east of County Road 900 West, 750 ft (229 m) 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 (127 mm), depth 150 ft (45.7 m), cased to 103 ft (31.4 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 695 ft (212 m) National Geodetic Vertical Datum. Measuring point: Top of well casing 2.7 ft (0.82 m) above land surface datum.

PERIOD OF RECORD.-- May 24, 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.70 ft (4.48 m) below land-surface datum, June 1, 1982; lowest, 42.21 ft (12.9 m) below land-surface datum, Aug. 21, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5								-----	14.86	-----	41.34	36.92
10								-----	14.83	28.17	32.27	-----
15								-----	14.82	26.42	33.81	-----
20								-----	14.99	-----	36.71	-----
25								14.90	17.21	-----	37.27	26.38
EOM								14.73	-----	-----	38.29	24.85
LOW								15.01	18.29	28.92	42.21	38.98
HIGH								14.73	14.70	26.13	30.78	24.85

WTR YR 1982 HIGH 14.70 JUN 1 LOW 42.21 AUG 21

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 (7.4 km) northwest of Rensselaer.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in (127 mm), depth 150 ft (45.7 m), cased to 106 ft (32.3 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 700 ft (213 m). Measuring point: Top of well casing 3.4 ft (1.04 m) 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 (6.39 m) below land-surface datum, Apr. 3, 1982; lowest, 45.64 ft (13.9 m) below land-surface datum, Aug. 28, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5						22.19	21.22	21.32	22.26	30.59	43.70	-----
10						21.99	21.37	21.49	22.22	33.79	41.38	-----
15						21.93	21.33	21.65	22.19	33.75	40.81	-----
20						21.73	21.25	22.00	22.32	32.82	42.89	-----
25						21.68	21.24	22.18	23.76	32.09	45.26	36.99
EOM						21.40	21.41	22.07	28.57	38.43	-----	35.28
LOW						22.42	21.68	22.36	28.81	39.80	45.64	38.12
HIGH						21.40	20.98	21.30	22.06	28.77	39.85	35.28

WTR YR 1982 HIGH 20.98 APR 3 LOW 45.64 AUG 28

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 (152 m) north of Airfield Road, 1,000 ft (305 m) southwest of the watertower and 2.2 mi (3.5 km) 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 (127 mm) depth 200 ft (61.0 m) cased to 33 ft (10.1 m), open hole.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 855 ft (261 m). Measuring point: Top of floor of shelter 3.00 ft (0.914 m) 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, 3.48 ft (1.06 m) below land surface datum Apr. 14, 1980; lowest 7.54 ft (2.30 m) below land surface datum, Nov. 9, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.95	7.21	7.13	5.53	4.75	4.64	4.21	5.06	4.97	4.94	5.32	5.64
10	6.99	7.32	6.76	5.28	4.66	4.56	4.49	5.18	4.96	4.89	5.47	5.50
15	7.12	7.14	6.53	5.10	4.61	4.47	4.60	5.26	4.91	5.04	5.51	5.51
20	7.23	7.07	6.54	5.29	4.41	4.31	4.62	5.33	4.83	5.05	5.62	5.55
25	7.16	7.21	6.29	5.04	4.81	4.34	4.74	5.37	5.02	5.18	5.67	5.59
EOM	7.35	6.94	5.69	4.59	4.66	4.40	4.98	5.07	4.98	5.17	5.73	5.77
LOW	7.45	7.54	7.24	5.95	5.15	4.90	5.09	5.61	5.21	5.31	5.96	5.86
HIGH	6.72	6.94	5.69	4.59	4.41	4.31	4.07	4.99	4.83	4.86	5.19	5.47

WTR YR 1982 HIGH 4.07 APR 3 LOW 7.54 NOV 9

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 (61 m) west of State Highway 3, 1.6 mi (2.6 km) south of Crosley Fish and Game Office and 3.0 mi (4.8 km) south of Vernon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestones and dolomites of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 180 ft (54.9 m), cased to 45 ft (13.7 m) open hole.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 718 ft (219 m). Measuring point: Top of floor of shelter 3.5 ft (1.07 m) above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.64 ft (11.17 m) below land-surface datum, Jan. 21, 1979; lowest, 40.52 ft (12.35 m) below land-surface datum, Sept. 18, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.87	39.76	39.58	38.92	38.52	-----	38.54	39.26	38.85	39.06	39.48	-----
10	39.86	39.83	39.59	39.11	38.82	-----	38.84	38.92	38.69	39.15	39.61	38.66
15	40.01	39.52	39.51	38.52	38.90	-----	38.93	39.04	38.90	39.32	39.66	38.85
20	40.17	39.43	39.69	38.82	38.58	-----	38.85	39.35	38.94	38.98	39.64	38.88
25	39.12	39.55	39.34	38.16	-----	38.61	38.98	39.28	39.10	38.84	-----	38.91
EOM	39.80	39.23	39.04	38.00	-----	38.72	39.16	38.79	38.97	39.13	-----	39.05
LOW	40.33	40.03	39.83	39.30	38.99	39.03	39.26	39.46	39.20	39.45	39.76	39.11
HIGH	39.06	39.23	39.04	38.00	38.32	38.61	38.40	38.79	38.69	38.76	39.23	38.65

WTR YR 1982 HIGH 38.00 JAN 31 LOW 40.33 OCT 21

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 (15.8 km) south of Vincennes.
Owner: Michael J. Kelley.

AQUIFER.--Sand and Gravel Quaternary Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 43 ft (13 m), cased to 16 ft (4.9 m), slotted to 19 ft (5.8 m), open end.
Instrumentation: Water-stage recorder. Prior to April 1968, handtaped monthly.

DATUM.--Altitude of land-surface datum is 405 ft (123 m). Measuring point: Top of floor of shelter 2.42 ft (0.74 m) above land-surface datum.

PERIOD OF RECORD.--November 1956 to December 1972. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.27 ft (1.00 m) below land-surface datum, Jan. 30, 1969; lowest, 11.35 ft (3.46 m) below land-surface datum, Feb. 1-13, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.50	10.68	10.36	8.42	5.15	8.52	8.51	----	8.78	9.69	10.24	9.76
10	10.57	10.62	10.37	7.89	6.35	8.75	----	----	7.94	9.71	10.35	10.06
15	10.62	10.63	10.40	7.86	8.02	7.36	----	----	8.79	9.80	10.43	9.77
20	10.65	10.61	10.45	9.04	6.02	7.30	----	9.49	9.08	9.93	10.50	9.78
25	10.67	10.55	9.60	6.82	7.51	8.02	----	9.58	9.37	10.01	10.57	9.99
EOM	10.68	10.48	9.26	4.64	8.01	8.53	----	8.26	9.52	10.13	10.59	10.13
LOW	10.68	10.70	10.47	9.45	8.18	8.85	8.71	9.60	9.55	10.16	10.66	10.58
HIGH	10.45	10.48	9.26	4.64	4.53	7.29	8.45	8.26	7.92	9.59	10.16	9.58

WTR YR 1982 HIGH 4.53 FEB 2 LOW 10.70 NOV 8, 9

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 (3.2 km) east of Oswego.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (38 mm), depth 22 ft (6.7 m), cased to 20 ft (6.1 m), screened to 22 ft (6.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 852 ft (260 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.42 ft (2.87 m) below land-surface datum, Mar. 24-26, 1982; lowest, 12.96 ft (3.95 m) below land-surface datum, Dec. 19-24, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.86	12.01	12.01	11.96	11.83	11.50	9.93	10.70	10.86	11.08	11.70	12.01
10	11.90	12.03	12.02	11.92	11.81	11.50	10.16	10.89	10.82	11.08	11.74	12.01
15	11.92	12.05	12.03	11.92	11.83	10.37	10.30	11.03	10.98	11.24	11.81	12.04
20	11.95	12.04	12.05	11.85	11.77	9.63	10.35	11.18	11.17	11.40	11.89	12.06
25	12.00	12.05	12.06	11.87	11.63	9.42	10.38	11.20	11.29	11.49	11.90	12.09
EOM	11.99	12.03	12.07	11.84	11.60	9.64	10.51	11.18	11.38	11.65	11.96	12.12
LOW	12.02	12.06	12.07	12.08	11.84	11.60	10.51	11.22	11.39	11.67	11.96	12.13
HIGH	11.82	12.00	12.00	11.84	11.60	9.42	9.73	10.51	10.82	11.05	11.67	11.96

WTR YR 1982 HIGH 9.42 MAR 24-26 LOW 12.13 SEP 30

KOSCIUSKO COUNTY

412500085384501. Local number, KO 5.

LOCATION.--Lat 41°25'00", long 85°38'45", in SE¼SW¼NW¼ sec.11, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, in the southeast corner of Wawasee Airport, and 3.5 mi (5.6 km) east of Syracuse.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (38 mm), depth 13 ft (4 m), cased to 11 ft (3.4 m), screened to 13 ft (4 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft (265 m). Measuring point: Top of floor of shelter 2.70 ft (0.82 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.94 ft (0.59 m) below land-surface datum, Mar. 20, 21, 1982; lowest, 6.27 ft (1.91 m) below land-surface datum, Nov. 20-23, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.95	5.03	5.11	----	4.76	4.24	2.25	2.54	----	2.82	3.54	4.27
10	4.88	5.11	5.12	----	4.77	4.29	2.31	2.60	3.00	3.03	---	4.36
15	4.98	5.17	5.18	----	4.85	2.41	2.24	2.75	----	3.20	3.80	4.51
20	4.98	5.18	5.25	----	4.56	1.94	2.19	2.85	----	3.34	3.97	4.65
25	5.02	5.17	5.28	4.92	4.29	2.10	2.33	2.88	----	3.50	4.04	4.77
EOM	4.98	5.10	----	4.76	4.29	2.15	2.48	2.74	2.61	3.64	4.20	4.75
LOW	5.03	5.22	5.30	5.02	4.86	4.29	2.48	2.91	3.07	3.65	4.21	4.78
HIGH	4.85	4.98	5.10	4.76	4.29	1.94	2.11	2.48	2.58	2.58	3.54	4.20

WTR YR 1982 HIGH 1.94 MAR 20, 21 LOW 5.30 DEC 28, 29

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 (51 mm), depth 23 ft (7 m), cased to 20 ft (6.1 m), screened to 23 ft (7 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft (265 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.61 ft (2.32 m) below land-surface datum, Apr. 19-21, 1982; lowest, 10.64 ft (3.24 m) below land-surface datum, Feb. 9, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.93	8.99	9.19	9.23	9.24	9.09	7.72	7.77	----	8.03	8.52	8.89
10	8.94	9.10	9.22	9.24	9.25	9.11	7.74	7.81	----	8.07	8.56	8.95
15	8.97	9.18	9.27	9.25	9.26	8.50	7.66	7.89	----	8.15	8.63	9.00
20	9.00	9.19	9.34	9.25	9.21	8.01	7.61	----	----	8.21	8.71	9.06
25	9.02	9.20	9.40	9.28	9.10	7.92	7.63	----	----	8.33	8.74	9.10
EOM	8.97	9.19	9.39	9.24	9.13	7.80	7.70	----	8.09	8.45	8.83	9.13
LOW	9.06	9.23	9.42	9.42	9.27	9.13	7.81	7.91	8.10	8.48	8.83	9.15
HIGH	8.88	8.97	9.17	9.23	9.10	7.80	7.61	7.70	8.09	8.03	8.48	8.83

WTR YR 1982 HIGH 7.61 APR 19-21 LOW 9.42 DEC 29-JAN 2

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 (6.1 m) 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 (51 mm), depth 23.8 ft (7.2 m), cased to 20.8 ft (6.3 m), screened to 23.8 ft (7.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft (265 m). Measuring point: Top of floor of shelter 2.90 ft (0.88 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.86 ft (0.57 m) below land-surface datum, Mar. 16, 1982; lowest, 5.43 ft (1.66 m) below land-surface datum, Nov. 11-13, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.51	4.47	4.56	----	4.27	4.14	3.11	4.22	3.93	3.42	4.64	4.96
10	4.56	4.59	4.70	----	4.36	4.09	3.33	----	4.10	3.80	4.44	4.96
15	4.64	4.71	4.78	----	4.45	2.20	3.35	----	4.26	4.00	4.73	4.95
20	4.54	4.53	4.30	4.60	4.09	2.08	3.42	4.38	4.27	4.16	4.83	4.84
25	4.54	4.48	4.25	4.57	4.00	2.72	3.76	4.29	4.41	4.34	4.85	4.88
EOM	4.40	4.44	----	4.23	4.07	2.79	4.02	3.91	4.03	4.57	4.94	4.77
LOW	4.72	4.79	4.88	4.66	4.49	4.19	4.04	4.44	4.55	4.63	4.94	4.98
HIGH	4.37	4.40	4.22	4.23	4.00	1.86	2.85	3.91	3.83	3.41	4.39	4.73

WTR YR 1982 HIGH 1.86 MAR 16 LOW 4.98 SEP 5, 6, 11, 17

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 (0.8 km) south of County Road 1200 North on west side of State Highway 13, and 1.7 mi (2.7 km) south of Syracuse.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in (51 mm), depth 27.8 ft (8.2 m), cased to 24 ft (7.3 m), screened to 27 ft (8.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 863 ft (263 m). Measuring point: Top of floor of shelter 2.80 ft (0.85 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.90 ft (0.58 m) below land-surface datum, Mar. 14, 1982; lowest, 5.80 ft (1.77 m) below land-surface datum, Jul. 24, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.16		4.83	----	----	4.44		----	3.94	3.62	5.03	5.39
10	5.06		----	----	----	4.71		----	4.20	4.24	4.88	5.36
15	5.10		----	----	----	----		----	4.71	4.48	5.06	5.43
20	5.01		----	4.83	----	----		4.74	4.75	4.71	5.23	5.35
25	4.97		----	4.78	4.24	----		4.58	4.85	4.89	5.23	5.33
EOM	4.82		----	4.23	4.34	----		4.03	4.25	5.03	5.36	5.21
LOW	5.26		4.84	4.88	4.40	4.72		4.76	5.06	5.10	5.36	5.44
HIGH	4.79		3.86	4.23	4.24	1.90		3.99	3.90	3.52	4.82	5.20

WTR YR 1982 HIGH 1.90 MAR 14 LOW 5.44 SEP 14, 15

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 (1.9 km) west of Brighton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in (127 mm), depth 86 ft (26.2 m), cased to 80 ft (24.4 m), screened to 86 ft (26.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 911.02 ft (277.7 m). Measuring point: Top of floor of shelter 3.0 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.99 ft (3.35 m) below land surface datum Apr. 3, 1982; lowest 15.45 ft (4.71 m) below land surface datum, Feb. 12-16, 1981

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.48	12.69	12.98	13.26	-----	13.70	11.09	11.10	11.56	12.19	13.09	13.96
10	12.45	12.75	13.01	13.29	13.62	13.72	11.18	11.20	11.61	12.37	13.18	13.99
15	12.46	12.78	13.06	13.34	13.64	11.73	11.16	11.27	11.65	12.42	13.22	14.01
20	12.51	12.80	13.12	13.36	13.64	11.15	11.12	11.43	11.72	12.47	13.63	14.03
25	12.57	12.88	13.16	13.33	13.68	11.05	11.06	11.47	11.81	12.70	13.69	14.06
EOM	12.65	12.89	13.20	13.43	13.67	11.03	11.08	11.48	12.14	13.03	13.83	14.11
LOW	12.66	12.93	13.23	13.43	13.69	13.76	11.22	11.51	12.17	13.07	13.87	14.12
HIGH	12.42	12.66	12.88	13.19	13.62	11.03	10.99	11.08	11.47	12.16	13.05	13.83

WTR YR 1982 HIGH 10.99 APR 3 LOW 14.12 SEP 30

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 (2.3 km) 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 (152 mm), depth 40 ft (12.2 m), cased to 35 ft (10.7 m), screened to 40 ft (12.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft (265 m). Measuring point: Top of floor of shelter 3.7 ft (1.13 m) above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.48 ft (1.06 m) below land-surface datum, Mar. 21, 1982; lowest, 8.19 ft (2.50 m) below land-surface datum, Sept. 24-27, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	----	6.32	----	6.87	7.12	7.26	4.53	5.55	6.28	6.98	7.55	8.02
10	5.54	----	6.84	6.73	7.18	7.33	4.82	5.78	6.41	7.08	7.59	8.08
15	5.74	----	6.88	6.72	7.26	5.01	4.82	5.99	6.55	7.15	7.65	8.13
20	5.90	----	6.95	6.85	7.27	3.55	4.76	6.17	6.65	7.23	7.74	8.16
25	6.04	----	7.02	6.93	7.23	3.75	5.03	6.32	6.78	7.32	7.83	8.19
EOM	----	----	7.11	7.03	7.23	4.23	5.31	6.34	6.89	7.46	7.93	8.11
LOW	6.13	6.32	7.11	7.14	7.28	7.33	5.35	6.38	6.92	7.48	7.95	8.19
HIGH	5.36	6.31	6.82	6.72	7.05	3.48	4.33	5.35	6.26	6.92	7.48	7.95

WTR YR 1982 HIGH 3.48 MAR 21 LOW 8.19 SEP 24-27

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 (3.2 km) southwest of Schneider.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 82 ft (25 m), cased to 52 ft (16 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 630.59 ft (192.20 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.55 ft (0.47 m) above land-surface datum.

REMARKS.--Water level may be affected by pumping.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.15 ft (0.05 m) below land-surface datum, Jan. 12, 1973; lowest, 14.35 ft (4.37 m) below land-surface datum, Sept. 9, 1974.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.65	3.14	2.72	2.33	2.65	----	1.32	1.79	2.12	2.97	4.08	8.85
10	3.59	3.17	2.71	----	2.72	----	1.35	2.00	2.21	3.08	4.73	8.24
15	3.54	3.17	2.76	----	2.77	----	1.34	2.25	2.35	3.15	5.21	7.81
20	3.38	3.01	2.72	----	2.61	----	1.17	2.31	2.50	3.16	7.10	7.28
25	3.29	2.77	2.69	----	2.59	----	1.38	2.29	2.64	3.35	8.51	6.90
EOM	3.28	2.65	2.67	2.51	2.51	1.34	1.60	2.18	2.75	3.54	8.81	6.69
LOW	4.04	3.51	3.12	3.00	3.04	2.61	1.76	2.60	3.01	3.81	9.26	9.23
HIGH	3.28	2.65	2.60	2.20	2.50	1.34	1.16	1.63	2.11	2.82	3.64	6.69

WTR YR 1982 HIGH 1.16 APR 3 LOW 9.26 AUG 31

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 1.5 in (38 mm), depth 22 ft (6.7 m), cased to 20 ft (6.1 m), screened to 22 ft (6.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 802.79 ft (244.690 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.54 ft (0.77 m) below land-surface datum June 1, 2, 1982; lowest, 7.04 ft (2.15 m) below land-surface datum, Mar. 8-11, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	----	4.46	4.16	3.92	3.86	3.67	2.71	----	2.55	2.80	2.86	----
10	----	4.54	4.15	3.93	----	3.62	2.70	----	2.57	2.76	2.85	----
15	4.50	4.56	4.13	3.92	3.84	3.20	2.66	2.75	2.70	2.84	2.88	3.32
20	4.47	4.30	4.11	3.93	3.75	2.95	2.61	2.78	2.74	2.88	2.98	3.27
25	4.49	4.24	4.12	3.93	3.75	2.89	----	2.72	2.90	2.91	----	3.23
EOM	4.55	4.10	4.05	3.82	3.77	2.83	----	2.57	2.85	2.95	----	----
LOW	4.62	4.57	4.17	4.14	3.91	3.76	2.85	2.79	2.92	2.97	3.00	3.32
HIGH	4.38	4.10	4.05	3.82	3.72	2.83	2.57	2.57	2.54	2.76	2.80	3.23

WTR YR 1982 HIGH 2.54 JUN 1, 2 LOW 4.62 OCT 1, 2

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 (4.8 km) southeast of Wanatah.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 32 ft (9.8 m), cased to 27 ft (8.2 m), screened to 32 ft (9.8 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 706.81 ft (215.44 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.60 ft (0.49 m) above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.60 ft (0.49 m) below land-surface datum, Apr. 3, 1982; lowest, 8.01 ft (2.44 m) below land-surface datum, Dec. 6, 7, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.79	6.27	5.91	5.58	6.13	5.28	2.32	3.69	4.44	5.54	6.10	6.76
10	5.88	6.36	5.89	5.36	6.24	5.23	2.28	3.97	4.68	5.18	6.00	6.85
15	5.98	6.45	5.93	5.44	6.31	2.21	2.75	4.21	4.86	5.31	6.22	6.94
20	6.04	6.41	6.04	5.68	6.06	1.64	2.32	4.42	5.13	5.49	6.35	7.02
25	6.10	6.31	6.18	5.84	5.47	2.56	3.10	4.54	5.39	5.73	6.48	7.09
EOM	6.22	5.96	6.25	5.95	5.37	1.81	3.48	4.56	5.56	5.93	6.64	7.17
LOW	6.23	6.51	6.31	6.35	6.34	5.42	3.51	4.61	5.62	5.96	6.67	7.18
HIGH	5.70	5.96	5.84	5.36	5.37	1.64	1.60	3.51	4.30	5.08	5.87	6.66

WTR YR 1982 HIGH 1.60 APR 3 LOW 7.18 SEP 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 (61 m) north of the Mixsawbah Fish Hatchery Manager's residence and 2.6 mi (4.2 km) southeast of Stillwell.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm) depth 104 ft (32 m) cased to 102 ft (31 m) screened to 104 ft (32 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 695 ft (212 m). Measuring point: Top of floor of shelter 3.60 ft (1.10 m) above land-surface datum.

PERIOD OF RECORD.--August 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.95 ft (0.90 m) below land surface datum, Mar 16, 1982; lowest 9.16 ft (2.79 m) below land surface datum, Aug 13, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.62	7.95	6.88	6.14	7.50	6.60	4.93	7.03	7.78	7.73	7.94	8.38
10	7.75	8.00	7.04	6.68	7.61	6.84	5.23	7.21	7.87	7.80	7.76	8.43
15	7.85	8.05	7.15	7.09	7.65	3.14	5.63	7.45	7.97	7.71	7.92	8.53
20	7.89	7.59	7.23	7.38	7.13	3.44	5.50	7.50	8.09	7.79	8.07	8.53
25	7.91	7.20	7.43	7.47	6.44	4.52	6.25	7.66	8.21	7.96	8.17	8.48
EOM	7.99	6.64	7.52	7.36	6.51	4.55	6.80	7.67	8.09	7.77	8.28	8.52
LOW	8.01	8.10	7.62	7.68	7.69	7.06	6.84	7.70	8.25	8.17	8.30	8.57
HIGH	7.62	6.64	6.64	6.14	6.40	2.95	4.47	6.83	7.67	7.71	7.74	8.28

WTR YR 1982 HIGH 2.95 MAR 16 LOW 8.57 SEP 16, 17

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 (152 mm), depth 100 ft (30.5 m), cased to 95 ft (29.0 m), screened to 100 ft (30.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft (232 m). Measuring point: Top of recorder shelf 4.1 ft (1.25 m) above land-surface.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.57 ft (1.09 m) below land-surface datum, June 16, 1981; lowest, 8.09 ft (2.46 m) below land surface datum, Sept. 30, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.45	6.23	5.71	5.60	6.32	6.46	4.21	4.59	4.47	5.47	6.29	7.23
10	5.61	6.36	5.71	5.44	6.47	6.57	4.44	4.75	4.67	5.52	6.34	7.39
15	5.77	6.49	5.81	5.56	6.57	4.75	4.16	4.87	4.82	5.69	6.50	7.58
20	5.89	6.33	5.93	5.85	6.57	4.32	4.02	4.90	5.03	5.82	6.66	7.70
25	5.99	5.83	6.11	5.99	6.47	4.33	4.23	4.57	5.23	5.98	6.82	7.86
EOM	6.17	5.50	6.14	6.07	6.38	4.31	4.49	4.51	5.35	6.15	7.05	8.07
LOW	6.19	6.61	6.27	6.35	6.66	6.72	4.50	4.96	5.41	6.17	7.07	8.09
HIGH	5.44	5.50	5.50	5.44	6.23	4.26	4.01	4.50	4.44	5.37	6.18	6.96

WTR YR 1982 HIGH 4.01 APR 19 LOW 8.09 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 (2.6 km) 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 (152 mm) depth 77 ft (23.5 m) cased to 71 ft (21.6 m) screened to 77 ft (23.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft (245 m). Measuring point: Top of recorder shelf 3.70 ft (1.13 m) above land-surface.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.70 ft (4.79 m) below land-surface datum, May 6, 1982, lowest, 19.25 ft (5.87 m) below land surface datum, Sept. 28, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.97	18.80	18.78	18.49	18.53	18.54	-----	15.71	16.10	16.35	16.76	-----
10	18.91	18.89	18.62	18.51	18.59	18.54	-----	15.76	16.08	16.37	16.80	-----
15	18.82	18.93	18.52	18.48	18.59	16.60	-----	15.83	16.01	16.48	16.86	17.44
20	18.78	18.89	18.44	18.49	18.63	16.73	-----	15.89	16.13	16.53	16.92	17.50
25	18.76	18.99	18.46	18.46	18.65	16.53	-----	16.01	16.23	16.62	-----	17.61
EOM	18.82	18.88	18.40	18.40	18.53	16.35	-----	16.02	16.27	16.70	-----	17.73
LOW	19.14	19.08	18.88	18.63	18.71	18.68	16.39	16.07	16.31	16.71	16.92	17.74
HIGH	18.73	18.80	18.40	18.37	18.49	16.35	16.27	15.70	16.01	16.28	16.71	17.44

WTR YR 1982 HIGH 15.70 MAY 6 LOW 19.14 OCT 2

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 (254 mm), depth 308 ft (94 m), cased to 60 ft (18 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 719.78 ft (219.89 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.15 ft (0.86 m) above land-surface datum.

REMARKS.--Water level affected by earthquakes.

PERIOD OF RECORD.--May 1958 to August 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.85 ft (1.78 m) below land-surface datum, June 17, 1958; lowest, 15.15 ft (4.62 m) below land-surface datum, Oct. 5, 1965.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.25	10.07	10.12	9.03	9.11	8.74	9.40	10.00	10.46	10.50	11.58	11.02
10	10.36	10.11	10.11	9.51	9.44	9.21	9.53	9.84	10.29	11.12	11.36	10.93
15	10.20	10.12	10.15	9.60	9.54	8.03	9.58	11.02	10.66	11.15	11.53	11.61
20	10.17	10.13	10.17	9.68	8.52	8.15	9.47	10.98	10.52	11.43	11.48	10.95
25	10.10	10.12	9.66	9.16	7.80	8.69	9.64	9.99	10.22	11.54	10.52	10.46
EOM	10.12	10.06	9.68	8.68	8.40	9.34	9.73	9.60	11.27	11.47	10.62	10.59
LOW	11.10	10.65	10.23	9.84	9.58	9.41	10.44	11.67	11.55	12.19	12.44	12.25
HIGH	9.99	10.06	9.64	8.68	7.80	8.03	9.30	9.60	9.47	10.50	10.48	10.44

WTR YR 1982 HIGH 7.80 FEB 25 LOW 12.44 AUG 20

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 (45.7 m) south of the intersection of Johnson Road and East 71st Street, 0.3 mi (0.5 km) west of Shadeland Avenue, and 1.5 mi (2.4 km) south of Castleton, Indiana.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 94 ft (28.7 m), cased to 89 ft (27.1 m), screened to 94 ft (28.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 812.20 ft (247.559 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.90 ft (1.19 m) above land-surface datum.

PERIOD OF RECORD.--May 12, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.75 ft (21.87 m) below land-surface datum, Apr. 15, 1980; lowest, 74.38 ft (22.67 m) below land-surface datum, Sept. 30, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	73.26	73.29	73.57	73.24	73.52	72.48	72.24	72.48	72.64	72.60	72.92	74.14
10	73.36	73.59	73.76	73.50	73.27	72.87	72.49	72.53	72.50	72.64	72.95	73.97
15	73.49	73.33	73.55	73.20	73.09	72.71	72.50	72.51	72.45	72.91	73.11	74.04
20	73.34	72.99	73.79	73.46	72.92	72.44	72.49	72.46	72.52	72.70	73.17	73.97
25	73.40	73.48	73.63	73.30	73.11	72.51	72.45	72.59	72.75	72.90	72.99	73.96
EOM	73.55	73.57	73.46	73.13	73.23	72.44	72.62	72.38	72.51	72.88	73.88	74.29
LOW	73.64	73.78	73.85	73.73	73.61	73.22	72.97	72.64	72.82	72.94	73.89	74.38
HIGH	73.08	72.99	73.12	73.12	72.86	72.43	72.00	72.30	72.36	72.57	72.88	73.75

WTR YR 1982 HIGH 72.00 APR 3 LOW 74.38 SEP 30

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 (0.4 km) southwest of Whitefield.
Owner: Joseph Arvin.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 143 ft (44 m), cased to 53 ft (16 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 565 ft (172 m). Measuring point: Top of floor of shelter 1.0 ft (0.30 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.91 ft (7.29 m) below land-surface datum, Apr. 14, 1980; lowest, 34.10 ft (10.39 m) below land-surface datum, Jan. 1, 5, 22, 23, 1960, and Dec. 18, 19, 1964.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.75	28.12	-----	28.53	28.81	28.12	27.14	27.31	27.10	27.11	27.33	
10	27.84	28.53	-----	28.82	28.78	28.12	27.67	27.31	27.02	26.97	27.36	
15	28.07	28.18	-----	28.39	28.42	27.88	27.39	27.25	26.88	27.28	27.39	
20	28.11	27.95	28.79	28.63	28.15	27.59	27.37	27.04	26.96	27.13	27.44	
25	27.98	28.23	28.73	28.47	28.67	27.68	27.31	27.01	27.15	27.31	27.30	
EOM	28.34	28.50	28.40	28.03	28.59	27.62	27.53	26.83	26.98	27.27	-----	
LOW	28.44	28.76	29.14	29.21	29.10	28.69	28.07	27.57	27.32	27.38	27.60	
HIGH	27.56	27.81	28.02	28.02	28.07	27.59	26.93	26.83	26.84	26.97	27.23	

WTR YR 1982 HIGH 26.83 MAY 31 LOW 29.21 JAN 7, 8, 10

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 (7.2 km) east of Crawfordsville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 111 ft (34.0 m), cased to 107 ft (32.6 m), screened to 109 ft (33.2 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 801 ft (244 m). Measuring point: Top of floor of shelter 2.38 ft (0.73 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.10 ft (7.96 m) below land-surface datum, Apr. 13, 1974; lowest, 32.06 ft (9.77 m) below land-surface datum, June 4, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.83	29.50	29.78	29.48	28.55	27.94	27.38	28.23	28.24	28.53	29.39	29.76
10	29.81	29.63	29.83	29.29	28.55	27.84	27.54	28.33	28.18	28.70	29.46	29.81
15	29.72	-----	29.83	29.00	28.55	27.54	27.62	28.50	28.30	28.94	29.56	29.89
20	29.65	29.47	29.93	29.06	28.41	27.57	27.64	28.54	28.19	29.05	29.62	29.93
25	29.61	29.66	29.84	28.84	28.40	27.68	27.84	28.48	28.27	29.20	29.51	30.03
EOM	29.62	29.59	29.62	28.50	28.28	27.68	28.08	28.21	28.31	29.32	29.66	30.20
LOW	29.95	29.80	30.00	29.74	28.68	28.27	28.14	28.64	28.41	29.35	29.72	30.23
HIGH	29.53	29.47	29.52	28.50	28.28	27.40	27.33	28.14	28.17	28.38	29.35	29.61

WTR YR 1982 HIGH 27.33 APR 3 LOW 30.23 SEP 30

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 (0.7 km), north of County Road 950 North, and 1.1 mi (1.8 km) north of Waverly.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 60 ft (18.3 m), cased to 56 ft (17.1 m), screened to 60 ft (18.3 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 645 ft (197 m) from topographic map. Measuring point: Top of floor of shelter 2.90 ft (0.88 m) above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.09 ft (2.77 m) below land surface datum, Apr. 9, 1982; lowest, 15.60 ft (4.75 m) below land-surface datum, Feb. 9, 10, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.16	14.00	14.53				-----	10.21	10.56	11.33	12.40	
10	-----	14.11	14.58				9.10	10.42	10.72	11.49	12.54	
15	-----	14.20	14.62				9.31	10.74	10.93	11.63	12.76	
20	-----	14.29	14.68				9.43	10.96	10.82	11.78	-----	
25	-----	14.41	-----				9.69	11.05	10.97	12.00	-----	
EOM	-----	14.42	-----				9.95	10.74	11.14	12.23	-----	
LOW	13.26	14.44	14.68				10.01	11.16	11.19	12.26	12.88	
HIGH	13.02	13.93	14.44				9.09	10.01	10.56	11.19	12.26	

WTR YR 1982 HIGH 9.09 APR 9 LOW 14.68 DEC 20

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 (1.6 km) south of Foresman.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 80 ft (24 m), cased to 76 ft (23 m), screened to 78 ft (24 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 654.10 ft (199.370 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.15 ft (0.66 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.94 ft (2.42 m) below land-surface datum, Mar. 20, 21, 1982; lowest, 15.67 ft (4.78 m) below land-surface datum, Oct. 14, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.06	12.83	12.38	11.64	11.71	9.82	9.88	11.14	10.70	12.50	13.47	14.46
10	13.19	12.88	12.29	11.22	11.81	10.08	10.26	11.54	10.95	12.64	13.62	14.58
15	13.21	12.85	12.25	11.26	11.81	8.49	9.68	12.02	11.56	12.69	13.78	14.88
20	13.01	12.76	12.30	11.58	11.12	7.94	9.37	12.25	11.84	12.64	13.98	14.88
25	12.92	12.65	12.35	11.73	9.99	8.54	9.99	12.14	12.15	12.85	14.04	14.92
EOM	12.93	12.31	12.31	11.66	9.84	9.42	10.65	11.43	12.23	13.32	14.21	15.11
LOW	13.32	12.95	12.48	12.48	11.89	10.26	10.78	12.30	12.40	13.39	14.23	15.14
HIGH	12.88	12.31	12.20	11.21	9.83	7.94	9.32	10.78	10.69	12.30	13.39	14.19

WTR YR 1982 HIGH 7.94 MAR 20, 21 LOW 15.14 SEP 30

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 (3.2 km) southwest of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 150 ft (46 m), cased to 136 ft (41.5 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 680.83 ft (207.517 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.03 ft (0.62 m) above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.65 ft (10.56 m) below land-surface datum, Apr 14, 1980; lowest, 70.13 ft (21.38 m) below land-surface datum, Aug. 11, 12, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.98	42.04	40.23			37.27	36.57	36.30	37.73	42.63	47.46	55.76
10	44.55	41.77	39.95			37.12	36.59	36.29	37.47	44.65	49.79	56.00
15	44.01	41.29	39.68			37.05	36.49	36.39	37.20	45.51	51.55	56.04
20	43.46	40.83	-----			36.89	36.40	37.47	37.18	45.50	53.42	55.22
25	43.00	40.59	-----			36.91	36.37	37.99	37.60	45.18	55.76	53.84
EOM	42.58	40.20	-----			36.75	36.44	37.78	40.57	45.93	55.85	52.68
LOW	45.57	42.60	40.28			37.44	36.89	38.07	41.12	46.16	56.33	56.35
HIGH	42.58	40.20	39.68			36.75	36.36	36.26	37.18	41.12	46.17	52.68

WTR YR 1982 HIGH 36.26 MAY 6 LOW 56.35 SEP 8

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 (4.8 km) north of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 150 ft (45.7 m) cased to 97 ft (29.6 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 663.34 ft (202.186 m) National Geodetic Vertical Datum. Measuring point: Top of floor of shelter 2.83 ft (0.86 m) above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft (1.23 m) below land-surface datum, May 31, 1976; lowest, 66.65 ft (20.31 m) below land-surface datum, Aug. 19, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.50	11.48	9.34	7.51	6.49	5.55	4.62	4.21	7.07	24.17	-----	-----
10	14.76	11.12	9.02	7.38	6.33	5.36	4.59	----	6.51	35.06	57.46	-----
15	13.84	10.61	8.72	7.14	6.09	5.23	4.49	----	5.99	-----	56.92	-----
20	12.70	10.12	8.44	7.10	5.84	5.03	4.34	----	12.19	-----	-----	-----
25	12.62	9.80	8.15	6.88	5.98	5.01	4.28	9.34	14.55	-----	-----	29.81
EOM	-----	9.35	7.74	6.52	5.82	4.80	4.35	7.64	18.58	51.13	-----	27.68
LOW	16.51	11.50	9.41	7.91	6.72	5.82	4.95	9.57	34.75	51.88	66.65	31.10
HIGH	12.27	9.35	7.74	6.52	5.79	4.80	4.27	4.21	5.98	18.01	49.36	27.68

WTR YR 1982 HIGH 4.21 MAY 5 LOW 66.65 AUG 19

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 (3.2 km) southwest of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in (50.8 mm), depth 45 ft (13.7 m), cased to 42 ft (12.8 m), screened to 45 ft (13.7).

DATUM.--Altitude of land-surface datum is 681 ft (208 m) from topographic map. Measuring point: top of "Y" in well casing 3.10 ft (0.94 m) 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 (0.33 m) below land-surface datum, May 3, 1978; lowest, 13.33 ft (4.06 m) below land-surface datum, Nov. 24 to Dec. 1, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.11	11.57	11.24	11.14	11.00	9.98	8.37	8.89	9.24	10.97	10.51	12.08
10	11.26	11.64	11.24	11.08	11.00	9.92	8.37	9.08	9.62	11.11	10.70	12.22
15	11.36	11.69	11.22	11.08	11.02	8.45	8.25	9.41	10.04	9.95	11.01	12.42
20	11.39	11.74	11.31	11.13	10.68	8.11	8.15	9.50	10.17	9.48	11.40	12.61
25	11.45	11.42	11.52	11.15	10.35	8.18	8.40	9.57	10.54	9.66	11.68	12.73
EOM	11.54	11.26	11.59	11.07	10.28	8.28	8.63	9.44	10.75	10.14	11.88	12.87
LOW	11.55	11.76	11.60	11.63	11.06	10.27	8.69	9.57	10.84	11.11	11.90	12.90
HIGH	11.02	11.26	11.20	11.07	10.28	8.10	8.10	8.65	9.22	9.48	10.24	11.90

WTR YR 1982 HIGH 8.10 MAR 21, 22 LOW 12.90 SEP 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 (4.8 km) north of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in. (51 mm), depth 45 ft (14 m), cased to 41 ft (12 m), screened to 44 ft (13 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 663 ft (202m) from topographic map. Measuring point: Top of floor of shelter 2.65 ft (0.81 m) 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 (0.009 m) below land-surface datum Mar. 16, 1982; lowest, 5.79 ft (1.76 m) below land-surface datum, Sept. 30, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.86	4.53	4.22	4.03	4.73	.74	1.69	3.27		----	4.73	5.34
10	4.12	4.56	4.32	4.00	4.74	.93	1.67	3.52		4.47	4.81	5.44
15	4.30	4.68	4.49	4.06	4.85	.31	1.92	3.96		3.99	4.94	5.54
20	4.27	4.51	4.68	4.46	4.45	.07	1.78	----		3.83	5.08	5.63
25	4.32	4.16	4.76	4.60	.28	.94	2.52	----		4.04	5.11	5.69
EOM	4.47	4.12	4.86	4.72	.84	.87	2.91	----		4.46	5.19	5.78
LOW	4.49	4.73	4.86	4.87	4.85	1.69	2.97	3.99		4.53	5.19	5.79
HIGH	3.74	4.12	4.13	3.99	.28	.03	.91	2.97		3.83	4.56	5.20

WTR YR 1982 HIGH .03 MAR 16 LOW 5.79 SEP 30

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 (0.8 km) west of County Road 600 West, and 2.0 mi (3.2 km) North and 3.5 mi (5.6 km) west of Enos.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, 5 inch (127 mm) diameter PVC casing extending into limestone 3 ft (0.9 m) and sealed from above by means of a rubber shale trap. The 4 inch (101.6 mm) rock hole extends to a depth of 150 ft (45.7 m) below land surface.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 760 ft (232 m) National Geodetic Vertical Datum. Measuring point: Top of casing 3.30 ft (1.00 m) above land surface.

PERIOD OF RECORD.--Oct. 16, 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.78 ft (6.94 m) below land-surface datum, May 6, 1982; lowest, 53.95 ft (16.4 m) below land-surface datum, Sept. 3, 10, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-----	28.05	26.68	25.57	-----	24.12	23.16	22.84	24.77	30.66	-----	-----
10	-----	27.83	26.47	25.50	-----	23.85	23.27	22.93	24.21	30.58	-----	52.62
15	-----	27.38	26.30	25.28	-----	23.80	23.15	28.78	23.67	30.99	-----	47.92
20	29.43	26.94	26.10	25.35	-----	23.61	23.03	31.46	23.55	30.83	46.06	45.33
25	28.97	26.80	26.03	25.09	-----	23.63	22.94	27.61	23.88	30.56	45.39	43.16
EOM	28.62	26.38	25.68	24.74	-----	23.35	23.09	25.49	33.00	42.46	44.43	41.59
LOW	30.03	28.71	26.79	26.10	25.21	24.37	23.66	37.05	38.48	47.54	50.68	53.95
HIGH	28.62	26.38	25.68	24.74	24.84	23.35	22.86	22.78	23.55	30.52	44.43	41.59

WTR YR 1982 HIGH 22.78 MAY 6 LOW 53.95 SEP 3, 10

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 (39.6 m) north of County Road 950 North, 1.0 mi (1.6 km) south of State Road 10, and 3.5 miles (5.6 km) west of Lake Village.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in (102 mm), rock hole depth 150 ft (45.7 m), cased to 64 ft with 5 in (127 mm) diameter casing, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft (245 m). Measuring point: Top of casing 3.30 ft (1.00 m) above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--Oct. 16, 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.25 ft (0.08 m) above land-surface datum, Apr. 16, 17, 1982; lowest, -12.66 ft (-3.86 m) above land-surface datum, Aug. 21, 22, 1982.

HIGHEST WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-----	-0.78		-----	-1.28	-0.71	.03	.08		-----	-5.58	-11.23
10	-----	-1.17		-----	-1.25	-0.63	.07	.00		-0.98	-7.20	-10.53
15	-----	-1.30		-----	-1.16	-0.56	.09	-0.09		-1.05	-7.72	-10.86
20	-1.25	-----		-----	-1.04	-0.34	.22	-0.40		-1.21	-11.92	-9.84
25	-1.14	-----		-----	-0.93	-0.26	.20	-0.33		-1.37	-12.31	-9.08
EOM	-0.99	-----		-1.32	-----	-0.10	.12	-----		-3.25	-11.18	-8.55
HIGH	-0.99	-0.78		-1.32	-0.84	-0.10	.25	.12		-0.94	-4.12	-8.55
LOW	-1.45	-1.42		-1.55	-1.37	-0.86	-0.14	-0.42		-4.09	-12.66	-11.85

WTR YR 1982 HIGH .25 APR 16, 17 LOW -12.66 AUG 21, 22

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 (18.3 m) east of County Road 525 East, 900 ft (274 m) south of County Road 100 South, and 2.0 mi (3.2 km) north of Mount Ayr.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in (127 mm), depth 130 ft (39.6 m), cased to 71 ft (21.6 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 676 ft (206 m). Measuring point: Top of well casing and 3.9 ft (1.19 m) above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.39 ft (0.12 m) above land-surface datum, May 6, 1982; lowest, -23.45 ft (-7.15 m) above land-surface datum, Aug. 28, 1982.

HIGHEST WATER LEVEL, IN FEET ABOVE LAND SURFACE DATUM , WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5								.35	-0.48	-8.83	-21.54	-22.89
10								.14	-0.45	-12.00	-19.64	-20.57
15								-0.06	-0.40	-11.99	-18.86	-19.12
20								-0.41	-0.52	-11.05	------	-17.72
25								-0.38	-1.76	-10.21	-23.07	-15.28
EOM								-0.31	-6.86	-16.38	-21.96	-13.54
HIGH								.39	-0.30	-7.09	-17.80	-13.54
LOW								-0.63	-7.13	-17.75	-23.45	-23.35

WTR YR 1982 HIGH .39 MAY 6 LOW -23.45 AUG 28

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 (8.0 km) south of Albion.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 149 ft (45.4 m), cased to 146 ft (44.5 m), screened to 148 ft (45.1 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 928 ft (283 m). Measuring point: Top of floor of shelter 2.65 ft (0.81 m) above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.55 ft (8.70 m) below land-surface datum, May 31, 1982; lowest, 32.49 ft (9.90 m) below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.77	29.80	30.36	30.07	30.21	30.05	28.86	28.69	28.85	28.88	29.10	29.37
10	30.00	30.09	30.22	30.04	30.21	29.90	29.00	28.76	28.73	28.67	29.14	29.23
15	29.96	29.91	30.09	29.98	30.01	29.85	28.91	28.78	28.57	28.94	29.16	29.35
20	29.95	29.78	30.15	30.22	29.89	29.49	28.80	28.70	28.66	28.93	29.12	29.30
25	29.95	30.04	30.19	30.13	30.54	29.41	28.71	28.77	28.85	28.99	29.16	29.37
EOM	30.14	29.87	29.90	29.98	30.15	29.06	28.85	28.55	28.90	28.98	29.22	29.53
LOW	30.16	30.30	30.44	30.46	30.54	30.24	29.37	28.87	28.96	29.03	29.39	29.59
HIGH	29.57	29.62	29.67	29.70	29.89	29.01	28.57	28.55	28.57	28.66	28.92	29.08

WTR YR 1982 HIGH 28.55 MAY 31 LOW 30.54 FEB 25

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 (3.2 km) west of Wolcottville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 44 ft (13.4 m), cased to 39 ft (11.9 m), screened to 42 ft (12.8 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 930 ft (283 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.53 ft (2.60 m) below land-surface datum, Mar. 20, 1982; lowest, 17.55 ft (5.35 m) below land-surface datum, Dec. 27, 28, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.68	12.78	12.02	11.81	12.52	12.56	9.74	11.38	10.92	11.97	13.27	14.67
10	12.94	13.04	12.15	11.53	12.96	12.52	10.12	11.67	10.13	12.24	13.49	14.76
15	13.14	13.17	12.35	11.98	12.87	9.40	9.63	12.00	11.87	12.36	13.69	14.98
20	13.34	13.14	12.71	12.63	12.64	8.53	9.53	12.23	12.24	12.46	13.92	15.06
25	13.33	12.38	12.94	12.82	12.65	9.24	10.32	12.18	12.53	12.78	14.16	15.17
EOM	13.01	11.67	12.89	12.26	12.32	9.51	10.98	11.39	12.46	13.16	14.43	15.16
LOW	13.47	13.39	13.24	13.18	13.09	12.78	11.00	12.35	12.66	13.19	14.44	15.21
HIGH	12.46	11.67	11.44	11.46	12.22	8.53	9.40	11.05	10.13	11.97	13.11	14.41

WTR YR 1982 HIGH 8.53 MAR 20 LOW 15.21 SEP 28

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 (51 mm), depth 24 ft (7.32 m) cased to 21 ft (6.4 m) screened to 24 ft (7.32 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 920 ft (280 m). Measuring point: Top of floor of shelter 3.0 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--Nov. 2, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.60 ft (1.40 m) below land-surface datum, June 16, 1981; lowest, 12.74 ft (3.88 m) below land-surface datum, Dec. 29, 1978, Feb 17, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.23	8.13	9.92	10.23	----	----	----	5.85	5.55	5.79	6.29	6.70
10	7.42	8.37	10.03	10.03	----	----	----	5.89	5.86	5.71	6.31	6.69
15	7.59	8.48	10.12	-----	----	----	----	5.96	6.02	5.79	6.42	6.63
20	7.71	8.57	10.22	-----	----	----	----	5.93	6.07	5.97	6.50	6.63
25	7.81	9.18	10.23	-----	----	----	----	5.91	6.15	6.14	6.52	6.61
EOM	7.92	9.66	10.38	-----	----	----	5.68	5.75	6.15	6.32	6.62	6.53
LOW	7.93	9.75	10.38	10.42	9.75	7.33	5.70	6.01	6.23	6.36	6.67	6.73
HIGH	7.01	7.94	9.75	10.03	9.75	7.33	5.52	5.70	5.49	5.69	6.24	6.51

WTR YR 1982 HIGH 5.49 JUN 3, 4 LOW 10.42 JAN 2

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 (10.6 km) southeast of Orleans.
Owner: Paul Middletown.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 108 ft (32.9 m), cased to 56 ft (17.1 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 712 ft (217 m). Measuring point: Top of floor of shelter 3.30 ft (1.01 m) above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.39 ft (2.25 m) below land-surface datum, Nov. 28, 1979; lowest, 44.44 ft below land-surface datum, Jan. 29, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.13	42.92	33.60	17.31	9.21	13.12	10.59	26.32	24.15	30.91	34.72	20.96
10	41.99	41.32	35.79	21.75	9.22	15.23	13.47	26.75	26.90	27.81	36.79	25.74
15	42.43	42.76	38.00	24.99	10.48	9.21	16.60	27.92	28.27	29.21	38.06	27.84
20	42.50	39.65	39.95	26.91	9.23	9.22	18.55	29.93	28.32	27.33	39.36	31.27
25	41.93	39.39	24.65	12.37	11.11	9.21	22.88	31.66	31.61	28.15	39.69	31.57
EOM	42.64	37.70	25.13	9.21	12.54	12.50	25.52	27.39	28.23	33.46	39.16	34.69
LOW	42.87	43.09	40.82	27.53	13.12	15.91	25.60	34.89	32.99	36.06	40.98	39.15
HIGH	40.30	37.70	24.63	9.21	9.21	9.21	9.46	25.60	22.49	26.48	33.39	20.39

WTR YR 1982 HIGH 9.21 JAN 31 AND OTHERS LOW 43.09 NOV 8

PARKE COUNTY

393619087043001. Local number, PA 6.

LOCATION.--Lat 39°36'19", long 87°04'30", in the 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 (2.7 km) east of Carbon, 2.6 mi (4.3 km) east of State Highway 59, and 6.2 mi (10.0 km) north of Brazil.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 155 ft (47 m), cased to 46 ft (14 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum, 703 ft (215 m). Measuring point: Top of casing 2.40 ft (0.73 m) above land-surface datum.

PERIOD OF RECORD.--July 1967 to Aug. 1971. Oct 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.53 ft (3.51 m) below land-surface datum, Apr. 19, 1970; lowest, 15.60 ft (4.75 m) below land-surface datum, Oct. 23, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-----	15.32	15.15	14.33	14.10	13.99	13.31	13.48	13.52	13.71	14.07	14.53
10	15.41	15.32	15.00	14.31	14.07	13.89	13.42	13.49	13.49	13.63	14.20	14.50
15	15.47	15.18	14.84	14.23	13.96	13.83	13.42	13.56	13.54	13.79	14.28	14.54
20	15.47	15.06	14.72	14.30	13.85	13.69	13.43	13.55	13.48	13.78	14.38	14.51
25	15.42	15.11	14.52	14.20	14.21	13.65	13.39	13.55	13.58	13.89	14.32	14.46
EOM	15.42	14.99	14.31	13.97	14.12	13.53	13.50	13.45	13.64	13.99	14.46	14.64
LOW	15.60	15.50	15.20	14.55	14.27	14.12	13.64	13.65	13.72	14.04	14.56	14.70
HIGH	15.26	14.99	14.31	13.97	13.85	13.53	13.23	13.42	12.03	13.55	14.01	14.37

WTR YR 1982 HIGH 13.23 APR 3 LOW 15.60 OCT 23

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 (152 mm), depth 58 ft (17.7 m), cased to 54 ft (16.5 m), screened to 56 ft (17.1 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 380 ft (116 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

REMARKS.--Water level affected by Wabash River floods.

PERIOD OF RECORD.--April 1967 to September 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.78 ft (1.76 m) below land-surface datum, Apr. 25, 1975; lowest, 21.25 ft (6.48 m) below land-surface datum, Feb. 15-20, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.56	18.42	18.90	18.27	13.40	10.00	8.86	10.82	12.18	13.90	15.45	14.23
10	17.73	18.53	18.95	17.82	12.68	10.41	9.34	11.11	12.01	14.06	15.73	14.81
15	17.90	18.62	19.02	17.56	12.85	9.55	9.71	11.73	12.35	14.35	16.00	15.35
20	18.06	18.72	19.13	17.73	11.98	9.39	9.38	12.30	12.87	14.64	16.29	15.70
25	18.21	18.82	18.87	15.94	11.59	7.93	9.65	12.77	13.20	14.72	16.54	16.03
EOM	18.36	18.82	18.57	14.02	10.59	8.44	10.16	12.27	13.56	15.07	16.23	16.32
LOW	18.38	18.90	19.16	18.57	14.00	10.64	10.26	12.91	13.70	15.14	16.66	16.37
HIGH	17.40	18.38	18.57	14.02	10.59	7.93	8.54	10.27	11.97	13.70	15.14	14.22

WTR YR 1982 HIGH 7.93 MAR 25 LOW 19.16 DEC 22

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 (1 km) north of Wadesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 280 ft (85.3 m), cased to 200 ft (61 m), open hole.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 458 ft (140 m) from topographic map. Measuring point: Top of floor of shelter 2.00 ft (0.61 m) above land-surface datum.

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 (34.44 m) below land-surface datum, Apr. 2, 1979; lowest, 131.86 ft (40.19 m) below land-surface datum, Aug. 7, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	------	123.73	123.73	123.52	123.84	122.85	122.88	122.83	123.18	123.03	125.86	------
10	124.05	123.92	123.52	123.18	124.00	122.67	121.87	122.87	122.31	123.62	125.60	------
15	124.36	123.87	123.35	122.89	123.66	122.31	122.78	122.79	122.92	124.71	------	------
20	124.20	123.58	123.82	123.51	123.22	122.33	122.14	122.99	123.15	124.87	------	------
25	124.02	123.85	123.33	123.42	123.57	121.82	122.10	123.40	123.67	125.10	------	123.90
EOM	123.84	123.89	123.40	123.80	123.31	121.70	122.21	123.03	123.39	125.39	------	123.93
LOW	127.36	128.04	126.47	126.87	127.02	125.92	126.14	128.75	127.29	131.68	131.86	126.50
HIGH	123.80	123.58	123.06	122.89	123.00	121.70	121.55	122.12	122.31	123.03	125.29	123.77

WTR YR 1982 HIGH 121.55 APR 3 LOW 131.86 AUG 7

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 (203 mm), depth 663 ft (202 m), cased to 11 ft (3.4 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 678.60 ft (206.837 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

REMARKS.--Water level affected by pumpage and earthquakes.

PERIOD OF RECORD.--July 1956 to February 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.03 ft (1.23 m) below land-surface datum, June 15, 1958; lowest, 18.81 ft (5.73 m) below land-surface datum, Feb. 25, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.89	12.02	11.94	10.42	11.27	----	8.94	-----	-----	12.60	14.86	16.91
10	11.93	12.29	11.79	10.02	11.46	----	9.41	-----	10.72	12.92	15.12	17.25
15	12.02	12.33	11.72	10.30	11.34	----	8.70	-----	11.08	13.32	15.40	17.46
20	12.10	12.23	11.98	11.12	-----	7.11	8.45	11.52	11.60	13.60	15.79	17.50
25	11.96	12.09	12.38	11.39	-----	7.72	9.27	10.94	12.26	14.07	16.05	17.90
EOM	12.19	11.38	12.21	11.08	-----	8.32	9.98	-----	12.33	14.37	16.48	18.13
LOW	13.09	13.84	12.95	12.94	13.23	8.84	10.11	11.83	12.60	14.53	16.62	18.40
HIGH	11.83	11.38	11.16	9.68	11.08	7.06	8.30	10.04	10.72	12.29	14.47	16.46

WTR YR 1982 HIGH 7.06 MAR 21 LOW 18.40 SEP 30

PULASKI COUNTY

410739086365201. Local number, PU 7.

LOCATION.--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 (1.3 km) southwest of Beardstown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 105 ft (32 m), cased to 98 ft (30 m), screened to 100 ft (30.5 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 715.26 ft (218.011 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

PERIOD OF RECORD.--August 1967 to September 1971, September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.69 ft (1.43 m) below land-surface datum, June 15, 1981; lowest, 11.66 ft (3.55 m) below land-surface datum, Dec. 2, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.77	8.25	7.99	7.42	7.74	6.75	5.67	6.50	7.18	8.51	9.53	10.32
10	7.92	8.36	8.04	7.47	7.87	6.85	5.74	6.64	7.50	8.75	9.59	10.40
15	8.10	8.45	8.11	7.67	7.94	5.24	5.60	6.98	7.81	8.83	9.73	10.53
20	8.06	8.37	8.25	7.92	7.35	4.82	5.51	7.29	8.02	9.02	9.89	10.60
25	8.15	7.99	8.37	7.98	6.99	5.28	5.94	7.16	8.28	9.17	10.00	10.63
EOM	8.25	7.83	8.27	7.70	6.94	5.55	6.22	7.11	8.27	9.38	10.22	10.72
LOW	8.26	8.55	8.43	8.42	7.99	6.95	6.26	7.36	8.45	9.44	10.26	10.74
HIGH	7.64	7.83	7.81	7.38	6.94	4.82	5.34	6.26	7.02	8.36	9.41	10.22

WTR YR 1982 HIGH 4.82 MAR 20 LOW 10.74 SEP 30

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 (12.9 km) east of Brazil.
Owner: Brazil Water Company.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in (305 mm), depth 60 ft (18 m), cased to 20 ft (6.1 m), slotted to 60 ft (18 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 612 ft (186 m). Measuring point: Top of floor of shelter 1.80 ft (0.55 m) above land-surface datum.

REMARKS.--Water level affected by Big Walnut Creek floods, and by pumpage from municipal well field.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.20 ft (0.06 m) below land-surface datum, Apr. 9, 1961; lowest, 19.95 ft (6.08 m) below land-surface datum, Jan. 15-25, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.03	17.24	-----	13.13	14.84			-----	14.95	16.17	15.33	17.14
10	17.12	17.10	-----	14.90	15.77			-----	14.83	15.83	16.03	17.28
15	17.30	-----	17.43	14.92	15.93			-----	15.75	16.12	16.54	17.35
20	17.41	-----	17.34	15.40	-----			-----	15.69	14.57	16.81	17.31
25	17.43	-----	16.50	14.61	-----			-----	16.11	15.59	16.94	17.37
EOM	17.07	-----	16.50	12.62	-----			15.00	16.21	15.79	17.15	17.43
LOW	17.61	17.41	17.59	16.66	16.24			16.09	16.46	16.70	18.33	18.55
HIGH	16.77	17.04	16.28	12.62	13.15			15.00	14.15	14.57	14.90	17.12

WTR YR 1982 HIGH 12.62 JAN 31 LOW 18.55 SEP 1

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 (8.9 km) north of Farmland.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 54 ft (16 m), cased to 33 ft (10 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 970 ft (296 m). Measuring point: Top of floor of shelter 3.86 ft (1.18 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.84 ft (2.39 m) below land-surface datum, June 6, 1981; lowest, 15.00 ft (4.57 m) below land-surface datum, Feb. 10, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.45	12.08	12.03	9.42	10.48	9.55	9.29		9.70	10.95	11.73	12.77
10	12.63	12.31	11.98	9.90	10.69	9.69	8.85		10.24	10.83	11.51	12.87
15	12.69	12.21	11.93	10.32	10.59	8.94	9.17		10.56	11.27	11.71	13.09
20	12.66	12.21	12.02	10.81	9.59	8.24	9.12		10.08	11.43	12.01	13.22
25	12.57	12.00	10.63	10.51	10.07	9.04	----		10.31	11.40	12.25	13.34
EOM	12.30	11.71	10.10	10.11	9.95	8.81	----		10.59	11.65	12.49	13.44
LOW	12.77	12.43	12.17	11.08	10.78	10.13	9.73		10.68	11.68	12.52	13.46
HIGH	12.30	11.71	10.10	9.05	9.40	8.24	8.62		9.54	10.67	11.42	12.45

WTR YR 1982 HIGH 8.24 MAR 20 LOW 13.46 SEP 30

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 (6.6 km) southeast of New Carlisle.
Owner: U.S. Geological Survey

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in (127 mm), depth 87.5 ft (26.7 m), cased to 83.3 ft (25.4 m) screened to 87.5 ft (26.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 737 ft (225 m). Measuring point: Top of floor of shelter 3.20 ft (0.98 m) above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.50 ft (0.76 m) below land surface datum Mar. 20, 1982; lowest 8.64 ft (2.63 m) below land surface datum, August 31, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.62	7.91	6.93	6.67	7.19	7.41	2.99	4.52	4.66	5.65	6.31	7.56
10	7.59	7.99	6.86	6.30	7.35	7.46	3.35	4.77	4.91	5.81	6.51	7.70
15	7.64	8.06	6.91	6.41	----	4.40	3.47	5.02	5.14	5.61	6.70	7.84
20	7.71	8.08	6.98	6.64	----	2.50	3.63	5.22	5.38	5.62	6.93	7.90
25	7.76	7.69	7.18	6.80	----	2.90	3.96	4.51	5.60	5.86	7.15	7.98
EOM	7.89	6.94	7.24	6.93	----	2.52	4.29	4.47	5.83	6.09	7.40	8.08
LOW	7.90	8.13	7.38	7.45	7.37	7.58	4.32	5.33	5.89	6.13	7.42	8.10
HIGH	7.59	6.94	6.77	6.30	7.11	2.50	2.58	4.32	4.48	5.57	6.13	7.39

WTR YR 1982 HIGH 2.50 MAR 20 LOW 8.13 NOV 20

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 (4.8 km) south of Carrollton.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 150 ft (46 m), cased to 128 ft (39 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 816.10 ft (248.747 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.90 ft (4.85 m) below land-surface datum, May 27, 1968; lowest, 22.65 ft (6.91 m) below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.29	21.50	21.93	19.67	19.15	18.72	-----	19.22	18.88	19.66	20.57	21.41
10	21.36	21.64	21.90	19.67	19.51	18.60	-----	19.34	19.08	19.80	20.73	21.47
15	21.42	21.61	21.89	19.92	19.69	-----	18.36	19.48	19.30	20.04	20.84	21.58
20	21.49	21.59	21.95	20.28	18.51	-----	18.43	19.63	18.80	20.12	20.98	21.66
25	21.48	21.77	21.15	19.44	18.49	-----	18.70	19.77	19.20	20.34	21.04	21.68
EOM	21.55	21.64	20.70	18.77	18.62	-----	19.03	19.08	19.42	20.36	21.26	21.83
LOW	21.59	21.89	22.02	20.87	19.75	18.82	19.26	19.85	19.57	20.41	21.36	21.88
HIGH	21.15	21.50	20.70	18.77	18.30	18.58	18.35	19.06	18.75	19.51	20.40	21.22

WTR YR 1982 HIGH 18.30 FEB 24 LOW 22.02 DEC 19-20

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, 5.0 mi (8.0 km) south of Knox.
Owner: Samuel A. Craigmile.

AQUIFER.--Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 85 ft (26 m), cased to 77 ft (23 m), screened to 85 ft (26 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 712.97 ft (217.313 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--October 1935 to December 1952 (random instantaneous measurements only), August 1963 to October 1966, June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft (0.25 m) below land surface datum, June 17, 1949; lowest, 6.99 ft (2.13 m) below land-surface datum, Aug. 2, 1939.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.13	5.37	4.97	4.17	4.87	3.86	3.59	4.39	----	5.18	5.73	6.15
10	5.21	5.43	5.05	----	4.97	3.98	3.65	4.48	----	5.22	5.61	6.21
15	5.29	5.49	5.09	----	5.02	2.83	3.55	4.63	----	5.35	5.79	6.28
20	5.11	5.09	5.18	4.87	4.20	2.57	3.60	4.68	4.81	5.43	5.91	6.25
25	5.22	4.97	5.22	4.94	3.92	3.26	4.02	----	4.97	5.55	5.96	6.11
EOM	5.35	4.96	5.16	4.68	3.98	3.44	4.26	----	5.07	5.66	6.08	6.19
LOW	5.36	5.53	5.24	5.19	5.04	4.17	4.29	4.71	5.12	5.69	6.08	6.31
HIGH	5.02	4.94	4.94	4.17	3.86	2.57	3.19	4.29	4.79	5.11	5.46	5.99

WTR YR 1982 HIGH 2.57 MAR 20 LOW 6.31 SEP 16, 17

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 (8.0 km) southeast of Knox.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (38 mm), depth 17 ft (5.2 m), cased to 15 ft (4.6 m), screened to 17 ft (5.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 717.02 ft (218.548 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.30 ft (0.70 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.34 ft (0.10 m) below land surface datum, June 13, 14, 1981; lowest, 3.31 ft (1.01 m) below land-surface datum, Jan. 12, 13, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.23	2.71	2.61	1.94	2.34	2.17	2.06	2.06	1.35	1.54	1.45	1.81
10	2.42	2.76	2.65	2.46	2.44	2.23	1.95	1.95	1.33	1.55	1.32	1.70
15	2.53	2.79	2.65	2.60	2.46	1.22	1.74	1.95	1.42	1.15	1.50	1.76
20	2.44	2.30	2.79	2.67	1.91	1.16	1.89	1.89	1.40	1.16	1.68	1.59
25	2.59	2.45	2.72	2.56	1.98	1.61	2.08	1.60	1.46	1.33	1.66	1.46
EOM	2.71	2.54	2.61	2.17	2.21	1.84	2.10	1.18	1.50	1.42	1.72	1.51
LOW	2.71	2.80	2.79	2.67	2.49	2.38	2.10	2.10	1.57	1.66	1.73	1.83
HIGH	2.10	2.30	2.51	1.94	1.88	1.05	1.57	1.18	1.13	1.14	1.20	1.40

WTR YR 1982 HIGH 1.05 MAR 16 LOW 2.80 NOV 17-19

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 1.5 in (38 mm), depth 13 ft (4.0 m), cased to 11 ft (3.4 m), screened to 13 ft (4.0 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 714.07 ft (217.649 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.20 ft (0.67 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.77 ft (0.23 m) below land-surface datum, June 12, 1981; lowest, 3.40 ft (1.03 m) below land-surface datum, Sept. 11, 12, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.06	2.28	2.12	1.50	1.80	1.44	1.52	1.98	1.72	----	2.67	2.97
10	2.13	2.31	2.19	1.97	1.84	1.41	1.49	1.92	1.96	----	2.51	2.97
15	2.21	2.36	2.22	2.05	1.82	1.13	1.49	2.17	2.18	----	2.73	2.96
20	1.98	1.72	2.26	2.11	1.36	.93	1.48	2.18	2.22	----	2.80	2.77
25	2.14	1.91	2.26	2.05	1.34	1.26	1.60	1.93	2.29	2.68	2.77	2.57
EOM	2.28	2.08	2.11	1.65	1.59	1.36	1.79	1.30	2.29	2.60	2.89	2.70
LOW	2.29	2.40	2.26	2.14	1.84	1.59	1.82	2.24	2.32	2.70	2.91	3.01
HIGH	1.91	1.72	2.05	1.38	1.32	.89	1.23	1.30	1.28	2.33	2.20	2.24

WTR YR 1982 HIGH .89 MAR 13 LOW 3.01 SEP 5, 6, 11, 12

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 in (51 mm) depth 24 ft (7.3 m) cased to 21 ft (6.4 m) screened to 24 ft (7.3 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 717 ft (219 m). Measuring point: Top of floor of shelter 3.10 ft (0.94 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.21 ft (0.06 m) below land-surface datum, June 13, 1981; lowest, 4.59 ft (1.40 m) below land-surface datum, Dec. 8, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.85	3.02	2.69	1.81		----	1.99	2.50	2.43	3.10	3.40	3.73
10	3.00	3.07	2.79	2.36		----	1.81	2.52	2.72	3.03	3.03	3.75
15	3.01	3.10	2.82	----		----	2.00	2.78	2.88	3.19	3.34	3.79
20	2.74	2.31	2.91	----		.97	1.99	2.84	2.91	3.26	3.50	3.68
25	2.84	2.48	2.91	----		1.85	2.23	2.56	3.07	3.42	3.49	3.49
EOM	3.02	2.73	2.74	----		1.87	2.35	1.64	2.92	3.37	3.63	3.60
LOW	3.02	3.12	2.94	2.75		2.01	2.35	2.91	3.16	3.52	3.69	3.86
HIGH	2.65	2.31	2.66	1.57		.94	1.36	1.64	1.57	2.98	2.54	3.28

WTR YR 1982 HIGH .94 MAR 16 LOW 3.86 SEP 11, 12, 17

STEUBEN COUNTY

414109085025701. Local number, SB 5.

LOCATION.--Lat 41°41'09", long 85°02'57", in NE¼NE¼NE¼ sec.8, T.37 N., R.13 E., Steuben County, Hydrologic Unit 04050001, 300 ft (91 m) west of the intersection of County Roads 300 West and 300 North, 0.5 mile (0.8 km) north of Crooked Lake, and 0.9 mile (1.4 km) south of channel between Lake James and Jimmerson Lake, and 4.5 miles (7.2 km) northwest of Angola, Indiana.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in (127 mm), depth 109 ft (23.2 m), cased to 103 ft (31.4 m), screened to 109 ft (23.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 1,035 ft (315 m). Measuring point: Top of floor of shelter 3.50 ft (1.07 m) above land-surface datum.

PERIOD OF RECORD.--June 1979 to Jan. 1982 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.60 ft (17.86 m) below land-surface datum, Aug. 15, 1981; lowest, 62.82 ft (19.15 m) below land-surface datum, Feb. 18-20, Mar. 1, 2, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.99	59.23	59.67	59.98								
10	59.04	59.37	59.74	60.04								
15	59.10	59.44	59.78	-----								
20	59.14	59.41	59.86	-----								
25	59.20	59.53	59.91	-----								
EOM	59.24	59.56	59.93	-----								
LOW	59.24	59.62	59.97	60.08								
HIGH	58.92	59.23	59.55	59.90								

WTR YR 1982 HIGH 58.92 OCT 1 LOW 60.08 JAN 11

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 (305 mm), depth 97 ft (30 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 520.9 ft (158.8 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 15.43 ft (4.70 m) above land-surface datum.

REMARKS.--Water level affected by Wabash River floods and by pumpage from municipal supply well field.

PERIOD OF RECORD.--April 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.14 ft (1.87 m) below land-surface datum, Mar. 17, 1982; lowest, 40.14 ft (12.23 m) below land-surface datum, Aug. 4, 1944.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.29	19.31	20.45	16.45	13.27	8.55	10.26	16.70	15.76	17.28	24.12	19.62
10	21.24	20.21	20.24	16.95	18.59	12.35	14.28	20.25	20.08	23.88	23.35	22.26
15	18.87	19.19	23.20	18.06	14.10	7.17	7.90	25.18	18.91	23.19	23.95	19.61
20	15.68	24.43	20.40	17.90	13.45	10.00	12.06	20.83	18.95	25.53	26.93	21.82
25	15.25	19.93	18.19	16.83	12.29	6.74	14.37	18.19	21.16	22.02	22.40	19.08
EOM	16.19	20.09	18.53	14.50	12.75	8.91	17.55	17.58	18.73	26.47	19.65	20.30
LOW	25.59	27.03	27.90	27.00	22.39	18.26	22.91	26.95	26.57	28.35	28.59	26.40
HIGH	15.25	16.22	17.36	14.50	9.04	6.14	7.41	14.98	15.76	17.28	19.65	18.32

WTR YR 1982 HIGH 6.14 MAR 17 LOW 28.59 AUG 4

TIPPECANOE COUNTY

402603086535101. Local number, TC 8.

LOCATION.--Lat 40°26'03", long 86°53'51", in NE¼SE¼SW¼ sec.17, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on the right bank of the Wabash River in West Lafayette.
Owner: West Lafayette Water Company.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in (305 mm), depth 84 ft (26 m).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 528.80 ft (161.178 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 13.54 ft (4.13 m) above land-surface datum.

REMARKS.--Water level affected by Wabash River floods and by pumpage from municipal supply wells.

PERIOD OF RECORD.--November 1945 to December 1949, February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft (0.93 m) below land-surface datum, Feb. 3, 1949; lowest, 39.9 ft (12.16 m) below land-surface datum, Sept. 16, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.10	20.73	20.00	16.26	14.80	12.50	11.92	16.78	15.65	17.86	20.35	21.96
10	21.02	21.12	20.43	17.13	15.66	13.44	12.53	17.35	16.82	18.52	19.43	21.77
15	21.26	21.49	21.54	16.00	15.90	7.45	10.87	17.92	17.86	18.57	19.82	21.77
20	21.03	21.71	21.84	16.42	13.39	8.05	10.87	18.03	17.09	18.78	20.44	21.43
25	20.44	20.99	20.54	16.20	10.65	9.17	14.10	17.49	17.52	19.06	20.04	21.80
EOM	19.75	19.91	19.44	14.70	12.81	10.94	15.46	16.62	17.80	19.48	20.33	21.53
LOW	23.50	23.67	22.97	21.02	17.64	15.88	18.31	20.21	19.60	21.39	22.55	23.90
HIGH	19.75	19.91	19.20	14.70	10.65	7.45	10.09	15.87	14.75	17.73	19.35	20.46

WTR YR 1982 HIGH 7.45 MAR 15 LOW 23.90 SEP 24

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 (1.6 km) southwest of Armstrong.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 125 ft (38 m), cased to 80 ft (24 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 447 ft (136 m). Measuring point: Top of floor of shelter 3.47 ft (1.06 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.88 ft (7.58 m) below land-surface datum, Apr. 3, 4, 1968; lowest, 33.77 ft (10.29 m) below land-surface datum, Sept. 18, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.08	33.30	33.05	32.59	32.19	31.97	31.83	31.94	32.06	32.68	33.22	33.20
10	33.22	33.33	32.90	32.62	32.18	31.93	32.08	31.84	32.08	32.68	33.35	33.28
15	33.37	33.16	32.73	32.31	32.00	31.66	31.99	31.96	32.10	32.79	33.27	33.21
20	33.31	32.95	32.86	32.39	31.89	31.52	31.91	31.98	32.12	32.81	33.43	33.32
25	33.19	32.95	32.77	32.13	32.16	31.67	31.88	32.00	32.47	32.92	33.47	33.28
EOM	33.33	32.72	32.58	31.89	32.06	31.92	31.88	31.83	32.63	33.01	33.35	33.42
LOW	33.51	33.50	33.11	32.87	32.41	32.35	32.47	32.20	32.77	33.14	33.64	33.77
HIGH	33.00	32.72	32.45	31.89	31.86	31.52	31.68	31.77	31.84	32.63	33.00	33.06

WTR YR 1982 HIGH 31.52 MAR 20 LOW 33.77 SEP 18

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 (152 mm), depth 138 ft (42.1 m), cased to 137 ft (41.7 m), with perforated pipe.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 511 ft (156 m). Measuring point: Top of floor of shelter 3.47 ft (1.06 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.05 ft (12.51 m) below land-surface datum, Apr. 5-12, 1982; lowest, 52.25 ft (15.93 m) below land-surface datum, Nov. 15-25, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.87	47.38	47.78	48.04	47.23	44.58	41.05	-----	44.10	44.70	45.36	46.43
10	46.90	47.44	47.84	48.03	47.05	44.05	41.05	-----	44.19	44.69	45.56	46.50
15	46.97	47.51	47.90	47.99	46.82	43.68	-----	-----	44.30	44.76	45.74	46.67
20	47.07	47.57	47.96	47.89	46.53	43.09	-----	-----	44.40	44.89	45.93	46.84
25	47.18	47.66	48.01	47.74	45.96	42.16	-----	-----	44.51	45.02	46.16	46.97
EOM	47.30	47.72	48.03	47.46	45.45	41.34	-----	43.93	44.63	45.21	46.34	47.13
LOW	47.32	47.73	48.04	48.04	47.46	45.45	41.33	43.97	44.64	45.23	46.37	47.19
HIGH	46.86	47.32	47.73	47.46	45.45	41.34	41.05	43.66	43.97	44.64	42.31	46.37

WTR YR 1982 HIGH 41.05 APR 5-12 LOW 48.04 DEC 31 TO JAN 9

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 (152 mm), depth 70 ft (21.3 m), cased to 67 ft (20.4 m), screened to 70 ft (21.3 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 502 ft (153 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.80 ft (12.74 m) below land-surface datum, June 7, 1974; lowest, 51.90 ft (15.82 m) below land-surface datum, Sept. 29 to Oct. 1, 1972 .

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.60	46.75	46.69	46.74	46.73	45.00	42.31	-----	43.58	43.66	44.24	45.25
10	46.63	46.71	46.70	46.57	46.55	44.50	42.24	-----	43.22	43.61	44.43	45.34
15	46.69	46.65	46.74	46.41	46.52	44.16	-----	-----	43.24	43.74	44.62	45.53
20	46.87	46.65	46.85	46.54	46.45	43.74	-----	-----	43.53	43.92	44.81	45.64
25	46.82	46.71	46.95	46.71	46.09	43.14	-----	-----	43.59	43.97	45.00	45.73
EOM	46.82	46.67	46.88	46.82	45.69	42.56	-----	43.81	43.62	44.05	45.21	45.82
LOW	46.90	46.82	46.98	46.90	46.89	45.69	42.56	43.88	43.83	44.08	45.24	45.84
HIGH	46.59	46.64	46.65	46.41	45.69	42.56	42.21	43.81	43.19	43.61	44.08	45.19

WTR YR 1982 HIGH 42.21 APR 12, 13 LOW 46.98 DEC 28, 29

VIGO COUNTY

391646087164001. Local number, VI 8.

LOCATION.--Lat 39°16'46", long 87°16'40", in SE¼NE¼SE¼ sec.27, T.10 N., R.8 W., Vigo County, Hydrologic Unit 05120111, 20 ft (6 m) west of County Road 72 East and 1.7 miles (2.7 km) northwest of Lewis.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 180 ft (55 m), cased to 40 ft (12 m), open hole.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 611 ft (186 m). Measuring point: Top of floor of shelter 2.50 ft (0.82 m) above land-surface datum.

PERIOD OF RECORD.--October 1978 to September 1982 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 77.87 ft (23.73 m) below land-surface datum, June 25, 1979; lowest, 80.27 ft (24.47 m) below land-surface datum, Feb. 26, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	79.65	79.77	80.00	79.79	79.99	79.90	79.40	-----	79.38	79.42	79.65	79.53
10	79.70	79.89	79.95	79.98	79.97	79.86	79.59	-----	79.34	79.33	79.69	79.49
15	79.82	79.76	79.97	79.81	79.83	79.78	79.47	-----	79.33	79.50	79.48	79.51
20	79.76	79.59	80.01	80.03	79.82	79.64	79.41	-----	79.32	79.39	79.55	79.44
25	79.72	79.74	79.91	79.87	80.15	79.73	-----	-----	79.50	79.53	79.46	79.44
EOM	79.90	79.59	79.72	79.69	80.11	79.68	-----	79.21	79.40	79.56	79.54	79.56
LOW	79.97	80.03	80.15	80.20	80.27	80.15	79.85	79.37	79.57	79.62	79.80	79.65
HIGH	79.52	79.55	79.53	79.53	79.69	79.64	79.28	79.21	79.21	79.33	77.76	79.38

WTR YR 1982 HIGH 79.21 MAY 31 LOW 80.27 FEB 26

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 (229 m) east of State Highway 1, and 4.0 mi (6.4 km) south of East Germantown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 49 ft (15 m), cased to 47 ft (14 m), screened to 49 ft (15 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 888 ft (271 m). Measuring point: Top of collar in shelter 3.60 ft (1.10 m) 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 (3.07 m) below land-surface datum, Aug. 3, 1979; lowest, 21.68 ft (6.61 m) below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.63	18.35	18.80	18.23		12.63	12.61	13.57	12.58	12.76	14.21	
10	17.77	18.44	18.85	17.68		13.04	12.69	13.65	11.59	13.00	14.45	
15	17.90	18.54	18.90	17.36		12.88	12.80	13.75	11.88	13.25	14.68	
20	18.03	18.63	18.98	17.19		12.47	12.97	13.87	12.07	13.49	14.92	
25	18.15	18.70	18.90	-----		12.26	13.18	13.65	12.39	13.73	15.14	
EOM	18.26	18.76	18.77	-----		12.54	13.38	12.91	12.51	13.98	-----	
LOW	18.27	18.76	19.02	18.76		13.08	13.39	13.89	12.80	14.01	15.36	
HIGH	17.52	18.28	18.77	17.17		12.25	12.57	12.91	11.59	12.56	14.03	

WTR YR 1982 HIGH 11.59 JUN 10, 11 LOW 19.02 DEC 22

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 (305 m) south of north entrance to Ouabache State Recreation Area, and 3.5 mi (5.6 km) southeast of Bluffton.
Owner: U.S. Geological Survey.

AQUIFER.--Silty dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 79 ft (24.1 m), cased to 46 ft (14.0 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 826.04 ft (251.777 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.35 ft (0.72 m) 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 (5.39 m) below land-surface datum, Apr. 4, 1973: lowest, 23.56 ft (7.18 m) below land-surface datum, Oct. 21, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			-----	21.58	21.34	20.61	19.59	20.44	20.68	21.54	22.57	22.92
10			22.78	21.72	21.65	20.61	19.92	20.57	20.96	21.63	22.64	22.87
15			22.74	21.85	21.51	19.41	19.49	20.98	21.00	21.91	22.66	22.98
20			22.82	22.15	20.48	19.10	19.46	21.00	20.88	22.05	22.76	22.96
25			22.37	21.77	20.39	19.46	19.90	20.88	21.21	22.20	22.62	23.08
EOM			22.12	21.14	20.54	19.64	20.26	20.58	21.39	22.33	22.79	23.10
LOW			22.96	22.53	21.75	20.91	20.37	21.97	21.58	22.44	22.95	23.23
HIGH			22.07	21.14	20.05	19.06	19.16	20.24	20.50	21.30	22.39	22.74

WTR YR 1982 HIGH 19.06 MAR 21 LOW 23.23 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 (1.2 km) north of Laud.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 191 ft (58 m), cased to 187 ft (57 m), screened to 191 ft (58 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft (265 m). Measuring point: Top of floor of shelter 2.68 ft (0.82 m) above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.30 ft (15.03 m) below land-surface datum, Mar. 27, 1976; lowest, 52.67 ft (16.05 m) below land-surface datum, Mar. 15, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.36	51.45	51.73	51.48	51.46	51.32	50.53	50.47	50.60		-----	51.30
10	51.58	51.71	51.68	51.52	51.50	51.21	50.61	50.50	50.56		50.98	51.25
15	51.58	51.55	51.58	51.30	51.37	51.22	50.52	50.62	50.42		51.00	51.27
20	51.50	51.39	51.64	51.53	51.20	51.01	50.46	50.53	50.42		51.03	51.23
25	51.58	51.57	51.62	51.40	51.77	50.91	50.38	50.51	50.61		50.94	51.23
EOM	51.67	51.42	51.42	51.17	51.48	50.70	50.47	50.33	-----		51.16	51.37
LOW	51.72	51.80	51.77	51.82	51.78	51.49	50.85	50.66	50.68		51.30	51.50
HIGH	51.27	51.25	51.27	51.17	51.20	50.68	50.36	50.33	50.42		50.92	51.08

WTR YR 1982 HIGH 50.33 MAY 31 LOW 51.82 JAN 7

☆U.S. GOVERNMENT PRINTING OFFICE: 1983—656-054/09

October 1, 1978

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)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	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