CALENDAR FOR WATER YEAR 1980

1979

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					

1980

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
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17	18	19	20	21	22	23
24	25	26	27	28	29	

MARCH

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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
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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
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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 for Indiana

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-80-

WATER YEAR 1980

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

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Doyle G. Frederick, Acting Director

For additional information write to
District Chief, Water Resources Division
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1819 North Meridian Street
Indianapolis, Indiana 46202

1981

PREFACE

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

This report is one of a series issued State by State under the general direction of Philip Cohen, Chief Hydrologist, and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

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16. Abstract (Limit: 200 words)

Water resources data for the 1980 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 185 gaging stations; stage and contents for 12 lakes and reservoirs; releases from 6 flood-control reservoirs; water quality for 51 gaging stations; and water levels for 79 observation wells. Also included are 97 crest-stage partial-record stations and 69 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Indiana.

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Department of Commerce

ILLUSTRATIONS

TABLES

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

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

INTRODUCTION

Water resources data for the 1980 water year for Indiana consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 185 gaging stations; stage and contents at 12 lakes and reservoirs; water quality at 51 gaging stations, and water levels at 79 observation wells. Also included are data for 97 crest-stage, and 69 low-flow stations. Locations of these sites are shown on figures 2, 3, and 4. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. 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 Disbribution, 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-80-1." 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) 269-7101.

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 English units to International System of units (SI) on inside of back cover.

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

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

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

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 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 one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

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

Cubic feet per second per square mile ($ft^3/s/mi^2$, 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 µm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to 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 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 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.

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

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

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

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

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

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

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

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

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

DOWNSTREAM ORDER AND STATION NUMBER

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

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

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

NUMBERING SYSTEM FOR WELLS

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

SPECIAL NETWORK

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

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

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

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

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

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

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

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

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity 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 front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from 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 6.

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.

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

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

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

Sediment

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

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

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

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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

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

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

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

HYDROLOGIC CONDITIONS

The hydrologic year was very near normal. General flooding occurred at the beginning of each season during the year. The only outstanding event was a low-water period during May.

Temperature and precipitation were quite normal during the first months of the water year. The first storms occurred during the last week of November. A series of intense thunderstorms swept across the state with the heaviest causing annual maximum discharges in the southwest part of the state. Rainfall was light during December with some freezing at mid month.

Temperatures and precipitation during the first part of January were slightly below normal and snowfall was less than one half of the normal amount. A light rain during a short winter warming trend at the end of January was the most severe part of the winter. Freezing conditions existed during the last week in January and the first half of February. Snow on the ground at the end of this period was less than one foot over the state. A warming trend with light rain began in the southern part of the

state at mid month and by the end of February, it had spread over the state melting the snow cover state wide.

An abnormal number of storms of low intensities and volume occurred during March and the first week of April. A continuous cloud cover during this period decreased the normal evaporation rate to less than one half thus helping to maintain above average streamflow. A six week period of little or no precipitation began in mid-April and lasted until the first of June. Streamflow at the end of May approached near record lows for the month at many sites. Some isolated thunderstorms occurred during this period in the Whitewater River basin and along the Ohio River.

During the first week of June, heavy thunderstorms swept across the state. The heaviest rainfall occurred in the middle Wabash River basin and the Upper White River basin on the first day of the month. Record or near record peaks for the period of record occurred in these areas. A week later heavy precipitation fell in the west central and south central sections of the state. These storms were followed by a short, hot, dry period until the end of June.

The summer months were extremely warm and humid with heavy isolated thunderstorms occurring throughout the state. For the third consecutive summer, precipitation from July to September was well above normal. Some annual peaks were recorded on smaller drainage areas in the western part of the state during July and August. Precipitation and streamflow were near normal during September except for a few thunderstorms at mid month along the western border.

Water temperatures were normal throughout the first months of the year. Due to above normal temperatures in late December and early January, periods of freezing were generally delayed until the end of January. Above normal temperatures during the middle of February in the south and central part of the state removed the ice from most streams. Temperatures throughout March and April were well below normal. Recovery to normal occurred gradually through June and were slightly above normal for the remainder of the water year.

Ground-water levels throughout the state fell to below normal levels during the autumn months. Early winter rains reversed the falling trend. Water levels peaked at slightly above normal in early December in the south and early January in the North. Freezing temperatures in late December sealed off recharge and ground-water levels dropped through the middle of February. Most ground-water levels in the state recovered to normal after the spring rains in March.

Ground-water levels fluctuated throughout the summer and fall months in response to rainfall.

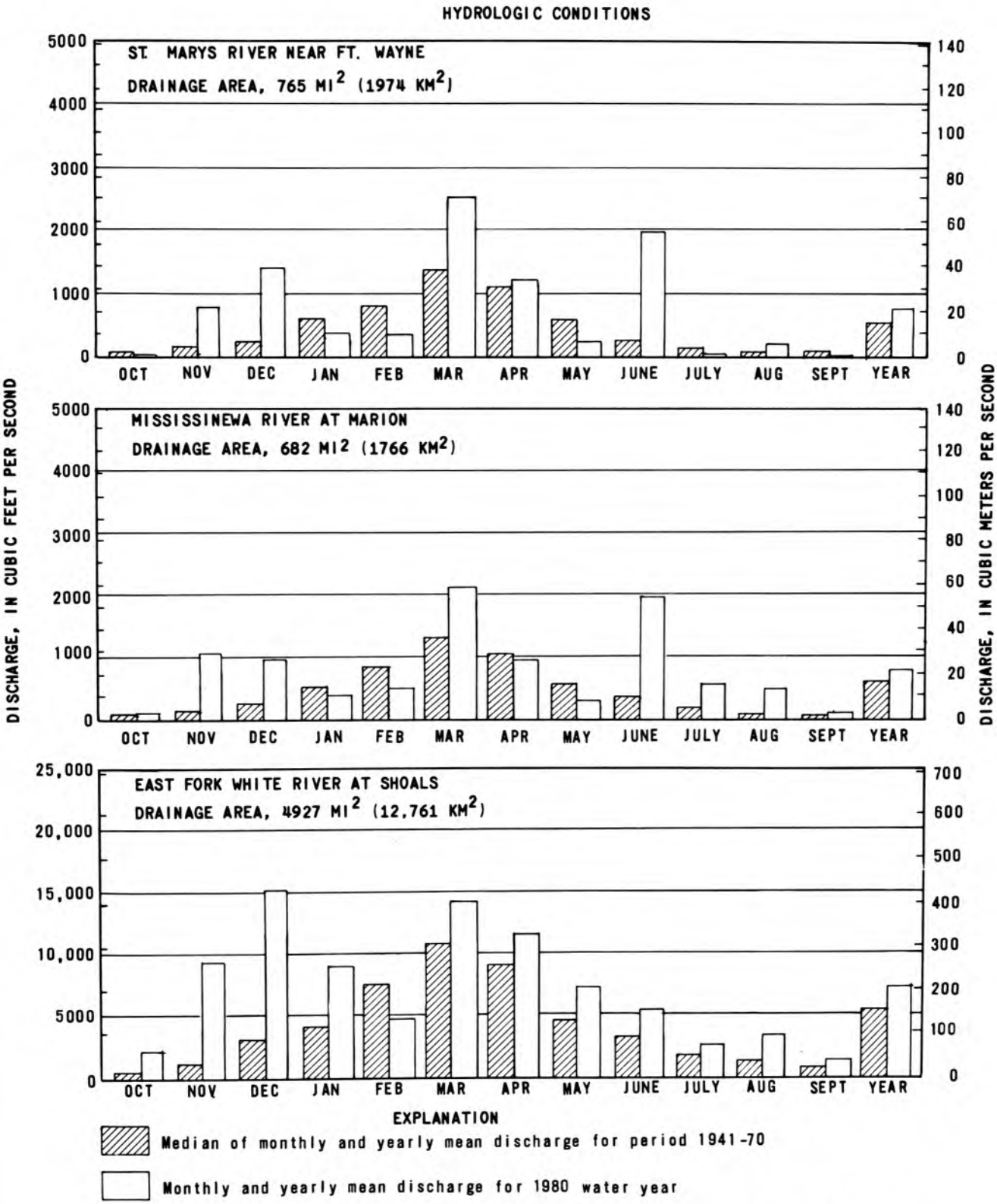


Figure 1.-- Comparison of discharge at three long-term representative gaging stations during 1980 water year with median discharge for period 1941-70.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-one manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Picket Street, Alexandria, VA 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 D. S. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

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

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

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

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

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

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

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

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

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

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

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

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

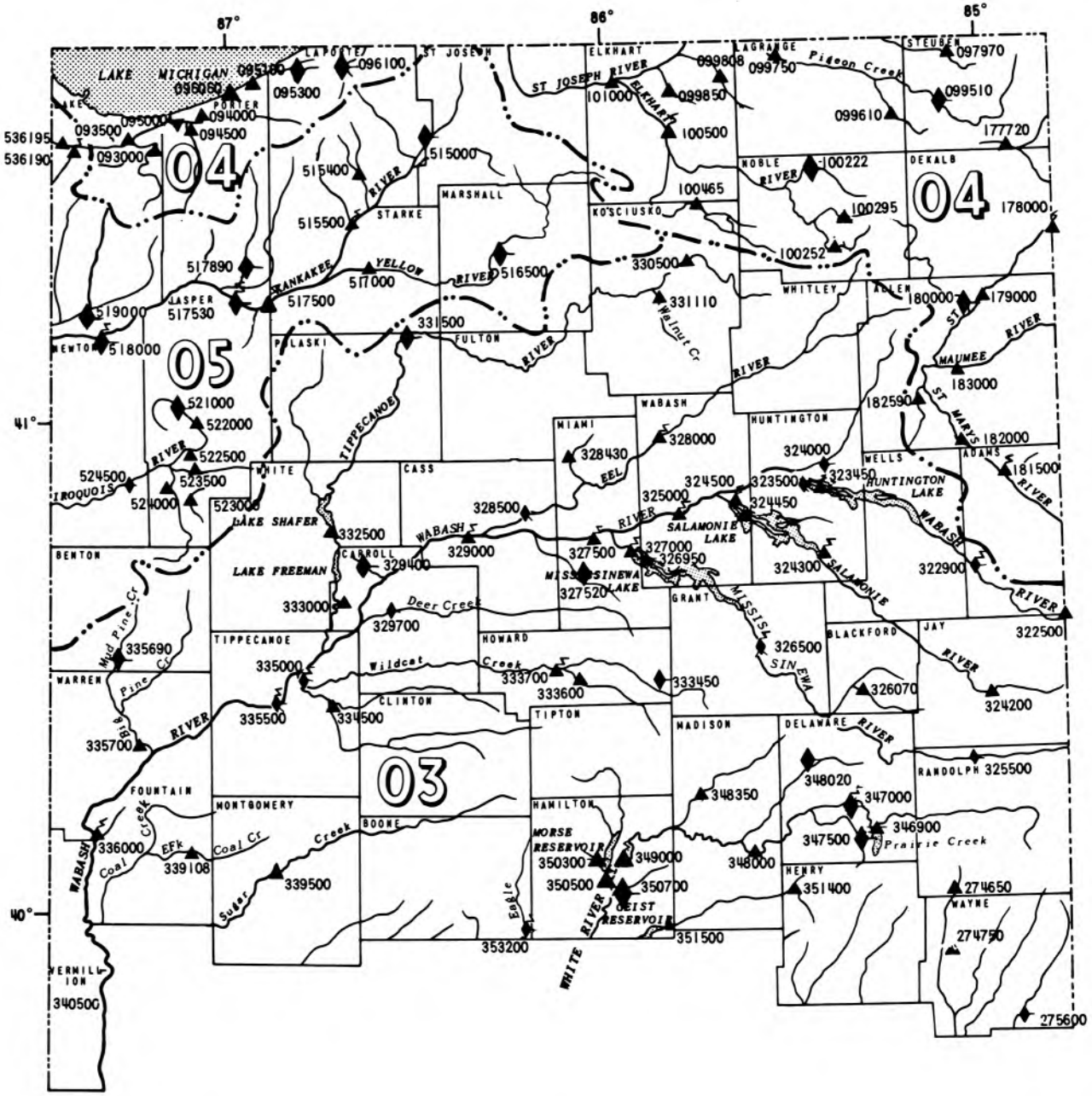
5-A4.* Methods for collection and analysis of aquatic biological and microbiological samples, by K. V. Slack, R. C. Averett, P. E. Greeson, and P. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages.

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.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ALLEN
WELLS
ADAMS
HUNTINGTON
WABASH
MIAMI
KOSCIUSKO
MARSHALL
STARKE
PULASKI
FULTON
CASS
WHITE
NEWTON
JASPER
BENTON
WARREN
TIPPECANOE
CARROLL
HOWARD
CLINTON
TIPTON
GRANT
BLACKFORD
JAY
MADISON
DELAWARE
RANDOLPH
HENRY
WAYNE
FOUNTAIN
MONTGOMERY
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ELKHART
Pigeon Creek
NOBLE
RIVER
Walnut Cr
YELLOW
RIVER
TIPPECANOE
RIVER
IROQUOIS
RIVER
EEL
RIVER
WABASH
RIVER
LAKE SHAFER
LAKE FREEMAN
SALAMONIE LAKE
MISSISSINEWA LAKE
HUNTINGTON LAKE
MAUMEE
RIVER
ST MARYS
RIVER
SALAMONIE
RIVER
Deer Creek
Wildcat
Creek
Mud Pine Cr
Pine Cr
Big
RIVER
Coal Cr
EFk
Coal Creek
Sugar
Creek
MORSE RESERVOIR
GEIST RESERVOIR
Eagle
WHITE
RIVER
Prairie Creek
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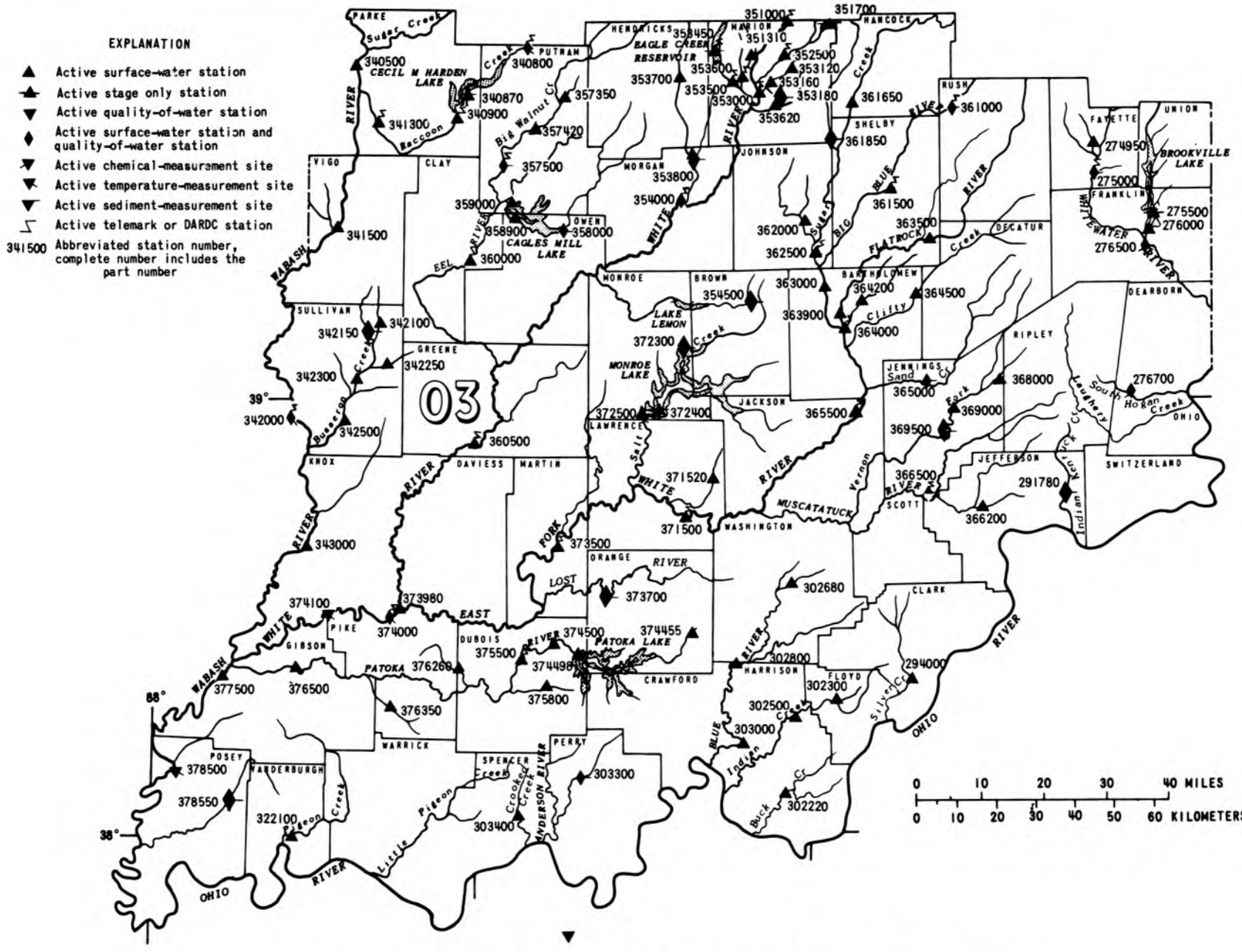


Figure 2.--Location of stream-flow and water quality gaging stations in Indiana.

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 mi² (26.9 km²).

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--10 years, 11.6 ft³/s (0.329 m³/s), 15.15 in/yr (385 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) Aug. 20, 1979, gage height, 8.85 ft (2.697 m); minimum daily discharge, 0.28 ft³/s (0.008 m³/s) Jan. 17, 1977.

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

Date	Time	Discharge (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. 23	2400	400	11.3	6.29	1.917	Mar. 8	0500	207	5.86	5.13	1.564
Nov. 28	0200	301	8.52	5.75	1.753	Mar. 21	0400	313	8.86	5.82	1.774
Dec. 24	0800	255	7.22	5.46	1.664	June 2	unknown	*694	19.7	*7.55	2.301
Feb. 21	1900	464	13.1	6.60	2.012						

Minimum daily discharge, 0.88 ft³/s (0.023 m³/s) Sep. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	24	29	11	4.0	6.9	25	4.5	5.9	4.5	2.3	2.6
2	4.5	22	21	10	3.8	6.4	19	4.3	185	4.0	2.3	3.0
3	3.5	9.2	15	9.2	3.7	6.0	16	4.1	97	3.8	2.3	2.1
4	3.6	5.4	12	8.6	3.5	6.2	15	3.9	40	3.4	2.2	1.9
5	3.4	4.3	12	7.8	3.4	48	13	3.8	30	3.4	2.2	1.7
6	3.2	3.8	12	7.0	3.4	28	12	3.6	22	3.6	3.6	1.5
7	3.3	3.3	10	7.1	3.3	30	11	3.3	32	3.1	5.2	1.5
8	3.1	3.1	9.4	5.6	3.3	148	12	3.1	41	3.0	3.0	1.5
9	3.3	10	8.3	5.3	3.3	51	12	3.1	19	3.0	2.7	1.4
10	3.2	17	8.0	5.2	3.2	40	12	3.0	15	3.5	2.6	1.3
11	3.0	7.0	7.6	53	3.2	26	11	3.0	10	2.9	2.8	1.2
12	3.2	5.0	7.0	27	3.2	16	12	3.4	8.5	2.8	3.8	1.2
13	3.1	4.1	6.6	16	3.2	12	11	3.2	7.6	2.7	2.7	1.2
14	2.8	3.8	5.9	14	3.1	10	31	2.9	6.7	2.7	2.6	1.2
15	3.0	3.6	5.6	13	3.2	13	19	2.7	6.7	2.5	2.8	1.2
16	3.1	3.4	5.8	14	3.4	16	15	2.7	7.6	2.4	2.5	1.2
17	4.1	3.1	5.3	17	3.7	54	12	5.3	5.9	2.4	18	1.2
18	3.4	3.1	5.2	14	3.1	38	10	18	4.7	2.4	6.6	1.1
19	3.0	3.0	5.2	11	3.1	24	8.8	10	14	2.3	8.8	1.0
20	3.5	3.0	5.0	9.8	5.8	18	8.0	9.2	12	2.3	3.6	.96
21	3.5	3.0	5.0	8.8	111	167	7.6	7.3	5.9	2.7	3.0	.96
22	3.6	3.1	26	8.8	110	52	7.2	6.4	4.3	5.0	2.7	.96
23	6.4	94	46	7.1	42	34	6.7	5.6	5.0	3.9	2.4	.96
24	4.9	152	136	6.3	28	34	6.3	7.9	5.9	2.8	2.2	1.0
25	4.0	85	74	6.9	19	28	5.9	6.2	4.3	2.6	2.0	.90
26	3.3	109	42	6.0	12	20	5.4	5.0	4.1	2.4	1.9	.90
27	3.1	52	31	5.5	10	16	5.2	4.1	4.0	2.6	1.8	.90
28	3.0	146	21	5.0	8.7	16	5.0	3.8	3.8	2.7	1.8	.85
29	2.7	47	17	4.4	7.3	33	4.8	3.1	34	2.5	1.8	.80
30	2.5	35	15	4.2	-----	32	4.7	2.8	5.6	2.3	6.4	.80
31	2.3	-----	13	4.3	-----	41	-----	2.6	-----	2.3	3.3	-----
TOTAL	105.6	867.3	621.9	332.9	417.9	1070.5	343.6	151.9	647.5	92.5	111.9	38.99
MEAN	3.41	28.9	20.1	10.7	14.4	34.5	11.5	4.90	21.6	2.98	3.61	1.30
MAX	6.4	152	136	53	111	167	31	18	185	5.0	18	3.0
MIN	2.3	3.0	5.0	4.2	3.1	6.0	4.7	2.6	3.8	2.3	1.8	.80
CFSM	.33	2.78	1.93	1.03	1.39	3.32	1.11	.47	2.08	.29	.35	.13
IN.	.38	3.10	2.22	1.19	1.49	3.83	1.23	.54	2.32	.33	.40	.14

CAL YR 1979 TOTAL 7611.20 MEAN 20.9 MAX 304 MIN 2.0 CFSM 2.01 IN 27.22
WTR YR 1980 TOTAL 4802.49 MEAN 13.1 MAX 185 MIN .80 CFSM 1.26 IN 17.18

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).

WATER-DISCHARGE RECORDS

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

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

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

AVERAGE DISCHARGE.--10 years, 72.6 ft³/s (2.056 m³/s), 16.80 in/yr (427 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) 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. 24	0500	1240	35.1	8.31	2.533	Feb. 22	0100	1280	36.2	8.45	2.576
Nov. 28	0600	1200	34.0	8.18	2.493	June 2	1700	*1410	39.9	*8.87	2.704

Minimum daily discharge, 18 ft³/s (0.51 m³/s) Sept. 27-30.

NOTE.--No gage-height record Aug. 14 to Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	117	133	75	40	52	128	51	55	42	23	30
2	48	111	110	72	37	49	105	49	827	38	23	33
3	41	65	96	67	35	48	94	47	455	37	24	27
4	42	53	90	64	34	50	89	46	151	36	23	26
5	40	49	87	60	33	258	79	45	108	36	22	25
6	40	46	86	57	34	133	73	45	89	35	44	24
7	39	43	77	57	33	132	74	43	119	32	131	24
8	41	41	70	53	32	738	73	41	307	32	39	24
9	40	70	66	51	32	208	74	40	96	32	32	23
10	39	120	65	50	31	161	73	40	90	32	31	23
11	38	66	64	291	32	121	68	40	70	31	36	22
12	38	55	62	118	30	94	71	54	62	29	52	22
13	37	52	59	83	29	85	66	47	56	29	33	22
14	35	47	57	78	29	80	199	41	53	27	31	22
15	35	45	55	72	33	83	124	40	61	27	30	22
16	36	43	54	74	33	92	100	40	67	26	100	23
17	37	40	51	79	30	258	84	79	52	26	390	26
18	36	38	50	71	30	169	75	135	48	25	170	24
19	35	38	50	63	30	114	70	74	48	23	190	22
20	35	38	48	60	52	98	66	60	64	23	70	21
21	35	36	47	58	396	753	64	54	47	34	50	20
22	35	37	251	58	624	223	61	49	42	43	41	20
23	41	409	344	54	164	143	59	47	44	33	35	21
24	39	735	716	51	111	158	57	50	57	27	31	20
25	36	437	390	55	90	136	55	46	42	24	28	20
26	35	632	184	52	71	106	54	41	39	23	27	20
27	34	230	133	51	67	93	52	40	37	36	26	18
28	34	763	106	48	63	94	54	39	36	42	26	18
29	34	243	93	44	56	175	53	38	135	29	26	18
30	33	161	88	42	----	173	51	37	52	26	50	18
31	32	----	81	42	----	226	----	37	----	24	35	----
TOTAL	1160	4860	3863	2150	2311	5303	2345	1535	3409	959	1869	678
MEAN	37.4	162	125	69.4	79.7	171	78.2	49.5	114	30.9	60.3	22.6
MAX	48	763	716	291	624	753	199	135	827	43	390	33
MIN	32	36	47	42	29	48	51	37	36	23	22	18
CFSM	.64	2.76	2.13	1.18	1.36	2.91	1.33	.84	1.94	.53	1.03	.39
IN.	.74	3.08	2.45	1.36	1.46	3.36	1.49	.97	2.16	.61	1.18	.43

CAL YR 1979 TOTAL 47403 MEAN 130 MAX 1380 MIN 21 CFSM 2.22 IN 30.04
WTR YR 1980 TOTAL 30442 MEAN 83.2 MAX 827 MIN 18 CFSM 1.42 IN 19.29

03274750 WHITEWATER RIVER NEAR HAGERSTOWN, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 30...	1020	10.0	32	32	2.8
MAR 13...	1450	5.0	87	101	24
JUL 03...	0810	19.0	37	75	7.5
AUG 14...	1515	20.5	30	47	3.8
SEP 24...	0720	----	19	16	.82

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.--12 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 300 ft^3/s (8.50 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)
Nov. 23	2300	317	8.98	4.66	1.420	June 7	2100	596	16.9	5.50	1.676
Nov. 26	0200	303	8.58	4.62	1.408	June 29	0200	320	9.06	4.72	1.439
Nov. 28	0100	401	11.4	4.91	1.497	July 3	0200	811	23.0	6.05	1.844
Dec. 24	0700	424	12.0	4.98	1.518	July 10	0500	*1800	51.0	7.85	2.393
Feb. 21	1700	483	13.7	5.17	1.576	Aug. 7	0100	374	10.6	4.86	1.481
Mar. 21	0300	585	16.6	5.47	1.667	Aug. 17	1300	519	14.7	5.28	1.609
June 2	1000	474	13.4	5.14	1.567	Aug. 18	2100	658	18.6	5.75	1.753

Minimum daily discharge, 1.3 ft^3/s (0.037 m^3/s) Sep. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	17	24	12	5.8	8.4	21	8.3	20	5.1	4.3	2.3
2	6.4	9.0	20	11	5.6	7.0	18	8.3	100	6.0	5.1	2.5
3	4.3	8.0	16	10	5.4	6.6	22	7.9	20	88	11	2.1
4	4.3	7.4	15	9.6	5.2	10	36	7.9	9.6	7.9	4.3	2.0
5	3.8	7.0	14	9.6	5.0	34	19	7.5	7.5	8.7	4.0	2.0
6	3.9	6.7	14	8.7	4.9	17	16	7.1	6.4	4.0	5.7	2.0
7	4.0	6.4	12	8.8	4.6	28	15	6.7	36	3.3	57	1.9
8	4.2	6.0	11	8.3	4.2	74	21	6.4	18	3.0	6.7	1.9
9	4.7	20	11	7.6	4.1	25	19	6.4	9.1	2.8	5.7	1.9
10	4.6	19	10	9.7	4.1	21	17	6.0	8.7	499	6.7	1.9
11	4.1	10	9.3	46	4.0	17	14	6.4	6.7	30	4.8	1.8
12	4.3	8.7	9.5	18	3.9	15	16	9.1	6.4	18	5.4	1.6
13	3.9	7.9	8.6	14	3.8	15	14	7.5	6.0	13	4.0	1.6
14	3.6	7.5	8.0	14	3.8	14	48	6.4	5.7	11	3.6	1.6
15	3.8	6.7	7.5	13	4.0	14	23	6.0	12	9.6	48	1.6
16	3.9	6.4	7.4	13	4.5	14	18	6.4	18	7.9	8.0	1.8
17	3.7	6.0	7.3	13	4.2	18	15	19	5.7	7.1	89	2.8
18	3.5	6.0	7.2	12	3.8	17	13	16	5.4	6.7	109	2.0
19	3.5	5.7	7.1	11	4.5	15	13	17	4.8	6.4	40	1.8
20	3.5	5.7	6.6	11	18	16	12	13	4.8	5.4	8.3	1.8
21	3.7	5.4	6.6	10	73	230	11	10	4.5	7.1	5.7	1.6
22	4.1	6.4	38	10	25	28	11	8.7	4.3	16	4.3	1.6
23	6.1	85	33	9.7	16	21	10	8.3	4.3	6.7	3.6	1.6
24	4.6	92	163	9.7	14	31	9.6	10	4.5	5.1	3.3	1.5
25	4.1	94	47	11	13	23	9.6	8.7	4.3	4.8	3.3	1.5
26	3.7	112	23	9.7	11	18	9.1	7.5	4.0	4.5	3.0	1.5
27	3.6	44	18	9.1	10	16	9.1	6.7	3.8	12	2.8	1.4
28	3.8	137	16	8.8	9.8	20	9.6	6.4	14	11	2.5	1.3
29	3.4	51	15	8.0	9.4	28	9.1	6.4	33	5.4	2.4	1.3
30	3.3	32	14	6.4	-----	38	8.7	6.0	6.0	4.8	2.4	1.3
31	3.3	-----	13	6.2	-----	34	-----	6.0	-----	4.5	2.4	----
TOTAL	126.2	835.9	612.1	358.9	284.6	873.0	486.8	264.0	393.5	824.8	466.3	53.5
MEAN	4.07	27.9	19.7	11.6	9.81	28.2	16.2	8.52	13.1	26.6	15.0	1.78
MAX	6.4	137	163	46	73	230	48	19	100	499	109	2.8
MIN	3.3	5.4	6.6	6.2	3.8	6.6	8.7	6.0	3.8	2.8	2.4	1.3
CFSM	.44	3.05	2.15	1.27	1.07	3.08	1.77	.93	1.43	2.90	1.64	.19
IN.	.51	3.39	2.49	1.46	1.16	3.54	1.98	1.07	1.60	3.35	1.89	.22

CAL YR 1979 TOTAL 6577.4 MEAN 18.0 MAX 295 MIN 3.3 CFSM 1.97 IN 26.71
WTR YR 1980 TOTAL 5579.6 MEAN 15.2 MAX 499 MIN 1.3 CFSM 1.66 IN 22.66

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).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1143: 1943-44(M), 1947 (M). WSP 1335: 1929-30, 1932(M), 1938, 1946-47(m), 1949-50. WSP 1505: 1942(P). WSP 1908: 1937(M), 1944, 1949(M), drainage area. 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.--52 years, 553 ft³/s (15.66 m³/s), 14.20 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)
Dec. 24	2400	6660	189	11.10	3.383	July 10	0800	*9100	258	*12.50	3.810
Mar 21	2300	7010	199	11.34	3.456	Aug. 18	2300	8460	240	12.17	3.709
June 3	1300	7220	204	11.48	3.499						

Minimum daily discharge, 174 ft³/s (4.93 m³/s) Sept. 30.

WATER-QUALITY RECORDS

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	322	431	1530	822	324	341	1790	465	574	582	329	277
2	394	991	1240	751	300	332	1350	446	2740	451	297	292
3	363	738	1020	676	280	320	1430	428	6050	2130	470	273
4	348	549	925	627	270	328	1950	411	2120	651	319	255
5	333	455	864	590	260	1020	1240	404	1380	509	275	252
6	325	411	840	548	250	1710	956	392	1040	405	264	244
7	327	382	769	533	250	1190	858	375	1260	347	1500	234
8	325	359	676	494	240	4360	949	363	2770	332	617	244
9	338	453	595	465	240	3220	1080	355	1270	322	393	227
10	336	1130	564	440	240	1890	968	344	1010	4960	477	221
11	327	879	543	1460	240	1480	870	339	803	1050	414	208
12	330	651	533	2220	230	1040	846	507	643	611	453	204
13	317	552	538	1160	230	846	781	614	561	481	355	208
14	304	486	499	925	230	722	2170	425	510	413	301	208
15	299	439	460	793	241	638	2010	369	553	367	1290	208
16	299	413	450	745	273	665	1470	351	886	336	728	208
17	304	380	431	787	238	888	1170	768	568	312	1470	244
18	305	363	412	763	234	1760	989	1790	465	292	2820	224
19	305	353	407	649	244	1120	871	1500	423	278	3780	204
20	298	344	394	590	417	888	789	987	512	266	1560	198
21	296	330	384	548	1340	5310	735	745	444	355	985	192
22	297	334	900	528	4100	3840	681	605	377	1620	673	189
23	332	1290	2830	509	1960	1930	642	534	360	779	528	189
24	337	5590	5030	445	1160	1740	597	595	449	476	450	186
25	333	3640	5210	490	840	1840	561	606	390	366	403	186
26	320	5930	2740	470	605	1350	535	490	335	320	362	183
27	309	2960	1860	436	519	1070	520	431	310	380	341	180
28	310	5310	1450	407	465	962	522	399	339	1810	312	177
29	306	3240	1190	362	407	1600	516	376	2020	722	300	177
30	312	1880	1020	341	-----	1680	488	368	1130	465	292	174
31	292	-----	912	341	-----	2720	-----	366	-----	372	288	----
TOTAL	9943	41263	37216	20915	16627	48800	30334	17148	32292	22760	23046	6466
MEAN	321	1375	1201	675	573	1574	1011	553	1076	734	743	216
MAX	394	5930	5210	2220	4100	5310	2170	1790	6050	4960	3780	292
MIN	292	330	384	341	230	320	488	339	310	266	264	174
CFSM	.61	2.60	2.27	1.28	1.08	2.98	1.91	1.05	2.03	1.39	1.41	.41
IN.	.70	2.90	2.62	1.47	1.17	3.43	2.13	1.21	2.27	1.60	1.62	.45

CAL YR 1979 TOTAL 410182 MEAN 1124 MAX 10400 MIN 151 CFSM 2.13 IN 28.84
WTR YR 1980 TOTAL 306810 MEAN 838 MAX 6050 MIN 174 CFSM 1.58 IN 21.58

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 mi² (518 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2108: Drainage area.

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 239 ft³/s (6.768 m³/s), 16.23 in/yr (412 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s (85.0 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. 24	0700	3420	96.9	9.77	2.978	Mar. 21	1200	*4300	122	*10.85	3.307
Nov. 26	0400	3660	104	10.09	3.075	June 3	0100	4210	119	10.76	3.280

Minimum daily discharge, 35 ft³/s (0.99 m³/s) Sep. 29, 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1969 to September 1976.
WATER TEMPERATURE: August 1970 to September 1971, March 1973 to September 1976.
SEDIMENT DISCHARGE: April 1967 to September 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	313	471	238	96	119	565	156	520	222	56	114
2	259	405	392	219	94	110	430	146	2180	194	59	208
3	208	293	336	202	90	114	464	144	2430	1190	92	144
4	206	233	317	194	88	123	831	134	649	413	61	103
5	188	208	301	182	86	658	480	132	412	307	51	88
6	173	197	293	166	84	591	374	123	331	255	59	80
7	156	183	269	169	82	480	340	117	377	209	316	73
8	173	174	236	141	82	1960	422	112	549	219	101	70
9	195	310	216	134	80	860	508	108	309	180	72	67
10	181	564	210	130	80	574	472	104	331	393	146	62
11	178	377	202	924	79	434	405	112	249	217	92	58
12	176	293	208	738	78	324	398	565	212	164	174	54
13	155	255	226	380	75	288	357	613	192	164	97	51
14	141	227	198	318	78	249	1020	306	180	134	70	48
15	140	209	182	284	99	225	757	233	244	110	456	46
16	154	199	177	275	112	230	464	212	284	99	303	47
17	153	185	153	284	80	350	360	672	202	85	864	106
18	147	177	144	258	80	457	321	1420	166	75	970	78
19	139	172	145	222	83	340	284	779	156	70	931	59
20	136	164	139	207	187	294	261	500	225	66	445	50
21	133	158	134	192	733	2930	291	367	161	85	290	46
22	147	174	447	192	1470	1010	244	306	132	199	211	43
23	213	1040	779	172	549	557	227	272	125	139	164	43
24	196	2290	2040	148	357	587	209	904	194	95	132	40
25	179	1560	1400	194	275	570	197	461	153	76	121	39
26	162	2500	691	169	214	416	185	321	119	69	108	39
27	151	901	472	148	194	353	177	264	104	69	97	37
28	153	1450	374	136	180	350	192	233	110	86	90	36
29	143	788	321	117	146	549	182	212	904	81	83	35
30	135	566	294	110	----	645	166	212	374	67	287	35
31	129	-----	266	100	----	1120	-----	202	-----	58	161	----
TOTAL	5148	16565	12033	7343	5931	17867	11583	10442	12574	5790	7159	1999
MEAN	166	552	388	237	205	576	386	337	419	187	231	66.6
MAX	259	2500	2040	924	1470	2930	1020	1420	2430	1190	970	208
MIN	129	158	134	100	75	110	166	104	104	58	51	35
CFSM	.83	2.76	1.94	1.19	1.03	2.88	1.93	1.69	2.10	.94	1.16	.33
IN.	.96	3.08	2.24	1.37	1.10	3.32	2.15	1.94	2.34	1.08	1.33	.37

CAL YR 1979 TOTAL 155817 MEAN 427 MAX 4280 MIN 52 CFSM 2.14 IN 28.98
WTR YR 1980 TOTAL 114434 MEAN 313 MAX 2930 MIN 35 CFSM 1.57 IN 21.28

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 mi^2 (982 km^2).

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 hm^3), elevation, 713 ft (217.3 m). Seasonal pool capacity is 184,000 acre-ft (227 hm^3), elevation, 748 ft (228.0 m). Capacity at uncontrolled spillway is 359,600 acre-ft (443 hm^3), 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 hm^3) Aug. 3, 1979, elevation, 754.15 ft (229.865 m); minimum, 127,370 acre-ft (157 hm^3) Feb. 3, 1976, elevation, 735.93 ft (224.311 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 203,330 acre-ft (251 hm^3) Aug. 20, elevation, 751.56 ft (229.075 m); minimum, 132,910 acre-ft (164 hm^3) Dec. 26, elevation, 737.25 ft (224.714 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	748.37	185,970	
Oct. 31	745.32	170,260	-15,710
Nov. 30	744.13	164,360	-5,900
Dec. 31	739.55	142,940	-21,420
CAL YR 1979			-5,150
Jan. 31	740.15	145,630	+2,690
Feb. 29	740.21	145,900	+270
Mar. 31	741.90	153,680	+7,780
Apr. 30	746.63	176,900	+23,220
May 31	748.32	185,710	+8,810
June 30	748.88	188,680	+2,970
July 31	748.53	186,820	-1,860
Aug. 31	748.12	184,640	-2,180
Sept. 30	747.12	179,420	-5,220
WTR YR 1980			-6,550

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.--Water-stage recorder. Datum of gage is 621.76 ft (189.512 m) National Geodetic Vertical Datum of 1929. Prior to May 22, 1954, nonrecording gage at site 100 ft (30 m) downstream at datum 2.00 ft (0.610 m) higher. May 22, 1954 to Aug. 20, 1965, water-stage recorder at site 165 ft (50 m) downstream at datum 2.00 ft (0.610 m) higher.

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

AVERAGE DISCHARGE.--26 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; minimum daily discharge, 4.7 ft^3/s (0.13 m^3/s) Nov. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,920 ft^3/s (82.7 m^3/s) May 20, gage height, 6.45 ft (1.966 m); minimum daily, 47 ft^3/s (1.33 m^3/s) May 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	646	2510	1280	306	462	915	55	282	495	200	207
2	169	816	2550	832	285	462	576	53	595	427	236	207
3	202	833	2610	891	257	462	307	52	766	904	206	206
4	267	850	2590	602	224	456	267	51	1310	785	214	171
5	285	850	2160	298	224	467	375	52	2220	459	211	154
6	284	488	1360	180	224	670	436	51	2370	460	212	154
7	327	867	676	180	221	952	431	49	2020	344	414	142
8	351	1480	456	246	217	968	429	49	1830	199	820	136
9	344	944	462	277	210	976	431	48	1820	200	697	128
10	338	839	456	277	203	1280	427	48	1340	178	503	122
11	351	944	462	418	200	1420	423	49	638	946	503	119
12	444	1020	462	479	200	1490	421	49	463	941	254	119
13	490	1020	462	782	200	1410	413	47	272	510	231	119
14	491	992	462	1200	200	1410	430	66	186	992	200	119
15	506	748	462	1370	200	806	414	97	188	1050	355	156
16	513	670	339	1370	200	475	408	107	230	426	485	178
17	794	702	277	1230	210	773	404	255	247	311	479	177
18	941	683	254	876	224	944	398	343	246	256	854	177
19	942	683	231	581	224	945	396	1240	246	203	1000	158
20	944	683	231	445	228	945	344	2670	246	188	1260	145
21	830	638	235	336	235	1140	229	2710	246	179	1750	145
22	782	602	398	265	393	1790	127	2300	246	182	1940	134
23	810	1200	1550	265	491	2030	83	1390	225	178	1530	116
24	804	1710	1670	265	491	2020	60	921	232	177	1350	102
25	598	2060	548	265	1090	2010	61	921	246	162	1350	149
26	509	1990	1120	285	1400	2000	59	921	245	148	1110	171
27	510	1980	1740	315	1400	1270	58	682	246	146	608	170
28	509	1980	1930	325	1410	463	57	364	248	136	374	171
29	507	1980	1930	329	861	457	55	276	246	140	289	169
30	507	2300	1910	325	-----	717	55	279	394	343	223	170
31	539	-----	1910	315	-----	923	----	280	-----	383	207	----
TOTAL	16040	33198	34413	17104	12228	32593	9489	16475	20089	12448	20065	4591
MEAN	517	1107	1110	552	422	1051	316	531	670	402	647	153
MAX	944	2300	2610	1370	1410	2030	915	2710	2370	1050	1940	207
MIN	152	488	231	180	200	456	55	47	186	136	200	102
CFSM	1.36	2.91	2.92	1.45	1.11	2.77	.83	1.40	1.76	1.06	1.70	.40
IN.	1.57	3.25	3.37	1.67	1.20	3.19	.93	1.61	1.97	1.22	1.96	.45

CAL YR 1979 TOTAL 249114 MEAN 683 MAX 3700 MIN 60 CFSM 1.80 IN 24.39
WTR YR 1980 TOTAL 228733 MEAN 625 MAX 2710 MIN 47 CFSM 1.65 IN 22.39

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.--59 years (1915-17, 1923 to current year), 1,280 ft^3/s (36.25 m^3/s), 14.20 in/yr (361 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, 15,200 ft^3/s (430 m^3/s) Dec. 24; gage height, 10.84 ft (3.304 m); minimum daily, 315 ft^3/s (8.92 m^3/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	1620	4160	2430	846	1110	3580	770	1140	1380	624	613
2	1250	2370	3850	1910	777	949	2640	735	3310	1110	668	624
3	895	1880	3660	1940	720	823	2650	710	7280	2110	1160	610
4	934	1650	3550	1580	681	795	5220	682	4190	1860	730	548
5	869	1550	3200	1170	662	3200	2600	654	3660	1240	604	506
6	787	1120	2480	971	655	3260	2220	631	3420	1140	561	494
7	787	1350	1770	958	647	2790	2030	609	3030	903	1780	464
8	771	2130	1420	939	634	6200	2110	591	5310	672	1780	459
9	762	2250	1330	951	631	5510	2530	576	3510	647	1310	437
10	760	2960	1290	906	632	3590	2350	563	2750	5030	1100	412
11	755	2370	1280	4740	622	3330	2120	573	1880	2620	1240	400
12	828	2130	1270	3480	599	2990	2300	904	1480	1890	1040	391
13	875	1980	1470	2460	578	2820	2080	1470	1150	1210	786	383
14	845	1870	1380	2520	592	2740	4450	879	929	1560	641	373
15	843	1540	1250	2550	611	2090	3390	779	876	1560	3240	414
16	854	1390	1090	2480	769	1720	2600	744	1530	868	1870	454
17	1090	1370	942	2360	690	2140	2230	2740	1190	702	1610	480
18	1260	1320	869	2030	631	3160	2030	4640	978	615	3190	488
19	1250	1290	841	1630	646	2700	1860	6130	895	527	7560	441
20	1240	1260	815	1410	810	2430	1680	4480	877	488	3300	404
21	1140	1180	794	1230	2130	10500	1450	3830	931	480	2990	395
22	1080	1150	2340	1120	5040	7450	1220	3270	824	1900	2820	375
23	1190	4180	5840	1080	3190	4510	1080	2450	769	1390	2370	344
24	1210	9360	10900	945	2180	4490	976	2080	811	878	2120	315
25	996	9150	8020	1080	2240	4450	919	2170	853	664	2050	374
26	876	10600	4700	1060	2350	3750	873	1880	770	555	1770	409
27	857	6310	4020	1020	2260	2840	847	1500	727	529	1230	404
28	851	7510	3610	976	2210	2050	848	1080	701	1500	913	401
29	848	6530	3330	897	1590	2760	857	931	1450	1090	776	399
30	839	4600	3190	867	-----	3360	812	905	1870	942	677	398
31	830	-----	3040	877	-----	5240	-----	920	-----	907	631	-----
TOTAL	28909	95970	87701	50567	36623	105747	62552	50876	59091	38967	53141	13209
MEAN	933	3199	2829	1631	1263	3411	2085	1641	1970	1257	1714	440
MAX	1260	10600	10900	4740	5040	10500	5220	6130	7280	5030	7560	624
MIN	537	1120	794	867	578	795	812	563	701	480	561	315
CFSM	.76	2.61	2.31	1.33	1.03	2.79	1.70	1.34	1.61	1.03	1.40	.36
IN.	.88	2.92	2.67	1.54	1.11	3.21	1.90	1.55	1.80	1.18	1.62	.40

CAL YR 1979 TOTAL 847560 MEAN 2322 MAX 15500 MIN 405 CFSM 1.90 IN 25.76
WTR YR 1980 TOTAL 683353 MEAN 1867 MAX 10900 MIN 315 CFSM 1.53 IN 20.77

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

WATER-QUALITY RECORDS

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

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos Feb. 9, 19, 1980, minimum, 95 micromhos Nov. 25, 1978.
WATER TEMPERATURE: Maximum, 28.0°C July 31, Aug. 21, 1975; minimum, freezing point on may days during 1976-77 winter periods, Feb. 8, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos Feb. 9, 19 minimum, 205 micromhos Aug. 15.
WATER TEMPERATURE: Maximum, 25.5°C July 9; minimum, 1.0°C Feb. 18.

REMARKS.--Figure for bottom material for May 1, 1979, published in IN-79-1 not valid, bottom material not collected at this site.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	TEMPERATURE, WATER (DEG C)	TEMPERATURE, AIR (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	TURBIDITY (NTU)	SPECIFIC CONDUCTANCE (MICROMHOS)	OXYGEN, DISSOLVED (MG/L)	PH FIELD (UNITS)	ALKALINITY (MG/L AS CACO3)	HARDNESS (MG/L AS CACO3)
OCT 01...	1130	80010	20.0	----	592	3.0	600	13.3	8.1	240	290
NOV 16...	1000	80010	9.5	----	1310	1.0	500	13.1	8.0	230	280
DEC 05...	1300	80010	7.0	----	2990	2.0	550	14.3	8.1	210	260
JAN 21...	1630	-----	1.6	----	1130	.50	635	----	7.7	250	310
FEB 19...	1330	80010	3.0	9.0	640	.50	610	15.4	8.3	260	290
MAR 11...	1615	80010	3.4	2.5	3310	1.5	520	14.9	7.8	220	280
APR 08...	1445	80010	10.0	17.5	1940	1.5	566	11.7	8.1	240	290
MAY 06...	1215	80010	18.8	23.5	599	2.8	555	----	8.5	240	310
JUN 06...	1400	80010	12.3	31.5	3380	1.5	526	8.4	7.2	210	250
JUL 01...	1600	80010	18.3	31.0	1290	67	473	----	7.5	200	270
AUG 07...	1100	80010	23.0	29.0	2520	230	460	----	7.3	190	220
SEP 04...	1100	80010	22.7	25.5	521	.50	500	9.1	8.0	160	280

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	SODIUM PERCENT	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT 01...	54	75	26	8.1	.2	6	11	2.7	339	318	542
NOV 16...	54	71	26	8.6	.2	9	11	2.3	320	318	1130
DEC 05...	54	66	24	8.6	.2	10	11	2.3	312	295	2520
JAN 21...	60	78	28	6.6	.2	4	8.6	2.0	49	277	149
FEB 19...	34	75	26	16	.4	10	21	5.2	374	359	646
MAR 11...	55	69	25	8.2	.2	6	11	2.4	336	312	3000
APR 08...	53	76	25	7.1	.2	5	----	2.0	339	322	1780
MAY 06...	74	78	29	8.5	.2	6	----	1.8	322	323	521
JUN 06...	40	62	23	7.8	.2	6	----	2.1	337	293	3080
JUL 01...	66	67	24	8.2	.2	6	----	2.6	313	289	1090
AUG 07...	26	55	19	6.5	.2	6	----	3.0	300	250	2040
SEP 04...	120	65	28	8.0	.2	6	----	2.5	333	263	468

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT 01...	.46	19	39	.2	4.0	3.4	---	.61	---	----
NOV 16...	.44	18	39	.2	5.1	2.7	2.5	.39	.37	.000
DEC 05...	.42	16	37	.2	5.3	2.3	2.2	.28	.22	.000
JAN 21...	.07	.5	2.0	.0	2.1	2.6	1.8	.31	.18	.040
FEB 19...	.51	22	42	.2	5.5	3.1	3.0	.45	.49	.000
MAR 11...	.46	17	38	.2	5.6	4.4	3.7	.51	.32	.080
APR 08...	.46	15	35	.2	5.1	---	3.4	---	.57	.000
MAY 06...	.44	16	33	.2	1.7	2.7	2.5	.32	.22	.010
JUN 06...	.46	16	38	.2	4.4	---	3.4	---	.30	.030
JUL 01...	.43	15	34	.2	4.2	4.1	3.7	1.0	.55	.020
AUG 07...	.41	13	27	.3	4.1	5.6	2.0	3.8	.28	.000
SEP 04...	.45	17	34	.2	3.8	2.1	2.2	.17	.28	.060

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	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 NH4)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)
OCT 01...	.140	---	2.6	---	.17	---	15	.040	-----	.12
NOV 16...	.010	.03	2.3	2.1	.01	.00	12	.010	.020	.03
DEC 05...	.000	.06	2.0	2.0	.00	.00	10	.080	.050	.25
JAN 21...	.010	.10	2.3	1.6	.01	.05	12	.010	.000	.03
FEB 19...	.000	.00	2.6	2.5	.00	.00	14	3.800	3.700	12
MAR 11...	.060	.17	3.8	3.3	.07	.10	19	.050	.040	.15
APR 08...	----	---	2.8	2.8	---	.00	----	.040	.030	.12
MAY 06...	.040	.13	2.3	2.3	.05	.01	12	.010	.040	.03
JUN 06...	----	---	---	3.1	---	.04	----	.070	.030	.21
JUL 01...	.000	.43	3.1	3.1	.00	.03	18	.170	.050	.52
AUG 07...	.040	3.5	1.8	1.7	.05	.00	25	.940	.050	2.9
SEP 04...	.060	.00	1.9	1.9	.07	.08	9.4	.240	.040	.74

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 01...	---	---	---	1960	K133	164	-----	19	30	--
NOV 16...	4.8	---	---	-----	-----	------	4900	30	106	82
DEC 05...	---	---	---	-----	-----	------	-----	38	307	64
JAN 21...	3.1	---	---	470	1	203	-----	69	211	46
FEB 19...	---	9.3	.5	10100	K900	327	-----	5	8.6	--
MAR 11...	3.7	---	---	-----	-----	------	16000	60	536	84
APR 08...	4.6	---	---	3650	K163	29	-----	80	419	71
MAY 06...	---	5.3	.3	4000	600	K20	1700	39	63	43
JUN 06...	3.6	---	---	44000	-----	K200	920	80	730	71
JUL 01...	5.5	---	---	33	93	92	880	177	616	94
AUG 07...	---	6.5	2.4	-----	-----	K24100	9300	1770	12000	94
SEP 04...	3.2	---	---	-----	41000	------	7000	36	51	84

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 01...	1130	1	--	--	80	---	---	3	--	--	10
NOV 16...	1000	2	0	2	60	40	100	1	0	0	10
FEB 19...	1330	2	0	2	80	20	100	5	0	0	10
MAY 06...	1215	2	0	1	80	20	100	0	0	0	10
AUG 07...	1100	2	2	4	70	200	300	0	3	3	40

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)
OCT 01...	--	---	2	--	--	7	--	--	---	---	10
NOV 16...	--	---	1	0	0	1	3	4	210	220	10
FEB 19...	0	10	2	0	0	2	1	3	110	120	10
MAY 06...	--	10	0	0	0	4	0	4	190	200	10
AUG 07...	10	50	0	19	19	4	28	32	---	---	50

DATE	LEAD, DISSOLVED (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, DISSOLVED (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)
OCT 01...	1	--	--	----	----	10	11	--	--	--	--
NOV 16...	0	1	1	30	40	10	2	3	5	0	0
FEB 19...	0	1	1	10	20	10	3	0	3	0	0
MAY 06...	0	4	4	20	30	7	2	0	2	0	0
AUG 07...	0	32	32	1400	1400	6	2	34	36	0	0

DATE	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, TOTAL (UG/L AS SE)	MERCURY DISSOLVED (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT 01...	--	2	---	---	0	--	--	.5	---	---
NOV 16...	0	20	20	40	0	0	0	.1	.0	.1
FEB 19...	0	0	10	10	0	0	0	.1	.0	.1
MAY 06...	0	0	30	30	0	0	0	.1	.0	.1
AUG 07...	0	6	100	110	0	0	0	.4	.0	.4

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	495	495	---	590	550	455	565	530	460	530	480
2	465	450	495	---	540	550	490	570	430	515	475	470
3	455	460	475	---	575	550	535	575	325	535	390	450
4	535	485	495	---	600	585	510	580	440	525	450	485
5	510	485	510	---	610	525	490	580	510	510	475	490
6	510	500	520	---	600	425	490	590	515	520	505	505
7	510	520	540	---	610	425	525	575	525	540	405	520
8	535	485	530	---	600	375	540	550	490	550	425	530
9	515	475	550	---	630	410	470	540	455	560	490	515
10	550	440	550	---	600	465	490	575	490	250	495	505
11	405	485	550	---	590	500	520	550	520	350	505	525
12	430	510	530	---	580	490	515	515	555	450	465	540
13	465	510	560	---	575	525	490	400	575	510	480	535
14	525	520	500	---	590	500	350	470	575	540	510	530
15	515	515	495	---	540	525	420	500	580	500	205	525
16	495	510	510	---	570	525	480	545	450	515	385	520
17	495	530	475	---	565	560	510	535	480	525	370	520
18	485	495	520	---	570	515	525	495	530	525	370	505
19	495	475	560	---	630	460	500	360	490	520	400	500
20	510	495	560	---	590	525	525	480	520	520	435	515
21	515	510	590	---	490	300	520	525	550	525	460	525
22	470	530	500	545	430	390	515	515	535	360	480	525
23	495	395	430	570	400	465	540	530	550	410	500	515
24	495	350	380	570	430	480	565	520	550	445	505	525
25	540	370	355	610	490	500	550	500	540	480	495	520
26	525	385	440	600	540	500	540	515	530	505	490	495
27	435	415	480	570	590	480	550	515	545	450	460	490
28	515	415	520	560	585	490	550	530	570	400	470	485
29	505	415	520	540	600	500	555	570	500	360	495	495
30	525	460	525	580	---	470	550	530	355	450	515	490
31	520	---	530	600	---	440	---	525	---	525	510	---
MEAN	501	470	506	575	562	484	509	527	507	478	456	508
MAX	590	530	590	610	630	585	565	590	580	560	530	540
MIN	405	350	355	540	400	300	350	360	325	250	205	450

WTR YR 1980 MEAN 503 MAX 630 MIN 205

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	15.0	7.5	---	2.0	1.5	7.5	13.0	20.5	18.0	24.0	21.5
2	18.0	12.5	7.0	---	2.0	1.5	6.5	13.5	19.5	19.0	23.0	23.0
3	17.5	12.0	7.0	---	1.5	1.5	8.5	14.5	19.0	21.5	23.0	23.0
4	17.5	13.5	8.0	---	1.5	2.5	8.5	15.0	18.5	21.5	24.0	23.0
5	16.5	12.5	8.0	---	1.5	4.0	7.5	15.5	14.0	22.0	24.0	21.0
6	16.0	12.5	9.0	---	3.0	3.0	8.5	16.5	14.5	21.5	23.0	21.0
7	15.5	14.5	8.5	---	2.5	3.5	10.0	16.0	15.5	20.5	23.5	20.5
8	15.5	13.0	8.5	---	3.0	4.0	10.5	15.0	14.5	22.0	22.0	19.5
9	16.0	11.5	8.0	---	3.5	4.0	11.0	13.0	14.0	25.5	20.0	19.0
10	15.0	10.5	6.5	---	2.5	5.0	9.0	14.5	14.5	24.5	21.5	18.0
11	14.0	12.0	7.0	---	2.5	4.0	8.5	15.5	13.5	24.5	23.5	18.0
12	14.0	11.0	8.5	---	1.5	3.0	10.0	17.5	14.0	23.0	23.0	18.0
13	14.0	11.0	8.0	---	2.0	4.0	9.5	18.0	15.5	21.5	23.0	19.0
14	13.5	11.5	6.0	---	3.0	3.0	8.0	18.0	19.0	22.0	23.0	19.0
15	14.0	10.5	5.5	---	4.0	4.5	7.0	16.0	20.0	21.0	23.0	19.0
16	15.0	10.5	6.0	---	3.0	5.5	6.0	14.0	19.0	22.5	22.5	18.5
17	16.0	10.0	4.0	---	2.0	7.0	8.0	15.5	20.0	24.0	22.0	18.0
18	16.0	11.0	4.0	---	1.0	8.0	10.5	16.0	20.0	24.5	22.0	18.5
19	16.5	10.5	4.0	---	2.5	6.0	11.5	16.5	20.0	23.5	22.0	19.0
20	17.0	10.5	4.0	---	4.0	6.5	12.0	14.5	20.0	24.0	22.0	18.0
21	17.5	11.5	4.0	---	4.0	7.5	13.0	12.0	19.0	24.5	21.0	19.5
22	17.5	12.5	6.0	5.0	4.0	5.5	13.5	12.0	20.0	24.0	20.0	21.0
23	15.0	11.5	7.0	4.0	4.0	6.0	16.0	13.0	20.0	23.5	18.0	19.5
24	14.0	10.5	7.5	2.5	4.0	6.0	14.5	14.0	22.0	22.5	18.0	17.5
25	13.5	9.5	8.5	4.5	3.0	6.5	13.5	14.0	23.0	22.5	18.0	17.5
26	12.0	10.0	7.0	3.5	3.0	6.0	13.0	13.5	24.5	23.0	18.5	16.5
27	12.0	10.0	6.5	3.5	3.0	5.5	12.5	13.0	23.5	22.5	20.0	16.5
28	14.0	9.5	5.5	4.0	2.5	6.5	11.5	13.0	22.0	22.5	20.0	16.0
29	13.5	7.0	5.5	2.5	3.5	7.5	10.5	20.5	21.5	22.5	20.0	16.0
30	14.0	7.0	6.0	2.5	---	7.5	12.5	21.0	21.0	23.5	20.0	17.5
31	14.5	----	5.5	1.5	---	7.5	----	20.5	----	22.5	20.5	----
MEAN	15.5	11.0	6.5	3.5	2.5	5.0	10.5	15.5	18.5	22.5	21.5	19.0
MAX	18.5	15.0	9.0	5.0	4.0	8.0	16.0	21.0	24.5	25.5	24.0	23.0
MIN	12.0	7.0	4.0	1.5	1.0	1.5	6.0	12.0	13.5	18.0	18.0	16.0

WTR YR 1980 MEAN 13.0 MAX 25.5 MIN 1.0

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 mi^2 (98.7 km^2).

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records good except those below 1 ft^3/s (0.028 m^3/s) and those for winter periods, which are poor.

AVERAGE DISCHARGE.--19 years, 42.1 ft^3/s (1.192 m^3/s), 15.01 in/yr (381 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) Apr. 29, 1970, gage height, 12.7 ft (3.87 m), from floodmarks; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 14.00 ft (4.267 m), discharge, 16,300 ft^3/s (462 m^3/s), on basis of contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft^3/s (70.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 25	1400	*3900	110	*8.02	2.444
Jan. 11	0700	3260	92.3	7.45	2.271

Minimum daily discharge, .06 ft^3/s (0.002 m^3/s) July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	206	40	22	10	16	79	11	34	1.3	.19	.39
2	139	116	31	19	9.6	15	54	10	27	5.0	.25	7.6
3	38	39	28	17	9.2	14	43	9.6	12	15	25	9.0
4	81	25	25	18	9.0	35	48	8.6	7.6	5.7	10	2.4
5	42	19	25	16	8.9	719	37	9.0	6.1	3.7	4.0	.78
6	27	17	24	12	8.9	156	31	7.6	5.2	2.5	1.8	.58
7	19	14	20	18	9.0	139	29	7.0	4.7	1.6	1.4	.48
8	15	13	16	15	9.3	414	36	6.6	15	1.3	.77	.42
9	14	543	14	13	9.4	88	42	6.4	7.9	.83	.48	.88
10	12	265	15	11	9.4	51	70	6.1	5.6	.72	.36	8.3
11	11	66	15	1330	8.9	36	46	6.9	5.9	.64	3.2	1.8
12	11	41	14	158	8.1	30	266	92	4.9	.47	17	.71
13	11	31	66	60	7.8	74	80	39	3.5	.39	2.2	.43
14	9.1	24	40	49	9.0	79	470	17	2.8	.33	3.1	.33
15	8.1	21	26	41	37	59	106	12	2.5	.29	21	.28
16	8.0	18	23	38	98	42	65	56	32	.25	8.5	.28
17	8.0	17	19	35	38	147	46	605	10	.21	3.5	.58
18	7.7	15	17	28	23	102	39	227	4.7	.16	1.8	.46
19	7.0	14	17	21	21	54	34	267	3.4	.13	77	.43
20	6.6	12	16	19	66	43	30	77	3.1	.10	11	.38
21	6.5	12	15	18	159	382	26	39	3.0	.06	3.4	.35
22	7.3	13	98	20	227	89	23	25	1.8	.35	1.6	.33
23	26	692	215	17	94	53	21	33	6.3	2.4	.85	32
24	13	481	837	17	59	209	19	160	40	1.6	.50	3.8
25	8.9	1310	328	27	40	122	16	66	9.5	1.1	.38	1.1
26	7.6	432	93	24	33	58	16	29	4.5	.66	.29	.46
27	6.9	96	53	19	29	43	14	19	3.2	.43	.32	.30
28	7.8	222	39	16	27	94	14	14	2.1	.37	.25	.20
29	8.6	77	33	14	23	163	14	11	2.0	.28	.17	.15
30	8.0	50	29	12	------	258	12	15	1.6	.24	.11	.10
31	7.1	----	25	11	------	183	----	11	-----	.14	1.1	-----
TOTAL	600.2	4901	2256	2135	1100.5	3967	1826	1902.8	271.9	48.25	201.52	75.30
MEAN	19.4	163	72.8	68.9	37.9	128	60.9	61.4	9.06	1.56	6.50	2.51
MAX	139	1310	837	1330	227	719	470	605	40	15	77	32
MIN	6.5	12	14	11	7.8	14	12	6.1	1.6	.06	.11	.10
CFSM	.51	4.28	1.91	1.81	1.00	3.36	1.60	1.61	.24	.04	.17	.07
IN.	.59	4.79	2.20	2.08	1.07	3.87	1.78	1.86	.27	.05	.20	.07

CAL YR 1979 TOTAL 27113.20 MEAN 74.3 MAX 1780 MIN 1.8 CFSM 1.95 IN 26.47
WTR YR 1980 TOTAL 19285.47 MEAN 52.7 MAX 1330 MIN .06 CFSM 1.38 IN 18.83

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1968 to current year.
SEDIMENT DISCHARGE: August 1969 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAM-FLOW, INSTANTANEOUS (CFS)	TEMPERATURE, WATER (DEG C)	TEMPERATURE, AIR (DEG C)	SPECIFIC CONDUCTANCE (MICROMHOS)	OXYGEN, DISSOLVED (MG/L)	PH FIELD (UNITS)	ALKALINITY (MG/L AS CACO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT 02...	0950	80010	172	17.0	---	430	11.4	8.0	130	1.2	----
NOV 16...	1530	80010	18	6.5	---	520	14.2	8.2	220	1.2	1.0
DEC 06...	1100	80010	23	4.0	---	595	13.9	8.2	220	1.4	1.3
JAN 22...	1530	-----	20	1.6	---	146	14.4	8.8	35	.60	.38
FEB 20...	1130	80010	50	.0	8.0	490	15.2	8.1	180	.56	.71
MAR 11...	1030	80010	36	2.3	.0	452	14.6	7.9	170	1.4	1.4
APR 08...	1100	80010	29	12.5	17.0	480	14.5	8.4	180	----	.31
MAY 06...	0815	80010	7.4	17.0	23.5	510	----	8.2	180	.09	.10
JUN 06...	1045	80010	5.4	23.0	30.4	462	9.1	8.0	180	----	.21
JUL 01...	0900	80010	1.3	22.5	27.0	420	----	7.6	160	.23	.22
AUG 07...	1500	80010	1.4	30.7	33.5	382	----	7.8	130	.18	.21
SEP 04...	1315	80010	1.3	25.5	29.0	480	9.3	7.9	150	.17	.16

DATE	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS PO4)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	SODIUM PERCENT	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
OCT 02...	--	.210	----	170	42	54	7.3	.2	8	14	6.3
NOV 16...	.00	.030	.000	280	62	88	11	.3	10	14	2.6
DEC 06...	.09	.050	.030	280	57	86	9.9	.3	9	12	1.9
JAN 22...	.03	.010	.010	60	25	15	6.0	.3	17	13	1.9
FEB 20...	.00	.010	.000	230	46	69	13	.4	11	15	2.1
MAR 11...	.09	.050	.030	220	54	70	9.2	.3	8	11	2.0
APR 08...	.00	----	.000	250	71	74	11	.3	9	----	1.6
MAY 06...	.00	.060	.000	260	84	76	14	.4	10	----	2.1
JUN 06...	.00	----	.000	250	69	75	11	.3	9	----	2.6
JUL 01...	.00	.090	.000	220	63	68	13	.4	11	----	3.4
AUG 07...	.06	.140	.020	170	41	52	17	.6	17	----	4.4
SEP 04...	.00	.310	.000	200	48	61	29	.9	24	----	5.9

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLO-RIDE, S-OLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
OCT											
02...	16	35	.2	8.6	1150	K81	129	235	214	109	.32
NOV											
16...	13	58	.2	7.0	-------	----	---	327	332	15.9	.44
DEC											
06...	11	60	.2	8.4	-------	----	---	347	330	21.5	.47
JAN											
22...	5.6	22	.0	3.1	K450	1	133	113	82	6.10	.15
FEB											
20...	17	58	.2	4.3	205	K7	---	313	288	42.3	.43
MAR											
11...	12	51	.2	5.8	-------	----	---	288	271	28.0	.39
APR											
08...	11	61	.2	.5	2150	K15	K10	304	285	23.4	.41
MAY											
06...	13	76	.2	.9	23000	K82	K66	335	309	6.69	.46
JUN											
06...	12	58	.3	6.1	76000	----	K67	341	289	4.97	.46
JUL											
01...	13	51	.2	5.9	K3	38	K18	293	265	1.03	.40
AUG											
07...	18	44	.3	6.4	K172000	373	28	256	231	.97	.35
SEP											
04...	35	58	.3	6.0	-------	K238	K156	330	297	1.16	.45

DATE	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT											
02...	126	59	79	--	--	--	--	--	---	--	--
NOV											
16...	67	3.3	58	--	--	--	--	--	---	--	--
DEC											
06...	41	2.5	45	--	--	--	--	--	---	--	--
JAN											
22...	77	4.2	51	--	--	--	--	--	---	--	--
FEB											
20...	7	.94	--	--	--	--	--	--	---	--	--
MAR											
11...	--	----	--	--	--	--	--	--	---	--	--
APR											
08...	--	----	--	--	--	--	--	--	---	--	--
MAY											
06...	--	----	--	--	--	--	--	--	---	--	--
JUN											
06...	57	.83	70	--	--	--	--	--	---	--	--
JUL											
01...	54	.19	99	--	--	--	--	--	---	--	--
AUG											
07...	46	.17	96	2	1	3	40	60	100	1	4
SEP											
04...	84	.29	96	1	0	1	40	60	100	1	7

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	CYANIDE TOTAL (MG/L AS CN)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 0....	--	--	--	--	--	---	--	--	---	---	---
NOV 16...	--	--	--	--	--	---	--	--	---	---	---
DEC 06...	--	--	--	--	--	---	--	--	---	---	---
JAN 22...	--	--	--	--	--	---	--	--	---	---	---
FEB 20...	--	--	--	--	--	---	--	--	---	---	---
MAR 11...	--	--	--	--	--	---	--	--	---	---	---
APR 08...	--	--	--	--	--	---	--	--	---	---	---
MAY 06...	--	--	--	--	--	---	--	--	---	---	---
JUN 06...	--	--	--	--	--	---	--	--	---	---	---
JUL 01...	--	--	--	--	--	---	--	--	---	---	---
AUG 07...	0	0	10	30	3	10	--	0	.00	890	900
SEP 04...	0	1	3	20	3	15	0	13	.00	520	520

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)
OCT 02...	--	---	--	--	--	--	--	---	--	--	--
NOV 16...	--	---	--	--	--	--	--	---	--	--	--
DEC 06...	--	---	--	--	--	--	--	---	--	--	--
JAN 22...	--	---	--	--	--	--	--	---	--	--	--
FEB 20...	--	---	--	--	--	--	--	---	--	--	--
MAR 11...	--	---	--	--	--	--	--	---	--	--	--
APR 08...	--	---	--	--	--	--	--	---	--	--	--
MAY 06...	--	---	--	--	--	--	--	---	--	--	--
JUN 06...	--	---	--	--	--	--	--	---	--	--	--
JUL 01...	--	---	--	--	--	--	--	---	--	--	--
AUG 07...	14	11	0	3	60	80	21	10	0	0	0
SEP 04...	4	10	--	4	40	70	31	10	0	0	0

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	LITHIUM DISSOLVED (UG/L AS LI)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, TOTAL (UG/L AS SE)	MERCURY DISSOLVED (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)
OCT 02...	---	----	--	--	--	--	--	--	--	---	--
NOV 16...	---	----	--	--	--	--	--	--	--	---	--
DEC 06...	---	----	--	--	--	--	--	--	--	---	--
JAN 22...	---	----	--	--	--	--	--	--	--	---	--
FEB 20...	---	----	--	--	--	--	--	--	--	---	--
MAR 11...	---	----	--	--	--	--	--	--	--	---	--
APR 08...	---	----	--	--	--	--	--	--	--	---	--
MAY 06...	---	----	--	--	--	--	--	--	--	---	--
JUN 06...	---	----	--	--	--	--	--	--	--	---	--
JUL 01...	---	----	--	--	--	--	--	--	--	---	--
AUG 07...	180	6.0	5	5	10	4	0	0	0	.2	.0
SEP 04...	210	6.0	29	20	50	4	0	0	0	.1	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	URANIUM NATURAL DISSOLVED (UG/L AS U)
OCT 02...	---	---	--	---	--	---	--	---
NOV 16...	---	---	--	---	--	---	--	---
DEC 06...	---	---	--	---	--	---	--	---
JAN 22...	---	---	--	---	--	---	--	---
FEB 20...	---	---	--	---	--	---	--	---
MAR 11...	---	---	--	---	--	---	--	---
APR 08...	---	---	--	---	--	---	--	---
MAY 06...	---	---	--	---	--	---	--	---
JUN 06...	---	---	--	---	--	---	--	---
JUL 01...	---	---	--	---	--	---	--	---
AUG 07...	.2	---	--	---	--	---	--	---
SEP 04...	.1	6.9	.7	5.8	.6	6.2	.6	1.0

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	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 SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	PER-THANE TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	LINDANE TOTAL (UG/L)
SEP 04...	1315	6.9	.7	5.8	.6	6.2	.6	1.0	.00	.0	.00	.00

DATE	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)
SEP 04...	.0	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00

DATE	PCB TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
SEP 04...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.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).

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records good above 10 ft^3/s (0.28 m^3/s) and fair below.

AVERAGE DISCHARGE.--11 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, 5,600 ft^3/s (159 m^3/s) Aug. 1, 1979, gage height, 11.27 ft (3.435 m), from rating curve extended above 1,800 ft^3/s (51.0 m^3/s); no flow for many days in 1970, 1972, and 1975.

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)
Nov. 9	1330	1310	37.1	5.98	1.823	May 12	1800	2170	61.5	7.21	2.198
Nov. 23	2330	1280	36.2	5.93	1.807	May 17	1945	3400	94.3	8.30	2.530
Nov. 25	1245	*4710	133	*9.29	2.832	June 1	1615	2930	83.0	7.90	2.408
Dec. 24	0745	1070	30.3	5.58	1.701	June 23	1700	1130	32.0	5.69	1.734
Jan. 11	0745	2960	83.8	7.93	2.417	Aug. 14	2045	1530	43.3	6.35	1.935

Minimum daily discharge, 0.16 ft^3/s (0.005 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	221	42	23	6.6	15	69	8.6	448	3.1	6.2	.87
2	111	93	30	19	6.2	13	51	7.8	109	20	4.0	3.8
3	36	41	25	17	5.8	12	40	7.4	43	75	46	.50
4	56	26	23	17	5.4	20	46	6.6	25	19	7.9	.35
5	32	19	21	15	5.4	42	30	6.2	18	14	29	.30
6	22	16	20	12	5.4	158	25	5.6	14	8.2	13	.25
7	15	12	16	15	5.4	129	23	5.0	11	5.9	6.0	.22
8	11	11	12	14	5.5	281	24	4.4	9.4	4.8	3.0	.19
9	9.5	466	10	11	5.6	87	31	4.0	6.3	4.0	1.6	.30
10	7.4	177	10	13	5.8	54	62	3.6	11	6.2	.86	2.0
11	6.2	62	10	927	5.6	37	37	13	9.3	11	.62	.80
12	6.6	38	10	149	5.2	29	220	310	4.8	5.7	.97	.50
13	5.2	27	47	73	5.0	44	73	125	3.7	4.0	.56	.40
14	4.3	20	30	55	6.0	50	311	36	3.3	3.0	98	.30
15	3.6	16	22	44	25	42	91	22	3.2	2.2	69	.23
16	3.2	14	19	36	100	33	60	35	100	1.8	7.0	.18
17	2.8	11	15	32	50	107	46	892	12	1.6	1.9	1.0
18	2.5	9.9	14	26	35	73	36	267	7.4	1.5	2.3	.50
19	2.3	8.8	13	21	30	46	30	198	5.2	1.3	26	.35
20	2.1	7.8	13	19	64	42	26	83	4.1	1.2	7.0	.25
21	2.0	6.8	12	17	94	347	24	47	3.3	2.0	2.0	.20
22	2.5	8.6	48	17	137	88	20	33	3.2	11	1.0	.17
23	8.6	589	117	14	70	54	18	29	146	6.1	.60	.60
24	6.6	339	564	17	47	166	15	69	34	3.5	.40	.45
25	5.0	1140	338	18	34	120	13	48	13	2.5	.35	.35
26	3.8	310	107	14	28	62	12	28	8.5	2.0	.31	.29
27	3.0	99	64	12	24	45	12	20	5.7	1.7	.28	.24
28	5.0	185	46	11	21	60	11	15	4.2	1.5	.25	.20
29	4.0	79	37	9.8	19	96	11	12	7.0	1.3	.23	.17
30	3.0	53	32	7.3	-----	202	9.5	17	4.5	1.2	.21	.16
31	2.5	------	27	6.9	-----	134	------	12	------	1.0	.20	-----
TOTAL	397.7	4105.9	1794	1682.0	856.9	2688	1476.5	2370.2	1077.1	227.3	336.74	16.12
MEAN	12.8	137	57.9	54.3	29.5	86.7	49.2	76.5	35.9	7.33	10.9	.54
MAX	111	1140	564	927	137	347	311	892	448	75	98	3.8
MIN	2.0	6.8	10	6.9	5.0	12	9.5	3.6	3.2	1.0	.20	.16
CFSM	.47	4.98	2.11	1.98	1.07	3.15	1.79	2.78	1.31	.27	.40	.02
IN.	.54	5.55	2.43	2.28	1.16	3.64	2.00	3.21	1.46	.31	.46	.02

CAL YR 1979 TOTAL 20252.19 MEAN 55.5 MAX 1140 MIN .17 CFSM 2.02 IN 27.39
WTR YR 1980 TOTAL 17028.46 MEAN 46.5 MAX 1140 MIN .16 CFSM 1.69 IN 23.03

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV						
01...	1630	12.0	695	234	439	89
JAN						
22...	1235	--	17	16	.73	--
MAR						
10...	1200	6.5	54	10	1.5	--
MAY						
05...	1415	22.5	5.2	23	.32	--
JUN						
30...	1315	25.5	3.9	35	.37	--
AUG						
11...	1300	31.0	.60	19	.03	--

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

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

AVERAGE DISCHARGE.--26 years, 226 ft^3/s (6.400 m^3/s), 16.24 in/yr (412 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)
Nov. 10	0600	3080	87.2	16.37	4.990	Dec. 24	2100	3140	88.9	16.53	5.038
Nov. 24	0800	3520	99.7	17.53	5.343	Jan. 12	0200	3240	91.8	16.80	5.121
Nov. 26	1300	*4010	114	*18.63	5.678	May. 18	unknown	3700	105	18.0	5.49

Minimum daily discharge, 3.0 ft^3/s (0.085 m^3/s) Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	497	414	220	75	135	631	94	88	23	23	4.5
2	294	1370	289	196	71	123	461	87	77	172	16	3.9
3	222	442	239	175	68	136	373	78	68	962	12	6.4
4	235	281	222	167	66	145	325	74	59	794	12	6.9
5	218	218	201	166	65	1120	264	68	53	650	12	8.1
6	160	182	194	144	69	933	230	63	44	227	13	6.7
7	129	157	163	189	71	484	213	56	38	142	13	4.9
8	107	136	138	185	67	715	217	46	837	103	11	3.9
9	116	929	127	157	66	574	273	43	180	69	9.8	4.1
10	215	2460	116	138	66	381	258	42	113	60	9.1	14
11	145	697	113	1680	67	308	218	33	85	57	8.4	12
12	124	413	107	2090	59	251	465	42	66	43	82	9.1
13	109	310	670	603	52	242	379	444	50	35	34	7.2
14	89	249	449	475	59	239	1820	127	47	30	16	4.7
15	79	213	271	388	89	201	808	85	44	25	25	3.7
16	77	189	235	318	526	184	484	71	38	20	28	3.9
17	71	167	177	283	304	210	355	1200	40	17	20	5.6
18	64	150	149	242	223	292	291	3600	26	14	16	6.7
19	57	135	138	208	210	220	244	810	27	12	85	6.9
20	52	123	132	191	273	201	215	451	135	11	275	5.2
21	49	115	119	167	405	1630	187	302	42	10	59	3.7
22	49	117	164	169	392	919	166	227	25	49	25	3.0
23	107	1790	598	158	312	461	149	208	36	62	17	7.8
24	102	3230	2410	127	335	878	132	901	83	34	13	16
25	74	2130	2050	142	249	1320	113	543	37	20	8.8	11
26	64	3770	941	130	210	592	113	246	28	15	6.9	8.1
27	56	1470	555	115	215	418	120	176	22	28	6.7	5.9
28	57	1020	407	108	218	466	119	145	17	142	6.9	4.9
29	71	707	331	87	185	1060	123	123	35	53	6.9	4.7
30	64	472	289	85	----	727	108	123	42	32	8.1	6.1
31	57	-----	249	77	----	1160	----	113	----	25	6.9	-----
TOTAL	3452	24139	12657	9580	5067	16725	9854	10621	2482	3936	885.5	199.6
MEAN	111	805	408	309	175	540	328	343	82.7	127	28.6	6.65
MAX	294	3770	2410	2090	526	1630	1820	3600	837	962	275	16
MIN	49	115	107	77	52	123	108	33	17	10	6.7	3.0
CFSM	.59	4.26	2.16	1.64	.93	2.86	1.74	1.82	.44	.67	.15	.04
IN.	.68	4.75	2.49	1.89	1.00	3.29	1.94	2.09	.49	.77	.17	.04

CAL YR 1979 TOTAL 149744.8 MEAN 410 MAX 4440 MIN 7.3 CFSM 2.17 IN 29.47
WTR YR 1980 TOTAL 99598.1 MEAN 272 MAX 3770 MIN 3.0 CFSM 1.44 IN 19.60

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 mi^2 (168.9 km^2), of which 28.1 mi^2 (72.8 km^2) does not contribute directly to surface runoff.

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

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

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

REMARKS.--Records good October through April, poor thereafter.

AVERAGE DISCHARGE.--11 years, 86.5 ft^3/s (2.450 m^3/s), 18.02 in/yr (458 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft^3/s (360 m^3/s) Apr. 2, 1970, gage height, 14.40 ft (4.389 m); minimum daily, 0.90 ft^3/s (0.025 m^3/s) Sept. 13, 1972.

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)
Nov. 9	1315	1310	37.1	5.81	1.771	Dec. 24	0200	1270	36.0	5.74	1.750
Nov. 23	2315	1640	46.4	6.35	1.935	Mar. 21	0715	1050	29.7	5.34	1.628
Nov. 25	2315	2440	69.1	7.44	2.268	May 18	unknown	*2860	81.0	*7.93	2.417

Minimum daily discharge, 1.8 ft^3/s (.051 m^3/s) Sept. 30.

NOTE.--No gage-height record: May 12 to July 20 and 26 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	299	108	75	30	40	218	27	22	15	9.0	2.4
2	84	267	80	68	29	35	174	25	20	30	8.0	2.3
3	71	156	63	60	28	40	139	24	19	170	7.2	2.2
4	75	93	60	60	27	44	110	23	18	148	6.8	2.1
5	73	74	50	54	27	198	84	22	17	105	6.2	2.5
6	67	65	48	49	30	138	74	20	15	60	5.8	2.3
7	55	52	44	60	30	108	70	19	14	40	5.2	2.1
8	46	48	41	55	29	105	68	19	100	30	4.7	2.0
9	47	604	38	52	27	82	63	20	45	25	4.3	5.0
10	60	468	36	50	27	78	58	19	25	21	3.9	20
11	51	253	35	246	26	68	54	18	20	25	3.5	10
12	48	194	46	210	25	63	148	25	17	19	25	6.0
13	40	143	200	153	23	64	121	100	15	15	14	5.0
14	34	86	147	124	30	52	453	40	13	13	7.2	3.5
15	33	73	108	97	73	46	242	25	12	11	15	2.5
16	32	55	90	86	245	45	169	22	20	10	30	2.0
17	30	46	80	78	116	56	130	200	22	9.4	12	2.5
18	28	41	72	70	82	53	111	492	15	8.8	8.0	2.2
19	27	36	65	63	73	51	95	212	13	8.0	7.0	2.1
20	27	32	56	58	70	116	85	118	24	7.6	12	2.0
21	28	30	51	55	66	604	79	88	16	8.2	7.8	2.0
22	31	33	65	56	62	243	74	70	12	23	6.0	2.5
23	68	529	90	51	65	163	72	66	14	11	4.8	10
24	40	592	830	48	69	339	67	90	30	37	3.9	5.0
25	33	992	507	46	68	272	61	128	16	13	3.2	4.0
26	30	732	300	41	58	180	60	60	12	10	2.7	3.4
27	28	268	217	38	57	122	59	35	10	50	2.4	2.9
28	29	257	163	36	56	269	50	30	9.0	100	2.0	2.4
29	26	189	137	34	47	307	44	29	20	25	2.3	2.0
30	24	138	111	32	----	287	36	28	25	15	2.9	1.8
31	23	----	89	33	----	276	----	25	-----	11	2.5	-----
TOTAL	1370	6845	4027	2238	1595	4544	3268	2119	630.0	1074.0	235.3	116.7
MEAN	44.2	228	130	72.2	55.0	147	109	68.4	21.0	34.6	7.59	3.89
MAX	84	992	830	246	245	604	453	492	100	170	30	20
MIN	23	30	35	32	23	35	36	18	9.0	7.6	2.0	1.8
CFSM	.68	3.50	1.99	1.11	.84	2.26	1.67	1.05	.32	.53	.12	.06
IN.	.78	3.91	2.30	1.28	.91	2.59	1.86	1.21	.36	.61	.13	.07

CAL YR 1979 TOTAL 56837.5 MEAN 156 MAX 3050 MIN 4.6 CFSM 2.39 IN 32.43
WTR YR 1980 TOTAL 28062.0 MEAN 76.7 MAX 992 MIN 1.8 CFSM 1.18 IN 16.01

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.

AVERAGE DISCHARGE.--12 years, 25.8 ft³/s (0.731 m³/s), 21.76 in/yr (553 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)
Nov. 25	1100	1950	55.2	6.38	1.945	July 2	2030	*3540	100	*7.69	2.344
May 17	1900	3190	90.3	7.44	2.268						

Minimum daily discharge, 0.13 ft³/s (0.004 m³/s) Sept. 22, 28-30

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	100	28	19	6.4	11	55	9.5	5.0	4.0	1.8	.21
2	18	47	23	17	6.0	10	46	8.7	4.7	358	1.7	.21
3	14	28	20	16	5.8	11	40	8.3	4.2	80	1.4	.18
4	18	21	19	17	5.6	12	37	7.5	3.7	51	1.3	.18
5	14	18	17	16	5.5	88	34	6.9	3.5	33	1.1	.16
6	13	15	16	15	5.5	45	31	6.5	3.3	18	.93	.16
7	9.9	13	14	18	5.6	33	30	5.6	37	11	.83	.16
8	8.7	13	13	16	5.6	32	32	5.3	24	7.9	.74	.16
9	16	250	12	15	5.5	27	31	5.0	7.9	6.5	.58	7.9
10	16	101	12	15	5.4	25	31	4.5	6.2	5.9	.50	13
11	12	41	11	152	5.2	22	28	4.5	5.6	5.3	.58	.74
12	11	29	23	57	5.0	20	50	9.5	5.0	4.5	5.0	.44
13	9.5	24	94	36	4.8	21	46	9.1	4.5	3.9	1.3	.23
14	8.3	20	43	30	6.0	19	187	5.3	4.2	3.2	.74	.21
15	7.9	17	30	25	8.0	18	52	4.2	4.2	2.9	17	.16
16	7.5	16	25	22	63	18	34	10	7.5	2.5	3.1	.16
17	7.2	14	20	20	41	22	28	414	4.7	2.2	1.4	.26
18	6.5	13	18	18	39	22	24	93	4.2	2.0	1.1	.26
19	5.9	13	17	17	27	20	21	32	4.0	1.7	1.1	.18
20	5.6	12	15	16	21	24	19	20	4.5	1.5	.93	.16
21	5.6	11	14	15	22	150	18	14	3.7	1.4	.65	.16
22	7.2	14	18	14	21	61	16	12	3.3	10	.50	.13
23	13	263	32	13	25	45	15	15	6.2	3.1	.34	.44
24	7.5	159	215	11	24	130	13	17	5.9	1.4	.26	.34
25	6.9	477	134	12	21	83	12	17	4.2	1.1	.26	.21
26	6.5	181	59	10	19	55	13	12	4.0	.93	.26	.16
27	6.2	56	39	9.2	17	43	12	9.1	3.7	20	.23	.16
28	7.5	74	31	8.5	16	112	12	7.2	3.7	6.5	.23	.13
29	7.2	43	26	8.0	13	86	11	5.9	9.5	2.7	.21	.13
30	6.5	34	24	7.4	-----	98	10	7.9	4.7	2.7	.21	.13
31	6.2	-----	21	6.8	-----	74	---	5.9	-----	2.5	.23	-----
TOTAL	301.3	2117	1083	671.9	454.9	1437	988	792.4	196.8	657.33	46.51	27.11
MEAN	9.72	70.6	34.9	21.7	15.7	46.4	32.9	25.6	6.56	21.2	1.50	.90
MAX	18	477	215	152	63	150	187	414	37	358	17	13
MIN	5.6	11	11	6.8	4.8	10	10	4.2	3.3	.93	.21	.13
CFSM	.60	4.39	2.17	1.35	.98	2.88	2.04	1.59	.41	1.32	.09	.06
IN.	.70	4.89	2.50	1.55	1.05	3.32	2.28	1.83	.45	1.52	.11	.06

CAL YR 1979 TOTAL 16775.92 MEAN 46.0 MAX 893 MIN .49 CFSM 2.86 IN 38.76
WTR YR 1980 TOTAL 8773.25 MEAN 24.0 MAX 477 MIN .13 CFSM 1.49 IN 20.27

03302500 INDIAN CREEK NEAR CORYDON, IN

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

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 577.12 ft (175.906 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1948, nonrecording gage, and Dec. 9, 1948, to June 12, 1952, recorder records for stages above 6.3 ft (1.920 m) at same site and datum.

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

AVERAGE DISCHARGE.--37 years, 174 ft³/s (4.928 m³/s), 18.32 in/yr (465 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft ³/s (756 m³/s) Mar. 5, 1964, gage height, 22.64 ft (6.901 m); no flow at times during 1943-44, 1951-54, 1959, 1965, 1972-73, 1976.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 26	Unknown	*5100	144	*14.25	4.343

Minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Aug. 28 and Sept. 8.

NOTE.--No gage-height record Nov. 16 to Dec. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	659	240	147	50	83	418	70	58	29	16	5.2
2	116	718	200	127	49	76	337	66	50	34	14	5.2
3	110	332	170	111	47	87	282	61	45	880	13	4.9
4	107	222	155	106	46	90	249	58	39	352	12	4.6
5	114	169	140	100	46	702	206	54	34	583	12	4.6
6	91	141	130	84	49	520	177	51	32	230	11	4.4
7	75	117	115	97	49	368	163	47	30	122	10	3.9
8	63	102	105	99	46	379	173	42	271	83	9.4	3.1
9	60	1160	95	86	46	324	204	40	84	64	8.4	8.1
10	130	1260	87	78	45	261	193	38	51	51	6.9	71
11	90	471	80	1200	42	214	167	35	39	50	6.0	32
12	78	314	100	768	38	179	312	45	32	37	50	14
13	68	238	400	412	37	173	305	191	28	31	25	9.0
14	56	185	300	322	42	154	1130	73	25	25	13	6.5
15	50	154	230	249	60	130	573	50	23	23	28	4.6
16	49	123	190	214	429	120	373	46	39	20	58	3.7
17	45	112	160	191	242	128	287	390	42	17	24	4.1
18	41	102	140	165	183	151	235	1360	26	15	15	3.9
19	37	94	123	143	161	127	197	358	33	13	14	3.7
20	34	86	108	128	149	130	169	235	44	12	20	3.4
21	34	90	94	119	167	995	149	171	31	11	13	3.5
22	35	95	97	112	167	563	130	132	22	36	9.4	4.2
23	91	1500	148	104	158	363	117	128	22	60	7.2	7.3
24	75	1700	1220	88	187	656	104	160	40	27	5.4	7.5
25	54	1300	1070	92	161	825	92	264	34	18	4.6	7.0
26	47	3000	615	81	133	444	88	149	24	14	3.9	8.4
27	42	600	388	72	133	337	89	105	20	79	3.3	6.5
28	43	800	287	68	125	384	82	84	18	185	3.1	5.3
29	48	450	233	60	108	689	81	71	43	47	3.7	4.2
30	43	300	202	56	----	533	76	76	49	29	5.4	3.7
31	39	-----	172	53	----	653	----	77	----	21	5.4	-----
TOTAL	2048	16594	7794	5732	3195	10838	7158	4727	1328	3198	430.1	257.5
MEAN	66.1	553	251	185	110	350	239	152	44.3	103	13.9	8.58
MAX	130	3000	1220	1200	429	995	1130	1360	271	880	58	71
MIN	34	86	80	53	37	76	76	35	18	11	3.1	3.1
CFSM	.51	4.29	1.95	1.43	.85	2.71	1.85	1.18	.34	.80	.11	.07
IN.	.59	4.79	2.25	1.65	.92	3.13	2.06	1.36	.38	.92	.12	.07

CAL YR 1979 TOTAL 116133.2 MEAN 318 MAX 5190 MIN 8.1 CFSM 2.47 IN 33.49
WTR YR 1980 TOTAL 63299.6 MEAN 173 MAX 3000 MIN 3.1 CFSM 1.34 IN 18.25

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 mi^2 (49.2 km^2).

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--10 years, 24.4 ft^3/s (0.691 m^3/s), 17.44 in/yr (443 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,430 ft^3/s (125 m^3/s) July 10, 1974, gage height, 12.29 ft (3.746 m) from rating curve extended above 900 ft^3/s (25.5 m^3/s) by a step-backwater analysis; minimum daily, 0.02 ft^3/s (0.001 m^3/s) Sept. 24, 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)
Nov. 25	1315	*1210	34.3	*7.41	2.259	July 4	1030	742	21.0	6.07	1.850
Jan. 11	0645	1100	31.2	7.14	2.176						

Minimum daily discharge, 0.34 ft^3/s (0.010 m^3/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	69	34	18	8.2	15	45	12	7.6	2.2	1.5	.55
2	26	46	26	16	7.8	13	40	12	7.2	11	1.7	3.3
3	15	30	23	15	7.5	12	34	11	6.3	8.6	4.3	1.7
4	17	24	21	14	7.2	13	30	10	5.1	139	3.0	.83
5	15	20	20	12	7.0	88	26	9.6	5.1	26	5.5	.62
6	14	18	18	12	7.2	48	24	9.1	4.3	14	4.3	.55
7	12	15	16	12	7.0	42	24	8.6	19	9.1	2.5	.39
8	11	15	14	11	6.8	104	28	8.6	14	7.2	1.7	8.6
9	10	131	13	9.6	6.7	51	30	7.6	6.7	5.9	1.3	3.3
10	9.1	82	12	9.6	6.6	41	31	7.6	5.5	7.2	.97	1.7
11	9.1	46	12	295	6.5	30	29	7.6	4.7	15	.97	.97
12	9.1	32	12	71	6.0	27	56	10	4.3	5.9	3.0	.70
13	7.6	26	24	47	5.6	27	44	12	3.7	4.7	1.3	.55
14	6.7	23	18	37	6.0	23	144	8.1	3.7	4.0	.97	.47
15	7.2	20	17	30	10	20	60	7.2	3.3	3.0	6.3	.34
16	6.7	18	16	27	38	20	44	11	3.0	2.8	3.3	.47
17	6.3	16	13	25	33	25	35	81	2.8	2.2	2.8	2.8
18	5.9	15	14	22	26	24	30	84	2.5	2.0	2.0	1.7
19	5.5	14	12	20	18	23	27	38	9.1	1.7	36	.83
20	5.9	13	11	19	24	24	24	26	6.7	1.5	12	.62
21	6.7	12	10	18	30	158	22	20	3.7	1.3	5.1	.47
22	8.6	17	17	18	32	63	20	16	3.0	7.2	3.3	.47
23	15	263	30	15	28	48	18	17	7.2	7.2	2.2	2.5
24	9.1	152	260	17	24	124	17	18	6.3	2.8	1.7	1.5
25	8.1	333	109	15	23	79	15	14	4.0	2.2	1.5	.97
26	7.6	160	63	13	21	53	15	12	3.0	1.7	1.1	.83
27	7.2	87	45	12	19	44	14	11	2.8	2.5	.83	.62
28	7.6	137	34	11	18	44	15	9.6	2.5	3.3	.70	.55
29	7.2	60	29	10	16	47	15	14	4.7	2.2	.55	.47
30	6.7	42	25	9.5	-----	63	13	8.6	2.8	1.5	.62	.39
31	6.3	----	21	8.8	-----	59	----	7.6	-----	1.3	.62	-----
TOTAL	300.2	1936	989	869.5	456.1	1452	969	528.8	164.6	306.2	113.63	39.76
MEAN	9.68	64.5	31.9	28.0	15.7	46.8	32.3	17.1	5.49	9.88	3.67	1.33
MAX	26	333	260	295	38	158	144	84	19	139	36	8.6
MIN	5.5	12	10	8.8	5.6	12	13	7.2	2.5	1.3	.55	.34
CFSM	.51	3.40	1.68	1.47	.83	2.46	1.70	.90	.29	.52	.19	.07
IN.	.59	3.79	1.94	1.70	.89	2.84	1.90	1.04	.32	.60	.22	.08

CAL YR 1979 TOTAL 12096.70 MEAN 33.1 MAX 466 MIN 2.5 CFSM 1.74 IN 23.68
WTR YR 1980 TOTAL 8124.79 MEAN 22.2 MAX 333 MIN .34 CFSM 1.17 IN 15.91

03302680 WEST FORK BLUE RIVER AT SALEM, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: October 1979 to September 1980 (discontinued).
SEDIMENT DISCHARGE: February 1979 to current year (partial-record station February 1979 to September 1979).

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 33°C August 9, 1980; minimum, freexing point January 29, 30, 31, February 1, 5, 7, 26, March 2, 1980.
SEDIMENT CONCENTRATION: Maximum observed instantaneous, 5,920 mg/L July 4, 1980; minimum daily, 1 mg/L on many days.
SEDIMENT DISCHARGE: Maximum observed instantaneous, 11,800 tons (10,700 tonnes) July 4, 1980; minimum daily, 0 tons (0 tonnes) many days during August and September 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 33°C August 9, 1980; minimum, freezing point January 29, 30, 31, February 1, 5, 7, 26, March 2.
SEDIMENT CONCENTRATION: Maximum observed instantaneous, 5,920 mg/L July 4; minimum daily, 1 mg/L on many days.
SEDIMENT DISCHARGE: Maximum observed instantaneous, 11,800 tons (10,700 tonnes) July 4; minimum daily, 0 tons (0 tonnes) many days during August and September.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	13.0	5.0	5.0	.0	1.0	7.0	14.0	24.0	27.0	29.0	29.0
2	14.0	12.0	5.0	4.0	1.0	.0	7.0	13.0	24.0	30.0	30.0	26.0
3	17.0	13.0	5.0	4.0	1.0	1.0	8.0	18.0	20.0	25.0	27.0	26.0
4	16.0	7.0	6.0	4.0	1.0	1.0	7.0	21.0	22.0	21.0	28.0	26.0
5	14.0	11.0	8.0	---	.0	4.0	15.0	23.0	22.0	26.0	26.0	28.0
6	14.0	9.0	8.0	1.0	1.0	3.0	10.0	23.0	26.0	25.0	28.0	28.0
7	14.0	10.0	7.0	3.0	.0	6.0	15.0	16.0	27.0	21.0	32.0	26.0
8	15.0	9.0	5.0	2.0	1.0	9.0	16.0	18.0	23.0	23.0	32.0	23.0
9	13.0	11.0	6.0	2.0	1.0	6.0	9.0	16.0	23.0	29.0	33.0	25.0
10	13.0	10.0	6.0	3.0	1.0	6.0	14.0	16.0	20.0	28.0	25.0	24.0
11	13.0	8.0	8.0	7.0	1.0	3.0	11.0	22.0	22.0	27.0	26.0	23.0
12	14.0	9.0	7.0	5.0	1.0	3.0	11.0	21.0	24.0	25.0	21.0	21.0
13	11.0	8.0	7.0	7.0	1.0	4.0	9.0	24.0	25.0	24.0	23.0	27.0
14	10.0	8.0	5.0	8.0	1.0	3.0	7.0	19.0	26.0	29.0	23.0	27.0
15	13.0	----	6.0	9.0	1.0	3.0	6.0	22.0	26.0	29.0	25.0	----
16	14.0	9.0	5.0	9.0	1.0	11.0	6.0	14.0	23.0	31.0	23.0	23.0
17	17.0	7.0	2.0	9.0	1.0	10.0	15.0	15.0	22.0	30.0	26.0	22.0
18	18.0	10.0	2.0	6.0	1.0	6.0	17.0	16.0	25.0	31.0	28.0	20.0
19	18.0	11.0	3.0	---	1.0	5.0	18.0	18.0	22.0	30.0	27.0	22.0
20	20.0	13.0	3.0	5.0	2.0	7.0	15.0	15.0	23.0	31.0	28.0	24.0
21	21.0	13.0	5.0	2.0	5.0	7.0	17.0	17.0	22.0	32.0	28.0	24.0
22	21.0	13.0	7.0	4.0	8.0	5.0	22.0	19.0	22.0	26.0	26.0	25.0
23	13.0	12.0	9.0	2.0	8.0	7.0	21.0	21.0	22.0	25.0	26.0	25.0
24	10.0	11.0	11.0	1.0	6.0	10.0	12.0	20.0	23.0	26.0	25.0	20.0
25	10.0	10.0	8.0	3.0	5.0	6.0	17.0	23.0	24.0	29.0	----	20.0
26	12.0	10.0	7.0	---	.0	6.0	20.0	19.0	25.0	30.0	30.0	20.0
27	8.0	12.0	7.0	5.0	1.0	5.0	11.0	22.0	---	26.0	29.0	18.0
28	15.0	9.0	6.0	1.0	3.0	8.0	12.0	24.0	30.0	28.0	29.0	18.0
29	14.0	7.0	7.0	.0	1.0	7.0	9.0	22.0	21.0	30.0	24.0	22.0
30	15.0	7.0	7.0	.0	---	6.0	9.0	24.0	27.0	30.0	27.0	22.0
31	17.0	----	7.0	.0	---	8.0	----	24.0	----	31.0	30.0	----
MEAN	14.5	10.0	6.0	4.0	2.0	5.5	12.5	19.5	23.5	27.5	27.0	23.5
MAX	21.0	13.0	11.0	9.0	8.0	11.0	22.0	24.0	30.0	32.0	33.0	29.0
MIN	8.0	7.0	2.0	.0	.0	.0	6.0	13.0	20.0	21.0	21.0	18.0

WTR YR 1980 MEAN 14.5 MAX 33.0 MIN .0

03302680 WEST FORK BLUE RIVER AT SALEM, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2	.06	---	----	3	.28	1	.05	2	.04	7	.28
2	6	.42	4	.50	3	.21	1	.04	2	.04	8	.28
3	2	.08	2	.16	3	.19	1	.04	2	.04	9	.29
4	4	.18	1	.06	3	.17	1	.04	2	.04	4	.14
5	2	.08	1	.05	3	.16	1	.03	2	.04	---	----
6	1	.04	1	.05	3	.15	1	.03	2	.04	17	2.2
7	1	.03	1	.04	3	.13	1	.03	3	.06	16	1.8
8	1	.03	1	.04	3	.11	1	.03	7	.13	---	----
9	1	.03	---	----	4	.14	1	.03	4	.07	26	3.6
10	1	.02	14	3.1	3	.10	1	.03	4	.07	15	1.7
11	1	.02	7	.87	4	.13	---	----	4	.07	11	.89
12	1	.02	6	.52	4	.13	19	3.6	4	.06	8	.58
13	1	.02	6	.42	8	.52	8	1.0	4	.06	7	.51
14	1	.02	6	.37	4	.19	6	.60	---	---	7	.43
15	1	.02	5	.27	2	.09	5	.41	---	---	6	.32
16	1	.02	4	.19	1	.04	4	.29	---	---	6	.32
17	1	.02	4	.17	1	.04	3	.20	---	---	21	1.4
18	1	.02	3	.12	1	.04	2	.12	---	---	6	.39
19	1	.01	2	.08	1	.03	2	.11	---	---	5	.31
20	1	.02	2	.07	4	.12	1	.05	---	---	6	.39
21	1	.02	1	.03	3	.08	2	.10	---	---	---	----
22	2	.05	2	.09	5	.23	1	.05	9	.78	---	----
23	3	.12	---	----	8	.65	2	.08	8	.60	---	----
24	1	.02	---	----	---	----	2	.09	6	.39	---	----
25	1	.02	---	----	---	----	2	.08	6	.37	34	7.3
26	1	.02	---	----	10	1.7	2	.07	8	.45	11	1.6
27	1	.02	---	----	7	.85	2	.06	7	.36	7	.83
28	1	.02	---	----	4	.37	1	.03	6	.29	11	1.3
29	1	.02	9	1.5	2	.16	1	.03	6	.26	16	2.0
30	1	.02	5	.57	1	.07	6	.15	---	---	38	6.5
31	1	.02	---	----	1	.06	4	.10	---	---	30	4.8

03302680 WEST FORK BLUE RIVER AT SALEM, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	APRIL MEAN CONCEN-TRATION (MG/L)	APRIL LOADS (T/DAY)	MAY MEAN CONCEN-TRATION (MG/L)	MAY LOADS (T/DAY)	JUNE MEAN CONCEN-TRATION (MG/L)	JUNE LOADS (T/DAY)	JULY MEAN CONCEN-TRATION (MG/L)	JULY LOADS (T/DAY)	AUGUST MEAN CONCEN-TRATION (MG/L)	AUGUST LOADS (T/DAY)	SEPTEMBER MEAN CONCEN-TRATION (MG/L)	SEPTEMBER LOADS (T/DAY)
1	11	1.3	6	.19	9	.18	7	.04	9	.04	7	.01
2	8	.86	5	.16	10	.19	---	----	18	.08	15	.13
3	6	.55	5	.15	13	.22	38	.88	27	.31	9	.04
4	5	.41	5	.14	7	.10	---	----	12	.10	8	.02
5	5	.35	5	.13	8	.11	28	2.0	---	----	7	.01
6	6	.39	5	.12	10	.12	14	.53	27	.31	8	.01
7	5	.32	5	.12	---	----	12	.29	13	.09	9	.00
8	10	.76	5	.12	30	1.1	11	.21	12	.06	---	---
9	11	.89	5	.10	15	.27	10	.16	12	.04	39	.35
10	11	.92	6	.12	12	.18	21	.41	15	.04	20	.09
11	10	.78	10	.21	11	.14	---	----	---	----	17	.04
12	28	4.2	19	.51	10	.12	26	.41	43	.35	17	.03
13	9	1.1	13	.42	10	.10	9	.11	14	.05	13	.02
14	---	----	6	.13	9	.09	10	.11	12	.03	13	.02
15	17	2.8	11	.21	14	.12	15	.12	---	----	12	.01
16	11	1.3	---	----	20	.16	19	.14	29	.26	11	.01
17	8	.76	---	----	20	.15	15	.09	14	.11	19	.14
18	5	.41	---	----	17	.11	8	.04	---	----	14	.06
19	6	.44	12	1.2	---	---	8	.04	---	----	17	.04
20	8	.52	8	.56	14	.25	10	.04	68	2.2	10	.02
21	8	.48	5	.27	12	.12	20	.07	12	.17	7	.00
22	3	.16	5	.22	11	.09	33	.64	8	.07	7	.00
23	4	.19	17	.78	---	---	37	.72	9	.05	7	.05
24	4	.18	9	.44	31	.53	12	.09	11	.05	6	.02
25	4	.16	5	.19	15	.16	8	.05	10	.04	5	.01
26	5	.20	5	.16	13	.11	8	.04	7	.02	5	.01
27	7	.26	5	.15	11	.08	12	.08	6	.01	6	.01
28	5	.20	5	.13	9	.06	9	.08	6	.01	6	.00
29	5	.20	5	.19	9	.11	5	.03	6	.00	6	.00
30	8	.28	8	.19	9	.07	6	.02	6	.01	5	.00
31	---	----	9	.18	---	---	7	.02	5	.00	---	---

03302680 WEST FORK BLUE RIVER AT SALEM, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
FEB					
23...	1500	----	241	361	235
MAR					
07...	1515	9.0	43	11	1.3
APR					
18...	1245	14.0	28	2	.15
SEP					
08...	1115	21.0	3.0	5	.04
09...	0900	19.0	2.8	1	.01
10...	1600	21.0	2.8	5	.04
11...	1630	25.0	2.6	1	.01
12...	1630	27.0	2.5	4	.03
13...	1630	21.0	3.3	3	.03
14...	1600	19.0	13	11	.39
15...	1900	18.0	7.1	1	.02
16...	1900	18.0	5.7	4	.06
17...	1730	20.0	5.1	1	.01
18...	1630	21.0	4.8	4	.05
19...	1800	20.0	4.3	4	.05
20...	1630	20.0	3.8	7	.07
21...	1730	17.0	54	47	6.9
22...	1300	17.0	83	26	5.8
23...	1130	15.0	40	3	.32
24...	1700	18.0	24	1	.06
25...	1900	19.0	18	1	.05
26...	1900	19.0	15	10	.40
27...	1700	18.0	14	1	.04
28...	1700	18.0	13	4	.14
29...	1300	19.0	11	1	.03
30...	1800	20.0	9.9	2	.05

03302680 WEST FORK BLUE RIVER AT SALEM, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
NOV								
01...	1630	115	108	34	--	--	--	---
09...	1630	142	117	45	--	--	--	---
23...	1100	160	60	26	--	--	--	---
24...	1100	127	25	8.6	--	--	--	---
25...	1700	271	240	176	--	--	--	---
26...	1630	99	24	6.4	--	--	--	---
27...	1630	59	10	1.6	--	--	--	---
28...	1630	87	18	4.2	--	--	--	---
DEC								
24...	1100	266	186	134	--	--	--	---
25...	0900	138	48	18	--	--	--	---
JAN								
11...	1730	220	178	106	--	--	--	---
FEB								
14...	1800	16	31	1.3	--	--	--	---
15...	1800	23	34	2.1	--	--	--	---
16...	1530	32	23	2.0	--	--	--	---
17...	1530	31	16	1.3	--	--	--	---
18...	1730	20	6	.32	--	--	--	---
19...	0830	17	17	.78	--	--	--	---
20...	0830	20	8	.43	--	--	--	---
21...	0830	27	12	.87	--	--	--	---
MAR								
05...	1330	87	174	41	--	--	--	---
08...	1500	85	109	25	--	--	--	---
21...	0800	370	986	985	94	97	99	100
22...	0800	67	22	4.0	--	--	--	---
23...	0800	49	238	31	--	--	--	---
24...	0800	106	81	23	--	--	--	---
APR								
14...	0800	189	302	154	--	--	--	---
MAY								
16...	1630	8.1	152	3.3	--	--	--	---
17...	1700	78	234	49	--	--	--	---
18...	1100	65	42	7.4	--	--	--	---
JUN								
07...	1800	4.0	10	.11	--	--	--	---
19...	1800	38	890	91	--	--	--	---
23...	2000	11	95	2.8	--	--	--	---
JUL								
02...	1700	2.0	6	.03	--	--	--	---

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
04...	1000	739	5920	11800
04...	1130	311	2150	1810
04...	1200	220	1540	915
04...	1300	226	1060	647
11...	0900	12	21	.68
AUG				
05...	1730	8.6	136	3.2
11...	2100	4.3	83	.96
15...	1200	13	94	3.3
18...	2000	1.3	14	.05
19...	1900	5.5	72	1.1
SEP				
08...	1800	14	356	13

03302800 BLUE RIVER AT FREDERICKSBURG, IN

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 590.00 ft (179.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years, 345 ft³/s (9.770 m³/s), 16.56 in/yr (421 mm/yr).

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

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

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 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)
Nov. 24	0900	5560	157	15.25	4.648	Dec. 24	1700	5380	152	14.99	4.569
Nov. 26	0900	*8310	235	*18.86	5.749	Jan. 11	1900	7040	199	17.29	5.270

Minimum daily discharge, 13 ft³/s (0.37 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	285	722	365	140	200	849	182	140	55	39	18
2	325	1580	586	318	130	182	696	170	127	66	38	18
3	255	674	491	280	120	170	601	164	113	1140	55	23
4	220	457	445	261	110	200	574	155	96	1020	90	28
5	250	352	410	245	107	1070	470	148	88	1150	57	25
6	192	287	385	215	110	1020	410	140	84	521	49	23
7	155	242	341	220	100	664	387	132	84	287	44	18
8	125	207	292	220	99	1260	399	121	961	200	37	16
9	116	547	254	188	101	1020	436	115	240	155	33	24
10	150	3040	238	174	98	709	457	111	153	125	30	25
11	128	1130	226	3720	95	559	413	108	116	254	28	25
12	113	732	215	2490	83	445	742	161	96	159	31	22
13	99	527	463	1070	81	416	729	511	86	105	33	19
14	82	401	568	807	88	387	2350	229	78	84	29	16
15	72	333	419	635	98	323	1310	168	72	75	39	14
16	71	287	357	547	598	302	838	155	84	68	56	13
17	68	245	288	498	428	323	648	1040	70	60	42	20
18	64	220	238	433	331	419	550	2650	60	54	35	24
19	61	196	242	376	302	360	470	852	60	48	118	27
20	56	180	222	338	305	352	407	565	270	45	137	23
21	53	164	198	313	439	1880	365	410	105	43	69	19
22	54	164	213	302	515	1240	323	315	72	95	44	21
23	91	2540	601	290	433	783	297	313	66	115	35	42
24	132	4110	3430	249	416	1260	266	793	128	81	28	40
25	88	2880	2490	263	363	2040	235	639	88	57	25	29
26	75	6490	1410	233	310	1040	222	385	66	49	23	23
27	68	1620	921	207	305	773	220	285	58	55	22	20
28	64	2010	685	196	295	677	209	229	52	69	21	18
29	64	1250	565	178	266	1000	215	190	68	64	20	16
30	61	903	498	159	----	863	196	174	71	48	20	15
31	57	-----	428	150	----	1260	-----	161	----	42	19	---
TOTAL	3522	34053	18842	15940	6866	23197	16284	11771	3852	6389	1346	664
MEAN	114	1135	608	514	237	748	543	380	128	206	43.4	22.1
MAX	325	6490	3430	3720	598	2040	2350	2650	961	1150	137	42
MIN	53	164	198	150	81	170	196	108	52	42	19	13
CFSM	.40	4.01	2.15	1.82	.84	2.64	1.92	1.34	.45	.73	.15	.08
IN.	.46	4.48	2.48	2.10	.90	3.05	2.14	1.55	.51	.84	.18	.09

CAL YR 1979 TOTAL 209602 MEAN 574 MAX 7040 MIN 35 CFSM 2.03 IN 27.55
WTR YR 1980 TOTAL 142726 MEAN 390 MAX 6490 MIN 13 CFSM 1.38 IN 18.76

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 mi^2 (1,233 km^2), of which 192 mi^2 (497 km^2) does not contribute directly to surface runoff. Also, part of flow from Indian Creek, downstream from Corydon, IN, enters Blue River via solution channel in Karst area through Harrison Spring.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 434.26 ft (132.362 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--50 years, 633 ft^3/s (17.93 m^3/s), 18.06 in/yr (459 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,500 ft^3/s (807 m^3/s) Jan. 22, 1959, gage height, 23.07 ft (7.032 m); minimum daily, 9.6 ft^3/s (0.27 m^3/s) Oct. 17, 1964.

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)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 24	0300	8410	238	11.63	3.545	Jan. 12	0600	8270	234	11.54	3.517
Nov. 26	1400	*10800	306	*13.13	4.002						

Minimum daily discharge, 43 ft^3/s (1.22 m^3/s) Sept. 30.

WATER-QUALITY RECORDS

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	698	1460	796	324	505	1750	402	375	176	129	50
2	335	2230	1180	699	309	432	1380	375	344	194	114	49
3	499	1300	969	622	302	412	1190	355	318	1730	113	47
4	439	852	857	571	290	452	1060	339	286	1580	109	44
5	410	656	788	538	280	1210	948	327	254	3410	173	44
6	423	550	739	502	288	2220	804	312	233	1510	140	47
7	369	480	669	479	285	1300	740	296	221	783	110	51
8	331	432	588	474	273	1730	739	275	544	547	100	45
9	307	1450	525	454	264	2280	764	254	787	441	88	59
10	329	4550	489	420	261	1450	784	240	390	366	79	292
11	343	2200	463	3440	255	1150	782	230	296	321	73	143
12	320	1330	469	6340	243	929	978	258	236	400	126	109
13	292	1020	783	2390	222	834	1440	1060	206	320	121	72
14	268	822	1110	1640	217	773	2770	623	187	244	102	58
15	248	688	871	1270	293	683	3420	404	173	205	166	50
16	235	602	754	1050	939	618	1800	358	195	150	174	45
17	227	535	664	932	1100	623	1320	1820	206	160	168	50
18	222	483	574	831	710	735	1090	4620	185	143	143	52
19	213	446	537	729	596	714	938	2330	164	128	122	48
20	202	415	519	653	577	683	819	1310	276	117	113	48
21	195	389	479	600	643	2520	729	959	381	111	206	50
22	198	391	462	571	784	3230	656	755	228	230	142	51
23	243	3150	712	553	808	1710	596	666	183	246	97	60
24	263	7420	3910	518	758	1920	550	1260	214	239	78	98
25	319	5380	5660	481	708	3810	503	1150	217	188	68	84
26	262	10200	3390	470	647	2280	470	881	201	137	61	69
27	239	4890	2040	431	580	1560	453	660	149	304	55	58
28	231	3460	1480	404	574	1370	440	548	102	349	52	51
29	224	2820	1190	381	552	1760	432	481	162	233	50	45
30	219	1870	1030	364	-----	1690	432	436	180	203	53	43
31	212	-----	915	346	-----	2180	-----	402	----	165	54	----
TOTAL	8945	61709	36276	29949	14082	43763	30777	24386	7893	15330	3379	2012
MEAN	289	2057	1170	966	486	1412	1026	787	263	495	109	67.1
MAX	499	10200	5660	6340	1100	3810	3420	4620	787	3410	206	292
MIN	195	389	462	346	217	412	432	230	102	111	50	43
CFSM	.61	4.32	2.46	2.03	1.02	2.97	2.16	1.65	.55	1.04	.23	.14
IN.	.70	4.82	2.84	2.34	1.10	3.42	2.41	1.91	.62	1.20	.26	.16

CAL YR 1979 TOTAL 437547 MEAN 1199 MAX 16500 MIN 104 CFSM 2.52 IN 34.19
WTR YR 1980 TOTAL 278501 MEAN 761 MAX 10200 MIN 43 CFSM 1.60 IN 21.77

03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN

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

DRAINAGE AREA.--39.8 mi² (103.1 km²).

WATER-DISCHARGE RECORDS

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

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

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

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

AVERAGE DISCHARGE.--19 years, 58.6 ft³/s (1.660 m³/s), 20.00 in/yr (508 mm/yr).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 899 ft³/s (25.5 m³/s) Nov. 25, gage height, 14.45 (4.404 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Sept. 13 to 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	98	336	48	19	29	136	37	17	15	3.8	.95
2	23	99	187	42	18	33	104	33	14	47	3.5	.88
3	20	61	63	38	17	27	83	29	12	90	2.9	.79
4	20	43	50	37	17	29	73	27	9.8	140	7.5	.72
5	19	33	46	34	16	123	63	24	9.4	98	9.7	.87
6	16	27	42	31	16	112	54	22	9.0	38	5.2	.77
7	15	23	37	32	17	85	64	20	8.9	19	3.7	.56
8	14	22	33	30	16	115	89	18	8.7	12	3.6	.59
9	15	295	29	28	16	132	81	17	8.7	9.0	3.3	.73
10	20	376	27	26	16	94	81	16	8.6	8.2	3.1	.48
11	18	288	26	391	16	69	72	15	8.4	6.5	5.1	.18
12	17	130	49	367	15	55	170	16	8.3	5.5	3.4	.12
13	15	74	173	303	14	50	137	31	8.0	4.7	2.8	.08
14	14	54	131	157	14	45	333	31	4.1	4.4	4.3	.08
15	13	45	89	86	70	39	239	23	3.2	4.1	5.5	.08
16	13	38	68	69	225	36	140	23	3.4	3.7	19	.16
17	12	33	52	62	122	60	98	183	3.4	3.5	11	.44
18	12	30	44	53	76	72	75	292	3.8	3.4	5.8	.36
19	12	28	40	45	60	60	60	181	5.6	3.2	3.6	.32
20	11	27	36	40	59	88	51	98	6.1	3.1	2.9	.32
21	11	25	33	37	59	420	46	62	5.9	3.0	2.9	.28
22	15	38	51	35	56	313	40	43	5.8	10	2.7	.32
23	32	503	121	32	61	194	35	42	50	7.1	2.5	.54
24	24	507	467	30	65	260	31	41	20	3.6	2.1	.65
25	20	629	390	29	55	268	28	34	9.1	3.1	1.8	.59
26	17	568	342	26	46	177	29	26	5.9	2.9	1.5	.59
27	16	443	250	24	43	116	44	20	4.8	3.5	1.1	.49
28	15	465	109	22	42	132	41	17	5.1	3.6	.91	.54
29	14	421	77	20	36	175	45	16	184	3.8	.85	.49
30	13	389	64	20	----	178	42	19	31	3.9	1.2	.54
31	13	----	55	21	----	191	----	18	-----	3.9	.99	-----
TOTAL	507	5812	3517	2215	1302	3777	2584	1474	482.0	566.7	128.25	14.51
MEAN	16.4	194	113	71.5	44.9	122	86.1	47.5	16.1	18.3	4.14	.48
MAX	32	629	467	391	225	420	333	292	184	140	19	.95
MIN	11	22	26	20	14	27	28	15	3.2	2.9	.85	.08
CFSM	.41	4.87	2.84	1.80	1.13	3.07	2.16	1.19	.41	.46	.10	.01
IN.	.47	5.43	3.29	2.07	1.22	3.53	2.42	1.38	.45	.53	.12	.01

CAL YR 1979 TOTAL 47734.40 MEAN 131 MAX 1430 MIN 3.1 CFSM 3.29 IN 44.61
WTR YR 1980 TOTAL 22379.46 MEAN 61.1 MAX 629 MIN .08 CFSM 1.54 IN 20.92

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

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
APR 09...	1410	78	43	9.1	92	95	98	100

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 mi^2 (20.36 km^2).

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 good, except those for winter periods, which are fair.

AVERAGE DISCHARGE.--11 years, 12.0 ft^3/s (0.340 m^3/s), 20.73 in/yr (526 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft^3/s (116 m^3/s) Apr. 28, 1970, gage height, 9.74 ft (2.969 m), from rating curve extended above 450 ft^3/s (12.7 m^3/s) on basis of two indirect measurements of peak flow at site 1.6 miles (2.6 km) downstream, drainage area, 16.0 mi^2 (41.4 km^2), adjusted to gage site; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 398 ft^3/s (11.3 m^3/s) Apr. 14, gage-height 8.62 ft (2.627 m); Minimum daily discharge, 0.02 ft^3/s (0.001 m^3/s) Aug. 28 to Sept. 2.

PEAK DISCHARGE (Base, 500 ft^3/s).--No peaks above the base.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	16	12	5.5	1.6	4.5	15	5.7	1.0	3.3	.06	.02
2	6.3	7.2	8.3	4.4	1.5	4.0	11	4.1	.79	37	.06	.02
3	2.2	3.9	7.1	3.4	1.5	3.3	10	3.0	.79	35	.06	.04
4	28	2.5	6.2	3.8	1.4	4.7	9.4	2.0	.67	45	.05	.04
5	2.0	2.1	6.0	3.1	1.4	27	8.0	1.8	.54	25	.05	.04
6	1.7	1.8	4.8	2.8	1.4	14	6.8	1.6	.49	13	.05	.04
7	1.4	1.8	3.3	3.8	1.4	15	7.4	.95	.43	6.4	.04	.04
8	1.4	1.9	2.0	2.1	1.4	22	11	.76	.33	2.9	.04	.03
9	4.2	110	1.9	1.9	1.3	13	15	.65	.30	2.1	.04	1.3
10	4.3	32	2.0	1.9	1.3	10	12	.61	.27	1.6	.04	1.4
11	2.8	16	1.8	98	1.3	6.8	11	.58	.33	1.4	6.6	.08
12	2.1	11	15	24	1.2	6.0	37	5.6	.21	1.2	1.5	.06
13	1.6	7.6	41	16	1.2	6.8	20	4.1	.20	1.0	.12	.05
14	1.4	5.3	18	12	1.7	4.9	110	1.5	.20	.94	4.4	.05
15	1.3	4.4	13	9.1	13	4.3	22	.81	.19	.86	3.9	.04
16	1.3	3.1	9.4	9.0	31	4.1	15	9.4	.23	.80	.89	.04
17	1.2	2.7	5.5	8.9	14	13	12	60	.19	.76	.30	.66
18	1.2	2.2	5.5	6.6	10	9.7	9.1	30	.15	.71	.15	.08
19	1.2	2.4	4.8	5.0	8.2	7.5	7.2	20	.13	.68	.10	.06
20	1.2	2.1	3.0	4.1	11	24	5.7	13	.11	.66	.06	.06
21	1.1	2.0	2.7	3.6	12	64	4.4	7.9	.10	.66	.05	.05
22	8.2	18	32	3.9	10	18	3.3	4.6	.08	3.0	.04	.79
23	7.0	189	38	2.5	16	14	2.6	6.3	16	1.7	.04	1.4
24	2.4	55	109	2.4	13	55	1.9	4.7	8.6	.95	.04	.15
25	1.7	178	31	2.0	9.3	23	1.3	3.4	1.7	.50	.04	.33
26	1.4	56	18	1.4	8.2	15	2.3	1.9	.88	.27	.03	.06
27	1.4	43	13	1.3	6.6	11	11	1.3	.62	.19	.03	.05
28	1.4	51	9.6	.99	5.4	23	6.5	1.1	.58	.14	.02	.05
29	1.2	21	8.2	.95	4.8	18	13	1.3	111	.11	.02	.05
30	1.2	15	8.4	.92	-----	39	8.7	1.6	11	.08	.02	.05
31	1.2	-----	7.0	1.6	-----	22	-----	1.3	------	.05	.02	----
TOTAL	97.2	864.0	447.5	246.96	192.1	506.6	409.6	201.56	158.11	187.96	18.86	7.13
MEAN	3.14	28.8	14.4	7.97	6.62	16.3	13.7	6.50	5.27	6.06	.61	.24
MAX	28	189	109	98	31	64	110	60	111	45	6.6	1.4
MIN	1.1	1.8	1.8	.92	1.2	3.3	1.3	.58	.08	.05	.02	.02
CFSM	.40	3.66	1.83	1.01	.84	2.07	1.74	.83	.67	.77	.08	.03
IN.	.46	4.09	2.12	1.17	.91	2.40	1.94	.95	.75	.89	.09	.03

CAL YR 1979 TOTAL 6585.87 MEAN 18.0 MAX 658 MIN .00 CFSM 2.29 IN 31.17
WTR YR 1980 TOTAL 3337.58 MEAN 9.12 MAX 189 MIN .02 CFSM 1.16 IN 15.79

03322100 PIGEON CREEK AT EVANSVILLE, IN

LOCATION.--Lat 38°00'14", long 87°32'19", in SE¼SW¼ sec.16, T.6 N., R.10 W., Vanderburgh County, Hydrologic Unit 05140202, on left bank in the median strip of Old U.S. 41, between two steel truss bridges at Evansville, and at mile 6.0 (9.6 km).

DRAINAGE AREA.--323 mi² (837 km²).

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

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

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

REMARKS.--Records poor.

AVERAGE DISCHARGE.--20 years 353 ft³/s (9.997 m³/s), 14.84 in/yr (377 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, 4,540 ft³/s (128 m³/s) Nov. 28; maximum gage height, 15.28 ft (4.657 m) Mar. 27 (backwater from Ohio River); minimum daily discharge (unaffected by backwater), 11 ft³/s (0.312 m³/s), Aug. 28 to Sep. 1; mimimum daily discharge (affected by backwater), no flow Oct. 1-6, 13-17, Dec. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	176	1960	280	64	154	1150	80	69	1490	32	11
2	.00	402	932	240	61	80	1250	76	64	1770	32	17
3	.00	144	255	186	59	112	800	71	56	2860	112	17
4	.00	88	203	159	60	137	398	67	46	1960	164	32
5	.00	69	280	158	66	332	300	62	42	1830	53	31
6	.00	57	224	144	64	611	211	55	43	1940	34	34
7	10	50	196	136	62	327	256	51	42	1880	25	30
8	29	47	162	138	59	650	511	45	317	1080	20	27
9	35	1010	134	110	56	919	528	39	216	272	17	27
10	46	1570	126	99	54	911	223	39	70	137	15	31
11	67	1410	122	1070	52	598	361	40	48	116	20	20
12	45	1460	249	1320	51	82	1290	62	38	97	32	15
13	.00	818	1200	960	50	258	961	568	34	76	30	13
14	.00	732	1050	600	49	508	1750	282	31	56	23	12
15	.00	180	564	330	212	353	995	104	29	49	20	12
16	.00	146	34	315	1200	238	400	101	61	43	18	14
17	.00	137	.00	758	1120	390	200	623	53	38	17	77
18	19	105	.00	564	901	1140	109	1320	34	32	16	135
19	20	103	238	310	414	680	80	1030	32	30	16	71
20	22	94	194	219	389	598	220	476	32	28	15	41
21	24	137	116	174	711	2040	459	213	31	23	13	33
22	49	962	200	168	926	1330	594	134	30	272	13	46
23	152	2140	878	164	777	1200	208	203	30	490	12	80
24	167	2250	1930	137	598	1540	130	712	657	76	12	123
25	72	2870	2300	129	355	1060	89	1070	889	56	12	62
26	50	3780	1900	112	235	1060	82	759	422	43	12	35
27	40	2950	900	105	199	1080	98	260	169	49	12	26
28	34	4220	480	97	265	824	101	135	76	164	11	24
29	33	3570	300	83	244	836	91	95	2300	128	11	22
30	32	2770	290	75	----	1300	84	92	1460	56	11	21
31	33	-----	285	68	----	1350	-----	83	----	43	11	----
TOTAL	979.00	34447	17702.00	9408	9353	22698	13929	8947	7421	17184	841	1139
MEAN	31.6	1148	571	303	323	732	464	289	247	554	27.1	38.0
MAX	167	4220	2300	1320	1200	2040	1750	1320	2300	2860	164	135
MIN	.00	47	.00	68	49	80	80	39	29	23	11	11
CFSM	.10	3.55	1.77	.94	1.00	2.27	1.44	.90	.77	1.72	.08	.12
IN.	.11	3.97	2.04	1.08	1.08	2.61	1.60	1.03	.85	1.98	.10	.13

CAL YR 1979 TOTAL 303750.00 MEAN 832 MAX 5950 MIN .00 CFSM 2.58 IN 34.98
WTR YR 1980 TOTAL 144048.00 MEAN 394 MAX 4220 MIN .00 CFSM 1.22 IN 16.59

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).

WATER-DISCHARGE RECORDS

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

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

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

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

AVERAGE DISCHARGE.--29 years, 198 ft³/s (5.607 m³/s), 10.26 in/yr (261 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)
Nov. 24	1400	2780	78.7	16.81	5.124	Mar. 21	2000	2950	83.5	16.96	5.169
Mar. 9	unknown	4040	114	17.85	5.441	June 3	1500	*4520	128	*18.19	5.544

Minimum daily discharge, 9.1 ft³/s (0.258 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	129	382	284	203	84	628	98	120	915	27	21
2	64	357	273	270	199	72	439	94	1540	309	24	31
3	73	235	231	259	195	63	380	90	4110	101	23	24
4	72	170	218	250	193	56	1030	85	2790	71	21	20
5	83	142	212	162	189	180	590	81	1400	58	21	20
6	102	95	229	68	185	560	414	77	679	52	19	18
7	100	57	211	65	198	700	351	74	399	49	50	18
8	97	47	187	162	194	1410	337	68	382	78	32	16
9	96	123	174	256	194	3900	410	66	323	91	24	15
10	158	562	171	267	193	1700	393	64	295	63	37	15
11	145	332	170	496	193	749	339	63	279	49	132	14
12	121	210	166	654	194	307	357	66	259	43	563	14
13	109	172	159	271	198	186	345	77	244	42	207	13
14	97	157	152	170	198	141	1270	68	232	37	109	13
15	97	148	147	254	211	138	1210	64	223	34	163	13
16	162	145	147	270	197	201	692	63	270	32	133	12
17	408	140	143	333	189	651	486	74	263	30	274	13
18	382	137	148	347	182	936	409	250	128	27	1260	16
19	255	134	147	299	181	460	369	177	89	27	708	14
20	223	186	138	273	180	293	343	115	87	26	199	13
21	206	157	135	258	245	1840	333	95	80	26	87	12
22	196	145	314	243	765	1910	303	82	71	60	58	12
23	201	716	1120	230	1160	778	172	76	66	40	43	12
24	184	2440	1570	220	490	707	137	93	84	35	36	12
25	157	1760	1840	291	239	1210	117	210	75	29	32	12
26	129	2330	915	285	169	563	114	149	63	26	29	12
27	118	1400	476	258	124	350	110	93	55	25	27	14
28	116	2040	324	226	111	287	111	76	51	88	25	12
29	115	1420	303	214	98	934	112	69	719	117	24	11
30	109	642	310	211	----	704	103	66	1690	49	24	9.1
31	112	-----	301	206	----	1140	-----	69	-----	33	23	-----
TOTAL	4526	16728	11413	8052	7267	23210	12404	2892	17066	2662	4434	451.1
MEAN	146	558	368	260	251	749	413	93.3	569	85.9	143	15.0
MAX	408	2440	1840	654	1160	3900	1270	250	4110	915	1260	31
MIN	39	47	135	65	98	56	103	63	51	25	19	9.1
CFSM	.56	2.13	1.41	.99	.96	2.86	1.58	.36	2.17	.33	.55	.06
IN.	.64	2.38	1.62	1.14	1.03	3.30	1.76	.41	2.42	.38	.63	.06

CAL YR 1979 TOTAL 97603.0 MEAN 267 MAX 4020 MIN 15 CFSM 1.02 IN 13.86
WTR YR 1980 TOTAL 111105.1 MEAN 304 MAX 4110 MIN 9.1 CFSM 1.16 IN 15.78

03322900 WABASH RIVER AT LINN GROVE, IN

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

DRAINAGE AREA.--453 mi² (1,173 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 808.00 ft (246.278 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--16 years, 372 ft³/s (10.54 m³/s), 11.15 in/yr (283 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)
Nov. 27	1100	3330	94.3	10.70	3.261	Mar. 23	0500	3100	87.8	10.43	3.179
Dec. 26	0800	3130	88.6	10.46	3.188	Apr. 16	0200	2030	57.5	8.90	2.713
Mar. 9	2300	*5050	143	*12.22	3.725	June 4	1200	4780	135	12.05	3.673

Minimum daily discharge, 15 ft³/s (.425 m³/s) Sept. 27, 28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	125	1770	344	214	111	1470	144	175	1270	55	37
2	36	299	758	313	209	95	1050	135	1690	878	45	34
3	50	385	372	289	204	78	643	129	2850	286	40	40
4	72	255	299	271	200	65	1130	123	4610	156	38	39
5	69	184	275	256	196	161	1430	118	4080	120	37	33
6	78	151	289	181	190	866	944	114	2840	100	37	32
7	96	103	285	114	202	1010	520	108	1760	89	72	30
8	94	61	249	110	231	2120	427	101	821	128	102	28
9	93	50	247	164	215	3700	456	95	468	174	69	27
10	93	297	232	244	211	4590	500	90	373	160	48	26
11	157	570	225	389	209	3230	441	87	338	106	329	25
12	144	343	223	1120	209	1960	439	98	307	77	734	24
13	119	229	211	745	211	888	470	115	288	65	617	24
14	103	188	202	327	212	430	1010	118	274	61	288	22
15	91	167	192	243	213	301	1750	102	273	55	232	22
16	97	156	187	298	206	354	1920	89	352	50	242	23
17	178	151	192	408	198	788	1290	109	347	46	294	24
18	452	143	185	481	192	1310	662	521	253	44	1210	24
19	383	140	202	399	190	1320	471	474	167	42	1420	24
20	268	142	200	331	185	771	406	278	173	40	1120	22
21	232	182	190	297	247	1230	376	195	155	39	346	19
22	215	166	370	280	1100	2280	358	156	130	70	168	18
23	207	450	1210	269	1590	2910	305	135	120	149	111	20
24	208	1420	1890	229	1380	2070	213	132	117	77	79	19
25	189	2100	2530	235	547	1700	181	162	143	55	65	17
26	162	2970	3030	299	220	1750	161	237	120	46	57	16
27	133	3300	2290	280	167	1170	154	181	104	42	51	15
28	118	3170	1240	256	124	628	156	132	94	46	46	15
29	115	3090	532	238	115	840	161	121	163	180	44	16
30	113	2760	409	227	----	1260	155	101	884	159	43	15
31	107	-----	378	219	----	1410	-----	97	-----	82	40	----
TOTAL	4503	23747	20864	9856	9587	41396	19649	4797	24469	4892	8079	730
MEAN	145	792	673	318	331	1335	655	155	816	158	261	24.3
MAX	452	3300	3030	1120	1590	4590	1920	521	4610	1270	1420	40
MIN	31	50	185	110	115	65	154	87	94	39	37	15
CFSM	.32	1.75	1.49	.70	.73	2.95	1.45	.34	1.80	.35	.58	.05
IN.	.37	1.95	1.71	.81	.79	3.40	1.61	.39	2.01	.40	.66	.06

CAL YR 1979 TOTAL 168799 MEAN 462 MAX 5810 MIN 29 CFSM 1.02 IN 13.86
WTR YR 1980 TOTAL 172569 MEAN 472 MAX 4610 MIN 15 CFSM 1.04 IN 14.17

03322900 WABASH RIVER AT LINN GROVE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSIS: October 1979 to current year.
WATER TEMPERATURE: October 1979 to current year.
SEDIMENT DISCHARGE: July 1971 to current year (partial-record station).

WATER DATA, OCTOBER 1979 TO SEPTEMBER 1980

	TEMPERATURE (DEG. C) OF WATER						SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG.C)					
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JULY			AUGUST			JULY			AUGUST	
1	----	----	----	27.0	24.0	25.5	---	---	---	573	544	565
2	----	----	----	26.0	24.5	25.5	---	---	---	612	574	597
3	----	----	----	25.5	24.0	24.5	---	---	---	647	611	629
4	----	----	----	25.5	23.5	24.5	---	---	---	693	648	668
5	----	----	----	25.5	24.5	25.0	---	---	---	717	696	706
6	----	----	----	26.0	24.0	25.0	---	---	---	759	715	737
7	----	----	----	26.5	24.5	25.5	---	---	---	825	657	774
8	----	----	----	26.5	24.5	25.5	---	---	---	697	436	531
9	24.5	24.0	24.0	26.5	25.0	26.0	609	582	593	742	692	712
10	26.0	23.5	24.5	27.0	25.0	26.0	589	439	500	689	634	674
11	27.0	23.5	25.5	26.0	23.0	24.5	527	452	472	641	336	496
12	26.5	25.0	26.0	23.5	23.0	23.5	576	483	515	453	348	377
13	27.5	24.5	26.0	23.5	22.5	23.0	636	575	623	460	390	422
14	28.0	24.5	26.5	23.5	22.5	23.0	687	623	658	522	463	489
15	29.0	26.0	27.5	23.5	22.5	23.0	710	604	669	671	528	599
16	29.0	26.5	28.0	23.0	22.0	22.5	708	650	681	761	676	725
17	28.0	26.0	27.0	22.0	20.5	21.0	682	622	669	788	762	772
18	26.5	25.0	26.0	21.5	20.5	21.0	687	669	678	829	785	805
19	27.5	25.5	26.0	22.5	20.5	22.0	703	687	695	891	833	862
20	28.0	25.5	26.5	----	----	----	732	675	704	---	---	---
21	26.5	25.0	26.0	----	----	----	775	602	719	---	---	---
22	26.0	24.5	25.0	----	----	----	749	681	723	---	---	---
23	24.5	22.5	23.5	----	----	----	702	597	629	---	---	---
24	25.0	22.0	23.5	----	----	----	644	586	603	---	---	---
25	25.0	22.5	24.0	----	----	----	656	604	631	---	---	---
26	25.5	23.5	24.5	----	----	----	663	604	633	---	---	---
27	25.0	23.0	24.0	----	----	----	703	665	688	---	---	---
28	23.5	22.5	23.0	----	----	----	756	699	728	---	---	---
29	24.0	22.0	23.0	----	----	----	769	608	708	---	---	---
30	23.0	21.5	22.5	----	----	----	563	424	499	---	---	---
31	25.0	22.0	23.5	----	----	----	541	485	515	---	---	---

03322900 WABASH RIVER AT LINN GROVE, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT					
11...	1200	13.0	167	64	29
25...	1430	10.5	193	37	19

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, 67,042 acre-ft (82.7 hm^3) June 10, elevation, 780.74 ft (237.970 m); minimum, 4,011 acre-ft (4.94 hm^3) Jan. 24, elevation, 736.78 ft (224.570 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	746.83	10,602	
Oct. 31	742.40	7,284	-3,318
Nov. 30	757.02	20,888	+13,604
Dec. 31	738.96	5,162	-15,726
CAL YR 1979			+742
Jan. 31	737.86	4,563	-599
Feb. 29	737.32	4,282	-281
Mar. 31	750.98	14,341	+10,059
Apr. 30	748.45	11,988	-2,353
May 31	749.64	13,067	+1,079
June 30	749.12	12,589	-478
July 31	750.88	14,244	+1,655
Aug. 31	749.09	12,562	-1,682
Sept. 30	746.80	10,577	-1,985
WTR YR 1980			-23

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 0512101, on right bank at the Huntington Water and Light Plant, 2 miles (3 km) south of Huntington, 2.4 miles (3.9 km) downstream from Huntington Lake, 3.2 miles (5.1 km) upstream from Little River, and at mile 409.0 (658.1 km).

DRAINAGE AREA.--721 mi² (1,867 km²).

WATER-DISCHARGE RECORDS

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

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

GAGE.--None. Datum of gage was 700.04 ft (213.372 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). July 6, 1951, to Sept. 30, 1974 water-stage recorder at site described in "LOCATION" paragraph. Prior to July 5, 1951, nonrecording gage at same site and datum.

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

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

AVERAGE DISCHARGE.--29 years, 605 ft³/s (17.13 m³/s), 11.39 in/yr (289 mm/yr).

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

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

EXTREMES FOR 1979 WATER YEAR.--Maximum daily discharge, 5,010 ft³/s (142 m³/s) Mar. 8; minimum daily discharge, 24 ft³/s (0.68 m³/s) Oct. 1-15, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,470 ft³/s (127 m³/s) Mar. 11, 12; minimum daily discharge, 26 ft³/s (0.74 m³/s) Apr. 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: October 1963 to June 1977.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	59	54	797	117	2450	838	110	474	75	834	332
2	24	63	54	1280	102	2750	603	145	256	113	690	217
3	24	65	84	1960	96	3060	575	310	298	154	449	222
4	24	64	329	1860	96	3220	683	285	247	164	470	164
5	24	64	699	1150	96	3470	433	238	169	164	484	108
6	24	69	543	426	96	3750	335	240	153	163	964	94
7	24	93	256	284	96	4680	331	237	153	104	1820	94
8	24	102	315	180	88	5010	286	201	157	75	1800	94
9	24	90	431	218	96	4950	351	201	166	162	1770	80
10	24	76	350	202	96	4850	634	201	174	262	1160	75
11	24	69	311	171	96	4740	778	201	820	443	1010	75
12	24	68	212	142	81	4550	953	168	1370	501	1530	75
13	24	63	141	142	59	4330	1070	153	894	498	1440	75
14	24	85	93	142	53	4050	1190	176	295	495	693	373
15	24	96	71	142	53	2690	1300	203	241	497	303	700
16	44	90	75	135	53	1550	1800	210	170	719	231	419
17	92	104	100	124	53	1290	2350	210	170	1070	173	69
18	109	113	107	124	53	1220	2410	191	168	1050	136	69
19	108	106	106	130	53	934	1870	129	166	1010	126	70
20	106	137	83	136	53	672	2280	128	118	566	126	70
21	65	147	89	136	53	640	1470	136	137	169	126	70
22	64	144	107	146	54	453	1070	121	253	136	127	70
23	76	141	107	156	77	363	1030	112	295	95	129	70
24	90	137	131	158	531	359	677	112	292	106	173	70
25	107	107	117	158	1300	316	494	129	205	210	205	70
26	119	84	106	152	1530	212	485	231	104	264	208	70
27	105	62	70	135	1310	147	320	490	75	452	213	70
28	101	73	71	135	1800	296	241	670	75	557	223	70
29	80	72	99	121	----	626	162	713	75	584	218	70
30	71	71	107	114	----	815	124	700	75	601	427	70
31	62	----	124	121	----	850	-----	682	----	605	609	----
TOTAL	1759	2714	5542	11277	8241	69293	27143	8033	8245	12064	18867	4175
MEAN	56.7	90.5	179	364	294	2235	905	259	275	389	609	139
MAX	119	147	699	1960	1800	5010	2410	713	1370	1070	1820	700
MIN	24	59	54	114	53	147	124	110	75	75	126	69

CAL YR 1978 TOTAL 213165 MEAN 584 MAX 5750 MIN 24
WTR YR 1979 TOTAL 177353 MEAN 486 MAX 5010 MIN 24

03323500 WABASH RIVER AT HUNTINGTON, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	141	3800	713	245	137	2480	27	308	585	204	75
2	116	179	3640	507	242	123	2440	39	399	1010	112	75
3	133	214	2720	351	239	136	2360	58	478	1030	90	75
4	150	232	1780	298	202	140	2300	108	510	590	87	75
5	149	301	1000	310	187	161	2270	185	536	176	82	75
6	149	329	617	275	190	253	2240	214	557	126	79	75
7	148	320	366	203	191	590	1860	227	571	126	50	75
8	147	310	279	83	191	1350	1020	212	577	126	29	39
9	154	299	301	76	192	1980	918	187	579	126	198	27
10	180	202	294	182	192	3220	993	146	579	126	94	27
11	179	152	240	339	192	4470	983	125	1120	174	211	27
12	178	203	216	395	192	4470	955	126	884	188	502	27
13	95	292	212	642	193	4330	753	126	393	188	690	27
14	171	322	214	740	193	3330	881	126	388	146	779	96
15	209	382	224	712	194	2450	1510	127	275	58	688	99
16	207	393	222	455	195	1910	1920	147	215	27	680	84
17	204	375	179	492	194	1240	2100	154	420	27	670	109
18	181	354	121	645	193	1590	2060	275	2670	27	701	106
19	195	206	132	681	193	1940	1360	604	3280	27	871	83
20	239	139	175	552	194	1940	675	982	2710	27	1370	74
21	309	144	189	394	228	1940	399	831	1900	27	1510	73
22	360	191	227	327	703	1980	309	409	1490	28	1450	73
23	396	277	1030	337	1560	2050	316	245	718	306	907	73
24	358	451	1930	227	1970	2150	241	191	303	379	227	85
25	296	595	2920	158	2020	2550	110	110	189	185	191	121
26	291	1740	3640	239	1570	2710	93	156	128	108	133	148
27	218	2670	3800	272	818	2690	55	192	172	97	112	104
28	188	2740	3730	251	289	2620	41	280	214	380	89	78
29	187	2810	3520	182	187	2540	34	248	157	1140	75	78
30	163	3480	2060	170	-----	2490	26	164	126	630	75	78
31	111	-----	1050	227	-----	2490	-----	250	-----	277	75	----
TOTAL	6131	20443	40828	11435	13349	61970	33702	7271	22846	8467	13031	2261
MEAN	198	681	1317	369	460	1999	1123	235	762	273	420	75.4
MAX	396	3480	3800	740	2020	4470	2480	982	3280	1140	1510	148
MIN	70	139	121	76	187	123	26	27	126	27	29	27

CAL YR 1979 TOTAL 234740 MEAN 643 MAX 5010 MIN 53
WTR YR 1980 TOTAL 241734 MEAN 660 MAX 4470 MIN 26

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).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 728.10 ft (221.925 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, nonrecording gage 4 miles (6 km) downstream at datum 8.79 ft (2.679 m) lower, and Oct. 1, 1948, to Sept. 5, 1950, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are fair. 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.--37 years, 222 ft^3/s (6.287 m^3/s), 11.46 in/yr (291 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,990 ft^3/s (170 m^3/s) Jan. 4, 1950; maximum gage height, 18.43 ft (5.617 m) Feb. 11, 1959; 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)
Mar. 17	2000	2980	84.4	13.50	4.115
June 3	0800	*3950	112	*15.75	4.801

Minimum daily discharge, 16 ft^3/s (.453 m^3/s) July 18, 19..

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1969 to September 1978 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	45	160	147	35	90	732	96	396	28	39	55
2	49	56	130	125	34	82	435	84	3700	29	31	36
3	41	35	119	109	34	78	395	78	3880	26	28	28
4	28	29	101	93	33	75	1670	72	3110	26	23	35
5	25	25	88	82	34	80	824	67	1710	26	22	39
6	23	23	102	71	33	135	432	64	768	33	21	29
7	23	23	102	63	34	168	312	59	435	31	21	24
8	22	22	91	54	33	1700	317	54	295	42	20	22
9	21	25	72	52	32	1460	648	52	211	33	21	21
10	20	59	69	50	31	1650	597	49	161	32	21	23
11	20	56	68	92	31	1080	378	51	119	26	25	21
12	21	41	73	193	30	445	332	56	97	23	39	20
13	21	36	105	191	30	283	285	102	82	22	30	20
14	20	29	85	123	30	214	654	106	75	20	229	21
15	19	28	68	85	30	257	899	67	72	19	1270	20
16	21	26	65	75	30	339	605	55	96	18	1030	21
17	24	24	57	159	30	2220	343	95	81	17	800	156
18	21	23	54	246	31	2550	263	998	63	16	1080	161
19	21	26	52	176	31	1330	215	504	58	16	423	70
20	22	26	50	134	34	763	178	278	63	21	256	45
21	23	23	47	103	54	1630	163	186	57	22	181	35
22	24	25	125	82	1440	1240	136	135	46	79	113	33
23	35	122	998	60	1260	611	123	110	41	96	76	156
24	30	396	1790	43	563	602	106	101	40	46	56	92
25	25	310	2080	41	243	969	93	140	39	30	45	61
26	22	671	1100	40	181	518	83	107	37	22	38	43
27	21	518	579	39	140	355	77	73	35	21	34	34
28	21	485	367	38	116	287	109	62	33	231	30	30
29	20	419	267	37	97	632	157	57	32	221	28	27
30	19	232	216	36	----	608	117	56	28	91	27	25
31	19	----	177	35	----	1360	-----	157	-----	54	40	----
TOTAL	744	3858	9457	2874	4734	23811	11678	4171	15860	1417	6097	1403
MEAN	24.0	129	305	92.7	163	768	389	135	529	45.7	197	46.8
MAX	49	671	2080	246	1440	2550	1670	998	3880	231	1270	161
MIN	19	22	47	35	30	75	77	49	28	16	20	20
CFSM	.09	.49	1.16	.35	.62	2.92	1.48	.51	2.01	.17	.75	.18
IN.	.11	.55	1.34	.41	.67	3.37	1.65	.59	2.24	.20	.86	.20

CAL YR 1979 TOTAL 68862 MEAN 189 MAX 3870 MIN 15 CFSM .72 IN 9.74
WTR YR 1980 TOTAL 86104 MEAN 235 MAX 3880 MIN 16 CFSM .89 IN 12.18

03324200 SALAMONIE RIVER AT PORTLAND, IN

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

DRAINAGE AREA.--85.6 mi² (221.7 km²).

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

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

GAGE.--Water-stage recorder. Datum of gage is 877.59 ft (267.489 m) 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.--21 years, 73.1 ft³/s (2.070 m³/s), 11.60 in/yr (295 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)
Nov. 24	0900	2030	57.5	12.33	3.758	Mar. 8	1600	2700	76.5	13.93	4.246
Nov. 26	0600	1520	43.0	10.74	3.274	Mar. 21	1600	2130	60.3	12.61	3.844
Nov. 28	1200	1680	47.6	11.25	3.429	June 3	0200	*3020	85.5	*14.60	4.450
Dec. 24	1800	1460	41.3	10.53	3.210						

Minimum daily discharge, 2.3 ft³/s (0.065 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	197	73	29	7.6	14	134	15	179	30	8.1	6.6
2	13	285	50	25	7.5	12	88	13	1590	18	5.6	6.9
3	7.6	72	38	22	7.2	12	76	12	2140	13	4.9	4.1
4	14	39	34	19	7.0	11	393	11	191	11	4.2	3.8
5	8.0	28	35	17	7.0	217	124	10	69	11	4.0	3.1
6	5.8	25	46	15	7.0	274	73	11	51	8.4	6.4	2.7
7	9.4	22	38	14	7.0	220	55	9.8	35	12	19	2.9
8	5.8	22	30	13	6.8	2420	55	9.0	41	80	9.0	2.7
9	4.3	66	23	12	6.8	811	97	8.5	25	82	5.6	2.8
10	4.5	305	23	13	6.8	378	96	7.7	27	29	4.4	2.8
11	7.6	80	22	212	6.8	196	60	7.5	21	19	12	2.9
12	7.1	44	21	159	6.8	90	100	11	15	11	41	3.0
13	6.2	32	18	59	6.6	61	77	14	12	7.5	14	2.6
14	5.2	26	17	36	7.0	49	641	11	11	6.2	14	2.9
15	4.7	22	15	32	6.8	64	258	8.1	13	5.9	20	2.8
16	10	20	15	36	6.6	113	129	7.1	75	6.0	17	3.4
17	145	17	14	74	6.4	413	67	25	27	8.7	109	7.2
18	67	16	13	63	6.6	309	48	136	16	5.3	369	4.1
19	32	17	12	41	6.6	146	37	52	16	4.3	208	3.4
20	23	58	11	32	6.8	98	31	31	19	3.7	54	2.5
21	18	47	11	25	199	1430	31	21	11	15	25	2.7
22	15	28	112	21	921	390	27	15	8.7	27	15	4.2
23	26	628	541	18	223	134	24	13	10	18	9.6	5.7
24	34	1710	944	15	111	278	20	16	105	11	6.9	3.2
25	23	589	576	17	50	330	17	17	27	6.6	5.9	4.2
26	18	1090	182	14	32	121	15	12	14	4.9	5.2	5.5
27	15	254	95	11	24	79	15	9.4	11	5.4	4.8	3.6
28	14	1270	60	9.4	18	66	20	8.5	8.6	131	4.4	2.6
29	15	302	45	8.4	15	380	23	7.7	752	85	4.1	2.3
30	16	121	41	8.0	------	178	18	9.8	103	20	4.4	3.4
31	13	----	35	7.8	------	351	----	10	------	11	5.5	-----
TOTAL	597.1	7432	3190	1077.6	1730.7	9645	2849	549.1	5623.3	706.9	1020.0	110.6
MEAN	19.3	248	103	34.8	59.7	311	95.0	17.7	187	22.8	32.9	3.69
MAX	145	1710	944	212	921	2420	641	136	2140	131	369	7.2
MIN	4.3	16	11	7.8	6.4	11	15	7.1	8.6	3.7	4.0	2.3
CFSM	.23	2.90	1.20	.41	.70	3.63	1.11	.21	2.19	.27	.38	.04
IN.	.26	3.23	1.39	.47	.75	4.19	1.24	.24	2.44	.31	.44	.05

CAL YR 1979 TOTAL 39860.8 MEAN 109 MAX 2230 MIN 3.0 CFSM 1.27 IN 17.32
WTR YR 1980 TOTAL 34531.3 MEAN 94.3 MAX 2420 MIN 2.3 CFSM 1.10 IN 15.01

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).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

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

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

AVERAGE DISCHARGE.--23 years, 387 ft^3/s (10.96 m^3/s), 12.36 in/yr (314 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)
Nov. 26	1700	3200	90.6	10.00	3.048	Mar. 8	2300	5000	142	11.64	3.548
Dec. 25	0200	3850	109	10.60	3.231	June 3	1100	5480	155	12.06	3.676
Feb. 22	1800	3370	95.4	*13.31[a]	4.057	July 28	0600	*6760	191	*13.14	4.005

Minimum daily discharge, 20 ft^3/s (0.57 m^3/s) July 16.

[a]Backwater from ice.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	116	541	226	54	107	1170	100	639	238	304	67
2	89	514	340	192	52	100	636	88	3220	96	197	61
3	104	587	243	165	50	97	486	80	5210	64	144	51
4	89	229	204	146	49	103	1640	76	4660	53	105	53
5	87	151	183	122	48	157	1450	73	4040	48	83	46
6	88	115	196	106	48	1360	614	70	1450	44	85	41
7	86	97	206	92	48	1920	394	68	562	41	261	41
8	77	89	179	79	48	3990	394	63	959	44	206	44
9	79	92	149	72	47	4550	875	60	491	84	107	41
10	71	324	132	69	47	4880	734	58	292	103	78	39
11	67	652	125	153	47	3270	484	59	225	68	324	37
12	71	270	122	1440	46	1070	426	68	166	58	469	37
13	78	179	113	632	46	620	492	86	132	42	230	42
14	75	144	102	262	47	416	1270	78	111	31	383	45
15	86	120	91	185	45	400	2400	67	108	22	237	46
16	98	106	90	177	44	583	1300	60	378	20	129	54
17	86	96	77	404	42	1660	621	91	331	57	641	80
18	156	88	68	492	44	2420	395	767	163	70	2230	74
19	162	82	66	323	44	1240	290	758	115	49	1560	61
20	97	80	64	231	47	717	230	345	227	32	773	56
21	79	97	68	193	65	1860	194	208	157	74	327	51
22	75	126	739	165	1930	2730	166	146	94	847	186	53
23	81	577	2430	113	3000	2210	157	112	80	663	124	61
24	83	2310	3350	77	1250	1060	140	101	159	233	84	57
25	83	2530	3600	90	563	2120	119	93	191	102	70	67
26	99	3050	2870	80	251	1200	104	83	108	59	58	63
27	84	2790	1130	73	180	621	95	69	69	52	53	49
28	75	2370	628	68	158	444	107	60	56	4990	48	46
29	71	2290	427	64	130	1040	119	56	73	3490	44	47
30	71	1450	335	60	----	1310	115	71	848	1120	46	43
31	72	-----	274	57	----	1650	-----	114	-----	534	58	----
TOTAL	2670	21721	19142	6608	8470	45905	17617	4228	25314	13428	9644	1553
MEAN	86.1	724	617	213	292	1481	587	136	844	433	311	51.8
MAX	162	3050	3600	1440	3000	4880	2400	767	5210	4990	2230	80
MIN	51	80	64	57	42	97	95	56	56	20	44	37
CFSM	.20	1.70	1.45	.50	.69	3.49	1.38	.32	1.99	1.02	.73	.12
IN.	.23	1.90	1.68	.58	.74	4.02	1.54	.37	2.22	1.18	.84	.14

CAL YR 1979 TOTAL 170797 MEAN 468 MAX 8320 MIN 32 CFSM 1.10 IN 14.95
WTR YR 1980 TOTAL 176300 MEAN 482 MAX 5210 MIN 20 CFSM 1.13 IN 15.43

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, 168,100 acre-ft (207 hm^3) Mar. 30, 1978, elevation, 780.20 ft (237.805 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, 107,906 acre-ft (133 hm^3) June 11, elevation, 768.32 ft (234.184 m); minimum, 10,485 acre-ft (12.9 hm^3) Nov. 5, elevation, 727.02 ft (221.596 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	745.16	36,634	
Oct. 31	727.11	10,558	-26,076
Nov. 30	744.87	36,028	+25,470
Dec. 31	741.32	29,031	-6,997
CAL YR 1979			-15,788
Jan. 31	730.06	13,164	-15,867
Feb. 29	731.35	14,476	+1,312
Mar. 31	740.30	27,172	+12,696
Apr. 30	751.25	50,634	+23,462
May 31	755.23	61,354	+10,720
June 30	758.33	70,758	+9,404
July 31	762.02	83,246	+12,488
Aug. 31	755.19	61,239	-22,007
Sept. 30	751.06	50,157	-11,082
WTR YR 1980			+13,649

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 mi^2 (1,443 km^2).

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

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

GAGE.--None. Datum of gage was 673.96 ft (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.--56 years (1924 to current year), 510 ft^3/s (14.44 m^3/s), 12.43 in/yr (316 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s (467 m^3/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 ft^3/s (0.020 m^3/s) Oct. 30, 1968, result of abnormal regulation.

EXTREMES FOR 1979 WATER YEAR.--Maximum daily discharge, 3,560 ft^3/s (101 m^3/s) Mar. 17; minimum daily, 24 ft^3/s (0.68 m^3/s) Apr. 8-10.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,670 ft^3/s (104 m^3/s) Mar. 16; minimum daily, 24 ft^3/s (0.68 m^3/s) Apr. 22-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	441	436	96	118	97	494	814	239	97	70	1280	48
2	438	428	78	521	88	334	813	143	70	70	1490	48
3	436	258	291	1300	78	102	812	106	70	70	1010	48
4	434	84	1090	1820	78	106	810	75	70	70	1010	48
5	431	90	1350	1730	70	109	711	59	70	70	1010	48
6	428	90	658	1620	61	110	483	59	70	85	1010	37
7	425	90	247	123	61	112	167	59	365	95	1000	26
8	423	76	701	92	61	802	24	59	491	95	810	26
9	420	58	1030	162	61	1090	24	60	496	386	309	26
10	417	55	701	157	61	1720	24	52	499	509	182	26
11	414	52	364	72	61	2080	144	48	731	514	182	445
12	411	52	260	71	61	2080	206	56	923	515	182	689
13	408	52	178	88	61	2060	211	60	1090	523	182	686
14	405	140	148	72	61	2050	214	60	1620	1070	156	683
15	551	90	149	72	61	2340	217	54	1740	1410	120	850
16	593	105	130	71	61	3250	426	48	767	1400	87	959
17	569	183	112	86	61	3560	672	48	120	1390	70	975
18	469	255	96	97	61	3510	671	48	120	1070	70	981
19	417	398	96	97	61	3450	670	48	120	412	70	950
20	480	314	96	97	61	3390	669	48	120	182	70	934
21	509	183	96	116	61	3330	926	48	120	182	145	824
22	503	137	96	111	100	3260	1050	48	411	98	332	923
23	498	96	97	99	208	3190	1040	48	531	70	612	917
24	492	96	97	113	267	3120	1040	48	530	70	1290	911
25	486	106	97	135	299	3050	1030	48	239	344	1480	905
26	481	123	97	154	319	2960	733	48	87	510	1080	898
27	475	122	96	154	213	2550	1080	176	70	515	391	870
28	468	85	86	105	343	1710	1080	308	70	517	472	852
29	461	89	93	88	----	1320	969	339	70	518	868	846
30	530	96	112	92	----	1520	568	339	70	517	990	839
31	476	----	113	97	----	1020	-----	224	-----	517	629	-----
TOTAL	14389	4439	8951	9730	3136	59779	18298	3103	11847	13864	18589	17318
MEAN	464	148	289	314	112	1928	610	100	395	447	600	577
MAX	593	436	1350	1820	343	3560	1080	339	1740	1410	1490	981
MIN	405	52	78	71	61	102	24	48	70	70	70	26

CAL YR 1978 TOTAL 231612 MEAN 635 MAX 4900 MIN 25
WTR YR 1979 TOTAL 183443 MEAN 503 MAX 3560 MIN 24

03324500 SALAMONIE RIVER AT DORA, IN--continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	833	142	1310	2240	134	374	1600	25	294	2570	1830	48
2	814	320	1300	2380	134	280	1200	25	313	2530	1820	79
3	851	610	1280	2260	123	372	672	25	125	952	1800	133
4	903	515	1590	1930	78	431	736	25	127	182	2300	151
5	889	227	1780	1480	52	429	1730	25	129	182	2480	151
6	875	126	1710	690	78	431	2130	25	130	182	1900	97
7	862	127	1640	183	90	621	1290	25	130	143	974	70
8	848	274	1570	183	105	769	636	25	130	87	508	70
9	1170	214	1290	183	113	870	539	25	131	70	438	59
10	1410	288	758	291	113	581	549	25	131	70	438	37
11	1350	524	384	281	113	238	332	25	493	70	452	26
12	1290	498	281	282	112	243	223	25	1090	95	1070	26
13	1220	379	281	468	112	1270	147	25	832	120	750	26
14	1040	288	280	574	112	2530	110	25	646	120	803	26
15	381	171	244	566	112	3520	112	25	645	105	626	460
16	113	171	183	324	112	3670	381	25	643	95	96	561
17	126	171	183	271	112	1670	517	25	643	95	96	503
18	126	172	183	554	112	734	518	25	641	64	511	501
19	126	172	183	636	112	1900	518	25	640	48	1380	499
20	127	171	183	509	112	2850	217	26	638	48	1520	498
21	127	171	183	427	112	2590	55	26	637	33	1510	496
22	174	79	184	426	402	2390	24	26	635	259	1780	494
23	252	33	573	.263	650	2880	24	26	921	1120	1870	493
24	162	347	796	183	1160	3040	24	26	1370	1480	1530	491
25	126	623	870	274	1430	3020	24	26	2130	596	660	489
26	126	911	926	274	1390	2990	24	26	2380	183	182	487
27	126	1210	948	183	1350	2910	24	26	2510	183	151	566
28	126	1260	1150	228	1290	2800	24	26	2690	364	120	613
29	126	1290	1350	213	995	2700	24	26	2650	636	84	611
30	126	1320	1330	182	-----	2650	24	26	2610	1140	48	609
31	99	-----	1640	152	-----	1510	-----	26	-----	1850	48	----
TOTAL	16924	12804	26563	19090	10920	53263	14428	787	27084	15672	29775	9370
MEAN	546	427	857	616	377	1718	481	25.4	903	506	960	312
MAX	1410	1320	1780	2380	1430	3670	2130	26	2690	2570	2480	613
MIN	99	33	183	152	52	238	24	25	125	33	48	26
CFSM	.98	.77	1.54	1.11	.68	3.08	.86	.05	1.62	.91	1.72	.56
IN.	1.13	.86	1.77	1.27	.73	3.56	.96	.05	1.81	1.05	1.99	.63

CAL YR 1979 TOTAL 211955 MEAN 581 MAX 3560 MIN 24 CFSM 1.04 IN 14.16
WTR YR 1980 TOTAL 236680 MEAN 647 MAX 3670 MIN 24 CFSM 1.16 IN 15.81

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. Flow regulated by Huntington Lake (See sta 03323450) and Salamonie Lake (See sta 03324450).

AVERAGE DISCHARGE.--57 years, 1,487 ft³/s (42.11 m³/s), 11.42 in/yr (290 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,600 ft³/s (1,400 m³/s) May 18, 1943; maximum gage height, 24.44 (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, 9,300 ft³/s (263 m³/s) June 2, gage height, 13.29 ft (4.051 m); minimum daily, 105 ft³/s (2.97 m³/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	319	5390	3370	542	935	5330	243	1210	2640	2100	215
2	796	475	5170	3470	586	491	4660	217	7590	3360	1900	228
3	890	843	4600	3250	631	605	3640	209	6850	2440	1800	237
4	1070	1060	3770	2870	576	627	5190	213	4880	1190	2130	267
5	1060	607	3410	2290	471	641	5320	278	3320	546	2450	303
6	1050	525	2880	1700	454	727	5100	405	2200	373	2130	269
7	1040	524	2670	652	468	1290	4040	403	1900	339	1140	214
8	1030	590	2330	534	482	4420	2480	393	1700	291	586	201
9	1250	644	2170	361	478	5330	2400	319	1200	266	404	185
10	1770	649	1500	379	468	5870	2520	300	860	260	523	147
11	1750	796	984	656	462	6600	2070	259	635	256	572	120
12	1720	921	685	925	457	5510	1790	267	2200	282	1340	110
13	1680	685	686	1220	456	5570	1620	312	2900	324	1680	107
14	1530	685	648	1640	455	6230	1980	326	2300	327	2080	105
15	934	570	613	1590	454	5950	2950	306	2700	305	2890	254
16	346	672	539	1320	454	6220	3250	268	3750	231	2640	517
17	344	657	511	858	453	7380	3160	341	4100	184	2250	719
18	338	640	455	1480	453	6160	2980	1600	4350	170	3170	1010
19	307	617	375	1820	452	5830	2510	1610	4250	117	2820	846
20	329	367	419	1580	452	5820	1330	1480	3800	118	3010	710
21	378	339	455	1110	493	6990	1050	1450	2580	192	3200	648
22	521	311	490	994	2880	6800	676	902	2420	765	3240	627
23	735	487	1940	833	4310	5670	651	636	1840	1160	3310	648
24	723	1130	5350	784	3930	6030	626	738	1690	1970	2130	764
25	513	1890	6970	537	3950	6840	414	397	2070	1030	1200	710
26	470	2920	6390	633	3660	6620	333	397	2340	481	454	684
27	455	4840	5700	611	2850	6160	282	397	2380	338	369	653
28	342	4610	5320	642	2190	5910	269	445	2750	1850	305	499
29	327	4740	5230	606	1710	6150	315	495	2700	1990	272	476
30	324	4770	4460	492	-----	6310	294	488	2620	2270	190	471
31	287	-----	3050	502	-----	6650	-----	438	-----	2100	186	-----
TOTAL	25014	38883	85160	39709	35677	152336	69230	16532	86085	28165	52471	12944
MEAN	807	1296	2747	1281	1230	4914	2308	533	2870	909	1693	431
MAX	1770	4840	6970	3470	4310	7380	5330	1610	7590	3360	3310	1010
MIN	287	311	375	361	452	491	269	209	635	117	186	105
CFSM	.46	.73	1.55	.73	.70	2.78	1.31	.30	1.62	.51	.96	.24
IN.	.53	.82	1.79	.84	.75	3.21	1.46	.35	1.81	.59	1.10	.27

CAL YR 1979 TOTAL 570451 MEAN 1563 MAX 9840 MIN 150 CFSM .88 IN 12.00
WTR YR 1980 TOTAL 642206 MEAN 1755 MAX 7590 MIN 105 CFSM .99 IN 13.51

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).

WATER-DISCHARGE RECORDS

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

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

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

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

AVERAGE DISCHARGE.--34 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)
Nov. 24	1100	2940	83.3	11.67	3.557	Mar. 17	0800	3020	85.5	11.72	3.572
Nov. 28	0900	2510	71.1	11.17	3.405	June 2	2200	5550	157	13.39	4.081
Mar. 5	1500	2460	69.7	11.08	3.377	June 29	1000	*6280	178	*13.69	4.173

Minimum daily discharge, 6.3 ft³/s (0.178 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	48	186	65	27	54	142	27	109	316	51	19
2	28	492	123	56	27	49	390	25	3170	166	37	39
3	21	165	99	49	27	45	238	24	3990	128	34	20
4	22	94	88	45	27	815	153	23	1330	109	28	16
5	49	68	89	40	27	1940	117	23	251	97	24	15
6	30	61	101	36	27	352	100	23	145	81	31	14
7	24	56	85	35	26	403	94	22	115	163	177	13
8	19	49	66	33	26	193	87	20	178	195	65	12
9	23	53	57	32	26	131	154	20	81	187	39	12
10	58	466	58	31	25	95	146	19	102	197	57	12
11	42	191	56	483	25	123	100	19	58	103	446	11
12	33	103	50	328	25	199	121	25	45	79	931	11
13	25	83	45	129	25	918	95	28	40	68	174	10
14	19	70	39	101	25	379	989	20	37	53	120	9.7
15	18	61	36	93	24	216	392	17	35	46	114	8.7
16	24	57	32	109	24	537	205	17	64	40	82	9.5
17	263	48	29	167	24	2470	131	35	35	68	549	12
18	119	44	28	119	24	593	99	184	30	44	661	12
19	81	40	27	85	24	311	78	76	31	33	549	9.9
20	67	59	26	73	34	345	67	48	51	28	171	8.9
21	56	43	25	66	329	570	65	33	29	46	104	8.3
22	52	43	91	58	1270	282	57	26	25	99	69	7.9
23	77	660	456	55	412	198	52	26	82	146	47	11
24	68	2170	1230	48	216	152	43	77	206	66	34	9.7
25	52	1030	867	41	120	130	36	96	53	42	28	8.6
26	44	1850	352	36	85	612	31	43	34	33	25	8.2
27	37	642	199	31	70	347	31	27	27	87	22	7.5
28	42	1950	130	29	60	359	42	23	278	752	20	6.9
29	42	575	101	28	59	422	35	21	5640	220	18	6.3
30	34	281	91	28	----	245	30	21	3470	106	17	6.9
31	31	-----	76	27	----	187	----	23	-----	72	15	-----
TOTAL	1514	11552	4938	2556	3140	13672	4320	1111	19741	3870	4739	356.0
MEAN	48.8	385	159	82.5	108	441	144	35.8	658	125	153	11.9
MAX	263	2170	1230	483	1270	2470	989	184	5640	752	931	39
MIN	14	40	25	27	24	45	30	17	25	28	15	6.3
CFSM	.37	2.90	1.20	.62	.81	3.32	1.08	.27	4.95	.94	1.15	.09
IN.	.42	3.23	1.38	.71	.88	3.82	1.21	.31	5.52	1.08	1.33	.10

CAL YR 1979 TOTAL 90725.0 MEAN 249 MAX 3740 MIN 13 CFSM 1.87 IN 25.38
WTR YR 1980 TOTAL 71509.0 MEAN 195 MAX 5640 MIN 6.3 CFSM 1.47 IN 20.00

03325500 MISSISSINEWA RIVER NEAR RIDGEVILLE, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT									
10...	1000	9.5	65	31	5.4	--	--	--	---
NOV									
27...	1420	90.0	538	95	138	--	--	--	---
JAN									
09...	1600	.0	37	16	1.6	--	--	--	---
APR									
08...	1250	11.0	87	52	12	--	--	--	---
JUN									
03...	1135	20.5	3900	1310	13800	99	99	99	100
JUL									
29...	1120	19.5	208	166	93	--	--	--	---
SEP									
09...	1000	21.0	13	30	1.1	--	--	--	---

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 mi^2 (75.6 km^2).

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

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

REMARKS.--Records fair.

AVERAGE DISCHARGE.--9 years, 27.4 ft^3/s (0.776 m^3/s), 12.74 in/yr (324 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1170 ft^3/s (33.1 m^3/s) June 2, 1980, gage height, 14.42 ft (4.395 m); maximum gage height, 14.42 ft (4.395 m) June 2, 1980; minimum daily discharge, 0.38 ft^3/s (0.011 m^3/s) Sept. 25, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft^3/s (12.74 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)
Dec. 24	1400	465	13.2	10.89	3.319	June 2	2100	*1170	33.1	*14.42	4.395
Feb. 22	0600	483	13.7	11.06	3.371	July 28	0100	786	22.3	13.04	3.975
Mar. 8	0700	716	20.3	13.09	3.990	Aug. 12	unknown	497	14.1	11.07	3.374
Mar. 21	1100	458	13.0	10.82	3.298						

Minimum daily discharge, 1.5 ft^3/s (0.04 m^3/s) Oct. 7, 8, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	33	22	11	2.8	5.0	50	6.3	105	9.2	19	3.5
2	5.7	37	15	9.7	2.9	4.5	30	5.5	697	6.3	13	7.2
3	2.2	8.5	12	8.2	2.8	4.3	33	5.1	593	5.2	10	5.0
4	2.3	4.8	10	7.4	2.8	4.1	204	4.8	126	4.7	8.5	4.0
5	2.5	3.6	11	6.8	2.9	76	65	4.6	69	4.3	7.4	3.1
6	1.6	2.9	14	6.2	2.9	106	34	4.5	45	3.8	7.1	2.6
7	1.5	2.8	12	5.4	2.8	80	22	4.0	30	3.6	27	2.5
8	1.5	2.5	9.4	5.0	2.8	615	27	3.7	30	4.0	13	2.5
9	1.6	6.0	8.2	4.8	2.9	245	35	3.5	18	3.6	6.2	2.4
10	2.0	34	8.0	4.8	2.9	187	28	3.4	20	10	12	2.3
11	2.2	9.4	7.7	62	2.8	96	19	3.5	13	5.2	54	2.1
12	1.6	5.5	7.1	43	2.8	52	27	3.8	10	3.6	485	2.1
13	1.6	4.1	6.5	12	2.6	34	20	5.6	8.8	3.6	62	2.2
14	1.6	3.2	6.0	10	2.6	25	181	3.7	8.1	3.0	16	2.5
15	1.8	2.9	5.5	9.4	2.7	35	113	3.3	8.9	2.9	12	2.4
16	2.6	2.8	5.0	12	2.7	60	63	3.0	22	2.9	15	2.6
17	6.8	2.5	4.5	44	2.8	192	34	24	10	3.7	92	6.1
18	3.1	2.3	4.4	22	2.8	125	23	118	7.6	3.3	330	3.4
19	1.7	2.3	4.2	13	2.9	64	18	36	7.1	2.9	97	2.1
20	1.6	3.2	4.1	10	3.6	38	15	17	9.6	2.8	47	2.0
21	1.6	2.8	4.1	8.5	69	300	12	9.9	6.6	13	29	1.9
22	1.5	2.9	95	8.2	352	121	11	7.0	5.3	30	16	2.0
23	2.6	171	209	6.5	111	62	9.8	6.0	5.7	19	10	5.5
24	2.2	256	328	5.7	54	96	8.7	7.6	11	5.5	6.6	3.1
25	2.0	115	185	5.5	27	113	7.7	6.6	6.0	3.6	4.7	2.5
26	1.7	246	90	4.8	19	46	7.1	4.4	4.9	3.2	3.8	2.4
27	2.1	88	53	3.9	12	29	6.8	3.7	4.4	82	3.2	2.0
28	2.3	221	33	3.6	8.2	23	8.1	3.5	4.6	478	2.7	1.7
29	2.8	74	22	3.2	6.2	73	8.2	3.3	91	114	2.4	1.6
30	2.2	35	17	2.9	-----	61	6.8	4.0	20	46	6.2	1.7
31	2.5	------	14	2.9	-----	125	------	6.9	------	28	4.3	----
TOTAL	71.5	1385.0	1226.7	362.4	715.2	3096.9	1127.2	326.2	1997.6	910.9	1422.1	87.0
MEAN	2.31	46.2	39.6	11.7	24.7	99.9	37.6	10.5	66.6	29.4	45.9	2.90
MAX	6.8	256	328	62	352	615	204	118	697	478	485	7.2
MIN	1.5	2.3	4.1	2.9	2.6	4.1	6.8	3.0	4.4	2.8	2.4	1.6
CFSM	.08	1.58	1.36	.40	.85	3.42	1.29	.36	2.28	1.01	1.57	.10
IN.	.09	1.76	1.56	.46	.91	3.95	1.44	.42	2.54	1.16	1.81	.11

CAL YR 1979 TOTAL 9144.56 MEAN 25.1 MAX 504 MIN .96 CFSM .86 IN 11.65
WTR YR 1980 TOTAL 12728.70 MEAN 34.8 MAX 697 MIN 1.5 CFSM 1.19 IN 16.22

03326500 MISSISSINEWA RIVER AT MARION, IN

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

DRAINAGE AREA.--682 mi² (1,766 km²).

WATER-DISCHARGE RECORDS

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

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

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

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

AVERAGE DISCHARGE.--57 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)
Nov. 26		unknown				June 4	0500	*16200	459	*13.77	4.197
Mar. 9	2300	8540	242	9.88	3.011						

Minimum daily discharge, 70 ft³/s (1.982 m³/s) Oct. 23, Sept. 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: November 1975 to September 1976, February 1979 to September 1979.
WATER TEMPERATURE: November 1975 to September 1976, February 1979 to September 1979.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	229	1430	527	180	295	1930	242	648	4280	310	178
2	145	566	964	454	175	250	1340	226	6870	2290	230	137
3	112	949	782	395	170	273	1040	213	15700	489	184	187
4	115	512	665	348	160	313	1880	203	14200	343	154	172
5	100	341	618	316	155	382	1800	196	5700	277	137	131
6	107	268	607	289	145	1220	1150	192	1830	232	145	109
7	97	231	613	260	142	1710	802	185	1120	201	303	102
8	104	209	428	239	140	6430	733	181	1280	179	395	95
9	102	228	359	230	135	7570	1350	178	979	256	305	89
10	100	356	315	225	132	6970	1230	174	728	318	207	85
11	93	936	299	304	130	2980	918	171	591	345	382	80
12	92	542	299	964	128	1730	790	218	388	313	410	77
13	111	366	273	1290	125	1210	756	198	350	210	1140	75
14	111	296	256	634	121	869	1410	193	334	183	692	78
15	101	255	234	475	121	764	2620	186	341	156	201	76
16	106	227	224	436	120	943	2110	129	571	132	251	86
17	108	211	220	564	120	1910	1280	186	476	118	772	133
18	131	194	205	754	120	2980	862	1260	371	113	1510	102
19	314	187	200	627	119	2250	660	1380	312	109	2430	95
20	223	196	189	481	118	1450	542	802	356	112	1540	85
21	175	192	185	409	219	2430	463	507	301	252	732	80
22	211	238	910	377	2900	4550	405	373	270	140	435	80
23	70	433	2360	347	4140	3470	373	302	318	211	298	105
24	118	2400	3960	280	2200	1720	334	322	1030	244	223	144
25	148	3830	4690	260	1220	2210	300	280	613	224	180	107
26	161	4610	3560	250	710	1860	270	305	420	146	153	91
27	140	3980	1880	240	556	1260	252	269	289	137	137	84
28	125	3480	1290	220	466	949	278	216	232	1890	124	80
29	119	3480	921	200	380	1250	285	190	261	2230	113	74
30	114	2250	723	195	-----	1690	262	190	2100	960	243	70
31	117	-----	617	185	-----	1880	-----	193	-----	475	292	----
TOTAL	3970	32192	30276	12775	15547	65768	28425	9860	58979	17565	14628	3087
MEAN	128	1073	977	412	536	2122	948	318	1966	567	472	103
MAX	314	4610	4690	1290	4140	7570	2620	1380	15700	4280	2430	187
MIN	70	187	185	185	118	250	252	129	232	109	113	70
CFSM	.19	1.57	1.43	.60	.79	3.11	1.39	.47	2.88	.83	.69	.15
IN.	.22	1.76	1.65	.70	.85	3.59	1.55	.54	3.22	.96	.80	.17

CAL YR 1979 TOTAL 282940 MEAN 775 MAX 11800 MIN 26 CFSM 1.14 IN 15.43
WTR YR 1980 TOTAL 293072 MEAN 801 MAX 15700 MIN 70 CFSM 1.17 IN 15.99

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 mi^2 (2,090 km^2).

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 hm^3), elevation, 712 ft (217.0 m). Seasonal pool capacity is 75,200 acre-ft (92.7 hm^3), elevation, 737 ft (224.6 m). Capacity of uncontrolled spillway elevation, 779 ft (237.4 m) is 368,400 acre-ft (454 hm^3). Reservoir is used for flood control and recreation. Reservoir put in operation on April 23, 1968.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 212,290 acre-ft (262 hm^3) Mar. 28, 1978, elevation, 763.54 ft (232.727 m); minimum, 17,446 acre-ft (21.5 hm^3) Mar. 5, 1980, elevation, 707.03 ft (215.503 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 173,902 acre-ft (214 hm^3) June 11, elevation, 758.03 ft (231.048 m); minimum, 17,446 acre-ft (21.5 hm^3) Mar. 5, elevation, 707.03 ft (215.503 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	736.15	72,526	
Oct. 31	730.86	57,890	-14,636
Nov. 30	736.73	74,330	+16,440
Dec. 31	726.18	47,056	-27,274
CAL YR 1979			+23,226
Jan. 31	712.12	23,445	-23,611
Feb. 29	709.93	20,720	-2,725
Mar. 31	732.91	63,205	+42,485
Apr. 30	733.68	65,309	+2,104
May 31	737.20	75,823	+10,514
June 30	742.61	95,144	+19,321
July 31	738.07	78,661	-16,483
Aug. 31	737.18	75,759	-2,902
Sept. 30	736.11	72,403	-3,356
WTR YR 1980			-127

03327000 MISSISSINEWA RIVER AT PEORIA, IN

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

DRAINAGE AREA.--808 mi² (2,092 km²).

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

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

GAGE.--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, nonrecording gage and crest-stage gage on highway bridge 2,500 ft (762 m) upstream, and Oct. 7, 1954, to Sept. 30, 1962, water-stage recorder on right bank at site 2,500 ft (762 m) upstream at same datum.

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

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

AVERAGE DISCHARGE.--28 years, 710 ft³/s (20.11 m³/s), 11.94 in/yr (303 mm/yr).

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

EXTREMES FOR 1979 WATER YEAR.--Maximum daily discharge, 4,710 ft³/s (133 m³/s) Mar. 21; minimum daily, 89 ft³/s (2.52 m³/s) Sept. 11-13.

EXTREMES FOR 1980 WATER YEAR.--Maximum daily discharge, 3,580 ft³/s (101 m³/s) Mar. 27; minimum daily, 22 ft³/s (0.62 m³/s) Apr. 24 to May 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	713	250	890	181	1550	1220	377	230	110	833	556
2	108	710	168	1170	166	1110	676	309	192	486	402	312
3	150	707	517	1790	138	469	481	267	192	554	99	240
4	171	684	1500	2240	125	490	482	290	192	313	101	196
5	170	670	2300	2220	125	512	446	303	192	207	102	223
6	170	668	1410	2180	125	524	422	326	193	152	610	267
7	170	665	784	1800	125	954	493	339	899	121	1120	267
8	170	662	1150	974	125	1300	455	339	1310	110	1110	223
9	170	651	1330	562	125	1360	408	339	1320	631	1670	167
10	170	639	1500	355	105	1360	486	297	1130	1000	1990	111
11	169	636	1050	174	96	1800	478	247	1320	754	2040	89
12	193	633	536	142	120	2160	436	232	1320	878	2020	89
13	217	630	474	353	152	2590	445	232	1310	453	2010	89
14	217	551	346	440	140	2890	453	232	1310	323	2260	122
15	316	510	256	319	122	2880	460	232	1080	475	2500	154
16	503	640	256	232	122	3280	768	232	816	603	2750	519
17	531	828	257	232	122	3610	1030	256	644	1070	2720	461
18	683	1140	257	286	122	3590	1030	272	486	1560	1830	296
19	764	1390	256	280	122	4060	1030	260	396	2190	810	296
20	714	1060	256	227	122	4580	1020	240	396	2540	446	296
21	679	863	256	181	122	4710	1660	218	473	1720	850	238
22	690	751	256	236	153	4650	1970	185	454	698	1200	210
23	695	671	311	382	281	4590	1510	173	289	459	1210	175
24	686	554	402	522	386	4530	1940	159	222	382	1490	153
25	677	471	368	428	424	4460	1290	151	198	432	1600	153
26	667	740	231	226	444	4380	1920	151	159	685	1590	153
27	658	898	130	178	292	4310	1260	504	138	796	1580	153
28	648	895	123	152	943	2680	771	712	121	805	1410	153
29	642	891	180	164	----	1480	746	674	110	816	997	153
30	689	564	196	181	----	1650	703	433	110	824	962	153
31	716	-----	307	181	----	1670	-----	312	-----	830	1110	----
TOTAL	13311	22085	17613	19697	5625	80179	26489	9293	17202	22977	41422	6667
MEAN	429	736	568	635	201	2586	883	300	573	741	1336	222
MAX	764	1390	2300	2240	943	4710	1970	712	1320	2540	2750	556
MIN	108	471	123	142	96	469	408	151	110	110	99	89

CAL YR 1978 TOTAL 314576 MEAN 862 MAX 6550 MIN 68
WTR YR 1979 TOTAL 282560 MEAN 774 MAX 4710 MIN 89

03327000 MISSISSINEWA RIVER AT PEORIA, IN--continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	682	2930	2690	422	1590	2900	22	650	3540	1120	416
2	490	1190	2900	2650	352	1350	3490	22	662	3540	615	476
3	406	1490	1750	2600	352	777	2680	22	363	3510	452	408
4	218	1340	329	2560	317	489	2070	22	115	3480	407	340
5	402	310	330	2000	296	396	2070	22	118	3200	476	340
6	701	310	330	1330	297	248	2070	22	119	1580	476	261
7	516	310	1410	737	342	264	2060	22	119	572	476	204
8	217	626	2820	524	364	1260	2050	22	120	376	495	159
9	217	1570	1770	488	364	1950	2040	23	120	309	458	96
10	216	1480	323	383	364	2030	2030	23	120	383	378	96
11	216	963	323	456	326	2070	2020	23	491	488	409	96
12	389	1750	323	520	307	2070	1450	23	1280	525	377	96
13	677	987	324	1220	299	2070	577	23	1460	479	1050	96
14	498	401	1390	1150	286	2510	611	23	1450	341	1360	274
15	206	323	2770	630	262	2710	1390	23	1450	222	788	421
16	206	324	1770	556	283	2690	1920	23	1450	146	436	476
17	206	777	1660	600	296	1210	1430	23	1860	146	477	504
18	206	1090	3020	839	296	364	593	328	2060	147	1130	363
19	398	319	2960	868	296	1160	175	1170	2050	164	1720	203
20	704	319	2940	624	296	1630	50	1170	2050	173	2000	203
21	519	796	2320	463	297	1780	51	636	2040	173	2160	237
22	210	2180	1440	463	671	1800	51	411	2940	474	1330	271
23	210	2450	1740	517	1630	2040	39	505	3520	796	457	305
24	210	2550	1380	431	2370	2170	22	678	3500	740	408	338
25	210	1500	419	325	2570	2620	22	672	3480	430	408	428
26	831	344	439	329	2910	3310	22	558	3450	485	408	377
27	1490	359	1000	447	3510	3580	22	472	3420	425	323	337
28	1120	367	1640	466	2120	3540	22	400	3390	426	272	309
29	642	962	1880	352	914	2610	22	315	3510	1410	178	270
30	640	2260	2200	381	-----	2100	22	316	3530	2010	111	269
31	639	-----	2510	465	-----	2100	-----	510	-----	1790	332	----
TOTAL	13996	30329	49340	28064	23409	56488	33971	8524	50887	32480	21487	8669
MEAN	451	1011	1592	905	807	1822	1132	275	1696	1048	693	289
MAX	1490	2550	3020	2690	3510	3580	3490	1170	3530	3540	2160	504
MIN	186	310	323	325	262	248	22	22	115	146	111	96

CAL YR 1979 TOTAL 323216 MEAN 886 MAX 4710 MIN 89
WTR YR 1980 TOTAL 357644 MEAN 977 MAX 3580 MIN 22

03327500 WABASH RIVER AT PERU, IN

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

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

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

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

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

REMARKS.--Records fair. Flow regulated by Huntington Lake (See sta 03323450), Salamonie Lake (See sta 03324450), and Mississinewa Lake (See sta 03326950).

AVERAGE DISCHARGE.--37 years, 2,355 ft³/s (66.69 m³/s), 11.91 in/yr (302 mm/yr).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,840 ft³/s (335 m³/s) Mar. 17, gage height, 10.82 ft (3.298 m); minimum daily, 276 ft³/s (7.82 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	952	1000	8220	5810	856	1960	8090	380	1530	6110	3440	636
2	1300	1630	8080	5940	873	1630	8530	350	7000	6440	2670	570
3	1480	2370	6780	5680	850	1240	6650	335	10100	6560	2370	544
4	1280	2860	4000	5330	870	1220	6980	340	8500	4790	2290	540
5	1350	1180	3700	4400	702	1210	7560	350	5900	4300	2650	558
6	1630	791	3190	3360	611	972	7370	530	3600	3140	2580	539
7	1590	800	3320	1720	670	1190	6550	525	3200	1180	1790	424
8	1290	917	6280	1020	726	5260	4990	515	2900	787	1170	395
9	1320	2390	4360	756	699	7580	4490	445	2150	650	1050	348
10	1920	2650	1860	743	685	8080	4730	428	1650	638	1040	298
11	1970	1540	1350	1120	685	8740	4400	412	1320	638	804	276
12	1980	2980	1150	1390	700	7620	3640	420	3630	668	1410	279
13	2190	2290	1040	1930	690	7390	2560	445	3880	851	2600	279
14	2100	1310	1580	3020	660	8520	2340	444	3790	714	3660	356
15	1430	888	3370	2480	638	8560	4210	411	4100	543	3620	441
16	648	898	2960	1910	619	8840	5160	413	5480	425	3280	800
17	546	1130	1660	1520	640	10200	4840	460	5660	362	2490	1170
18	540	2200	3510	2040	655	6880	4050	1300	6440	326	4070	1480
19	546	917	3490	2760	660	6930	2850	2700	6490	335	4510	1040
20	795	774	3410	2200	656	7390	2000	2950	6090	367	4850	884
21	727	790	3130	1630	743	9080	1330	2450	5170	357	5250	808
22	797	2520	2160	1530	2470	8910	1010	1700	4960	965	4760	813
23	914	3060	2920	1440	5940	7630	960	1240	5390	1830	3610	882
24	751	3450	6770	1210	5780	8310	905	1450	5330	2590	2670	981
25	1580	3800	7180	938	6710	9460	660	1180	5250	1930	1690	965
26	2170	2900	6740	996	6330	9910	450	920	5810	1030	967	954
27	1390	4970	6330	1030	6010	9770	405	840	5770	882	692	921
28	955	4820	6730	1100	4540	9450	380	760	5900	1710	558	791
29	930	5230	6940	952	2580	9030	420	740	6040	3260	508	691
30	925	6590	6700	763	-----	8520	395	770	6040	4330	397	676
31	916	-----	5430	825	-----	9240	------	1050	------	4080	491	-----
TOTAL	38912	69645	134340	67543	55248	210722	108905	27253	149070	62788	73937	20339
MEAN	1255	2322	4334	2179	1905	6797	3630	879	4969	2025	2385	678
MAX	2190	6590	8220	5940	6710	10200	8530	2950	10100	6560	5250	1480
MIN	540	774	1040	743	611	972	380	335	1320	326	397	276
CFSM	.47	.86	1.61	.81	.71	2.53	1.35	.33	1.85	.75	.89	.25
IN.	.54	.96	1.86	.94	.77	2.92	1.51	.38	2.06	.87	1.02	.28

CAL YR 1979 TOTAL 907105 MEAN 2485 MAX 10700 MIN 307 CFSM .93 IN 12.56
WTR YR 1980 TOTAL 1018702 MEAN 2783 MAX 10200 MIN 276 CFSM 1.04 IN 14.11

03327520 PIPE CREEK NEAR BUNKER HILL, IN

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

DRAINAGE AREA.--159 mi² (412 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 736.00 (224.333 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--12 years, 145 ft³/s (4.106 m³/s), 12.38 in/yr (314 mm/yr).

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

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

Date	Time	Discharge (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	1100	1000	28.3	7.61	2.320	June 4	0600	*2900	82.1	*13.17	4.014
Mar. 9	0100	1320	37.4	8.69	2.649	June 8	0800	1210	34.3	8.33	2.539
Mar. 17	1500	1250	35.4	8.46	2.579						

Minimum daily discharge, 12 ft³/s (0.340 m³/s) Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	102	219	131	47	74	447	75	247	42	47	28
2	126	225	165	115	46	70	317	68	1230	40	38	25
3	84	152	132	102	45	68	286	67	2170	38	34	22
4	52	97	122	93	44	66	645	65	2750	38	30	20
5	39	74	117	88	44	80	487	63	1620	37	27	19
6	34	62	116	80	43	104	313	63	448	35	28	18
7	30	54	106	79	43	142	242	60	472	32	51	18
8	27	50	90	78	42	1090	225	56	1080	30	39	17
9	25	60	78	72	42	1230	367	53	499	30	32	17
10	23	156	76	69	41	1020	369	52	320	29	32	16
11	23	154	77	83	41	688	280	52	232	29	177	15
12	22	105	74	94	41	393	231	55	170	28	365	15
13	21	86	67	114	40	282	195	64	138	26	140	15
14	21	73	61	90	40	206	353	57	119	25	90	15
15	20	64	58	77	40	187	499	51	112	23	65	14
16	22	58	59	73	40	238	391	47	145	22	46	15
17	24	52	52	96	42	970	273	70	161	21	282	28
18	22	48	51	110	43	1060	213	387	112	20	787	24
19	21	46	49	101	43	648	175	344	98	20	430	19
20	20	45	48	92	45	453	150	225	94	20	238	17
21	20	41	46	88	87	745	130	168	92	36	140	15
22	25	41	56	89	630	682	116	126	78	79	86	14
23	60	145	283	82	458	418	108	107	81	51	58	14
24	65	372	774	69	261	462	98	149	75	31	44	13
25	53	352	918	87	172	711	89	152	72	26	38	14
26	42	760	593	67	112	465	80	115	62	23	33	14
27	37	623	375	59	120	322	76	90	58	23	29	13
28	34	476	263	55	96	257	86	78	54	302	26	12
29	31	424	206	52	78	398	91	71	50	227	24	12
30	29	288	179	50	----	430	84	72	44	107	32	12
31	27	----	154	48	----	574	----	115	-----	67	24	----
TOTAL	1097	5285	5664	2583	2866	14533	7416	3217	12883	1557	3512	510
MEAN	35.4	176	183	83.3	98.8	469	247	104	429	50.2	113	17.0
MAX	126	760	918	131	630	1230	645	387	2750	302	787	28
MIN	18	41	46	48	40	66	76	47	44	20	24	12
CFSM	.22	1.11	1.15	.52	.62	2.95	1.55	.65	2.70	.32	.71	.11
IN.	.26	1.24	1.33	.60	.67	3.40	1.74	.75	3.01	.36	.82	.12

CAL YR 1979 TOTAL 64908 MEAN 178 MAX 2130 MIN 13 CFSM 1.12 IN 15.19
WTR YR 1980 TOTAL 61123 MEAN 167 MAX 2750 MIN 12 CFSM 1.05 IN 14.30

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 mi^2 (1,080 km^2), includes that of Pony Creek.

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

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

GAGE.--Water-stage recorder. Datum of gage is 738.00 ft (224.942 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1953, nonrecording gage on downstream side of Second Street bridge, 700 ft (213 m) upstream at same datum.

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

AVERAGE DISCHARGE.--51 years, 353 ft^3/s (10.00 m^3/s), 11.50 in/yr (292 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,940 ft^3/s (225 m^3/s) Dec. 22, 1967, gage height, 13.55 ft (4.130 m); maximum gage height, 14.00 ft (4.267 m) Feb. 27, 1936; minimum daily discharge, 16 ft^3/s (0.45 m^3/s) Oct. 19, 1956.

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)
Dec. 25	0200	2580	73.1	7.40	2.256	Mar. 21	1700	2640	74.8	7.49	2.283
Feb. 22	0900	2210	62.6	6.64	2.024	Apr. 4	1200	2560	72.5	7.34	2.237
Mar. 10	2400	2240	63.4	6.80	2.073	June 2	2200	*4560	129	*10.64	3.243
Mar. 17	2300	3530	100	9.16	2.792						

Minimum daily discharge, 60 ft^3/s (1.70 m^3/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	138	280	388	133	205	1350	271	318	109	110	767
2	102	227	220	339	132	199	935	253	3820	105	91	375
3	85	151	188	299	132	195	771	238	3860	100	84	191
4	79	122	176	267	132	191	2370	222	2600	96	76	173
5	76	105	165	247	138	204	2100	204	1650	93	70	198
6	72	96	186	225	139	219	1570	196	979	110	60	183
7	76	91	186	206	139	242	994	182	698	126	62	142
8	71	88	184	195	136	1080	823	172	617	120	64	122
9	69	95	169	180	134	1470	1400	167	564	107	90	115
10	69	174	163	170	130	2020	1240	161	449	101	82	105
11	68	172	157	165	128	1680	924	159	358	91	76	98
12	69	138	218	280	124	855	757	159	304	86	72	93
13	69	128	385	271	121	547	653	165	265	82	71	87
14	68	115	313	233	118	427	823	170	240	76	458	83
15	68	107	242	200	117	476	1090	161	222	73	973	79
16	77	102	208	190	124	555	968	153	468	69	904	81
17	79	95	170	311	135	2470	689	157	457	66	783	852
18	76	91	151	361	147	3220	561	550	334	65	1070	1040
19	74	90	136	320	160	2620	482	576	260	65	696	523
20	74	90	121	278	179	2180	433	422	263	63	474	345
21	76	86	117	244	219	2360	388	332	241	63	435	170
22	80	88	124	229	1620	2210	351	271	202	113	341	180
23	115	180	530	202	1580	1710	325	235	178	180	247	446
24	105	346	1650	190	900	1210	294	218	173	111	190	378
25	88	318	2470	170	541	1280	276	214	170	85	154	258
26	82	848	2010	152	410	1010	253	194	156	73	132	196
27	76	747	1420	141	313	788	240	170	139	69	120	157
28	74	561	924	136	275	662	269	157	128	164	114	126
29	72	468	674	135	231	950	315	148	125	305	109	104
30	72	356	538	134	----	1010	294	148	116	196	121	105
31	70	----	452	132	----	1580	-----	186	-----	140	330	----
TOTAL	2397	6413	14927	6990	8787	35825	23938	7011	20354	3302	8659	7772
MEAN	77.3	214	482	225	303	1156	798	226	678	107	279	259
MAX	115	848	2470	388	1620	3220	2370	576	3860	305	1070	1040
MIN	66	86	117	132	117	191	240	148	116	63	60	79
CFSM	.19	.51	1.16	.54	.73	2.77	1.91	.54	1.63	.26	.67	.62
IN.	.21	.57	1.33	.62	.78	3.20	2.14	.63	1.82	.29	.77	.69

CAL YR 1979 TOTAL 127160 MEAN 348 MAX 3890 MIN 54 CFSM .84 IN 11.34
WTR YR 1980 TOTAL 146375 MEAN 400 MAX 3860 MIN 60 CFSM .96 IN 13.06

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 poor.

AVERAGE DISCHARGE.--10 years, 9.20 ft³/s (0.260 m³/s), 14.08 in/yr (358 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 284 ft³/s (8.04 m³/s) Mar. 3, 1979, gage height, 5.86 ft (1.786 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)
Nov. 26	0200	129	3.65	4.35	1.326	Mar. 17	0800	205	5.81	5.16	1.573
Dec. 24	1100	172	4.87	4.84	1.475	Apr. 3	2300	138	3.91	4.44	1.353
Feb. 22	0500	*267	7.56	*5.79	1.765	June 1	2400	198	5.61	5.09	1.551
Mar. 9	2000	97	2.75	3.90	1.189						

Minimum daily discharge, 1.1 ft³/s (.031 m³/s) for many days.

NOTE.--No gage-height record June 25 to September 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	4.1	6.2	7.0	3.3	4.8	25	6.3	36	2.7	1.4	1.4
2	2.3	3.3	5.4	6.6	3.2	4.6	16	6.0	116	2.6	1.3	2.8
3	1.3	2.0	4.9	6.2	3.1	4.5	31	5.8	55	2.5	1.3	1.6
4	1.3	1.5	4.7	5.9	3.1	4.4	67	5.6	25	2.4	1.2	1.4
5	1.3	1.4	4.9	5.6	3.0	5.7	28	5.4	14	2.5	1.2	1.2
6	1.3	1.3	5.6	5.3	3.0	6.4	16	5.2	11	2.4	1.2	1.1
7	1.3	1.2	5.5	4.9	3.3	12	13	5.0	10	2.3	1.1	1.1
8	1.2	1.2	5.2	4.8	3.0	59	21	4.9	7.5	2.2	1.1	1.4
9	1.2	1.6	4.7	4.5	2.9	52	37	4.8	6.2	2.1	1.2	1.2
10	1.2	3.4	4.4	4.5	2.8	63	26	4.7	5.7	2.0	1.2	1.3
11	1.3	2.5	4.3	15	2.7	28	16	4.7	5.1	1.9	1.2	1.2
12	1.3	2.0	6.3	33	2.7	13	15	5.0	4.7	1.8	3.3	1.1
13	1.2	1.7	6.4	6.5	2.6	8.7	12	5.2	4.5	1.7	1.9	1.5
14	1.2	1.5	5.3	5.7	2.8	7.8	35	4.8	4.4	1.6	2.8	1.2
15	1.2	1.4	4.7	5.3	3.0	9.3	33	4.6	5.1	1.5	2.5	1.1
16	1.6	1.3	4.3	9.3	2.8	11	20	4.4	5.9	1.4	1.8	1.6
17	1.4	1.2	3.6	21	2.6	126	14	7.0	4.6	1.3	5.9	6.0
18	1.3	1.2	3.3	12	2.4	60	11	12	4.2	1.3	8.8	5.0
19	1.3	1.2	3.2	8.9	2.8	35	9.7	8.3	4.5	1.2	6.6	3.5
20	1.3	1.2	3.1	7.7	3.4	22	8.7	7.3	4.1	1.1	4.5	2.7
21	1.3	1.2	3.0	6.8	16	50	7.8	6.3	3.7	1.1	2.7	2.2
22	1.7	1.6	3.9	6.3	139	22	7.3	5.7	3.4	1.3	2.1	1.9
23	2.8	8.5	14	5.2	55	15	6.8	5.4	3.4	1.2	1.8	1.7
24	2.0	6.4	89	4.8	27	25	6.6	5.3	3.4	1.1	1.5	1.5
25	1.6	11	65	5.0	14	24	6.1	5.0	3.3	1.1	1.4	1.5
26	1.4	78	32	4.4	9.4	14	5.9	4.6	3.2	1.1	1.3	1.4
27	1.2	24	17	4.1	7.0	11	5.9	4.3	3.2	2.4	1.2	1.3
28	1.2	14	12	3.8	5.8	10	7.5	4.2	3.1	2.0	1.2	1.2
29	1.1	9.9	10	3.6	5.2	24	7.3	4.1	3.0	1.7	1.1	1.2
30	1.2	7.4	8.6	3.5	---	22	6.8	4.6	2.8	1.6	1.1	1.1
31	1.2	---	7.7	3.4	---	56	---	4.6	---	1.5	1.2	---
TOTAL	43.6	198.2	358.2	230.6	336.9	810.2	522.4	171.1	366.0	54.6	68.1	54.4
MEAN	1.41	6.61	11.6	7.44	11.6	26.1	17.4	5.52	12.2	1.76	2.20	1.81
MAX	2.8	78	89	33	139	126	67	12	116	2.7	8.8	6.0
MIN	1.1	1.2	3.0	3.4	2.4	4.4	5.9	4.1	2.8	1.1	1.1	1.1
CFSM	.16	.75	1.31	.84	1.31	2.94	1.96	.62	1.38	.20	.25	.20
IN.	.18	.83	1.50	.97	1.41	3.40	2.19	.72	1.53	.23	.29	.23

CAL YR 1979 TOTAL 3255.62 MEAN 8.92 MAX 188 MIN .96 CFSM 1.01 IN 13.65
WTR YR 1980 TOTAL 3214.30 MEAN 8.78 MAX 139 MIN 1.1 CFSM .99 IN 13.48

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).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

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

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

AVERAGE DISCHARGE.--37 years, 727 ft³/s (20.59 m³/s), 12.51 in/yr (318 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)
Mar. 11	1400	6430	182	8.50	2.591
June 3	2000	*7620	216	*9.14	2.786

Minimum daily discharge, 149 ft³/s (4.22 m³/s) Oct. 1.

NOTE.--Revision--The maximum gage height for water year 1979 is 9.46; the previously published figure was not the maximum.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	194	593	679	275	452	2870	538	651	302	305	562
2	187	237	501	607	270	404	2010	503	4270	293	265	1050
3	196	348	439	550	270	385	1590	481	7330	285	239	628
4	203	286	399	504	265	370	3220	461	6210	281	223	459
5	178	237	390	470	260	380	3610	444	3400	277	212	385
6	176	213	380	420	255	405	2720	429	2220	268	205	385
7	169	200	394	380	255	445	2030	413	1640	261	200	360
8	170	194	389	351	250	1510	1570	400	1230	283	194	309
9	166	200	375	340	245	2900	2000	393	1060	278	200	274
10	162	220	358	325	240	3540	2350	383	912	268	238	255
11	162	278	350	360	235	3560	1900	378	758	255	233	248
12	162	309	352	520	230	2190	1500	386	657	243	233	241
13	161	267	405	541	225	1270	1260	408	594	231	242	230
14	160	244	519	493	225	860	1430	407	554	222	622	223
15	158	226	463	420	228	773	2250	388	532	212	970	213
16	165	216	410	400	230	899	2120	369	545	206	2020	216
17	171	210	377	548	235	3190	1570	379	719	201	1630	301
18	180	204	330	688	242	6160	1150	599	684	192	2270	1560
19	174	204	300	629	255	4920	934	1070	602	187	1910	1620
20	169	197	275	553	266	3520	824	852	548	192	1200	945
21	165	197	260	501	303	3540	746	674	509	200	791	632
22	170	200	270	464	2740	3960	680	568	480	259	660	485
23	196	230	371	433	3920	2880	630	507	454	358	535	455
24	209	364	1940	356	2410	2360	585	530	459	351	420	730
25	230	557	4400	350	1550	2460	550	537	437	283	356	645
26	207	1370	3630	330	822	2020	522	473	403	238	313	480
27	188	1850	2610	320	682	1590	500	424	376	279	282	398
28	180	1160	1850	310	550	1270	509	394	356	265	259	349
29	172	920	1260	300	490	1440	564	378	335	394	241	317
30	165	731	936	290	---	1920	574	378	317	500	226	296
31	162	---	783	280	---	2850	---	473	---	375	237	---
TOTAL	5462	12263	26309	13712	18423	64423	44768	15017	39242	8439	17931	15251
MEAN	176	409	849	442	635	2078	1492	484	1308	272	578	508
MAX	230	1850	4400	688	3920	6160	3610	1070	7330	500	2270	1620
MIN	149	194	260	280	225	370	500	369	317	187	194	213
CFSM	.22	.52	1.08	.56	.81	2.63	1.89	.61	1.66	.35	.73	.64
IN.	.26	.58	1.24	.65	.87	3.04	2.11	.71	1.85	.40	.85	.72

CAL YR 1979 TOTAL 250489 MEAN 686 MAX 7820 MIN 144 CFSM .87 IN 11.81
WTR YR 1980 TOTAL 281240 MEAN 768 MAX 7330 MIN 149 CFSM .97 IN 13.26

03328500 EEL RIVER NEAR LOGANSPORT, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: October 1969 to September 1980 (discontinued).
SEDIMENT DISCHARGE: August 1969 to September 1980 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 32.0°C July 15, 1980; minimum, freezing point on many days during winter periods.
SEDIMENT CONCENTRATION: Maximum daily, 1,790 mg/L June 15, 1975; minimum daily, 5 mg/L Jan. 17 to Feb. 7, 20, 21, 1977.
SEDIMENT DISCHARGE: Maximum daily, 26,400 tons (23,900 tonnes) June 15, 1975; minimum daily, 0.68 tons (0.62 tonnes) Nov. 6, 1975.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 32.0°C July 15; minimum, freezing point on many days during winter period.
SEDIMENT CONCENTRATION: Maximum daily, 1440 mg/L June 2; minimum daily, 6 mg/L Feb. 16.
SEDIMENT DISCHARGE: Maximum daily, 23,200 tons (21,000 tonnes) June 3; minimum daily, 3.7 tons (3.4 tonnes) Feb. 16.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	----	3.0	3.0	---	---	7.0	14.0	----	23.0	----	25.0
2	17.5	11.0	---	4.0	2.0	1.0	8.0	13.0	20.0	----	26.0	23.0
3	18.0	----	2.0	3.0	---	---	8.0	----	21.0	25.0	----	22.0
4	----	8.0	---	3.0	2.0	2.0	7.0	20.0	20.0	----	23.0	----
5	15.0	----	5.0	---	---	---	7.0	----	20.0	24.0	----	23.0
6	----	10.0	---	3.0	.0	2.0	11.0	22.0	22.0	----	24.0	----
7	14.0	9.0	6.0	---	---	---	11.0	----	22.0	25.0	----	22.0
8	----	7.0	---	1.5	2.0	3.0	12.0	15.0	20.0	----	27.0	----
9	13.0	----	4.0	---	---	4.0	10.0	----	21.0	26.0	----	23.0
10	----	5.0	---	3.0	1.0	5.0	8.0	17.0	19.0	----	26.0	----
11	10.0	----	7.0	---	---	3.0	9.0	----	19.0	25.0	----	19.0
12	----	6.0	---	1.0	1.0	3.0	10.0	17.0	19.0	----	23.0	----
13	9.0	----	5.0	---	---	2.0	11.0	----	22.0	30.0	----	21.0
14	----	6.0	---	4.0	2.0	3.0	8.0	18.0	23.0	----	23.0	----
15	13.0	----	4.0	---	---	7.0	8.0	----	---	32.0	23.0	20.0
16	----	8.0	---	4.0	1.0	7.0	8.0	17.0	20.0	----	23.0	----
17	11.0	----	1.0	5.0	---	7.0	11.0	----	20.0	27.0	23.0	18.0
18	----	11.0	1.0	5.0	1.0	---	14.0	17.0	22.0	----	21.0	----
19	----	----	2.0	5.0	---	6.0	15.0	16.0	19.0	26.0	23.0	18.0
20	----	10.0	---	5.0	3.0	6.0	18.0	18.0	21.0	----	22.0	18.0
21	----	---	3.0	3.0	---	7.0	17.0	19.0	22.0	27.0	28.0	23.0
22	----	12.0	---	---	---	5.0	16.0	21.0	----	----	26.0	----
23	12.0	----	8.0	1.0	3.0	7.0	17.0	18.0	22.0	24.0	26.0	20.0
24	----	9.0	8.0	---	3.0	7.0	12.0	24.0	----	----	26.0	----
25	10.0	----	8.0	2.0	3.0	5.0	15.0	23.0	26.0	22.0	----	20.0
26	----	8.0	6.0	---	1.0	6.0	15.0	----	----	----	25.0	----
27	12.0	8.0	6.0	1.0	2.0	7.0	----	----	29.0	24.0	----	18.0
28	----	6.0	5.0	---	2.0	7.0	12.0	----	----	----	24.0	----
29	14.0	4.0	5.0	.0	.5	8.0	14.0	20.0	28.0	25.0	----	22.0
30	----	3.0	4.0	---	---	7.0	14.0	----	----	----	24.0	----
31	12.0	----	4.0	.0	---	7.0	----	25.0	----	23.0	----	----
MEAN	13.5	8.0	4.5	3.0	1.5	5.0	11.5	18.5	21.5	25.5	24.5	21.0
MAX	20.0	12.0	8.0	5.0	3.0	8.0	18.0	25.0	29.0	32.0	28.0	25.0
MIN	9.0	3.0	1.0	.0	.0	1.0	7.0	13.0	19.0	22.0	21.0	18.0

WTR YR 1980 MEAN 13.0 MAX 32.0 MIN .0

03328500 EEL RIVER NEAR LOGANSPORT, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26	10	47	25	14	22	14	26	14	10	23	28
2	23	12	55	35	13	18	12	20	15	11	21	23
3	32	17	53	50	12	14	10	15	11	8.0	20	21
4	33	18	32	25	11	12	9	12	8	5.7	19	19
5	31	15	32	20	10	11	8	10	8	5.6	19	19
6	30	14	33	19	11	11	8	9.1	8	5.5	18	20
7	29	13	36	19	15	16	9	9.2	8	5.5	19	23
8	28	13	64	34	15	16	14	13	9	6.1	179	936
9	28	13	31	17	16	16	18	17	9	6.0	284	2220
10	28	12	30	18	16	15	22	19	9	5.8	258	2470
11	27	12	46	35	16	15	27	26	12	7.6	220	2110
12	26	11	39	33	17	16	35	49	13	8.1	129	763
13	25	11	25	18	28	31	29	42	10	6.1	59	202
14	24	10	20	13	32	45	21	28	8	4.9	29	67
15	24	10	20	12	14	18	19	22	7	4.3	21	44
16	24	11	21	12	13	14	17	18	6	3.7	25	61
17	28	13	24	14	12	12	28	41	10	6.3	702	7810
18	30	15	24	13	18	16	33	61	9	5.9	1050	17400
19	28	13	26	14	18	15	16	27	8	5.5	474	6300
20	28	13	34	18	17	13	9	13	7	5.0	268	2550
21	27	12	35	19	17	12	7	9.5	13	11	384	3670
22	30	14	37	20	16	12	7	8.8	503	4300	476	5090
23	44	23	43	27	26	26	8	9.4	428	4530	238	1850
24	45	25	36	35	89	489	8	7.7	173	1130	154	981
25	45	28	28	42	404	4830	8	7.6	85	356	148	983
26	41	23	220	871	248	2430	8	7.1	49	109	109	594
27	40	20	142	709	117	824	8	6.9	34	63	70	301
28	39	19	63	197	76	380	9	7.5	27	40	58	199
29	37	17	35	87	48	163	12	9.7	25	33	65	253
30	34	15	22	43	29	73	13	10	---	---	96	498
31	33	14	---	----	21	44	13	9.8	---	-------	240	1990
TOTAL	---	466	---	2494	---	9629	---	571.3	---	10698.6	---	59495

03328500 EEL RIVER NEAR LOGANSPORT, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	263	2040	63	92	114	204	34	28	106	87	102	210
2	103	559	55	75	1440	19500	32	25	105	75	137	388
3	69	296	50	65	1170	23200	30	23	98	63	117	198
4	653	6470	47	59	515	8640	28	21	91	55	102	126
5	771	7510	45	54	305	2800	26	19	85	49	91	95
6	320	2350	43	50	210	1260	24	17	83	46	80	83
7	180	987	49	55	159	704	22	16	80	43	70	68
8	130	551	58	63	140	465	43	33	75	39	65	54
9	409	2460	57	60	147	421	37	28	76	41	63	47
10	480	3050	56	58	141	347	34	25	90	58	60	41
11	144	739	55	56	119	244	32	22	71	45	56	37
12	75	304	54	56	100	177	30	20	56	35	54	35
13	60	204	62	68	87	140	29	18	53	35	52	32
14	101	412	61	67	77	115	28	17	153	246	50	30
15	278	1690	56	59	69	99	27	15	281	855	48	28
16	161	922	54	54	64	94	27	15	289	1580	47	27
17	83	352	55	56	173	344	26	14	238	1050	106	86
18	62	193	96	155	265	489	25	13	308	1890	275	1220
19	63	159	115	332	81	132	24	12	228	1180	246	1080
20	81	180	50	115	59	87	45	23	124	402	109	278
21	83	167	42	76	49	67	56	30	95	203	71	121
22	77	141	48	74	46	60	83	58	91	162	66	86
23	70	119	63	86	49	60	114	110	83	120	63	77
24	67	106	80	114	57	71	87	82	75	85	143	293
25	62	92	91	132	48	57	73	56	69	66	86	150
26	53	75	77	98	45	49	63	40	64	54	69	89
27	44	59	71	81	43	44	64	48	58	44	52	56
28	40	55	68	72	41	39	54	39	52	36	40	38
29	48	73	67	68	39	35	120	128	46	30	31	27
30	59	91	69	70	36	31	186	251	41	25	25	20
31	---	-----	93	119	---	-----	141	143	40	26	---	----
TOTAL	---	32406	---	2639	---	59975	---	1389	---	8725	---	5120

TOTAL LOAD FOR YEAR: 193607.9 TONS.

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.

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.--57 years (1923 to current year), 3,295 ft³/s (93.3 m³/s), 11.84 in/yr (301 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, 19,800 ft³/s (561 m³/s) Jun. 2, gage height, 9.87 ft (3.008 m); minimum daily, 550 ft³/s (15.6 m³/s) Jul. 20.

NOTE.--No gage-height record Nov. 14 to Feb. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	1300	9790	6790	1260	3340	11600	839	2560	6870	3790	1250
2	1480	1760	9470	7630	1320	3180	11200	757	14300	7550	3170	1570
3	1910	2900	8220	7060	1280	2360	8860	714	18500	7380	2760	1260
4	1510	3290	4950	6520	1230	1910	10600	693	14300	5510	2560	1120
5	1550	2090	4240	5730	1080	1930	11800	672	9120	4690	3170	1050
6	1770	1170	4010	4240	940	1720	10400	714	5210	3490	3170	1050
7	1820	1090	4240	2560	1020	1690	8960	780	4840	1510	2560	937
8	1550	1090	6260	1640	1110	6680	6760	769	4460	1150	1640	839
9	1450	2220	5210	1320	1050	13200	6600	746	3320	975	1470	757
10	1930	3130	2970	1320	1020	14000	7260	682	2770	932	1320	672
11	2210	2050	2170	1470	1030	14500	6410	672	2420	963	1320	620
12	2180	3380	1640	2560	1040	12100	5160	703	4590	1020	2170	610
13	2410	3100	1470	4240	1030	10100	3860	735	5690	1170	2760	601
14	2440	1640	2170	4010	1010	10700	3660	735	5320	1010	4010	573
15	1890	1320	4240	3170	955	10800	6710	693	5240	874	4710	703
16	1240	1180	3580	2760	943	11200	7600	651	6220	747	5470	975
17	873	1640	2170	2560	976	15300	6760	661	6800	632	4240	1510
18	860	2370	4010	2760	985	17000	5180	1670	7400	580	6520	2760
19	837	1470	4010	4010	995	14200	4030	4080	7410	559	7340	2560
20	974	1180	4010	4010	1000	12900	2600	3860	7180	550	7060	1840
21	1100	1040	3790	2760	1100	14000	1980	3030	6110	640	7060	1470
22	983	2560	2760	2370	5990	15800	1570	2040	5920	1790	6260	1370
23	1140	3580	2970	2170	11200	12400	1310	1590	6580	2360	5210	1370
24	1280	4010	8530	1800	9680	11500	1220	1890	6440	3160	4010	1570
25	1230	4010	13600	1470	9170	12700	1120	1550	6400	2120	2760	1640
26	1060	5470	12200	1380	8040	12700	900	1260	6750	1640	1800	1470
27	2240	7340	10500	1550	7800	11900	827	1130	6650	1320	1190	1340
28	2400	6790	9790	1630	7040	11200	839	1010	6990	1320	1030	1230
29	1350	7340	9470	1500	3910	11100	875	975	7000	3790	937	1050
30	1150	8530	8830	1230	-----	11000	900	1050	6930	5210	839	988
31	1140	-----	7340	1180	-----	12900	------	1410	------	4710	769	-----
TOTAL	47087	90040	178610	95400	85204	316010	157551	38761	203420	76222	103075	36755
MEAN	1519	3001	5762	3077	2938	10190	5252	1250	6781	2459	3325	1225
MAX	2440	8530	13600	7630	11200	17000	11800	4080	18500	7550	7340	2760
MIN	837	1040	1470	1180	940	1690	827	651	2420	550	769	573
CFSM	.40	.79	1.53	.81	.78	2.70	1.39	.33	1.79	.65	.88	.32
IN.	.46	.89	1.76	.94	.84	3.11	1.55	.38	2.00	.75	1.01	.36

CAL YR 1979 TOTAL 1314771 MEAN 3602 MAX 21900 MIN 531 CFSM .95 IN 12.94
WTR YR 1980 TOTAL 1428135 MEAN 3902 MAX 18500 MIN 550 CFSM 1.03 IN 14.06

03329400 RATTLESNAKE CREEK NEAR PATTON, IN

LOCATION.--Lat 40°42'6", long 86°41'49", in NW¼SW¼ sec.7, T.26 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on left bank 5 ft (2 m) downstream from bridge on County Road 900 West, and 2.5 miles (4.0 km) northeast of Patton.

DRAINAGE AREA.--6.83 mi² (17.69 km²).

WATER-DISCHARGE RECORDS

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.--12 years, 7.07 ft³/s (0.200 m³/s), 14.06 in/yr (357 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 400 ft³/s (11.33 m³/s) June 2, 1980, gage height, 5.00 ft (1.52 m); maximum gage height, 5.30 ft (1.615 m) June 14, 1975; minimum daily discharge, 0.14 ft³/s (0.004 m³/s) Sept. 23, 1974.

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

Date	Time	Discharge (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	0400	250	7.08	4.60	1.40	June 2	1500	331	9.37	4.83	1.47
Apr. 8	1700	140	3.96	4.17	1.27	June 7	1900	214	6.06	4.48	1.37
June 2	0200	*400	11.33	*5.00	1.52						

Minimum daily discharge, 0.33 ft³/s (0.009 m³/s) Oct. 4, 5, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	1.9	3.8	4.2	1.5	3.2	14	3.3	43	2.3	.66	.50
2	1.6	1.3	3.0	3.8	1.4	3.0	11	3.3	220	2.3	.66	.56
3	.37	.92	2.9	3.4	1.4	2.7	19	3.2	55	2.2	.66	.46
4	.33	.79	2.8	3.2	1.3	2.5	29	3.0	32	2.2	.61	.46
5	.33	.72	3.0	3.0	1.3	3.2	16	3.2	24	2.2	.61	.41
6	.37	.72	2.8	2.8	1.2	6.4	11	3.0	20	2.0	.56	.46
7	.37	.66	2.8	2.6	1.2	11	9.4	2.8	54	1.9	.56	.46
8	.33	.72	2.4	2.5	1.2	34	55	2.8	36	1.9	.50	.56
9	.37	.99	2.4	2.4	1.2	21	52	2.8	19	1.9	.56	.46
10	.46	1.5	2.4	2.2	1.2	19	30	2.8	14	1.8	.99	.46
11	.56	1.1	2.3	5.7	1.2	11	21	2.8	8.8	1.6	1.3	.46
12	.46	.92	2.4	4.2	1.2	7.8	17	2.9	7.1	1.5	1.3	.50
13	.50	.85	2.3	3.3	1.2	6.4	12	3.0	5.7	1.3	.85	.50
14	.46	.79	2.1	2.8	1.2	5.0	21	2.6	5.3	1.2	1.4	.50
15	.50	.79	1.9	2.6	1.2	5.5	23	2.4	5.7	1.1	1.4	.46
16	1.1	.72	1.8	3.7	1.2	7.1	16	2.4	6.9	1.1	.99	.66
17	.56	.72	1.7	6.4	1.2	42	12	2.8	4.7	1.1	3.2	1.6
18	.46	.66	1.6	5.2	1.2	23	9.4	2.7	4.4	.99	1.7	.85
19	.46	.72	1.5	4.4	1.2	16	7.8	2.6	4.9	.85	1.8	.61
20	.46	.66	1.5	3.9	1.3	12	6.7	2.4	5.2	.85	1.3	.56
21	.41	.72	1.5	3.6	7.8	12	5.8	2.3	3.8	.85	.85	.50
22	1.5	.85	2.1	3.4	103	8.7	5.5	2.2	3.4	.85	.66	.66
23	2.1	2.1	3.0	3.4	27	7.7	4.9	2.4	3.7	.72	.61	.66
24	1.1	1.8	25	2.8	16	9.4	4.5	2.4	4.0	.72	.56	.66
25	.79	4.9	21	2.5	9.0	9.9	4.1	2.3	3.3	.72	.56	.66
26	.61	21	14	2.2	6.0	8.0	4.0	2.1	3.2	.72	.50	.66
27	.61	9.2	9.4	2.1	4.3	6.9	3.8	2.1	3.0	1.1	.46	.66
28	.61	7.5	7.1	2.0	3.7	6.6	4.0	2.1	2.9	.85	.46	.66
29	.61	5.8	6.0	1.8	3.5	8.7	3.7	2.1	2.7	.72	.46	.66
30	.66	4.5	5.5	1.7	-----	11	3.4	2.3	2.4	.66	.46	.66
31	.72	-----	4.7	1.6	-----	23	-----	2.1	-----	.66	.50	-----
TOTAL	20.69	76.52	146.7	99.4	205.3	353.7	436.0	81.2	608.1	40.86	27.69	17.93
MEAN	.67	2.55	4.73	3.21	7.08	11.4	14.5	2.62	20.3	1.32	.89	.60
MAX	2.1	21	25	6.4	103	42	55	3.3	220	2.3	3.2	1.6
MIN	.33	.66	1.5	1.6	1.2	2.5	3.4	2.1	2.4	.66	.46	.41
CFSM	.10	.37	.69	.47	1.04	1.67	2.12	.38	2.97	.19	.13	.09
IN.	.11	.42	.80	.54	1.12	1.93	2.37	.44	3.31	.22	.15	.10

CAL YR 1979 TOTAL 1923.22 MEAN 5.27 MAX 169 MIN .33 CFSM .77 IN 10.47
WTR YR 1980 TOTAL 2114.09 MEAN 5.78 MAX 220 MIN .33 CFSM .85 IN 11.51

03329400 RATTLESNAKE CREEK NEAR PATTON, IN

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: February 1979 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM
OCT							
10...	0950	----	.48	12	.02	--	---
NOV							
28...	1000	----	8.1	20	.44	--	---
JAN							
09...	0930	----	2.4	6	.04	--	---
APR							
09...	1320	7.0	49	405	54	99	100
JUN							
02...	1250	----	121	683	223	99	100
03...	1150	19.0	50	192	26	99	100
JUL							
31...	1615	29.0	.62	32	.05	--	---
SEP							
11...	1300	18.5	.46	53	.07	--	---

03329700 DEER CREEK NEAR DELPHI, IN

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

DRAINAGE AREA.--274 mi² (710 km²).

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 553.81 ft (168.801 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark, levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--37 years, 240 ft³/s (6.797 m³/s), 11.89 in/yr (302 mm/yr).

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

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

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

Date	Time	Discharge (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. 8	1600	2130	60.3	7.03	2.143	June 8	0400	3400	96.3	8.71	2.655
Mar. 17	2100	2520	71.4	7.58	2.310	Aug. 7	0900	3900	110	9.29	2.832
June 3	0200	*7860	222	*13.16	4.011						

Minimum daily discharge, 35 ft³/s (0.99 m³/s) Oct. 1, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	98	340	241	88	118	901	149	662	91	66	61
2	75	264	267	210	84	114	667	140	4200	85	60	63
3	104	224	218	187	84	112	667	134	6020	82	57	58
4	69	158	202	167	82	118	1170	130	3160	78	54	56
5	58	122	195	158	82	134	832	126	1390	79	51	54
6	53	105	195	145	85	160	602	122	936	74	149	52
7	50	95	182	149	84	261	481	118	1240	69	2420	51
8	46	91	160	138	84	1730	509	113	2670	66	632	56
9	42	95	136	133	82	1470	716	109	1250	70	360	53
10	39	149	134	130	81	1070	680	107	876	88	255	50
11	39	210	134	143	80	771	557	107	632	70	371	44
12	38	165	136	172	79	505	485	130	462	64	832	44
13	36	136	124	238	79	388	417	153	367	59	454	44
14	36	120	114	179	78	294	632	134	310	55	313	43
15	35	107	107	145	81	258	852	114	288	52	241	42
16	44	102	100	136	81	294	762	105	285	49	172	48
17	47	94	94	182	78	1500	569	116	232	46	317	120
18	47	89	89	227	86	1980	458	202	202	45	966	92
19	46	88	86	213	85	1170	385	273	244	43	832	69
20	43	84	83	189	88	866	333	205	249	40	545	58
21	42	82	81	177	136	1060	291	167	175	871	333	52
22	49	84	95	177	1290	1010	258	145	151	466	227	48
23	77	97	147	162	976	702	238	134	142	189	160	51
24	140	218	790	132	516	693	215	132	170	107	126	47
25	107	258	1160	165	343	1050	195	132	153	79	107	45
26	86	1060	842	132	207	752	177	114	128	320	94	43
27	74	930	590	114	147	565	167	104	114	410	84	41
28	66	676	439	105	132	477	172	97	107	197	77	41
29	63	561	357	99	125	619	175	95	100	113	70	40
30	59	428	313	95	----	720	162	160	94	82	66	39
31	56	----	276	91	----	1020	-----	246	-----	65	65	----
TOTAL	1801	6990	8186	4931	5523	21981	14725	4313	27009	4204	10556	1605
MEAN	58.1	233	264	159	190	709	491	139	900	136	341	53.5
MAX	140	1060	1160	241	1290	1980	1170	273	6020	871	2420	120
MIN	35	82	81	91	78	112	162	95	94	40	51	39
CFSM	.21	.85	.96	.58	.69	2.59	1.79	.51	3.29	.50	1.25	.20
IN.	.24	.95	1.11	.67	.75	2.98	2.00	.59	3.67	.57	1.43	.22

CAL YR 1979 TOTAL 85512 MEAN 234 MAX 2610 MIN 29 CFSM .85 IN 11.61
WTR YR 1980 TOTAL 111824 MEAN 306 MAX 6020 MIN 35 CFSM 1.12 IN 15.18

03329700 DEER CREEK NEAR DELPHI, IN

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: August 1969 to September 1978 October 1979 to September 1980 (partial-record station).

SUSPENDED SEDIMENT DISCHARGE, OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV 28...	1550	4.0	668	52	94	--	--	--	--	---
JUN 03...	0900	---	7420	1310	26200	95	96	97	99	100

03330500 TIPPECANOE RIVER AT OSWEGO, IN

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

DRAINAGE AREA.--113 mi² (293 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.00 ft (252.984 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1953, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--31 years, 98.1 ft³/s (2.778 m³/s), 11.79 in/yr (299 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 341 ft³/s (9.66 m³/s) Apr. 9, gage height, 7.74 ft (2.359 m); minimum daily, 2.2 ft³/s (0.06 m³/s) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	43	78	121	52	90	278	158	74	48	30	146
2	7.8	42	76	122	50	93	275	151	131	48	31	150
3	7.2	30	76	122	49	95	276	145	163	42	31	153
4	6.8	25	77	120	48	98	284	98	179	30	31	156
5	8.1	20	74	119	48	102	314	74	205	35	31	162
6	4.4	21	71	116	49	105	321	71	216	40	31	168
7	4.4	27	66	112	49	107	325	68	253	59	30	166
8	4.2	31	65	111	49	114	330	57	288	85	30	164
9	4.0	60	63	109	50	120	338	25	285	81	31	161
10	3.9	58	62	106	51	126	340	26	281	77	34	156
11	3.8	56	60	106	51	132	340	28	271	66	47	151
12	3.7	55	61	106	51	139	336	32	255	29	64	145
13	3.7	36	59	104	51	145	332	35	237	28	74	139
14	2.8	39	58	99	51	151	335	39	221	28	109	131
15	2.2	38	46	95	53	155	329	57	217	27	132	100
16	2.3	39	20	92	54	159	324	96	214	27	132	54
17	2.6	54	20	91	53	185	318	94	206	26	154	75
18	4.3	64	20	89	51	202	310	99	202	26	211	78
19	4.3	66	21	87	49	218	301	103	199	25	214	93
20	4.4	63	22	85	48	236	292	106	197	24	222	122
21	4.8	90	23	84	47	260	279	108	192	24	222	143
22	5.2	101	53	81	52	278	263	110	187	27	213	163
23	19	100	72	77	54	292	243	111	178	27	198	175
24	16	98	83	74	56	305	223	111	169	27	175	181
25	17	97	99	71	63	310	207	112	138	26	157	188
26	18	94	107	67	68	309	194	105	100	26	138	192
27	17	91	109	63	73	304	184	101	98	26	128	203
28	17	89	112	61	80	298	179	97	88	31	114	207
29	15	84	114	57	87	293	172	83	51	32	67	205
30	13	81	117	55	----	289	165	35	50	31	66	196
31	15	----	120	53	----	284	----	38	----	31	125	----
TOTAL	250.9	1792	2104	2855	1587	5994	8407	2573	5545	1159	3272	4523
MEAN	8.09	59.7	67.9	92.1	54.7	193	280	83.0	185	37.4	106	151
MAX	19	101	120	122	87	310	340	158	288	85	222	207
MIN	2.2	20	20	53	47	90	165	25	50	24	30	54
CFSM	.07	.53	.60	.82	.48	1.71	2.48	.74	1.64	.33	.94	1.34
IN.	.08	.59	.69	.94	.52	1.97	2.77	.85	1.83	.38	1.08	1.49

CAL YR 1979 TOTAL 27579.2 MEAN 75.6 MAX 341 MIN 2.2 CFSM .67 IN 9.08
WTR YR 1980 TOTAL 40061.9 MEAN 109 MAX 340 MIN 2.2 CFSM .97 IN 13.19

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.--11 years, 16.0 ft^3/s (0.453 m^3/s), 11.08 in/yr (281 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 252 ft^3/s (7.14 m^3/s) June 1, 1980, gage height, 3.95 ft (1.204 m); minimum daily, 0.49 ft^3/s (0.014 m^3/s) Sept. 11, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 252 ft^3/s (7.14 m^3/s) June 1, gage height, 3.95 ft (1.204 m); minimum daily, 0.91 ft^3/s (0.026 m^3/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.91	3.2	19	17	7.3	12	55	14	21	3.8	2.0	52
2	1.9	4.3	16	15	7.0	10	48	14	170	3.6	1.9	57
3	1.7	4.5	13	14	6.7	9.6	47	13	193	3.4	1.8	46
4	1.5	4.2	11	13	6.4	9.4	81	12	162	3.4	1.7	38
5	2.2	4.0	9.3	12	6.2	9.4	87	14	117	3.4	1.7	36
6	3.1	3.7	9.7	11	6.0	10	70	13	89	3.3	1.6	28
7	3.1	3.3	9.7	10	6.0	11	53	12	68	3.3	1.6	21
8	3.3	3.1	11	9.4	5.9	31	47	10	53	3.1	1.5	17
9	3.2	3.1	9.7	8.7	5.5	55	52	8.9	39	2.9	1.7	14
10	2.7	3.7	9.3	8.4	5.7	82	53	8.5	29	2.8	2.1	12
11	2.4	3.6	8.9	10	5.6	92	49	8.2	23	2.7	2.7	10
12	2.2	3.6	9.7	16	5.4	76	43	8.2	19	2.6	2.7	8.7
13	2.0	3.6	11	13	5.3	55	38	9.3	16	2.5	2.7	7.9
14	1.8	3.4	11	13	5.0	40	41	9.3	13	2.2	9.5	7.2
15	1.7	3.1	9.7	12	5.2	35	55	8.9	16	1.9	10	6.5
16	1.8	2.8	9.3	12	5.2	40	52	8.5	20	1.8	9.4	7.0
17	1.8	2.6	9.0	17	5.3	94	43	9.3	15	1.7	9.8	44
18	1.7	2.4	8.8	20	5.3	113	34	13	12	1.6	11	61
19	1.7	2.5	8.6	21	5.4	97	28	16	11	1.6	11	55
20	1.6	2.9	8.4	19	5.5	75	25	19	9.3	1.5	9.1	42
21	1.5	2.7	8.2	16	6.7	78	22	18	7.4	1.4	7.6	30
22	1.8	3.2	8.2	14	60	74	19	16	6.4	1.9	6.3	30
23	2.4	3.6	12	12	85	60	18	14	5.5	2.2	5.0	44
24	2.5	4.7	35	11	77	53	17	14	5.4	2.0	4.2	35
25	2.9	5.3	69	12	59	53	16	13	5.3	1.8	3.7	27
26	2.7	19	77	13	35	47	14	12	5.0	1.7	3.9	21
27	2.7	26	62	11	20	39	14	10	4.7	2.1	5.2	17
28	2.6	32	45	9.6	16	34	15	8.9	4.5	2.8	4.8	14
29	2.6	28	32	8.8	14	38	16	8.2	4.3	2.6	4.5	12
30	2.5	22	23	8.2	-----	42	16	7.8	4.0	2.4	6.0	11
31	2.3	-----	19	7.6	-----	53	----	8.9	------	2.2	30	-----
TOTAL	68.81	214.1	602.5	394.7	488.6	1527.4	1168	359.9	1147.8	76.2	176.7	811.3
MEAN	2.22	7.14	19.4	12.7	16.8	49.3	38.9	11.6	38.3	2.46	5.70	27.0
MAX	3.3	32	77	21	85	113	87	19	193	3.8	30	61
MIN	.91	2.4	8.2	7.6	5.0	9.4	14	7.8	4.0	1.4	1.5	6.5
CFSM	.11	.36	.99	.65	.86	2.52	1.99	.59	1.95	.13	.29	1.38
IN.	.13	.41	1.14	.75	.93	2.90	2.22	.68	2.18	.14	.34	1.54

CAL YR 1979 TOTAL 5470.69 MEAN 15.0 MAX 142 MIN .80 CFSM .77 IN 10.38
WTR YR 1980 TOTAL 7036.01 MEAN 19.2 MAX 193 MIN .91 CFSM .98 IN 13.35

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).

WATER-DISCHARGE RECORDS

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

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

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

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

AVERAGE DISCHARGE.--37 years, 808 ft³/s (22.88 m³/s), 12.82 in/yr (326 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft³/s (65.01 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	2100	2590	73.3	10.47	3.191	Apr. 6	0200	3750	106	11.39	3.472
Mar. 19	1200	3320	94.0	11.22	3.420	June 4	1100	*5360	152	*12.81	3.904

Minimum daily discharge, 170 ft³/s (4.81 m³/s) Oct. 1.

WATER-QUALITY RECORDS

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	240	793	1020	430	710	2270	1040	704	526	307	1090
2	214	280	696	935	410	620	2290	996	1850	492	288	1060
3	222	297	618	863	400	590	2190	953	4260	452	276	1020
4	230	294	568	805	385	560	2490	914	5270	437	269	981
5	234	270	525	759	370	550	3460	883	4620	425	265	965
6	220	261	519	718	360	540	3710	838	3810	414	263	934
7	219	245	541	683	350	625	3380	773	3260	395	257	846
8	212	257	540	668	350	893	3020	718	2820	386	254	746
9	210	279	520	640	350	1680	3200	687	2430	377	257	684
10	200	310	495	620	350	2140	3530	669	2110	375	269	653
11	198	325	477	860	350	2530	3440	654	1800	376	277	620
12	195	331	475	760	350	2480	3140	618	1510	372	305	575
13	189	317	499	700	350	2060	2800	639	1330	359	333	547
14	187	296	502	655	350	1650	2560	640	1210	343	411	520
15	180	276	484	630	350	1460	2610	628	1120	321	529	498
16	187	251	460	634	350	1430	2750	604	1120	298	661	482
17	197	238	430	679	350	1730	2640	598	1140	287	700	602
18	208	230	420	772	350	2770	2410	688	1070	276	761	955
19	203	224	390	768	355	3390	2190	765	1030	270	781	940
20	197	217	370	735	360	3190	2010	767	1000	268	779	856
21	184	217	375	703	656	2880	1850	743	940	259	750	818
22	190	228	386	674	1200	2740	1700	706	869	258	720	798
23	249	260	429	632	1950	2620	1570	670	812	260	709	780
24	271	313	662	615	2170	2400	1460	655	783	256	691	778
25	311	353	1370	558	1770	2330	1370	660	750	253	644	761
26	304	629	1680	545	1280	2320	1260	636	709	247	583	765
27	283	1090	1640	520	1100	2190	1160	591	673	256	536	775
28	261	1060	1450	500	900	2030	1120	556	638	310	495	772
29	241	979	1320	480	800	1970	1130	550	600	302	461	735
30	227	888	1230	460	-----	2030	1090	634	556	305	432	674
31	222	-----	1120	440	-----	2090	-----	718	-----	310	591	-----
TOTAL	6815	11455	21984	21031	19096	57198	69800	22191	50794	10465	14854	23230
MEAN	220	382	709	678	658	1845	2327	716	1693	338	479	774
MAX	311	1090	1680	1020	2170	3390	3710	1040	5270	526	781	1090
MIN	170	217	370	440	350	540	1090	550	556	247	254	482
CFSM	.26	.45	.83	.79	.77	2.16	2.72	.84	1.98	.40	.56	.90
IN.	.30	.50	.96	.91	.83	2.49	3.03	.96	2.21	.45	.65	1.01

CAL YR 1979 TOTAL 276930 MEAN 759 MAX 7390 MIN 166 CFSM .89 IN 12.03
WTR YR 1980 TOTAL 328913 MEAN 899 MAX 5270 MIN 170 CFSM 1.05 IN 14.29

03332500 TIPPECANOE RIVER NEAR MONTICELLO, IN

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

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

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

REVISED RECORDS.--WSP 2109: Drainage area.

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

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

AVERAGE DISCHARGE.--49 years, 1,496 ft³/s (42.37 m³/s), 11.74 in/yr (298 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,880 ft³/s (251 m³/s) June 3; minimum daily, 260 ft³/s (7.36 m³/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	412	586	1670	1960	833	1390	4710	1810	1300	800	520	1860
2	553	652	1430	1750	767	1140	4130	1680	6780	849	412	1840
3	433	652	1340	1710	767	1130	4140	1560	8880	767	412	1810
4	390	520	1300	1540	750	1260	5860	1520	7640	750	368	1610
5	390	520	1260	1430	783	1510	5410	1540	7240	718	390	1400
6	412	635	1300	1300	734	1350	4840	1430	6290	635	282	1280
7	412	418	1280	1130	685	1430	4890	1430	5440	972	477	1240
8	390	602	1190	800	718	4020	5620	1260	5430	632	260	1280
9	347	520	1150	979	668	5050	7420	1180	4090	520	455	1040
10	412	668	1090	767	718	5590	6340	1190	3190	668	368	1000
11	325	586	1090	1440	718	4550	5690	1240	2810	586	598	915
12	347	652	1150	1130	619	4260	5190	1170	2580	537	433	915
13	368	635	1170	1430	652	3530	4650	1150	2180	635	418	915
14	347	701	1110	1430	635	2920	4580	1260	2040	520	575	783
15	303	520	1060	1320	701	2700	5420	1150	1910	520	767	800
16	494	586	1020	1430	685	2740	4900	915	1860	477	767	917
17	368	520	685	1370	602	6620	4240	1090	1690	368	892	1410
18	368	520	718	1650	652	6950	3910	1190	1840	412	958	1840
19	368	602	767	1630	652	5740	3450	1150	1670	412	1000	1710
20	368	520	866	1460	750	5610	3170	1280	1660	390	1130	1430
21	368	510	915	1480	897	5020	2880	1060	1530	412	1020	1430
22	412	586	1110	1430	3910	4700	2570	1240	1530	368	849	1220
23	520	734	1160	1040	4080	3980	2550	1150	1400	390	865	1090
24	390	800	2060	800	3290	3940	2230	1130	1360	325	795	1110
25	520	884	3530	1220	3520	4130	2160	1280	1300	412	881	1080
26	520	2350	3540	871	1790	3770	2000	1190	1260	368	783	915
27	520	2570	3160	915	2190	3420	1980	1060	1110	412	711	1020
28	520	2380	2750	734	2060	3280	1810	990	1000	520	672	1040
29	520	2140	2470	635	1730	3820	1810	915	1000	390	672	1020
30	412	1890	2140	685	-----	4080	1810	1040	893	455	596	915
31	412	-----	2060	766	-----	5240	------	1170	-----	412	1120	-----
TOTAL	12921	26459	47541	38232	37556	114870	120360	38420	88903	16632	20446	36835
MEAN	417	882	1534	1233	1295	3705	4012	1239	2963	537	660	1228
MAX	553	2570	3540	1960	4080	6950	7420	1810	8880	972	1130	1860
MIN	303	418	685	635	602	1130	1810	915	893	325	260	783
CFSM	.24	.51	.89	.71	.75	2.14	2.32	.72	1.71	.31	.38	.71
IN.	.28	.57	1.02	.82	.81	2.47	2.59	.83	1.91	.36	.44	.79

CAL YR 1979 TOTAL 543231 MEAN 1488 MAX 13900 MIN 238 CFSM .86 IN 11.67
WTR YR 1980 TOTAL 599175 MEAN 1637 MAX 8880 MIN 260 CFSM .95 IN 12.87

03333000 TIPPECANOE RIVER NEAR DELPHI, IN

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

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 552.01 ft (168.253 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Mar. 14, 1903, to July 20, 1906, and Nov. 2 to Dec. 31, 1908, nonrecording gage at site 5.5 miles (8.8 km) downstream at different datum.

REMARKS.--Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--41 years (1939 to current year), 1,628 ft³/s (46.10 m³/s), 11.86 in/yr (301 mm/yr).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft³/s (379 m³/s) June 2, gage height, 11.34 ft (3.456 m); Minimum daily, 293 ft³/s (8.30 m³/s) Oct. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	628	1860	1990	850	1640	4920	2000	1730	792	601	2150
2	742	698	1500	1990	780	1480	4100	1700	9030	1040	451	1800
3	450	870	1350	1700	720	1430	4430	1760	10800	671	462	1930
4	442	500	1460	1700	640	1440	6830	1680	7970	1050	445	1770
5	443	555	1280	1530	860	1680	5420	1700	7100	680	452	1470
6	449	743	1420	1350	700	1610	4820	1510	6020	634	450	1400
7	449	500	1390	1470	725	1700	4950	1510	5570	742	453	1220
8	450	634	1340	820	725	3720	5620	1510	5790	1020	394	1320
9	448	773	1230	1240	670	5310	7530	1310	4340	437	538	1210
10	448	524	1230	815	620	5590	6630	1320	3530	697	331	1060
11	408	853	1050	1700	700	4780	5570	1330	2900	599	870	978
12	293	521	1320	1250	560	4200	5120	1350	2800	733	585	924
13	426	901	1270	1390	700	3640	4640	1420	2300	616	356	933
14	394	687	1160	1760	565	3160	4580	1350	2200	616	829	830
15	356	582	1260	1300	760	2810	5490	1350	2010	689	882	999
16	751	647	1160	1610	680	2980	4850	1270	2010	410	878	933
17	410	513	687	1490	600	6460	4440	1250	1550	443	1040	1430
18	360	616	792	1760	700	7120	4010	1350	1980	454	1140	2080
19	438	699	1040	1900	700	5740	3500	1340	1610	488	1180	1760
20	330	522	813	1620	700	5530	3240	1580	1730	383	1440	1510
21	493	525	1030	1610	1070	4930	3170	1320	1580	525	1250	1420
22	553	727	1330	1540	4020	4650	2640	1350	1470	483	951	1410
23	740	880	1380	1370	4610	4070	2660	1250	1470	415	909	1110
24	390	840	2350	946	3520	4110	2490	1350	1410	373	977	1210
25	488	1040	3840	1100	3860	4240	2240	1390	1260	454	889	1260
26	488	2330	3770	820	1880	3970	2030	1330	1430	454	782	929
27	624	2870	3300	1000	2310	3670	2130	1230	1130	477	862	1190
28	694	2700	3000	700	2480	3390	2030	1160	912	599	665	1170
29	490	2320	2570	700	2000	3820	2030	1100	1290	494	697	1140
30	489	2090	2430	611	-----	4220	1730	1200	1050	494	499	1100
31	419	-----	2330	860	-----	5290	------	1280	-----	538	1100	-----
TOTAL	14800	29288	51942	41642	39705	118380	123840	43550	95972	18500	23358	39646
MEAN	477	976	1676	1343	1369	3819	4128	1405	3199	597	753	1322
MAX	751	2870	3840	1990	4610	7120	7530	2000	10800	1050	1440	2150
MIN	293	500	687	611	560	1430	1730	1100	912	373	331	830
CFSM	.26	.52	.90	.72	.73	2.05	2.21	.75	1.72	.32	.40	.71
IN.	.30	.58	1.04	.83	.79	2.36	2.47	.87	1.91	.37	.47	.79

CAL YR 1979 TOTAL 578461 MEAN 1585 MAX 14900 MIN 261 CFSM .85 IN 11.54
WTR YR 1980 TOTAL 640623 MEAN 1750 MAX 10800 MIN 293 CFSM .94 IN 12.78

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).

WATER DISCHARGE RECORDS

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.--19 years, 130 ft³/s (3.682 m³/s), 12.09 in/yr (307 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)
Mar. 8	1900	1790	50.7	8.47	2.582
June 3	0100	*6140	174	*13.34	4.066

Minimum daily discharge, 4.8 ft³/s (0.136 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	104	247	118	35	60	406	63	228	44	19	15
2	29	272	178	102	33	51	300	58	2340	40	15	13
3	31	168	142	89	32	45	267	53	4840	37	13	11
4	26	110	131	81	31	43	786	52	2090	35	11	10
5	21	84	125	77	30	58	569	51	969	33	10	9.0
6	19	74	123	70	30	87	357	51	607	30	35	8.4
7	20	64	111	68	29	162	265	48	471	27	351	7.6
8	18	58	91	65	29	1430	244	45	1030	26	241	7.6
9	15	66	77	55	29	1160	374	43	628	25	98	7.1
10	14	166	78	55	28	900	360	41	433	52	55	6.3
11	13	143	79	79	28	599	276	43	281	44	57	6.3
12	14	106	75	124	28	364	233	45	196	31	169	6.0
13	15	91	67	101	27	257	195	47	152	25	106	6.0
14	12	78	61	88	27	185	380	40	126	22	59	6.0
15	11	70	59	74	27	183	540	34	122	19	42	6.0
16	12	65	61	70	27	245	417	32	284	16	32	6.7
17	18	57	49	88	27	695	288	45	189	16	61	12
18	28	55	54	107	27	920	218	213	125	14	215	12
19	28	52	53	97	28	578	175	165	169	13	403	9.5
20	26	49	50	88	31	424	147	136	266	11	227	7.6
21	23	46	46	84	45	663	125	107	140	11	122	6.7
22	23	48	82	88	451	587	110	84	98	13	75	7.1
23	61	208	345	76	418	378	101	76	82	16	50	26
24	97	474	724	77	231	408	90	203	94	13	37	15
25	72	370	754	77	144	627	82	413	78	10	29	9.5
26	54	760	459	61	85	422	74	189	65	9.0	24	7.6
27	44	674	315	51	93	305	71	118	58	10	20	6.0
28	40	591	227	47	81	248	77	91	54	131	17	5.2
29	35	498	181	43	68	314	76	78	56	82	15	5.2
30	31	334	159	39	----	341	69	73	50	42	16	4.8
31	28	----	135	37	----	493	----	71	-----	27	18	-----
TOTAL	890	5935	5338	2376	2199	13232	7672	2808	16321	924.0	2642	266.2
MEAN	28.7	198	172	76.6	75.8	427	256	90.6	544	29.8	85.2	8.87
MAX	97	760	754	124	451	1430	786	413	4840	131	403	26
MIN	11	46	46	37	27	43	69	32	50	9.0	10	4.8
CFSM	.20	1.36	1.18	.53	.52	2.93	1.75	.62	3.73	.20	.58	.06
IN.	.23	1.51	1.36	.61	.56	3.37	1.95	.72	4.16	.24	.67	.07

CAL YR 1979 TOTAL 58428.8 MEAN 160 MAX 3030 MIN 7.6 CFSM 1.10 IN 14.89
WTR YR 1980 TOTAL 60603.2 MEAN 166 MAX 4840 MIN 4.8 CFSM 1.14 IN 15.44

03333450 WILDCAT CREEK NEAR JEROME, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1978 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT					
03...	1240	17.5	30	11	.89
09...	1355	13.0	15	9	.36
16...	1045	11.0	11	22	.65
23...	1425	13.0	67	28	5.1
30...	1425	12.0	30	13	1.1
NOV					
06...	1520	9.0	74	12	2.4
14...	1525	7.0	76	15	3.1
21...	1440	12.0	45	23	2.8
27...	1330	9.0	635	34	58
DEC					
04...	1405	5.0	129	14	4.9
11...	1340	7.0	79	12	2.6
19...	1000	2.0	52	10	1.4
20...	1120	1.0	49	18	2.4
26...	1245	6.0	448	28	34
JAN					
03...	1250	4.0	88	8	1.9
09...	1210	.0	54	14	2.0
16...	1245	4.0	70	7	1.3
24...	1040	.0	77	10	2.1
30...	1530	1.0	40	12	1.3
FEB					
06...	1530	.0	31	11	.92
07...	1030	----	30	3	.24
14...	1335	.0	25	11	.74
19...	1335	.0	28	11	.83
27...	0945	1.0	91	14	3.4
MAR					
05...	1440	1.0	61	8	1.3
13...	1515	2.0	247	18	12
18...	1435	----	860	68	158
25...	1315	5.0	624	52	88
27...	1330	7.5	306	19	16
APR					
02...	1440	8.0	292	55	43
04...	1535	6.0	886	225	538
05...	0915	5.0	593	116	186
06...	0925	7.0	368	59	59
08...	1540	10.0	243	217	142

03333450 WILDCAT CREEK NEAR JEROME, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
APR								
09...	1055	9.0	387	96	100	--	--	---
14...	1605	6.0	511	214	295	--	--	---
15...	1010	8.0	547	120	177	--	--	---
15...	2230	6.0	498	186	250	--	--	---
23...	1020	14.0	104	84	24	--	--	---
30...	1255	11.0	70	73	14	--	--	---
MAY								
08...	1205	13.0	45	42	5.1	--	--	---
14...	1415	17.0	40	46	5.0	--	--	---
20...	1115	15.5	138	103	38	76	--	---
22...	0905	17.0	86	45	10	--	--	---
24...	1600	18.0	194	869	455	--	--	---
24...	1730	18.0	222	1340	803	--	--	---
24...	1930	18.0	443	1540	1840	--	--	---
24...	2215	18.0	575	1060	1650	--	--	---
25...	1000	15.0	438	146	173	--	--	---
29...	1240	20.0	86	52	12	--	--	---
JUN								
01...	1130	18.0	249	2990	2010	--	--	---
01...	1430	18.0	350	2090	1980	--	--	---
01...	1810	18.0	375	758	767	--	--	---
02...	0950	18.0	966	1920	5010	--	--	---
02...	1430	18.0	2360	3240	20600	--	--	---
03...	0930	20.0	5420	1200	17600	--	--	---
03...	1440	20.0	4560	932	11500	--	--	---
03...	1920	23.0	3960	699	7470	99	99	100
04...	0905	20.0	2280	329	2030	--	--	---
08...	1135	18.0	1190	518	1660	--	--	---
11...	1030	16.0	294	110	87	--	--	---
16...	1050	17.0	307	202	167	--	--	---
19...	1320	20.0	102	60	17	--	--	---
26...	1400	25.0	64	70	12	--	--	---
JUL								
03...	1435	23.0	37	56	5.6	--	--	---
10...	1440	26.0	49	83	11	--	--	---
16...	1000	26.0	17	53	2.4	--	--	---
17...	1210	27.0	16	109	4.7	--	--	---
23...	1315	25.0	17	102	4.7	--	--	---
28...	0925	20.0	146	175	69	--	--	---
31...	1800	26.0	24	62	4.0	--	--	---

03333450 WILDCAT CREEK NEAR JEROME, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
AUG					
07...	1825	24.0	431	164	191
12...	1500	25.0	190	104	53
18...	0955	22.0	141	92	35
19...	1435	23.0	415	104	117
27...	1110	23.5	21	50	2.8
28...	1545	26.0	17	60	2.8
SEP					
04...	1420	24.0	9.5	53	1.4
09...	1435	24.0	7.1	42	.81
18...	1435	18.0	11	30	.89
26...	1350	20.0	7.6	24	.49

03333600 KOKOMO CREEK NEAR KOKOMO, IN

LOCATION.--Lat 40°26'28", long 86°05'20", in NW¼SW¼ sec.16, T.23 N., R.4E., 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 mi^2 (64.0 km^2).

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

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

GAGE.--Water-stage recorder. Datum of gage is 807.68 ft (246.181 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--21 years, 21.2 ft^3/s (0.600 m^3/s), 11.66 in/yr (296 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft^3/s (29.4 m^3/s) Apr. 20, 1964, gage height, 9.88 ft (3.011 m); minimum daily, 0.08 ft^3/s (0.002 m^3/s) Aug. 20, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 260 ft^3/s (7.36 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. 8	0800	459	13.0	6.24	1.902	June 7	2200	448	12.7	6.05	1.844
June 2	2000	*959	27.2	*9.45	2.880						

Minimum daily discharge, 0.55 ft^3/s (0.016 m^3/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	44	43	25	7.2	9.6	67	12	70	8.0	1.5	1.6
2	14	50	32	21	6.5	8.6	54	11	546	7.2	1.5	1.7
3	5.9	31	28	18	6.2	8.2	51	10	748	6.9	1.5	1.5
4	4.7	21	26	17	5.9	7.8	93	9.6	240	6.9	1.5	1.5
5	4.4	17	26	16	5.8	9.8	64	9.6	111	6.2	1.5	1.5
6	4.0	15	25	14	5.6	15	49	9.2	85	5.9	23	1.3
7	4.5	12	22	14	5.6	46	41	8.8	144	5.0	53	1.2
8	4.1	12	17	11	5.4	362	45	8.4	273	4.7	16	1.3
9	3.6	17	15	10	5.2	149	72	8.8	94	8.8	6.9	1.2
10	3.3	39	16	10	5.0	120	65	8.8	76	96	4.5	1.2
11	3.1	28	15	19	4.9	82	51	9.2	53	24	10	1.1
12	3.4	21	14	18	4.7	57	44	11	40	13	20	1.1
13	3.2	18	13	18	4.5	44	38	8.8	34	8.8	9.2	1.0
14	3.0	14	11	17	4.5	35	78	5.6	29	5.9	5.0	1.2
15	2.9	13	11	13	4.4	37	88	5.0	28	4.2	4.0	1.2
16	3.3	12	12	14	4.3	47	69	4.7	44	3.3	3.1	1.6
17	5.2	10	9.2	16	4.2	180	51	6.5	33	3.1	18	2.4
18	8.3	9.6	9.2	19	4.2	136	40	24	25	2.8	31	1.3
19	6.8	9.2	11	18	4.7	90	36	16	48	2.3	74	1.1
20	5.7	8.4	10	16	5.6	70	35	12	70	2.0	33	1.0
21	5.1	8.0	9.2	15	9.6	96	31	10	36	2.3	17	1.0
22	8.0	8.8	14	16	86	72	25	8.0	26	7.2	10	1.4
23	29	46	101	14	56	56	23	7.6	28	4.5	6.5	2.4
24	23	58	128	14	38	78	20	40	31	2.6	4.7	2.8
25	15	54	104	14	25	97	17	56	20	2.1	3.8	2.0
26	11	152	69	12	12	66	15	30	15	1.8	3.1	1.7
27	9.2	90	51	10	20	51	14	20	13	1.8	2.6	1.6
28	8.4	92	42	9.2	15	45	15	13	11	2.8	2.3	1.1
29	7.2	69	38	8.0	12	67	15	10	10	2.3	2.0	.55
30	6.2	62	35	7.6	-----	65	13	17	9.2	1.8	1.7	.55
31	6.2	------	30	7.6	-----	85	----	15	------	1.6	1.7	-----
TOTAL	226.2	1041.0	986.6	451.4	378.0	2292.0	1319	425.6	2990.2	255.8	373.6	42.10
MEAN	7.30	34.7	31.8	14.6	13.0	73.9	44.0	13.7	99.7	8.25	12.1	1.40
MAX	29	152	128	25	86	362	93	56	748	96	74	2.8
MIN	2.9	8.0	9.2	7.6	4.2	7.8	13	4.7	9.2	1.6	1.5	.55
CFSM	.30	1.41	1.29	.59	.53	2.99	1.78	.56	4.04	.33	.49	.06
IN.	.34	1.57	1.49	.68	.57	3.45	1.99	.64	4.50	.39	.56	.06

CAL YR 1979 TOTAL 9433.20 MEAN 25.8 MAX 449 MIN 1.5 CFSM 1.05 IN 14.21
WTR YR 1980 TOTAL 10781.50 MEAN 29.5 MAX 748 MIN .55 CFSM 1.19 IN 16.24

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 fc (236.409 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair. 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.--25 years, 227 ft³/s (6.429 m³/s), 12.74 in/yr (324 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 discharge, 7.2 ft³/s (0.20 m³/s) Sept. 30, 1956.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 4	0300	*8110	230	*12.01	3.661

Minimum daily discharge, 30 ft³/s (0.85 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	217	514	291	77	150	960	150	411	88	53	64
2	102	247	378	264	75	120	800	140	3250	87	51	64
3	49	291	294	235	72	120	620	130	7390	87	49	60
4	51	204	247	214	68	135	800	120	5580	86	47	59
5	48	157	225	195	66	150	910	112	1940	86	45	55
6	40	137	214	180	67	160	740	100	1050	86	301	51
7	35	122	202	172	67	187	600	105	773	86	252	47
8	35	119	176	159	67	1500	510	100	1350	86	195	52
9	40	130	155	146	66	1520	750	98	1120	137	207	47
10	36	120	135	139	66	1500	690	94	820	267	127	43
11	40	120	129	141	65	1200	600	92	545	102	238	40
12	40	120	135	152	66	780	520	110	358	80	238	41
13	36	120	129	167	65	600	460	135	285	73	212	42
14	32	139	112	176	64	450	540	125	238	68	142	36
15	32	130	105	174	64	340	660	96	255	66	109	30
16	58	130	102	163	65	350	780	60	386	64	86	52
17	44	130	94	159	65	600	1090	119	337	62	334	117
18	37	120	90	167	62	1600	920	109	241	60	366	46
19	39	120	87	176	64	1400	740	222	285	60	529	40
20	39	120	87	176	65	1050	500	222	442	69	433	36
21	40	120	86	169	150	920	297	187	282	88	255	32
22	81	115	96	165	910	1000	250	155	192	114	172	48
23	93	174	139	159	840	860	230	135	183	84	117	96
24	72	307	285	146	760	660	210	219	185	70	90	72
25	70	465	619	141	520	800	190	665	159	60	75	52
26	96	705	782	137	330	700	170	378	131	90	75	45
27	87	914	700	120	255	560	165	227	114	120	72	40
28	72	929	509	105	210	500	155	172	101	140	68	37
29	73	864	366	94	190	540	160	141	94	100	65	35
30	96	674	327	87	----	780	160	209	91	78	66	32
31	96	----	310	83	----	1100	-----	178	-----	54	76	----
TOTAL	1785	8260	7829	5052	5501	22332	16177	5105	28588	2798	5145	1511
MEAN	57.6	275	253	163	190	720	539	165	953	90.3	166	50.4
MAX	102	929	782	291	910	1600	1090	665	7390	267	529	117
MIN	32	115	86	83	62	120	155	60	91	54	45	30
CFSM	.24	1.14	1.05	.67	.79	2.98	2.23	.68	3.94	.37	.69	.21
IN.	.27	1.27	1.20	.78	.85	3.43	2.49	.78	4.39	.43	.79	.23

CAL YR 1979 TOTAL 95191 MEAN 261 MAX 3920 MIN 29 CFSM 1.08 IN 14.63
WTR YR 1980 TOTAL 110083 MEAN 301 MAX 7390 MIN 30 CFSM 1.24 IN 16.92

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 fair.

AVERAGE DISCHARGE.--37 years, 239 ft³/s (6.768 m³/s), 13.36 in/yr (339 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s (357 m³/s) June 10, 1958, gage height, 15.28 (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)
June 3	0200	*7160	203	*12.13	3.70
June 8	0500	3550	101	9.06	2.76

Minimum daily discharge, 38 ft³/s (1.076 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	105	389	204	76	140	952	130	223	105	52	52
2	62	184	270	186	75	135	667	122	3290	99	51	49
3	105	196	228	171	72	132	551	115	5200	95	49	48
4	84	158	205	160	71	137	1060	105	2380	92	48	47
5	68	132	190	152	69	144	889	98	1170	89	46	48
6	65	111	180	142	68	178	619	95	734	86	46	48
7	61	103	170	138	68	196	503	95	889	81	68	48
8	61	98	162	119	67	1710	537	91	2650	77	127	47
9	56	100	149	137	66	1490	859	86	1270	76	84	50
10	52	158	138	130	73	1100	750	84	803	77	68	48
11	51	196	129	137	71	808	586	88	561	145	81	46
12	51	165	125	176	71	540	497	110	446	100	252	44
13	49	145	121	173	73	427	436	123	377	87	151	40
14	47	133	117	163	62	352	597	110	333	75	93	39
15	46	114	111	140	65	317	816	95	418	69	77	40
16	48	105	103	127	68	357	920	100	561	66	72	42
17	54	100	96	144	69	1040	1030	120	395	64	140	50
18	58	95	90	165	72	1550	880	153	301	62	355	100
19	55	92	87	163	59	984	620	138	257	62	637	77
20	58	90	86	152	61	694	390	145	225	63	1100	56
21	55	90	86	147	120	854	270	140	206	73	455	48
22	57	88	95	149	1190	885	215	128	180	100	274	52
23	108	103	180	142	718	590	195	120	165	111	176	112
24	127	198	497	117	383	523	175	115	158	90	120	100
25	133	214	803	110	276	730	165	150	149	70	96	70
26	111	846	619	100	200	565	150	235	137	59	82	54
27	96	970	427	93	176	443	145	185	127	145	72	48
28	88	714	330	88	171	386	145	145	120	100	65	45
29	82	590	274	84	145	490	148	123	119	70	60	42
30	78	465	248	81	----	600	139	135	112	60	58	40
31	73	----	225	78	----	1170	-----	196	-----	54	55	----
TOTAL	2177	6858	6930	4268	4755	19667	15906	3875	23956	2602	5110	1630
MEAN	70.2	229	224	138	164	634	530	125	799	83.9	165	54.3
MAX	133	970	803	204	1190	1710	1060	235	5200	145	1100	112
MIN	38	88	86	78	59	132	139	84	112	54	46	39
CFSM	.29	.94	.92	.57	.68	2.61	2.18	.51	3.29	.35	.68	.22
IN.	.33	1.05	1.06	.65	.73	3.01	2.43	.59	3.67	.40	.78	.25

CAL YR 1979 TOTAL 86751 MEAN 238 MAX 2750 MIN 34 CFSM .98 IN 13.28
WTR YR 1980 TOTAL 97734 MEAN 267 MAX 5200 MIN 38 CFSM 1.10 IN 14.96

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 mi^2 (2,056 km^2).

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 527.66 ft (160.831 m) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark). Nonrecording gage prior to June 13, 1957, and August 21, 1974, to May 20, 1976, at present site and datum.

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

AVERAGE DISCHARGE.--26 years, 755 ft^3/s (21.38 m^3/s), 12.91 in/yr (328 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s (708 m^3/s) June 10, 1958, gage height, 21.52 ft (6.559 m), from rating curve extended above 18,000 ft^3/s (510 m^3/s); minimum daily, 46 ft^3/s (1.30 m^3/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 ft^3/s (178 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
June 3	0800	*12700	360	*16.34	4.980

Minimum daily discharge, 106 ft^3/s (3.00 m^3/s) Oct. 1.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: December 1970 to August 1974.
WATER TEMPERATURE: December 1970 to August 1974.
SEDIMENT DISCHARGE: July 1968 to December 1978 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	310	1320	761	295	434	2900	457	891	330	178	178
2	209	571	1040	680	290	371	2180	419	5750	313	178	166
3	306	620	845	611	288	379	1830	393	11900	303	171	166
4	212	607	741	562	285	423	2720	364	11800	293	168	154
5	185	489	684	529	283	465	2740	337	9650	293	156	166
6	188	415	666	485	280	625	2220	316	5590	277	154	166
7	173	371	638	457	280	634	1670	330	3120	270	368	166
8	166	344	584	426	277	3900	1570	313	3830	260	593	154
9	152	344	517	423	274	4700	2280	296	4140	253	333	178
10	142	446	485	423	270	4380	2180	290	2960	267	300	166
11	145	598	465	453	268	3340	1830	290	2030	509	316	154
12	142	589	453	529	265	2310	1530	364	1550	357	670	154
13	138	525	449	567	262	1670	1290	438	1200	296	550	131
14	138	461	419	554	257	1280	1620	382	991	257	404	131
15	135	415	389	493	257	1060	2280	323	1070	234	316	142
16	138	404	382	457	258	1080	2770	329	1320	228	280	142
17	152	400	344	481	258	2470	3450	457	1180	225	380	218
18	193	379	320	546	258	4650	3200	537	959	218	1180	350
19	163	371	310	562	257	3680	2170	477	771	215	1860	247
20	161	368	310	541	257	2750	1200	517	901	209	2670	188
21	149	382	300	509	375	2700	865	497	959	237	1250	163
22	159	368	330	501	2900	3020	761	438	732	337	722	171
23	250	396	411	477	2510	2380	713	423	584	400	442	400
24	371	607	1390	415	1670	1910	625	400	521	333	333	354
25	350	953	2620	390	1150	2490	580	469	525	237	283	228
26	286	2230	2540	360	800	2280	537	825	473	203	218	183
27	267	2850	1910	340	657	1810	493	647	430	513	203	161
28	263	2420	1420	316	598	1460	477	489	396	310	190	154
29	240	2020	1130	308	517	1650	517	415	379	244	190	147
30	218	1670	964	303	-----	1990	477	465	354	209	190	138
31	221	-----	860	300	-----	3300	-----	825	-----	190	190	----
TOTAL	6118	22923	25236	14759	16596	65591	49675	13522	76956	8820	15436	5616
MEAN	197	764	814	476	572	2116	1656	436	2565	285	498	187
MAX	371	2850	2620	761	2900	4700	3450	825	11900	513	2670	400
MIN	106	310	300	300	257	371	477	290	354	190	154	131
CFSM	.25	.96	1.03	.60	.72	2.67	2.09	.55	3.23	.36	.63	.24
IN.	.29	1.07	1.18	.69	.78	3.07	2.33	.63	3.61	.41	.72	.26

CAL YR 1979 TOTAL 285192 MEAN 781 MAX 8200 MIN 97 CFSM .98 IN 13.36
WTR YR 1980 TOTAL 321248 MEAN 878 MAX 11900 MIN 106 CFSM 1.11 IN 15.05

03335500 WABASH RIVER AT LAFAYETTE, IN

LOCATION.--Lat 40°25'19", long 86°53'49", in NE¼SW¼ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on right bank 20 ft (6 m) downstream from Brown Street in Lafayette, 0.2 mile (0.3 km) upstream from Main Street bridge, 0.3 mile (0.5 km) downstream from Harrison Memorial Bridge, 5.1 miles (8.2 km) downstream from Wildcat Creek, and at mile 311.9 (501.8 km).

DRAINAGE AREA.--7,267 mi² (18,822 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1901 to January 1902, March to December 1902, January to May 1903 (gage heights only), October 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at present site since October 1913 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1335: 1929, 1932-33, 1936. WSP 1505: 1950. WSP 1555: 1928(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 504.14 ft (153.662 m) National Geodetic Vertical Datum of 1929. Prior to May 2, 1903, nonrecording gage 0.5 mile (0.8 km) upstream at different datum. Oct. 7, 1923, to Nov. 20, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for missing record or ice effected which are fair. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--57 years (1923 to current year), 6,399 ft³/s (181.2 m³/s), 11.96 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft³/s (3,710 m³/s) May 19, 1943, gage height, 28.47 ft (8.678 m); minimum daily, 399 ft³/s (11.3 m³/s) Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 32.9 ft (10.03 m), from floodmark determined by National Weather Service, discharge, 190,000 ft³/s (5,380 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,100 ft³/s (1,362 m³/s) June 3, gage height, 19.82 ft (6.040 m); minimum daily, 1,550 ft³/s (43.9 m³/s) Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	2320	12100	10400	2700	5840	24900	4140	4710	8670	5740	2840
2	2320	2780	12600	10300	2760	5420	21300	4080	17200	8690	5100	3850
3	2550	3610	11600	9920	2880	4670	18400	3860	44500	9080	4110	4060
4	2670	4340	9630	9270	2900	4370	20700	3610	46200	8520	3850	3660
5	2320	4230	7120	8770	2850	4460	23600	3490	39500	7080	3720	3300
6	2500	3040	6710	7390	2700	4730	21300	3460	29100	6230	4080	3160
7	2770	2440	6060	6230	2600	4390	18300	3260	18700	4730	5800	2860
8	2630	2170	6740	4170	2570	10700	16400	3270	23700	3260	4970	2960
9	2330	2320	7710	3520	2600	23300	18900	3140	19200	2860	3300	2570
10	2460	3770	6860	3360	2650	25300	19000	2990	13400	2360	3050	2320
11	2750	4270	4420	3500	2680	25000	16900	2910	10200	2890	3240	2200
12	2750	3720	3980	3930	2670	21400	14700	3080	8760	2610	4090	2020
13	2670	4510	3680	4450	2640	16500	12600	3250	9820	2360	4360	2070
14	2980	4110	3480	5450	2580	14600	11500	3210	10100	2740	4940	1980
15	2910	3050	3950	5830	2480	14100	14500	3000	9520	2250	6200	1610
16	2700	2510	5630	5170	2400	14100	16800	2900	9990	2250	6380	2080
17	2190	2450	4920	5140	2360	18700	15800	2710	10300	1680	6630	3080
18	1660	2410	3530	4920	2450	32100	13500	3060	10700	1650	7680	4080
19	1620	3460	5350	5960	2480	30600	11100	4810	10900	1620	10500	5430
20	1550	2620	5290	6160	2500	25300	9620	6420	10600	1620	11900	4560
21	1640	2250	5050	5470	2700	22600	7960	6160	10600	1630	10100	3750
22	1940	2150	4950	4870	9800	25000	7060	4340	8780	2920	9010	3490
23	2080	3890	4670	4480	19000	22400	6400	4120	9100	3330	7730	3260
24	2410	4900	7800	4010	17200	19000	5830	3990	9200	3650	6360	3440
25	2350	6450	19600	3740	14100	20700	5450	4340	8760	4080	5240	3360
26	2240	9550	21900	4140	11500	21800	4930	4320	8840	3590	4050	3480
27	2070	13500	18800	3950	10400	19800	4600	3780	9040	3780	3330	2830
28	3360	13900	15900	4180	10200	17900	4510	3430	8760	3790	2730	3060
29	3120	12300	14200	3460	7960	17400	4500	3120	8990	3440	2390	2890
30	2240	11800	13200	2940	------	18900	4410	3020	8730	5350	2230	2700
31	2050	------	12100	2630	------	22300	------	3860	------	6050	2210	-----
TOTAL	73460	144820	269530	167710	155310	533380	395470	115130	447900	124760	165020	92950
MEAN	2370	4827	8695	5410	5356	17210	13180	3714	14930	4025	5323	3098
MAX	3360	13900	21900	10400	19000	32100	24900	6420	46200	9080	11900	5430
MIN	1550	2150	3480	2630	2360	4370	4410	2710	4710	1620	2210	1610
CFSM	.33	.66	1.20	.74	.74	2.37	1.81	.51	2.05	.55	.73	.43
IN.	.38	.74	1.38	.86	.80	2.73	2.02	.59	2.29	.64	.84	.48

CAL YR 1979 TOTAL 2411030 MEAN 6606 MAX 48800 MIN 1240 CFSM .91 IN 12.34
WTR YR 1980 TOTAL 2685440 MEAN 7337 MAX 46200 MIN 1550 CFSM 1.01 IN 13.75

03335500 WABASH RIVER AT LAFAYETTE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1954 to September 1964, August 1967 to September 1975.
SEDIMENT DISCHARGE: March 1978 to September 1980 (discontinued as daily sediment station; converted to partial-record sediment station).

INSTRUMENTATION.--Water temperature recorder from July 1954 to Sept. 1978. A US D-74 sampler mounted on upstream bridge.

REMARKS.--Several periods of high sediment yield were not measured during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 32.0°C July 30, 31, 1954; minimum, freezing point on many days during most winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 677 mg/L Apr. 16, 1980; minimum daily mean, 5 mg/L Oct. 8, 1978, Jan. 23, 1980.
SEDIMENT LOADS: Maximum daily, 79,600 tons (72,200 tonnes) June 4, 1980: minimum daily; 21 tons (19.1 tonnes) Oct. 8, 1978.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum, 980 mg/L Feb. 11, 1965; minimum, 6 mg/L Dec. 22, 1976.
SEDIMENT LOADS: Maximum, 81,500 tons (73,900 tonnes) Feb. 11, 1965; minimum, 9.1 tons (8.3 tonnes) Mar. 12, 1965.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 677 mg/L Apr. 16; minimum daily mean, 5 mg/L Jan. 23.
SEDIMENT LOADS: Maximum daily, 79,600 tons (72,200 tonnes) June 4; minimum daily, 50 tons (45.4 tonnes) Jan. 31.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	28	123	70	471	104	3400	41	1150			---	------
2	27	169	55	413	90	3060	47	1310			---	------
3	34	234	59	575	87	2720	52	1390			---	------
4	40	288	47	551	87	2260	85	2130			---	------
5	45	282	43	491	101	1940	49	1160			---	------
6	31	209	26	213	105	1900	38	758			---	------
7	26	194	26	171	81	1330	35	589			---	------
8	32	227	35	205	69	1260	31	349			---	------
9	41	258	35	219	60	1250	26	247			---	------
10	32	213	29	295	77	1430	28	254			---	------
11	38	282	24	277	87	1040	29	274			---	------
12	20	148	35	352	68	731	34	361			---	------
13	22	159	38	463	46	457	46	553			---	------
14	34	274	45	499	38	357	46	677			---	------
15	21	165	31	255	50	533	35	551			---	------
16	49	379	21	142	51	775	26	363			---	------
17	96	568	29	192	51	677	19	264			---	------
18	52	233	33	215	43	410	21	279			---	------
19	26	114	45	420	41	592	13	209			235	19400
20	17	71	39	276	44	628	11	183			216	14800
21	67	309	40	243	47	641	10	148			190	11600
22	45	236	39	226	49	655	8	105			202	13600
23	39	219	53	557	56	706	5	60			128	7740
24	33	215	46	609	---	-----	6	65			111	5690
25	28	178	60	1040	---	-----	9	91			84	4690
26	24	145	123	3170	---	-----	8	89			97	5710
27	48	268	99	3610	---	-----	7	75			104	5560
28	50	454	85	3190	110	4720	7	79			109	5270
29	51	430	91	3020	79	3030	7	65			---	------
30	59	357	89	2840	50	1780	7	56			---	------
31	69	382	---	-----	47	1540	7	50			122	7350
TOTAL	---	7783	---	25200	---	39822	---	13934			---	101410

03335500 WABASH RIVER AT LAFAYETTE, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	142	9550	70	782	---	------	84	1970	99	1530	35	279
2	110	6330	71	782	---	------	56	1310	104	1430	45	468
3	113	5610	63	657	---	------	50	1230	93	1030	27	296
4	264	15300	46	448	638	79600	66	1520	96	998	27	267
5	234	14900	34	320	399	42600	52	994	94	944	26	232
6	149	8570	34	318	229	18000	55	925	87	958	25	213
7	143	7070	30	264	126	6360	70	894	309	4920	25	193
8	119	5270	32	283	248	16100	41	361	126	1690	37	296
9	161	8220	33	280	224	11600	39	301	68	606	40	278
10	135	6930	29	234	194	7020	33	210	61	502	34	213
11	133	6070	25	196	149	4100	27	211	71	621	34	202
12	112	4450	49	407	148	3500	41	289	69	762	29	158
13	108	3670	43	377	161	4270	38	242	80	942	26	145
14	116	3600	40	347	97	2650	30	222	97	1290	45	241
15	192	7630	38	308	95	2440	30	182	89	1490	51	222
16	677	30700	30	235	147	3970	31	188	115	1980	40	225
17	---	------	30	220	119	3310	41	186	204	3650	55	415
18	87	3170	31	256	102	2950	38	169	205	4250	54	595
19	78	2340	78	1010	125	3680	36	157	232	6580	66	968
20	66	1710	79	1370	89	2550	38	166	118	3790	35	431
21	69	1480	67	1110	141	4040	57	251	115	3140	24	243
22	57	1090	---	-----	131	3110	134	1110	108	2630	33	311
23	54	933	---	-----	71	1740	130	1170	66	1380	41	361
24	58	913	---	-----	96	2380	123	1210	56	962	43	399
25	58	853	---	-----	161	3810	85	936	61	863	42	381
26	46	612	---	-----	89	2120	87	843	43	470	37	348
27	55	683	---	-----	82	2000	143	1520	51	459	26	199
28	69	840	---	-----	92	2180	205	2140	53	391	34	281
29	69	838	---	-----	81	1970	161	1570	49	316	27	211
30	71	845	---	-----	67	1580	223	3170	48	289	30	219
31	---	------	---	-----	---	------	149	2430	38	227	---	----
TOTAL	---	160177	---	10204	---	239630	---	28077	---	51090	---	9290

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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft (218.846 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and periods of no gage-height record, Mar. 3 to Apr. 8, and Aug. 6 to Sept. 10.

AVERAGE DISCHARGE.--9 years (1972 to current year), 39.3 ft³/s (1.113 m³/s), 13.55 in/yr (344 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 250 ft³/s (7.08 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. 26	0430	258	7.31	5.62	1.713	Mar. 31	unknown	850	(24)	unknown	
Feb. 22	0245	1110	31.4	8.84	2.694	June 2	1645	*3420	96.9	*11.67	3.557
Mar. 8	unknown	500	(14)	unknown		June 7	2130	798	22.6	8.05	2.454
Mar. 18	unknown	600	(17)	unknown							

Minimum daily discharge, 0.49 ft³/s (0.014 m³/s) Sept. 12.

NOTE.--No gage-height record Mar. 3 to Apr. 8 and Aug. 6 to Sept 10.

REVISIONS.--Several peak discharges and annual maximum (*) for water years 1971, 1973, 1975-1979 have been revised as shown in the following table. They supersede figures published in the reports for 1971, 1973, 1975-1979.

Water Year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Water Year	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
1971	July 9	0100	1460	41.3	9.46	2.883	1976	Feb. 10	1700	*1190	33.7	*8.99	2.740
1973	Dec. 30	2300	*1070	30.3	*8.75	2.667		Feb. 16	2300	1080	30.6	8.76	2.670
	Apr. 1	0600	922	26.1	8.39	2.557	1977	Sept. 13	1600	*929	26.3	*8.41	2.563
1975	Jan. 11	0300	911	25.8	8.36	2.548	1978	May 13	0200	*937	26.5	*8.43	2.569
	Aug. 29	2000	*1730	49.0	*9.82	2.993	1979	Mar. 4	unknown	*2690	76.2	*11.00	3.353

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	14	31	20	7.5	14	170	19	112	11	1.9	.60
2	4.3	5.8	23	17	7.2	13	118	19	1800	11	1.7	1.7
3	1.9	4.3	22	16	7.0	12	95	18	543	10	1.9	.92
4	1.5	3.5	21	15	6.7	12	168	17	227	9.6	1.7	.70
5	1.5	3.3	21	14	6.5	16	112	17	153	10	1.5	.65
6	1.5	3.3	18	13	6.3	31	90	16	115	8.3	1.4	.62
7	1.5	3.1	16	12	6.2	29	74	15	240	7.6	1.3	.60
8	1.4	3.5	12	11	6.1	220	110	14	293	7.6	1.3	1.6
9	1.4	4.3	14	11	6.1	175	143	14	114	6.4	1.2	.94
10	1.2	5.8	14	10	6.0	115	102	15	83	7.9	1.8	.68
11	1.4	4.0	13	26	6.0	80	79	14	65	6.4	5.1	.59
12	1.5	3.8	11	20	6.0	63	68	17	55	5.8	3.2	.49
13	1.4	3.8	10	16	6.0	49	57	16	48	5.3	2.2	.82
14	1.2	3.5	9.3	12	6.0	43	124	13	44	4.3	1.9	.82
15	1.2	3.5	8.6	15	6.0	40	140	13	53	4.3	1.7	.59
16	1.5	3.5	7.9	22	6.0	46	99	13	66	3.8	1.6	1.1
17	1.7	3.3	7.4	29	6.0	180	74	14	45	3.5	14	7.0
18	1.5	3.3	6.9	25	6.1	230	59	13	39	3.1	5.0	3.3
19	1.4	3.3	6.8	21	6.1	145	51	16	35	2.6	6.6	1.4
20	1.4	3.1	6.7	18	35	104	45	14	27	2.6	3.3	.95
21	1.4	3.3	6.8	17	91	82	40	12	24	2.6	1.5	.82
22	1.9	7.6	9.4	15	382	71	37	11	22	2.6	1.0	.70
23	3.3	13	14	14	86	66	32	12	22	2.6	.84	.59
24	1.7	10	120	13	48	71	29	11	27	2.2	.75	.70
25	1.5	17	97	12	38	106	26	10	19	2.2	.69	.70
26	1.4	172	75	11	24	74	24	9.3	17	2.0	.66	.59
27	1.4	84	54	10	18	59	24	8.9	16	3.1	.63	.70
28	1.4	59	39	9.4	16	51	24	8.9	15	2.2	.62	.59
29	1.4	47	28	8.8	15	84	22	9.3	14	1.9	.59	.59
30	1.4	38	26	8.3	-----	160	20	9.6	12	2.8	.56	.59
31	1.5	-----	22	7.9	-----	305	----	8.9	----	2.0	.53	-----
TOTAL	50.6	536.9	770.8	469.4	872.8	2746	2256	417.9	4345	157.3	68.67	32.64
MEAN	1.63	17.9	24.9	15.1	30.1	88.6	75.2	13.5	145	5.07	2.22	1.09
MAX	4.3	172	120	29	382	305	170	19	1800	11	14	7.0
MIN	1.2	3.1	6.7	7.9	6.0	12	20	8.9	12	1.9	.53	.49
CFSM	.04	.45	.63	.38	.76	2.25	1.91	.34	3.68	.13	.06	.03
IN.	.05	.51	.73	.44	.82	2.59	2.13	.39	4.10	.15	.06	.03

CAL YR 1979 TOTAL 20357.70 MEAN 55.8 MAX 1800 MIN 1.2 CFSM 1.42 IN 19.22
WTR YR 1980 TOTAL 12724.01 MEAN 34.8 MAX 1800 MIN .49 CFSM .88 IN 12.01

03335690 MUD PINE CREEK NEAR OXFORD, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1979 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT									
09...	1410	----	1.2	7	.02	--	--	--	---
NOV									
27...	1310	----	76	32	6.6	--	--	--	---
JAN									
08...	1330	----	29	29	2.3	--	--	--	---
FEB									
11...	1435	----	6.2	0	-----	--	--	--	---
APR									
08...	1350	9.0	91	137	34	97	99	99	100
JUL									
30...	1630	28.0	1.8	78	.38	--	--	--	---
SEP									
10...	1545	26.0	.68	13	.02	--	--	--	---

03335700 BIG PINE CREEK NEAR WILLIAMSPORT, IN

LOCATION.--Lat 40°19'03", long 87°17'26", in SW¼SE¼ sec.26, T.22 N., R.8 W., Warren County, Hydrologic Unit 05120108, on downstream side of county road bridge, 1.6 miles (2.6 km) north of city limits of Williamsport, and 3.7 miles (6.0 km) upstream from mouth.

DRAINAGE AREA.--323 mi² (837 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 511.68 ft (155.960 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to May 19, 1967, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good except those for winter periods and periods of no gage-height records, June 15 to July 30, which are fair.

AVERAGE DISCHARGE.--25 years, 263 ft³/s (7.448 m³/s), 11.06 in/yr (281 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s (357 m³/s) Feb. 10, 1959, from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of contracted-opening measurement, gage height, 16.00 ft (4.877 m), from floodmark; minimum daily, 6.5 ft³/s (0.18 m³/s) Oct. 6-8, 1966.

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

Date	Time	Discharge (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	0400	2970	84.1	8.72	2.658	June 7	2100	3650	103	9.50	2.896
June 3	0800	*7920	224	*13.15	4.008						

Minimum daily discharge, 18 ft³/s (0.510 m³/s) Sept. 27-30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: July 1970 to September 1976.
WATER TEMPERATURE: November 1970 to September 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	114	212	200	84	175	1520	193	700	138	38	27
2	69	97	178	180	82	163	1030	183	3700	137	37	31
3	56	82	167	160	81	155	837	178	6600	134	37	26
4	47	67	149	150	79	150	1400	172	3090	134	36	24
5	39	61	141	140	78	165	1210	167	2020	130	36	23
6	35	57	144	130	77	190	822	164	1450	120	35	22
7	32	54	134	125	75	262	657	156	1490	115	32	22
8	29	54	119	120	74	1570	822	149	1960	115	31	26
9	27	57	104	115	73	1250	1130	144	1300	115	30	28
10	26	63	100	111	72	1020	988	141	689	102	43	25
11	26	62	104	188	71	695	757	141	524	96	57	24
12	27	59	104	164	71	450	641	162	446	88	62	24
13	27	57	97	193	70	356	528	167	402	78	42	24
14	27	56	90	164	69	285	757	151	371	70	37	24
15	26	54	84	139	69	281	1020	134	400	66	36	24
16	27	54	79	132	68	331	907	127	420	66	36	26
17	27	53	73	164	68	1440	724	127	290	66	110	47
18	29	52	69	185	68	1640	585	144	270	58	89	48
19	27	54	68	180	68	1320	484	134	310	50	57	43
20	27	53	69	167	127	868	421	125	300	48	42	38
21	26	53	80	159	314	695	371	121	235	47	35	37
22	27	57	90	164	1720	551	335	114	210	50	28	37
23	35	70	108	149	1000	454	307	112	230	44	25	32
24	33	81	600	143	556	510	281	121	240	44	24	19
25	33	93	858	138	356	738	259	226	199	44	23	19
26	31	673	657	129	215	610	241	156	190	48	22	19
27	30	610	467	119	200	493	229	125	180	63	21	18
28	29	405	360	109	190	446	229	112	170	47	21	18
29	28	314	304	102	180	684	226	110	160	42	21	18
30	28	253	250	95	----	1190	206	162	140	40	20	18
31	28	----	220	89	----	1790	-----	159	-----	38	19	----
TOTAL	1009	3869	6279	4503	6255	20927	19924	4577	28686	2433	1182	811
MEAN	32.5	129	203	145	216	675	664	148	956	78.5	38.1	27.0
MAX	69	673	858	200	1720	1790	1520	226	6600	138	110	48
MIN	26	52	68	89	68	150	206	110	140	38	19	18
CFSM	.10	.40	.63	.45	.67	2.09	2.06	.46	2.96	.24	.12	.08
IN.	.12	.45	.72	.52	.72	2.41	2.29	.53	3.30	.28	.14	.09

CAL YR 1979 TOTAL 124514 MEAN 341 MAX 5500 MIN 26 CFSM 1.06 IN 14.34
WTR YR 1980 TOTAL 100455 MEAN 274 MAX 6600 MIN 18 CFSM .85 IN 11.57

03336000 WABASH RIVER AT COVINGTON, IN

LOCATION (REVISED).--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 mi^2 (21,285 km^2).

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 poor. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--41 years, 7,276 ft^3/s (206 m^3/s), 12.02 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 147,000 ft^3/s (4,160 m^3/s) May 20, 1943, gage height, 32.44 ft (9.888 m); minimum daily, 487 ft^3/s (13.8 m^3/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 ft^3/s (5,600 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,100 ft^3/s (1,362 m^3/s) June 5, gage height, 24.15 ft (7.361 m); minimum daily, 2,220 ft^3/s (62.9 m^3/s) Oct. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2250	2680	12400	11600	2900	10200	25800	5310	4860	9050	5980	2670
2	2240	2860	12100	10400	2800	7590	26700	5160	12200	8870	5690	3430
3	2700	3260	12000	10300	2750	5870	25400	4980	25400	8970	5100	4090
4	2880	3980	11200	9930	2730	5400	24600	4800	38700	9210	4310	3780
5	2910	4430	8970	9390	2700	5100	24200	4590	45800	8540	4080	3470
6	2720	4280	7500	8730	2700	5400	24600	4460	41900	7360	4030	3470
7	2720	3340	7040	7590	2750	6300	23700	4330	34000	6480	4330	3100
8	2850	2910	6630	6470	2850	15000	22200	4210	28100	5080	5960	2950
9	2830	2730	7510	5050	2950	21000	22700	4220	26300	3930	4690	2950
10	2650	2900	7910	4370	3000	25000	23100	4100	22200	3530	3700	2900
11	2630	4020	6880	4180	2950	25200	23200	3970	15700	3110	3410	2700
12	2970	4380	5050	4520	2900	25700	21500	4010	11300	3380	3820	2600
13	3010	4130	4710	4650	2800	24900	19200	4220	10200	3190	4400	2450
14	3040	4640	4320	5140	2700	23500	18500	4190	10800	3020	4480	2350
15	3210	4190	4120	6190	2700	20000	19000	4060	10900	3210	5440	2300
16	3150	3470	4920	6060	2880	10700	19500	3880	10900	2880	6040	2300
17	3060	2980	5820	5700	2900	10800	19500	3800	11200	2810	6650	2450
18	2680	2890	5120	5620	2800	24100	18500	3730	11000	2450	7060	2850
19	2320	3000	4690	5700	2750	27500	16500	4060	11400	2370	8760	3400
20	2290	3570	5700	6550	2850	30200	14500	5940	11200	2310	10600	4000
21	2220	3070	5620	6450	5350	30400	12300	7080	11000	2330	10500	4450
22	2230	2730	5590	5870	12100	27700	11000	6620	10400	2540	9330	4100
23	2430	2810	5390	5470	15900	25500	9200	5820	9420	3270	8470	3850
24	2580	4260	6350	4930	18600	24500	8400	5050	9970	3660	7210	3500
25	2760	5300	13200	4530	16900	23000	7400	4820	9720	3930	6130	3300
26	2760	8210	19300	4450	14600	22500	6560	5070	9270	4280	5030	3300
27	2720	11700	20000	4090	12200	22000	6080	4960	9520	4440	4130	3250
28	2650	13700	17900	3830	11200	21500	5910	4490	9340	4350	3520	3100
29	3530	13600	15700	3600	11000	21500	5560	4160	9230	4030	3050	2900
30	3290	13300	14100	3400	------	24000	5490	3930	9260	3930	2840	2800
31	2730	------	12900	3200	------	24900	------	4020	------	5540	3950	-----
TOTAL	85010	149320	280640	187960	174210	596960	510800	144040	491190	142050	172690	94760
MEAN	2742	4977	9053	6063	6007	19260	17030	4646	16370	4582	5571	3159
MAX	3530	13700	20000	11600	18600	30400	26700	7080	45800	9210	10600	4450
MIN	2220	2680	4120	3200	2700	5100	5490	3730	4860	2310	2840	2300
CFSM	.33	.61	1.10	.74	.73	2.34	2.07	.57	1.99	.56	.68	.38
IN.	.38	.68	1.27	.85	.79	2.70	2.31	.65	2.22	.64	.78	.43

CAL YR 1979 TOTAL 2872850 MEAN 7871 MAX 52600 MIN 1650 CFSM .96 IN 13.00
WTR YR 1980 TOTAL 3029630 MEAN 8278 MAX 45800 MIN 2220 CFSM 1.01 IN 13.71

03339000 VERMILION RIVER NEAR DANVILLE, IL

LOCATION.--Lat 40°05'53", long 87°35'37", in SE¼NW¼ sec.22, T.19 N., R.11 W., Vermilion County, Illinois, Hydrologic Unit 05120109, on left bank 1.5 mi (2.4 km) upstream from Stony Creek and 2.5 mi (4.0 km) southeast of Danville, and at mile 19.2 (30.9 km).

DRAINAGE AREA.--1,290 mi² (3,341 km²).

PERIOD OF RECORD.--October 1914 to September 1921, June 1928 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 853: 1936(M). WSP 973: 1939. WSP 1305: 1915-16, 1920, 1929. WSP 1335: 1934(m). WSP 1909: 1960. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 503.33 ft (153.415 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 9, 1935, nonrecording gage at site 0.3 mi (0.5 km) upstream at same datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor. Flow regulated at times by storage at Lake Vermilion on North Fork Vermilion River, 4.5 mi (7.2 km) above station, usable capacity, 7,440 acre-ft (9.17 km³), and by Danville sewage-disposal plant.

AVERAGE DISCHARGE.--59 years, 937 ft³/s (26.59 m³/s), 9.86 in/yr (250 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft³/s (1,380 m³/s) Mar. 13, 1939, gage height, 28.59 ft (8.714 m); minimum daily, 2 ft³/s (0.057 m³/s) Oct. 9-14, 1920, Aug. 10, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,000 ft³/s (170 m³/s) and maximum (*):

Date	Time	Discharge (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. 18	0345	7100	201	11.60	3.536	June 4	0930	*17600	498	*20.16	6.145
Mar. 31	1015	9000	255	13.36	4.072						

Minimum daily discharge, 52 ft³/s (1.47 m³/s) Aug. 10, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	117	613	460	190	380	7140	710	500	411	76	74
2	140	99	300	400	190	360	4760	580	2800	378	70	86
3	115	115	288	360	180	370	3510	550	15400	308	67	101
4	135	105	300	330	170	380	3950	600	17000	300	67	140
5	115	94	292	280	160	400	3360	520	9000	358	72	92
6	105	92	338	250	160	411	2640	500	5800	296	67	82
7	99	86	360	240	170	491	1870	500	4500	272	62	84
8	96	88	231	240	160	2490	2280	430	3600	227	60	80
9	94	96	206	240	160	4120	3250	401	3000	210	54	67
10	90	108	190	387	170	3800	3180	480	2450	193	52	69
11	88	-112	157	430	190	3290	1910	480	2000	184	60	63
12	92	124	166	347	180	2120	1870	624	1650	166	65	58
13	90	101	166	460	180	1890	2140	585	1400	154	67	58
14	90	92	154	369	170	1340	2120	650	1150	135	72	65
15	84	92	137	343	160	1040	2620	539	1000	130	90	57
16	84	88	140	317	180	1260	2820	470	3100	115	181	74
17	88	88	130	270	160	3590	2260	465	2050	108	143	124
18	88	86	146	250	150	6750	1800	858	1350	94	284	168
19	96	86	146	240	160	5150	1900	1310	908	96	556	168
20	90	84	146	230	160	3440	1720	1070	966	84	512	137
21	92	86	148	220	250	2600	1430	877	734	110	280	103
22	98	103	174	230	350	2370	1060	728	585	124	184	76
23	100	130	197	210	1500	1840	954	661	602	108	120	70
24	110	135	1060	220	900	1850	996	661	858	88	94	63
25	174	148	2210	240	700	3080	1110	1090	792	72	78	58
26	122	512	1400	230	550	2780	722	1120	585	70	72	54
27	110	1230	1010	250	470	2280	600	850	528	92	80	54
28	90	978	915	255	400	1820	700	700	512	80	80	54
29	86	640	728	240	390	2330	600	590	501	112	74	55
30	99	711	640	200	---	3720	610	560	486	99	69	52
31	90	---	510	190	---	8330	---	520	---	82	62	---
TOTAL	3165	6626	13598	8928	8910	76072	65882	20679	85807	5256	3870	2486
MEAN	102	221	439	288	307	2454	2196	667	2860	170	125	82.9
MAX	174	1230	2210	460	1500	8330	7140	1310	17000	411	556	168
MIN	84	84	130	190	150	360	600	401	486	70	52	52
CFSM	.08	.17	.34	.22	.24	1.90	1.70	.52	2.22	.13	.10	.06
IN.	.09	.19	.39	.26	.26	2.19	1.90	.60	2.47	.15	.11	.07

CAL YR 1979 TOTAL 539254 MEAN 1477 MAX 22200 MIN 84 CFSM 1.15 IN 15.55
WTR YR 1980 TOTAL 301279 MEAN 823 MAX 17000 MIN 52 CFSM .64 IN 8.69

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 poor.

AVERAGE DISCHARGE.--12 years, 37.6 ft^3/s (1.065 m^3/s), 15.29 in/yr (388 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)
Feb. 22	0400	791	22.4	5.94	1.810	June 7	2145	844	23.9	6.20	1.890
June 2	2030	*2320	65.7	*9.79	2.984						

Minimum daily discharge, 3.7 ft^3/s (0.105 m^3/s) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	35	26	32	11	19	93	23	102	13	7.0	7.9
2	18	11	21	28	11	21	79	22	1100	13	6.6	8.2
3	14	7.8	19	25	11	27	72	22	370	12	6.6	8.2
4	7.0	5.9	19	23	10	30	77	21	162	12	6.3	8.2
5	4.8	5.2	18	22	11	47	69	19	97	12	6.3	9.1
6	4.4	5.3	18	20	11	45	62	19	67	11	7.0	8.4
7	4.2	5.0	19	18	10	44	56	19	230	11	9.7	8.0
8	4.0	5.0	18	17	9.7	161	83	18	232	13	6.6	11
9	4.1	9.6	17	16	9.7	100	95	17	64	14	6.3	11
10	4.3	21	18	14	10	92	80	18	43	12	7.0	9.6
11	4.2	19	17	12	9.7	80	71	19	39	11	13	8.8
12	4.5	15	16	14	9.2	71	65	20	36	10	7.9	8.1
13	4.3	12	13	18	8.8	61	58	17	35	9.8	7.0	7.6
14	3.8	11	12	20	9.8	50	114	15	32	9.5	7.3	7.2
15	3.7	9.4	11	15	11	43	93	15	30	9.0	9.7	6.9
16	6.0	8.9	10	14	10	42	76	17	28	8.5	8.8	10
17	8.6	8.0	9.5	16	9.0	80	67	19	26	7.8	14	38
18	11	7.4	9.0	19	11	84	60	17	24	7.4	147	15
19	10	7.3	8.7	17	13	73	54	16	22	7.1	48	12
20	8.4	7.1	8.4	16	17	64	50	15	19	9.6	20	10
21	10	7.2	8.2	16	68	61	46	14	17	12	14	9.7
22	18	7.2	10	16	335	57	42	13	16	13	12	12
23	21	9.1	24	16	96	50	40	13	15	12	11	15
24	18	11	106	15	64	48	38	19	15	10	10	9.7
25	16	26	79	16	43	56	35	23	15	8.8	9.7	8.8
26	15	95	62	13	32	51	29	18	14	9.3	9.7	7.8
27	14	53	51	13	27	44	28	15	13	13	9.4	7.4
28	12	47	45	12	27	40	26	13	13	10	9.2	6.9
29	11	39	40	12	22	40	26	20	14	7.9	8.7	6.6
30	12	31	37	12	-----	174	25	48	13	7.2	8.2	6.3
31	10	-----	35	16	-----	167	----	45	----	7.0	7.9	-----
TOTAL	297.3	541.4	804.8	533	926.9	2022	1809	609	2903	322.9	461.9	303.4
MEAN	9.59	18.0	26.0	17.2	32.0	65.2	60.3	19.6	96.8	10.4	14.9	10.1
MAX	21	95	106	32	335	174	114	48	1100	14	147	38
MIN	3.7	5.0	8.2	12	8.8	19	25	13	13	7.0	6.3	6.3
CFSM	.29	.54	.78	.52	.96	1.95	1.81	.59	2.90	.31	.45	.30
IN.	.33	.60	.90	.59	1.03	2.25	2.01	.68	3.23	.36	.51	.34

CAL YR 1979 TOTAL 18465.6 MEAN 50.6 MAX 1100 MIN 3.7 CFSM 1.52 IN 20.57
WTR YR 1980 TOTAL 11534.6 MEAN 31.5 MAX 1100 MIN 3.7 CFSM .94 IN 12.85

03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN

LOCATION.--Lat 40°02'56", long 86°53'58", in SW¼NW¼ sec.32, T.19 N., R.4 W., Montgomery County, Hydrologic Unit 05120110, on left bank 327 ft (100 m) upstream from Crawfordsville Electric Light and Power Co.'s dam at Crawfordsville, 0.5 mile (0.8 km) upstream from bridge on State Highway 43, 1.0 mile (1.6 km) downstream from Walnut Fork Sugar Creek, and at mile 40.4 (65.0 km).

DRAINAGE AREA.--509 mi² (1,318 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 973: 1939(M). WSP 1275: Drainage area. WSP 1335: 1949.

GAGE.--Water-stage recorder. Datum of gage is 657.77 ft (200.488 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, and July to September which are fair.

AVERAGE DISCHARGE.--42 years, 487 ft³/s (13.79 m³/s), 12.99 in/yr (330 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)
Feb. 22	1100	4160	118	4.36	1.329	June 2	1900	*7390	209	*6.18	1.884
Mar. 8	1900	5260	149	4.90	1.494	June 8	1500	6530	185	5.62	1.713
Mar. 17	2300	5170	146	4.85	1.478						

Minimum daily discharge, 36 ft³/s (1.02 m³/s) Sept. 29 and 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: February 1972 to July 1979 (discontinued).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	297	828	429	124	237	2210	259	197	142	54	44
2	620	732	624	375	122	221	1460	243	3480	135	53	52
3	200	479	490	332	120	210	1400	234	6400	132	52	66
4	140	333	448	302	119	225	2790	227	4040	127	51	53
5	115	266	417	285	118	360	1610	219	1620	129	50	47
6	100	225	428	258	117	626	1090	216	1030	122	100	43
7	88	204	393	245	116	567	875	208	1220	119	582	40
8	82	184	338	178	115	3690	1050	196	6110	116	409	38
9	78	208	282	229	115	4070	1760	191	3150	123	192	58
10	77	477	275	205	114	2900	1680	186	1350	269	123	80
11	76	480	273	291	113	1940	1220	187	910	127	157	66
12	75	343	260	435	113	1210	966	210	623	116	145	58
13	72	287	235	411	112	887	789	216	473	113	126	48
14	68	251	215	376	112	651	1420	191	391	111	111	43
15	65	221	200	297	118	609	1820	173	358	108	96	38
16	80	206	202	278	122	772	1580	167	669	100	88	43
17	105	190	121	321	126	2970	1110	186	526	92	102	93
18	125	179	111	363	128	4090	867	242	353	84	239	96
19	115	173	112	335	140	2290	711	240	298	78	573	70
20	100	167	112	306	208	1540	600	214	267	72	835	59
21	95	156	112	292	382	2180	521	199	232	68	491	49
22	295	155	157	296	3410	1850	458	187	212	82	267	44
23	520	225	275	265	2330	1190	420	179	210	106	172	41
24	360	615	1370	215	1180	1070	380	199	223	90	123	41
25	300	546	2320	295	794	1470	347	210	209	70	107	59
26	227	2890	1790	223	440	1090	316	189	187	62	90	49
27	188	2940	1150	181	370	858	298	160	174	93	74	41
28	168	2010	824	142	300	748	298	146	164	83	62	38
29	156	1600	644	136	270	928	311	139	166	68	53	36
30	139	1080	563	130	-----	1480	281	163	149	58	47	36
31	128	-----	497	127	-----	3360	-----	215	-----	55	44	----
TOTAL	5022	18119	16066	8553	11948	46289	30638	6191	35391	3250	5668	1569
MEAN	162	604	518	276	412	1493	1021	200	1180	105	183	52.3
MAX	620	2940	2320	435	3410	4090	2790	259	6400	269	835	96
MIN	65	155	111	127	112	210	281	139	149	55	44	36
CFSM	.32	1.19	1.02	.54	.81	2.93	2.01	.39	2.32	.21	.36	.10
IN.	.37	1.32	1.17	.63	.87	3.38	2.24	.45	2.59	.24	.41	.11

CAL YR 1979 TOTAL 238859 MEAN 654 MAX 8080 MIN 59 CFSM 1.29 IN 17.46
WTR YR 1980 TOTAL 188704 MEAN 516 MAX 6400 MIN 36 CFSM 1.01 IN 13.79

03340500 WABASH RIVER AT MONTEZUMA, IN

LOCATION.--Lat 39°47'33", long 87°22'26", in SE¼NE¼ sec.35, T.16 N., R.9 W., Parke County, Hydrologic Unit 05120108, on downstream side of first pier from left bank of bridge on U.S. Highway 36 at Montezuma, 2.0 miles (3.2 km) upstream from Raccoon Creek, 4.9 miles (7.9 km) downstream from Sugar Creek, and at mile 240.0 (386.0 km).

DRAINAGE AREA.--11,118 mi² (28,796 km²).

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

REVISED RECORDS.--WSP 1335: 1929, 1931(M). WSP 1505: 1954. WSP 1915: 1954(m). WSP 2109: Drainage area. WRD Ind. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 457.75 ft (139.522 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1927, to July 12, 1950, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--53 years, 9,642 ft³/s (273 m³/s), 11.78 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 184,000 ft³/s (5,210 m³/s) May 20, 1943, gage height, 32.83 ft (10.007 m); minimum daily, 571 ft³/s (16.2 m³/s) Sept. 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 34.0 ft (10.36 m), from floodmarks, discharge, 230,000 ft³/s (6,510 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 56,100 ft³/s (1,590 m³/s) June 6, gage height, 23.54 ft (7.175 m); minimum daily, 2,750 ft³/s (77.9 m³/s) Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2890	3840	16100	16100	3950	15000	38200	8410	5920	11100	6920	3580
2	2930	4250	15500	14400	3800	11300	37600	7920	13400	10800	6900	3880
3	3210	4570	15200	13600	3750	9300	36500	7810	34300	10600	6460	4670
4	3630	4850	14500	13200	3750	8500	36100	7490	42300	10900	5640	5000
5	3760	5440	13100	12500	3750	8200	34500	7010	48100	10600	5030	4900
6	3590	5460	10800	11700	3700	8300	32800	6490	55300	9520	4700	4580
7	3430	4820	9920	10500	3700	8800	31800	6250	51100	8580	4890	4270
8	3480	4050	8990	8930	3900	13400	31200	5890	45300	7480	6420	4140
9	3580	3660	8850	7120	4100	25800	33600	5790	41300	6060	6910	4130
10	3450	3850	9680	6150	4150	29400	33400	5720	36400	5470	5100	3960
11	3280	4730	9300	6280	4050	30800	32300	5620	29500	5060	4340	3690
12	3390	5610	7420	6260	4000	31200	30100	6180	21100	4880	4140	3490
13	3670	5360	6380	6680	3850	30700	27300	6090	15800	4770	4840	3360
14	3600	5480	5960	6970	3750	28300	25900	5960	14700	4590	5470	3260
15	3730	5600	5600	7740	3700	24100	26900	5800	14600	4480	5870	3210
16	3850	4680	5680	8390	3950	21600	27800	5500	14600	4370	7070	3130
17	3720	4030	6760	7940	3950	22700	27800	5350	15800	4130	7550	3460
18	3600	3740	6670	7830	3750	29900	26700	5330	15500	3870	8280	4080
19	3130	3620	5550	7660	3650	32800	24200	5940	14800	3590	10500	4950
20	2880	4100	6630	8170	3700	35000	20900	7350	14800	3490	12100	5990
21	2840	4120	7140	8600	5600	36100	18000	9070	14100	3460	13100	5810
22	2750	3620	7050	8120	14200	35700	15300	9200	13500	3660	11700	5030
23	2990	3510	7280	7520	23700	33300	13300	8420	12200	4130	10400	4560
24	3340	4490	9380	6750	24800	31600	12000	7440	12300	4560	9280	4350
25	3640	6260	16900	6410	23700	30400	11100	6750	12500	4940	7960	4280
26	3640	11300	23600	6140	20600	29600	10500	7420	11800	5140	6900	4240
27	3530	16400	24600	5820	19500	28900	9600	7260	11400	5740	5790	4370
28	3330	18400	23600	5100	17500	28200	9070	6350	11500	5520	4990	3990
29	3710	19200	21200	4990	16000	27400	9080	5720	11200	5480	4370	3950
30	4230	17400	18800	4750	------	28000	8790	5450	11200	4840	3940	3880
31	3790	------	17300	4300	------	35700	------	5450	------	5890	3760	------
TOTAL	106590	196440	365440	256620	242500	770000	732340	206430	666320	187700	211320	126190
MEAN	3438	6548	11790	8278	8362	24840	24410	6659	22210	6055	6817	4206
MAX	4230	19200	24600	16100	24800	36100	38200	9200	55300	11100	13100	5990
MIN	2750	3510	5550	4300	3650	8200	8790	5330	5920	3460	3760	3130
CFSM	.31	.59	1.06	.75	.75	2.23	2.20	.60	2.00	.55	.61	.38
IN.	.36	.66	1.22	.86	.81	2.58	2.45	.69	2.23	.63	.71	.42

CAL YR 1979 TOTAL 4212820 MEAN 11540 MAX 75600 MIN 2200 CFSM 1.04 IN 14.10
WTR YR 1980 TOTAL 4067890 MEAN 11110 MAX 55300 MIN 2750 CFSM 1.00 IN 13.61

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.--130 mi^2 (360 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1957 to current year. Prior to October 1963, published as Raccoon Creek near Fincastle.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area. WRD Ind 1979: 1978.

GAGE.--Water-stage recorder. Datum of gage is 686.03 ft (209.102 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--23 years, 143 ft^3/s (4.050 m^3/s), 13.97 in/yr (355 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft^3/s (428 m^3/s) Jan. 26, 1962; maximum gage height, 15.68 ft (4.779 m) Jan. 26, 1962 (ice jam); minimum daily discharge, 1.8 ft^3/s (0.051 m^3/s) Sept. 16, 17, and Oct. 5, 6, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.10 ft (5.822 m), discharge, 39,900 ft^3/s (1,130 m^3/s), from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,900 ft^3/s (53.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 8	1800	*2180	61.7	*9.39	2.862
Mar. 17	1900	1960	55.5	8.94	2.725

Minimum daily discharge, 3.9 ft^3/s (0.11 m^3/s) Sept. 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1975 to September 1977.
WATER TEMPERATURE: July 1965 to September 1977. Prior to October 1975 fragmentary instantaneous observations.
SEDIMENT DISCHARGE: August 1959 to September 1971, October 1973 to March 1979 (partial-record station, October 1971 to September 1973).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	170	215	131	52	62	583	69	41	23	9.8	5.6
2	41	198	167	117	52	58	391	65	686	22	9.1	6.8
3	27	117	140	104	51	55	297	63	1030	21	9.1	7.1
4	26	83	131	96	51	58	295	60	307	21	8.5	6.3
5	23	68	124	90	51	100	230	57	170	21	8.1	5.7
6	22	62	126	83	50	224	192	56	114	20	8.0	5.5
7	21	56	115	84	50	171	171	53	87	19	11	5.4
8	20	53	100	71	49	1420	271	51	85	18	18	7.5
9	21	64	87	72	49	902	433	50	84	17	14	8.6
10	20	142	85	70	48	681	425	49	68	84	10	12
11	21	118	85	101	47	456	301	51	57	55	9.0	8.4
12	21	88	81	156	46	299	238	105	49	31	7.7	6.6
13	21	75	76	135	45	233	193	71	45	24	7.0	5.9
14	20	66	71	107	44	184	513	55	42	20	7.2	5.3
15	20	61	68	89	44	192	505	49	42	18	15	5.2
16	22	58	65	88	43	230	436	48	42	17	23	7.2
17	34	55	63	109	43	1170	294	50	38	15	19	16
18	36	52	62	112	44	971	226	57	35	14	21	18
19	32	50	62	99	44	496	184	54	34	13	21	15
20	28	48	60	93	68	349	155	49	111	12	20	10
21	27	46	57	89	351	613	135	47	50	13	16	7.8
22	29	45	63	84	1430	444	118	45	38	13	12	6.7
23	107	87	94	76	550	304	107	44	36	12	9.5	5.9
24	89	186	517	72	323	286	97	45	39	11	8.1	5.3
25	62	155	661	87	200	317	89	45	34	11	7.4	5.1
26	51	967	487	70	125	249	82	43	30	10	6.9	4.7
27	44	554	321	56	94	207	77	40	29	11	6.5	4.5
28	43	487	234	54	76	189	77	39	27	12	6.1	4.4
29	40	368	187	53	69	252	81	38	26	16	5.6	4.0
30	37	268	167	53	----	605	74	37	25	13	5.6	3.9
31	35	----	149	52	----	1280	----	38	----	11	5.4	-----
TOTAL	1061	4847	4920	2753	4189	13057	7270	1623	3501	618	344.6	220.4
MEAN	34.2	162	159	88.8	144	421	242	52.4	117	19.9	11.1	7.35
MAX	107	967	661	156	1430	1420	583	105	1030	84	23	18
MIN	20	45	57	52	43	55	74	37	25	10	5.4	3.9
CFSM	.25	1.17	1.14	.64	1.04	3.03	1.74	.38	.84	.14	.08	.05
IN.	.28	1.30	1.32	.74	1.12	3.49	1.95	.43	.94	.17	.09	.06

CAL YR 1979 TOTAL 75614.0 MEAN 207 MAX 4350 MIN 18 CFSM 1.49 IN 20.24
WTR YR 1980 TOTAL 44404.0 MEAN 121 MAX 1430 MIN 3.9 CFSM .87 IN 11.88

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, 56,740 acre-ft (69.96 hm^3) June 10, elevation, 664.49 ft (202.536 m); minimum, 16,220 acre-ft (20.0 hm^3) Dec. 17, elevation, 640.03 ft (195.081 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	661.05	49,350	
Oct. 31	655.00	37,760	-11,590
Nov. 30	645.55	22,960	-14,800
Dec. 31	643.14	19,840	-3,120
CAL YR 1979			+1,420
Jan. 31	640.24	16,450	-3,390
Feb. 29	641.70	18,110	+1,660
Mar. 31	656.69	40,810	+22,700
Apr. 30	659.88	46,990	+6,180
May 31	661.02	49,290	+2,300
June 30	661.09	49,440	+150
July 31	660.77	48,770	-670
Aug. 31	660.76	48,750	-20
Sept. 30	660.16	47,550	-1,200
WTR YR 1980			-1,800

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.--24 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 1979 WATER YEAR.--Maximum daily discharge, 1,240 ft^3/s (35.1 m^3/s) Sept. 11, 1979; minimum daily, 18 ft^3/s (0.51 m^3/s) Mar. 23, 1979.

EXTREMES FOR CURRENT YEAR:--Maximum daily discharge, 980 ft^3/s (27.8 m^3/s) June 17; minimum daily, 26 ft^3/s (0.74 m^3/s) July 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	451	316	81	103	657	345	969	66	348	70	1070
2	56	448	138	187	92	663	270	858	66	81	95	1070
3	56	382	135	530	69	380	86	330	66	65	95	1060
4	56	358	137	731	76	126	87	160	66	48	95	1050
5	56	356	437	724	81	86	87	138	76	367	96	1050
6	56	354	610	715	61	88	443	129	193	346	83	1040
7	56	352	260	707	61	88	743	101	239	48	96	1040
8	56	240	101	697	61	89	741	81	173	48	96	1030
9	56	256	102	557	61	89	292	81	81	48	583	1020
10	56	450	103	386	43	89	309	81	81	48	802	1120
11	56	497	103	157	37	90	185	81	81	48	799	1240
12	56	493	103	122	46	90	90	91	81	35	796	1230
13	140	378	104	122	46	90	90	117	74	65	793	1220
14	315	336	104	122	46	90	91	129	63	85	790	1140
15	365	338	522	122	46	90	91	129	48	86	787	593
16	168	547	710	122	73	415	91	150	48	87	878	333
17	122	397	700	105	77	953	92	161	48	237	930	82
18	148	378	689	98	46	1030	434	160	35	646	926	82
19	148	677	377	98	46	1090	860	148	28	602	205	82
20	261	673	122	98	46	1130	978	129	28	735	93	82
21	474	669	165	110	46	1120	1030	129	28	731	94	82
22	472	731	183	122	113	801	1030	85	28	727	94	82
23	470	752	140	122	56	18	1020	66	96	617	95	82
24	468	744	122	122	66	348	1010	66	68	536	95	82
25	466	736	122	123	70	677	1010	66	48	718	96	127
26	464	727	122	122	71	804	1000	66	38	718	96	159
27	461	718	84	122	72	930	996	66	28	467	96	112
28	460	709	36	122	327	721	990	66	28	152	523	86
29	457	699	73	122	----	425	982	66	28	90	803	158
30	455	688	122	574	----	439	975	66	347	92	906	158
31	453	-----	124	283	----	466	-----	66	----	93	1080	-----
TOTAL	7439	15534	7166	8425	2038	14172	16448	5031	2378	9014	13086	17762
MEAN	240	518	231	272	72.8	457	548	162	79.3	291	422	592
MAX	474	752	710	731	327	1130	1030	969	347	735	1080	1240
MIN	56	240	36	81	37	18	86	66	28	35	70	82

CAL YR 1978 TOTAL 107555 MEAN 295 MAX 1310 MIN 28
WTR YR 1979 TOTAL 118493 MEAN 325 MAX 1240 MIN 18

03340900 BIG RACCOON CREEK AT FERNDALE, IN--continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	590	767	617	127	657	138	48	55	28	28	28
2	158	588	758	611	127	396	139	48	82	28	28	28
3	158	586	749	604	127	177	140	48	84	28	28	28
4	230	583	739	561	127	177	140	48	85	28	28	28
5	266	580	729	234	126	177	140	48	85	28	28	28
6	265	576	654	123	126	178	325	48	85	28	28	28
7	244	573	378	123	126	342	539	48	45	28	28	28
8	220	569	155	123	126	552	539	48	65	28	28	28
9	212	566	155	123	126	574	362	48	85	28	28	28
10	211	563	155	123	102	581	581	48	85	28	28	28
11	211	560	155	124	53	584	696	48	85	28	28	28
12	113	557	185	124	53	585	694	48	85	28	28	28
13	55	554	147	124	54	582	691	48	85	28	28	28
14	55	550	123	352	60	579	296	48	85	28	28	28
15	55	546	156	337	65	576	506	48	85	28	28	28
16	55	542	195	150	76	574	701	48	539	28	28	28
17	55	538	174	150	103	291	701	48	980	28	28	28
18	55	534	146	156	103	146	558	48	972	28	28	28
19	55	475	162	174	102	390	390	48	624	28	64	28
20	220	408	170	178	103	615	390	48	576	28	81	28
21	287	406	170	177	133	617	280	48	269	28	81	28
22	418	421	153	177	160	449	234	48	167	28	81	28
23	475	436	124	177	501	180	234	48	81	28	55	28
24	473	435	125	90	698	125	234	48	71	28	28	28
25	472	434	128	131	694	126	213	48	81	28	28	28
26	470	246	130	177	688	126	203	48	81	28	28	46
27	468	414	131	176	681	127	87	48	65	28	28	51
28	467	657	368	134	675	128	48	48	48	26	28	48
29	537	778	633	53	666	128	48	35	48	28	28	48
30	595	773	628	53	----	130	48	28	38	28	28	48
31	592	-----	623	91	----	135	-----	28	----	28	28	----
TOTAL	8305	16038	10065	6547	6908	11004	10295	1435	5821	866	1090	941
MEAN	268	535	325	211	238	355	343	46.3	194	27.9	35.2	31.4
MAX	595	778	767	617	698	657	701	48	980	28	81	51
MIN	55	246	123	53	53	125	48	28	38	26	28	28

CAL YR 1979 TOTAL 122762 MEAN 336 MAX 1240 MIN 18
WTR YR 1980 TOTAL 79315 MEAN 217 MAX 980 MIN 26

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 mi^2 (1,160 km^2).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Coxville.

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

GAGE.--Water-stage recorder. Datum of gage is 494.00 ft (150.571 m) National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

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

AVERAGE DISCHARGE.--24 years, 483 ft^3/s (13.68 m^3/s), 14.64 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108,000 ft^3/s (3,060 m^3/s) June 28, 1957, gage height, 21.23 ft (6.471 m), from rating curve extended above 35,000 ft^3/s (991 m^3/s) on basis of an estimate made by slope-area study; minimum daily, 6.5 ft^3/s (0.18 m^3/s) Oct. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,980 ft^3/s (84.4 m^3/s) Mar. 30, gage height, 10.72 ft (3.268 m); minimum daily, 56 ft^3/s (1.58 m^3/s) Aug. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	999	1100	840	218	812	1370	267	232	121	64	87
2	340	892	1050	823	225	786	978	252	633	112	63	93
3	258	807	1010	808	231	403	803	242	1200	112	63	85
4	254	761	1010	796	218	376	1000	233	696	112	62	81
5	310	734	994	639	228	442	972	224	522	109	60	79
6	306	720	973	361	208	496	889	215	386	108	59	77
7	302	706	775	340	206	493	861	205	306	100	60	77
8	294	702	452	299	204	1660	1250	198	275	95	58	79
9	264	734	384	295	204	1590	1530	192	229	92	56	78
10	260	793	366	282	201	1400	1350	188	209	91	56	77
11	260	749	355	339	192	1200	1320	190	196	87	107	73
12	252	723	338	344	181	1040	1230	204	184	85	71	71
13	153	705	292	315	183	970	1150	206	174	83	60	70
14	134	691	289	313	190	907	1750	186	172	81	59	69
15	126	677	280	627	198	933	1450	177	171	79	121	68
16	129	665	259	360	221	953	1650	172	300	76	98	75
17	142	653	237	369	207	1630	1350	182	911	75	107	149
18	140	645	228	346	206	1150	1250	186	959	73	501	111
19	134	633	228	340	211	827	933	182	981	71	1340	96
20	148	514	231	352	209	1060	825	171	868	70	353	83
21	288	512	229	343	362	1150	750	161	481	86	238	76
22	336	522	242	351	790	974	621	154	280	87	195	76
23	557	670	322	335	881	549	575	157	232	76	173	95
24	532	697	1030	302	976	551	537	155	336	71	136	77
25	521	704	883	266	986	542	494	150	224	69	112	72
26	516	1710	684	321	915	469	339	143	195	68	103	69
27	516	926	553	302	905	426	308	136	178	77	97	80
28	524	1030	494	246	886	420	303	136	155	84	93	80
29	524	1210	843	217	857	570	314	134	152	70	89	81
30	610	1150	866	207	-----	1290	286	123	135	67	87	80
31	653	-----	856	211	-----	2420	-----	118	-----	65	85	----
TOTAL	10017	23634	17853	12289	11699	28489	28438	5639	11972	2652	4826	2464
MEAN	323	788	576	396	403	919	948	182	399	85.5	156	82.1
MAX	653	1710	1100	840	986	2420	1750	267	1200	121	1340	149
MIN	126	512	228	207	181	376	286	118	135	65	56	68
CFSM	.72	1.76	1.29	.88	.90	2.05	2.12	.41	.89	.19	.35	.18
IN.	.83	1.96	1.48	1.02	.97	2.37	2.36	.47	.99	.22	.40	.20

CAL YR 1979 TOTAL 249501 MEAN 684 MAX 9270 MIN 96 CFSM 1.53 IN 20.72
WTR YR 1980 TOTAL 159972 MEAN 437 MAX 2420 MIN 56 CFSM .98 IN 13.28

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 mi^2 (31,766 km^2).

PERIOD OF RECORD.--August 1902 to December 1903 (gage height only), February 1905 to July 1906, October 1927 to current year. Gage-height records collected at site 3,300 ft (1,010 m) upstream June 1891 to June 1897 and since December 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 205: 1905. WSP 1335: 1944. WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.90 ft (134.996 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 27, 1928.

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

AVERAGE DISCHARGE.--53 years, 10,650 ft^3/s (301.6 m^3/s), 11.79 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft^3/s (5,350 m^3/s) May 20, 1943, gage height, 30.50 ft (9.296 m); minimum daily, 701 ft^3/s (19.9 m^3/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 ft^3/s (6,940 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52,900 ft^3/s (1,500 m^3/s) Jun. 7, gage height, 22.59 ft (6.885 m); minimum daily, 2,820 ft^3/s (79.9 m^3/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2980	4480	16600	16700	3900	13800	37500	9140	7390	10800	5890	3380
2	3150	4920	15800	15100	3800	11100	38800	8640	10300	10500	6350	3450
3	3220	4970	15400	14000	3900	9140	38600	8330	25400	10300	6160	3870
4	3480	5100	14900	13600	3900	8380	37900	8110	33400	10300	5610	4360
5	3780	5480	14000	12900	3900	8280	37200	7780	39600	10300	4920	4530
6	3890	5830	11900	12000	3800	8440	35600	7350	46900	9680	4620	4300
7	3710	5700	10400	11100	3710	8700	34200	6990	52400	8680	4480	4000
8	3620	4970	9580	9710	4100	10200	33400	6730	50300	7730	4910	3820
9	3660	4470	8790	8240	4210	21200	35200	6510	45900	6450	6460	3700
10	3710	4380	9260	7430	4250	27900	35700	6380	41500	5410	5510	3670
11	3580	4720	9450	6750	4090	30200	35100	6280	36500	4880	4550	3430
12	3470	5570	8330	6820	4130	30900	33600	6330	29100	4420	4180	3190
13	3660	5930	6880	6840	3900	31400	31800	6560	20100	4330	4270	3050
14	3750	5680	6190	6980	3770	30900	30300	6610	16200	4220	4780	2900
15	3710	5990	5790	7500	3760	28300	30200	6460	15200	4000	5870	2840
16	3840	5580	5560	8380	4030	24100	30200	6170	14900	3860	6450	2820
17	3920	4830	6110	8330	4080	23500	30100	5900	15400	3580	7210	3090
18	3830	4380	6700	8060	3860	28300	29600	5870	15900	3480	7850	3720
19	3550	4230	5920	7870	3650	31100	28100	6050	15200	3130	12800	4100
20	3140	4230	5840	7950	3720	32800	24800	6840	14900	3010	12200	4900
21	2950	4600	6810	8520	4420	35000	21300	8290	14400	3020	12900	5510
22	3020	4300	6920	8420	8560	36200	18200	9110	13700	3090	12300	5050
23	3180	4150	7100	7880	20800	35600	15700	8700	12700	3250	10700	4440
24	3540	4510	8910	7130	24500	34000	13800	7990	12000	3800	9600	4110
25	3850	6010	15100	6690	24900	32800	12600	7250	12500	4180	8330	3910
26	4010	10700	21400	6370	22500	31800	11600	7200	12000	4380	7190	3870
27	3970	15900	24400	6140	19100	31100	10700	7470	11300	4850	6060	3880
28	3840	18600	24400	5560	16400	30500	9920	7000	11300	5220	5040	3860
29	3710	19400	22300	5070	15300	30000	9790	6350	11200	5000	4360	3560
30	4320	18200	19900	4540	------	30000	9540	5910	10800	4660	3840	3580
31	4420	------	17900	4200	------	33900	------	5730	------	4630	3530	------
TOTAL	112460	207810	368540	266780	234940	779540	801050	220030	668390	175140	208920	114890
MEAN	3628	6927	11890	8606	8101	25150	26700	7098	22280	5650	6739	3830
MAX	4420	19400	24400	16700	24900	36200	38800	9140	52400	10800	12900	5510
MIN	2950	4150	5560	4200	3650	8280	9540	5730	7390	3010	3530	2820
CFSM	.30	.57	.97	.70	.66	2.05	2.18	.58	1.82	.46	.55	.31
IN.	.34	.63	1.12	.81	.71	2.36	2.43	.67	2.03	.53	.63	.35

CAL YR 1979 TOTAL 4656790 MEAN 12760 MAX 74400 MIN 2620 CFSM 1.04 IN 14.12
WTR YR 1980 TOTAL 4158490 MEAN 11360 MAX 52400 MIN 2820 CFSM .93 IN 12.61

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE¼SW¼ sec.30, T.7 N., R.10 W., Sullivan County, Hydrologic Unit 05120111, on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mile (0.8 km) downstream from Turtle Creek, and at mile 162.0 (260.7 km).

DRAINAGE AREA.--13,161 mi² (34,087 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to April 1939 monthly discharge only, published in WSP 1305. June 1911 to December 1914 (gage heights only) available in the Corps of Engineers office, Louisville, Ky.

REVISED RECORDS.--WSP 1335: 1939, 1950. WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.65 ft (126.385 m) National Geodetic Vertical Datum of 1929. Prior to July 17, 1951, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--42 years, 11,614 ft³/s (329 m³/s), 11.98 in/yr (304 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, 52,600 ft³/s (1,490 m³/s) June 10, gage height, 19.30 ft (5.883 m); minimum daily, 3,530 ft³/s (100 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3750	5340	17800	18200	4370	15000	40300	10400	6670	12600	5470	4890
2	3840	5530	16300	16700	4230	13200	40700	9950	12900	11700	6470	5440
3	3900	5470	15500	15100	4250	11000	42500	9460	14100	11600	6920	5230
4	3950	5430	15100	14200	4340	9440	44300	9170	21500	12000	6570	4910
5	4180	5530	14600	13700	4430	9280	44900	8900	26200	12200	6030	5140
6	4410	5900	13600	13000	4480	10300	44500	8550	30700	11200	5450	5160
7	4430	6130	11900	12200	4540	10000	43600	8170	35200	10200	5230	4910
8	4270	5900	10700	11200	4560	11100	42800	7830	42200	9280	5160	4620
9	4220	5340	9760	9860	4610	15500	42700	7510	48500	8330	5700	4450
10	4280	4980	9210	8370	4640	22300	42500	7280	52100	7120	6720	4320
11	4250	4910	9630	7460	4520	25300	42300	7200	51800	6250	5930	4240
12	4110	5210	9610	7620	4540	27400	42100	7150	49300	5780	5170	4030
13	4040	6020	8450	7370	4440	29200	41200	7280	44600	5410	4820	3830
14	4200	6190	7230	7390	4280	30500	40600	7390	34200	5290	4950	3680
15	4210	6080	6620	7600	4250	32000	39600	7340	22900	5090	6010	3530
16	4240	6260	6220	8150	4370	32200	37800	7180	18300	4890	7080	3550
17	4390	5790	5990	8970	4550	31700	35900	6990	16400	4840	7530	4680
18	4390	5160	6530	8850	4490	32000	34500	6840	16400	4630	7840	4840
19	4290	4780	6890	8520	4240	31500	33600	6740	16200	4440	9530	4550
20	3990	4610	6220	8290	4150	32000	32400	6900	15500	4150	12500	4820
21	3660	4720	6420	8500	4760	33700	29900	7600	15200	4030	12100	5540
22	3550	5020	7170	8900	7800	35400	25500	8800	14600	4280	12400	5860
23	3610	5050	7460	8690	14800	37400	20900	9450	14000	4240	11700	5590
24	3760	5170	10000	8110	21300	39700	17200	9130	13200	4190	10500	5070
25	4030	5500	13800	7540	23400	40900	14800	8540	12800	4550	9520	4700
26	4280	10500	17600	7130	23500	40200	13500	7870	12800	4910	8400	4490
27	4400	14200	21600	6780	21900	38500	12600	7850	12200	5150	7410	4410
28	4360	16900	23400	6420	18800	36900	11700	7950	11800	5860	6440	4430
29	4240	18800	23600	5830	16400	36100	11000	7540	14600	5850	5650	4340
30	4200	19000	22400	5400	------	36400	10800	7020	14300	5610	5240	4120
31	4730	------	20300	4840	------	39800	------	6620	------	5220	4780	------
TOTAL	128160	215420	381610	290890	240940	845920	976700	246600	711170	210890	225220	139370
MEAN	4134	7181	12310	9384	8308	27290	32560	7955	23710	6803	7265	4646
MAX	4730	19000	23600	18200	23500	40900	44900	10400	52100	12600	12500	5860
MIN	3550	4610	5990	4840	4150	9280	10800	6620	6670	4030	4780	3530
CFSM	.31	.55	.94	.71	.63	2.07	2.47	.60	1.80	.52	.55	.35
IN.	.36	.61	1.08	.82	.68	2.39	2.76	.70	2.01	.60	.64	.39

CAL YR 1979 TOTAL 5459060 MEAN 14960 MAX 76000 MIN 3000 CFSM 1.14 IN 15.43
WTR YR 1980 TOTAL 4612890 MEAN 12600 MAX 52100 MIN 3530 CFSM .96 IN 13.04

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 bench mark).

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

AVERAGE DISCHARGE.--14 years, 18.7 ft^3/s (0.530 m^3/s), 15.21 in/yr (386 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, 18.99 ft (5.788 m) June 28, 1980; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft^3/s (50.1 m^3/s) June 28, gage height, 18.99 ft (5.788m); minimum daily, 0.18 ft^3/s (0.005 m^3/s) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	8.2	15	8.0	2.5	14	73	3.3	102	57	2.7	9.3
2	7.3	3.9	9.8	5.7	2.4	12	62	3.0	61	46	8.3	158
3	3.2	2.6	8.0	4.6	2.3	11	67	2.7	42	37	5.6	32
4	2.2	2.1	5.7	4.2	2.3	9.7	71	2.4	29	55	3.1	19
5	1.7	1.7	4.9	3.7	2.3	78	52	2.2	22	33	2.5	14
6	1.4	1.5	4.2	3.7	2.3	62	42	2.0	14	24	2.2	7.9
7	.94	1.1	3.7	3.7	2.3	53	34	1.8	9.5	15	2.0	5.4
8	.86	1.1	2.9	5.5	2.3	99	66	1.7	7.8	9.8	2.1	4.1
9	.78	2.7	2.7	5.5	2.3	64	64	1.6	6.2	7.3	1.8	3.6
10	.55	3.0	2.7	4.4	2.2	52	57	1.6	5.1	5.5	1.6	3.0
11	.55	2.6	2.6	60	2.2	40	44	5.5	4.0	4.3	1.6	2.6
12	.55	2.2	2.7	29	2.2	31	35	4.4	3.3	3.5	1.1	2.3
13	.24	2.0	2.6	17	2.1	29	25	4.7	2.6	2.8	1.1	2.0
14	.24	1.7	2.3	11	3.0	37	98	2.8	2.0	2.4	2.0	1.8
15	.18	1.6	2.2	8.0	9.0	41	76	2.4	1.7	2.2	30	1.3
16	.33	1.4	2.0	11	22	30	58	2.6	1.3	1.9	21	12
17	.33	1.2	1.8	20	12	137	44	11	.98	1.7	12	142
18	.24	1.1	1.7	12	10	72	32	11	.88	1.4	5.5	37
19	.24	1.1	1.7	7.7	10	58	24	5.4	.86	1.3	3.5	23
20	.24	1.0	1.7	6.3	28	48	17	3.6	.54	1.2	2.6	13
21	.21	1.4	1.8	5.3	71	86	11	2.3	.44	14	2.2	9.8
22	1.2	3.0	6.3	4.9	75	53	8.0	2.0	.44	17	2.0	8.5
23	2.0	19	18	4.2	58	41	6.1	2.3	.92	6.2	1.8	7.7
24	1.1	26	126	7.5	45	60	4.5	2.0	1.9	3.8	1.7	8.0
25	.86	48	75	3.9	36	47	3.3	1.6	2.1	2.6	1.6	8.5
26	.66	85	56	3.2	28	36	2.9	1.4	1.7	2.2	1.3	7.3
27	.55	54	42	2.9	20	27	2.7	1.1	1.4	15	1.1	6.6
28	.66	46	30	2.8	18	28	3.7	.93	219	12	.98	5.9
29	.47	34	22	2.7	14	40	4.9	.80	611	6.5	1.0	5.5
30	.47	23	15	2.6	-----	176	3.8	.79	77	4.8	1.1	4.6
31	.47	-----	11	2.6	-----	102	------	.63	-------	3.5	14	-----
TOTAL	35.62	383.2	484.0	273.6	488.7	1673.7	1091.9	91.55	1232.66	399.9	141.08	565.7
MEAN	1.15	12.8	15.6	8.83	16.9	54.0	36.4	2.95	41.1	12.9	4.55	18.9
MAX	7.3	85	126	60	75	176	98	11	611	57	30	158
MIN	.18	1.0	1.7	2.6	2.1	9.7	2.7	.63	.44	1.2	.98	1.3
CFSM	.07	.77	.93	.53	1.01	3.23	2.18	.18	2.46	.77	.27	1.13
IN.	.08	.85	1.08	.61	1.09	3.73	2.43	.20	2.75	.89	.31	1.26

CAL YR 1979 TOTAL 8916.65 MEAN 24.4 MAX 585 MIN .06 CFSM 1.46 IN 19.86
WTR YR 1980 TOTAL 6861.61 MEAN 18.7 MAX 611 MIN .18 CFSM 1.12 IN 15.28

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 mi² (37.3 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 476.00 ft (145.085 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--14 years, 13.7 ft³/s (0.388 m³/s), 12.92 in/yr (328 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft³/s (54.7 m³/s) July 26, 1973, gage height, 13.23 ft (4.033 m); no flow at times most years.

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

Date	Time	Discharge (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)
June 1	1730	532	15.1	10.71	3.264	Sept. 17	0530	585	16.6	10.92	3.328
June 29	0630	*1720	48.7	*12.93	3.941						

Minimum daily discharge, no flow, Oct. 14-16.

NOTE.--No gage-height record Oct. 31 to Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	8.0	4.7	5.6	2.1	4.9	29	4.1	152	4.8	1.6	7.8
2	6.0	3.5	4.2	4.8	2.0	4.5	19	3.2	18	3.9	4.6	157
3	3.5	1.8	3.8	4.1	1.9	3.7	24	2.5	9.4	6.6	10	16
4	1.9	1.2	3.4	3.7	1.8	7.1	53	2.1	7.8	66	1.3	10
5	1.5	1.0	3.2	3.5	1.8	30	17	2.0	7.4	8.2	.57	7.6
6	1.3	.94	2.9	3.2	1.7	28	13	1.9	6.8	3.4	.35	6.4
7	.75	.84	2.7	3.2	1.7	25	11	1.7	6.1	2.3	.28	5.6
8	.43	.82	2.6	4.8	1.7	38	128	1.6	8.0	2.1	.17	5.0
9	.31	1.5	2.4	4.3	1.6	26	34	1.5	6.0	1.8	.22	4.5
10	.31	3.0	2.3	4.1	1.5	20	25	8.2	4.9	1.6	.22	4.1
11	.31	2.2	2.3	39	1.5	15	15	11	3.8	1.4	.35	3.7
12	.28	1.6	2.4	14	1.4	12	13	9.4	3.0	1.2	.25	3.4
13	.08	1.4	2.3	10	1.4	13	9.4	9.8	2.2	1.1	.17	3.3
14	.00	1.3	2.0	8.2	2.5	22	81	8.2	1.7	1.0	.63	3.2
15	.00	1.2	1.8	7.4	5.6	26	44	7.2	1.3	.92	24	3.1
16	.00	1.1	1.7	14	12	17	21	8.6	1.1	.84	9.2	12
17	.22	1.1	1.5	21	9.6	71	13	13	.69	.77	3.5	146
18	.31	1.0	1.5	11	6.7	37	10	9.2	.39	.70	1.2	11
19	.31	.98	1.5	6.8	6.5	20	8.4	4.0	.43	.63	1.0	7.0
20	.22	.94	1.5	5.4	15	18	7.4	2.6	.39	.58	.81	8.0
21	.20	1.2	2.5	4.8	69	50	6.5	2.1	.20	1.3	.87	8.8
22	.35	2.5	12	4.0	52	23	5.2	2.5	.22	9.9	.69	8.8
23	1.7	10	19	6.2	22	18	4.4	4.3	1.4	2.2	.50	11
24	1.3	20	99	4.5	15	56	3.9	4.3	5.8	.63	.39	6.2
25	1.2	40	26	3.3	12	27	4.7	3.9	3.6	.35	.25	5.5
26	.87	70	14	3.0	8.4	20	4.7	2.9	1.7	.48	.14	4.6
27	.52	25	11	2.7	8.6	17	4.4	1.8	1.4	2.3	.06	4.0
28	.57	15	9.0	2.5	12	20	6.0	1.1	29	5.0	.03	3.8
29	.57	6.0	7.8	2.3	8.8	33	7.0	.78	664	2.5	.20	3.5
30	.39	5.2	7.2	2.2	-----	55	5.2	.88	10	1.8	.39	3.8
31	.32	------	6.4	2.2	-----	62	-----	.55	------	1.5	16	-----
TOTAL	26.35	230.32	264.6	215.8	287.8	819.2	627.2	136.91	958.72	137.80	79.94	484.7
MEAN	.85	7.68	8.54	6.96	9.92	26.4	20.9	4.42	32.0	4.45	2.58	16.2
MAX	6.0	70	99	39	69	71	128	13	664	66	24	157
MIN	.00	.82	1.5	2.2	1.4	3.7	3.9	.55	.20	.35	.03	3.1
CFSM	.06	.53	.59	.48	.69	1.83	1.45	.31	2.22	.31	.18	1.13
IN.	.07	.59	.68	.56	.74	2.12	1.62	.35	2.48	.36	.21	1.25

CAL YR 1979 TOTAL 7509.30 MEAN 20.6 MAX 794 MIN .00 CFSM 1.43 IN 19.40
WTR YR 1980 TOTAL 4269.34 MEAN 11.7 MAX 664 MIN .00 CFSM .81 IN 11.03

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: February 1978 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT 31...	1055	13.0	.29	61	.05	--	--	--	---
DEC 06...	1330	4.5	3.0	11	.09	--	--	--	---
JAN 17...	1120	6.0	21	46	2.6	84	90	94	100
FEB 28...	1145	1.0	9.1	13	.32	96	100	--	---
APR 24...	1715	11.0	4.1	41	.45	96	---	--	---
MAY 28...	1630	20.0	1.1	27	.08	--	---	--	---
JUN 18...	1035	----	.43	120	.14	74	---	--	---
AUG 06...	1420	26.0	.33	32	.03	--	---	--	---
SEP 18...	1530	18.0	9.3	35	.88	--	---	--	---

03342250 MUD CREEK NEAR DUGGER, IN

LOCATION.--Lat 39°06'28", long 87°16'42", in SE¼NE¼ sec.27, T.8 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 700 East, 0.6 mile (1.0 km) north of County Road 100 North, 1.7 miles (2.7 km) upstream from mouth, and 2.5 miles (4.0 km) northwest of Dugger.

DRAINAGE AREA.--11.9 mi² (30.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 466.41 ft (142.162 m) National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service bench mark).

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

AVERAGE DISCHARGE.--14 years, 14.1 ft³/s (0.399 m³/s), 16.09 in/yr (409 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft³/s (36.0 m³/s) July 27, 1979, gage height, 14.83 ft (4.520 m) from flood mark; minimum daily, 0.40 ft³/s (0.011 m³/s) Jan. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 421 ft³/s (11.9 m³/s) Mar. 30, gage height, 11.06 ft (3.371 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	16	8.0	24	3.2	8.4	28	9.1	11	6.7	2.7	1.6
2	4.7	5.3	8.8	6.0	3.2	7.6	20	8.8	6.3	6.1	8.2	38
3	4.0	4.2	12	5.1	3.2	10	23	8.5	4.4	12	11	7.4
4	2.9	3.8	6.5	5.2	3.2	18	22	8.2	3.5	31	4.1	4.8
5	2.5	3.5	6.6	4.9	3.1	44	14	7.6	3.3	14	3.2	4.2
6	2.2	3.4	6.4	4.5	3.1	29	11	7.0	3.1	9.5	2.9	3.9
7	2.0	3.2	5.9	4.2	3.1	16	10	6.7	3.0	7.9	2.9	3.3
8	1.9	3.6	5.3	3.5	3.0	36	15	6.7	3.3	7.2	2.7	3.1
9	1.9	10	5.2	3.6	3.0	19	20	6.1	2.7	6.7	2.4	3.1
10	5.0	6.2	5.3	6.0	2.9	14	18	6.1	2.6	6.7	3.8	2.9
11	12	4.8	5.2	40	2.9	9.7	12	6.7	2.5	6.4	4.8	2.7
12	3.0	4.0	5.3	19	2.9	8.5	13	11	2.5	6.1	2.7	2.4
13	1.9	3.3	5.1	12	3.0	11	8.9	8.8	2.4	5.6	2.7	2.4
14	1.6	2.8	4.8	11	5.0	15	90	6.7	2.4	5.6	2.2	2.4
15	1.5	2.6	4.5	8.9	10	17	47	5.8	2.4	5.3	23	2.4
16	1.5	2.4	4.0	12	17	14	33	7.6	3.3	5.2	12	6.8
17	2.0	2.2	3.5	15	9.0	123	22	9.1	2.4	5.1	5.6	67
18	1.7	2.0	3.0	8.9	7.2	41	18	7.8	2.3	4.9	3.9	5.3
19	1.4	1.8	3.0	7.6	12	21	16	7.0	5.3	4.8	3.3	2.5
20	1.2	1.8	3.5	7.1	17	21	14	6.4	3.3	4.7	2.4	2.1
21	1.3	1.9	5.0	6.8	46	67	14	5.8	2.6	53	2.2	1.7
22	1.7	6.0	21	6.8	41	26	12	5.4	2.4	28	2.0	1.5
23	5.4	17	25	6.5	20	18	11	5.2	10	6.8	2.0	1.3
24	3.5	12	99	12	13	56	14	6.6	8.2	3.8	1.8	1.2
25	2.7	8.6	40	7.2	9.9	31	9.8	5.4	4.6	2.9	1.6	1.2
26	2.3	35	19	5.6	16	20	9.5	4.7	3.9	2.9	1.6	1.1
27	2.2	20	13	4.9	11	15	9.1	4.3	3.5	8.2	1.4	1.1
28	2.2	13	9.5	4.5	9.2	18	11	3.5	9.5	4.4	1.4	1.0
29	2.3	10	8.4	4.0	10	23	11	4.2	25	3.2	1.7	1.0
30	2.8	9.0	7.7	3.6	-----	110	9.5	3.9	8.5	2.7	1.7	1.0
31	2.8	-----	6.8	3.3	-----	65	-----	3.5	-----	2.9	1.6	-----
TOTAL	87.1	219.4	366.3	273.7	293.1	932.2	565.8	204.2	150.2	280.3	125.5	180.4
MEAN	2.81	7.31	11.8	8.83	10.1	30.1	18.9	6.59	5.01	9.04	4.05	6.01
MAX	12	35	99	40	46	123	90	11	25	53	23	67
MIN	1.2	1.8	3.0	3.3	2.9	7.6	8.9	3.5	2.3	2.7	1.4	1.0
CFSM	.24	.61	.99	.74	.85	2.53	1.59	.55	.42	.76	.34	.51
IN.	.27	.69	1.14	.86	.92	2.91	1.77	.64	.47	.88	.39	.56

CAL YR 1979 TOTAL 8362.1 MEAN 22.9 MAX 500 MIN 1.2 CFSM 1.92 IN 26.14
WTR YR 1980 TOTAL 3678.2 MEAN 10.0 MAX 123 MIN 1.0 CFSM .84 IN 11.50

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 mi² (357 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 440.00 ft (134.112 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Flow affected by surface-mined areas and U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--14 years, 146 ft³/s (4.135 m³/s), 14.37 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,050 ft³/s (171 m³/s) July 29, 1979, gage height, 16.28 ft (4.962 m); minimum daily, 0.9 ft³/s (0.025 m³/s) Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,430 ft³/s (40.5 m³/s) Mar. 31, gage height, 12.92 ft (3.938 m); minimum daily, 9.2 ft³/s (0.260 m³/s) Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	102	96	110	30	90	1160	58	67	534	23	56
2	28	86	74	86	30	80	733	52	473	238	21	325
3	24	25	61	62	30	70	427	46	197	244	113	250
4	17	19	56	58	30	80	438	42	139	330	55	123
5	14	16	52	56	29	170	304	38	100	264	33	85
6	13	16	50	52	29	440	225	35	69	138	25	61
7	11	14	45	52	29	300	185	33	53	90	20	42
8	11	13	39	48	28	720	218	30	47	63	18	29
9	11	21	34	48	28	540	422	27	33	47	15	23
10	26	28	33	43	27	375	324	25	26	37	14	18
11	64	24	33	218	27	261	242	25	21	29	15	15
12	40	18	33	391	27	218	206	35	18	24	11	13
13	9.9	16	31	187	27	200	166	54	15	20	9.9	12
14	9.4	14	29	147	29	195	583	48	14	17	9.7	10
15	9.4	14	27	122	37	265	694	35	15	15	90	9.9
16	10	14	26	114	90	194	469	28	14	13	125	17
17	12	14	25	156	103	734	294	34	12	12	169	430
18	11	13	25	138	86	1100	218	50	14	10	92	298
19	9.9	13	24	107	72	602	171	63	11	9.7	82	139
20	9.2	12	24	90	160	395	142	48	16	9.4	54	87
21	9.7	13	27	80	370	654	126	38	11	46	36	61
22	12	30	47	77	740	477	108	31	9.7	432	27	47
23	33	154	138	69	520	313	95	27	21	154	20	45
24	19	170	585	62	360	412	79	30	43	95	16	35
25	16	131	769	69	260	428	67	29	25	62	14	28
26	14	553	433	63	200	250	61	25	18	45	12	25
27	13	342	294	55	131	188	55	20	14	46	11	22
28	14	240	211	48	118	167	55	18	16	76	10	20
29	15	178	167	40	110	282	71	16	729	52	9.9	19
30	13	126	143	33	----	577	67	18	1170	37	11	17
31	42	----	126	31	----	1370	----	16	------	27	10	------
TOTAL	553.5	2429	3757	2912	3757	12147	8405	1074	3410.7	3216.1	1171.5	2361.9
MEAN	17.9	81.0	121	93.9	130	392	280	34.6	114	104	37.8	78.7
MAX	64	553	769	391	740	1370	1160	63	1170	534	169	430
MIN	9.2	12	24	31	27	70	55	16	9.7	9.4	9.7	9.9
CFSM	.13	.59	.88	.68	.94	2.84	2.03	.25	.83	.75	.27	.57
IN.	.15	.65	1.01	.78	1.01	3.27	2.27	.29	.92	.87	.32	.64

CAL YR 1979 TOTAL 90433.5 MEAN 248 MAX 5740 MIN 9.2 CFSM 1.80 IN 24.38
WTR YR 1980 TOTAL 45194.7 MEAN 123 MAX 1370 MIN 9.2 CFSM .89 IN 12.18

03342300 BUSSERON CREEK NEAR SULLIVAN, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1978 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
OCT											
18...	1030	16.0	15	13	.53	--	--	--	---	---	---
NOV											
29...	1530	----	165	103	46	77	81	86	91	96	100
DEC											
06...	1630	4.0	40	70	7.6	88	89	92	95	95	96
14...	1530	----	20	46	2.5	94	96	98	99	100	---
20...	1530	1.0	18	21	1.0	--	--	--	--	---	---
26...	1345	5.0	413	106	118	--	--	--	--	---	---
JAN											
01...	1330	4.0	104	37	10	--	--	--	--	---	---
10...	1440	.5	42	43	4.9	--	--	--	--	---	---
16...	1515	5.0	111	52	16	--	--	--	--	---	---
22...	1445	3.0	106	56	16	86	--	--	--	---	---
30...	1530	.0	33	22	2.0	--	--	--	--	---	---
FEB											
06...	1530	.0	29	21	1.6	--	--	--	--	---	---
13...	1620	.0	44	23	2.7	--	--	--	--	---	---
21...	1445	.0	370	288	288	--	--	--	--	---	---
28...	1700	3.0	160	53	23	--	--	--	--	---	---
MAR											
04...	1530	.0	80	71	15	--	--	--	--	---	---
12...	1430	3.0	214	33	19	--	--	--	--	---	---
19...	1500	7.0	550	174	258	91	94	97	99	100	---
27...	1530	10.0	183	109	54	92	94	96	98	99	100
APR											
01...	1430	7.0	1100	150	445	93	96	98	99	100	---
10...	1730	11.0	313	117	99	97	99	99	100	---	---
16...	1515	18.0	427	124	143	86	89	92	95	99	100
23...	1745	21.0	85	87	20	91	93	94	96	99	100
30...	1720	13.0	57	33	5.1	--	--	--	--	---	---
MAY											
07...	1530	16.0	25	29	2.0	--	--	--	--	---	---
17...	1030	15.0	25	65	4.4	--	--	--	--	---	---
21...	1615	21.0	29	33	2.6	--	--	--	--	---	---
28...	1045	19.0	12	24	.78	--	--	--	--	---	---
JUN											
05...	1600	22.0	88	144	34	--	--	--	--	---	---
10...	1600	21.0	18	45	2.2	--	--	--	--	---	---
21...	0940	19.0	6.2	13	.22	--	--	--	--	---	---
27...	1630	28.0	9.0	37	.90	--	--	--	--	---	---

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 except those for period of no gage-height record, May 31 to Jun. 30, which are fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures and surface-mined areas.

AVERAGE DISCHARGE.--37 years, 222 ft^3/s (6.287 m^3/s), 13.22 in/yr (336 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.--Maximum discharge, 1980 ft $^3/s$ (56.1 m^3/s) Mar. 30, gage height 12.99 ft (3.959 m), no peak above base of 2,200 ft^3/s (62.3 m^3/s): minimum daily 12 ft^3/s (0.340 m^3/s) June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	136	171	170	52	117	1790	95	130	998	37	42
2	31	145	126	147	51	113	1650	83	595	415	36	435
3	41	55	100	114	51	115	1200	74	350	441	143	424
4	31	32	97	104	50	131	950	67	220	741	79	159
5	28	28	87	96	50	436	607	61	150	570	43	112
6	24	27	84	85	49	728	415	55	110	248	32	83
7	22	27	74	85	49	508	329	51	86	154	26	60
8	21	24	63	66	48	1100	335	47	68	110	23	46
9	21	36	55	71	48	1140	623	43	54	79	21	38
10	20	63	53	62	47	737	594	39	42	63	20	32
11	70	44	55	367	46	474	422	52	34	53	24	27
12	79	37	55	667	45	348	350	63	29	43	20	24
13	25	32	51	337	45	312	279	92	25	36	14	24
14	18	28	47	241	48	347	954	70	23	31	14	22
15	18	25	43	199	70	486	1240	53	22	27	93	19
16	19	24	45	187	158	370	1030	47	21	25	166	25
17	21	24	29	254	180	1110	566	60	19	24	231	585
18	20	24	30	237	153	1380	372	79	22	20	128	553
19	18	23	32	180	129	1350	284	86	18	18	107	211
20	16	22	35	152	211	924	234	68	27	17	74	123
21	14	23	42	137	828	1130	202	56	17	19	51	85
22	17	53	78	132	1250	1030	170	47	12	474	40	66
23	49	339	266	118	1070	598	149	44	27	228	32	48
24	35	309	1050	96	630	802	129	47	59	117	27	54
25	28	268	1240	117	418	880	111	43	42	81	24	42
26	23	978	1010	107	297	501	101	36	31	59	22	40
27	21	743	546	93	270	346	92	30	22	55	20	36
28	21	472	357	70	210	289	90	28	26	77	18	33
29	21	332	273	62	199	461	109	40	210	70	17	30
30	23	225	230	58	----	1030	107	45	1500	49	19	29
31	22	----	196	54	----	1880	-----	26	----	39	19	----
TOTAL	837	4598	6620	4865	6752	21173	15484	1727	3991	5381	1620	3507
MEAN	27.0	153	214	157	233	683	516	55.7	133	174	52.3	117
MAX	79	978	1240	667	1250	1880	1790	95	1500	998	231	585
MIN	14	22	29	54	45	113	90	26	12	17	14	19
CFSM	.12	.67	.94	.69	1.02	3.00	2.26	.24	.58	.76	.23	.51
IN.	.14	.75	1.08	.79	1.10	3.45	2.53	.28	.65	.88	.26	.57

CAL YR 1979 TOTAL 165358 MEAN 453 MAX 6140 MIN 14 CFSM 1.99 IN 26.98
WTR YR 1980 TOTAL 76555 MEAN 209 MAX 1880 MIN 12 CFSM .92 IN 12.49

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 good.

AVERAGE DISCHARGE.--51 years, 11,800 ft³/s (334.2 m³/s), 11.70 in/yr (297 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 daily discharge, 41,900 ft³/s (1,187 m³/s) June 12; minimum daily, 3,340 ft³/s (94.6 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3600	5170	18700	19800	4780	16500	38200	11400	6460	15300	5520	4680
2	3600	5600	17400	18100	4400	14800	38900	11000	10900	13400	6320	5300
3	3650	5550	16400	16500	4340	12700	39300	10400	14300	12600	7180	6110
4	3680	5390	15800	15200	4370	10900	40700	9930	20200	13900	6900	5200
5	3790	5400	15400	14500	4460	10400	41300	9660	24700	14800	6400	5050
6	4070	5650	14700	13900	4590	11000	41100	9300	26600	13200	5680	5200
7	4200	6020	13300	13200	4630	11300	40200	8800	28200	11600	5200	5000
8	4120	6080	11800	12300	4660	12500	39200	8370	30400	10400	5020	4680
9	4000	5750	10800	11100	4700	16000	38800	8060	33900	9250	5030	4410
10	4000	5340	9890	9610	4760	22000	38900	7750	38000	8020	5970	4200
11	4060	4950	9900	8720	4730	25000	38800	7660	41300	6790	6510	4090
12	4010	4970	10300	8900	4620	26000	38700	7680	41900	6130	5480	3960
13	3850	5630	9540	8430	4610	27000	37900	7710	40600	5580	4810	3750
14	3870	6210	8120	7990	4450	27500	38000	7580	37400	5290	4580	3550
15	4020	6130	7210	8020	4400	28600	38400	7400	30600	5080	5600	3380
16	4020	6210	6730	8330	4680	29700	37800	7240	22000	4800	6830	3340
17	4130	6160	6340	9360	4780	31100	36600	7130	18200	4640	7420	4610
18	4240	5520	6420	9680	4850	32300	35100	6960	17000	4480	7930	5860
19	4170	4990	7030	9250	4650	32300	33500	6900	16900	4240	8450	5190
20	4000	4680	6780	8890	4460	32300	32400	6840	16300	3990	12000	4690
21	3630	4590	6330	8770	5500	33200	31200	7270	15900	3750	12700	5120
22	3390	5000	7080	9250	8860	33100	29100	8380	15400	4010	12500	5840
23	3410	6100	7950	9380	13500	33200	25100	9510	15100	4420	12400	5750
24	3430	6050	10400	8900	20500	34300	21000	9550	14700	3990	11300	5340
25	3670	5900	14700	8280	23300	35800	17400	8940	13600	4130	10300	4840
26	3940	10200	17700	7720	24000	36500	15400	8230	13400	4470	9100	4450
27	4180	14300	20800	7320	23500	36100	14100	7810	12700	4810	7970	4290
28	4240	17000	22600	6950	21300	34900	13100	7980	14700	5290	6980	4230
29	4160	18500	23300	6450	18400	34100	12200	7750	16800	5900	6120	4250
30	4020	19200	23200	5910	------	34500	11800	7190	16100	5640	5460	4070
31	4260	------	21700	5460	------	37000	------	6750	------	5360	4940	------
TOTAL	121410	218240	398320	316170	250780	812600	954200	257130	664260	225260	228600	140430
MEAN	3916	7275	12850	10200	8648	26210	31810	8295	22140	7266	7374	4681
MAX	4260	19200	23300	19800	24000	37000	41300	11400	41900	15300	12700	6110
MIN	3390	4590	6330	5460	4340	10400	11800	6750	6460	3750	4580	3340
CFSM	.29	.53	.94	.74	.63	1.91	2.32	.61	1.62	.53	.54	.34
IN.	.33	.59	1.08	.86	.68	2.21	2.59	.70	1.80	.61	.62	.38

CAL YR 1979 TOTAL 5608850 MEAN 15370 MAX 78000 MIN 2700 CFSM 1.12 IN 15.22
WTR YR 1980 TOTAL 4587400 MEAN 12530 MAX 41900 MIN 3340 CFSM .91 IN 12.45

03346000 NORTH FORK EMBARRAS RIVER NEAR OBLONG, IL

LOCATION.--Lat 39°00'37", long 87°56'47", in NW¼NW¼ sec.35, T.7 N., R.14 W., Crawford County, Illinois, Hydrologic Unit 05120112, on left bank at downstream side of bridge on State Highway 33, 0.8 mi (1.3 km) upstream from Illinois Central Gulf Railroad bridge, 2 mi (3 km) west of Oblong, and at mile 10.5 (16.9 km).

DRAINAGE AREA.--318 mi² (824 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 456.19 ft (139.047 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1940, nonrecording gage and Dec. 11, 1940, to Sept. 30, 1964, water-stage recorder at same site at datum 2.00 ft (0.610 m) higher. Oct. 8, 1971, to May 15, 1979, water-stage recorder at site 0.8 mi (1.3 km) downstream at present datum.

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

AVERAGE DISCHARGE.--40 years, 251 ft³/s (7.108 m³/s), 10.69 in/yr (272 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,100 ft³/s (767 m³/s) Jan. 4, 1950, gage height, 24.38 ft (7.431 m), present datum, from rating curve extended above 16,000 ft³/s (453 m³/s); no flow for many days in 1953-54, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 3,860 ft³/s (109 m³/s) Mar. 31, gage height, 17.31 ft (5.276 m), no peak above base of 4,000 ft³/s (119 m³/s); minimum daily discharge, 6.8 ft³/s (0.19 m³/s) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	9.5	96	103	30	117	2750	59	40	78	134	14
2	9.0	12	67	92	29	120	894	53	615	40	62	856
3	9.0	9.5	52	81	28	110	419	48	1200	36	192	997
4	11	9.0	52	72	28	96	1140	45	341	870	96	192
5	9.0	9.0	46	64	28	233	702	42	145	503	31	132
6	8.1	9.0	43	59	29	692	313	38	104	100	20	87
7	7.2	8.7	42	54	29	515	235	34	82	48	74	59
8	7.3	8.2	38	55	30	1010	411	31	133	35	345	39
9	7.3	11	34	60	30	1090	1660	29	92	30	78	31
10	7.8	14	31	65	30	785	1880	28	56	25	39	27
11	7.8	12	29	60	31	649	784	31	45	60	28	25
12	7.6	9.3	27	55	30	304	375	45	40	50	24	23
13	7.3	8.9	27	55	29	218	268	39	35	35	23	21
14	6.9	8.7	26	50	27	257	769	38	33	30	31	20
15	6.8	8.6	24	50	31	874	1500	31	31	26	159	18
16	7.0	8.5	23	50	49	635	817	27	31	23	845	30
17	7.0	8.0	21	50	103	1290	351	74	31	20	513	1070
18	7.1	8.0	21	45	96	2720	239	272	28	19	267	1010
19	7.1	7.5	20	45	65	1350	190	180	28	18	526	192
20	8.6	7.5	20	40	67	366	157	97	28	17	352	97
21	7.8	8.0	20	40	358	350	135	65	24	20	104	62
22	7.3	9.0	22	35	1250	546	117	51	23	300	58	45
23	7.3	15	26	35	1400	261	102	46	23	240	37	49
24	7.4	20	492	35	578	490	88	53	36	64	30	63
25	13	60	1510	40	353	1240	76	107	25	38	25	50
26	11	650	887	35	210	476	68	88	23	29	23	33
27	9.7	771	310	30	146	263	63	48	22	26	20	28
28	9.7	277	202	35	162	244	60	36	21	110	18	27
29	10	247	150	32	146	959	61	32	751	50	16	24
30	9.5	145	125	30	----	1380	64	30	602	27	15	22
31	9.0	------	114	29	----	3250	-----	30	----	22	14	----
TOTAL	259.6	2388.9	4597	1581	5422	22890	16688	1827	4688	2989	4199	5343
MEAN	8.37	79.6	148	51.0	187	738	556	58.9	156	96.4	135	178
MAX	13	771	1510	103	1400	3250	2750	272	1200	870	845	1070
MIN	6.8	7.5	20	29	27	96	60	27	21	17	14	14
CFSM	.03	.25	.47	.16	.59	2.32	1.75	.19	.49	.30	.43	.56
IN.	.03	.28	.54	.18	.63	2.68	1.95	.21	.55	.35	.49	.63

CAL YR 1979 TOTAL 118461.3 MEAN 325 MAX 9880 MIN 6.8 CFSM 1.02 IN 13.86
WTR YR 1980 TOTAL 72872.5 MEAN 199 MAX 3250 MIN 6.8 CFSM .63 IN 8.52

03346900 PRAIRIE CREEK RESERVOIR NEAR MUNCIE, IN

LOCATION.--Lat 40°08'46", long 85°17'35", in NE¼NE¼ sec.32, T.20 N., R.11 E., Delaware County, Hydrologic Unit 05120201, at intake tower of reservoir on Prairie Creek, 0.3 mile (0.5 km) above mouth, and 5.8 miles (9.3 km) southeast of Muncie.

DRAINAGE AREA.--16.8 mi^2 (43.5 km^2).

PERIOD OF RECORD.--1962 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three 24-inch (610 mm) valves. Capacity at uncontrolled spillway elevation, 990 ft (301.8 m) is 21,900 acre-ft (27.0 hm^3). Reservoir is used for low-flow augmentation of the water supply for Muncie and recreation. Reservoir was filled for the first time in the spring of 1963.

COOPERATION.--Records furnished by Muncie Water Works Company.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	990.0	21,860	
Oct. 31	989.9	21,670	-190
Nov. 30	990.0	21,860	+190
Dec. 31	990.0	21,860	0
CAL YR 1979			+250
Jan. 31	990.0	21,860	0
Feb. 29	990.0	21,860	0
Mar. 31	990.0	21,860	0
Apr. 30	990.0	21,860	0
May 31	991.0	23,120	+1,260
June 30	990.0	21,860	-1,260
July 31	990.0	21,860	0
Aug. 31	990.0	21,860	0
Sept. 30	989.2	20,860	-1,000
WTR YR 1980			-1,000

Diversion for municipal supply for City of Muncie

Water supply for the city of Muncie is from White River and augmented by Prairie Creek Reservoir. Water is diverted at Muncie Water Works on Burlington Drive, 3.0 miles (4.8 km) upstream from White River at Muncie (03347000) and returned at sewage disposal plant 3.9 miles (6.3 km) downstream from station.

Diversion, monthly and yearly means in ft^3/s

Oct.	Nov.	Dec.	1979 Cal. year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	1980 Water year
18.5	17.7	17.1	18.0	18.1	18.8	18.8	18.9	17.8	19.1	21.1	19.0	20.1	18.7

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).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1930 to current year. Prior to October 1948, published as West Fork White River at Muncie. Daily gage heights from July 1923 to December 1929 are available in the district office.

REVISED RECORDS.--WSP 1335: 1931-32(M), 1936(M), 1938, 1948. WSP 1435: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 917.10 ft (279.532 m) National Geodetic Vertical Datum of 1929 (city of Muncie bench mark). See WSP 1705 for history of changes prior to Jan. 28, 1942. Jan. 28, 1942, to Apr. 27, 1964, water-stage recorder at present site at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Natural flow affected by regulation of Prairie Creek Reservoir and by diversion of municipal water supply by Muncie Water Works Co. (See sta 03346900). Records of diversion available since October 1937.

AVERAGE DISCHARGE.--49 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)
Nov. 24	2000	2530	71.6	7.38	2.249	Mar. 9	0200	3430	97.1	8.30	2.53
Nov. 26	1600	2510	71.1	7.36	2.243	Mar. 22	0100	2700	76.5	7.58	2.310
Nov. 28	2100	2730	77.3	7.61	2.320	June 3	1600	*5680	161	*10.15	3.094

Minimum daily discharge, 21 ft³/s (.595 m³/s) Sept. 26, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	144	621	224	90	130	734	112	224	303	60	141
2	67	435	456	198	87	116	505	104	2320	181	54	208
3	79	263	360	177	85	104	407	102	4890	136	49	126
4	74	176	308	161	83	119	420	99	2740	116	47	91
5	68	133	292	139	80	302	327	95	881	101	43	77
6	66	114	290	121	78	745	273	90	525	89	82	72
7	56	100	264	106	76	536	249	85	386	78	217	69
8	53	92	220	96	75	2430	238	80	607	74	133	63
9	52	107	190	90	74	2620	248	77	362	71	94	59
10	50	310	179	87	73	1240	251	79	296	208	72	55
11	56	265	172	334	70	826	226	79	239	235	309	54
12	53	181	158	774	69	524	228	82	188	120	591	53
13	52	146	145	401	70	391	227	94	158	93	289	53
14	47	124	135	287	72	316	591	79	143	74	147	50
15	44	113	127	255	75	302	786	70	134	57	108	49
16	49	101	124	251	74	379	554	69	139	42	91	52
17	65	95	115	305	71	723	377	149	123	37	222	64
18	77	91	112	283	68	1120	298	427	101	37	609	31
19	79	92	110	230	66	683	252	296	117	34	420	27
20	74	88	99	198	65	478	222	201	286	31	291	24
21	70	86	98	181	269	1790	198	154	175	45	189	22
22	70	97	193	174	2030	2030	180	128	123	54	128	26
23	71	605	700	168	1190	948	166	113	170	95	96	29
24	87	2170	1320	150	623	704	151	116	361	95	79	30
25	99	1800	1660	168	389	781	138	126	213	62	67	26
26	92	2330	1020	140	335	561	127	113	140	44	59	21
27	91	1610	626	123	239	424	123	91	109	112	59	22
28	87	2290	430	114	201	359	133	80	101	262	70	22
29	84	1820	336	106	164	669	132	75	939	241	129	24
30	54	922	288	98	----	663	121	82	666	139	286	21
31	51	-----	254	93	----	974	----	79	-----	83	150	----
TOTAL	2066	16900	11402	6232	6941	23987	8882	3626	17856	3349	5240	1661
MEAN	66.6	563	368	201	239	774	296	117	595	108	169	55.4
MAX	99	2330	1660	774	2030	2620	786	427	4890	303	609	208
MIN	44	86	98	87	65	104	121	69	101	31	43	21
CFSM	.28	2.34	1.53	.83	.99	3.21	1.23	.49	2.47	.45	.70	.23
IN.	.32	2.61	1.76	.96	1.07	3.70	1.37	.56	2.76	.52	.81	.26

CAL YR 1979 TOTAL 140118 MEAN 384 MAX 4290 MIN 34 CFSM 1.59 IN 21.63
WTR YR 1980 TOTAL 108142 MEAN 295 MAX 4890 MIN 21 CFSM 1.22 IN 16.69

03347000 WHITE RIVER AT MUNCIE, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT 11...	1320	9.0	58	54	8.5	--	--	--	---
NOV 29...	1250	----	1720	86	399	--	--	--	---
JAN 10...	0945	----	87	15	3.5	--	--	--	---
FEB 13...	1330	----	72	9	1.7	--	--	--	---
APR 09...	1005	----	239	63	41	--	--	--	---
JUN 03...	1655	----	5410	1060	15500	99	99	99	100
JUL 30...	1035	24.0	141	131	50	--	--	--	---
SEP 10...	1020	21.0	58	66	10	--	--	--	---

03347500 BUCK CREEK NEAR MUNCIE, IN

LOCATION.--Lat 40°08'05", long 85°22'25", in SW¼SE¼ sec.34, T.20 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on left bank at downstream side of bridge on County Road 400 South, 1.0 mile (1.6 km) upstream from Muncie Water Works Co. pumping station, 4.2 miles (6.8 km) southeast of courthouse in Muncie, and at mile 10.6 (17.0 km).

DRAINAGE AREA.--35.5 mi^2 (91.9 km^2).

WATER-DISCHARGE RECORDS

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 above 180 ft^3/s, which are fair.

AVERAGE DISCHARGE.--26 years, 35.8 ft^3/s (1.014 m^3/s), 13.69 in/yr (348 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)
Nov. 24	0300	459	13.00	7.82	2.384	Mar. 8	1000	749	21.21	9.88	3.011
Nov. 26	0500	437	12.38	7.64	2.329	Mar. 21	1000	577	16.34	8.74	2.66
Nov. 28	0600	534	15.12	8.42	2.566	June 2	2100	*901	25.52	*11.02	3.359
Feb. 21	2300	484	13.71	8.02	2.444	Aug. 17	1600	428	12.12	7.56	2.304

Minimum daily discharge, 18 ft^3/s (.51 m^3/s) Sept. 21, 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	120	71	48	28	33	80	34	54	37	22	25
2	32	65	60	45	28	28	65	33	520	34	21	24
3	36	49	54	43	27	27	57	33	346	32	21	23
4	34	42	51	42	27	29	55	32	106	31	21	22
5	32	39	52	40	27	85	49	31	74	31	21	21
6	31	37	52	38	26	68	46	31	60	29	40	21
7	29	35	47	38	26	62	44	30	65	29	104	21
8	28	34	44	37	26	469	46	30	146	28	63	20
9	29	54	42	36	25	149	50	30	60	28	34	20
10	30	52	41	36	25	105	50	29	60	29	29	19
11	30	42	40	95	25	78	46	29	47	27	44	19
12	30	38	39	67	25	60	53	33	42	26	56	19
13	29	36	38	49	25	53	48	31	40	25	33	19
14	29	34	36	47	25	49	118	29	38	25	29	19
15	29	33	34	46	25	52	92	28	38	24	30	19
16	36	32	33	48	25	56	75	29	45	24	28	19
17	34	32	32	51	24	114	59	73	37	24	183	23
18	33	31	31	45	24	97	52	141	35	23	106	20
19	32	31	30	42	24	69	47	70	56	23	91	19
20	32	31	29	42	36	59	45	52	53	22	55	19
21	32	30	33	40	155	340	43	43	37	23	41	18
22	36	36	63	39	229	126	41	38	34	29	35	19
23	35	164	111	35	84	85	40	36	59	25	31	20
24	33	266	233	34	58	85	39	38	66	23	29	19
25	32	147	140	32	47	79	37	34	38	22	28	19
26	31	271	92	32	40	62	37	32	33	22	27	19
27	31	118	71	31	37	55	36	30	32	32	25	18
28	30	338	60	30	35	54	38	29	31	59	24	18
29	30	126	55	29	32	87	37	28	110	31	24	18
30	30	88	52	29	----	84	37	30	45	25	25	18
31	34	----	49	28	----	123	----	29	----	24	24	----
TOTAL	971	2451	1815	1294	1240	2922	1562	1195	2407	866	1344	597
MEAN	31.3	81.7	58.5	41.7	42.8	94.3	52.1	38.5	80.2	27.9	43.4	19.9
MAX	36	338	233	95	229	469	118	141	520	59	183	25
MIN	22	30	29	28	24	27	36	28	31	22	21	18
CFSM	.88	2.30	1.65	1.18	1.21	2.66	1.47	1.09	2.26	.79	1.22	.56
IN.	1.02	2.57	1.90	1.36	1.30	3.06	1.64	1.25	2.52	.91	1.41	.63

CAL YR 1979 TOTAL 21032 MEAN 57.6 MAX 679 MIN 18 CFSM 1.62 IN 22.04
WTR YR 1980 TOTAL 18664 MEAN 51.0 MAX 520 MIN 18 CFSM 1.44 IN 19.56

03347500 BUCK CREEK NEAR MUNCIE, IN

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: June 1979 to September 1980 discontinued.

EXTREMES FOR PERIOD OF RECORD.--
SEDIMENT CONCENTRATION: Maximum daily, 969 mg/L Aug. 17, 1980; minimum daily, 15 mg/L Jan. 21-23, 26, 27, Feb. 3, 19, 1980.
SEDIMENT DISCHARGE: Maximum daily, 1,190 tons (1,080 tonnes) Aug. 21, 1979; minimum daily, 0.97 tons Feb. 19, 1980.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily, 969 mg/L Aug. 17; minimum, 15 mg/L Jan. 21-23, 26, 27, Feb. 3, 19.
SEDIMENT DISCHARGE: Maximum daily, 721 tons (654 tonnes) Aug. 17,; minimum daily, 0.97 tons (0.88 tonnes) Feb. 19.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	87	5.2	823	307	40	7.7	---	----	48	3.6	32	2.9
2	103	8.9	70	12	40	6.5	---	----	30	2.3	28	2.1
3	67	6.5	64	8.5	38	5.5	24	2.8	15	1.1	28	2.0
4	50	4.6	63	7.1	28	3.9	20	2.3	20	1.5	28	2.2
5	52	4.5	63	6.6	32	4.5	24	2.6	---	------	141	39
6	55	4.6	62	6.2	24	3.4	48	4.9	---	------	51	9.4
7	55	4.3	53	5.0	24	3.0	40	4.1	---	------	---	-----
8	58	4.4	50	4.6	28	3.3	30	3.0	32	2.2	---	-----
9	62	4.9	67	9.8	30	3.4	30	2.9	---	------	---	-----
10	62	5.0	55	7.7	40	4.4	40	3.9	---	------	107	30
11	64	5.2	48	5.4	30	3.2	236	69	---	------	62	13
12	58	4.7	40	4.1	24	2.5	110	20	40	2.7	54	8.7
13	56	4.4	37	3.6	21	2.2	60	7.9	32	2.2	58	8.3
14	55	4.3	37	3.4	32	3.1	60	7.6	65	4.4	50	6.6
15	50	3.9	40	3.6	30	2.8	28	3.5	43	2.9	32	4.5
16	48	4.7	45	3.9	20	1.8	30	3.9	53	3.6	32	4.8
17	52	4.8	42	3.6	22	1.9	34	4.7	65	4.2	98	34
18	65	5.8	44	3.7	24	2.0	18	2.2	25	1.6	51	13
19	57	4.9	48	4.0	24	1.9	18	2.0	15	.97	55	10
20	57	4.9	50	4.2	21	1.6	17	1.9	37	3.6	---	-----
21	57	4.9	---	-----	18	1.6	15	1.6	230	190	---	-----
22	58	5.6	---	-----	23	3.9	15	1.6	417	287	---	-----
23	70	6.6	---	-----	57	17	15	1.4	160	38	---	-----
24	75	6.7	---	-----	272	215	18	1.7	34	5.3	---	-----
25	60	5.2	---	-----	124	47	16	1.4	28	3.6	20	4.3
26	62	5.2	---	-----	58	14	15	1.3	18	1.9	22	3.7
27	67	5.6	---	-----	63	12	15	1.3	22	2.2	49	7.3
28	64	5.2	---	-----	70	11	---	----	25	2.4	76	11
29	60	4.9	---	-----	68	10	39	3.1	29	2.5	94	22
30	65	5.3	40	9.5	55	7.7	45	3.5	---	------	---	-----
31	101	13	---	-----	38	5.0	38	2.9	---	------	---	-----
TOTAL	---	168.7	---	423.5	---	412.8	---	169.0	---	569.77	---	238.8

03347500 BUCK CREEK NEAR MUNCIE, IN

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	----			---	------	140	14	98	5.8	34	2.3
2	---	----			---	------	---	-----	90	5.1	42	2.7
3	---	----			---	------	---	-----	48	2.7	34	2.1
4	60	8.9			---	------	---	-----	40	2.3	34	2.0
5	60	7.9			191	38	---	-----	42	2.4	44	2.5
6	60	7.5			160	26	---	-----	---	-----	48	2.7
7	68	8.1			319	98	---	-----	---	-----	48	2.7
8	70	8.7			909	541	---	-----	---	-----	58	3.1
9	67	9.0			223	36	---	-----	75	6.9	54	2.9
10	---	----			232	38	60	4.7	53	4.1	37	1.9
11	---	----			132	17	67	4.9	245	36	38	1.9
12	---	----			117	13	97	6.8	246	44	48	2.5
13	---	----			117	13	95	6.4	82	7.3	43	2.2
14	---	----			130	13	70	4.7	72	5.6	34	1.7
15	---	----			98	10	80	5.2	90	7.3	39	2.0
16	---	----			245	30	60	3.9	103	7.8	44	2.3
17	---	----			109	11	48	3.1	969	721	48	3.0
18	---	----			62	5.9	52	3.2	107	31	44	2.4
19	---	----			568	144	50	3.1	185	45	39	2.0
20	---	----			562	95	38	2.3	94	14	39	2.0
21	---	----			128	13	61	3.8	78	8.6	42	2.0
22	---	----			97	8.9	60	4.7	70	6.6	40	2.1
23	---	----			738	191	67	4.5	60	5.0	40	2.2
24	38	4.0			684	147	82	5.1	53	4.1	34	1.7
25	23	2.3			205	21	87	5.2	49	3.7	37	1.9
26	---	----			130	12	72	4.3	58	4.2	26	1.3
27	---	----			123	11	173	27	45	3.0	32	1.6
28	---	----			100	8.4	336	71	50	3.2	39	1.9
29	---	----			809	307	70	5.9	33	2.1	44	2.1
30	---	----			179	22	104	7.0	30	2.0	38	1.8
31	---	----			---	------	132	8.6	27	1.7	---	----
TOTAL	---	56.4			---	1870.2	---	209.4	---	992.5	---	65.5

TOTAL LOAD FOR YEAR: 5176.57 TONS.

03348000 WHITE RIVER AT ANDERSON, IN

LOCATION.--Lat 40°06'20", long 85°40'16", in NW¼NW¼ sec.18, T.19 N., R.8 E., Madison County, Hydrologic Unit 05120201, on downstream side of Twelfth Street bridge, 250 ft (76 m) upstream from municipal water-supply plant in Anderson, 1 mile (2 km) upstream from Killbuck Creek, and at mile 293.3 (471.9 km).

DRAINAGE AREA.--406 mi² (1,052 km²).

PERIOD OF RECORD.--July 1925 to September 1926, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 950 ft (290 m) downstream December 1910 to February 1918, 250 ft (76 m) downstream from February 1918 to Sept. 14, 1973, and at present site since Sept. 15, 1973, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Anderson.

REVISED RECORDS.--WSP 1335: 1932, 1934-35, 1936(M), 1938-40. WSP 1385: 1950(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 825.02 ft (251.466 m) National Geodetic Vertical Datum of 1929. Prior to May 12, 1934, nonrecording gage at present site and datum. May 12, 1934, to Sept. 14, 1973, nonrecording gage at site 250 ft (76 m) downstream at same datum. Sept. 15, 1973, to Sept. 23, 1976, nonrecording gage at present site and datum.

REMARKS.--Records good, except those for discharge above 1,000 cfs, 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.--50 years, 542 ft³/s (15.35 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)
Nov. 25	0100	3352	94.9	9.60	2.926	Feb. 22	1800	3050	86.4	9.28	2.828
Nov. 26	2000	3450	97.7	9.69	2.954	Mar. 9	1000	4790	136	10.83	3.301
Nov. 29	0400	3700	105	9.91	3.020	Mar. 22	0600	3750	106	9.96	3.036
Dec. 25	0700	2930	83.0	9.20	2.804	June 3	1200	*8010	227	*14.44	4.401

Minimum daily discharge, 95 ft³/s (2.69 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	343	1130	457	210	253	1370	264	428	630	196	235
2	239	792	802	412	210	230	955	252	3000	450	174	346
3	275	548	608	376	208	220	776	245	7310	329	178	271
4	250	376	512	348	206	253	899	240	5430	265	159	212
5	235	295	471	324	203	377	675	237	2060	237	156	190
6	228	262	468	304	200	1060	550	229	1140	215	174	180
7	215	239	432	301	197	827	503	222	849	204	697	175
8	190	222	368	272	192	2700	536	214	1260	195	426	167
9	178	238	311	272	189	4330	562	210	877	204	281	160
10	174	418	291	251	187	2240	512	204	728	280	237	153
11	193	482	285	416	183	1520	480	207	589	245	350	144
12	224	355	273	1190	179	1010	462	225	481	278	776	142
13	160	295	246	736	178	753	465	239	421	218	608	142
14	152	264	230	540	183	619	834	217	386	204	338	140
15	148	243	216	468	187	571	1430	195	377	185	267	138
16	173	232	211	444	196	654	1110	190	381	167	231	145
17	239	216	200	501	178	1050	765	425	360	158	346	216
18	217	208	186	510	173	1860	608	1130	325	150	1320	152
19	211	201	190	433	170	1280	513	794	346	148	996	123
20	206	221	183	380	168	897	452	511	623	142	656	115
21	200	200	178	351	230	2150	413	387	454	166	441	110
22	198	204	318	339	2460	3210	377	317	349	255	313	108
23	243	780	1020	326	2120	1760	351	281	312	221	252	140
24	217	2680	1840	282	1110	1240	326	296	597	215	220	117
25	232	2770	2680	312	696	1320	304	271	462	192	201	113
26	228	2980	1860	285	485	1010	286	258	352	163	189	105
27	218	2670	1220	266	409	775	275	227	308	173	177	99
28	218	2910	850	244	320	665	302	215	293	666	182	97
29	209	3070	666	230	280	976	296	206	1400	428	182	99
30	197	1720	574	220	-----	1150	278	213	940	320	353	95
31	171	-----	513	215	-----	1540	-----	231	-----	232	322	----
TOTAL	6401	26434	19332	12005	11907	38500	17665	9352	32838	7935	11398	4629
MEAN	206	881	624	387	411	1242	589	302	1095	256	368	154
MAX	275	3070	2680	1190	2460	4330	1430	1130	7310	666	1320	346
MIN	148	200	178	215	168	220	275	190	293	142	156	95
CFSM	.51	2.17	1.54	.95	1.01	3.06	1.45	.74	2.70	.63	.91	.38
IN.	.59	2.42	1.77	1.10	1.09	3.53	1.62	.86	3.01	.73	1.04	.42

CAL YR 1979 TOTAL 258589 MEAN 708 MAX 7570 MIN 148 CFSM 1.74 IN 23.69
WTR YR 1980 TOTAL 198396 MEAN 542 MAX 7310 MIN 95 CFSM 1.34 IN 18.18

03348020 KILLBUCK CREEK NEAR GASTON, IN

LOCATION.--Lat 40°15'45", long 85°30'53", in SE¼SW¼ sec.16, T.21 N., R.9 E., Delaware County, Hydrologic Unit 05120201, on right bank 30 ft (9 m) upstream from bridge on County Road 500 North, 15 ft (5 m) east of County Road 675 West, 3.6 miles (5.8 km) southwest of Gaston, and at mile 15.6 (25.1 km).

DRAINAGE AREA.--25.5 mi² (66.0 km²).

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years, 25.2 ft³/s (.714 m³/s), 13.42 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1200 ft³/s (34.0 m³/s) June 2, 1980, gage height, 12.70 ft (3.871 m) minimum daily discharge, 0.76 ft³/s (0.022 m³/s) Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 2	1700	*1200	34.0	------	-----
June 2	2300	-----	----	*12.70	3.871

Minimum daily discharge, 4.4 ft³/s (.125 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	15	46	26	9.6	17	61	16	77	29	11	19
2	6.1	21	34	24	9.5	16	48	15	898	24	9.5	58
3	6.9	12	28	21	9.5	15	43	14	966	20	8.6	31
4	6.2	8.7	24	19	9.3	15	90	14	465	18	8.0	22
5	6.1	7.3	24	18	9.1	35	63	13	135	16	7.7	18
6	5.8	6.8	24	16	8.9	60	46	13	83	16	19	15
7	5.5	6.3	22	16	8.7	50	38	13	67	14	84	13
8	5.2	6.0	18	14	8.6	193	46	12	74	13	40	12
9	5.3	6.8	15	13	9.0	184	66	12	55	12	20	9.3
10	5.4	14	15	13	9.0	122	47	12	49	13	25	8.6
11	5.2	11	14	29	8.8	82	38	12	40	12	59	8.2
12	5.2	8.7	13	42	8.2	54	37	13	35	11	44	7.8
13	5.2	7.8	11	27	7.9	41	34	15	32	10	25	8.0
14	5.2	7.2	10	23	8.1	35	73	12	30	9.4	18	8.4
15	5.2	6.8	9.9	20	8.4	38	84	11	30	8.9	15	8.0
16	5.8	6.6	9.5	21	8.6	47	64	11	39	8.5	13	8.2
17	9.3	6.4	9.0	26	7.9	89	46	34	31	8.2	21	10
18	8.3	6.3	8.5	24	7.7	106	37	100	28	7.7	99	10
19	7.0	6.1	8.4	20	7.9	67	32	56	38	7.4	135	8.4
20	6.6	6.2	8.3	18	8.3	51	29	36	57	7.1	58	7.7
21	6.9	5.7	8.0	17	26	146	27	28	29	7.7	34	7.1
22	7.1	5.5	32	17	155	129	25	24	23	11	25	7.1
23	9.0	44	102	15	108	72	23	23	29	13	19	19
24	9.3	129	168	14	62	65	22	22	120	9.4	15	14
25	8.1	91	179	14	43	78	20	23	50	8.1	13	11
26	7.5	136	104	13	31	56	19	19	31	7.6	12	9.3
27	7.2	100	69	12	27	46	18	16	25	7.8	11	8.3
28	7.3	139	52	11	23	41	19	15	24	59	9.7	7.8
29	7.2	98	43	10	19	53	19	14	92	37	9.3	7.4
30	6.7	61	37	10	-----	53	17	14	48	20	40	7.3
31	6.8	-----	30	9.8	-----	79	----	13	----	14	26	-----
TOTAL	203.0	986.2	1175.6	572.8	667.0	2135	1231	645	3700	459.8	933.8	388.9
MEAN	6.55	32.9	37.9	18.5	23.0	68.9	41.0	20.8	123	14.8	30.1	13.0
MAX	9.3	139	179	42	155	193	90	100	966	59	135	58
MIN	4.4	5.5	8.0	9.8	7.7	15	17	11	23	7.1	7.7	7.1
CFSM	.26	1.29	1.49	.73	.90	2.70	1.61	.82	4.82	.58	1.18	.51
IN.	.30	1.44	1.71	.84	.97	3.11	1.80	.94	5.40	.67	1.36	.57

CAL YR 1979 TOTAL 10684.1 MEAN 29.3 MAX 359 MIN 4.1 CFSM 1.15 IN 15.59
WTR YR 1980 TOTAL 13098.1 MEAN 35.8 MAX 966 MIN 4.4 CFSM 1.40 IN 19.11

03348020 KILLBUCK CREEK NEAR GASTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT									
11...	1110	9.0	5.3	75	1.1	--	---	--	--
NOV									
28...	1240	6.0	162	88	38	--	---	--	--
JAN									
10...	1210	----	13	36	1.3	--	---	--	--
FEB									
11...	1425	----	8.7	20	.47	--	---	--	--
APR									
07...	1325	----	39	64	6.7	--	---	--	--
JUN									
02...	1140	21.0	966	2070	5400	99	100	--	--
04...	1025	20.5	543	441	647	95	97	98	99
JUL									
28...	1605	19.5	78	206	43	--	---	--	--
SEP									
08...	1530	23.0	11	82	2.4	--	---	--	--

03348350 PIPE CREEK AT FRANKTON, IN

LOCATION.--Lat 40°13'38", long 85°45'58", in SE¼NE¼ sec.31, T.21 N., R.7 E., Madison County, Hydrologic Unit 05120201, on right bank 20 ft (6 m) downstream from bridge on County Road 500 West, at northeast edge of Frankton.

DRAINAGE AREA.--113 mi² (293 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft (246.888 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--12 years, 107 ft³/s (3.030 m³/s), 12.86 in/yr (327 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft³/s (123 m³/s) June 3, 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)
Dec. 25	0200	1090	30.9	8.98	2.737	Mar. 21	2400	722	20.4	7.79	2.374
Feb. 22	2300	757	21.4	7.94	2.420	June 3	0300	*4340	123	*14.78	4.505
Mar. 8	2000	1500	42.5	9.97	3.039						

Minimum daily discharge, 7.7 ft³/s (0.22 m³/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	83	134	111	34	56	246	52	160	49	17	86
2	29	122	102	94	33	50	181	47	2310	37	15	59
3	23	73	84	81	33	45	149	47	3640	32	15	40
4	24	52	78	73	32	49	223	45	1630	30	14	26
5	22	41	75	67	32	107	173	44	889	27	13	19
6	21	37	76	61	31	182	131	44	563	25	126	16
7	20	33	71	56	31	145	113	41	378	23	253	13
8	19	31	62	52	30	1080	159	39	443	21	112	11
9	19	39	54	50	30	1050	387	37	285	20	59	10
10	19	91	53	47	30	644	280	36	238	22	39	9.4
11	18	72	52	102	29	470	191	37	164	20	37	8.7
12	19	53	50	158	28	297	161	42	123	18	69	8.2
13	18	46	45	103	28	214	138	48	103	17	44	7.9
14	18	40	42	86	28	158	322	39	90	16	29	8.2
15	17	36	39	73	29	158	424	34	89	15	24	7.7
16	19	34	37	71	30	203	316	32	114	14	21	9.8
17	43	32	35	101	28	340	207	110	81	13	26	15
18	33	30	33	107	27	528	155	476	67	13	147	14
19	26	28	32	87	27	334	124	297	111	12	301	11
20	24	27	31	76	28	239	105	166	167	12	185	8.8
21	23	26	30	71	72	465	90	110	80	12	87	7.9
22	23	27	215	69	548	561	79	81	60	25	52	11
23	44	205	574	64	540	312	73	69	52	25	35	218
24	40	501	60	88	275	287	66	121	77	19	27	105
25	32	406	925	57	168	423	60	142	66	15	23	56
26	28	472	563	49	109	275	55	87	47	13	20	38
27	25	375	363	44	92	198	53	64	40	16	18	28
28	25	379	256	41	76	162	62	53	37	80	16	23
29	24	319	188	39	62	200	65	47	82	52	24	20
30	23	179	159	37	----	208	57	44	83	28	194	18
31	23	----	133	35	----	336	----	66	-----	21	162	-----
TOTAL	759	3889	4651	2250	2540	9776	4845	2597	12269	742	2204	913.6
MEAN	24.5	130	150	72.6	87.6	315	162	83.8	409	23.9	71.1	30.5
MAX	44	501	925	158	548	1080	424	476	3640	80	301	218
MIN	17	26	30	35	27	45	53	32	37	12	13	7.7
CFSM	.22	1.15	1.33	.64	.78	2.79	1.43	.74	3.62	.21	.63	.27
IN.	.25	1.28	1.53	.74	.84	3.22	1.59	.85	4.04	.24	.73	.30

CAL YR 1979 TOTAL 43951.0 MEAN 120 MAX 1820 MIN 17 CFSM 1.06 IN 14.47
WTR YR 1980 TOTAL 47435.6 MEAN 130 MAX 3640 MIN 7.7 CFSM 1.15 IN 15.62

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 mi^2 (2,222 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year. Gage-height records collected at present site from December 1913 to December 1935, and after June 1951, and at site 400 ft (122 m) downstream January 1936 to May 1951, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Noblesville.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.16 ft (224.991 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--34 years, 841 ft^3/s (23.82 m^3/s), 13.31 in/yr (338 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,800 ft^3/s (759 m^3/s) Apr. 22, 1964, gage height, 21.31 ft (6.495 m); minimum daily, 44 ft^3/s (1.25 m^3/s) Sept. 28, 1954.

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)
Mar. 9	2300	7310	207	13.34	4.066
June 4	0400	*18400	521	*19.11	5.825

Minimum daily discharge, 211 ft^3/s (5.98 m^3/s) Sept. 22.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: November 1952 to September 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	565	2230	1050	410	614	2850	614	683	1200	399	622
2	358	1290	1680	927	400	500	2060	577	5410	781	342	539
3	387	1280	1340	834	392	470	1650	548	13000	621	311	622
4	369	871	1160	760	380	550	1830	526	16900	534	299	460
5	358	671	1060	707	376	674	1780	510	9690	487	276	374
6	323	573	1030	651	365	1420	1380	501	4070	448	305	336
7	292	513	979	630	355	1550	1190	481	2660	413	3900	309
8	264	468	869	575	351	4100	1170	461	3370	394	2310	303
9	255	478	752	520	340	6980	1880	446	2770	377	1170	285
10	266	732	698	538	340	6250	1740	443	1890	505	845	269
11	261	968	683	701	335	3840	1420	434	1510	485	761	258
12	258	797	661	1530	325	2570	1240	455	1190	533	1030	251
13	261	653	617	1510	315	1860	1170	559	996	409	1190	249
14	247	569	574	1090	310	1480	1550	494	879	361	787	245
15	236	513	539	909	336	1330	2980	436	825	342	624	239
16	266	476	518	837	360	1450	2580	414	854	310	525	248
17	434	442	492	896	335	2100	1920	554	796	285	499	349
18	461	418	463	1010	325	3800	1490	2250	701	266	1290	370
19	395	401	448	912	310	3180	1240	2360	642	257	2690	275
20	362	402	458	796	328	2200	1080	1460	1130	247	2160	238
21	341	398	434	731	473	2760	977	1070	1050	291	1270	221
22	334	392	696	708	2990	5120	897	857	739	576	837	211
23	452	860	2190	679	4680	3930	843	741	626	539	621	402
24	485	3250	3770	592	2720	2570	773	771	728	405	495	532
25	414	4540	5200	591	1670	2910	717	960	990	369	429	365
26	402	4570	4510	613	1180	2470	674	804	706	311	389	295
27	373	5010	2940	522	944	1860	636	663	574	297	357	255
28	358	4030	2060	477	847	1550	647	581	509	747	328	231
29	348	4830	1600	455	733	1620	706	527	952	1030	332	219
30	341	3540	1360	435	-----	2090	658	508	1960	701	415	213
31	313	-----	1200	420	-----	2680	-----	574	-----	500	700	----
TOTAL	10479	44500	43211	23606	23225	76478	41728	22579	78800	15021	27886	9785
MEAN	338	1483	1394	761	801	2467	1391	728	2627	485	900	326
MAX	485	5010	5200	1530	4680	6980	2980	2360	16900	1200	3900	622
MIN	236	392	434	420	310	470	636	414	509	247	276	211
CFSM	.39	1.73	1.63	.89	.93	2.88	1.62	.85	3.06	.57	1.05	.38
IN.	.45	1.93	1.87	1.02	1.01	3.32	1.81	.98	3.42	.65	1.21	.42

CAL YR 1979 TOTAL 454506 MEAN 1245 MAX 9610 MIN 190 CFSM 1.45 IN 19.71
WTR YR 1980 TOTAL 417298 MEAN 1140 MAX 16900 MIN 211 CFSM 1.33 IN 18.09

03350300 MORSE RESERVOIR NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°04'21", long 86°02'47", in SE¼SW¼ sec.23, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, in intake structure of reservoir on Cicero Creek, 2.5 miles (4.0 km) northwest of courthouse in Noblesville, and 4.8 miles (7.7 km) above mouth.

DRAINAGE AREA.--214 mi^2 (554 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 760.00 ft (231.648 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by two 36-inch (914 mm) valves or one 16-inch (406 mm) valve. Minimum design capacity is essentially empty at invert of outlet conduit at elevation of 763.50 ft (232.715 m). Capacity at uncontrolled spillway elevation, 810 ft (246.9 m) is 21,180 acre-ft (26.1 hm^3). Reservoir is used for water supply for Indianapolis and recreation. Reservoir put in operation on Dec. 9, 1955, and was filled for the first time on Feb. 3, 1957.

COOPERATION.--Records furnished by Indianapolis Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 25,310 acre-ft (31.2 hm^3) June 28, 1957, elevation, 812.95 ft (247.787 m); minimum, 14,120 acre-ft (17.4 hm^3) Jan. 5, 1964, elevation, 804.26 ft (245.138 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 22,640 acre-ft (27.9 hm^3) Mar. 9, elevation, 811.06 ft (247.211 m); minimum, 20,910 acre-ft (25.8 hm^3) July 20, elevation, 809.79 ft (246.824 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	809.91	21,060	
Oct. 31	810.09	21,300	+240
Nov. 30	810.46	21,810	+510
Dec. 31	810.26	21,530	-280
CAL YR 1979			+180
Jan. 31	810.04	21,230	-300
Feb. 29	810.15	21,380	+150
Mar. 31	810.57	21,960	+580
Apr. 30	810.14	21,370	-590
May 31	810.18	21,420	+50
June 30	810.20	21,450	+30
July 31	810.01	21,190	-260
Aug. 31	810.02	21,210	+20
Sept. 30	810.03	21,220	+10
WTR YR 1980			+160

03350500 CICERO CREEK AT NOBLESVILLE, IN

LOCATION.--Lat 40°03'20", long 86°02'30", in NW¼NE¼ sec.35, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on right bank 150 ft (46 m) downstream from bridge on State Highway 38, 1.0 mile (1.6 m) northwest of Noblesville, 1.9 miles (3.1 km) downstream from Hinkle Creek, and 3.2 miles (5.1 km) upstream from mouth.

DRAINAGE AREA.--216 mi^2 (559 km^2).

PERIOD OF RECORD.--July 1950 to September 1980 (discontinued).

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.00 ft (228.600 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--30 years, 195 ft^3/s (5.522 m^3/s), 12.26 in/yr (311 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,800 ft^3/s (278 m^3/s) June 28, 1957, gage height, 15.26 ft (4.651 m); minimum daily, 0.25 ft^3/s (0.007 m^3/s) Oct. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,600 ft^3/s (102 m^3/s) June 3, gage height, 12.53 ft (3.819 m); minimum daily, 3.1 ft^3/s (0.088 m^3/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	148	420	201	62	118	740	109	111	102	11	24
2	35	354	319	181	60	105	557	98	1390	85	13	17
3	36	305	249	165	59	97	435	98	3430	66	19	14
4	54	214	227	153	59	85	511	95	3120	65	5.9	11
5	35	159	205	133	56	95	528	75	1480	63	6.3	13
6	22	139	214	113	55	238	405	79	761	47	87	19
7	24	111	201	98	54	240	331	87	601	20	1330	15
8	18	93	171	93	53	1460	331	68	1350	32	935	9.9
9	19	129	137	89	53	1750	443	54	952	28	428	21
10	19	216	133	88	52	1190	457	55	612	77	240	13
11	15	251	131	177	51	877	400	68	425	66	220	4.5
12	25	201	142	270	50	593	352	93	307	54	187	3.6
13	24	167	118	242	47	433	295	113	240	47	137	7.6
14	9.0	139	102	212	46	326	435	88	203	15	98	21
15	5.9	116	93	177	46	275	725	62	203	14	102	9.0
16	23	109	78	159	45	302	612	59	258	18	82	3.1
17	85	93	69	187	45	609	465	111	224	21	102	43
18	102	90	65	220	44	1150	367	209	175	7.6	263	34
19	90	85	62	205	44	832	297	229	151	12	640	31
20	75	80	60	189	49	618	254	218	120	11	728	26
21	66	71	60	167	93	770	220	242	109	9.0	514	26
22	65	85	131	140	743	785	189	189	95	49	290	14
23	131	251	229	125	877	549	191	153	103	43	171	199
24	209	575	635	116	509	523	169	171	183	18	116	268
25	173	569	1020	98	347	746	131	203	153	13	75	175
26	122	1070	710	88	229	615	129	171	109	16	59	107
27	90	1070	523	80	185	457	124	116	84	16	49	65
28	87	848	383	74	183	383	120	98	74	34	35	53
29	71	740	302	70	155	400	139	84	144	19	26	34
30	63	540	263	65	----	475	124	72	163	16	29	29
31	50	----	235	63	----	782	-----	114	-----	11	25	------
TOTAL	1848.1	9018	7687	4438	4351	17878	10476	3681	17330	1094.6	7023.2	1309.7
MEAN	59.6	301	248	143	150	577	349	119	578	35.3	227	43.7
MAX	209	1070	1020	270	877	1750	740	242	3430	102	1330	268
MIN	5.2	71	60	63	44	85	120	54	74	7.6	5.9	3.1
CFSM	.28	1.39	1.15	.66	.69	2.67	1.62	.55	2.68	.16	1.05	.20
IN.	.32	1.55	1.32	.76	.75	3.08	1.80	.63	2.98	.19	1.21	.23

CAL YR 1979 TOTAL 89961.7 MEAN 246 MAX 3510 MIN 2.6 CFSM 1.14 IN 15.49
WTR YR 1980 TOTAL 86134.6 MEAN 235 MAX 3430 MIN 3.1 CFSM 1.09 IN 14.83

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).

WATER-DISCHARGE RECORDS

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 fair.

AVERAGE DISCHARGE.--13 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, gage height, 7.47 ft (2.277 m); minimum daily, 2.3 ft³/s (0.065 m³/s) Aug. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (8.496 m³/s) and maximum (*):

Date	Time	Discharge (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. 26	0945	323	9.15	4.12	1.256	Mar. 8	1815	339	9.60	3.85	1.173
Dec. 24	1915	337	9.54	3.87	1.180	June 3	0400	*852	24.1	*5.73	1.746
Feb. 22	1030	314	8.89	3.73	1.137						

Minimum daily discharge, 8.4 ft³/s (0.238 m³/s) Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	82	71	55	22	27	131	38	54	19	13	12
2	19	103	55	48	21	24	105	37	455	18	12	13
3	16	68	47	43	21	22	90	37	737	17	12	12
4	16	49	43	41	20	29	88	36	287	16	12	12
5	15	40	50	38	19	48	74	35	159	16	11	12
6	14	35	57	34	18	56	64	34	120	14	14	12
7	14	32	52	35	18	50	60	31	210	14	181	11
8	13	30	44	32	18	274	64	29	170	13	87	11
9	13	33	38	28	18	228	101	28	140	13	37	11
10	14	49	38	27	18	190	91	29	110	25	43	10
11	14	39	37	92	18	134	77	29	91	22	127	10
12	14	33	34	110	18	96	76	31	67	14	183	10
13	13	29	31	74	18	77	71	32	55	13	82	9.8
14	13	26	29	56	18	61	143	27	48	12	42	9.3
15	12	24	29	46	17	76	157	26	46	11	84	9.5
16	14	22	29	49	17	92	121	28	63	9.8	111	10
17	28	21	28	63	17	148	94	42	42	9.8	110	18
18	24	20	24	55	17	162	80	120	37	10	168	13
19	20	21	24	46	17	116	68	86	34	9.3	228	12
20	18	21	22	42	19	94	60	65	34	9.3	127	10
21	16	19	22	39	57	207	56	52	29	27	75	9.8
22	16	19	65	41	272	167	52	43	28	148	42	9.3
23	33	96	175	38	163	120	50	38	27	90	27	8.8
24	30	190	281	42	108	118	46	42	27	32	21	9.3
25	26	112	260	34	76	123	44	44	25	22	18	9.3
26	22	239	177	30	57	94	42	35	24	18	16	8.8
27	19	140	133	28	45	80	42	29	23	20	16	8.4
28	19	171	102	26	38	74	43	28	22	37	15	8.4
29	18	119	87	25	31	105	44	27	22	27	14	8.4
30	18	88	79	24	----	116	41	26	19	18	13	8.4
31	17	----	65	23	----	188	----	28	----	15	12	-----
TOTAL	548	1970	2228	1364	1216	3396	2275	1212	3205	739.2	1953	316.5
MEAN	17.7	65.7	71.9	44.0	41.9	110	75.8	39.1	107	23.8	63.0	10.6
MAX	33	239	281	110	272	274	157	120	737	148	228	18
MIN	10	19	22	23	17	22	41	26	19	9.3	11	8.4
CFSM	.35	1.29	1.42	.87	.83	2.17	1.49	.77	2.11	.47	1.24	.21
IN.	.40	1.44	1.63	1.00	.89	2.49	1.67	.89	2.35	.54	1.43	.23

CAL YR 1979 TOTAL 24677.7 MEAN 67.6 MAX 1080 MIN 9.7 CFSM 1.33 IN 18.07
WTR YR 1980 TOTAL 20422.7 MEAN 55.8 MAX 737 MIN 8.4 CFSM 1.10 IN 14.95

03350700 STONY CREEK NEAR NOBLESVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1978 to current year (partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT									
05...	0830	13.5	15	32	1.3	--	--	--	---
12...	0850	10.5	13	8	.28	--	--	--	---
19...	0930	15.0	21	55	3.1	--	--	--	---
26...	0810	----	22	27	1.6	--	--	--	---
NOV									
02...	0900	10.0	108	60	17	--	--	--	---
09...	0940	.8	31	23	1.9	--	--	--	---
15...	1230	8.5	24	15	.97	--	--	--	---
21...	0915	11.0	19	38	1.9	--	--	--	---
26...	0810	9.0	273	149	110	--	--	--	---
DEC									
07...	0930	6.0	52	18	2.5	--	--	--	---
14...	0915	3.5	29	23	1.8	--	--	--	---
20...	0925	2.0	22	13	.77	--	--	--	---
JAN									
04...	0930	3.0	43	9	1.0	--	--	--	---
10...	0830	2.0	26	2	.14	--	--	--	---
18...	1300	6.0	56	9	1.4	--	--	--	---
25...	0950	4.0	38	8	.82	--	--	--	---
FEB									
08...	0935	.0	16	20	.86	--	--	--	---
12...	1445	2.0	18	16	.78	--	--	--	---
14...	1030	.0	17	20	.92	--	--	--	---
20...	1315	3.0	19	16	.82	--	--	--	---
27...	1715	3.0	40	21	2.3	--	--	--	---
MAR									
07...	1525	4.0	42	19	2.2	--	--	--	---
11...	1305	3.0	117	31	9.8	--	--	--	---
19...	1340	7.0	111	28	8.4	--	--	--	---
26...	1230	5.0	92	17	4.2	--	--	--	---
APR									
04...	1430	7.0	89	53	13	--	--	--	---
10...	1200	6.0	94	45	11	--	--	--	---
14...	0930	6.5	112	155	47	90	97	99	100
15...	1410	5.0	152	69	28	--	--	--	---
24...	1345	15.0	48	31	4.0	--	--	--	---
30...	1400	14.0	39	34	3.6	90	--	--	---
MAY									
10...	1250	16.0	28	114	8.6	68	--	--	---
14...	1515	18.0	28	109	8.2	64	--	--	---

03350700 STONY CREEK NEAR NOBLESVILLE, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY						
23...	1240	19.0	39	57	6.0	--
JUN						
01...	1720	21.5	58	146	23	--
03...	1455	22.0	714	385	742	97
03...	2000	21.0	618	293	489	97
04...	1245	19.0	288	249	194	87
05...	0905	17.5	164	220	97	97
16...	1525	19.0	69	139	26	--
19...	1230	20.0	45	168	20	--
27...	1330	27.0	32	72	6.2	--
JUL						
05...	1050	24.0	21	77	4.4	--
10...	1445	27.0	43	102	12	--
15...	1210	21.0	17	52	2.4	--
25...	1445	23.5	17	62	2.8	--
28...	1730	23.5	53	77	11	--
AUG						
02...	1100	25.0	19	68	3.5	--
09...	1900	27.0	29	66	5.2	--
23...	1300	24.0	22	72	4.3	--
SEP						
04...	1550	24.5	12	81	2.6	--
14...	1645	24.0	8.6	61	1.4	--
17...	1020	18.0	18	77	3.7	--
18...	1220	19.0	13	61	2.1	--
26...	1350	19.0	8.6	59	1.4	--

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. Flow slightly regulated by Morse Reservoir (See sta 03350300).

AVERAGE DISCHARGE.--51 years, 1,099 ft³/s (31.12 m³/s), 12.24 in/yr (311 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)
Mar. 10	0400	9070	257	10.88	3.316
June 4	2000	*19200	544	*16.15	4.923

Minimum daily discharge, 292 ft³/s (8.27 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	322	669	2910	1520	540	895	3830	843	831	1680	503	782
2	400	1600	2240	1320	530	772	2990	795	4280	1090	432	646
3	453	1830	1850	1160	510	720	2400	761	11700	832	390	705
4	427	1310	1630	1040	510	780	2390	731	18100	719	381	621
5	438	952	1480	968	500	914	2560	701	16400	659	347	481
6	406	799	1420	893	490	1580	2090	680	7100	601	349	422
7	386	720	1350	860	480	2030	1830	662	3860	536	3360	396
8	363	645	1160	793	470	4040	1780	630	5430	491	3630	466
9	350	660	992	725	460	8230	2380	597	4090	477	2010	377
10	355	903	929	697	450	8710	2530	584	2930	702	1410	365
11	351	1270	903	969	440	5470	2150	579	2370	639	1250	334
12	347	1140	891	1780	430	3570	1920	640	1940	692	1390	319
13	354	918	840	2070	427	2620	1770	713	1660	569	1610	314
14	337	798	776	1630	420	2130	2100	701	1430	470	1140	313
15	317	709	726	1310	410	1880	3510	600	1290	429	939	317
16	322	664	705	1160	498	1920	3490	558	1430	402	909	310
17	501	616	689	1230	420	2480	2730	687	1320	373	1020	449
18	642	573	618	1400	410	4440	2160	1980	1130	355	1400	512
19	579	548	608	1330	400	4400	1860	2810	1000	334	3520	407
20	506	529	620	1150	430	3140	1640	1990	1280	324	3370	336
21	463	532	601	1020	631	3250	1440	1580	1470	449	2280	310
22	452	525	802	987	3090	5570	1280	1220	1080	772	1570	293
23	575	1090	2150	965	5700	5340	1190	1010	932	860	1050	365
24	756	3230	4240	848	3820	3390	1080	991	957	582	813	873
25	680	4870	6060	835	2390	3560	997	1180	1320	478	686	682
26	606	5540	5800	843	1780	3390	925	1110	1070	422	595	498
27	542	6050	3860	756	1380	2630	882	905	877	406	532	389
28	504	5020	2750	692	1220	2210	869	783	789	539	474	339
29	479	5410	2180	604	1050	2220	945	715	861	1310	442	314
30	453	4540	1900	568	-----	2660	905	667	2160	880	438	292
31	435	-----	1720	560	-----	3460	-----	705	------	654	745	-----
TOTAL	14101	54660	55400	32683	30286	98401	58623	29108	101087	19726	38985	13227
MEAN	455	1822	1787	1054	1044	3174	1954	939	3370	636	1258	441
MAX	756	6050	6060	2070	5700	8710	3830	2810	18100	1680	3630	873
MIN	317	525	601	560	400	720	869	558	789	324	347	292
CFSM	.37	1.50	1.47	.87	.86	2.60	1.60	.77	2.77	.52	1.03	.36
IN.	.43	1.67	1.69	1.00	.92	3.00	1.79	.89	3.08	.60	1.19	.40

CAL YR 1979 TOTAL 600472 MEAN 1645 MAX 14100 MIN 260 CFSM 1.35 IN 18.32
WTR YR 1980 TOTAL 546287 MEAN 1493 MAX 18100 MIN 292 CFSM 1.23 IN 16.67

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 mi^2 (46.4 km^2).

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 fair except those below 20 ft^3/s (0.57 m^3/s), which are poor.

AVERAGE DISCHARGE.--11 years, 19.3 ft^3/s (0.547 m^3/s), 14.64 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft^3/s (156 m^3/s) June 26, 1978, gage height, 13.31 ft (4.057 m); minimum daily, 0.47 ft^3/s (0.013 m^3/s) Dec. 2, 1971.

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)
June 2	1730	*555	15.7	*5.62	1.713

Minimum daily discharge, 1.8 ft^3/s (0.051 m^3/s) Sept. 14, 26, 27, 30..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	47	19	13	5.2	10	42	10	21	3.2	4.3	3.9
2	9.5	12	16	12	4.5	9.0	29	9.7	143	3.7	3.5	8.6
3	4.0	9.0	15	11	4.6	8.0	29	9.3	56	3.7	3.1	4.3
4	5.0	7.0	14	10	4.7	9.3	42	9.7	19	3.9	2.6	3.4
5	3.7	6.0	13	9.7	4.8	31	23	10	13	5.6	2.2	2.8
6	3.5	8.0	12	9.4	5.0	29	18	9.3	10	4.3	10	2.3
7	3.3	7.0	16	14	4.5	21	18	8.9	57	3.4	21	2.1
8	3.2	6.0	11	10	4.4	73	41	8.6	78	4.1	5.6	22
9	3.1	18	10	8.8	4.3	46	51	8.2	18	4.6	3.8	11
10	3.0	10	9.2	8.0	4.2	37	36	8.2	17	8.6	10	6.2
11	3.0	8.0	11	59	4.1	25	24	8.6	11	5.2	25	4.1
12	3.0	7.0	16	28	4.0	18	24	29	9.5	3.5	8.3	2.9
13	4.4	6.0	12	19	4.0	17	18	15	8.2	2.4	4.9	2.2
14	3.2	5.5	9.6	17	4.5	18	83	9.3	8.0	2.8	4.2	1.8
15	3.1	5.0	7.9	15	8.0	19	46	7.2	8.0	2.3	26	2.1
16	4.5	4.7	7.2	18	6.0	18	29	6.5	8.9	2.1	13	4.9
17	12	4.5	6.7	27	5.0	81	22	37	7.5	2.1	72	34
18	8.0	4.3	6.1	21	4.2	51	17	49	6.2	2.0	37	7.2
19	6.0	4.1	5.8	16	4.0	29	15	15	7.5	1.9	87	4.1
20	4.5	4.0	21	15	13	23	14	11	8.2	1.9	65	3.3
21	4.0	6.0	14	15	44	76	13	8.9	5.4	50	18	3.0
22	18	15	35	14	161	36	11	7.5	4.6	98	11	2.7
23	12	86	44	13	50	25	10	9.3	4.6	14	7.5	2.3
24	9.0	58	135	11	29	45	10	25	4.6	6.4	6.2	2.1
25	7.0	53	74	14	23	37	9.7	11	4.1	4.2	5.1	2.0
26	6.0	100	39	11	20	24	9.3	8.6	3.7	3.4	4.3	1.8
27	5.4	38	28	9.7	15	19	8.9	7.5	3.4	55	3.9	1.8
28	6.0	45	21	8.9	13	29	12	6.5	3.2	55	3.7	2.2
29	5.4	29	18	8.0	11	58	16	6.2	3.2	14	3.2	1.9
30	5.0	22	16	7.0	-----	99	11	6.2	2.8	7.7	3.2	1.8
31	8.0	-----	14	6.0	-----	97	-----	7.2	-----	5.3	3.0	-----
TOTAL	181.2	635.1	676.5	458.5	469.0	1117.3	731.9	383.4	554.6	384.3	477.6	154.8
MEAN	5.85	21.2	21.8	14.8	16.2	36.0	24.4	12.4	18.5	12.4	15.4	5.16
MAX	18	100	135	59	161	99	83	49	143	98	87	34
MIN	3.0	4.0	5.8	6.0	4.0	8.0	8.9	6.2	2.8	1.9	2.2	1.8
CFSM	.33	1.18	1.22	.83	.91	2.01	1.36	.69	1.03	.69	.86	.29
IN.	.38	1.32	1.41	.95	.97	2.32	1.52	.80	1.15	.80	.99	.32

CAL YR 1979 TOTAL 8264.7 MEAN 22.6 MAX 523 MIN 3.0 CFSM 1.26 IN 17.17
WTR YR 1980 TOTAL 6224.2 MEAN 17.0 MAX 161 MIN 1.8 CFSM .95 IN 12.93

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 fair.

AVERAGE DISCHARGE.--12 years, 6.21 ft³/s (0.176 m³/s), 14.54 in/yr (369 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)
June 2	0800	*482	13.7	*7.25	2.210
June 7	2200	204	5.78	5.84	1.780

Minimum daily discharge 0.22 ft³/s (0.006 m³/s) Sept. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	21	8.2	5.3	1.7	1.9	12	1.5	16	.98	.29	.38
2	2.4	14	5.6	3.9	1.6	1.7	8.5	1.4	167	.94	.28	.39
3	1.6	7.2	5.0	3.0	1.6	1.6	7.3	1.4	39	.94	.26	.39
4	1.7	4.8	4.5	2.8	1.6	1.5	7.3	1.3	14	.89	.26	.37
5	1.5	3.9	5.0	2.6	1.5	11	5.8	1.3	7.8	.88	.26	.36
6	1.4	3.5	5.0	2.4	1.5	8.4	4.4	1.3	4.9	.83	.32	.36
7	1.2	2.9	4.3	2.3	1.4	9.0	3.8	1.2	39	.79	.48	.36
8	1.0	2.9	3.3	2.1	1.4	69	3.9	1.1	35	.78	.33	.36
9	1.1	5.9	3.2	1.9	1.3	26	4.9	1.1	8.3	.75	.34	.36
10	1.0	7.9	3.2	2.1	1.3	19	5.0	1.0	11	1.1	.48	.34
11	1.2	4.8	3.0	18	1.2	11	3.3	1.1	4.7	.89	1.5	.26
12	1.2	3.9	2.8	10	1.2	7.1	5.5	1.3	3.4	.77	1.2	.22
13	.99	3.4	2.6	7.1	1.2	5.8	4.4	1.1	2.8	.73	.55	.22
14	.87	2.9	2.4	6.5	1.2	4.2	19	.95	2.5	.68	.46	.22
15	.89	2.8	2.4	6.2	1.3	6.9	15	.91	2.7	.61	.53	.22
16	1.5	2.5	2.4	7.3	1.2	8.2	11	.97	3.4	.56	.68	.30
17	2.8	2.4	2.0	8.4	1.1	23	7.7	20	2.2	.52	30	.54
18	2.3	2.3	1.9	6.7	1.1	16	6.3	36	2.0	.49	18	.40
19	2.2	2.3	1.9	5.8	1.1	10	5.1	13	1.8	.48	14	.32
20	2.0	2.1	1.9	5.0	4.1	8.0	3.6	6.5	1.6	.46	5.0	.29
21	1.9	2.1	2.0	4.1	31	65	2.8	4.1	1.5	.60	2.5	.29
22	2.2	2.6	13	4.2	32	20	2.5	3.1	1.4	1.1	1.5	.31
23	3.8	50	22	3.2	13	11	2.3	2.7	1.3	.72	.98	.35
24	2.9	54	54	2.7	8.0	10	2.1	2.5	1.3	.58	.76	.32
25	2.6	33	34	2.4	5.6	8.8	1.9	2.2	1.2	.49	.64	.32
26	2.3	54	17	2.2	4.4	6.9	1.8	1.8	1.2	.45	.58	.31
27	2.2	27	11	2.1	3.4	6.0	1.7	1.6	1.1	.95	.51	.28
28	2.2	64	8.3	2.1	2.7	5.7	1.9	1.4	1.1	1.4	.45	.26
29	2.0	22	7.3	2.0	2.2	12	1.8	1.4	1.3	.74	.42	.26
30	1.9	12	6.8	1.8	-----	16	1.6	1.4	1.1	.59	.40	.26
31	2.0	-----	6.1	1.8	-----	22	-----	1.6	-----	.39	.39	----
TOTAL	55.77	424.1	252.1	138.0	131.9	432.7	164.2	118.23	381.6	23.08	84.35	9.62
MEAN	1.80	14.1	8.13	4.45	4.55	14.0	5.47	3.81	12.7	.74	2.72	.32
MAX	3.8	64	54	18	32	69	19	36	167	1.4	30	.54
MIN	.87	2.1	1.9	1.8	1.1	1.5	1.6	.91	1.1	.39	.26	.22
CFSM	.31	2.43	1.40	.77	.78	2.41	.94	.66	2.19	.13	.47	.06
IN.	.36	2.72	1.62	.88	.85	2.77	1.05	.76	2.45	.15	.54	.06

CAL YR 1979 TOTAL 3106.69 MEAN 8.51 MAX 179 MIN .72 CFSM 1.47 IN 19.92
WTR YR 1980 TOTAL 2215.65 MEAN 6.05 MAX 167 MIN .22 CFSM 1.04 IN 14.21

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 mi² (437 km²).

PERIOD OF RECORD.--July 1941 to current year.

REVISED RECORDS.--WSP 1435: 1949(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 787.43 ft (240.009 m) National Geodetic Vertical Datum of 1929 (levels by Indianapolis Water Co.). Prior to June 27, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--39 years, 167 ft³/s (4.729 m³/s), 13.42 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft³/s (248 m³/s) Apr. 21, 1964, gage height, 9.88 ft (3.011 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Sept. 23, 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 12 ft (3.7 m) March 1913 (information by local resident).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (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. 9	0700	1490	42.2	5.97	1.820	June 3	1900	*2770	78.4	*7.49	2.283
Mar. 22	0500	1380	39.1	5.77	1.759	June 8	1800	1600	45.3	6.14	1.871

Minimum daily discharge, 42 ft³/s (1.19 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	177	352	207	105	115	525	138	158	90	62	65
2	113	359	280	188	105	110	392	132	1120	87	57	69
3	95	228	235	174	105	100	325	129	2520	84	57	65
4	82	167	210	163	105	120	343	125	1410	83	55	61
5	78	136	202	155	104	163	292	122	518	83	53	58
6	72	124	206	145	102	278	245	118	358	80	73	58
7	70	111	187	144	100	226	232	113	406	75	181	56
8	71	101	161	129	100	810	239	108	1490	71	97	59
9	71	110	144	126	98	1220	345	106	812	71	74	57
10	72	181	142	119	95	684	306	105	458	184	94	55
11	69	165	138	223	93	486	264	105	350	128	160	51
12	70	133	133	384	92	348	253	117	261	94	225	50
13	67	118	125	245	90	286	246	130	218	84	138	49
14	63	108	116	210	88	245	420	108	194	73	101	49
15	61	103	111	195	86	249	563	100	187	68	105	47
16	64	96	111	191	98	271	466	97	227	65	120	51
17	85	88	101	216	81	398	349	187	186	61	584	80
18	93	85	96	208	82	617	294	841	161	58	1050	70
19	82	84	96	181	82	425	256	583	145	56	750	57
20	74	82	95	169	92	334	227	367	142	53	415	52
21	73	79	91	160	204	792	207	269	132	56	257	49
22	73	80	171	157	782	1050	192	210	123	107	183	48
23	100	380	502	148	503	536	182	183	117	113	140	48
24	110	965	811	133	323	425	170	178	117	76	116	49
25	96	697	1020	145	245	413	154	182	112	64	103	46
26	87	836	619	131	188	333	148	155	105	60	93	44
27	81	607	429	120	160	281	145	134	101	65	84	45
28	80	943	333	115	140	262	156	123	96	118	77	44
29	78	841	277	110	130	393	158	117	102	103	72	43
30	72	467	252	110	----	416	144	116	103	77	69	42
31	69	----	230	105	----	653	----	140	-----	67	66	----
TOTAL	2441	8651	7976	5206	4578	13039	8238	5638	12429	2554	5711	1617
MEAN	78.7	288	257	168	158	421	275	182	414	82.4	184	53.9
MAX	113	965	1020	384	782	1220	563	841	2520	184	1050	80
MIN	61	79	91	105	81	100	144	97	96	53	53	42
CFSM	.47	1.70	1.52	.99	.94	2.49	1.63	1.08	2.45	.49	1.09	.32
IN.	.54	1.90	1.76	1.15	1.01	2.87	1.81	1.24	2.74	.56	1.26	.36

CAL YR 1979 TOTAL 95427 MEAN 261 MAX 3170 MIN 60 CFSM 1.54 IN 21.01
WTR YR 1980 TOTAL 78078 MEAN 213 MAX 2520 MIN 42 CFSM 1.26 IN 17.19

03351700 GEIST RESERVOIR NEAR OAKLANDON, IN

LOCATION.--Lat 39°54'26", long 85°59'07", in SW¼NE¼ sec.20, T.17 N., R.5 E., Marion County, Hydrologic Unit 05120201, in intake structure of reservoir on Fall Creek, 2.6 miles (4.2 km) northwest of Oaklandon, 17.6 miles (28.3 km) above mouth.

DRAINAGE AREA.--215 mi^2 (556 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 755.00 ft (230.124 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by a 36-inch (914 mm) valve. Minimum design capacity is essentially empty at invert on outlet conduit at elevation of 756.75 ft (230.657 m). Capacity at uncontrolled spillway elevation, 785 ft (239.3 m) is 21,180 acre-ft (26.1 hm^3). Reservoir is used for water supply for Indianapolis and recreation. Reservoir filled for first time on Mar. 17, 1943.

COOPERATION.--Records furnished by Indianapolis Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,360 acre-ft (33.7 hm^3) May 18, 1943, elevation, 788.02 ft (240.188 m); minimum, 11,230 acre-ft (13.8 hm^3) Jan. 5, 1964, elevation, 778.42 ft (237.262 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 23,430 acre-ft (28.9 hm^3) June 8, elevation, 786.14 ft (239.615 m); minimum, 21,270 acre-ft (26.2 hm^3) July 20, elevation, 785.05 ft (239.283 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	785.19	21,540	
Oct. 31	785.22	21,590	+50
Nov. 30	785.73	22,590	+1000
Dec. 31	785.41	21,960	-630
CAL YR 1979			+180
Jan. 31	785.26	21,670	-290
Feb. 29	785.35	21,840	+170
Mar. 31	785.71	22,550	+710
Apr. 30	785.29	21,730	-820
May 31	785.26	21,670	-60
June 30	785.23	21,610	-60
July 31	785.23	21,610	0
Aug. 31	785.26	21,670	+60
Sept. 30	785.15	21,460	-210
WTR YR 1980			-80

Diversion for municipal supply for city of Indianapolis

Water supply for the city of Indianapolis is from White River, Fall Creek, and Eagle Creek. Water from White River is diverted below White River near Nora (03351000) into Indianapolis Water Canal at Westfield Boulevard. Water from Fall Creek is diverted below Fall Creek at Millersville (03352500) at pumping station at Keystone Avenue. Water from Eagle Creek is taken from Eagle Creek Reservoir (see sta 03353450). The return flow of the diversion is made below White River at Indianapolis (03353000). Major return flow is made at mouth of Eagle Creek and minor return flow is made at Southport Road.

Diversion, monthly and yearly means in ft^3/s

Oct.	Nov.	Dec.	1979 Cal. year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	1980 Water year
168	151	154	161	153	150	152	152	176	172	207	186	175	166

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 in the district office.

REVISED RECORDS.--WSP 1335: 1930-31, 1933, 1936-38, 1942-43. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 722.16 ft (220.114 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1961, water-stage recorder at site 500 ft (152 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Geist Reservoir (See sta 03351700).

AVERAGE DISCHARGE.--51 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, 3,380 ft³/s (95.7 m³/s) June 8, gage height, 8.47 ft (2.582 m); minimum daily, 65 ft³/s (1.84 m³/s) Sept. 25, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	255	655	375	150	218	1150	222	355	139	82	105
2	116	417	503	347	145	180	890	206	1230	134	80	115
3	113	390	402	335	140	170	708	198	2840	123	81	106
4	116	293	358	328	135	205	670	188	2800	126	75	90
5	103	227	329	276	134	320	617	170	1290	124	67	84
6	94	198	326	263	130	469	502	161	774	117	84	83
7	86	182	293	249	129	463	455	150	758	98	280	80
8	84	161	274	244	127	978	468	146	2950	92	234	145
9	95	194	236	226	125	1730	665	136	2150	99	167	117
10	96	245	225	213	122	1460	666	132	1140	272	173	102
11	94	252	221	420	120	1080	575	136	770	266	277	77
12	91	219	225	670	116	787	536	224	581	185	290	70
13	86	192	212	557	113	608	520	244	465	145	280	67
14	82	174	186	454	110	499	796	202	409	109	204	67
15	78	154	174	394	105	479	1080	158	387	96	307	68
16	89	158	165	369	163	505	988	154	472	91	264	71
17	110	139	158	388	144	743	781	271	393	77	727	215
18	112	131	147	399	126	1100	620	1080	330	70	1370	145
19	105	126	147	359	127	918	519	1170	285	81	1750	106
20	105	129	144	330	139	719	441	841	264	74	1370	84
21	103	124	139	294	255	1310	406	602	236	106	715	76
22	118	127	274	276	923	1690	350	442	215	246	465	71
23	151	445	691	261	984	1210	328	363	215	206	301	74
24	158	1110	1300	251	672	970	298	339	224	145	224	69
25	142	1190	1630	262	491	885	267	424	202	105	183	65
26	124	1420	1230	241	372	725	257	347	183	87	161	66
27	109	1180	856	214	314	589	230	254	167	99	138	66
28	115	1190	654	197	280	556	229	204	159	117	129	66
29	109	1270	523	171	254	777	253	179	165	129	159	65
30	109	909	459	165	----	934	230	194	150	121	121	65
31	98	-----	422	155	----	1300	-----	223	-----	92	111	----
TOTAL	3269	13201	13558	9683	7145	24577	16493	9760	22559	3971	10869	2680
MEAN	105	440	437	312	246	793	550	315	752	128	351	89.3
MAX	158	1420	1630	670	984	1730	1150	1170	2950	272	1750	215
MIN	78	124	139	155	105	170	229	132	150	70	67	65
CFSM	.35	1.48	1.47	1.05	.83	2.66	1.85	1.06	2.52	.43	1.18	.30
IN.	.41	1.65	1.69	1.21	.89	3.07	2.06	1.22	2.82	.50	1.36	.33

CAL YR 1979 TOTAL 166866 MEAN 457 MAX 4750 MIN 78 CFSM 1.53 IN 20.83
WTR YR 1980 TOTAL 137765 MEAN 376 MAX 2950 MIN 65 CFSM 1.26 IN 17.20

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 (See sta 03350300) and Geist Reservoir (See sta 03351700), and by diversion of municipal water supply (See sta 03351700) by the Indianapolis Water Co.

AVERAGE DISCHARGE.--51 years (1904-5, 1930 to current year), 1,398 ft³/s (39.59 m³/s), 11.61 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 Co., discharge, 70,000 ft³/s (1,980 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,500 ft³/s (241 m³/s) and maximum (*):

Date	Time	Discharge (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. 10	0700	10000	283	10.83	3.300	June 8	1000	9390	266	10.52	3.206
Jun. 5	0100	*21700	615	*15.48	4.718						

Minimum daily discharge, 262 ft³/s (7.42 m³/s) Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	1330	3750	1850	740	1300	5090	1060	1070	1930	517	977
2	551	1580	2840	1670	700	1140	4130	999	3950	1280	425	863
3	480	1990	2260	1500	670	1080	3310	939	12300	980	379	707
4	510	1560	1930	1350	650	1110	3140	928	18900	835	374	710
5	467	1180	1780	1220	630	1460	3200	851	19300	780	304	559
6	448	933	1670	1150	610	1950	2780	827	10000	698	571	487
7	402	844	1600	1050	590	2520	2410	757	4520	616	2760	441
8	385	718	1460	1000	580	4120	2460	722	8380	546	3960	688
9	370	919	1250	874	560	8840	3080	690	6620	506	2190	577
10	381	1030	1120	842	550	9740	3360	672	4320	713	1550	461
11	375	1310	1100	1770	540	6960	2920	687	3240	900	1650	390
12	366	1300	1080	2320	530	4610	2630	1050	2520	780	1410	339
13	337	1060	1030	2700	518	3450	2380	1010	2020	706	1620	314
14	338	912	921	2240	560	2830	3070	877	1760	553	1430	302
15	313	835	859	1840	653	2480	4240	770	1580	451	2130	294
16	363	721	826	1650	709	2450	4530	690	1730	396	1290	386
17	458	718	785	1720	600	3340	3590	1140	1650	332	2120	1130
18	623	621	682	1840	560	5190	2870	2480	1400	314	2860	738
19	630	597	672	1790	600	5430	2410	3640	1290	287	5100	567
20	553	614	716	1610	612	4030	2120	2730	1200	276	5690	431
21	506	573	709	1420	677	4660	1900	1940	1560	773	3290	357
22	657	651	1330	1370	3750	6380	1710	1510	1330	1610	2140	317
23	750	1920	2540	1260	6430	6620	1540	1190	1080	1130	1500	262
24	743	3770	5780	1230	5140	4680	1450	1540	1060	788	1130	618
25	750	5720	7550	1180	3300	4360	1300	1320	1250	584	889	764
26	643	7450	7250	1130	2440	4220	1220	1320	1260	494	782	547
27	584	7120	5040	1030	1950	3390	1140	983	982	578	657	437
28	559	6600	3530	940	1750	2940	1120	772	887	1030	595	350
29	534	6330	2750	860	1530	3180	1180	679	894	1120	580	293
30	496	5790	2340	820	-----	3790	1160	679	1600	972	556	274
31	487	-----	2070	780	-----	5140	-----	698	------	684	679	-----
TOTAL	15422	66696	69220	44006	39129	123390	77440	36150	119653	23642	51128	15580
MEAN	497	2223	2233	1420	1349	3980	2581	1166	3988	763	1649	519
MAX	750	7450	7550	2700	6430	9740	5090	3640	19300	1930	5690	1130
MIN	313	573	672	780	518	1080	1120	672	887	276	304	262
CFSM	.30	1.36	1.37	.87	.83	2.43	1.58	.71	2.44	.47	1.01	.32
IN.	.35	1.52	1.57	1.00	.89	2.81	1.76	.82	2.72	.54	1.16	.35

CAL YR 1979 TOTAL 769393 MEAN 2108 MAX 18600 MIN 313 CFSM 1.29 IN 17.51
WTR YR 1980 TOTAL 681456 MEAN 1862 MAX 19300 MIN 262 CFSM 1.14 IN 15.50

03353120 PLEASANT RUN AT ARLINGTON AVENUE AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°03'50", in SW¼NW¼ sec.2, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank 46 ft (14 m) upstream from Arlington Avenue bridge in Indianapolis, 0.5 mile (0.8 km) downstream from small left-bank tributary, and at mile 7.9 (12.7 km).

DRAINAGE AREA.--7.58 mi² (19.63 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft (237.744 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--20 years (1960 to current year), 7.71 ft³/s (0.218 m³/s), 13.81 in/yr (351 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s (73.6 m³/s) June 25, 1978, gage height, 13.86 ft (4.225 m); no flow at times in 1960-62.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1956 reached a stage of 16.0 ft (4.88 m), from information by local resident.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Aug. 19	1615	*521	14.8	*6.23	1.899

Minimum daily discharge, 0.51 ft³/s (0.014 m³/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	57	4.7	2.3	1.0	2.2	12	1.6	29	.82	.94	17
2	8.9	5.1	3.1	2.3	1.0	2.0	7.6	1.8	80	1.0	.92	6.3
3	1.3	1.8	2.7	2.1	1.0	2.0	6.5	1.6	17	.90	1.0	1.2
4	4.0	1.1	2.6	2.0	1.0	4.0	5.3	1.2	6.2	.90	1.0	.90
5	1.1	.98	2.4	1.8	1.1	22	3.7	1.2	3.5	1.0	1.2	.82
6	1.1	1.4	2.0	1.6	1.2	12	3.0	.98	2.3	.75	35	.82
7	1.1	1.2	1.8	1.7	1.1	13	3.8	.96	50	.73	25	.71
8	1.4	.96	1.6	1.4	1.0	30	16	1.6	19	.81	2.8	15
9	2.7	20	1.4	1.3	1.1	12	14	.90	5.4	.86	1.3	8.9
10	1.1	6.5	1.5	1.4	1.2	8.7	8.8	1.2	12	1.0	3.3	3.0
11	1.5	2.1	1.6	54	1.2	5.5	5.6	1.7	2.8	.98	16	1.1
12	1.8	1.3	3.1	10	1.0	4.3	15	20	2.1	.97	1.9	.80
13	1.1	1.1	1.3	5.3	1.1	7.0	5.7	5.5	1.8	1.2	1.3	.71
14	.77	1.0	1.1	4.7	1.5	8.1	40	2.2	1.5	1.2	1.2	.62
15	.79	1.0	3.9	3.9	4.0	6.1	16	1.6	3.5	1.2	61	.59
16	5.7	1.0	3.2	5.5	3.0	4.9	8.5	4.4	11	1.4	11	7.2
17	3.8	1.1	.86	4.4	2.5	34	6.0	47	2.3	1.3	30	49
18	1.1	1.0	.83	3.1	2.2	13	4.6	23	1.7	1.2	46	3.1
19	1.1	.85	.83	2.5	2.0	7.7	3.6	5.5	2.8	1.2	82	1.3
20	1.1	.81	.82	2.8	8.0	7.9	3.0	3.0	1.9	1.1	14	.82
21	1.2	.87	4.3	2.2	15	74	2.8	2.2	1.3	42	5.0	.67
22	25	14	48	2.0	8.0	12	3.4	1.7	1.2	34	2.4	.66
23	9.1	84	33	1.8	5.4	7.3	2.4	6.8	6.4	4.3	1.5	.63
24	3.0	29	90	3.0	4.5	25	2.3	45	2.5	2.0	1.1	.58
25	1.8	53	31	5.0	3.8	11	2.0	7.8	1.4	1.5	1.0	.68
26	1.2	49	11	2.0	3.3	6.8	1.7	3.5	1.4	1.2	.97	.55
27	1.0	26	6.9	1.7	2.8	5.0	1.4	2.3	1.4	14	.92	.54
28	2.1	36	4.9	1.3	2.5	18	4.1	2.0	4.0	3.3	.97	.51
29	.97	10	3.8	1.2	2.3	18	3.5	1.9	2.9	1.3	.93	.65
30	.96	6.6	3.3	1.1	----	45	2.6	26	1.3	1.0	.82	.52
31	.96	------	2.7	1.0	----	25	-----	15	-----	.98	.79	------
TOTAL	99.75	415.77	280.24	136.4	84.8	453.5	214.9	241.14	279.6	126.10	353.26	125.88
MEAN	3.22	13.9	9.04	4.40	2.92	14.6	7.16	7.78	9.32	4.07	11.4	4.20
MAX	25	84	90	54	15	74	40	47	80	42	82	49
MIN	.77	.81	.82	1.0	1.0	2.0	1.4	.90	1.2	.73	.79	.51
CFSM	.43	1.83	1.19	.58	.39	1.93	.95	1.03	1.23	.54	1.50	.55
IN.	.49	2.04	1.38	.67	.42	2.23	1.05	1.18	1.37	.62	1.73	.62

CAL YR 1979 TOTAL 4315.16 MEAN 11.8 MAX 371 MIN .69 CFSM 1.56 IN 21.17
WTR YR 1980 TOTAL 2811.34 MEAN 7.68 MAX 90 MIN .51 CFSM 1.01 IN 13.80

03353160 PLEASANT RUN AT BROOKVILLE ROAD AT INDIANAPOLIS, IN

LOCATION.--Lat 39°45'52", long 86°05'43", in NE¼NW¼ sec.9, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Brookville Road bridge in Indianapolis, 2.2 miles (3.5 km) downstream from Arlington Avenue, and at mile 5.7 (9.2 km).

DRAINAGE AREA.--10.1 mi^2 (26.2 km^2).

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

REVISED RECORDS.--WSP 1909: 1960. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 752.00 ft (229.210 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--20 years (1960 to current year), 10.11 ft^3/s (0.286 m^3/s), 13.59 in/yr (345 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,000 ft^3/s (85.0 m^3/s) June 25, 1978, gage height, 11.28 ft (3.438 m); no flow at times in 1960-68.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 520 ft^3/s (14.73 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May. 24	1215	*617	17.5	*5.49	1.673
Aug. 15	0145	520	14.7	5.07	1.545

Minimum daily discharge, 0.63 ft^3/s (0.018 m^3/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	66	3.9	3.0	1.4	3.0	16	2.8	31	1.2	1.1	27
2	9.0	3.9	3.0	2.8	1.4	2.7	12	2.1	110	1.2	.98	7.5
3	1.6	1.7	3.0	2.8	1.4	2.7	10	2.6	12	1.4	1.1	1.5
4	3.6	1.2	2.6	2.6	1.5	5.0	9.8	2.5	4.5	1.3	1.1	1.1
5	1.4	1.1	2.5	2.5	1.6	30	7.9	2.1	3.0	1.3	1.1	.98
6	1.4	1.6	2.5	2.4	1.7	17	7.5	2.0	2.6	1.2	47	.88
7	1.7	1.4	2.5	3.0	1.6	14	7.9	1.3	52	.98	23	.82
8	2.0	1.1	2.5	2.3	1.5	38	21	2.5	20	1.2	1.8	34
9	2.6	17	2.5	2.1	1.6	17	19	2.0	7.6	1.2	1.7	16
10	1.6	5.0	2.5	2.2	1.7	13	12	1.3	13	1.2	4.0	5.4
11	1.6	1.7	2.6	52	1.7	9.8	9.3	2.6	2.6	1.2	19	1.3
12	2.1	1.4	3.9	11	1.5	8.8	19	23	2.3	1.2	2.5	.92
13	1.3	1.2	2.5	8.4	1.6	11	9.8	5.7	2.0	1.4	1.6	.84
14	1.1	1.1	2.1	5.7	2.3	12	45	2.6	1.8	1.3	1.4	.80
15	1.1	1.1	3.4	4.8	5.0	11	19	2.0	2.2	1.3	78	.74
16	4.2	1.1	3.9	5.7	4.0	9.8	8.8	3.5	12	1.4	11	16
17	3.2	1.2	1.8	5.4	3.3	36	6.4	47	2.1	1.4	37	65
18	1.4	1.6	1.3	3.9	2.8	18	5.4	28	1.9	1.3	62	5.4
19	1.1	1.1	1.1	3.5	2.5	12	4.5	4.8	2.1	1.4	100	1.4
20	1.2	.80	1.0	3.7	11	12	3.9	3.2	2.1	1.3	29	.78
21	1.1	.88	6.0	3.5	20	72	3.9	2.6	1.6	41	6.0	.74
22	23	9.2	42	3.2	11	16	4.8	2.1	1.4	30	2.7	.71
23	6.8	76	30	2.9	7.4	11	3.9	7.0	7.0	2.8	1.9	.68
24	2.8	28	95	3.0	6.0	26	3.5	56	2.3	1.8	1.3	.69
25	1.8	44	27	6.6	5.0	14	2.8	5.8	1.6	1.4	1.1	.72
26	1.4	46	9.3	3.5	4.3	10	3.0	3.6	1.4	1.3	1.0	.70
27	1.4	18	6.4	2.6	3.8	8.8	2.6	3.0	1.4	16	1.0	.67
28	2.1	30	4.8	2.2	3.5	19	4.5	2.8	5.0	5.0	1.2	.63
29	1.4	7.1	3.9	1.8	3.2	21	4.8	19	2.5	1.7	.98	.64
30	1.7	4.8	3.5	1.6	-----	47	3.5	19	1.6	1.2	.93	.68
31	1.8	------	3.2	1.5	-----	29	-----	16	-----	.98	.85	------
TOTAL	98.5	376.28	282.2	162.2	115.3	556.6	291.5	280.5	312.6	128.56	443.34	195.22
MEAN	3.18	12.5	9.10	5.23	3.98	18.0	9.72	9.05	10.4	4.15	14.3	6.51
MAX	23	76	95	52	20	72	45	56	110	41	100	65
MIN	1.1	.80	1.0	1.5	1.4	2.7	2.6	1.3	1.4	.98	.85	.63
CFSM	.32	1.24	.90	.52	.39	1.78	.96	.90	1.03	.41	1.42	.65
IN.	.36	1.39	1.04	.60	.42	2.05	1.07	1.03	1.15	.47	1.63	.72

CAL YR 1979 TOTAL 5095.80 MEAN 14.0 MAX 479 MIN .80 CFSM 1.39 IN 18.77
WTR YR 1980 TOTAL 3242.80 MEAN 8.86 MAX 110 MIN .63 CFSM .88 IN 11.94

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 mi^2 (11.40 km^2).

WATER-DISCHARGE RECORDS

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

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

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

AVERAGE DISCHARGE.--10 years, 5.41 ft^3/s (0.153 m^3/s), 16.70 in/yr (424 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 770 ft^3/s (21.8 m^3/s) June 25, 1978, gage height, 7.77 ft (2.368 m); minimum daily, 0.54 ft^3/s (0.015 m^3/s) Jan. 18, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 80 ft^3/s (2.27 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)
Aug. 15	0200	*342	9.69	*5.35	1.631	Mar. 30	1600	109	3.09	3.52	1.073
Aug. 19	1730	81	2.29	3.20	.975	May 24	1145	175	4.96	4.10	1.250
Sept. 1	1645	126	3.57	3.68	1.122	June 2	1700	139	3.94	3.79	1.155
Sept. 17	0130	86	2.44	3.40	1.036	June 28	1915	152	4.30	3.91	1.192
Dec. 24	0500	94	2.66	3.37	1.027	Aug. 6	2115	108	3.06	3.51	1.070
Mar. 21	0500	92	2.61	3.35	1.021	Aug. 10	2330	87	2.46	3.29	1.003

Minimum daily discharge, 1.1 ft^3/s (0.031 m^3/s) Oct. 14.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	19	2.7	2.5	1.2	2.1	7.0	3.1	9.8	1.8	1.4	16
2	3.2	2.4	2.1	2.3	1.2	2.0	4.9	3.1	44	1.8	1.3	7.0
3	1.4	1.9	1.8	2.1	1.2	1.9	4.4	2.5	10	1.8	1.3	2.6
4	2.0	1.8	1.8	2.0	1.2	1.9	4.0	2.0	4.6	1.7	1.4	2.1
5	1.6	1.8	1.8	1.8	1.2	17	3.2	2.0	4.0	1.5	1.2	1.7
6	1.5	2.0	1.8	1.6	1.2	5.7	2.8	2.1	3.7	1.4	11	1.6
7	1.4	1.8	1.7	2.0	1.2	5.0	3.1	2.1	6.3	1.4	6.9	1.5
8	1.7	1.7	2.0	1.7	1.2	12	8.1	2.0	4.0	1.4	1.6	3.5
9	2.3	6.8	1.8	1.6	1.2	5.4	6.0	1.9	2.5	1.4	1.4	2.0
10	1.4	2.3	1.8	1.6	1.2	4.2	5.1	2.0	3.8	1.5	2.9	1.6
11	2.0	1.6	1.8	23	1.2	3.1	3.6	2.7	2.4	1.4	13	1.6
12	1.9	2.1	2.6	4.7	1.2	2.7	8.1	5.0	2.0	1.4	1.9	1.7
13	1.2	1.5	1.8	2.8	1.2	4.0	3.9	2.4	2.0	1.4	1.5	1.6
14	1.1	1.5	1.6	3.0	1.2	3.9	21	1.9	1.9	1.4	1.7	1.7
15	1.2	1.5	1.6	2.5	3.7	3.6	8.4	1.8	1.8	1.4	49	1.9
16	3.1	1.5	1.6	3.1	2.9	3.2	5.1	3.1	2.0	1.5	9.1	5.2
17	1.9	1.4	1.5	3.0	2.6	14	4.1	15	1.7	1.5	17	19
18	1.4	1.3	1.5	2.4	2.3	6.1	3.6	6.2	1.7	1.5	18	2.3
19	1.9	1.2	1.5	2.1	2.1	4.0	3.1	3.2	3.5	1.4	23	2.0
20	2.3	1.2	1.4	2.2	4.0	4.1	2.8	2.5	1.7	1.4	7.9	1.7
21	2.5	1.4	3.8	2.0	10	34	2.5	2.2	1.6	15	3.7	1.5
22	11	4.9	22	1.9	7.0	5.8	2.5	2.0	1.5	11	3.0	2.4
23	3.5	21	12	1.8	4.5	3.8	2.5	9.2	3.3	2.2	2.2	1.8
24	1.9	7.5	40	2.8	3.6	12	2.5	36	1.8	1.8	2.1	1.3
25	1.8	14	14	2.6	3.0	5.1	2.5	6.5	1.6	1.7	2.2	1.4
26	1.7	16	6.0	1.7	2.7	3.5	2.4	3.6	1.6	1.6	2.1	1.4
27	1.8	9.6	4.3	1.5	2.4	2.9	2.2	3.0	1.6	7.9	2.0	1.5
28	1.8	13	3.8	1.4	2.3	8.7	4.8	2.9	12	2.2	2.0	1.3
29	1.5	4.3	3.5	1.3	2.2	8.5	4.0	2.7	2.8	1.7	2.0	1.4
30	2.0	3.2	3.3	1.3	----	28	3.3	14	1.7	1.5	1.8	1.4
31	2.7	-----	2.8	1.3	----	15	-----	7.7	-----	1.4	1.7	----
TOTAL	71.5	151.2	151.7	87.6	72.1	233.2	141.5	156.4	142.9	78.0	197.3	93.7
MEAN	2.31	5.04	4.89	2.83	2.49	7.52	4.72	5.05	4.76	2.52	6.36	3.12
MAX	11	21	40	23	10	34	21	36	44	15	49	19
MIN	1.1	1.2	1.4	1.3	1.2	1.9	2.2	1.8	1.5	1.4	1.2	1.3
CFSM	.53	1.15	1.11	.64	.57	1.71	1.07	1.15	1.08	.57	1.45	.71
IN.	.60	1.28	1.28	.74	.61	1.97	1.20	1.32	1.21	.66	1.67	.79

CAL YR 1979 TOTAL 2276.89 MEAN 6.24 MAX 143 MIN .92 CFSM 1.42 IN 19.25
WTR YR 1980 TOTAL 1577.10 MEAN 4.31 MAX 49 MIN 1.1 CFSM .98 IN 13.33

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'56", long 86°15'22", in SW¼NW¼ sec.1, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of bridge on State Highway 334 at Zionsville, 200 ft (61 m) upstream from Long Branch, and at mile 24.7 (39.7 km).

DRAINAGE AREA.--103 mi² (267 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 816.85 ft (248.976 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--23 years, 98.9 ft³/s (2.801 m³/s), 13.04 in/yr (331 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)
Mar. 8	1300	2270	64.3	8.29	2.527	June 8	0500	*3610	102	*9.84	2.999
June 2	2000	1760	49.8	7.40	2.256	Aug. 19	2200	2690	76.2	8.74	2.664

Minimum daily discharge, 4.9 ft³/s (0.14 m³/s) Sept. 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1969 to September 1979 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	171	139	70	34	58	314	56	24	20	8.2	13
2	37	178	109	62	32	52	225	53	695	19	7.1	14
3	40	114	94	54	29	45	182	52	586	17	6.8	13
4	28	81	88	49	26	49	169	50	218	17	10	11
5	22	65	89	47	25	116	138	47	136	20	6.2	9.7
6	20	58	94	42	29	169	121	44	98	15	46	8.6
7	18	50	85	44	28	115	118	42	333	13	334	8.3
8	17	45	69	78	27	1340	168	38	1760	12	82	46
9	16	62	61	33	26	589	251	42	329	11	60	30
10	16	152	61	31	26	447	225	34	218	73	46	18
11	16	106	59	124	28	266	171	35	149	21	83	11
12	16	79	56	153	27	178	153	37	108	14	57	9.3
13	17	67	50	103	25	137	130	39	84	11	30	8.7
14	16	56	46	86	24	107	345	33	71	12	23	7.9
15	17	51	44	71	30	114	305	28	67	8.4	35	8.1
16	19	47	41	78	33	137	237	27	148	7.4	52	9.8
17	59	43	36	124	30	527	181	39	95	6.8	256	73
18	64	42	31	117	26	429	144	53	66	6.7	337	50
19	48	39	27	95	26	260	123	44	58	6.4	1050	27
20	41	36	25	86	34	195	110	44	55	6.1	955	18
21	36	33	22	79	169	389	100	41	40	18	313	14
22	39	40	29	79	854	240	89	33	35	18	167	11
23	151	262	96	69	317	175	82	34	35	14	99	8.7
24	110	284	441	109	189	254	74	44	55	8.5	63	7.8
25	76	282	434	63	137	265	67	34	39	6.4	45	7.4
26	58	1010	251	54	110	184	62	27	30	5.7	32	6.1
27	49	388	167	49	88	147	60	22	27	104	28	5.8
28	45	380	123	46	78	137	62	21	24	50	21	5.4
29	39	243	102	41	68	201	65	20	24	22	18	5.2
30	34	173	92	37	----	370	59	19	22	14	15	4.9
31	31	----	82	35	----	606	----	20	----	10	14	-----
TOTAL	1201.8	4637	3143	2208	2575	8298	4530	1152	5629	587.4	4299.3	470.7
MEAN	38.8	155	101	71.2	88.8	268	151	37.2	188	18.9	139	15.7
MAX	151	1010	441	153	854	1340	345	56	1760	104	1050	73
MIN	6.8	33	22	31	24	45	59	19	22	5.7	6.2	4.9
CFSM	.38	1.51	.98	.69	.86	2.60	1.47	.36	1.83	.18	1.35	.15
IN.	.43	1.67	1.14	.80	.93	3.00	1.64	.42	2.03	.21	1.55	.17

CAL YR 1979 TOTAL 56359.2 MEAN 154 MAX 3350 MIN 4.6 CFSM 1.50 IN 20.35
WTR YR 1980 TOTAL 38731.2 MEAN 106 MAX 1760 MIN 4.9 CFSM 1.03 IN 13.99

03353450 EAGLE CREEK RESERVOIR NEAR INDIANAPOLIS, IN

LOCATION.--Lat 39°49'20", long 86°18'11", in NW¼NW¼ sec. 22, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, in outlet structure of reservoir on Eagle Creek, 800 ft (240 m) upstream from Interstate Highway 74, 0.5 mile (0.8 km) downstream from School Branch, 1.0 mile (1.6 km) northeast of Clermont, and 2 miles (3.2 km) west of Indianapolis.

DRAINAGE AREA.--162 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, 24,620 acre-ft (30.4 hm^3) June 2, elevation, 790.44 ft (240.926 m); minimum, 22,920 acre-ft (28.3 hm^3) Oct. 16, elevation, 789.17 ft (240.539 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	789.42	23,250	
Oct. 31	790.06	24,080	+830
Nov. 30	790.00	24,000	-80
Dec. 31	790.00	24,000	0
CAL YR 1979			-140
Jan. 31	789.93	23,910	-90
Feb. 29	790.03	24,040	+130
Mar. 31	790.14	24,200	+160
Apr. 30	790.04	24,060	-140
May 31	790.02	24,030	-30
June 30	789.98	23,970	-60
July 31	790.02	24,030	+60
Aug. 31	790.00	24,000	-30
Sept. 30	789.87	23,830	-170
WTR YR 1980			+580

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 mi^2 (451 km^2).

PERIOD OF RECORD.--November 1938 to current year.

REVISED RECORDS.--WSP 953: 1939. WSP 1625: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 699.00 ft (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.--41 years (1939 to current year), 155 ft^3/s (4.390 m^3/s), 12.10 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,800 ft^3/s (816 m^3/s) June 28, 1957, gage height, 23.59 ft (7.190 m), from rating curve extended above 9,000 ft^3/s (255 m^3/s) on basis of a combined current-meter measurement and slope-area measurement; no flow for several days in August 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 23.2 ft (7.07 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,800 ft^3/s (79.3 m^3/s) June 8, gage height, 6.28 ft (1.914 m); minimum daily, 7.5 ft^3/s (0.21 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	298	135	80	48	95	541	121	48	18	12	16
2	15	219	143	45	28	60	313	35	651	17	12	16
3	15	109	155	63	30	70	290	87	979	17	12	12
4	16	96	150	60	34	76	286	33	309	17	12	12
5	20	97	108	60	65	157	153	32	167	18	11	12
6	19	23	54	57	34	258	192	98	115	17	15	11
7	18	91	54	27	28	132	164	26	112	16	298	12
8	18	23	56	54	43	1100	267	27	1690	15	75	18
9	18	119	23	23	43	721	404	24	455	15	66	11
10	18	170	32	52	27	562	323	24	237	16	14	12
11	18	148	46	317	26	516	275	22	158	15	81	12
12	18	112	54	217	28	286	223	122	95	15	14	11
13	19	27	56	86	29	166	175	83	88	15	20	11
14	24	93	29	100	30	122	473	24	36	15	46	10
15	19	53	23	68	31	197	504	48	84	14	113	11
16	22	19	49	86	65	178	279	25	114	11	22	12
17	19	99	28	125	41	601	291	117	95	9.2	307	29
18	18	20	22	167	27	642	182	204	23	9.0	293	105
19	18	88	21	100	25	366	140	36	104	9.0	535	11
20	17	27	23	49	62	256	145	88	20	9.1	1140	9.1
21	17	18	22	71	321	577	116	24	75	26	341	8.3
22	27	82	84	78	1170	352	104	90	20	23	145	8.2
23	23	408	186	71	500	242	89	25	20	11	118	8.8
24	21	521	582	82	238	349	98	85	19	11	21	8.7
25	19	377	772	108	269	430	96	23	83	10	19	7.6
26	19	1320	503	60	106	215	31	82	18	11	74	7.9
27	17	678	308	43	116	234	84	22	17	168	12	7.9
28	19	572	125	34	160	227	102	21	17	146	12	7.6
29	18	338	113	75	84	294	52	20	17	89	12	7.7
30	17	127	84	41	----	471	82	20	18	13	13	7.5
31	17	----	98	45	----	911	----	20	----	12	13	-----
TOTAL	580	6372	4138	2544	3708	10863	6474	1708	5884	807.3	3878	433.3
MEAN	18.7	212	133	82.1	128	350	216	55.1	196	26.0	125	14.4
MAX	27	1320	772	317	1170	1100	541	204	1690	168	1140	105
MIN	15	18	21	23	25	60	31	20	17	9.0	11	7.5
CFSM	.11	1.22	.76	.47	.74	2.01	1.24	.32	1.13	.15	.72	.08
IN.	.12	1.36	.88	.54	.79	2.32	1.38	.37	1.26	.17	.83	.09

CAL YR 1979 TOTAL 92942.0 MEAN 255 MAX 5000 MIN 13 CFSM 1.47 IN 19.87
WTR YR 1980 TOTAL 47389.6 MEAN 129 MAX 1690 MIN 7.5 CFSM .74 IN 10.13

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 fair. High-water flow is diverted from Dry Run basin into Little Eagle Creek above gage.

AVERAGE DISCHARGE.--16 years (water years 1965 to current year) 20.6 ft^3/s (0.583 m^3/s), 11.70 in/yr (297 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)
June 2	unknown	*500	14.2	*unknown	

Minimum daily discharge, 1.4 ft^3/s (0.040 m^3/s) July 26.

NOTE.--No gage-height record June 2, 12 to July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	67	15	13	6.5	13	65	15	25	4.3	8.6	7.0
2	12	17	11	12	6.1	12	49	14	219	4.1	7.4	22
3	3.6	9.5	9.2	11	5.7	10	53	14	88	4.0	7.1	8.4
4	4.6	6.9	9.1	9.8	5.8	13	91	13	20	4.5	6.2	6.4
5	3.0	5.2	8.6	9.2	5.7	53	48	13	11	6.0	6.1	5.6
6	2.4	4.7	8.6	7.4	6.1	39	37	12	6.9	4.0	34	4.8
7	2.1	3.8	8.3	7.3	7.1	33	35	12	34	3.4	51	4.0
8	2.0	3.1	7.1	6.3	5.7	87	85	11	60	2.9	12	22
9	1.9	4.5	6.0	6.2	5.7	62	96	10	13	2.5	8.0	9.7
10	1.9	15	6.0	5.7	6.0	57	68	13	10	15	7.2	7.0
11	1.9	8.0	5.7	85	6.1	37	47	11	8.6	5.0	30	5.4
12	1.9	6.0	5.9	35	5.8	27	47	64	7.2	3.2	8.5	4.5
13	2.5	5.0	5.4	24	5.3	27	37	29	6.9	2.5	6.5	3.7
14	2.1	4.3	4.4	21	5.2	28	149	18	7.0	3.5	6.3	3.0
15	2.0	3.9	4.2	18	16	33	70	14	8.0	2.5	93	3.8
16	10	3.6	4.0	23	12	34	47	17	15	2.0	28	11
17	8.2	3.3	3.7	33	9.2	117	35	82	11	1.7	119	62
18	3.0	3.1	3.8	23	6.2	72	28	119	8.0	1.6	82	5.2
19	2.0	2.9	3.8	18	6.5	46	25	42	10	1.6	73	2.7
20	1.6	2.7	3.8	16	17	38	22	29	13	1.5	56	2.1
21	2.3	2.7	8.1	14	51	105	21	23	9.0	52	22	1.8
22	15	10	40	14	49	50	19	16	7.0	58	14	1.7
23	8.0	90	54	11	38	37	18	17	7.0	4.4	11	1.9
24	6.0	56	198	14	41	73	17	30	12	2.2	8.9	1.8
25	5.0	61	103	14	32	55	16	23	8.0	1.7	8.0	1.7
26	4.3	112	49	9.9	24	38	14	16	6.5	1.4	7.3	1.7
27	3.7	40	32	8.4	20	31	14	12	5.7	96	6.5	1.6
28	3.2	48	24	8.0	17	52	22	10	5.2	69	5.8	1.6
29	2.8	27	20	7.6	15	87	23	9.8	4.8	20	5.1	1.6
30	2.5	19	18	7.4	-----	146	17	9.0	4.5	13	4.5	1.8
31	3.0	-----	15	6.8	-----	132	----	9.0	-----	9.7	4.0	-----
TOTAL	134.5	645.2	694.7	499.0	436.7	1644	1315	726.8	651.3	403.2	747.0	217.5
MEAN	4.34	21.5	22.4	16.1	15.1	53.0	43.8	23.4	21.7	13.0	24.1	7.25
MAX	15	112	198	85	51	146	149	119	219	96	119	62
MIN	1.6	2.7	3.7	5.7	5.2	10	14	9.0	4.5	1.4	4.0	1.6
CFSM	.18	.90	.94	.67	.63	2.22	1.83	.98	.91	.54	1.01	.30
IN.	.21	1.00	1.08	.78	.68	2.56	2.05	1.13	1.01	.63	1.16	.34

CAL YR 1979 TOTAL 11461.7 MEAN 31.4 MAX 903 MIN 1.3 CFSM 1.31 IN 17.84
WTR YR 1980 TOTAL 8114.9 MEAN 22.2 MAX 219 MIN 1.4 CFSM .93 IN 12.63

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 and period of no gage-height record, which are poor.

AVERAGE DISCHARGE.--10 years, 19.9 ft³/s (0.564 m³/s), 17.32 in/yr (440 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, 0.49 ft³/s (0.014 m³/s) Oct. 9, 1978.

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)
Nov. 26	0015	333	9.43	4.39	1.338	June 28	1930	309	8.75	4.29	1.308
Dec. 24	0715	316	8.95	4.32	1.317	Aug. 19	unknown	*608	17.2	*5.36	1.634
May. 24	1145	438	12.4	4.79	1.460						

Minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Aug. 5.

NOTE.--No gage-height record Aug. 8 to Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	50	18	11	4.0	8.0	39	7.4	17	2.6	1.4	2.2
2	14	9.2	14	9.7	4.0	7.0	27	7.7	94	1.9	1.1	15
3	3.0	5.3	12	9.0	4.0	7.0	22	6.4	43	1.9	1.5	6.0
4	4.1	3.9	11	8.4	4.0	9.0	20	6.0	17	1.9	1.1	4.0
5	2.5	3.2	11	7.8	4.6	47	15	5.8	10	1.9	1.0	3.2
6	1.9	3.1	11	7.3	5.0	34	14	5.6	7.7	1.8	15	2.9
7	1.9	3.0	11	7.0	4.5	23	14	5.2	14	1.6	24	2.6
8	2.6	2.6	8.4	6.7	4.0	63	27	5.0	18	1.5	4.3	4.1
9	3.8	15	7.7	6.4	4.2	35	27	4.7	7.1	1.4	3.5	3.6
10	4.6	11	7.9	6.0	4.5	27	23	4.6	12	1.4	16	4.5
11	2.6	5.7	8.1	86	4.3	17	17	5.1	5.2	1.2	28	3.1
12	2.8	4.3	9.2	33	4.0	13	33	13	5.2	1.2	10	2.3
13	2.8	3.7	8.2	18	4.2	14	20	8.6	4.5	1.2	4.9	2.0
14	2.3	3.1	7.1	16	4.5	15	76	5.8	4.0	1.1	7.0	1.9
15	2.3	2.8	6.7	14	15	17	43	4.5	4.1	1.1	150	1.8
16	3.5	2.7	6.7	16	13	15	28	5.6	6.2	1.1	52	11
17	5.0	2.5	6.1	18	8.5	49	20	43	3.3	1.2	60	36
18	2.8	2.4	6.1	14	7.0	32	16	34	3.5	1.4	56	5.5
19	2.4	2.4	6.2	11	6.0	19	14	15	7.2	1.4	400	2.8
20	3.3	2.3	5.7	11	13	16	12	10	4.1	1.5	200	2.1
21	3.8	2.1	8.3	9.8	35	142	11	8.0	2.9	20	54	1.8
22	18	8.6	88	8.8	25	43	9.8	6.7	2.5	22	26	2.3
23	13	124	74	7.8	20	27	9.1	17	5.7	4.6	15	1.8
24	4.6	71	169	9.4	17	52	8.5	137	4.6	2.1	10	1.6
25	3.3	65	84	12	14	34	7.9	47	2.7	1.6	7.1	1.5
26	2.7	139	39	8.4	12	23	7.5	20	2.4	1.4	5.8	1.4
27	2.7	55	25	6.2	10	18	7.4	11	2.2	16	5.0	1.4
28	3.2	101	19	5.0	9.0	32	11	7.9	20	5.5	4.2	1.4
29	2.9	39	16	4.8	8.0	52	9.9	8.0	10	2.3	3.4	1.5
30	2.9	25	14	4.5	-----	89	7.8	25	3.6	1.8	3.0	1.8
31	4.3	-----	12	4.2	-----	75	-----	13	-----	1.4	2.5	-----
TOTAL	137.0	767.9	730.4	397.2	272.3	1054.0	596.9	503.6	343.7	109.0	1172.8	133.1
MEAN	4.42	25.6	23.6	12.8	9.39	34.0	19.9	16.2	11.5	3.52	37.8	4.44
MAX	18	139	169	86	35	142	76	137	94	22	400	36
MIN	1.9	2.1	5.7	4.2	4.0	7.0	7.4	4.5	2.2	1.1	1.0	1.4
CFSM	.28	1.64	1.51	.82	.60	2.18	1.28	1.04	.74	.23	2.42	.29
IN.	.33	1.83	1.74	.95	.65	2.51	1.42	1.20	.82	.26	2.80	.32

CAL YR 1979 TOTAL 10421.28 MEAN 28.6 MAX 645 MIN .90 CFSM 1.83 IN 24.85
WTR YR 1980 TOTAL 6217.90 MEAN 17.0 MAX 400 MIN 1.0 CFSM 1.09 IN 14.83

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 winter periods, which are fair. Low flow affected by releases from Danville Filtration Plant.

AVERAGE DISCHARGE.--22 years, 29.6 ft^3/s (0.838 m^3/s), 13.96 in/yr (354 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft^3/s (94.3 m^3/s) July 14, 1962, 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 flood-marks, 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)
Nov. 25	2030	*1220	34.6	*7.35	2.240
Feb. 22	0500	702	19.9	5.36	1.633

Minimum daily discharge, 0.31 ft^3/sec (0.009 m^3/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	70	57	25	5.9	16	105	14	9.4	1.6	1.3	6.4
2	9.9	42	40	22	5.8	14	76	13	183	1.7	.94	9.4
3	5.5	22	34	18	5.7	13	63	13	128	1.6	.86	3.0
4	4.1	14	30	18	5.6	12	57	11	56	1.7	.80	1.7
5	3.5	11	34	15	5.5	42	46	11	35	1.8	.74	1.2
6	3.3	9.4	31	13	5.5	62	40	11	26	1.3	5.5	1.1
7	3.3	8.0	26	12	5.4	47	36	9.4	20	1.1	42	.86
8	3.0	8.0	20	11	5.4	113	47	8.5	17	.94	8.5	35
9	3.3	20	19	10	5.3	100	73	8.5	13	2.5	2.5	22
10	3.3	33	19	9.6	5.2	101	74	8.5	14	12	3.3	11
11	3.3	17	18	79	5.2	70	56	9.0	9.9	3.0	32	3.7
12	3.3	13	16	53	5.1	52	49	34	8.5	1.7	6.4	2.5
13	3.0	10	15	35	5.1	44	41	28	7.6	.94	2.0	1.8
14	2.5	8.0	13	29	5.0	36	120	15	7.6	.86	1.7	1.6
15	2.5	7.6	11	24	5.0	46	99	11	8.5	.63	80	1.1
16	3.9	7.2	9.0	30	5.0	53	84	9.9	6.8	.58	45	1.3
17	5.5	6.4	8.2	45	5.1	181	62	14	5.1	.48	193	44
18	5.5	5.9	7.7	35	5.2	124	49	78	5.1	.39	135	15
19	4.7	5.9	7.4	28	5.4	81	41	36	5.5	.35	124	6.6
20	4.7	5.5	7.0	26	5.9	63	34	23	4.3	.31	57	3.5
21	4.7	5.5	7.8	24	23	104	30	18	3.7	48	34	3.0
22	9.4	8.5	15	23	379	70	25	14	3.3	52	18	2.6
23	36	109	40	19	129	55	23	14	3.7	11	11	2.2
24	15	82	163	22	86	73	20	17	3.9	2.7	6.8	1.8
25	11	363	174	18	63	71	18	13	3.3	1.2	5.1	1.5
26	8.5	530	105	14	43	55	17	9.9	2.7	.86	3.7	1.4
27	7.6	178	71	11	30	46	16	8.5	2.5	60	2.7	1.3
28	8.0	149	51	8.8	22	55	17	8.0	2.0	41	2.5	1.2
29	5.9	101	40	7.4	18	99	16	8.0	2.7	13	1.7	1.1
30	5.5	73	35	6.4	-----	196	14	7.6	1.8	3.9	1.6	1.0
31	5.5	------	30	6.0	-----	203	----	6.8	-----	2.0	1.2	------
TOTAL	199.5	1922.9	1154.1	697.2	900.3	2297	1448	490.6	599.9	271.14	830.84	189.86
MEAN	6.44	64.1	37.2	22.5	31.0	74.1	48.3	15.8	20.0	8.75	26.8	6.33
MAX	36	530	174	79	379	203	120	78	183	60	193	44
MIN	2.5	5.5	7.0	6.0	5.0	12	14	6.8	1.8	.31	.74	.86
CFSM	.22	2.23	1.29	.78	1.08	2.57	1.68	.55	.69	.30	.93	.22
IN.	.26	2.48	1.49	.90	1.16	2.97	1.87	.63	.77	.35	1.07	.25

CAL YR 1979 TOTAL 16536.60 MEAN 45.3 MAX 1380 MIN 1.0 CFSM 1.57 IN 21.36
WTR YR 1980 TOTAL 11001.34 MEAN 30.1 MAX 530 MIN .31 CFSM 1.05 IN 14.21

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 mi^2 (549 km^2).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft (196.486 m) National Geodetic Vertical Datum of 1929. Dec. 10, 1963 to Sept. 30, 1964, nonrecording gage at bridge 1,950 ft (594 m) upstream at datum 1.39 ft (0.424 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--23 years, 224 ft^3/s (6.344 m^3/s), 14.35 in/yr (364 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft^3/s (538 m^3/s) July 13, 1979, gage height, 23.31 ft (7.105 m); minimum daily, 2.0 ft^3/s (0.057 m^3/s) Dec. 24, 25, 1960, Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 22.5 ft (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 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)
Nov. 26	0500	*5330	151	*18.95	5.776	Aug. 19	0300	3930	111	17.21	5.246
Mar. 30	2300	3210	90.9	16.11	4.910						

Minimum daily discharge, 18 ft^3/s (0.51 m^3/s) July 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	205	390	224	94	144	781	123	66	39	41	50
2	56	369	317	206	93	120	516	116	582	36	35	74
3	60	201	278	188	90	110	413	111	1000	36	31	60
4	54	155	266	178	88	148	484	106	328	35	28	48
5	48	129	257	166	89	273	349	103	208	39	26	43
6	45	116	259	151	92	333	295	99	158	36	25	41
7	43	109	241	155	89	295	271	94	126	32	439	38
8	43	100	212	136	87	700	362	89	124	30	214	84
9	45	127	190	132	85	756	510	86	114	28	116	110
10	41	235	186	123	82	630	481	83	105	38	84	95
11	43	180	184	516	79	462	368	85	96	35	271	54
12	45	148	180	513	77	338	328	117	86	29	127	43
13	43	131	171	312	75	268	283	177	74	26	84	39
14	42	116	160	276	74	233	857	116	68	24	71	36
15	42	107	148	246	73	273	660	103	63	22	853	34
16	43	103	144	246	116	310	503	97	67	21	351	36
17	51	96	129	312	89	827	370	113	62	20	862	284
18	48	90	120	287	85	910	305	216	55	19	582	173
19	49	88	112	241	88	497	264	184	56	18	1690	103
20	49	85	106	220	100	370	235	140	63	18	543	74
21	47	82	124	204	497	875	218	117	57	26	276	61
22	48	85	224	194	1780	530	193	96	50	257	184	53
23	131	530	483	175	806	360	177	93	48	95	136	53
24	121	696	1420	144	481	452	163	146	48	46	106	46
25	89	806	1340	173	287	493	151	134	51	33	89	41
26	75	3650	814	149	248	349	142	91	47	27	77	37
27	66	1160	506	136	200	285	135	79	42	208	68	35
28	63	979	376	119	180	271	135	72	45	506	62	34
29	61	680	305	107	160	664	146	66	64	129	56	32
30	57	487	273	100	----	1100	131	66	42	71	52	31
31	54	-----	250	95	----	1730	-----	63	----	51	48	----
TOTAL	1743	12045	10165	6424	6384	15106	10226	3381	3995	2030	7627	1942
MEAN	56.2	402	328	207	220	487	341	109	133	65.5	246	64.7
MAX	131	3650	1420	516	1780	1730	857	216	1000	506	1690	284
MIN	41	82	106	95	73	110	131	63	42	18	25	31
CFSM	.27	1.90	1.55	.98	1.04	2.30	1.61	.51	.63	.31	1.16	.31
IN.	.31	2.11	1.78	1.13	1.12	2.65	1.79	.59	.70	.36	1.34	.34

CAL YR 1979 TOTAL 133564 MEAN 366 MAX 6960 MIN 37 CFSM 1.73 IN 23.44
WTR YR 1980 TOTAL 81068 MEAN 221 MAX 3650 MIN 18 CFSM 1.04 IN 14.23

03353800 WHITE LICK CREEK AT MOORESVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB						
25...	1530	----	377	64	65	87
APR						
21...	1450	16.0	220	89	53	70
JUN						
19...	1145	21.0	50	79	11	--
AUG						
07...	1235	26.0	676	286	522	--
SEP						
15...	1600	22.0	32	36	3.1	--

03354000 WHITE RIVER NEAR CENTERTON, IN

LOCATION.--Lat 39°29'51", long 86°24'02", in NE¼NE¼ sec.10, T.12 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at upstream side of bridge on Blue Bluff Road, 0.8 mile (1.3 km) downstream from White Lick Creek, 1 mile (1.6 km) south of Centerton, and at mile 199.3 (321.0 km).

DRAINAGE AREA.--2,444 mi² (6,330 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to September 1930 (gage heights only), October 1930 to March 1932, October 1946 to current year. Monthly discharge only for October and November 1946, published in WSP 1305. Published as West Fork White River at Martinsville prior to March 1932, and as West Fork White River near Centerton October 1946 to September 1948.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 1909: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.44 ft (181.490 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark), levels by Indianapolis Power and Light Co. See WSP 1725 for history of changes prior to July 1953. July 1953 to Aug. 7, 1975, water-stage recorder at site 0.4 mile (0.6 km) downstream at same datum.

REMARKS.--Records good except those for Jan. and Feb. which are fair. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--35 years (1930-31, 1946 to current year), 2,415 ft³/s (68.39 m³/s), 13.42 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft³/s (1,430 m³/s) Apr. 22, 1964, gage height, 17.57 ft (5.355 m) at site 0.4 mile (0.6 km) downstream; minimum daily, 131 ft³/s (3.71 m³/s) Nov. 15, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft (6.95 m) at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft (6.68 m) at site 0.4 mile (0.6 km) downstream (from information by Corps of Engineers), discharge, 90,000 ft³/s (2,550 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s (269 m³/s) and maximum (*):

Date	Time	Discharge (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. 28	0900	11900	337	10.27	3.130	Mar. 31	0600	11400	323	10.02	3.054
Dec. 25	unknown	unknown		unknown		June 6	0700	*21600	612	*14.19	4.325
Mar. 11	0200	12200	346	10.48	3.194	June 9	0700	11800	334	10.04	3.060
Mar. 21	1600	9750	276	8.90	2.713	Aug. 20	1800	9660	274	8.64	2.634

Minimum daily discharge, 615 ft³/s (17.42 m³/s) July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	695	1650	6700	3200	1500	2050	8720	1760	1410	2650	1150	1170
2	989	2430	4890	3000	1400	1830	7240	1700	2910	2130	981	1540
3	946	2550	3940	2800	1350	1670	5760	1550	10000	1830	886	1240
4	928	2470	3400	2440	1300	1640	5430	1530	13700	1500	820	1150
5	937	1910	3060	2300	1350	2490	4990	1400	18400	1380	779	1050
6	878	1650	2840	2080	1400	3220	4600	1330	21000	1300	756	928
7	828	1450	2700	1960	1400	3490	4000	1360	11600	1150	3590	828
8	771	1350	2600	1840	1350	4880	3720	1240	8250	1060	5230	920
9	756	1310	2310	1750	1300	9620	5070	1200	11000	972	3870	1300
10	756	1960	2000	1600	1300	11700	5320	1140	7540	963	2540	1080
11	748	1920	1930	3080	1250	11600	4860	1130	5440	1310	2740	853
12	732	1970	1990	4500	1150	7610	4500	1370	4280	1230	2270	748
13	740	1870	1930	4070	1100	5530	4010	1800	3500	1190	2100	687
14	710	1600	1790	3900	1100	4470	5570	1460	3050	1040	2170	651
15	687	1450	1640	3300	1100	4070	6570	1320	2700	920	4740	622
16	673	1350	1570	3020	1340	3840	7000	1220	2680	844	3110	644
17	803	1250	1490	3110	1290	4790	6010	1560	2740	779	4300	1940
18	886	1150	1410	3150	1110	7420	4800	3110	2470	724	4980	1580
19	998	1100	1330	3060	1030	7710	4080	4340	2210	680	7570	1190
20	946	1100	1330	2920	1070	6500	3530	4220	2080	637	9170	928
21	869	1050	1300	2620	1920	8350	3150	3150	2150	615	6690	779
22	844	1150	2500	2530	5950	8450	2860	2610	2230	2320	4180	695
23	1450	1700	4500	2450	7950	9160	2600	2080	1850	1970	2900	658
24	1330	2000	10000	2270	7980	8010	2390	2360	1810	1460	2210	644
25	1270	4200	13500	2280	5440	7260	2240	2870	1800	1130	1730	1090
26	1190	5800	11500	2220	3900	6540	2030	2250	1970	963	1560	972
27	1070	9000	9000	2100	3140	5570	1910	1780	1710	981	1340	820
28	998	11500	7000	1890	2690	4640	1850	1550	1520	2280	1200	702
29	963	9410	5000	1760	2450	5600	1970	1370	1950	1560	1100	658
30	920	8680	4200	1670	-----	6140	1940	1350	1640	1730	1020	622
31	869	-----	3700	1550	-----	10800	------	1320	------	1400	981	-----
TOTAL	28180	87980	123050	80420	66610	186650	128720	58430	155590	40698	88663	28689
MEAN	909	2933	3969	2594	2297	6021	4291	1885	5186	1313	2860	956
MAX	1450	11500	13500	4500	7980	11700	8720	4340	21000	2650	9170	1940
MIN	673	1050	1300	1550	1030	1640	1850	1130	1410	615	756	622
CFSM	.37	1.20	1.62	1.06	.94	2.46	1.76	.77	2.12	.54	1.17	.39
IN.	.43	1.34	1.87	1.22	1.01	2.84	1.96	.89	2.37	.62	1.35	.44

CAL YR 1979 TOTAL 1326241 MEAN 3634 MAX 26100 MIN 673 CFSM 1.49 IN 20.19
WTR YR 1980 TOTAL 1073680 MEAN 2934 MAX 21000 MIN 615 CFSM 1.20 IN 16.34

03354000 WHITE RIVER NEAR CENTERTON, IN--continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: September 1953 to April 1956, October 1966 to September 1967, May 1970 to September 1972, October 1977 to current year.
SEDIMENT DISCHARGE: March 1965 to September 1977 (partial-record station).

TEMPERATURE, (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				---	---	---	----	----	----	14.5	12.0	13.0
2				---	---	---	----	----	----	15.5	13.5	14.5
3				---	---	---	----	----	----	18.0	14.5	16.0
4				---	---	---	8.5	7.0	8.0	19.0	15.5	17.5
5				---	---	---	9.0	6.0	7.5	19.5	16.5	18.0
6				---	---	---	10.5	7.5	9.0	20.5	17.5	19.0
7				---	---	---	11.0	9.5	10.0	18.5	16.5	17.5
8				---	---	---	11.5	10.5	11.0	17.0	15.5	16.0
9				---	---	---	11.0	9.0	10.0	18.5	14.5	16.5
10				---	---	---	9.5	8.0	9.0	17.5	16.0	16.5
11				---	---	---	9.0	8.0	8.5	18.5	16.0	17.5
12				---	---	---	10.0	9.0	9.5	19.5	18.0	18.5
13				---	---	---	9.5	8.5	9.0	21.5	18.0	19.5
14				---	---	---	8.0	5.5	6.5	20.0	18.0	19.0
15				---	---	---	6.5	5.0	6.0	21.0	17.5	19.0
16				7.5	6.0	6.5	8.5	6.0	7.0	18.5	17.0	18.0
17				8.0	7.0	7.5	10.0	7.5	8.5	17.0	16.5	17.0
18				7.0	5.5	6.0	12.0	9.0	10.5	18.5	16.0	17.5
19				6.5	5.5	6.0	14.0	10.5	12.5	18.0	17.0	17.5
20				6.5	6.0	6.5	14.5	12.5	13.5	18.5	17.0	17.5
21				7.0	6.0	6.5	16.5	13.5	15.0	20.0	17.0	18.5
22				7.0	5.5	6.5	17.5	14.0	16.0	21.0	18.5	20.0
23				6.5	6.5	6.5	18.0	15.5	16.5	21.5	20.0	20.5
24				7.5	6.5	7.0	17.0	14.5	15.5	21.0	19.5	20.0
25				7.5	6.0	6.5	16.0	13.0	14.5	22.0	19.0	20.5
26				6.5	6.0	6.0	15.5	13.5	14.5	22.5	19.5	21.0
27				8.0	5.5	6.5	14.0	13.5	13.5	22.0	19.5	20.5
28				---	---	---	13.0	12.0	12.5	23.5	20.0	21.5
29				---	---	---	12.5	11.5	12.0	24.5	21.5	23.0
30				---	---	---	12.5	11.5	12.0	24.5	22.0	23.0
31				---	---	---	----	----	----	25.5	22.0	24.0
MONTH				8.0	5.5	6.5	18.0	5.0	11.0	25.5	12.0	18.5

03354000 WHITE RIVER NEAR CENTERTON, IN--continued

TEMPERATURE, (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	22.5	23.0	23.5	21.5	22.5						
2	23.5	21.5	22.0	23.5	22.0	22.5						
3	22.0	20.5	21.0	22.5	21.5	22.0						
4	21.5	20.5	21.0	22.5	21.0	21.5						
5	22.0	20.5	21.0	24.5	21.0	22.0						
6	23.0	21.0	22.0	25.0	22.0	23.5						
7	23.0	22.0	22.5	24.5	21.0	23.0						
8	22.5	21.0	21.5	26.5	22.5	24.5						
9	20.5	19.5	20.0	26.0	23.0	25.0						
10	20.0	19.5	19.5	26.0	23.5	24.5						
11	20.0	18.0	19.0	26.0	23.0	24.5						
12	20.5	18.0	19.5	26.0	23.5	24.5						
13	20.0	18.5	19.5	26.0	23.0	24.5						
14	20.5	19.0	19.5	26.0	22.5	24.0						
15	21.0	19.5	20.5	26.5	22.5	24.5						
16	21.0	19.0	20.0	26.0	23.0	24.5						
17	20.5	19.0	19.5	25.5	22.5	24.0						
18	21.5	18.5	20.0	24.5	22.0	23.0						
19	21.0	19.5	20.5	25.5	21.5	23.5						
20	21.0	18.5	19.5	25.5	21.5	23.5						
21	22.0	19.0	20.0	23.0	21.0	22.0						
22	22.5	19.5	21.0	----	----	----						
23	20.5	20.0	20.0	----	----	----						
24	22.0	19.5	20.5	----	----	----						
25	23.5	21.0	22.0	----	----	----						
26	24.5	22.0	23.5	----	----	----						
27	25.5	23.0	24.0	----	----	----						
28	25.0	23.0	24.0	----	----	----						
29	24.5	21.5	23.0	----	----	----						
30	23.0	20.5	22.0	----	----	----						
31	----	----	----	----	----	----						
MONTH	25.5	18.0	21.0	26.5	21.0	23.5						
YEAR	26.5	5.0	17.0									

03354500 BEANBLOSSOM CREEK AT BEANBLOSSOM, IN

LOCATION.--Lat 39°15'45", long 86°14'55", in SW¼NW¼ sec.31, T.10 N., R.3 E., Brown County, Hydrologic Unit 05120202, on right bank 15 ft (5 m) downstream from bridge on State Highway 135, 0.3 mile (0.5 km) south of Beanblossom, 2.7 miles (4.3 km) upstream from North Fork Beanblossom Creek, and at mile 42.1 (67.7 km).

DRAINAGE AREA.--14.6 mi² (37.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1965, published as Bean Blossom Creek at Bean Blossom.

REVISED RECORDS.--WSP 1555: 1952, 1953(M), 1956-57. WSP 1705: 1952(P). WRD 1979: 1978.

GAGE.--Water-stage recorder. Datum of gage is 673.65 ft (205.329 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--29 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.--Maximum discharge, 586 ft³/s (16.6 m³/s) Dec. 24, gage height 6.25 ft (1.905 m); no peaks above the base of 700 cfs (19.8 m³/s); minimum daily, 0.12 ft³/s (0.003 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.71	14	22	15	5.8	12	50	8.1	27	1.9	4.4	.46
2	2.3	8.1	18	14	5.0	11	40	7.8	23	1.5	2.9	.74
3	1.0	5.3	15	13	4.5	14	79	7.2	19	6.2	6.2	.46
4	.87	3.9	14	13	4.1	14	130	6.2	17	4.2	1.5	.39
5	.74	3.1	14	12	3.9	107	36	5.6	14	3.1	.85	.27
6	.65	2.9	13	12	3.7	42	27	5.3	10	2.0	.55	.32
7	.79	2.9	11	11	3.6	36	28	4.7	11	1.3	.85	.32
8	.51	2.0	9.5	9.5	3.5	196	28	4.2	10	1.2	.55	.55
9	.76	9.5	8.5	8.8	3.3	56	32	3.6	7.3	.96	.32	.85
10	.87	13	8.5	8.5	3.2	40	39	2.9	6.4	.96	.22	.39
11	.91	8.5	8.1	93	3.0	34	32	3.4	6.7	.96	.55	.27
12	1.2	6.9	8.8	40	2.9	30	33	22	5.1	.85	.65	.22
13	1.1	5.6	10	26	2.8	30	29	23	4.4	.74	.27	.22
14	.46	4.7	9.9	24	2.7	33	95	10	3.7	.65	.22	.22
15	.96	4.2	9.1	21	8.8	39	41	6.8	3.0	.55	38	.22
16	1.2	3.6	8.8	20	15	36	34	6.5	8.7	.55	11	.46
17	1.1	3.4	7.5	19	13	83	32	121	5.3	.55	8.5	6.5
18	1.3	3.1	7.2	17	11	61	29	72	3.9	.46	4.7	.96
19	1.5	2.8	6.8	15	12	46	23	91	15	.39	6.2	.38
20	1.2	2.5	6.4	14	18	42	22	30	12	.39	6.5	.27
21	1.1	2.4	6.2	13	61	274	21	20	6.9	3.1	2.9	.22
22	2.6	5.9	93	13	59	88	19	18	5.0	7.2	1.9	.16
23	3.9	138	90	11	32	68	16	18	7.2	1.9	1.2	.32
24	1.5	116	256	11	24	101	14	21	8.1	.96	.85	.22
25	1.1	99	114	13	21	75	12	19	6.5	.65	.74	.16
26	1.0	139	43	12	18	52	10	15	4.4	.46	.65	.16
27	.96	70	29	11	17	39	8.8	11	3.9	1.2	.46	.46
28	1.5	203	23	9.5	16	33	8.6	9.1	2.9	2.0	.39	.16
29	.84	44	20	8.5	15	36	9.5	8.1	3.9	.96	.32	.12
30	1.1	27	19	7.2	-----	100	8.5	7.2	2.2	.55	.39	.16
31	1.0	-----	17	6.4	-----	82	-----	5.9	-----	.39	.55	-----
TOTAL	36.73	954.3	926.3	521.4	392.8	1910	986.4	593.6	263.5	48.78	105.28	16.61
MEAN	1.18	31.8	29.9	16.8	13.5	61.6	32.9	19.1	8.78	1.57	3.40	.55
MAX	3.9	203	256	93	61	274	130	121	27	7.2	38	6.5
MIN	.46	2.0	6.2	6.4	2.7	11	8.5	2.9	2.2	.39	.22	.12
CFSM	.08	2.18	2.05	1.15	.93	4.22	2.25	1.31	.60	.11	.23	.04
IN.	.09	2.43	2.36	1.33	1.00	4.87	2.51	1.51	.67	.12	.27	.04

CAL YR 1979 TOTAL 8975.28 MEAN 24.6 MAX 813 MIN .41 CFSM 1.69 IN 22.87
WTR YR 1980 TOTAL 6755.70 MEAN 18.5 MAX 274 MIN .12 CFSM 1.27 IN 17.21

03354500 BEANBLOSSOM CREEK AT BEANBLOSSOM, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT										
07...	1100	15.0	.55	14	.02	--	--	--	--	---
14...	1100	12.0	.22	18	.01	--	--	--	--	---
21...	1100	17.0	1.1	18	.05	--	--	--	--	---
28...	1100	15.0	2.7	19	.14	--	--	--	--	---
NOV										
04...	1100	14.0	3.6	5	.05	--	--	--	--	---
11...	1100	14.0	8.1	2	.04	--	--	--	--	---
18...	1100	12.0	2.9	5	.04	--	--	--	--	---
25...	1100	12.0	42	52	5.9	--	--	--	--	---
DEC										
02...	1100	9.0	17	9	.41	--	--	--	--	---
16...	1100	----	9.2	4	.10	--	--	--	--	---
23...	1100	10.0	80	51	11	--	--	--	--	---
30...	1100	12.0	18	3	.15	--	--	--	--	---
JAN										
06...	1100	7.0	10	4	.11	--	--	--	--	---
08...	1145	----	11	18	.53	--	--	--	--	---
20...	1100	7.0	13	9	.32	--	--	--	--	---
27...	1100	4.0	10	11	.30	--	--	--	--	---
FEB										
03...	1100	3.0	4.5	8	.10	--	--	--	--	---
10...	1100	3.0	3.2	5	.04	--	--	--	--	---
12...	1330	----	2.9	5	.04	--	--	--	--	---
17...	1100	3.0	11	6	.18	--	--	--	--	---
24...	1100	8.0	23	13	.81	--	--	--	--	---
MAR										
02...	1100	1.0	11	17	.50	--	--	--	--	---
09...	1100	7.0	55	141	21	--	--	--	--	---
23...	1100	8.0	68	46	8.4	--	--	--	--	---
24...	1130	----	112	195	59	87	95	98	99	100
28...	0930	----	30	52	4.2	--	--	--	--	---
APR										
13...	1100	7.0	29	25	2.0	--	--	--	--	---
20...	1100	10.0	22	18	1.1	--	--	--	--	---
27...	1100	13.0	9.2	20	.50	--	--	--	--	---
MAY										
04...	1100	15.0	6.8	24	.44	--	--	--	--	---
11...	1100	22.0	3.6	26	.25	--	--	--	--	---
18...	1100	25.0	55	74	11	--	--	--	--	---
25...	1100	22.0	20	35	1.9	--	--	--	--	---

03354500 BEAN BLOSSOM CREEK AT BEANBLOSSOM, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUN					
01...	1100	23.0	10	34	.92
08...	1100	19.0	9.9	18	.48
11...	1100	30.0	5.3	20	.29
15...	1100	23.0	2.9	16	.13
22...	1100	18.0	5.6	39	.59
29...	1100	24.0	3.9	26	.27
JUL					
13...	1000	25.5	.74	4	.01
20...	1000	29.0	.46	0	.00
21...	1300	----	.32	14	.01
27...	1100	28.0	.85	28	.06
30...	1000	29.0	.46	0	.00
AUG					
03...	1100	28.0	5.3	90	1.3
17...	1000	23.0	8.5	30	.69
31...	1000	25.0	.55	11	.02
SEP					
07...	1100	25.0	.22	13	.01
11...	1605	24.0	.25	10	.01

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 good.

AVERAGE DISCHARGE.--11 years, 3.79 ft^3/s (0.107 m^3/s), 17.16 in/yr (436 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.--Maximum discharge, 131 ft^3/s (3.71 $m/^3/s$) Mar. 30, gage height 3.13 ft. (0.954 m); Minimum daily discharge, 0.03 ft^3/s (0.001 m^3/s) July 16-20, 23-26, 30, 31, Aug. 1-5.

PEAK DISCHARGE (Base, 150 ft^3/s).--No peaks above the base.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	6.4	4.6	2.7	.76	1.7	11	1.2	1.1	.07	.03	.41
2	2.0	3.0	3.5	2.3	.64	1.6	7.4	1.2	28	.05	.03	.21
3	.49	1.8	3.2	1.9	.60	1.6	6.3	1.1	7.1	.05	.03	.07
4	.44	1.3	3.2	1.8	.56	1.7	5.8	1.0	2.7	.06	.03	.05
5	.33	1.2	3.4	1.6	.58	6.8	4.6	.90	1.5	.06	.03	.05
6	.30	1.1	3.0	1.5	.62	4.9	3.9	.82	1.1	.05	.74	.04
7	.25	.92	2.6	1.6	.60	4.9	3.7	.72	.90	.05	.08	.05
8	.22	.96	1.9	1.1	.54	14	7.6	.67	.77	.04	.04	1.1
9	.23	2.9	1.9	1.1	.52	11	10	.63	.61	.05	.04	.16
10	.25	2.8	2.0	1.1	.56	11	9.2	.62	.61	.04	2.1	.06
11	.27	1.6	1.8	7.1	.54	6.5	6.2	.64	.46	.04	2.3	.05
12	.28	1.3	1.7	3.5	.52	4.9	5.4	2.0	.38	.04	.06	.05
13	.21	1.2	1.4	3.0	.50	4.0	4.3	1.1	.34	.04	.05	.04
14	.20	1.0	1.1	2.6	.48	3.7	18	.68	.32	.04	.05	.04
15	.21	.98	.94	2.1	.56	4.6	14	.58	.52	.04	2.3	.04
16	.32	.86	.82	2.8	.64	5.4	9.9	.59	.35	.03	.85	.68
17	.70	.82	.70	3.4	.58	31	6.6	1.2	.25	.03	8.5	5.7
18	.43	.78	.74	2.8	.50	13	5.1	3.1	.23	.03	12	.76
19	.32	.78	.78	2.2	.76	8.7	4.2	1.3	.20	.03	6.1	.36
20	.30	.69	.82	2.0	4.9	6.7	3.6	.97	.19	.03	1.2	.22
21	.28	.71	.91	1.8	25	18	3.1	.77	.14	.14	.58	.15
22	3.3	1.5	2.3	2.1	32	7.9	2.6	.65	.12	.04	.32	.11
23	3.4	12	4.6	1.5	8.7	6.1	2.1	.69	3.1	.03	.21	.11
24	1.3	5.6	22	1.5	5.6	7.4	1.8	.80	.68	.03	.15	.06
25	.92	21	16	1.8	4.0	6.4	1.6	.65	.35	.03	.11	.05
26	.73	24	8.6	1.4	3.3	5.4	1.5	.48	.23	.03	.08	.04
27	.67	10	5.7	1.2	3.1	4.6	1.4	.38	.17	.15	.06	.04
28	.73	11	4.2	1.0	2.8	6.1	1.6	.34	.13	.04	.05	.04
29	.59	6.9	3.7	.86	2.0	8.8	1.7	.31	.12	.04	.05	.04
30	.49	5.5	3.5	.79	------	36	1.4	.32	.09	.03	.05	.04
31	.45	------	3.1	.80	------	20	-----	.29	-----	.03	.04	-----
TOTAL	23.31	130.60	114.71	62.95	102.46	274.4	165.6	26.70	52.76	1.46	38.26	10.82
MEAN	.75	4.35	3.70	2.03	3.53	8.85	5.52	.86	1.76	.047	1.23	.36
MAX	3.4	24	22	7.1	32	36	18	3.1	28	.15	12	5.7
MIN	.20	.69	.70	.79	.48	1.6	1.4	.29	.09	.03	.03	.04
CFSM	.25	1.45	1.23	.68	1.18	2.95	1.84	.29	.59	.02	.41	.12
IN.	.29	1.62	1.42	.78	1.27	3.40	2.05	.33	.65	.02	.47	.13

CAL YR 1979 TOTAL 2128.98 MEAN 5.83 MAX 192 MIN .07 CFSM 1.94 IN 26.39
WTR YR 1980 TOTAL 1004.03 MEAN 2.74 MAX 36 MIN .03 CFSM .91 IN 12.45

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 (revised) 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).

WATER-DISCHARGE RECORDS

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

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

AVERAGE DISCHARGE.--6 years, 232 ft^3/s (6.570 m^3/s), 14.58 in/yr (370 m).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft^3/s (184 m^3/s), Mar. 4, 1979, gage height, 13.96ft (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)
Nov. 26	1500	3140	88.9	9.47	2.886	Mar. 30	2000	2960	83.8	9.25	2.819
Feb. 22	1300	2880	81.6	9.15	2.789	Jun. 2	2100	2350	66.6	8.46	2.579
Mar. 8	2000	1820	51.5	7.69	2.344	Aug. 18	2100	*5910	167	*12.76	3.889
Mar. 17	1700	2140	60.6	8.16	2.487						

Minimum daily discharge, 21 ft^3/s (0.566 m^3/s) July 19, 20, Aug. 6.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSIS: December 1973 to September 1977.
WATER TEMPERATURE: December 1973 to September 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	350	427	248	98	148	1010	132	56	43	28	41
2	341	438	341	226	98	142	693	122	869	40	25	88
3	136	274	286	202	97	152	536	116	1480	39	25	75
4	95	190	268	190	97	183	491	110	568	40	22	41
5	75	153	256	178	96	271	404	107	325	47	22	35
6	62	138	256	159	96	390	347	101	223	40	21	31
7	56	124	231	164	95	328	319	95	169	37	74	29
8	51	114	200	132	95	1080	335	88	176	34	105	53
9	48	148	176	123	94	1160	544	85	185	32	58	148
10	47	259	171	117	93	963	619	83	142	47	45	78
11	47	239	169	242	91	705	483	85	118	65	434	56
12	45	180	162	438	90	469	404	144	96	39	101	40
13	43	157	148	316	89	377	347	151	86	31	53	34
14	40	140	138	256	89	310	892	95	81	27	39	29
15	38	126	128	218	100	319	906	80	81	26	36	28
16	38	120	118	218	134	363	796	74	85	26	157	31
17	60	109	114	277	114	1390	548	89	72	24	383	253
18	78	101	109	274	102	1300	430	164	64	22	953	242
19	72	101	105	234	96	778	357	130	96	21	973	95
20	61	98	107	218	140	572	313	100	118	21	335	64
21	58	91	110	202	487	973	268	85	91	50	205	48
22	110	107	140	200	2260	714	229	74	69	319	136	45
23	316	465	253	178	1030	502	210	68	103	68	96	51
24	242	599	1060	157	619	525	187	72	109	38	75	38
25	162	660	1140	207	438	572	173	83	74	32	62	34
26	124	2600	836	159	307	446	157	80	61	29	53	31
27	105	1310	556	138	215	370	148	61	53	155	49	26
28	101	1000	412	118	175	357	151	53	60	138	46	26
29	93	748	341	112	160	583	162	48	60	66	42	26
30	83	540	310	104	----	1280	144	49	48	42	42	24
31	75	-----	271	99	----	1940	-----	48	----	33	39	----
TOTAL	3014	11679	9339	6104	7695	19662	12603	2872	5818	1671	4734	1840
MEAN	97.2	389	301	197	265	634	420	92.6	194	53.9	153	61.3
MAX	341	2600	1140	438	2260	1940	1010	164	1480	319	973	253
MIN	38	91	105	99	89	142	144	48	48	21	21	24
CFSM	.45	1.80	1.39	.91	1.23	2.94	1.94	.43	.90	.25	.71	.28
IN.	.52	2.01	1.61	1.05	1.33	3.39	2.17	.49	1.00	.29	.82	.32

CAL YR 1979 TOTAL 121350 MEAN 332 MAX 5250 MIN 29 CFSM 1.54 IN 20.90
WTR YR 1980 TOTAL 87031 MEAN 238 MAX 2600 MIN 21 CFSM 1.10 IN 14.99

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN

LOCATION.--Lat 39°32'11", long 86°58'35", in NW¼SW¼ sec.28, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank at downstream side of county highway bridge, 1.5 miles (2.4 km) southwest of Reelsville, and 4.1 miles (6.6 km) upstream from Mill Creek.

DRAINAGE AREA.--326 mi² (844 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1949 to current year. Published as Eel River near Reelsville, October 1952 to September 1956.

REVISED RECORDS.--WSP 1335: 1950. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.24 ft (179.296 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Dec. 10, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow partly regulated by Soil Conservation Service control structures on tributaries to Little Walnut Creek beginning in 1971.

AVERAGE DISCHARGE.--31 years, 346 ft³/s (9.799 m³/s), 14.41 in/yr (366 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)
Nov. 26	0600	3080	87.2	9.45	2.880	Mar. 30	2400	3930	111	10.70	3.261
Feb. 22	1900	2930	83.0	9.21	2.807	Aug. 19	0500	*6050	171	*13.18	4.017

Minimum daily discharge, 40 ft³/s (1.13 m³/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	395	556	376	165	187	1510	205	316	86	59	121
2	598	513	459	346	163	240	1010	190	742	78	53	154
3	320	359	389	320	161	300	812	173	1940	73	50	141
4	140	277	365	299	160	250	781	162	804	71	46	108
5	112	229	350	259	156	420	622	154	477	70	45	93
6	94	204	347	230	150	563	531	150	340	69	43	84
7	85	188	323	210	145	482	488	142	271	63	43	79
8	78	174	288	198	139	967	532	133	271	58	99	88
9	74	212	207	188	136	1500	772	128	259	54	68	216
10	71	336	247	188	131	1170	901	120	204	52	54	161
11	70	349	242	409	129	907	702	108	180	74	437	122
12	70	290	235	531	125	630	590	170	151	61	143	91
13	68	258	223	394	123	514	509	240	132	54	81	80
14	64	237	207	347	121	441	1390	182	122	49	61	73
15	62	218	205	302	115	440	1370	151	119	47	550	68
16	60	207	208	296	175	468	1240	142	142	45	292	73
17	92	197	207	348	204	1610	821	168	119	43	450	393
18	107	186	198	402	203	1870	650	218	104	42	948	321
19	111	181	195	363	160	1040	543	226	195	41	3310	199
20	101	175	192	344	160	774	473	175	267	40	882	140
21	95	170	199	322	532	1380	424	155	156	54	484	110
22	109	188	231	310	2430	1050	387	138	112	346	350	102
23	320	532	381	267	1370	715	335	132	366	96	280	153
24	321	706	1620	228	798	749	295	132	456	62	229	90
25	232	636	1500	279	581	784	270	130	174	49	190	76
26	186	2910	1130	244	429	623	250	138	128	44	167	63
27	159	1700	773	213	382	523	235	117	107	593	149	58
28	151	1210	594	183	365	497	225	104	97	369	137	54
29	144	932	498	175	353	813	228	95	185	139	124	52
30	131	689	454	170	-----	1580	222	90	101	92	113	48
31	122	-----	413	168	-----	3130	-----	90	----	69	108	----
TOTAL	4579	14858	13436	8909	10261	26617	19118	4658	9037	3083	10045	3611
MEAN	148	495	433	287	354	859	637	150	301	99.5	324	120
MAX	598	2910	1620	531	2430	3130	1510	240	1940	593	3310	393
MIN	60	170	192	168	115	187	222	90	97	40	43	48
CFSM	.45	1.52	1.33	.88	1.09	2.64	1.95	.46	.92	.31	.99	.37
IN.	.52	1.70	1.53	1.02	1.17	3.04	2.18	.53	1.03	.35	1.15	.41

CAL YR 1979 TOTAL 212880 MEAN 583 MAX 7790 MIN 60 CFSM 1.79 IN 24.29
WTR YR 1980 TOTAL 128212 MEAN 350 MAX 3310 MIN 40 CFSM 1.07 IN 14.63

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: September 1969 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV 01...	1410	----	563	194	303	85	--	--	--	---
DEC 04...	1700	----	---	41	40	--	--	--	--	---
JAN 15...	1420	----	---	21	17	--	--	--	--	---
FEB 26...	1630	----	---	90	103	84	--	--	--	---
APR 22...	1645	18.0	366	54	53	--	92	98	99	100
SEP 17...	1150	17.0	474	335	405	--	--	--	--	---

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 (revised), 3 miles (5 km) east of Cataract, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--245 mi² (635 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1505: 1956(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.40 ft (215.311 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1949, nonrecording gage, and Nov. 8, 1949, to Sept. 22, 1968, water-stage recorder at site 100 ft (30 m) upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--31 years, 261 ft³/s (7.392 m³/s), 14.47 in/yr (368 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)
Nov. 27	0200	*3960	112	*15.00	4.572	Mar. 31	1800	2970	84.1	13.11	3.996
Dec. 25	0400	2740	77.6	12.81	3.904						

Minimum daily discharge, 21 ft³/s (0.59 m³/s) July 20, Aug 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	294	401	237	100	151	1520	107	265	65	32	56
2	175	340	307	210	96	155	630	99	754	50	28	175
3	78	175	255	186	90	170	484	95	1010	49	26	74
4	53	125	240	175	88	191	646	89	281	46	24	46
5	48	100	238	166	88	847	427	84	172	63	22	41
6	44	91	237	145	88	860	334	80	133	80	21	39
7	42	84	202	158	87	622	290	74	115	40	227	37
8	39	79	170	132	84	1300	399	69	285	34	75	101
9	40	117	148	136	82	1120	759	66	123	31	34	202
10	41	320	149	118	78	838	641	64	99	30	28	160
11	40	195	145	946	76	601	438	65	114	29	853	80
12	42	143	139	1020	74	401	391	93	76	28	242	54
13	41	121	129	395	72	338	322	130	66	27	79	44
14	37	106	118	309	70	311	1370	80	63	26	49	38
15	36	96	109	283	70	475	996	65	60	25	1180	34
16	38	92	95	298	175	463	705	62	98	24	719	37
17	46	83	79	421	145	1330	461	95	66	23	933	699
18	51	80	80	328	112	1440	355	159	54	22	560	412
19	46	78	82	257	108	601	289	123	105	22	1920	181
20	49	75	88	235	138	443	247	94	307	21	1290	110
21	49	71	91	219	850	1310	213	80	83	79	344	81
22	52	88	349	211	2110	730	186	70	60	789	183	67
23	213	1020	953	185	853	447	170	69	53	125	122	90
24	138	869	2110	191	547	622	150	92	67	49	92	63
25	91	940	2470	211	432	688	134	110	54	33	76	51
26	72	3400	1060	175	285	432	125	71	46	27	64	43
27	62	3580	580	150	316	344	119	56	41	96	55	37
28	61	1830	412	122	269	328	118	51	38	578	49	34
29	59	810	338	123	225	813	130	48	374	103	44	33
30	54	518	309	110	----	1160	117	46	130	56	40	31
31	52	-----	272	102	----	2790	-----	47	----	39	38	----
TOTAL	1938	15920	12355	7954	7808	22321	13166	2533	5192	2709	9449	3150
MEAN	62.5	531	399	257	269	720	439	81.7	173	87.4	305	105
MAX	213	3580	2470	1020	2110	2790	1520	159	1010	789	1920	699
MIN	36	71	79	102	70	151	117	46	38	21	21	31
CFSM	.26	2.17	1.63	1.05	1.10	2.94	1.79	.33	.71	.36	1.25	.43
IN.	.29	2.42	1.88	1.21	1.19	3.39	2.00	.38	.79	.41	1.43	.48

CAL YR 1979 TOTAL 204736 MEAN 561 MAX 7800 MIN 29 CFSM 2.29 IN 31.09
WTR YR 1980 TOTAL 104495 MEAN 286 MAX 3580 MIN 21 CFSM 1.17 IN 15.87

03358000 MILL CREEK NEAR CATARACT, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: November 1978 to current year.
CHEMICAL ANALYSES: November 1978 to current year.
SEDIMENT DISCHARGE: September 1969 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
FEB 25...	1200	3.0	---	65	72	--	--	--	--	---
APR 21...	1100	----	---	44	26	--	--	--	--	---
JUL 28...	1200	27.0	480	480	658	93	94	95	97	100
SEP 09...	1100	----	---	141	70	--	--	--	--	---

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, 160,120 acre-ft (74.13 hm^3) Apr. 17, elevation, 654.35 ft (199.445 m); minimum, 27,380 acre-ft (33.8 hm^3) May 4 elevation, 636.19 ft (193.911 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	648.73	48,510	
Oct. 31	637.52	29,290	-19,220
Nov. 30	651.94	55,000	+25,710
Dec. 31	640.56	33,940	-21,060
CAL YR 1979			+1,030
Jan. 31	636.30	27,540	-6,400
Feb. 29	638.14	30,210	+2,670
Mar. 31	650.84	52,740	+22,530
Apr. 30	636.70	28,110	-24,630
May 31	637.32	29,000	+890
June 30	637.92	29,880	+880
July 31	637.45	29,190	-690
Aug. 31	637.47	29,220	+30
Sept. 30	637.44	29,180	-40
WTR YR 1980			-19,330

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.--42 years (1938 to current year), 303 ft^3/s (8.581 m^3/s), 14.00 in/yr (356 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 1979 WATER YEAR.--Maximum daily discharge, 2,410 ft^3/s (68.3 m^3/s) Sept. 10, 1979; minimum daily, 33 ft^3/s (0.93 m^3/s) Oct. 2, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,060 ft^3/s (58.3 m^3/s) Oct. 1; minimum daily, 19 ft^3/s (0.54 m^3/s) July 19-21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	36	114	116	140	117	273	1790	256	101	111	1670
2	33	36	80	107	113	118	274	1770	138	776	87	1730
3	34	36	96	108	113	121	745	1750	79	1150	113	1850
4	36	41	100	109	113	107	1100	1730	69	670	114	1940
5	35	44	489	604	113	100	974	1710	69	450	114	2040
6	35	44	860	1370	113	102	1430	1680	56	518	114	2130
7	35	44	853	1580	98	102	1780	1810	70	514	114	2260
8	35	44	333	1560	90	102	1720	1850	230	431	353	2300
9	34	44	102	1530	100	103	269	1820	302	176	339	2380
10	34	44	102	1500	100	103	270	1790	303	89	475	2410
11	35	44	103	1470	92	103	271	1750	302	89	810	2390
12	35	44	103	1300	84	562	155	1580	300	90	996	2370
13	77	44	103	492	84	1190	101	1340	288	53	1330	1980
14	382	78	103	205	96	1580	102	1180	235	69	1810	2130
15	522	95	613	234	100	1690	102	479	103	94	1910	2310
16	520	165	882	166	100	1680	102	133	89	98	1900	2290
17	516	202	873	104	100	1670	294	97	77	101	1890	2270
18	268	274	863	174	100	1650	1050	89	69	102	1880	2240
19	93	315	854	217	100	1800	1280	89	69	102	493	2310
20	93	581	845	195	100	1900	1680	89	54	390	112	2320
21	93	736	840	155	100	1890	1660	84	257	868	113	2300
22	93	646	598	229	159	1870	1650	79	516	960	114	2350
23	93	408	302	258	107	384	1640	57	477	842	329	2360
24	93	198	199	260	108	126	1630	50	370	281	1010	2330
25	54	163	157	372	112	631	1440	50	257	102	1440	2290
26	35	94	187	424	115	1250	1430	50	94	102	1450	2260
27	35	94	199	257	116	1510	1590	76	50	102	184	2220
28	35	95	172	176	116	1740	1580	89	50	66	433	2180
29	36	137	135	203	----	801	1560	89	50	68	85	2140
30	36	158	136	185	----	268	1720	89	82	109	599	2110
31	36	----	139	154	----	271	-----	145	----	110	1370	-----
TOTAL	3526	4984	11535	15814	2982	25641	29872	25384	5361	9673	22192	65860
MEAN	114	166	372	510	107	827	996	819	179	312	716	2195
MAX	522	736	882	1580	159	1900	1780	1850	516	1150	1910	2410
MIN	33	36	80	104	84	100	101	50	50	53	85	1670

CAL YR 1978 TOTAL 147307 MEAN 404 MAX 2260 MIN 33
WTR YR 1979 TOTAL 222824 MEAN 610 MAX 2410 MIN 33

03359000 MILL CREEK NEAR MANHATTAN, IN--continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2060	90	114	1680	166	1150	113	559	76	257	60	50
2	1670	233	443	1450	166	1050	114	189	95	325	50	88
3	1580	302	1160	899	166	236	115	189	100	222	50	247
4	1550	301	1730	468	124	237	136	158	102	50	42	151
5	1380	299	1880	289	103	296	597	107	102	50	33	69
6	1120	256	1850	289	113	719	1270	107	102	50	24	69
7	954	173	1820	289	113	962	1330	107	102	50	35	56
8	868	172	1790	247	113	966	863	67	102	50	51	50
9	468	173	1760	165	113	432	568	47	102	50	51	77
10	50	258	1720	166	164	136	795	47	102	50	88	230
11	50	300	1680	170	140	137	857	88	448	50	109	228
12	50	300	1250	407	113	138	1170	108	1240	50	395	89
13	50	299	804	803	113	287	1310	109	1350	50	531	74
14	50	257	528	935	112	1010	403	246	578	50	456	55
15	50	173	207	923	113	1430	115	245	69	49	181	50
16	50	173	207	774	160	1410	200	108	70	49	119	50
17	50	173	207	642	237	557	705	108	101	49	121	52
18	50	145	124	545	208	139	1110	47	115	27	122	295
19	50	89	100	367	166	366	1340	48	115	19	124	519
20	50	89	139	329	188	871	1410	48	360	19	127	515
21	50	145	154	411	418	422	1520	48	236	19	128	510
22	51	173	224	411	248	144	1630	48	97	79	685	211
23	78	262	327	384	136	144	1650	48	102	110	1040	89
24	161	456	179	271	137	120	1700	49	115	110	1030	107
25	196	388	104	364	284	673	1780	49	97	108	1220	102
26	195	105	106	385	577	1180	1780	49	63	83	1300	74
27	124	109	414	330	954	1390	1740	49	50	70	1280	69
28	89	111	1170	243	1190	670	1710	49	50	91	1250	55
29	89	113	1710	193	1170	107	1670	50	92	391	567	50
30	89	113	1750	165	----	108	1500	50	118	457	50	50
31	89	----	1720	166	----	111	-----	50	----	142	50	----
TOTAL	13411	6230	27371	15160	8005	17598	31201	3271	6451	3226	11369	4331
MEAN	433	208	883	489	276	568	1040	106	215	104	367	144
MAX	2060	456	1880	1680	1190	1430	1780	559	1350	457	1300	519
MIN	50	89	100	165	103	107	113	47	50	19	24	50

CAL YR 1979 TOTAL 249791 MEAN 684 MAX 2410 MIN 50
WTR YR 1980 TOTAL 147624 MEAN 403 MAX 2060 MIN 19

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 except those for winter periods, which are fair. Flow regulated by Cagles Mill Lake (See sta 03358900).

AVERAGE DISCHARGE.--49 years, 870 ft³/s (24.64 m³/s), 14.23 in/yr (361 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, 5,610 ft³/s (159 m³/s) Mar. 31, gage height, 15.86 ft (4.834 m); minimum daily, 93 ft³/s (2.634 m³/s) July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	584	1070	2160	406	1540	3600	1400	1260	315	223	289
2	2470	947	1050	2030	408	1420	1970	663	1600	378	189	404
3	2000	862	1460	1610	409	656	1590	607	2510	362	174	430
4	1850	691	2010	1150	378	636	1660	565	1500	229	160	474
5	1730	607	2240	726	333	1580	1450	511	894	202	143	277
6	1510	473	2220	656	346	1780	2020	482	646	200	137	253
7	1260	378	2170	643	335	1980	2090	451	691	183	134	238
8	1210	346	2100	587	325	2470	2000	412	819	170	169	222
9	971	395	2040	502	315	2950	1720	356	514	162	187	280
10	381	650	2000	473	333	1920	2270	338	445	163	162	397
11	286	694	1970	1030	356	1650	2030	340	424	167	653	491
12	259	616	1830	1380	301	1250	1960	457	1300	169	597	285
13	240	556	1270	1380	318	1080	2130	630	1550	150	653	235
14	225	526	1070	1560	310	1490	3300	502	1310	140	600	206
15	210	418	581	1480	333	2110	2820	508	333	135	1870	185
16	204	392	547	1440	451	2100	2350	375	354	129	1000	187
17	206	378	495	1280	485	3370	1980	430	328	123	999	886
18	214	362	454	1320	476	3520	2040	505	310	116	1010	714
19	219	323	439	1010	372	2000	2200	517	298	98	4090	810
20	206	313	448	874	433	1960	2130	418	759	93	2180	721
21	193	310	454	804	1130	2810	2130	330	691	158	1020	677
22	210	383	553	777	3230	2030	2140	296	328	985	911	548
23	529	1350	1180	719	2740	1440	2150	289	626	463	1450	351
24	553	1640	3070	581	1530	1510	2110	301	1190	325	1380	287
25	535	1580	2960	673	1160	1830	2130	340	495	392	1410	266
26	460	4220	2030	737	1260	2120	2130	275	340	343	1540	227
27	392	3130	1520	610	1350	2120	2080	249	275	914	1500	199
28	279	2020	1830	526	1750	1910	2060	223	303	1720	1470	189
29	268	1660	2260	421	1670	1570	2070	208	529	553	1220	172
30	255	1280	2300	395	-----	2100	2000	198	362	694	361	165
31	242	-----	2230	400	-----	5280	-----	194	-----	415	297	-----
TOTAL	21767	28084	47851	29934	23243	62182	64310	13370	22984	10646	27889	11065
MEAN	702	936	1544	966	801	2006	2144	431	766	343	900	369
MAX	2470	4220	3070	2160	3230	5280	3600	1400	2510	1720	4090	886
MIN	193	310	439	395	301	636	1450	194	275	93	134	165
CFSM	.85	1.13	1.86	1.16	.97	2.42	2.58	.52	.92	.41	1.08	.45
IN.	.98	1.26	2.14	1.34	1.04	2.79	2.88	.60	1.03	.48	1.25	.50

CAL YR 1979 TOTAL 590847 MEAN 1619 MAX 11200 MIN 161 CFSM 1.95 IN 26.48
WTR YR 1980 TOTAL 363325 MEAN 993 MAX 5280 MIN 93 CFSM 1.20 IN 16.28

03360500 WHITE RIVER AT NEWBERRY, IN

LOCATION.--Lat 38°55'42", long 87°01'00", in NE¼NE¼ sec.25, T.6 N., R.6 W., Greene County, Hydrologic Unit 05120202, on right bank 500 ft (152 m) upstream from bridge on State Highway 57 at Newberry, 2.3 miles (3.7 km) downstream from Doans Creek, and at mile 112.7 (181.3 km).

DRAINAGE AREA.--4,688 mi² (12,142 km²).

PERIOD OF RECORD.--September 1928 to current year. Prior to October 1948, published as West Fork White River at Newberry.

REVISED RECORDS.--WSP 873: 1937(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 465.59 ft (141.912 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1928, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--52 years, 4,705 ft³/s (133 m³/s), 13.63 in/yr (346 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft³/s (2,180 m³/s) May 21, 1943, gage height, 24.19 ft (7.373 m); minimum daily, 200 ft³/s (5.66 m³/s) Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 27.5 ft (8.38 m) Mar. 27, 1913, from floodmarks by Indiana State Highway Commission; discharge, 130,000 ft³/s (3,680 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 22,000 ft³/s (623 m³/s) Nov. 30, gage height unknown; minimum daily, 1,200 ft³/s (34.0 m³/s) July 21 and Sep. 30.

NOTE.--No gage-height record Nov. 23 to Dec. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3500	1900	18000	8410	2750	5970	16800	5300	3220	3610	2480	1810
2	3600	2400	15000	7650	2620	5300	19200	4740	12600	3180	2120	1920
3	3850	3470	13000	6980	2540	4850	18700	3860	11700	3440	2040	2320
4	3660	3680	9600	6210	2530	4120	15500	3550	9720	3480	1950	2200
5	3320	3680	8800	5410	2470	5770	12300	3350	11100	3450	1620	2030
6	3200	3380	8000	4720	2400	9570	10400	3180	12200	2610	1450	1850
7	2940	2970	6920	4370	2300	9560	9740	2970	13600	2280	1350	1660
8	2680	2670	6510	4080	2300	11300	9450	2840	16000	2090	1870	1550
9	2560	2620	6110	3820	2300	12600	10600	2690	17900	1930	3570	1520
10	2400	2910	5770	3540	2300	12900	10700	2540	13700	1800	4280	1680
11	2070	3170	5420	4940	2300	13800	10800	2500	11400	1750	3440	1810
12	1830	3330	5230	8490	2200	14300	11200	2530	8620	1790	2920	1750
13	1740	3260	5060	8880	2200	14400	10500	3030	6980	1870	3360	1580
14	1670	3140	4480	7960	2200	12000	12900	3310	6320	1760	2890	1370
15	1610	2920	4030	7570	2260	9840	15400	3110	5550	1690	3190	1280
16	1580	2660	3540	6910	3100	9440	15900	2810	4410	1560	5030	1230
17	1550	2490	3180	6690	3190	11300	14800	2860	4010	1460	6350	1860
18	1530	2350	3000	6280	2950	14100	12700	4320	3940	1380	4940	3240
19	1610	2290	2870	5950	2750	14600	10700	5920	3680	1310	6240	3210
20	1650	2180	2740	5500	2960	14400	9310	6630	3490	1250	7960	2550
21	1690	2090	2670	5130	4470	15700	8330	6670	3750	1200	9400	2240
22	1670	2090	4380	4800	8000	16500	7640	5680	3540	3720	8790	1980
23	1800	2100	9320	4530	10400	15900	7150	4650	3370	3540	6600	1920
24	2010	3000	13400	4250	12100	15600	6720	4170	3800	3160	5230	1750
25	2370	4300	18400	4060	11900	16100	6280	4140	4030	2400	4390	1450
26	2270	6000	20200	4120	10200	14800	6010	4630	3230	2130	3800	1360
27	2200	9400	20000	4030	8000	12800	5750	4200	2910	2010	3540	1500
28	2090	14000	18700	3720	6840	11300	5530	3650	2800	3280	3320	1390
29	1900	20000	16100	3400	6600	10200	5470	3150	8730	4360	3080	1280
30	1780	22000	12100	3060	------	10300	5440	2800	6530	2990	2860	1200
31	1710	------	9560	2920	------	14300	------	2590	------	2600	2160	-----
TOTAL	70040	142450	282090	168380	129130	363620	321920	118370	222830	75080	122220	54490
MEAN	2259	4748	9100	5432	4453	11730	10730	3818	7428	2422	3943	1816
MAX	3850	22000	20200	8880	12100	16500	19200	6670	17900	4360	9400	3240
MIN	1530	1900	2670	2920	2200	4120	5440	2500	2800	1200	1350	1200
CFSM	.48	1.01	1.94	1.16	.95	2.50	2.29	.81	1.58	.52	.84	.39
IN.	.56	1.13	2.24	1.34	1.02	2.89	2.55	.94	1.77	.60	.97	.43

CAL YR 1979 TOTAL 3105460 MEAN 8508 MAX 47700 MIN 1530 CFSM 1.82 IN 24.64
WTR YR 1980 TOTAL 2070620 MEAN 5657 MAX 22000 MIN 1200 CFSM 1.21 IN 16.43

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW¼SW¼ sec.18, T.15 N., R.9 E., Rush County, Hydrologic Unit 05120204, on right bank 300 ft (91 m) upstream from highway bridge, 0.5 mile (0.8 km) northwest of Carthage, 2.2 miles (3.5 km) downstream from Three Mile Creek, and at mile 50.7 (81.6 km).

DRAINAGE AREA.--184 mi² (477 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1961, published as Blue River at Carthage, Ind.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 859.33 ft (261.924 m) 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.--30 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)
Nov. 28	1400	2140	60.6	7.48	2.280
June 8	0800	*2370	67.1	*7.80	2.377

Minimum daily discharge, 65 ft³/s (1.84 m³/s) Sept. 28, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	470	520	273	140	159	579	163	188	192	97	105
2	206	650	415	254	135	140	436	157	773	167	93	120
3	169	396	350	236	130	145	364	153	1090	190	121	105
4	155	279	321	224	130	149	335	149	525	169	92	99
5	142	226	311	211	129	381	293	146	396	132	84	96
6	136	202	311	198	133	457	268	144	322	116	91	94
7	128	182	284	199	128	360	258	139	349	104	468	93
8	132	263	254	179	124	1180	251	135	1490	99	275	94
9	154	326	234	173	120	896	246	133	495	93	150	91
10	143	519	227	168	120	646	243	129	380	610	117	88
11	136	390	218	424	115	492	224	131	285	273	152	84
12	135	323	215	472	110	353	241	200	232	171	165	81
13	125	282	203	318	110	301	234	182	207	133	125	78
14	117	184	190	288	119	271	549	147	190	113	110	76
15	118	168	182	267	130	275	554	134	212	103	323	75
16	122	156	180	271	138	304	478	130	277	94	272	83
17	130	145	167	315	120	461	356	348	199	87	563	113
18	129	139	161	280	110	608	302	1060	178	81	820	88
19	122	137	162	245	118	416	269	568	200	78	933	80
20	120	140	157	228	152	333	248	387	199	75	479	75
21	118	128	155	214	487	1370	231	298	182	98	310	72
22	117	140	419	210	1120	1010	217	249	175	340	237	71
23	148	749	962	197	595	603	208	224	154	270	192	73
24	144	1660	1410	179	417	575	194	279	137	151	164	70
25	135	948	1250	198	322	591	184	246	119	115	147	70
26	126	1380	741	181	240	431	177	197	122	98	136	68
27	118	827	547	168	219	358	174	174	142	116	127	66
28	120	1800	420	160	201	326	184	163	168	370	118	65
29	113	979	357	150	176	479	182	153	896	202	113	65
30	107	650	326	147	----	480	169	151	307	134	108	66
31	104	-----	297	140	----	836	----	156	-----	108	111	----
TOTAL	4085	14838	11946	7167	6288	15386	8648	7025	10589	5082	7293	2504
MEAN	132	495	385	231	217	496	288	227	353	164	235	83.5
MAX	206	1800	1410	472	1120	1370	579	1060	1490	610	933	120
MIN	104	128	155	140	110	140	169	129	119	75	84	65
CFSM	.72	2.69	2.09	1.26	1.18	2.70	1.57	1.23	1.92	.89	1.28	.45
IN.	.83	3.00	2.42	1.45	1.27	3.11	1.75	1.42	2.14	1.03	1.47	.51

CAL YR 1979 TOTAL 127464 MEAN 349 MAX 3790 MIN 87 CFSM 1.90 IN 25.77
WTR YR 1980 TOTAL 100851 MEAN 276 MAX 1800 MIN 65 CFSM 1.50 IN 20.39

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: July 1973 to September 1977, November 1979 to current year.
WATER TEMPERATURE: November 1974 to September 1977, November 1979 to current year.
SUSPENDED SEDIMENT DISCHARGE: October 1977 to current year.

INSTRUMENTATION.--Water-quality monitor and automatic pumping sediment sampler.

REMARKS.--Sediment-discharge and water-quality record good.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 26.5°C July 11, 1976; minimum freezing point on several days during the winter period.
SPECIFIC CONDUCTANCE: Maximum, 996 micromhos Feb. 7, 1977; minimum, 114 micromhos Jan. 27, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 1550 mg/L June 8, 1980; minimum daily, 8 mg/L Jan. 6, 1978, Jan. 20, 1979.
SEDIMENT LOADS: Maximum daily, 7100 tons (6440 tonnes) June 8, 1980; minimum daily, 1.6 tons (1.45 tonnes) Sept. 25, 29, 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 26.0° C July 15, 20, August 9, 10; minimum, 0.5° C January 24, February 1, 2, 3, 4, 5, 12, 13, March 2, 3.
SPECIFIC CONDUCTANCE: Maximum, 729 micromhom February 16; minimum 234 micromhom June 29.
SEDIMENT CONCENTRATIONS: Maximum daily, 1550 mg/L June 8; minimum daily, 11 mg/L Sept. 30.
SEDIMENT LOADS: Maximum daily load, 7100 tons (6440 tonnes) June 8; minimum daily, 2.0 tons (1.81 tonnes) Sept. 30.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18	5.6	---	------	52	73	19	14	---	------	27	12
2	38	23	52	91	42	47	20	14	---	------	26	9.8
3	25	11	42	45	31	29	17	11	---	------	30	12
4	50	21	28	21	27	23	15	9.1	---	------	21	8.4
5	38	15	37	23	51	43	15	8.5	---	------	86	117
6	36	13	32	17	54	45	13	6.9	---	------	65	80
7	35	12	28	14	36	28	15	8.1	---	------	33	32
8	35	12	53	38	62	43	37	18	---	------	379	1270
9	34	14	67	64	55	35	---	----	---	------	208	538
10	26	10	68	95	60	37	---	----	---	------	118	206
11	28	10	30	32	65	38	---	----	---	------	75	100
12	34	12	19	17	48	28	---	----	---	------	47	45
13	32	11	20	15	42	23	---	----	---	------	40	33
14	30	9.5	18	8.9	42	22	---	----	---	------	35	26
15	28	8.9	16	7.3	38	19	---	----	38	13	37	27
16	28	9.2	18	7.6	33	16	---	----	20	7.5	34	28
17	22	7.7	17	6.7	39	18	---	----	19	6.2	107	170
18	31	11	20	7.5	32	14	---	----	19	5.6	112	184
19	24	7.9	21	7.8	35	15	---	----	20	6.4	55	62
20	22	7.1	21	7.9	33	14	---	----	25	12	37	33
21	23	7.3	20	6.9	29	12	---	----	198	460	638	2470
22	26	8.2	22	8.3	108	174	39	22	357	1130	289	856
23	36	14	177	407	145	384	37	20	141	227	165	269
24	---	----	239	1050	314	1100	45	22	81	91	137	222
25	---	----	78	200	137	462	---	----	53	46	115	187
26	---	----	193	738	82	164	---	----	31	20	90	105
27	---	----	168	387	52	77	---	----	27	16	77	74
28	---	----	224	1050	38	43	---	----	22	12	65	57
29	---	----	117	309	27	26	---	----	29	14	109	143
30	---	----	76	133	23	20	---	----	---	------	93	132
31	---	----	---	------	22	18	---	----	---	------	181	420
TOTAL	---	260.4	---	4814.9	---	3090	---	153.6	---	2066.7	---	7928.2

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	88	138	38	17	114	65	142	74	67	18	15	4.3
2	52	61	35	15	1020	3270	104	47	49	12	22	7.1
3	50	49	52	21	920	3200	82	42	50	17	---	-----
4	42	38	47	19	320	454	75	34	44	11	---	-----
5	30	24	39	15	220	235	72	26	80	18	---	-----
6	34	25	39	15	165	143	70	22	91	26	---	-----
7	38	26	56	21	181	250	66	19	383	570	---	-----
8	37	25	48	17	1550	7100	63	17	134	121	39	9.9
9	30	20	40	14	315	441	61	15	59	24	68	17
10	21	14	32	11	180	185	700	1540	56	18	67	16
11	46	28	28	9.9	120	92	139	102	86	36	52	12
12	71	46	97	61	116	73	102	47	88	39	62	14
13	66	42	50	25	142	79	67	24	65	22	59	12
14	188	323	47	19	130	67	52	16	54	16	49	10
15	138	206	48	17	128	75	47	13	220	251	39	7.9
16	97	125	71	25	138	110	35	8.9	103	82	32	7.2
17	85	82	157	215	----	-----	40	9.4	422	977	45	15
18	67	55	361	1130	----	-----	45	9.8	358	850	20	4.8
19	60	44	108	166	----	-----	51	11	299	817	27	5.8
20	55	37	91	95	----	-----	37	7.5	135	186	28	5.7
21	54	34	90	72	----	-----	51	18	81	70	38	7.4
22	48	28	72	48	----	-----	154	151	65	42	26	5.0
23	41	23	77	47	----	-----	115	100	40	21	22	4.3
24	28	15	191	158	----	-----	48	20	37	16	20	3.8
25	31	15	124	85	----	-----	38	12	32	13	27	5.1
26	42	20	76	40	----	-----	28	7.4	31	11	26	4.8
27	40	19	70	33	56	21	46	32	31	11	13	2.3
28	42	21	62	27	310	265	620	670	36	11	13	2.3
29	37	18	55	23	847	2520	205	120	60	18	12	2.1
30	41	19	57	23	298	260	110	40	23	6.7	11	2.0
31	---	----	94	40	----	-----	97	28	16	4.8	---	-----
TOTAL	---	1620	---	2523.9	----	18905	---	3283.0	---	4335.5	---	187.8

TOTAL LOAD FOR YEAR: 49169.0 TONS.

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1				---	---	---	494	466	478	580	572	576
2				---	---	---	514	495	502	584	575	580
3				---	---	---	537	517	529	594	585	591
4				---	---	---	547	539	544	604	593	601
5				---	---	---	556	548	552	614	597	606
6				---	---	---	562	548	555	613	598	605
7				---	---	---	577	551	561	616	601	606
8				---	---	---	586	579	583	626	610	620
9				---	---	---	595	583	590	625	607	619
10				---	---	---	597	590	593	630	615	623
11				---	---	---	605	598	603	623	476	568
12				---	---	---	610	598	604	530	484	503
13				---	---	---	615	604	610	565	539	555
14				---	---	---	614	607	611	582	559	574
15				---	---	---	614	604	610	588	580	584
16				---	---	---	612	602	606	594	582	588
17				---	---	---	612	601	608	586	568	577
18				---	---	---	631	611	623	582	571	578
19				---	---	---	620	610	617	590	578	587
20				---	---	---	627	609	618	596	587	591
21				---	---	---	623	602	615	600	587	596
22				---	---	---	600	455	557	617	602	608
23				---	---	---	451	423	441	618	604	612
24				---	---	---	447	324	385	614	603	610
25				---	---	---	411	361	377	640	606	616
26				---	---	---	465	418	441	648	608	630
27				423	403	414	501	467	483	618	603	610
28				398	277	306	531	503	516	617	602	610
29				415	331	385	543	534	539	633	603	620
30				465	415	448	550	545	548	632	609	620
31				---	---	---	565	550	560	636	614	626
MONTH				465	277	388	631	324	550	648	476	596

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	639	616	629	554	540	547	497	425	456	577	559	569
2	642	618	629	580	542	563	531	499	519	583	556	569
3	648	587	621	576	539	559	548	533	541	578	558	570
4	649	499	608	572	553	564	568	548	562	585	551	560
5	649	619	635	567	422	517	575	565	570	576	552	565
6	636	614	626	481	405	441	579	568	574	585	558	573
7	671	616	640	509	483	495	574	566	571	588	561	579
8	648	624	634	509	276	352	578	566	573	595	576	589
9	642	614	629	344	279	315	577	567	571	602	581	593
10	644	616	632	371	344	355	586	569	577	600	583	594
11	636	616	626	495	371	435	589	575	581	606	593	600
12	643	613	631	540	498	518	602	581	595	601	514	581
13	645	524	608	567	544	553	588	585	586	573	491	540
14	650	606	630	596	569	582	585	469	526	597	579	592
15	649	619	629	608	573	586	530	492	513	612	599	608
16	729	626	672	579	553	565	528	499	514	621	609	617
17	636	614	624	566	499	545	531	518	526	614	466	572
18	658	541	610	518	492	505	543	535	540	490	427	461
19	643	605	629	561	520	539	551	541	547	584	493	512
20	672	596	636	576	556	565	556	546	552	636	586	622
21	586	312	477	544	322	388	561	550	556	641	630	638
22	346	302	318	439	339	390	573	555	565	639	631	636
23	397	349	373	495	441	463	585	561	572	632	622	628
24	437	397	415	526	443	489	577	564	570	625	535	588
25	469	439	452	511	484	496	578	566	572	589	495	559
26	510	471	499	559	513	531	580	564	573	599	583	593
27	552	512	530	578	517	554	584	563	573	601	594	598
28	538	526	530	566	558	562	575	564	571	605	596	602
29	558	536	545	563	513	533	582	558	572	612	597	607
30	---	---	---	534	425	516	568	558	563	613	607	610
31	---	---	---	447	384	417	---	---	---	607	589	599
MONTH	729	302	576	608	276	498	602	425	556	641	427	585

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	585	560	576	533	473	499	630	620	624	605	585	596
2	538	298	410	568	501	544	638	558	605	596	580	589
3	426	322	371	503	494	498	587	572	583	595	587	591
4	476	426	456	502	495	499	580	577	579	608	589	601
5	504	478	487	543	496	526	602	575	591	611	603	608
6	533	506	516	560	540	553	624	533	597	615	608	611
7	541	269	513	563	547	553	476	352	414	613	604	609
8	403	252	326	658	564	610	510	312	435	610	601	604
9	488	408	458	642	622	631	563	512	546	617	599	607
10	520	493	506	594	269	390	583	560	570	619	607	613
11	546	519	535	499	394	459	577	516	541	626	612	617
12	561	548	557	555	503	536	549	491	533	647	625	636
13	570	562	565	576	547	568	536	481	504	642	623	630
14	578	569	573	594	574	584	573	537	560	631	605	614
15	585	538	569	623	595	607	568	387	471	627	622	625
16	542	493	525	629	608	616	516	433	483	638	612	631
17	564	545	556	608	596	604	544	278	460	611	587	599
18	585	564	576	616	597	609	385	342	369	591	568	580
19	587	535	542	625	609	615	385	323	357	610	595	602
20	553	534	544	638	613	623	496	438	472	614	606	609
21	531	521	526	633	533	596	534	499	519	626	613	619
22	538	522	529	543	385	471	551	537	547	629	618	623
23	522	511	517	468	397	436	570	554	563	638	620	628
24	610	538	589	523	471	496	576	567	573	638	618	626
25	574	545	557	610	526	579	577	575	576	625	613	621
26	592	547	582	638	612	625	586	579	583	637	625	629
27	566	524	547	632	606	619	599	585	592	643	637	640
28	625	314	554	476	330	425	600	597	599	644	637	641
29	419	234	340	520	472	495	608	601	604	650	647	649
30	471	411	443	583	523	552	605	599	602	664	650	655
31	---	---	---	640	584	622	609	599	603	---	---	---
MONTH	625	234	512	658	269	550	638	278	537	664	568	617
YEAR	729	234	555									

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---	4.0	3.5	4.0	5.0	4.5	4.5
2				---	---	---	3.5	2.5	3.0	4.5	4.0	4.5
3				---	---	---	4.0	2.5	3.0	4.5	4.0	4.5
4				---	---	---	5.0	3.5	4.0	4.5	3.5	4.0
5				---	---	---	6.0	4.5	5.0	3.5	3.0	3.0
6				---	---	---	6.0	5.5	6.0	3.0	2.5	3.0
7				---	---	---	6.0	5.0	5.5	3.0	2.5	3.0
8				---	---	---	5.5	4.0	5.0	2.5	1.5	2.0
9				---	---	---	4.5	4.0	4.5	3.0	2.0	2.0
10				---	---	---	5.5	4.0	5.0	4.0	2.0	2.5
11				---	---	---	8.0	5.5	6.5	6.0	4.0	5.0
12				---	---	---	8.0	7.0	7.5	4.0	1.5	2.5
13				---	---	---	6.5	5.5	6.0	3.5	2.0	2.5
14				---	---	---	5.5	4.0	4.5	5.5	3.5	4.5
15				---	---	---	4.5	3.0	4.0	5.5	4.5	5.0
16				---	---	---	4.5	3.0	4.0	6.5	5.5	5.5
17				---	---	---	3.0	1.5	2.0	7.0	6.5	7.0
18				---	---	---	2.5	1.5	2.0	6.5	5.5	6.0
19				---	---	---	3.5	2.5	3.0	6.0	4.5	5.5
20				---	---	---	4.0	2.5	3.5	6.0	5.0	5.5
21				---	---	---	5.0	3.5	4.0	5.5	3.5	4.5
22				---	---	---	5.5	5.0	5.5	5.0	4.5	4.5
23				---	---	---	7.0	5.5	6.0	4.5	2.0	3.0
24				---	---	---	8.5	7.0	8.0	2.0	.5	1.5
25				---	---	---	7.5	6.0	6.5	4.5	2.5	3.5
26				---	---	---	6.0	5.5	5.5	4.0	3.0	3.5
27				8.5	8.0	8.5	5.5	5.0	5.5	4.5	3.0	3.5
28				7.5	4.5	5.5	5.0	4.5	4.5	4.0	2.5	3.0
29				4.5	4.0	4.5	5.0	4.5	5.0	2.5	1.0	1.5
30				4.0	4.0	4.0	6.0	4.5	5.0	2.0	1.0	1.5
31				---	---	---	5.0	4.5	5.0	2.5	1.0	1.5
MONTH				8.5	4.0	5.5	8.5	1.5	5.0	7.0	.5	3.5

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	.5	1.5	2.0	1.0	1.5	7.5	7.0	7.0	14.5	11.5	13.0
2	1.5	.5	1.0	2.0	.5	1.0	11.0	7.0	9.0	15.0	12.5	14.0
3	1.5	.5	1.0	2.0	.5	1.5	10.5	9.0	9.5	16.5	13.5	15.0
4	2.0	.5	1.0	4.5	1.5	3.0	10.0	7.0	8.5	18.0	14.0	16.0
5	2.0	.5	1.5	4.5	2.5	4.0	10.5	6.5	8.5	18.5	15.0	17.0
6	3.5	2.0	2.5	4.0	2.0	3.0	12.0	8.5	10.0	18.5	16.0	17.0
7	3.0	1.5	2.5	4.5	3.0	4.0	12.5	10.0	11.0	17.0	15.0	15.5
8	3.0	1.0	2.0	4.5	2.5	3.0	13.0	11.0	12.0	14.5	12.5	13.5
9	4.0	2.5	3.0	5.5	2.5	4.0	12.0	9.0	10.5	15.0	11.5	13.5
10	3.5	2.0	3.0	6.0	4.5	5.0	9.5	8.0	9.0	14.5	12.5	13.5
11	3.5	2.0	2.5	5.0	3.5	4.5	10.0	7.5	9.0	17.0	14.0	15.0
12	2.0	.5	1.5	4.5	3.5	4.0	11.0	10.0	10.5	17.5	16.5	17.0
13	2.5	.5	1.5	4.5	3.5	4.0	9.5	8.5	9.0	20.0	16.5	18.0
14	4.0	2.5	3.5	6.5	3.5	5.0	8.5	6.5	7.0	18.0	15.5	16.5
15	4.5	3.5	4.0	8.0	4.5	6.5	6.5	6.0	6.5	17.0	14.0	15.5
16	4.0	2.0	3.0	8.0	6.5	7.5	10.0	6.0	7.5	16.0	14.5	15.0
17	2.0	1.0	1.5	8.0	6.5	7.5	11.0	7.5	9.5	14.5	14.0	14.5
18	2.5	1.0	1.5	7.0	5.0	6.0	14.0	9.5	11.5	16.0	14.5	15.0
19	4.5	2.5	3.5	7.5	5.5	6.5	14.5	11.0	13.0	16.0	15.0	15.5
20	5.5	4.5	5.0	8.0	6.5	7.0	15.0	12.0	13.5	16.0	14.5	15.5
21	4.5	2.5	4.0	8.0	6.0	7.0	16.5	13.0	15.0	17.5	14.5	16.0
22	3.5	2.5	3.0	8.0	5.0	6.5	17.0	13.0	15.5	18.5	15.5	17.0
23	4.0	3.5	4.0	7.5	6.5	7.0	16.5	14.5	15.5	18.5	17.0	18.0
24	4.5	3.5	4.0	8.0	7.5	7.5	15.0	12.5	14.0	18.0	17.0	17.5
25	4.0	2.5	3.5	7.5	6.5	6.5	13.5	10.5	12.0	19.5	16.5	18.0
26	3.0	1.0	2.5	6.5	5.5	6.0	13.5	11.0	12.5	19.5	17.0	18.5
27	4.0	2.5	3.0	9.0	5.5	7.0	13.0	11.5	12.0	18.5	16.0	17.5
28	4.5	2.5	3.5	8.5	8.0	8.5	11.5	10.0	10.5	19.0	16.0	17.5
29	3.5	1.5	2.5	8.5	8.0	8.0	11.5	10.0	10.5	20.5	17.5	19.0
30	---	---	---	8.0	7.5	7.5	12.0	9.5	11.0	21.0	19.0	20.0
31	---	---	---	7.5	7.0	7.0	----	----	----	21.5	19.0	20.5
MONTH	5.5	.5	2.5	9.0	.5	5.5	17.0	6.0	10.5	21.5	11.5	16.5

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	19.0	19.5	21.0	19.0	20.0	25.0	21.5	23.0	23.5	21.0	22.0
2	19.0	18.5	19.0	22.0	20.0	21.0	25.5	22.5	24.0	22.5	21.0	21.5
3	20.5	19.0	19.5	21.5	20.5	21.0	23.5	23.5	23.5	22.0	19.0	20.5
4	19.5	18.0	18.5	22.5	20.0	21.0	24.0	23.0	23.5	22.0	19.5	20.5
5	19.5	17.5	18.5	24.0	21.0	22.5	23.5	21.5	22.5	21.5	20.0	21.0
6	21.0	18.5	20.0	24.0	21.5	22.5	24.5	21.5	23.0	22.5	19.5	21.0
7	21.5	18.0	20.5	22.5	20.0	21.5	25.0	22.5	23.5	21.5	19.5	20.5
8	19.5	17.5	18.5	25.5	21.5	23.5	25.0	23.5	24.5	22.0	19.5	20.5
9	18.0	16.0	17.0	24.5	23.5	24.0	26.0	24.0	25.0	21.5	20.0	20.5
10	17.5	16.0	16.5	24.5	22.0	23.0	26.0	23.5	24.5	20.5	18.0	19.0
11	17.0	14.5	16.0	24.5	22.0	23.0	24.5	22.5	23.5	20.0	16.0	17.5
12	17.5	14.5	16.5	24.5	22.5	23.5	24.0	22.0	23.0	19.0	16.5	18.0
13	18.0	15.5	17.0	25.5	22.5	24.0	23.5	21.5	22.5	20.5	18.0	19.0
14	18.5	16.5	17.5	25.0	22.0	23.5	23.0	21.5	22.5	20.5	18.5	19.5
15	19.0	17.5	18.0	26.0	22.5	24.5	23.0	21.5	22.0	19.0	18.0	18.5
16	18.5	16.5	17.5	25.5	23.5	24.5	22.5	20.0	21.5	17.5	16.5	17.0
17	18.0	15.5	17.0	25.5	22.5	24.0	20.0	19.0	19.5	17.5	16.5	17.0
18	19.0	16.0	17.5	24.0	21.5	23.0	22.0	20.5	21.0	17.5	15.0	16.0
19	18.0	15.5	16.5	25.5	21.5	23.5	22.5	21.5	22.0	18.0	15.0	16.5
20	17.5	14.5	16.0	26.0	22.5	24.5	23.0	21.5	22.0	19.5	16.5	18.0
21	19.0	15.5	17.0	24.5	23.0	23.5	23.0	22.0	22.5	21.5	18.5	20.0
22	20.0	16.5	18.5	23.5	22.5	23.0	22.5	21.0	22.0	22.0	20.0	21.0
23	19.5	18.0	19.0	23.5	21.5	22.5	22.0	20.0	21.0	20.5	17.5	19.0
24	20.5	18.0	19.0	23.0	20.5	22.0	22.0	19.5	21.0	17.5	15.5	16.5
25	22.0	19.0	20.5	23.0	20.5	21.5	21.5	19.5	21.0	17.0	15.5	16.5
26	22.5	20.0	21.0	23.5	20.5	22.0	22.5	20.0	21.0	16.0	14.0	15.0
27	23.0	20.5	21.5	22.5	20.0	21.5	23.0	20.0	21.5	14.5	12.5	13.5
28	23.5	21.0	22.5	21.5	20.5	21.0	23.5	20.5	22.0	15.5	13.0	14.5
29	22.5	21.5	22.0	22.5	20.0	21.0	23.0	21.0	22.0	16.0	13.5	14.5
30	21.5	20.0	21.0	22.0	21.0	21.5	22.5	20.5	21.5	16.5	14.0	15.5
31	----	----	----	23.5	21.0	22.0	22.5	20.5	21.5	----	----	----
MONTH	23.5	14.5	18.5	26.0	19.0	22.5	26.0	19.0	22.5	23.5	12.5	18.5
YEAR	26.0	.5	12.5									

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE¼SE¼ sec.31, T.13 N., R.7 E., Shelby County, Hydrologic Unit 05120204, on left bank 0.2 mile (0.3 km) downstream from bridge on U.S. Highway 421 at Shelbyville, 0.6 mile (1.0 km) downstream from Little Blue River, and at mile 23.9 (38.4 km).

DRAINAGE AREA.--421 mi² (1,090 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1943 to current year. Prior to October 1961, published as Blue River at Shelbyville.

REVISED RECORDS.--WSP 1505: 1944. WSP 1909: 1959(M). WSP 2109: Drainage area. 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.

AVERAGE DISCHARGE.--37 years, 467 ft³/s (13.23 m³/s), 15.06 in/yr (383 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 flood-marks.

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)
Nov. 29	0200	3960	112	11.74	3.578	Aug. 19	2400	*5050	143	*12.99	3.959
Dec. 25	1000	3730	106	11.44	3.487						

Minimum daily discharge, 126 ft³/s (3.57 m³/s) Sept. 30.

WATER-QUALITY RECORDS

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	573	1440	694	270	314	1620	305	286	667	226	195
2	273	1570	1130	619	255	300	1180	292	639	413	216	193
3	358	1040	921	557	250	300	968	284	2310	1080	359	192
4	306	716	820	512	255	323	970	276	1280	744	360	180
5	281	539	768	483	268	563	807	269	813	536	249	174
6	262	446	758	434	266	1080	691	264	609	453	227	171
7	249	381	690	422	260	866	618	257	507	332	1610	166
8	237	386	596	377	252	1650	569	249	1930	282	1610	169
9	259	493	524	356	244	2290	540	243	1720	256	629	175
10	265	1010	497	338	241	1590	513	238	897	1170	582	164
11	252	897	474	682	241	1250	474	242	674	1280	650	158
12	249	682	453	1310	228	922	464	273	519	653	643	153
13	241	577	429	871	223	756	471	361	446	411	477	148
14	225	460	396	720	233	660	1030	284	399	314	345	146
15	215	367	373	663	236	662	1380	251	368	272	1010	143
16	219	339	367	648	267	711	1130	241	485	246	1140	146
17	229	306	341	743	230	862	887	395	438	229	977	165
18	232	289	318	712	230	1350	719	1810	352	216	1820	169
19	227	278	322	605	230	1020	606	1550	343	206	3980	150
20	220	279	311	539	262	826	537	1000	338	199	3180	145
21	217	268	301	506	659	2210	492	728	319	202	1330	141
22	218	276	763	486	1990	3030	448	559	302	528	820	138
23	246	1270	2410	454	1510	1660	423	479	292	1100	546	136
24	277	3190	2850	388	1010	1340	393	474	281	534	413	135
25	267	3020	3660	411	775	1460	365	612	260	341	338	132
26	250	2890	2420	388	576	1100	345	444	239	274	295	131
27	239	2550	1630	352	492	896	333	362	245	253	263	130
28	234	3410	1220	335	453	799	334	324	240	450	241	128
29	231	3590	982	300	376	994	341	301	1250	433	223	128
30	223	1950	869	280	-----	1130	320	287	985	304	211	126
31	216	-----	783	275	-----	1980	-----	278	-----	249	204	----
TOTAL	7644	34042	29816	16460	12782	34894	19968	13932	19766	14627	25174	4627
MEAN	247	1135	962	531	441	1126	666	449	659	472	812	154
MAX	358	3590	3660	1310	1990	3030	1620	1810	2310	1280	3980	195
MIN	215	268	301	275	223	300	320	238	239	199	204	126
CFSM	.59	2.70	2.29	1.26	1.05	2.68	1.58	1.07	1.57	1.12	1.93	.37
IN.	.68	3.01	2.63	1.45	1.13	3.08	1.76	1.23	1.75	1.29	2.22	.41

CAL YR 1979 TOTAL 298136 MEAN 817 MAX 6920 MIN 169 CFSM 1.94 IN 26.34
WTR YR 1980 TOTAL 233732 MEAN 639 MAX 3980 MIN 126 CFSM 1.52 IN 20.65

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
AUG 19...	1905	4620	333	4150	79	89	94	98	99	100

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 mi^2 (243.2 km^2).

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

REVISED RECORDS.--WDR IN-76-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 786.00 ft (239.573 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--13 years, 105 ft^3/s (2.974 m^3/s), 15.19 in/yr (386 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft^3/s (52.4 m^3/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 ft^3/s (0.091 m^3/s) Oct. 7, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft^3/s (26.9 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jun. 8	0800	*1350	38.2	*8.91	2.716
Aug. 18	2200	1130	32.0	7.60	2.316

Minimum daily discharge, 11 ft^3/s (0.31 m^3/s) Sept. 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	72	268	111	43	60	369	60	58	35	16	28
2	26	166	191	98	40	50	252	57	195	30	15	45
3	28	178	146	86	40	48	191	55	584	28	15	32
4	37	115	125	79	40	60	163	53	589	27	14	29
5	34	84	116	73	40	102	142	51	305	35	13	26
6	31	68	115	68	40	154	122	50	170	32	26	23
7	29	59	107	65	38	152	113	48	136	25	400	21
8	28	51	92	63	38	342	121	46	978	22	119	35
9	27	54	78	66	36	524	153	44	666	20	65	23
10	38	75	73	65	35	443	142	43	412	149	45	20
11	42	105	71	121	34	295	124	43	231	115	63	17
12	39	78	69	232	33	195	137	44	156	59	42	16
13	35	63	64	168	35	154	133	47	114	39	32	15
14	31	56	59	125	33	130	293	51	94	31	27	15
15	28	49	55	110	36	128	361	48	83	26	152	14
16	28	46	54	110	45	142	290	43	100	21	89	15
17	30	43	51	128	40	202	217	82	122	19	181	40
18	29	40	55	128	35	296	167	407	82	17	508	33
19	31	38	49	107	38	233	138	500	67	16	756	23
20	33	37	45	93	40	176	119	324	59	15	456	19
21	33	34	43	85	158	462	106	204	53	18	233	17
22	34	37	123	81	402	560	95	147	49	52	132	16
23	43	236	324	76	383	403	87	116	47	41	86	16
24	44	551	612	71	229	275	80	103	48	26	64	16
25	52	574	675	72	165	251	74	139	43	22	51	16
26	48	633	565	65	121	197	69	105	40	19	44	15
27	42	506	339	58	105	160	66	82	35	18	39	15
28	39	680	231	53	94	144	65	72	43	22	34	12
29	37	614	172	47	82	193	65	65	111	21	31	11
30	36	461	145	46	----	257	63	61	47	21	29	11
31	33	----	127	45	----	409	----	58	----	18	28	----
TOTAL	1065	5803	5239	2795	2498	7197	4517	3248	5717	1039	3805	634
MEAN	34.4	193	169	90.2	86.1	232	151	105	191	33.5	123	21.1
MAX	52	680	675	232	402	560	369	500	978	149	756	45
MIN	20	34	43	45	33	48	63	43	35	15	13	11
CFSM	.37	2.06	1.80	.96	.92	2.47	1.61	1.12	2.03	.36	1.31	.23
IN.	.42	2.30	2.08	1.11	.99	2.85	1.79	1.29	2.26	.41	1.51	.25

CAL YR 1979 TOTAL 58647 MEAN 161 MAX 1560 MIN 20 CFSM 1.72 IN 23.23
WTR YR 1980 TOTAL 43557 MEAN 119 MAX 978 MIN 11 CFSM 1.27 IN 17.26

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).

WATER-DISCHARGE RECORDS

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 fair.

AVERAGE DISCHARGE.--13 years, 95.4 ft³/s (2.702 m³/s), 16.44 in/yr (418 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)
Nov. 26	0715	1090	30.9	7.75	2.362	Mar. 21	1315	1080	30.6	7.62	2.323
Dec. 24	1415	1170	33.1	8.03	2.448	Aug. 20	0430	*2110	59.8	*10.38	3.164

Minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	89	137	69	23	45	279	29	40	22	8.0	22
2	23	80	103	58	22	35	180	24	262	13	3.8	81
3	16	45	86	50	22	35	140	28	429	11	4.1	33
4	12	34	78	45	22	45	119	27	146	15	3.1	24
5	11	27	77	42	22	137	99	24	82	14	2.4	21
6	11	24	76	37	21	164	85	20	64	9.1	9.1	19
7	10	22	67	38	20	133	79	23	53	7.7	443	17
8	9.6	20	53	30	20	369	88	21	564	11	107	26
9	12	36	45	27	20	350	140	16	328	11	48	24
10	11	78	45	23	19	273	125	20	132	25	28	36
11	11	51	44	199	18	184	97	21	83	39	134	15
12	11	33	44	231	15	125	142	22	56	19	67	13
13	10	26	39	114	15	104	122	29	49	13	37	15
14	9.6	26	34	95	19	95	356	25	42	8.4	26	15
15	9.6	24	34	86	24	129	295	20	37	3.6	434	14
16	10	22	34	90	34	129	205	14	39	2.6	163	15
17	11	21	29	114	20	240	144	91	35	3.1	388	88
18	6.1	20	27	93	15	266	109	367	23	10	364	53
19	10	19	27	75	17	164	91	191	27	11	1200	31
20	10	18	24	68	33	128	80	118	34	10	1460	23
21	10	17	24	63	220	753	69	86	24	18	299	20
22	10	21	196	62	459	367	56	62	21	58	156	18
23	31	402	450	55	236	193	53	51	21	38	99	12
24	19	668	825	48	163	220	51	200	27	19	70	10
25	13	350	670	54	125	219	45	168	15	14	55	15
26	11	797	314	43	90	148	39	87	14	11	42	15
27	16	336	186	38	81	118	38	55	15	17	35	13
28	16	731	131	32	68	115	37	42	20	27	29	13
29	11	330	103	28	55	252	41	39	84	9.5	23	12
30	5.8	186	91	27	----	280	34	40	35	5.7	24	7.0
31	5.3	----	80	25	----	566	----	40	----	4.6	22	-----
TOTAL	373.0	4553	4173	2059	1918	6381	3438	2000	2801	480.3	5783.5	720.0
MEAN	12.0	152	135	66.4	66.1	206	115	64.5	93.4	15.5	187	24.0
MAX	31	797	825	231	459	753	356	367	564	58	1460	88
MIN	5.3	17	24	23	15	35	34	14	14	2.6	2.4	7.0
CFSM	.15	1.93	1.71	.84	.84	2.61	1.46	.82	1.19	.20	2.37	.31
IN.	.18	2.15	1.97	.97	.91	3.01	1.62	.94	1.32	.23	2.73	.34

CAL YR 1979 TOTAL 52015.8 MEAN 143 MAX 2180 MIN 5.3 CFSM 1.82 IN 24.56
WTR YR 1980 TOTAL 34679.8 MEAN 94.8 MAX 1460 MIN 2.4 CFSM 1.20 IN 16.37

03361850 BUCK CREEK AT ACTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: June 1978 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT										
05...	0740	13.0	10	70	1.9	--	--	--	---	---
12...	1000	----	11	49	1.5	--	--	--	---	---
19...	1030	----	10	46	1.2	--	--	--	---	---
26...	0930	----	11	6	.18	--	--	--	---	---
NOV										
02...	0840	----	86	40	9.3	--	--	--	---	---
07...	1530	8.5	21	45	2.6	--	--	--	---	---
21...	0845	----	17	20	.92	--	--	--	---	---
30...	1510	----	173	16	7.5	--	--	--	---	---
DEC										
07...	1340	7.0	66	14	2.5	--	--	--	---	---
14...	1035	----	34	18	1.7	--	--	--	---	---
21...	1045	1.0	26	9	.63	--	--	--	---	---
28...	0930	----	130	20	7.0	--	--	--	---	---
JAN										
05...	1100	3.0	43	14	1.6	--	--	--	---	---
11...	0930	----	67	53	9.6	--	--	--	---	---
18...	0950	----	95	13	3.3	--	--	--	---	---
FEB										
08...	1000	----	20	75	4.0	75	--	--	---	---
24...	1130	----	162	26	11	--	--	--	---	---
MAR										
28...	1300	----	101	43	12	--	--	--	---	---
APR										
03...	0940	----	140	74	28	57	85	99	---	---
07...	1540	12.0	79	72	15	49	86	99	100	---
16...	1550	----	190	42	22	--	--	--	---	---
MAY										
07...	0950	15.5	23	74	4.6	--	--	--	---	---
30...	1045	20.5	45	65	7.9	--	--	--	---	---
JUN										
03...	1115	20.0	442	482	575	96	97	98	99	100
13...	1200	18.0	48	126	16	--	--	--	---	---
JUL										
03...	1315	23.0	11	64	1.9	--	--	--	---	---
10...	1130	----	9.8	82	2.2	67	--	--	---	---
11...	1145	23.0	38	228	23	99	--	--	---	---
24...	1100	23.0	19	50	2.6	--	--	--	---	---
30...	1030	----	6.1	52	.86	--	--	--	---	---
AUG										
08...	1200	26.0	103	146	41	90	91	92	98	100

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 except those for winter periods, which are fair.

AVERAGE DISCHARGE.--38 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)
Nov. 28	1530	*1410	39.9	*7.19	2.192
Mar. 21	1800	1310	37.1	6.82	2.079

Minimum daily discharge, 8.4 ft³/s (0.24 m³/s) July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	95	262	111	42	49	426	51	69	23	9.4	14
2	59	120	192	97	40	46	286	48	222	21	9.7	14
3	35	66	156	86	38	43	222	46	262	94	25	14
4	26	48	134	81	36	54	234	45	113	55	14	13
5	22	38	126	75	36	221	171	44	77	36	11	13
6	22	35	121	68	36	270	138	43	64	27	14	13
7	20	33	104	70	34	212	122	41	57	21	973	12
8	19	31	85	57	34	464	124	38	138	19	210	12
9	19	47	75	54	34	411	231	37	65	17	82	14
10	19	112	73	51	34	319	159	36	55	17	47	22
11	19	75	70	267	33	228	127	36	67	17	32	18
12	19	56	68	285	32	158	138	57	40	15	27	13
13	18	48	65	153	31	136	130	65	34	13	23	12
14	16	42	59	127	30	131	450	43	32	12	19	11
15	16	38	55	114	38	212	349	36	30	12	149	9.9
16	17	36	56	119	37	195	235	35	62	11	127	11
17	17	33	47	135	35	287	171	111	39	10	344	40
18	18	32	46	113	33	354	134	337	30	9.3	384	38
19	17	31	47	97	36	218	112	176	32	8.8	345	22
20	16	31	45	89	56	163	100	120	33	8.6	208	17
21	16	31	43	84	218	1010	90	91	26	9.6	103	15
22	18	33	245	83	490	558	83	75	23	17	65	13
23	44	432	594	75	285	311	77	69	32	21	43	13
24	40	731	1030	66	198	334	71	107	54	14	33	12
25	28	528	903	73	148	336	65	242	30	10	28	12
26	23	1120	482	61	104	226	61	100	24	8.4	25	11
27	21	560	326	56	94	170	58	71	21	12	22	11
28	22	1270	233	52	85	154	58	59	20	34	20	11
29	21	596	182	43	69	268	60	52	54	19	18	9.3
30	21	354	155	44	----	368	55	49	34	13	17	10
31	20	----	130	44	----	776	----	44	----	11	15	-----
TOTAL	705	6702	6209	2930	2416	8682	4737	2404	1839	615.7	3442.1	450.2
MEAN	22.7	223	200	94.5	83.3	280	158	77.5	61.3	19.9	111	15.0
MAX	59	1270	1030	285	490	1010	450	337	262	94	973	40
MIN	16	31	43	43	30	43	55	35	20	8.4	9.4	9.3
CFSM	.21	2.08	1.87	.88	.78	2.62	1.48	.72	.57	.19	1.04	.14
IN.	.25	2.33	2.16	1.02	.84	3.02	1.65	.84	.64	.21	1.20	.16

CAL YR 1979 TOTAL 72009.0 MEAN 197 MAX 5340 MIN 16 CFSM 1.84 IN 25.03
WTR YR 1980 TOTAL 41132.0 MEAN 112 MAX 1270 MIN 8.4 CFSM 1.05 IN 14.30

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, 1.2 miles (1.9 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).

WATER-DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--38 years, 493 ft³/s (13.96 m³/s), 14.12 in/yr (359 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)
Nov. 28	2300	4220	120	10.13	3.088
Aug. 21	1100	*4430	125	*10.36	3.158

Minimum daily discharge, 61 ft³/s (1.73 m³/s) Aug. 6.

WATER-QUALITY RECORDS

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	202	1390	616	220	295	2200	275	265	219	80	133
2	187	611	1010	534	200	250	1460	260	439	166	73	140
3	181	532	796	463	200	240	1110	248	1510	278	93	186
4	159	414	687	418	200	280	1040	243	1230	236	78	141
5	147	286	628	386	200	488	835	236	870	180	68	124
6	145	257	615	350	200	1020	692	229	541	161	61	116
7	136	229	562	339	190	892	606	219	411	150	1350	110
8	129	208	477	307	190	1430	553	212	850	129	1300	106
9	130	215	401	274	180	2130	832	203	1770	123	451	113
10	128	395	369	261	177	1820	778	193	1070	120	254	129
11	130	439	353	549	170	1430	673	192	683	228	204	127
12	144	356	340	1340	161	991	631	224	461	220	361	103
13	138	289	325	913	178	780	715	252	356	160	215	93
14	129	253	297	704	160	679	1260	225	303	126	158	91
15	124	232	275	604	168	794	1980	204	271	112	461	88
16	121	216	269	579	200	832	1410	190	284	102	1140	89
17	124	202	252	662	190	968	1060	271	276	93	850	124
18	124	194	245	654	170	1670	820	1240	264	86	1780	223
19	122	186	233	554	180	1230	671	1460	226	82	1980	168
20	120	179	228	478	183	928	580	1120	226	80	3250	127
21	123	172	216	437	478	2480	514	759	207	83	3760	111
22	127	172	457	417	1880	3400	456	566	185	98	1010	100
23	158	893	2010	393	1640	1950	416	456	177	179	604	94
24	209	2860	2970	339	1160	1430	385	441	228	153	415	86
25	185	2840	3960	345	848	1580	356	802	201	111	315	82
26	175	3580	2980	322	627	1150	328	559	169	93	261	81
27	164	3220	1800	284	511	895	311	398	154	91	220	81
28	159	3620	1220	265	447	762	301	322	146	118	190	80
29	153	3750	941	233	373	1070	303	282	296	120	166	78
30	147	2170	804	233	-----	1300	292	264	380	93	151	76
31	138	-----	707	230	-----	2650	-----	253	-----	83	143	----
TOTAL	4478	29172	27817	14483	11681	37814	23568	12798	14449	4273	21442	3400
MEAN	144	972	897	467	403	1220	786	413	482	138	692	113
MAX	209	3750	3960	1340	1880	3400	2200	1460	1770	278	3760	223
MIN	120	172	216	230	160	240	292	190	146	80	61	76
CFSM	.30	2.05	1.89	.99	.85	2.57	1.66	.87	1.02	.29	1.46	.24
IN.	.35	2.29	2.18	1.14	.92	2.97	1.85	1.00	1.13	.34	1.68	.27

CAL YR 1979 TOTAL 314253 MEAN 861 MAX 10300 MIN 120 CFSM 1.82 IN 24.66
WTR YR 1980 TOTAL 205375 MEAN 561 MAX 3960 MIN 61 CFSM 1.18 IN 16.12

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.

AVERAGE DISCHARGE.--40 years, 1,155 ft³/s (32.71 m³/s), 14.80 in/yr (376 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)
Nov. 29	1200	8130	230	11.94	3.639	Aug. 21	0930	*8540	242	*12.19	3.716
Dec. 25	2200	7850	222	11.70	3.566						

Minimum daily discharge, 296 ft³/s (8.38 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	409	504	4180	1680	660	883	5020	875	810	1350	527	520
2	490	1680	2950	1490	614	707	3680	832	1040	1010	491	505
3	545	1960	2300	1340	618	775	2850	800	3130	1260	521	558
4	535	1430	1940	1230	608	782	2780	774	3870	1560	665	496
5	489	1100	1730	1150	609	1030	2330	755	2420	1100	565	460
6	468	932	1660	1070	624	2160	1960	732	1660	961	485	440
7	442	822	1560	1020	589	2120	1740	714	1340	818	1700	424
8	429	739	1380	962	575	2870	1620	694	1950	701	3600	417
9	420	787	1200	875	572	4770	1810	674	4560	643	2000	423
10	436	1190	1110	838	564	4550	1750	655	3320	673	1200	444
11	434	1560	1060	1200	554	3500	1590	650	2090	2040	1000	418
12	437	1290	1020	2810	528	2530	1500	704	1540	1480	1300	388
13	426	1080	981	2350	499	1960	1590	818	1260	1010	1100	372
14	411	949	916	1790	531	1680	2370	777	1120	775	769	364
15	396	812	856	1570	538	1710	4130	698	1020	665	1140	355
16	391	739	826	1490	604	1770	3390	660	1040	602	2740	357
17	394	684	787	1600	564	1950	2690	810	1110	557	2010	404
18	398	640	725	1660	520	3230	2140	2730	989	520	3550	511
19	393	616	716	1460	551	2900	1800	4170	878	494	4340	452
20	385	598	703	1290	547	2210	1590	3210	870	475	6520	394
21	379	585	673	1190	966	4110	1440	2190	823	474	7670	371
22	382	577	997	1140	3300	6700	1320	1670	766	537	2850	355
23	410	1520	3890	1090	4110	5670	1230	1380	742	1250	1750	343
24	486	5320	6130	989	2870	3810	1150	1270	789	1160	1310	331
25	480	6700	7540	965	2070	3810	1080	1710	740	781	1070	324
26	460	7470	7280	944	1600	3160	1020	1440	671	633	904	321
27	438	7160	5030	864	1270	2510	972	1150	636	577	782	317
28	424	7260	3420	807	1150	2130	945	989	631	603	696	314
29	416	7970	2600	741	1010	2440	946	894	980	812	628	307
30	405	6630	2180	695	-----	2980	923	833	1980	664	578	296
31	392	-----	1900	706	-----	4830	-----	796	-----	568	549	-----
TOTAL	13400	71304	70240	39006	29815	86237	59356	37054	44775	26753	55010	11981
MEAN	432	2377	2266	1258	1028	2782	1979	1195	1493	863	1775	399
MAX	545	7970	7540	2810	4110	6700	5020	4170	4560	2040	7670	558
MIN	379	504	673	695	499	707	923	650	631	474	485	296
CFSM	.41	2.24	2.14	1.19	.97	2.63	1.87	1.13	1.41	.81	1.68	.38
IN.	.47	2.50	2.47	1.37	1.05	3.03	2.08	1.30	1.57	.94	1.93	.42

CAL YR 1979 TOTAL 748810 MEAN 2052 MAX 16500 MIN 379 CFSM 1.94 IN 26.28
WTR YR 1980 TOTAL 544931 MEAN 1489 MAX 7970 MIN 296 CFSM 1.41 IN 19.12

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE¼NE¼ sec.9, T.11 N., R.8 E., Shelby County, Hydrologic Unit 05120205, on right bank 500 ft (152 m) downstream from highway bridge, 0.8 mile (1.3 km) southwest of St. Paul, and 1.5 miles (2.4 km) downstream from Mill Creek, and at mile 34.4 (55.3 km).

DRAINAGE AREA.--303 mi² (785 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1958, published as Flatrock Creek at St. Paul.

REVISED RECORDS.--WSP 853: 1934-36. WSP 973: 1942. WSP 1335: 1933, 1936. WSP 1725: 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.84 ft (233.123 m) 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 winter periods, which are fair.

AVERAGE DISCHARGE.--50 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)
Nov. 26	0500	3180	90.1	4.78	1.457	Mar. 21	1100	3490	98.8	5.04	1.536
Nov. 28	0600	3540	100	5.08	1.548	Aug. 19	1700	*4030	114	*5.45	1.661
Dec. 24	1300	3590	102	5.12	1.561						

Minimum daily discharge, 33 ft³/s (0.93 m³/s) Sept. 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: January 1976 to September 1979.
WATER TEMPERATURE: January 1976 to September 1979.
SEDIMENT DISCHARGE: August 1969 to September 1977 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	210	988	480	180	180	1310	212	229	391	124	105
2	178	683	748	416	170	160	1030	207	601	212	109	101
3	199	596	606	361	170	180	841	203	1770	458	540	98
4	157	389	530	330	170	200	1340	199	1340	1010	517	91
5	138	289	488	307	170	455	967	195	617	369	192	86
6	127	246	478	277	160	856	695	195	415	297	138	81
7	119	216	433	269	150	696	577	191	314	187	287	78
8	113	193	365	242	150	1930	513	183	1190	148	572	79
9	115	238	313	233	150	1830	492	175	1430	131	231	85
10	117	619	297	221	140	1440	457	175	662	337	197	80
11	114	585	284	649	130	986	412	191	426	1480	223	69
12	115	407	273	1110	130	708	406	340	306	1200	237	64
13	112	324	272	752	120	565	390	392	246	329	201	63
14	105	274	258	573	140	481	925	272	216	216	141	58
15	96	242	238	505	140	443	1020	225	191	163	1370	52
16	93	227	233	492	170	459	821	179	313	134	1080	53
17	93	206	215	525	150	524	647	248	308	114	556	70
18	90	195	214	499	140	790	531	641	203	102	784	71
19	88	185	199	419	140	723	448	1130	179	93	2840	60
20	82	176	193	365	206	581	387	746	179	85	2990	52
21	80	167	183	336	631	2740	346	507	145	142	1060	48
22	80	168	963	323	1160	1990	313	375	128	1080	511	45
23	82	740	2170	302	1080	1500	297	313	121	1940	334	41
24	85	2020	3170	254	656	1030	292	335	131	899	249	41
25	88	2010	2750	286	480	1070	252	287	145	310	203	38
26	88	2770	2280	252	340	847	238	243	118	208	173	37
27	85	2120	1350	231	300	668	229	212	108	164	149	36
28	82	3020	906	216	270	584	234	199	99	254	136	36
29	82	2240	716	200	210	745	229	191	289	394	124	34
30	82	1730	625	190	----	966	220	191	986	197	117	33
31	80	-----	551	190	----	1400	-----	191	-----	145	111	----
TOTAL	3270	23485	23289	11805	8203	27727	16859	9343	13405	13189	16496	1885
MEAN	105	783	751	381	283	894	562	301	447	425	532	62.8
MAX	199	3020	3170	1110	1160	2740	1340	1130	1770	1940	2990	105
MIN	80	167	183	190	120	160	220	175	99	85	109	33
CFSM	.35	2.58	2.48	1.26	.93	2.95	1.86	.99	1.48	1.40	1.76	.21
IN.	.40	2.88	2.86	1.45	1.01	3.40	2.07	1.15	1.65	1.62	2.03	.23

CAL YR 1979 TOTAL 204649 MEAN 561 MAX 5730 MIN 80 CFSM 1.85 IN 25.13
WTR YR 1980 TOTAL 168956 MEAN 462 MAX 3170 MIN 33 CFSM 1.53 IN 20.74

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.

AVERAGE DISCHARGE.--13 years, 616 ft³/s (17.45 m³/s), 15.67 in/yr (398 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)
Nov. 24	2330	4580	130	9.87	3.008	Mar. 9	0400	3910	111	9.32	2.841
Nov. 26	2300	5660	160	10.59	3.228	Mar. 22	0400	5240	148	10.33	3.149
Nov. 29	0100	*7260	206	*11.55	3.520	Aug. 21	0200	4110	116	9.66	2.944
Dec. 25	0700	6940	197	11.36	3.463						

Minimum daily discharge, 89 ft³/s (2.52 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	238	2210	893	347	392	2020	374	316	718	216	193
2	232	946	1490	783	349	347	1490	360	522	380	189	190
3	300	1130	1110	691	350	383	1180	346	1520	512	216	177
4	300	801	1000	625	329	387	1890	334	1650	910	625	168
5	264	593	893	575	326	471	1840	321	1040	765	402	157
6	243	496	842	529	340	1140	1240	312	661	506	260	151
7	228	437	782	498	322	1140	994	302	529	405	399	144
8	220	388	690	468	307	2090	859	292	737	318	684	142
9	214	385	607	415	321	3420	790	282	1380	276	562	139
10	213	745	560	390	307	2520	736	274	1100	249	326	169
11	210	1030	535	590	296	1710	688	271	654	941	328	152
12	209	793	514	1770	282	1250	652	347	512	1520	328	133
13	204	632	498	1420	268	988	637	557	431	673	313	125
14	198	542	480	1030	300	857	1160	553	385	414	265	122
15	187	474	452	901	296	830	1810	407	355	321	625	117
16	181	434	435	847	321	801	1360	349	369	269	1740	115
17	180	396	415	870	299	814	1070	416	453	231	1040	121
18	180	366	374	847	294	987	887	1300	382	201	733	130
19	178	352	373	759	306	1090	768	1510	326	182	1440	126
20	176	336	363	674	305	908	687	1460	326	168	3450	119
21	170	316	348	624	617	2440	627	946	298	156	2990	113
22	173	316	573	596	1460	4170	574	722	269	303	969	109
23	181	731	4330	573	1590	2650	537	600	260	1250	626	105
24	186	3190	5000	519	1160	1720	505	559	255	1460	484	100
25	185	3890	6330	515	846	1720	470	593	276	555	398	98
26	182	4540	4610	499	665	1420	441	499	253	363	342	95
27	180	4470	3030	459	570	1110	421	423	229	293	300	93
28	180	5050	1850	433	530	948	410	380	216	253	261	92
29	178	5670	1380	396	465	992	409	352	212	363	239	91
30	176	3610	1160	360	-----	1180	392	328	559	339	219	89
31	174	-----	1020	383	-----	2070	-----	316	-----	246	208	----
TOTAL	6294	43297	44254	20932	14168	42945	27544	16085	16475	15540	21177	3875
MEAN	203	1443	1428	675	489	1385	918	519	549	501	683	129
MAX	300	5670	6330	1770	1590	4170	2020	1510	1650	1520	3450	193
MIN	170	238	348	360	268	347	392	271	212	156	189	89
CFSM	.38	2.70	2.67	1.26	.92	2.59	1.72	.97	1.03	.94	1.28	.24
IN.	.44	3.02	3.08	1.46	.99	2.99	1.92	1.12	1.15	1.08	1.48	.27

CAL YR 1979 TOTAL 362388 MEAN 993 MAX 10500 MIN 170 CFSM 1.86 IN 25.24
WTR YR 1980 TOTAL 272586 MEAN 745 MAX 6330 MIN 89 CFSM 1.40 IN 18.99

03364000 EAST FORK WHITE RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°12'00", long 85°55'32", in NE¼NW¼ sec.25, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at abutment of abandoned bridge at west end of Second Street in Columbus, 0.6 mile (1.0 km) downstream from confluence of Driftwood River and Flatrock River, 1.3 miles (2.1 km) upstream from Haw Creek, and at mile 238.7 (384.1 km).

DRAINAGE AREA.--1,707 mi² (4,421 km²).

PERIOD OF RECORD.--October 1947 to current year. Prior to January 1948 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 2109: Drainage area.

GAGE.--Water-stage recorder above concrete control. Datum of gage is 603.12 ft (183.831 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1952, nonrecording gage 600 ft (183 m) upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--33 years, 1,862 ft³/s (52.73 m³/s), 14.81 in/yr (376 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)
Nov. 29	0600	*14100	399	*7.43	2.265	Mar. 22	1000	11200	317	5.85	1.783
Dec. 25	1300	13800	391	7.26	2.213	Aug. 21	1200	11600	329	5.89	1.795

Minimum daily discharge, 372 ft³/s (10.5 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	733	832	6870	2970	1220	1560	6960	1330	1260	2500	850	885
2	832	2300	4840	2680	1130	1330	5550	1280	1720	1640	749	850
3	976	3270	4000	2410	1150	1420	4630	1240	3930	1800	799	850
4	1030	2560	3450	2210	1110	1470	5360	1200	5450	2840	1520	815
5	921	1990	3100	2080	1130	2130	4840	1180	3970	2270	1200	733
6	850	1640	2940	1940	1180	3700	3850	1150	2650	1690	867	686
7	782	1420	2810	1850	1090	3890	3240	1110	2100	1440	1850	686
8	765	1280	2530	1740	1050	5270	2940	1090	2410	1150	4550	656
9	717	1330	2270	1590	1070	7290	2940	1050	5330	1010	3410	641
10	733	1990	2100	1520	1030	6800	2970	1010	4930	921	1880	702
11	733	2840	2020	2440	1010	5420	2720	1010	3170	2840	1640	641
12	717	2380	1940	4600	976	4400	2620	1260	2300	3630	1880	598
13	702	1990	1910	4360	921	3560	2590	1770	1820	2080	1670	544
14	671	1720	1820	3380	976	3140	4040	1540	1560	1420	1330	507
15	641	1490	1690	2940	995	3070	5740	1220	1420	1130	2190	471
16	627	1350	1640	2780	1150	3100	5180	1090	1420	976	4780	507
17	627	1260	1560	2840	1110	3270	4280	2380	1590	867	3670	570
18	627	1180	1470	2910	995	4400	3450	4660	1420	782	4280	671
19	627	1130	1400	2650	1050	4520	2940	6120	1220	717	6290	671
20	612	1090	1400	2360	1070	3740	2530	5330	1200	671	9080	584
21	612	1050	1350	2190	1880	6720	2300	3810	1130	641	11200	519
22	612	1030	2500	2080	4490	10700	2080	2840	1030	885	5670	483
23	641	2590	7090	1990	5490	9120	1940	2330	995	2620	2970	471
24	717	7410	11300	1820	4600	5860	1820	2130	1030	3270	2240	448
25	749	10100	13500	1770	3480	5550	1690	2470	1010	1720	1800	425
26	717	12400	12600	1770	2750	4960	1560	2240	958	1220	1540	425
27	686	12300	8930	1620	2300	4120	1490	1770	939	1030	1330	404
28	686	12600	5390	1520	2100	3560	1440	1490	903	958	1180	393
29	671	13600	4400	1400	1850	3740	1440	1350	921	1310	1070	382
30	656	11400	3780	1280	-----	4550	1420	1240	2680	1220	976	372
31	627	------	3340	1310	-----	6280	-----	1180	-----	958	921	-----
TOTAL	22297	119522	125940	71000	50353	138640	96550	60870	62466	48206	85382	17590
MEAN	719	3984	4063	2290	1736	4472	3218	1964	2082	1555	2754	586
MAX	1030	13600	13500	4600	5490	10700	6960	6120	5450	3630	11200	885
MIN	612	832	1350	1280	921	1330	1420	1010	903	641	749	372
CFSM	.42	2.33	2.38	1.34	1.02	2.62	1.89	1.15	1.22	.91	1.61	.34
IN.	.49	2.60	2.74	1.55	1.10	3.02	2.10	1.33	1.36	1.05	1.86	.38

CAL YR 1979 TOTAL 1198186 MEAN 3283 MAX 24900 MIN 612 CFSM 1.92 IN 26.11
WTR YR 1980 TOTAL 898816 MEAN 2456 MAX 13600 MIN 372 CFSM 1.44 IN 19.59

03364200 HAW CREEK NEAR CLIFFORD, IN

LOCATION.--Lat 39°16'04", long 85°51'22", in NW¼SW¼ sec.34, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, on left bank 20 ft (6.10 m) downstream from bridge on County Road 450 North, 1.2 miles (1.9 km) southeast of Clifford, 5.8 miles (9.3 km) northeast of Columbus, and 7.6 miles (12.2 km) upstream from mouth.

DRAINAGE AREA.--47.5 mi² (123.0 km²).

WATER-DISCHARGE RECORDS

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 poor.

AVERAGE DISCHARGE.--13 years, 51.5 ft³/s (1.458 m³/s), 14.72 in/yr (374 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,560 ft³/s (72.5 m³/s) May 24, 1968, gage height, 13.9 (4.24 m), from floodmark; no flow at times during September and October 1967 due to diversion for irrigation.

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

Date	Time	Discharge (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. 24	0300	*1630	46.2	*11.32	3.450	Mar. 8	1200	860	24.4	8.13	2.478
Nov. 26	0400	1100	31.2	9.25	2.819	Mar. 21	unknown	1510	42.8	10.90	3.322
Nov. 28	0500	1380	39.1	10.41	3.173	Apr. 14	1000	896	25.4	8.31	2.533
Dec. 22	2200	1620	45.9	11.27	3.435	May 19	1000	846	24.0	8.06	2.457
Dec. 24	0900	1380	39.1	10.44	3.182						

Minimum daily discharge, 3.8 ft³/s (0.11 m³/s) Sept. 30.

NOTE.--No gage height record Dec. 29 to Feb. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	192	92	56	17	25	150	30	57	9.0	4.0	5.8
2	25	169	75	48	17	22	100	29	76	13	4.5	5.7
3	14	86	59	42	17	25	150	29	48	137	8.0	5.7
4	11	55	53	38	17	29	250	28	36	26	6.0	5.5
5	10	42	51	34	17	182	150	27	31	20	5.0	5.3
6	10	37	49	31	16	163	90	27	29	15	5.7	5.0
7	9.5	27	45	31	16	138	80	27	28	11	28	4.8
8	9.4	25	41	26	16	537	70	26	44	9.0	11	4.6
9	11	51	38	24	16	191	100	26	23	8.0	8.0	14
10	11	116	37	22	15	124	68	25	22	10	6.0	30
11	10	64	35	130	15	97	62	24	18	13	5.0	9.1
12	10	46	35	140	14	85	66	35	16	9.0	7.0	6.2
13	9.9	38	43	80	13	80	61	45	15	7.0	6.0	5.4
14	9.2	31	42	70	15	75	448	32	15	6.0	5.0	4.9
15	8.7	28	38	60	20	100	164	28	14	5.4	250	4.9
16	8.7	25	37	64	35	90	115	25	36	4.8	150	4.9
17	9.0	23	31	70	27	100	95	183	19	4.5	30	5.9
18	9.0	22	30	60	22	130	80	303	14	4.3	50	6.3
19	9.0	21	29	50	19	90	69	465	16	4.1	230	5.8
20	8.7	20	28	44	63	80	60	173	14	4.0	50	6.0
21	8.7	19	27	42	167	700	54	109	12	4.8	16	4.4
22	9.0	20	585	39	184	250	50	87	11	7.0	11	4.3
23	17	492	641	36	107	140	46	76	12	10	9.2	4.3
24	14	853	872	30	78	150	43	87	13	6.8	8.0	4.3
25	12	329	375	40	61	150	40	71	15	5.4	7.4	4.2
26	11	612	189	33	50	100	37	61	12	4.5	6.9	4.1
27	10	210	132	29	42	80	35	53	10	5.4	6.3	4.1
28	10	769	97	25	40	70	34	48	9.0	6.1	6.1	4.1
29	10	203	82	19	34	100	35	44	12	5.5	5.7	4.0
30	10	127	70	18	----	150	31	41	10	5.0	7.0	3.8
31	9.8	----	62	18	----	250	----	37	-----	4.5	7.4	-----
TOTAL	334.6	4752	4020	1449	1170	4503	2833	2301	687.0	385.1	960.2	187.4
MEAN	10.8	158	130	46.7	40.3	145	94.4	74.2	22.9	12.4	31.0	6.25
MAX	25	853	872	140	184	700	448	465	76	137	250	30
MIN	8.7	19	27	18	13	22	31	24	9.0	4.0	4.0	3.8
CFSM	.23	3.33	2.74	.98	.85	3.05	1.99	1.56	.48	.26	.65	.13
IN.	.26	3.72	3.15	1.13	.92	3.53	2.22	1.80	.54	.30	.75	.15

CAL YR 1979 TOTAL 28783.4 MEAN 78.9 MAX 998 MIN 8.7 CFSM 1.66 IN 22.54
WTR YR 1980 TOTAL 23582.3 MEAN 64.4 MAX 872 MIN 3.8 CFSM 1.36 IN 18.47

03364200 HAW CREEK NEAR CLIFFORD, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1978 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV						
06...	1040	9.5	35	67	6.3	--
DEC						
19...	1800	1.0	29	12	.94	--
FEB						
14...	0910	1.0	16	105	4.5	79
APR						
05...	0830	----	156	90	38	--
28...	1435	----	37	43	4.3	--
JUN						
26...	1830	25.5	12	62	2.0	--
JUL						
21...	1625	25.0	4.8	35	.45	--
AUG						
20...	1545	25.0	32	73	6.3	--
SEP						
11...	1040	18.0	8.5	53	1.2	95
29...	1640	18.0	4.1	25	.28	--

03364500 CLIFTY CREEK AT HARTSVILLE, IN

LOCATION.--Lat 39°16'25", long 85°42'10", in NW¼NW¼ sec.36, T.10 N., R.7 E., Bartholomew County, Hydrologic Unit 05120206, at downstream side of left abutment of highway bridge, 0.2 mile (0.3 km) north of Hartsville, 5.9 miles (9.5 km) upstream from Duck Creek, and at mile 20.0 (32.2 km).

DRAINAGE AREA.--91.4 mi² (236.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1335: 1950. WSP 1725: 1949(M). WSP 2109: Drainage area. WRD Ind. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 677.34 ft (206.453 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--32 years, 98.0 ft³/s (2.775 m³/s), 14.56 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s (320 m³/s) Jan. 21, 1959, gage height, 14.29 ft (4.356 m); no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached an elevation of 702.4 ft (214.09 m) National Geodetic Vertical Datum of 1929, from floodmarks, upstream from bridge.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (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. 24	unknown	1730	49.0	5.85	1.783	Dec. 24	1400	1830	51.8	6.01	1.832
Nov. 26	unknown	1500	42.5	unknown		Mar. 21	1300	*2130	60.3	*6.54	1.993
Nov. 28	unknown	1300	36.8	unknown		Apr. 4	0400	1660	47.0	5.72	1.743
Dec. 22	2300	1300	36.8	5.05	1.539	Aug. 19	1400	1520	43.0	5.46	1.664

Minimum daily discharge, 0.77 ft³/s (0.022 m³/s) Sept. 30.

NOTE.--No gage-height record Oct. 18 to Dec. 3.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: December 1970 to September 1975.
WATER TEMPERATURE: December 1970 to September 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	600	180	106	34	40	234	40	72	14	5.9	8.1
2	157	450	140	93	33	35	180	37	159	24	5.4	8.8
3	149	200	120	80	33	45	346	36	359	135	5.8	7.3
4	90	120	112	73	33	54	1020	34	136	64	16	6.2
5	63	90	105	67	33	220	293	32	91	42	13	5.4
6	48	70	103	59	32	272	197	32	70	30	6.5	4.5
7	39	60	90	60	30	215	153	31	62	21	22	3.9
8	33	52	73	49	30	896	140	28	135	15	27	4.0
9	34	700	63	47	30	443	227	27	86	12	12	10
10	30	500	62	43	29	269	181	26	63	18	6.2	45
11	27	200	59	257	28	201	153	27	53	51	3.7	13
12	27	140	60	271	25	148	159	144	40	21	26	6.8
13	23	110	78	160	24	128	149	177	34	13	30	4.8
14	19	90	86	132	28	121	516	82	32	9.1	12	3.6
15	17	76	71	121	35	127	275	52	31	6.9	457	3.1
16	17	68	66	123	60	123	201	44	97	5.2	244	3.0
17	18	62	55	129	45	129	154	82	73	4.2	112	6.8
18	17	56	48	114	38	150	126	230	40	3.3	63	8.1
19	16	50	52	97	34	125	109	437	32	2.6	931	6.2
20	15	47	46	86	87	126	97	268	36	2.1	276	5.5
21	15	45	42	80	260	1570	85	169	29	2.9	141	4.3
22	14	60	514	77	340	423	74	123	23	71	79	3.0
23	23	900	862	71	193	237	69	104	21	207	48	2.2
24	30	1500	1440	57	142	252	62	112	23	73	33	1.9
25	23	800	756	72	114	246	56	95	25	30	26	1.7
26	20	1300	358	57	81	175	52	73	19	18	21	1.6
27	17	500	242	50	70	138	50	58	17	13	17	1.6
28	20	1100	187	47	60	126	49	51	15	11	14	1.3
29	23	400	154	36	50	156	48	46	16	10	12	.85
30	21	250	137	35	----	221	44	43	18	7.8	10	.77
31	20	-----	121	35	----	379	----	43	----	5.9	8.9	------
TOTAL	1077	10596	6482	2784	2031	7790	5499	2783	1907	943.0	2684.4	183.32
MEAN	34.7	353	209	89.8	70.0	251	183	89.8	63.6	30.4	86.6	6.11
MAX	157	1500	1440	271	340	1570	1020	437	359	207	931	45
MIN	12	45	42	35	24	35	44	26	15	2.1	3.7	.77
CFSM	.38	3.86	2.29	.98	.77	2.75	2.00	.98	.70	.33	.95	.07
IN.	.44	4.31	2.64	1.13	.83	3.17	2.24	1.13	.78	.38	1.09	.07

CAL YR 1979 TOTAL 58667.50 MEAN 161 MAX 3360 MIN 5.5 CFSM 1.76 IN 23.88
WTR YR 1980 TOTAL 44759.72 MEAN 122 MAX 1570 MIN .77 CFSM 1.34 IN 18.22

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 mi² (401 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 629.13 ft (191.759 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1952, nonrecording gage at site 1.7 miles (2.7 km) upstream at datum approximately 8 ft (2.4 m) higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--32 years, 174 ft³/s (4.928 m³/s), 15.24 in/yr (387 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,900 ft³/s (564 m³/s) Jan. 21, 1959, gage height, 21.70 ft (6.614 m) inside, 22.20 ft (6.767 m) outside, from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times during 1948, 1949, 1953-55, 1964, 1965, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s (82.1 m³/s) and maximum (*):

Date	Time	Discharge (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. 26	unknown	3250	92.0	9.60	2.926	Mar. 21	1600	4130	117	10.80	3.292
Dec. 24	1500	*4150	118	*10.82	3.298						

Minimum daily discharge, 6.3 ft³/s (0.18 m³/s) Sept. 30.

NOTE.--No gage-height record Oct. 16 to Nov. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	1000	265	165	54	100	482	61	124	22	35	11
2	72	800	204	143	50	80	308	57	398	19	27	27
3	190	350	159	125	48	87	234	53	253	500	450	16
4	121	210	141	113	46	95	1010	50	129	200	200	11
5	95	150	131	105	43	1700	580	45	83	120	90	9.6
6	68	120	126	98	44	800	324	43	60	90	70	8.7
7	54	100	115	91	44	570	229	40	45	60	180	8.2
8	45	90	100	89	45	1050	206	37	150	45	90	9.0
9	41	1000	86	80	45	825	351	35	80	35	74	9.7
10	42	1100	81	72	47	459	339	34	58	500	55	83
11	42	400	80	1130	45	343	273	33	50	250	43	31
12	40	250	82	988	42	254	425	42	40	100	36	16
13	40	180	249	362	40	204	375	150	32	60	40	11
14	38	150	243	263	42	199	712	100	26	48	30	9.6
15	33	120	148	228	45	193	644	60	20	38	1000	8.4
16	31	110	121	203	78	179	383	40	150	32	400	8.1
17	30	95	108	203	135	194	268	300	92	26	200	9.7
18	29	86	81	182	94	441	204	1200	40	23	120	12
19	28	80	83	151	73	275	168	700	30	20	404	13
20	27	74	79	131	115	210	143	500	26	17	243	9.4
21	26	70	73	119	424	2390	128	300	22	20	88	8.0
22	25	90	417	107	805	921	112	150	18	270	47	10
23	40	1500	1790	105	587	449	101	130	21	150	31	17
24	50	2400	2790	92	415	478	91	450	100	100	24	8.0
25	40	2000	1760	90	300	588	82	350	50	50	20	6.8
26	35	2500	756	104	221	336	74	174	41	30	17	6.6
27	30	600	444	90	170	248	68	109	30	25	15	6.6
28	35	1770	321	80	151	201	67	82	25	60	13	6.6
29	40	600	248	69	137	303	69	68	23	40	12	6.4
30	37	364	212	59	----	332	68	58	23	25	11	6.3
31	35	-----	189	56	----	870	----	58	----	20	11	-----
TOTAL	1499	18359	11682	5893	4385	15374	8518	5509	2239	2995	4076	403.7
MEAN	48.4	612	377	190	151	496	284	178	74.6	96.6	131	13.5
MAX	190	2500	2790	1130	805	2390	1010	1200	398	500	1000	83
MIN	25	70	73	56	40	80	67	33	18	17	11	6.3
CFSM	.31	3.95	2.43	1.23	.97	3.20	1.83	1.15	.48	.62	.85	.09
IN.	.36	4.41	2.80	1.41	1.05	3.69	2.04	1.32	.54	.72	.98	.10

CAL YR 1979 TOTAL 111040.0 MEAN 304 MAX 5000 MIN 17 CFSM 1.96 IN 26.65
WTR YR 1980 TOTAL 80932.7 MEAN 221 MAX 2790 MIN 6.3 CFSM 1.43 IN 19.42

03365000 SAND CREEK NEAR BREWERSVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: August 1969 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV 28...	1350	1810	356	1740	90	95	98	99	100

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW¼NE¼ sec.7, T.6 N., R.6 E., Jackson County, Hydrologic Unit 05120206, on left bank 1,700 ft (518 m) downstream from highway bridge, 1 mile (2 km) north of Seymour, 9.5 miles (15.3 km) downstream from Sand Creek, and at mile 214.6 (345.3 km).

DRAINAGE AREA.--2,341 mi² (6,063 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Yearly maximum discharge only for water years 1924-27 published in WSP 1305. Daily gage heights from May 1923 to September 1927 are available in the district office.

REVISED RECORDS.--WSP 743: 1928-29, 1931-32, WSP 783: 1934. WSP 873: 1938. WSP 1335: 1928(M), 1929-30, 1932-33(M), 1937(M), 1942. WSP 1435: 1949. WSP 1705: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 550.67 ft (167.844 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1927 to July 2, 1931, nonrecording gage 1,700 ft (518 m) upstream at datum 7.61 ft (2.320 m) higher. July 3, 1931 to July 16, 1934, nonrecording gage at site 100 ft (30 m) downstream at present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--53 years, 2,450 ft³/s (69.38 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)
Nov. 26	2200	24400	691	16.31	4.971	Mar. 22	0500	21100	598	15.83	4.825
Dec. 25	0600	*25400	719	*16.45	5.014						

Minimum daily discharge, 502 ft³/s (14.2 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	1070	13400	4550	1810	2410	9850	1850	1750	2370	1030	1050
2	1100	3650	9170	4020	1720	2050	9230	1780	2800	1880	980	1020
3	1470	3980	6430	3610	1670	1970	7330	1710	2960	2150	1520	997
4	1470	3500	5190	3310	1650	2040	8660	1660	5410	2520	1340	982
5	1340	2670	4520	3080	1630	3210	9870	1610	5650	2620	1410	926
6	1230	2160	4120	2870	1640	7390	6860	1560	3810	1920	1120	878
7	1140	1870	3880	2720	1630	6590	5170	1520	2770	1670	1070	836
8	1080	1670	3560	2610	1570	7170	4440	1470	2380	1430	2730	824
9	1040	1680	3190	2430	1550	10600	4310	1430	3750	1260	3640	818
10	1030	3710	2910	2270	1530	10500	4420	1400	5770	1180	2240	806
11	1030	3700	2740	3690	1510	9230	4060	1390	4770	2030	1590	917
12	1020	3280	2650	7910	1470	7430	3970	1390	3090	3210	1530	819
13	1000	2660	2810	7090	1420	5650	4030	1910	2380	2680	1620	755
14	975	2240	3060	5580	1400	4810	5740	2070	2020	1700	1430	718
15	945	1980	2680	4600	1450	4470	9190	1740	1820	1380	2520	683
16	915	1770	2470	4160	1580	4400	8440	1540	1890	1210	5450	668
17	903	1630	2320	4070	1710	4340	6830	1910	2110	1090	4660	679
18	904	1520	2170	4090	1580	5480	5380	5720	1900	1020	3510	705
19	899	1430	2070	3840	1520	6250	4380	7460	1680	958	4440	772
20	883	1380	2040	3470	1570	5570	3720	9700	1550	911	6900	733
21	865	1320	1970	3190	2370	9510	3310	7320	1500	882	8640	668
22	871	1300	2330	3030	5160	18800	3000	4690	1420	1130	9710	638
23	891	3440	9430	2910	7250	13800	2740	3480	1350	1890	5590	631
24	903	10800	17400	2730	7320	10900	2540	3430	1390	2990	2920	603
25	961	15200	24300	2570	5550	9340	2350	3610	1400	2280	2200	575
26	947	20800	20300	2570	4210	8250	2190	3250	1320	1480	1830	556
27	918	21500	15600	2430	3410	6610	2070	2600	1220	1230	1580	537
28	914	19400	10700	2150	3050	5290	1990	2170	1170	1130	1410	520
29	899	21800	7800	2030	2770	4970	1930	1930	1150	1120	1280	510
30	887	18000	6090	1900	-----	5520	1910	1780	1500	1300	1170	502
31	871	------	5190	1840	-----	8360	------	1670	-----	1130	1100	-----
TOTAL	31371	181110	202490	107320	72700	212910	149910	86750	73680	51751	88160	22326
MEAN	1012	6037	6532	3462	2507	6868	4997	2798	2456	1669	2844	744
MAX	1470	21800	24300	7910	7320	18800	9870	9700	5770	3210	9710	1050
MIN	865	1070	1970	1840	1400	1970	1910	1390	1150	882	980	502
CFSM	.43	2.58	2.79	1.48	1.07	2.93	2.14	1.20	1.05	.71	1.22	.32
IN.	.50	2.88	3.22	1.71	1.16	3.38	2.38	1.38	1.17	.82	1.40	.35

CAL YR 1979 TOTAL 1754561 MEAN 4807 MAX 36700 MIN 865 CFSM 2.05 IN 27.88
WTR YR 1980 TOTAL 1280478 MEAN 3499 MAX 24300 MIN 502 CFSM 1.50 IN 20.35

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 current year.

REMARKS.--Some regulation of low flow and temperatures by Seymour Water Co. at dam 500 ft (152 m) upstream. Sediment samples collected at highway bridge, 1,700 ft (518 m) upstream.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 31.0°C July 13, 14, 1966; minimum, freezing point on many days during most winter periods. Maximum of 32.0°C was observed on July 19, 1954.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,200 mg/L May 25, June 25, 1968; minimum daily, 2 mg/L Jan. 3 to Feb. 11, 1977.
SEDIMENT DISCHARGE: Maximum daily load, 179,000 tons (162,000 tonnes) May 25, 1968; minimum daily, 0.91 ton (0.83 tonnes) Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily, 803 mg/L July 3; minimum daily, 10 mg/L Feb. 18.
SEDIMENT DISCHARGE: Maximum daily load, 32,600 tons (29,600 tonnes) Mar. 22; minimum daily, 31 ton (28.1 tonnes) Sept. 30.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26	75	66	233	67	2420	31	381	42	205	24	156
2	29	86	193	1860	60	1490	47	510	41	190	15	83
3	62	257	64	688	48	833	79	770	59	266	40	213
4	34	135	49	476	52	729	73	652	37	165	15	83
5	24	87	23	167	51	622	75	624	42	185	116	1260
6	27	90	22	128	54	601	99	767	43	190	210	4190
7	28	86	22	111	86	901	92	676	16	70	85	1510
8	29	85	17	77	78	750	61	430	20	85	117	2470
9	27	76	17	77	57	491	74	486	28	117	306	8890
10	23	64	86	897	56	440	78	478	42	174	136	3850
11	20	56	23	230	43	318	176	2740	34	139	92	2290
12	23	63	15	133	61	436	274	5900	49	194	76	1520
13	28	76	18	129	47	357	134	2570	37	142	47	717
14	39	103	20	121	38	314	104	1620	17	64	41	532
15	46	117	17	91	47	340	54	671	32	125	35	422
16	48	119	14	67	63	420	71	797	17	73	39	463
17	51	124	20	88	46	288	48	527	11	51	32	375
18	48	117	28	115	41	240	52	574	10	43	56	829
19	44	107	30	116	32	179	60	622	20	82	60	1010
20	40	95	23	86	49	270	71	665	16	68	37	556
21	37	86	30	107	43	229	27	233	31	198	524	17300
22	32	75	29	102	72	574	58	474	188	2880	635	32600
23	28	67	141	1600	282	6870	78	613	247	4860	380	14200
24	23	56	178	4820	155	7280	63	464	119	2340	220	6720
25	19	49	83	3410	111	7280	71	493	104	1560	102	2570
26	19	49	123	7270	99	5430	85	590	97	1100	71	1580
27	20	50	140	8530	72	3030	84	551	75	691	66	1180
28	20	49	84	4400	60	1730	75	435	28	231	73	1040
29	20	49	122	7180	53	1120	64	351	26	194	49	658
30	20	48	80	3890	43	707	78	400	---	-----	162	2500
31	21	49	---	-----	50	701	55	273	---	-----	254	5580
TOTAL	---	2645	---	47199	---	47390	---	27337	---	16682	---	117347

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	168	4470	43	215	141	731	455	2910	76	211	69	196
2	97	2420	47	226	374	2700	424	2210	67	177	87	240
3	79	1560	52	240	301	2490	803	5540	405	1840	82	221
4	273	6840	56	251	657	9550	480	3270	124	449	70	186
5	349	9590	58	252	298	4550	434	3070	101	385	77	193
6	166	3070	52	219	212	2180	332	1720	98	296	74	175
7	135	1880	50	205	169	1260	267	1200	169	534	71	160
8	92	1100	48	191	167	1070	220	849	311	2110	64	142
9	85	989	46	178	377	4280	180	612	195	1920	56	124
10	100	1190	43	163	733	11300	511	2950	118	714	52	113
11	108	1180	50	188	371	4740	511	2950	123	528	71	176
12	65	697	93	349	233	1990	702	6080	125	516	66	146
13	67	729	97	506	174	1120	273	2020	105	459	64	130
14	194	3490	142	794	202	1100	251	1150	102	394	62	120
15	250	6200	87	409	229	1130	208	775	479	4220	58	107
16	133	3030	101	420	315	1650	147	480	540	7950	48	87
17	79	1460	97	560	354	2020	112	330	260	3270	37	68
18	67	973	231	3390	262	1340	83	229	200	1900	33	63
19	70	828	190	3970	196	889	85	220	190	2280	54	113
20	83	834	161	4150	176	737	110	271	300	5460	43	85
21	62	554	134	2650	157	636	130	310	178	4150	34	61
22	57	462	164	2080	137	525	285	976	107	2810	30	52
23	65	481	144	1350	118	430	627	3460	160	2270	31	53
24	60	411	278	2590	98	368	430	3470	136	1070	32	52
25	56	355	304	2980	80	302	146	899	113	671	33	51
26	54	319	248	2190	78	278	117	468	94	464	31	47
27	51	285	184	1290	138	455	86	286	86	367	29	42
28	48	258	176	1030	142	449	130	397	80	305	27	38
29	34	177	120	625	153	475	132	399	64	221	25	34
30	38	196	77	370	717	3000	192	674	64	202	23	31
31	---	-----	52	234	---	-----	103	314	60	178	---	----
TOTAL	---	56028	---	34265	---	63745	---	50489	---	48321	---	3306

TOTAL LOAD FOR YEAR: 514754 TONS.

03366200 HARBERTS CREEK NEAR MADISON, IN

LOCATION.--Lat 38°46'55", long 85°29'08", in SW¼SE¼ sec.14, T.4 N., R.9 E., Jefferson County, Hydrologic Unit 05120207, attached to left downstream wingwall of bridge on County Road 533 West, 0.2 mile (0.3 km) west of Smyrna, 3.7 miles (6.0 km) upstream from Big Creek, and 4 miles (6 km) northwest of Madison.

DRAINAGE AREA.--9.31 mi² (24.11 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 725.75 ft (221.209 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--12 years, 13.1 ft³/s (0.371 m³/s), 19.11 in/yr (485 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)
Nov. 25	1300	*1090	30.9	*6.90	2.103	May 17	2100	938	26.6	6.56	1.999
Jan. 11	0700	741	21.0	6.08	1.853	May 24	1900	890	25.2	6.45	1.966

Minimum daily discharge, 0.04 ft³/s (0.001 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	95	11	5.9	2.9	5.6	32	3.6	56	.80	1.5	.14
2	48	36	7.8	5.1	2.7	5.3	17	3.4	24	21	.80	1.5
3	11	13	6.1	4.5	2.5	5.1	13	3.2	7.3	15	3.2	.70
4	19	7.9	5.7	4.7	2.4	7.0	11	3.1	4.6	9.4	1.5	.26
5	9.9	5.7	5.6	4.3	2.3	195	8.7	3.0	3.4	4.6	.90	.19
6	6.6	4.8	5.3	4.1	2.3	41	7.4	2.9	2.8	2.3	1.0	.12
7	5.1	4.1	4.8	6.3	2.3	34	7.1	2.7	2.6	1.5	.47	.12
8	4.2	3.8	4.0	5.8	2.3	88	9.2	2.6	5.3	1.2	.35	.19
9	3.8	160	3.5	4.1	2.4	29	12	2.5	2.4	.90	.26	.11
10	3.5	80	3.4	3.9	2.5	16	20	2.4	3.0	2.0	.19	.79
11	3.2	19	3.3	298	2.3	11	13	9.6	3.0	4.6	.14	.24
12	3.4	11	3.5	38	2.2	8.7	86	66	2.0	1.4	.14	.15
13	3.0	8.1	32	17	2.0	17	25	45	1.8	.90	.16	.12
14	2.7	6.3	14	17	2.5	20	145	9.5	1.6	.62	.14	.08
15	2.4	5.3	8.2	13	6.0	15	29	5.5	1.5	.54	11	.06
16	2.3	4.6	7.0	10	27	12	25	7.1	4.6	.40	2.6	.07
17	2.2	4.0	5.4	9.7	20	35	14	338	2.1	.35	1.2	1.0
18	2.1	3.6	4.5	8.0	14	25	11	124	1.5	.29	2.6	.44
19	2.0	3.3	4.2	6.4	12	15	9.0	30	1.5	.25	16	.20
20	1.9	3.1	3.9	5.6	10	12	7.9	16	1.5	.21	3.4	.14
21	1.8	2.9	3.7	5.1	43	90	7.2	10	1.2	.18	1.1	.10
22	1.7	3.9	28	5.1	29	30	6.2	7.5	1.0	.40	.54	.09
23	5.0	222	65	4.5	21	20	5.7	6.7	3.2	.25	.35	.56
24	2.5	120	193	4.5	15	60	5.1	224	3.0	1.0	.26	.35
25	2.2	388	95	6.3	11	40	4.7	48	1.4	.47	.22	.20
26	2.0	104	26	5.7	8.6	25	4.6	11	1.0	.35	.19	.16
27	1.9	25	15	4.6	7.2	15	4.4	6.6	.90	.47	.19	.11
28	2.5	78	11	3.8	6.6	20	4.3	5.1	.80	.80	.14	.08
29	2.1	22	8.8	3.2	6.0	25	4.3	4.2	1.0	.47	.12	.06
30	2.0	14	7.8	3.1	-----	60	3.9	4.4	.90	.35	.70	.04
31	1.9	------	6.8	3.0	-----	45	-----	3.4	------	.30	.35	----
TOTAL	167.9	1458.4	603.3	520.3	270.0	1026.7	552.7	1011.0	146.90	73.30	51.71	8.37
MEAN	5.42	48.6	19.5	16.8	9.31	33.1	18.4	32.6	4.90	2.36	1.67	.28
MAX	48	388	193	298	43	195	145	338	56	21	16	1.5
MIN	1.7	2.9	3.3	3.0	2.0	5.1	3.9	2.4	.80	.18	.12	.04
CFSM	.58	5.22	2.10	1.81	1.00	3.56	1.98	3.50	.53	.25	.18	.03
IN.	.67	5.83	2.41	2.08	1.08	4.10	2.21	4.04	.59	.29	.21	.03

CAL YR 1979 TOTAL 7797.75 MEAN 21.4 MAX 403 MIN .29 CFSM 2.30 IN 31.15
WTR YR 1980 TOTAL 5890.58 MEAN 16.1 MAX 388 MIN .04 CFSM 1.73 IN 23.53

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).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1947 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 541.17 ft (164.949 m) National Geodetic Vertical Datum of 1929. Prior to June 22, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--32 years (1948 to current year), 348 ft^3/s (9.855 m^3/s), 16.13 in/yr (410 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)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 24	0600	8570	243	19.67	5.995	Jan. 11	2200	11200	317	21.27	6.483
Nov. 26	0500	*14600	413	*22.92	6.986	May 18	0600	10000	283	20.58	6.273

Minimum daily discharge, 5.3 ft^3/s (0.15 m^3/s) Sept. 30.

WATER-QUALITY RECORDS

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	671	489	241	90	150	1090	90	257	41	13	12
2	491	1910	384	204	86	140	628	83	1750	36	30	12
3	372	695	303	177	80	140	455	77	501	1200	67	22
4	376	370	251	165	78	150	391	72	247	503	363	37
5	423	247	226	158	76	2770	376	66	158	270	116	27
6	293	186	210	142	76	3470	289	62	116	149	59	22
7	186	153	190	147	76	1130	240	57	97	92	39	17
8	141	132	162	175	77	2280	250	53	390	67	30	299
9	118	1270	138	151	83	1660	274	50	150	54	23	134
10	105	4090	124	129	81	710	424	47	93	47	18	62
11	97	1010	117	5560	80	483	460	53	97	72	14	47
12	92	488	113	4980	74	358	1300	157	103	139	12	26
13	91	332	275	946	70	316	1060	1640	81	80	9.3	20
14	83	249	530	610	75	455	2480	565	66	58	7.3	17
15	76	193	360	534	78	452	1330	229	57	46	91	13
16	73	160	249	435	274	407	716	145	95	37	202	12
17	71	136	192	378	210	434	515	1890	168	31	79	15
18	68	119	152	337	170	884	373	7100	88	28	68	14
19	64	105	135	284	150	579	299	1670	65	26	535	15
20	59	96	124	234	329	391	243	1000	63	22	544	11
21	57	88	116	202	856	2110	204	514	61	19	131	8.4
22	56	91	225	189	1120	1810	176	345	51	19	67	7.1
23	63	3300	1340	177	892	680	160	276	44	38	43	9.8
24	74	6700	4550	156	606	779	137	323	216	54	33	9.1
25	68	5080	3630	160	335	1880	119	643	225	35	25	8.8
26	85	9720	1510	180	250	854	109	309	101	28	19	8.9
27	73	1590	735	194	200	530	105	188	70	23	16	7.5
28	69	2030	497	161	180	403	101	141	57	22	13	6.6
29	66	1260	382	131	165	726	99	115	49	19	11	5.7
30	64	675	324	107	----	778	96	102	44	17	10	5.3
31	62	-----	284	100	----	1980	-----	97	----	13	10	-----
TOTAL	4154	43146	18317	17744	6917	29889	14499	18159	5560	3285	2697.6	911.2
MEAN	134	1438	591	572	239	964	483	586	185	106	87.0	30.4
MAX	491	9720	4550	5560	1120	3470	2480	7100	1750	1200	544	299
MIN	56	88	113	100	70	140	96	47	44	13	7.3	5.3
CFSM	.46	4.91	2.02	1.95	.82	3.29	1.65	2.00	.63	.36	.30	.10
IN.	.53	5.48	2.33	2.25	.88	3.79	1.84	2.31	.71	.42	.34	.12

CAL YR 1979 TOTAL 214819.0 MEAN 589 MAX 10700 MIN 23 CFSM 2.01 IN 27.27
WTR YR 1980 TOTAL 165278.8 MEAN 452 MAX 9720 MIN 5.3 CFSM 1.54 IN 20.98

03368000 BRUSH CREEK NEAR NEBRASKA, IN

LOCATION.--Lat 39°04'13", long 85°29'10" in NW¼NE¼ sec.11, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on right bank at downstream side of county road bridge, 1.5 miles (2.4 km) northwest of Nebraska, 2.9 miles (4.7 km) northeast of Butlerville, and 3.6 miles (5.8 km) upstream from Brush Creek Dam.

DRAINAGE AREA.--11.4 mi² (29.5 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.17 ft (218.593 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--25 years, 13.1 ft³/s (0.371 m³/s), 15.56 in/yr (395 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,440 ft³/s (97.4 m³/s) May 24, 1968, gage height, 11.40 ft (3.475 m), from rating curve extended above 440 ft³/s (12.5 m³/s) on basis of contracted-opening measurement of peak flow at gage height, 9.70 ft (2.957 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s (26.9 ³/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. 25	unknown	1160	32.9	7.31	2.228	Mar. 21	0315	1150	32.6	7.30	2.225
Jan. 11	0730	*1540	43.6	*8.16	2.487	May 17	2000	1070	30.3	7.09	2.161
Mar. 5	0630	1080	30.6	7.12	2.170	July 3	0115	1070	30.3	7.11	2.167

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	121	8.8	5.7	4.0	6.0	17	3.4	40	.50	2.1	.16
2	7.3	25	7.2	5.0	3.8	5.0	11	3.1	20	23	1.1	2.1
3	2.3	10	5.6	4.8	3.5	5.0	8.4	2.9	8.1	127	88	.68
4	10	6.8	5.3	4.7	3.2	7.0	8.2	2.7	5.6	5.0	3.6	.23
5	4.4	5.7	5.1	4.4	3.0	302	6.5	2.5	4.9	3.5	1.9	.19
6	2.0	5.0	5.0	4.0	3.0	63	5.4	2.4	4.0	2.0	1.2	.16
7	1.5	4.4	4.7	5.0	3.2	50	5.3	2.3	3.5	1.4	.86	.13
8	1.3	4.1	4.4	4.0	3.3	112	9.6	2.1	7.0	1.1	.56	.12
9	1.2	130	3.9	3.4	3.4	21	10	2.1	3.0	.82	.35	.17
10	1.1	50	3.9	3.2	3.5	12	17	2.0	4.0	105	.25	1.1
11	1.0	17	3.8	422	3.2	8.8	9.8	2.0	3.5	15	.25	.33
12	1.0	11	3.9	48	3.0	7.3	60	3.2	2.8	3.8	.34	.14
13	1.1	8.0	23	21	2.8	9.3	15	7.0	2.5	2.2	.22	.12
14	1.4	6.5	9.6	18	3.0	13	120	4.1	2.3	1.5	.27	.10
15	1.8	5.5	6.3	16	3.5	11	23	3.0	2.1	1.1	30	.08
16	1.0	4.8	5.6	14	15	8.4	18	2.5	10	.75	3.1	.09
17	.90	4.3	4.3	13	9.0	25	11	214	4.0	.59	1.6	.22
18	.82	3.8	3.8	11	6.0	28	8.5	76	2.5	.54	1.0	.22
19	.80	3.5	3.8	8.8	7.0	14	7.1	43	2.0	.46	4.6	.13
20	.78	3.3	3.7	8.2	20	12	6.1	15	2.0	.40	2.3	.10
21	.76	3.2	3.6	7.5	40	327	5.8	10	1.7	.45	1.1	.08
22	.74	5.0	80	7.5	54	25	5.3	7.7	1.4	20	.60	.19
23	3.0	280	76	6.9	35	13	5.0	29	20	3.3	.38	3.4
24	2.0	150	305	5.6	24	64	5.0	124	2.5	1.0	.28	.39
25	1.5	450	135	9.2	16	24	4.8	32	1.5	.58	.25	.14
26	1.2	150	25	8.7	12	12	4.5	11	1.1	.38	.23	.14
27	1.0	30	14	7.3	10	9.5	4.5	7.2	.83	.37	.21	.09
28	1.3	90	9.8	6.5	9.2	10	4.5	5.6	.63	.55	.21	.07
29	2.0	30	8.3	5.1	9.2	26	4.5	5.0	.77	.38	.18	.06
30	1.4	12	7.8	4.5	-----	102	4.0	4.8	.65	.29	.16	.05
31	1.2	------	6.8	4.3	-----	49	-----	5.0	------	.25	.14	-----
TOTAL	58.68	1629.9	793.0	697.3	315.8	1381.3	424.8	636.6	164.88	323.21	147.34	11.18
MEAN	1.89	54.3	25.6	22.5	10.9	44.6	14.2	20.5	5.50	10.4	4.75	.37
MAX	10	450	305	422	54	327	120	214	40	127	88	3.4
MIN	.74	3.2	3.6	3.2	2.8	5.0	4.0	2.0	.63	.25	.14	.05
CFSM	.17	4.76	2.25	1.97	.96	3.91	1.25	1.80	.48	.91	.42	.03
IN.	.19	5.32	2.59	2.28	1.03	4.51	1.39	2.08	.54	1.05	.48	.04

CAL YR 1979 TOTAL 7457.45 MEAN 20.4 MAX 600 MIN .21 CFSM 1.79 IN 24.33
WTR YR 1980 TOTAL 6583.99 MEAN 18.0 MAX 450 MIN .05 CFSM 1.58 IN 21.48

03369000 VERNON FORK MUSCATATUCK RIVER NEAR BUTLERVILLE, IN
(Formerly published as Vernon Fork near Butlerville)

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 above 50 ft³/s (1.42 m³/s) and poor below. Water supply for the Muscatatuck State School is diverted and the sewage effluent returned above station. Flow regulated by Brush Creek Reservoir.

AVERAGE DISCHARGE.--38 years, 94.6 ft³/s (2.679 m³/s), 14.96 in/yr (380 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)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 25	1800	4010	114	11.14	3.395	Mar. 21	0800	4000	113	11.13	3.392
Jan. 11	1100	*4420	125	*11.63	3.545						

Minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	591	89	53	30	45	214	27	76	6.0	7.9	5.3
2	125	256	70	47	28	40	169	25	158	59	5.9	11
3	75	123	55	43	27	40	116	24	101	289	341	7.3
4	78	82	54	43	26	45	306	22	55	54	56	5.4
5	71	59	54	40	24	1160	125	21	22	41	25	4.2
6	45	47	54	35	24	456	87	20	18	32	15	3.3
7	33	39	47	38	25	347	76	18	16	15	76	2.9
8	25	34	40	35	25	579	138	16	89	10	28	2.9
9	21	452	35	31	26	269	206	15	25	8.1	12	2.8
10	19	438	34	26	27	157	205	14	18	323	9.9	74
11	18	143	34	1680	26	109	144	16	16	172	8.3	10
12	18	97	77	389	23	87	323	48	12	90	8.9	4.5
13	17	73	167	192	22	92	192	98	9.5	38	9.6	3.1
14	15	58	103	156	22	121	508	29	8.4	10	5.4	2.6
15	13	47	62	137	29	131	248	19	7.7	8.1	505	2.0
16	12	42	54	129	95	98	193	18	157	6.4	84	2.1
17	11	36	44	126	72	149	133	332	31	5.3	40	3.0
18	10	32	34	106	45	260	104	549	15	4.3	27	2.7
19	10	29	36	84	43	174	86	538	11	4.1	97	3.2
20	10	27	32	74	134	118	72	184	9.0	3.8	36	2.6
21	9.6	26	31	68	320	1490	94	111	7.8	6.0	20	2.1
22	9.0	32	318	65	451	295	75	63	6.4	151	13	2.5
23	20	1250	571	62	244	167	41	59	28	61	8.8	4.6
24	30	1250	1880	48	173	286	37	211	84	17	6.6	2.8
25	20	1380	776	72	122	243	32	171	17	8.0	5.2	2.1
26	15	1220	243	74	92	170	29	85	10	5.7	4.8	1.7
27	13	227	167	58	84	111	28	54	7.8	5.2	4.2	1.4
28	16	549	111	50	82	83	28	41	6.8	12	3.9	1.2
29	22	203	78	37	66	179	31	32	7.6	8.6	3.6	1.2
30	17	138	69	34	----	324	28	29	9.7	5.0	3.5	1.2
31	15	----	61	32	----	388	----	27	------	4.1	3.5	-----
TOTAL	830.6	8980	5480	4064	2407	8213	4068	2916	1039.7	1462.7	1475.0	175.7
MEAN	26.8	299	177	131	83.0	265	136	94.1	34.7	47.2	47.6	5.86
MAX	125	1380	1880	1680	451	1490	508	549	158	323	505	74
MIN	9.0	26	31	26	22	40	28	14	6.4	3.8	3.5	1.2
CFSM	.31	3.48	2.06	1.53	.97	3.09	1.58	1.10	.40	.55	.55	.07
IN.	.36	3.89	2.37	1.76	1.04	3.56	1.76	1.26	.45	.63	.64	.08

CAL YR 1979 TOTAL 54443.3 MEAN 149 MAX 3740 MIN 4.1 CFSM 1.74 IN 23.58
WTR YR 1980 TOTAL 41111.7 MEAN 112 MAX 1880 MIN 1.2 CFSM 1.30 IN 17.80

03369500 VERNON FORK MUSCATATUCK RIVER AT VERNON, IN
(Formerly published as Vernon Fork at Vernon)

LOCATION.--Lat 38°58'34", long 85°37'13", in NW¼SE¼, sec.10, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, at downstream end of left bank bridge pier, 1 mile (2 km) southwest of Vernon, 3.1 miles (5.0 km) downstream from Otter Creek, and at mile 36.4 (58.6 km)

DRAINAGE AREA.--198 mi² (513 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1940, 1953. WSP 1909: 1952-53. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 587.30 ft (179.009 m) National Geodetic Vertical Datum of 1929, (levels by State of Indiana, Department of Natural Resources). Prior to Jan. 14, 1940, and June 23 to Nov. 13, 1967, nonrecording gage, and Jan. 14, 1940, to June 22, 1967, water-stage recorder at site on right bank at same datum.

REMARKS.--Records good except those below 50 ft³/s (1.42 m³/s), which are poor. Diversion above station for municipal water supply of North Vernon and Vernon. Part of this diversion returned above gage as sewage effluent by North Vernon Sewage Treatment Plant. Some regulation at times at low flow by Old Timbers Lake on Jefferson Proving Grounds.

AVERAGE DISCHARGE.--41 years, 222 ft³/s (6.287 m³/s), 15.23 in/yr (387 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,800 ft³/s (1,610 m³/s) Jan. 21, 1959, from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of slope-area measurement of peak flow, gage height, 32.83 ft (10.007 m), from high-water mark. No flow at times in 1940, 1943-44.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft³/s (170 m³/s) and maximum (*):

Date	Time	Discharge (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. 25	2100	7390	209	12.99	3.959	Jan. 11	1500	*7640	216	*13.22	4.029
Dec. 24	1200	6640	188	12.30	3.749	Mar. 21	1100	7090	201	12.72	3.877

Minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	968	233	145	60	100	600	71	546	16	15	4.1
2	137	1110	178	129	56	90	402	68	546	11	26	71
3	169	317	139	119	52	90	306	63	254	763	1050	41
4	141	183	124	113	50	93	530	60	166	195	226	13
5	181	128	118	105	47	2590	295	57	81	108	80	7.8
6	90	101	114	94	47	1320	198	53	65	80	54	5.5
7	60	85	103	95	49	937	173	49	56	51	59	4.5
8	49	74	86	99	50	1770	231	44	138	29	83	4.9
9	41	845	74	85	49	817	470	39	101	19	35	5.4
10	38	1570	69	71	51	457	472	36	68	29	17	59
11	36	415	67	3680	50	297	323	53	70	697	12	58
12	36	236	74	1280	47	224	865	306	44	168	12	18
13	34	168	300	464	42	215	528	459	33	104	19	7.9
14	30	131	311	341	43	301	1440	157	29	33	17	5.0
15	28	107	154	288	55	310	680	89	26	18	676	4.0
16	25	93	122	249	174	243	485	73	264	13	264	3.9
17	24	82	103	237	187	354	322	1020	142	9.3	84	4.8
18	22	73	79	207	114	704	247	2170	56	7.6	53	4.7
19	22	67	78	161	83	415	200	1150	35	6.3	187	4.8
20	22	63	73	137	219	309	169	560	26	5.1	139	4.2
21	20	59	69	124	571	3460	161	325	21	5.0	54	3.3
22	18	66	325	116	1060	904	182	197	17	217	31	3.2
23	28	2740	1610	111	549	459	106	155	28	217	19	13
24	48	3050	3820	91	369	750	92	333	259	60	12	15
25	47	3040	2120	110	252	804	80	516	79	23	8.6	9.4
26	34	3240	819	136	183	432	74	224	39	12	7.1	5.3
27	27	748	472	110	165	312	69	140	24	8.9	5.5	4.2
28	27	1500	323	93	163	225	70	105	18	8.2	5.2	3.0
29	29	629	216	74	139	474	79	85	28	11	4.6	2.7
30	30	369	188	65	----	601	79	76	19	10	4.3	2.5
31	30	-----	168	62	----	1390	----	74	----	6.6	4.0	-----
TOTAL	1561	22257	12729	9191	4976	21447	9928	8807	3278	2941.0	3263.3	393.1
MEAN	50.4	742	411	296	172	692	331	284	109	94.9	105	13.1
MAX	181	3240	3820	3680	1060	3460	1440	2170	546	763	1050	71
MIN	18	59	67	62	42	90	69	36	17	5.0	4.0	2.5
CFSM	.26	3.75	2.08	1.50	.87	3.50	1.67	1.43	.55	.48	.53	.07
IN.	.29	4.18	2.39	1.73	.93	4.03	1.87	1.65	.62	.55	.61	.07

CAL YR 1979 TOTAL 132917.0 MEAN 364 MAX 8250 MIN 13 CFSM 1.84 IN 24.97
WTR YR 1980 TOTAL 100771.4 MEAN 275 MAX 3820 MIN 2.5 CFSM 1.39 IN 18.93

03369500 VERNON FORK MUSCATATUCK RIVER AT VERNON, IN--Continued
(Formerly Published as Vernon Fork at Vernon)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: November 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
NOV 26...	1140	----	2880	229	1780	95	97	99	100
JAN 10...	1215	1.0	70	4	.76	--	---	--	---
APR 29...	1315	11.5	76	4	.82	--	---	--	---
JUN 25...	1430	23.5	69	371	69	99	100	--	---
AUG 18...	1315	24.5	51	91	13	--	---	--	---

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 (now used as an auxiliary gage).

REMARKS.--Records good.

AVERAGE DISCHARGE.--27 years (1939-43, 1957 to current year), 3,907 ft³/s (110.6 m³/s), 13.74 in/yr (349 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)
Nov. 30	2200	*28800	816	*26.25	8.001	Mar. 25	unknown	unknown		unknown	
Dec. 28	0300	23300	660	24.24	7.388	May 22	1700	13500	382	17.76	5.413
Mar. 12	0800	14600	413	18.63	5.678						

Minimum daily discharge, 949 ft³/s (26.9 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	1480	28300	11100	2720	4490	10400	3050	2890	1670	1510	1770
2	1910	2270	26100	8630	2620	4130	10900	2940	3160	2080	1420	1720
3	2030	4540	22300	6450	2610	3480	11400	2810	5010	2630	1340	1730
4	2410	5990	17700	5320	2570	3170	12000	2680	6090	3100	1390	1640
5	2630	6300	13200	4810	2530	4090	11500	2570	6120	4470	2230	1600
6	2630	5430	9780	4450	2530	6290	10000	2460	6030	3980	2330	1530
7	2460	4060	7300	4190	2440	7850	9400	2360	5500	3170	1900	1450
8	2190	3300	5700	3980	2260	9960	8690	2250	4840	2580	1540	1400
9	1930	3320	5020	3800	2230	11200	7070	2150	4120	2230	1750	1360
10	1780	4890	4580	3630	2150	12100	6550	2070	4220	1940	2880	1430
11	1700	6170	4200	4690	2100	13800	6590	2010	4950	1850	3000	1480
12	1650	6930	3930	7300	2070	14500	6950	1990	5300	1910	2330	1420
13	1610	7160	3880	8570	2010	13400	7410	2260	4550	3040	1950	1400
14	1580	7050	4280	10000	1930	11300	8520	3390	3740	3320	1900	1330
15	1540	6410	4890	11400	1930	10000	9730	4450	3150	2690	1990	1240
16	1500	4990	4820	11700	2340	9000	10600	3840	2790	2130	2420	1190
17	1460	3730	4250	10800	2630	7600	12200	3410	2590	1800	4010	1170
18	1420	3170	3780	9380	2790	7300	12300	5490	2790	1600	4910	1140
19	1390	2860	3480	8100	2870	7400	11100	8170	2910	1460	4590	1120
20	1360	2670	3240	6550	2790	7800	9320	10400	2710	1370	4750	1140
21	1330	2510	3090	5310	3240	10000	7100	11800	2410	1280	5810	1170
22	1310	2410	3300	4720	4570	15000	5590	13300	2240	1250	6410	1140
23	1320	3860	5760	4360	6200	13000	4910	12500	2130	1240	6740	1110
24	1340	8080	9340	4090	7570	17000	4490	10500	2180	1570	7110	1080
25	1370	9910	13500	3890	8410	20000	4110	8750	2050	2460	5810	1080
26	1390	14200	17700	3720	8120	17100	3800	7520	2150	2770	3810	1020
27	1430	17800	22000	3620	6640	15300	3550	5950	2180	2250	2950	1010
28	1420	23100	23200	3510	5360	13500	3340	4860	1940	1820	2530	986
29	1400	27900	21800	3320	4710	11800	3230	4120	1930	1600	2290	965
30	1380	28600	18600	3100	------	10400	3140	3510	1740	1490	2050	949
31	1350	------	14800	2890	------	10200	------	3140	------	1490	1880	-----
TOTAL	52180	231110	333820	187380	102940	322160	235890	156700	104410	68240	97530	38770
MEAN	1683	7704	10770	6045	3550	10390	7863	5055	3480	2201	3146	1292
MAX	2630	28600	28300	11700	8410	20000	12300	13300	6120	4470	7110	1770
MIN	1310	1480	3090	2890	1930	3170	3140	1990	1740	1240	1340	949
CFSM	.44	2.00	2.79	1.57	.92	2.69	2.04	1.31	.90	.57	.82	.34
IN.	.50	2.23	3.22	1.81	.99	3.10	2.27	1.51	1.01	.66	.94	.37

CAL YR 1979 TOTAL 2655780 MEAN 7276 MAX 46000 MIN 1310 CFSM 1.88 IN 25.59
WTR YR 1980 TOTAL 1931130 MEAN 5276 MAX 28600 MIN 949 CFSM 1.37 IN 18.61

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 ARA.--24.1 mi² (62.4 km²).

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

REVISED RECORDS.--WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft (175.260 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--10 years, 35.6 ft³/s (1.008 m³/s), 20.06 in/yr (510 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft³/s (433 m³/s) July 21, 1973, gage height, 14.0 ft (4.27 m), from floodmarks, from rating extended above 550 ft³/s (15.6 m³/s) on basis of step-backwater analysis and contracted-opening and flow-over-road measurement of peak flow; no flow at times during 1971, 1975, and 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached a stage of 18.1 ft (5.52 m) from information by local resident.

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

Date	Time	Discharge (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. 25	0330	1360	38.5	5.68	1.731	June 1	1630	1060	30.0	5.24	1.597
Mar. 21	0145	*2220	62.9	*6.74	2.054	Aug. 18	2230	1180	33.4	5.43	1.655

Minimum daily discharge, 0.19 ft³/s (0.005 m³/s) Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	72	52	28	9.7	15	88	13	106	8.0	2.9	.19
2	5.4	26	38	24	9.6	14	68	12	48	6.1	2.6	1.6
3	4.6	15	31	21	9.5	14	70	11	24	4.8	1.7	1.6
4	4.0	12	28	20	9.4	15	113	9.7	15	13	1.4	.82
5	3.3	9.7	26	18	9.2	46	70	9.1	12	8.0	1.1	.70
6	3.0	8.1	23	16	9.0	117	57	8.0	9.7	5.2	.94	.51
7	2.5	7.6	19	17	8.8	95	49	7.0	8.5	3.8	.82	.36
8	2.5	6.7	17	15	8.7	205	45	6.1	14	2.9	.60	1.6
9	2.5	92	15	13	8.6	99	43	5.6	7.5	2.4	.43	1.0
10	2.3	72	15	13	8.6	68	54	5.2	6.1	2.2	.36	.66
11	2.3	33	14	137	8.5	49	46	12	4.8	3.2	.29	.45
12	2.5	24	15	77	8.5	40	77	20	4.1	2.2	.29	.37
13	2.5	19	35	51	8.6	42	61	29	3.5	1.6	.23	.32
14	2.3	15	28	44	9.0	40	198	15	3.2	1.4	.23	.30
15	2.3	13	24	35	10	37	100	11	2.9	1.1	.51	.29
16	2.5	11	22	32	23	33	72	14	2.9	.94	1.2	.72
17	2.5	10	20	29	18	99	55	284	2.6	.82	1.1	34
18	2.3	9.1	18	26	15	93	45	183	2.4	.60	65	3.0
19	2.0	8.6	16	22	14	65	39	125	7.0	.51	40	.74
20	1.6	8.1	15	20	22	83	33	75	10	.51	6.5	.50
21	1.6	7.6	18	19	66	611	27	51	4.1	1.1	2.9	.37
22	2.0	12	397	19	79	125	23	36	2.9	5.6	1.7	.30
23	5.0	460	331	16	52	82	20	32	19	2.9	1.4	.54
24	6.7	278	718	16	40	153	17	72	12	1.6	1.1	.40
25	5.4	318	341	19	29	99	15	57	7.5	1.1	.82	.32
26	4.6	281	140	15	24	72	14	32	4.8	.82	.70	.27
27	4.3	115	87	13	20	55	13	22	3.5	2.9	.51	.40
28	4.3	221	61	12	17	54	15	17	73	6.1	.43	.31
29	4.3	95	48	11	16	57	20	13	43	2.6	.36	.26
30	4.3	72	40	10	-----	110	15	11	13	1.6	.29	.28
31	4.3	------	33	9.8	-----	125	----	9.1	-----	1.2	.23	-----
TOTAL	102.5	2331.5	2685	817.8	570.7	2812	1562	1206.8	477.0	96.80	138.64	53.18
MEAN	3.31	77.7	86.6	26.4	19.7	90.7	52.1	38.9	15.9	3.12	4.47	1.77
MAX	6.7	460	718	137	79	611	198	284	106	13	65	34
MIN	1.6	6.7	14	9.8	8.5	14	13	5.2	2.4	.51	.23	.19
CFSM	.14	3.22	3.59	1.10	.82	3.76	2.16	1.61	.66	.13	.19	.07
IN.	.16	3.60	4.14	1.26	.88	4.34	2.41	1.86	.74	.15	.21	.08

CAL YR 1979 TOTAL 22589.80 MEAN 61.9 MAX 1840 MIN 1.6 CFSM 2.57 IN 34.87
WTR YR 1980 TOTAL 12853.92 MEAN 35.1 MAX 718 MIN .19 CFSM 1.46 IN 19.84

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 mi^2 (28.2 km^2).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 550.00 ft (167.64 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--10 years, 14.2 ft^3/s (0.402 m^3/s), 17.69 in/yr (449 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s (153 m^3/s) July 13, 1979, gage height, 13.18 ft (4.017 m) from rating curve extended above 1,200 ft^3/s (34.0 m^3/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 ft^3/s (9.91 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. 25	2030	896	25.4	9.85	3.002	May 24	1645	681	19.3	9.08	2.768
Dec. 24	0545	665	18.8	9.25	2.819	June 1	1430	*1200	34.0	*10.33	3.148
Mar. 8	0415	731	20.7	9.25	2.819	Aug. 15	0245	371	10.5	7.71	2.350
May 17	1730	393	11.1	7.82	2.384						

Minimum daily discharge, 0.13 ft^3/s (0.004 m^3/s) Aug. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	22	30	12	3.3	7.0	65	7.0	160	1.1	.80	.32
2	1.6	10	22	9.6	3.2	6.5	43	6.7	58	.90	2.5	.56
3	1.5	6.1	18	8.2	3.1	6.4	70	6.2	22	.85	3.2	.32
4	1.4	4.2	17	7.9	3.0	7.3	106	5.7	12	.90	1.0	.25
5	1.3	3.4	16	7.3	3.0	77	55	5.2	8.2	.80	.64	.18
6	1.3	3.0	15	6.2	3.2	48	37	4.7	6.0	.64	.40	.18
7	1.2	2.6	13	6.5	3.1	32	30	4.2	14	.56	.32	.34
8	1.2	2.4	11	5.7	2.9	182	32	3.7	19	.45	.22	.69
9	1.2	11	10	5.5	2.9	67	42	3.4	7.6	.40	.18	.80
10	1.0	16	10	5.2	2.8	43	45	3.2	5.5	2.1	.14	.50
11	1.0	10	9.6	82	2.8	31	38	3.7	4.0	1.1	.16	.38
12	1.2	7.3	10	42	2.9	26	65	17	3.0	.69	.18	.40
13	1.0	5.7	10	26	2.8	24	50	19	2.1	.56	.14	.45
14	1.3	4.5	9.6	18	2.8	25	111	11	1.6	.40	.13	.50
15	1.6	3.8	8.9	14	6.5	30	67	8.6	1.4	.38	51	.53
16	1.5	3.4	8.0	13	33	29	44	22	1.6	.36	11	.60
17	1.5	3.0	7.4	12	25	73	33	146	1.1	.36	6.5	7.9
18	1.6	2.6	6.6	10	19	59	27	99	.90	.34	3.2	1.1
19	1.6	2.6	6.2	15	16	40	23	133	1.7	.34	2.7	.60
20	1.6	2.6	5.8	7.9	17	36	19	55	1.5	.32	1.6	.40
21	1.7	2.6	6.0	7.3	75	142	16	29	1.1	11	1.2	.34
22	3.4	6.1	85	7.3	75	64	14	19	.90	2.5	.74	.30
23	5.7	170	97	6.2	32	41	13	16	1.1	.74	.56	.36
24	3.4	121	244	6.5	20	70	11	82	1.2	.50	.40	.27
25	2.6	198	122	7.3	15	57	9.3	55	.96	.34	.36	.20
26	2.6	145	62	6.5	12	39	8.2	23	.80	.27	.30	.16
27	2.4	116	34	6.0	10	30	7.6	14	.69	8.6	.25	.20
28	2.3	154	24	5.2	9.6	28	7.6	10	1.6	2.3	.20	.18
29	2.3	67	20	4.7	7.9	27	8.2	7.6	5.2	.96	.18	.18
30	2.1	41	16	4.2	-----	68	7.6	6.7	1.5	.56	.18	.20
31	2.0	------	14	3.7	-----	96	------	5.5	------	.38	.22	-----
TOTAL	57.3	1146.9	968.1	378.9	414.8	1511.2	1104.5	832.1	346.25	41.70	90.60	19.39
MEAN	1.85	38.2	31.2	12.2	14.3	48.7	36.8	26.8	11.5	1.35	2.92	.65
MAX	5.7	198	244	82	75	182	111	146	160	11	51	7.9
MIN	1.0	2.4	5.8	3.7	2.8	6.4	7.6	3.2	.69	.27	.13	.16
CFSM	.17	3.51	2.86	1.12	1.31	4.47	3.38	2.46	1.06	.12	.27	.06
IN.	.20	3.91	3.30	1.29	1.42	5.16	3.77	2.84	1.18	.14	.31	.07

CAL YR 1979 TOTAL 8870.48 MEAN 24.3 MAX 466 MIN .56 CFSM 2.23 IN 30.27
WTR YR 1980 TOTAL 6911.74 MEAN 18.9 MAX 244 MIN .13 CFSM 1.73 IN 23.59

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT					
14...	1730	11.0	1.3	7	.02
21...	1130	19.0	1.4	6	.02
28...	2030	13.0	2.0	6	.03
NOV					
04...	1630	11.0	4.2	5	.06
06...	1540	--	2.8	11	.08
18...	1100	12.0	2.8	1	.01
25...	1300	8.0	32	8	.69
DEC					
02...	1800	6.0	12	14	.45
09...	1530	6.0	3.6	1	.01
16...	1650	2.0	3.4	2	.02
23...	1645	8.0	121	11	3.6
30...	1730	6.0	14	1	.04
JAN					
06...	1050	1.0	6.5	4	.07
08...	1650	4.0	5.7	4	.06
13...	1225	4.0	35	5	.47
20...	1145	6.0	10	4	.11
27...	1245	4.0	6.9	3	.06
SEP					
07...	1745	24.0	.34	7	.01
14...	1800	25.0	.50	8	.01
21...	0945	23.0	.34	6	.01
22...	1700	25.0	.30	4	.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 mi^2 (1,119 km^2).

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 hm^3), elevation, 515 ft (157.0 m). Capacity at uncontrolled spillway elevation, 556 ft (169.5 m) is 446,000 acre-ft (550 hm^3). 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 hm^3) May 2, 1973, elevation, 550.60 (167.823 m); minimum, 149,500 acre-ft (184 hm^3) Nov. 7, 1966, elevation, 534.77 ft (163.000 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 289,970 acre-ft (358 hm^3) Dec. 4, elevation 546.68 ft (166.628 m); minimum, 162,101 acre-ft (200 hm^3) Mar. 5, elevation 536.06 ft (163.391 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	540.87	214,640	
Oct. 31	540.51	210,410	-4,230
Nov. 30	546.55	288,140	+77,730
Dec. 31	546.60	288,840	+700
CAL YR 1978			+77,960
Jan. 31	539.26	196,090	-92,750
Feb. 29	537.31	174,920	-21,170
Mar. 31	540.99	216,060	+41,140
Apr. 30	540.18	206,580	-9,480
May 31	541.18	218,330	+11,750
June 30	538.49	187,560	-30,770
July 31	537.68	178,830	-8,730
Aug. 31	537.74	179,470	+640
Sept. 30	537.44	176,290	-3,180
WTR YR 1980			-38,350

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).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-May 1955 to current year.

REVISED RECORDS.--WSP 1705: 1959. WSP 1725: 1956(M). WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 480.00 ft (146.304 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1960, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1960, nonrecording gage at site 0.7 mile (1.1 km) upstream at datum 2.41 ft (0.735 m) higher.

REMARKS.--Flow regulated by Monroe Lake (See sta 03372400). Daily discharge computed from relation between discharge, head, and 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.--25 years, 496 ft³/s (14.05 m³/s), 15.59 in/yr (396 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 1979 WATER YEAR.--Maximum daily discharge, 2,180 ft³/s (61.7 m³/s) May 9; minimum daily, 48 ft³/s (1.36 m³/s) Sept. 19-30.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,130 ft³/s (60.3 m³/s) Jan. 19, 20; minimum daily, 47 ft³/s (1.33 m³/s) Oct. 19 to Nov. 1

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURES: August 1966 to September 1976.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum temperature, 29.0°C July 10, 11, 1973, July 30, 1975; minimum, 1.0°C Jan. 4, 5, 8-13, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum temperature observed, 31.0°C Aug. 6, 1964.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	61	210	821	1590	102	744	1880	1850	60	218	1890
2	61	61	210	208	1580	102	747	1880	1840	60	220	1890
3	61	61	210	209	1570	103	749	1880	1450	60	222	1880
4	61	61	212	721	1570	104	487	1880	442	60	222	1870
5	61	61	461	1340	1460	105	222	1880	97	60	222	1870
6	61	61	768	1340	1030	106	682	1870	96	60	222	1860
7	61	61	437	1340	682	106	1290	1870	95	60	222	1850
8	61	61	103	1330	443	106	1410	2010	230	60	222	1840
9	61	61	105	1330	395	106	1410	2180	297	60	222	1840
10	61	61	105	1430	511	106	1410	2170	297	60	367	1830
11	61	61	106	1650	559	106	1410	2160	297	60	577	1820
12	61	61	106	1640	462	106	673	2150	296	60	810	1810
13	61	61	106	1630	176	503	201	2150	296	61	1190	1790
14	61	61	106	1630	92	1290	190	2150	297	63	1750	1130
15	61	61	603	1620	92	1880	191	2140	296	64	1930	1030
16	61	61	901	1620	92	2020	191	2130	296	64	1920	670
17	62	61	900	1610	92	2010	191	1990	296	64	1910	265
18	61	165	1080	1610	193	2010	191	1810	296	64	1900	106
19	61	211	1420	1600	294	2090	553	1800	162	64	1900	48
20	61	211	1550	1600	294	2150	1380	1790	95	64	1500	48
21	61	445	1550	1600	294	2140	1870	1860	95	64	853	48
22	61	584	1740	1610	386	2140	1930	1930	95	64	859	48
23	61	583	1870	1610	172	2130	1930	1920	95	532	860	48
24	61	583	1860	1610	97	2130	1920	1920	72	994	860	48
25	61	581	1860	1620	100	2130	1920	1910	60	1210	859	48
26	61	453	1850	1610	101	2130	1910	1900	60	768	858	48
27	61	376	1840	1610	101	2120	1910	1890	60	208	858	48
28	61	320	1840	1610	101	2120	1900	1880	60	210	1010	48
29	61	210	1830	1600	-----	2110	1900	1870	60	214	1200	48
30	61	210	1820	1600	-----	2100	1890	1860	60	217	1320	48
31	61	----	1820	1590	-----	1300	-----	1860	-----	217	1690	-----
TOTAL	1892	5969	29579	43949	14529	37761	33402	60570	10038	5926	28973	27817
MEAN	61.0	199	954	1418	519	1218	1113	1954	335	191	935	927
MAX	62	584	1870	1650	1590	2150	1930	2180	1850	1210	1930	1890
MIN	61	61	103	208	92	102	190	1790	60	60	218	48

WTR YR 1978 TOTAL 193230 MEAN 529 MAX 2440 MIN 50
WTR YR 1979 TOTAL 300405 MEAN 823 MAX 2180 MIN 48

03372500 SALT CREEK NEAR HARRODSBURG, IN--continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	47	221	1400	1970	1950	204	1770	1200	775	50	50
2	48	48	221	1970	1750	1940	205	1760	208	560	50	50
3	48	48	221	2070	1210	1920	579	1750	226	504	50	50
4	48	48	469	2060	906	1910	517	1740	208	310	50	50
5	48	48	967	2060	728	1550	208	1730	208	145	50	50
6	48	48	1690	2050	458	1420	208	1730	208	74	50	50
7	48	48	2090	2040	403	1630	844	1370	208	50	50	50
8	48	48	2090	2030	226	801	1690	800	209	50	50	50
9	48	48	2080	2030	92	1090	1830	436	209	50	50	50
10	48	48	2070	2020	92	1540	1240	162	209	50	50	50
11	48	48	2060	1590	92	1540	1070	132	209	50	50	50
12	48	48	2060	1760	92	1530	1820	132	531	50	50	50
13	48	48	2050	2020	92	1260	1820	201	381	50	50	50
14	48	48	2040	2020	92	1050	1150	337	329	50	50	50
15	48	48	2040	2010	130	1050	422	457	1290	50	50	50
16	48	48	2030	2010	193	1050	210	697	1640	50	50	50
17	48	48	2020	2000	193	1050	543	702	1640	50	50	50
18	48	68	2010	2050	377	1270	1120	826	1630	50	50	50
19	47	77	2010	2130	559	1680	1340	1150	1620	50	50	50
20	47	77	2000	2130	671	1830	1610	982	1620	50	50	50
21	47	77	1990	2120	1100	934	1830	281	1610	50	50	50
22	47	78	1990	2110	1400	257	1830	205	1600	50	50	50
23	47	158	1970	2100	1570	198	1820	205	1600	50	50	50
24	47	457	587	2090	1720	200	1810	205	1590	50	50	50
25	47	477	198	2080	1720	201	1810	207	1580	50	50	50
26	47	214	200	2070	1710	201	1800	207	1580	50	50	50
27	47	216	201	2060	1700	202	1790	617	1420	50	50	49
28	47	219	201	2050	1700	795	1790	1310	1260	50	50	49
29	47	220	201	2040	1830	1610	1780	1560	1080	50	50	49
30	47	221	201	2030	---	1610	1770	1630	928	50	50	49
31	47	---	588	2020	---	929	---	1630	---	50	50	---
TOTAL	1475	3374	40766	62220	24776	36198	36660	26921	28231	3618	1550	1496
MEAN	47.6	112	1315	2007	854	1168	1222	868	941	117	50.0	49.9
MAX	48	477	2090	2130	1970	1950	1830	1770	1640	775	50	50
MIN	47	47	198	1400	92	198	204	132	208	50	50	49

CAL YR 1979 TOTAL 308580 MEAN 845 MAX 2180 MIN 47
WTR YR 1980 TOTAL 267285 MEAN 730 MAX 2130 MIN 47

03373500 EAST FORK WHITE RIVER AT SHOALS, IN

LOCATION.--Lat 38°40'02", long 86°47'31", in NW¼NW¼ 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), (revised).

DRAINAGE AREA.--4,927 mi² (12,761 km²).

PERIOD OF RECORD.--June 1903 to July 1906, October 1908 to September 1916, June 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as East Branch White River at Shoals, 1903-6, 1908-16. Gage-height records collected at same site since May 1908 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 353: 1912. WSP 1335: 1903-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.25 ft (134.798 m) 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.--66 years (1903-5, 1909-16, 1923 to current year), 5,440 ft³/s (154.1 m³/s) 14.99 in/yr (379 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft³/s (4,530 m³/s) Mar. 28, 1913, gage height, 42.2 ft (12.86 m), from rating curve extended above 100,000 ft³/s (2,830 m³/s); minimum daily, 64 ft³/s (1.81 m³/s) Oct. 6, 1935, as a result of filling Williams Reservoir.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 20,000 ft³/s (566 m³/s) and maximum (*):

Date	Time	Discharge (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. 1	2200	*32700	926	*20.86	6.358	Mar. 26	0100	23100	654	15.68	4.779
Dec. 29	1300	26400	748	17.72	5.401						

Minimum daily discharge, 897 ft³/s (25.4 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2590	1930	32600	17700	5010	6940	15300	5360	5080	3490	1890	2110
2	2510	2440	32600	13800	4770	6480	14100	5220	6120	3210	1890	2030
3	2460	3250	31500	11100	4530	5960	14800	5070	6960	4010	1830	1980
4	2500	4890	28200	8750	3900	5590	17100	4910	6850	4080	1730	1990
5	2760	6610	22600	7450	3400	6710	17700	4770	7110	5450	1890	1860
6	3030	7090	16400	6770	3190	10900	15000	4630	6960	5500	2770	1780
7	3110	6460	12400	6350	2840	11200	14200	4510	6770	4640	2740	1680
8	3050	5210	9440	6050	2680	13500	13300	4190	6940	3750	2270	1580
9	2850	4350	7610	5790	2500	16300	11600	3550	5960	3160	1900	1500
10	2580	5340	6780	5570	2290	16000	10500	3100	5130	2760	2370	1460
11	2370	6870	6270	5980	2180	16600	9740	2730	5180	2450	3480	1540
12	2240	7560	5900	10100	2110	17700	10000	2640	5830	2360	3250	1580
13	2150	8030	6080	11600	2050	18000	11700	2950	6140	2540	2560	1510
14	2090	8220	6470	12600	2010	16600	13900	3860	5910	3620	2150	1480
15	2030	8120	6830	14000	1940	13900	16100	4940	5430	3770	2130	1380
16	1970	7560	7270	15000	2800	11300	14700	5330	4970	3140	2530	1290
17	1920	6260	6980	15100	3570	9390	14700	5170	4650	2570	3020	1310
18	1870	4860	6350	14100	3490	10200	15500	9200	4550	2200	4590	1320
19	1830	4070	5890	12500	3670	10200	15300	12000	4760	1960	5210	1290
20	1800	3680	5570	11000	3920	10800	13800	12600	4830	1790	5080	1200
21	1760	3410	5320	8890	4300	16200	11600	13100	4550	1650	5340	1180
22	1710	3250	5350	7410	6460	19400	9180	14000	4300	1610	6220	1190
23	1730	4320	10300	6670	8680	17100	7830	15100	4150	1580	6630	1170
24	1940	11800	16300	6510	10000	18300	7130	14700	4220	1550	6980	1140
25	2050	15100	21300	6440	11400	22300	6680	13000	4230	2000	6940	1100
26	2000	20400	23500	6250	11900	22800	6280	10700	4070	2990	5100	1070
27	1930	23800	24100	6040	11000	21100	5960	8740	4150	3200	3700	1020
28	1860	25900	25300	5890	9010	18600	5730	7200	3990	2720	3060	982
29	1850	29800	26300	5700	7610	16800	5590	6410	5820	2330	2740	928
30	1850	31900	25600	5490	------	15600	5500	5830	4840	2030	2520	897
31	1830	------	22600	5250	------	15800	------	5410	------	1870	2280	-----
TOTAL	68220	282480	469710	281850	143210	438270	350520	220920	160450	89980	106790	42547
MEAN	2201	9416	15150	9092	4938	14140	11680	7126	5348	2903	3445	1418
MAX	3110	31900	32600	17700	11900	22800	17700	15100	7110	5500	6980	2110
MIN	1710	1930	5320	5250	1940	5590	5500	2640	3990	1550	1730	897
CFSM	.45	1.91	3.08	1.85	1.00	2.87	2.37	1.45	1.09	.59	.70	.29
IN.	.52	2.13	3.55	2.13	1.08	3.31	2.65	1.67	1.21	.68	.81	.32

CAL YR 1979 TOTAL 3717520 MEAN 10180 MAX 48400 MIN 1710 CFSM 2.07 IN 28.07
WTR YR 1980 TOTAL 2654947 MEAN 7254 MAX 32600 MIN 897 CFSM 1.47 IN 20.05

03373700 LOST RIVER NEAR WEST BADEN SPRINGS, IN

LOCATION.--Lat 38°35'10", long 86°38'03", in SW¼SE¼ sec.21, T.2 N., R.2 W., Orange County, Hydrologic Unit 05120208, on left bank 20 ft (6 m) downstream from bridge on U.S. Highway 150, 1.7 miles (2.7 km) northwest of West Baden Springs, 3.8 miles (6.1 km) downstream from Lick Creek, and at mile 34.8 (56.0 km).

DRAINAGE AREA.--287 mi² (743 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1965, published as Lost River near West Baden.

GAGE.--Water-stage recorder. Datum of gage is 457.92 ft (139.574 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair except those for period of no gage-height record, Oct. 1 to Nov. 6 and Feb. 12 to Apr 10, which are poor.

AVERAGE DISCHARGE.--15 years, 375 ft³/s (10.62 m³/s), 17.74 in/yr (450 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,540 ft³/s (214 m³/s) July 27, 1979, gage height, 25.71 ft (7.826 m); minimum daily, 7.5 ft³/s (0.21 m³/s) Oct. 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 28.1 ft (8.56 m), from floodmarks.

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

Date	Time	Discharge (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. 26	1100	*3780	107	*23.06	7.029	Mar. 21,22	unknown	unknown		unknown	
Dec. 25	1800	2400	68.0	21.29	6.489						

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

NOTE.--No gage-height record Oct. 1 to Nov. 6 and Feb. 12 to Apr. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	590	1270	483	145	185	960	181	126	167	44	25
2	130	390	877	424	135	178	750	167	117	133	45	33
3	165	285	617	370	130	173	640	157	110	832	64	33
4	140	230	510	333	125	195	560	148	101	1370	76	31
5	122	195	415	308	120	1100	515	139	90	1500	59	29
6	108	180	351	283	118	880	495	131	89	1070	49	29
7	98	164	312	271	113	800	505	123	86	542	42	27
8	89	152	276	261	110	1200	580	115	185	360	38	25
9	85	664	248	242	105	1010	690	110	336	269	36	25
10	92	1610	226	223	100	760	625	105	167	214	34	26
11	100	1010	211	1140	100	575	548	102	112	179	33	26
12	104	701	201	1880	98	470	927	106	96	155	33	27
13	92	518	273	1570	93	415	1050	156	89	137	32	26
14	83	429	362	1090	91	385	1450	177	84	121	32	27
15	77	362	305	712	150	355	1650	116	80	109	36	26
16	74	309	261	550	500	335	1260	114	84	99	43	27
17	70	275	231	480	400	325	851	635	77	90	45	31
18	68	249	209	423	350	415	640	1800	70	82	39	25
19	65	226	190	372	310	360	534	1400	66	76	34	25
20	64	208	185	329	325	330	460	785	91	71	32	22
21	66	192	170	297	520	1750	396	478	161	67	31	20
22	78	190	362	280	490	1400	349	364	83	74	29	23
23	130	1230	1300	264	400	1050	316	306	70	80	27	32
24	110	2130	1870	244	335	1190	285	294	161	66	25	33
25	96	2240	2340	234	285	1500	255	349	183	58	24	28
26	88	3460	2270	219	250	1200	234	262	110	53	24	24
27	82	2860	1940	202	228	990	220	202	82	53	23	22
28	78	2500	1470	190	210	840	206	172	73	53	23	21
29	75	2100	985	175	195	970	205	156	455	51	26	19
30	72	1660	684	164	----	930	196	147	346	46	26	20
31	70	-----	559	159	----	1180	-----	135	----	43	25	----
TOTAL	2867	27309	21480	14172	6531	23446	18352	9632	3980	8220	1129	787
MEAN	92.5	910	693	457	225	756	612	311	133	265	36.4	26.2
MAX	165	3460	2340	1880	520	1750	1650	1800	455	1500	76	33
MIN	64	152	170	159	91	173	196	102	66	43	23	19
CFSM	.32	3.17	2.42	1.59	.78	2.63	2.13	1.08	.46	.92	.13	.09
IN.	.37	3.54	2.78	1.84	.85	3.04	2.38	1.25	.52	1.07	.15	.10

CAL YR 1979 TOTAL 247249 MEAN 677 MAX 6820 MIN 33 CFSM 2.36 IN 32.05
WTR YR 1980 TOTAL 137905 MEAN 377 MAX 3460 MIN 19 CFSM 1.31 IN 17.87

03373700 LOST RIVER NEAR WEST BADEN SPRINGS, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
JAN									
10...	1210	214	30	17	--	--	--	--	---
APR									
10...	1730	603	78	127	93	97	98	99	100
JUN									
05...	1330	94	71	18	--	--	--	--	---

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 cfs for the 1980 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 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).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1305. Published as "at Hazleton" October 1927 to September 1938. Records published for both sites October 1937 to September 1938. Gage-height records collected at present site and datum since January 1935 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Apr. 1, 1941.

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

AVERAGE DISCHARGE.--53 years, 11,711 ft³/s (331.6 m³/s), 14.30 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 (6,660 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 56,700 ft³/s (1,610 m³/s) Dec. 2, gage height, 21.96 ft (6.69 m); minimum daily, 2,670 ft³/s (75.6 m³/s) Sept. 30.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: June 1964 to September 1979.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7530	5050	55800	42400	9750	15800	35100	12400	9450	14300	5620	5510
2	7450	5410	56500	35200	9350	14400	34700	12100	9370	10300	5630	5070
3	7440	5870	55100	27500	8980	13300	34700	11600	14800	11400	5620	4960
4	7440	7310	51800	22000	8640	12300	36700	10700	18200	12800	5260	4890
5	7420	9250	46200	18300	8170	12800	39000	10100	17700	15800	4970	4830
6	7320	10300	40200	15800	7750	16000	38200	9740	18000	13600	4690	4570
7	7290	10300	32200	14300	7420	21100	33800	9370	18800	11700	4880	4300
8	7090	9210	24300	13300	7080	24100	29900	9000	19600	9770	5040	4010
9	6730	8880	19400	12500	6900	27400	27700	8540	20800	8250	4860	3780
10	6370	10700	16600	11900	6660	30300	25900	7880	21600	7180	5200	3560
11	6070	11200	15100	12800	6440	31100	24700	7280	21700	6460	6140	3540
12	5750	11900	14200	16300	6310	31900	25100	6890	20400	6000	6890	3670
13	5390	12300	14000	21000	6180	33000	25800	6850	17700	5750	6700	3720
14	5170	12200	13900	23000	6040	33800	29800	7220	15000	5720	6450	3560
15	5020	11900	13400	23700	6100	33100	33400	8150	13600	6210	6350	3320
16	4910	11400	13200	24100	8190	29100	34600	8970	12500	6410	6150	3170
17	4810	10400	12800	24600	9170	25600	34900	9400	11100	6070	7410	3260
18	4740	8940	12000	24000	9460	25400	34600	10400	10100	5520	9010	3450
19	4640	7810	11200	22400	9000	26100	34000	15300	9680	5110	9570	4420
20	4600	7120	10600	20500	9090	27000	32000	19500	9530	4780	10700	4710
21	4570	6710	10100	18300	10500	32600	28300	20900	9360	4520	12000	4340
22	4600	6550	10200	16100	13500	37800	24100	21100	9230	4470	13700	4010
23	5130	10600	15100	14500	16700	39600	20600	21300	9250	5090	14500	3900
24	4950	18100	26100	13400	19800	40500	18000	21400	11000	6020	13800	3550
25	4940	24000	34400	12800	21900	42300	16300	20400	9620	5710	12900	3400
26	5160	33700	38900	12200	23300	43000	15100	18500	9320	5460	12000	3090
27	5110	38500	42600	11900	23400	43600	14200	16400	8720	5790	10200	2880
28	5040	43300	46000	11600	21200	42200	13500	14300	8330	6130	8500	2830
29	4960	48100	47900	11100	18000	39100	13100	12400	11500	6080	7550	2790
30	4830	52300	48800	10700	------	35900	12700	11000	14100	6930	6900	2670
31	4700	------	47300	10200	------	36200	------	10100	------	6330	6240	------
TOTAL	177170	469310	895900	568400	324980	916400	820500	389190	410060	235660	245430	115760
MEAN	5715	15640	28900	18340	11210	29560	27350	12550	13670	7602	7917	3859
MAX	7530	52300	56500	42400	23400	43600	39000	21400	21700	15800	14500	5510
MIN	4570	5050	10100	10200	6040	12300	12700	6850	8330	4470	4690	2670
CFSM	.51	1.41	2.60	1.65	1.01	2.66	2.46	1.13	1.23	.68	.71	.35
IN.	.59	1.57	3.00	1.90	1.09	3.06	2.74	1.30	1.37	.79	.82	.39

CAL YR 1979 TOTAL 8117450 MEAN 22240 MAX 85000 MIN 4570 CFSM 2.00 IN 27.14
WTR YR 1980 TOTAL 5568760 MEAN 15220 MAX 56500 MIN 2670 CFSM 1.37 IN 18.62

03374100 WHITE RIVER AT HAZLETON, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°29'23", long 87°33'00", in SE¼NW¼ sec.29, T.1 N., R.10 W., Gibson County, Hydrologic Unit 05120202, on downstream side of county road bridge (Old U.S. 41) at Hazleton, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--11,305 mi² (29,280 km²).

PERIOD OF RECORD.--
CHEMICAL ANALYSES: February 1973 to current year.
WATER TEMPERATURE: October 1973 to current year.
SEDIMENT DISCHARGE: October 1973 to current year.
WATER DISCHARGE: October 1927 to September 1938.

REMARKS.--Water discharge obtained from station White River at Petersburg (See sta 03374000).

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 33.5°C Aug. 14, 1976; freezing point on several days during winter period 1975-76.
SPECIFIC CONDUCTANCE: Maximum, 882 micromhos July 21, 1977; minimum, 192 micromhos Nov. 6, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	TEMPERATURE, WATER (DEG C)	TEMPERATURE, AIR (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	TURBIDITY (NTU)	SPECIFIC CONDUCTANCE (MICROMHOS)	OXYGEN, DISSOLVED (MG/L)	PH FIELD (UNITS)	ALKALINITY (MG/L AS CACO3)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT												
04...	0800	80010	19.5	----	7410	20	482	10.3	8.0	160	220	65
NOV												
07...	1300	80010	10.5	----	10200	2.0	520	10.3	8.1	160	210	52
DEC												
03...	1330	80010	3.5	----	54900	40	340	12.8	8.0	110	150	44
JAN												
16...	1600	80010	4.5	----	5440	8.0	370	5.8	8.0	120	160	43
FEB												
29...	1100	80010	5.5	-5.5	18100	5.0	413	----	7.8	120	180	58
MAR												
27...	1400	80010	9.0	9.0	49800	18	350	14.2	8.1	110	170	61
APR												
25...	1100	80010	16.5	----	16500	20	456	8.8	8.3	170	220	51
MAY												
28...	1400	80010	23.0	32.0	14800	65	445	11.8	7.5	140	200	63
JUN												
20...	1100	80010	23.0	24.0	9500	1.0	509	7.5	7.8	180	230	46
JUL												
29...	1530	80010	28.5	29.0	6000	-----	565	8.2	8.1	---	---	--
AUG												
27...	1800	80010	26.5	35.0	7580	4.4	440	6.9	7.9	150	190	42
SEP												
29...	1400	80010	21.5	29.0	3200	.90	519	6.9	7.0	160	200	36

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	SODIUM PERCENT	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, DISSOLVED (TONS PER AC-FT)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT												
04...	62	17	11	.3	9	14	3.4	287	261	5740	.39	20
NOV												
07...	57	17	15	.4	18	20	5.2	293	271	8070	.40	24
DEC												
03...	42	12	6.0	.2	11	9.5	3.5	214	194	31700	.29	15
JAN												
16...	44	13	13	.4	20	15	2.3	221	215	3250	.30	15
FEB												
29...	48	14	11	.4	12	13	2.4	198	235	9680	.27	20
MAR												
27...	47	13	7.6	.3	9	10	2.4	238	204	32000	.32	14
APR												
25...	59	18	11	.3	10	----	2.0	293	271	13100	.40	17
MAY												
28...	55	16	13	.4	12	----	2.4	286	251	11400	.39	18
JUN												
20...	61	18	12	.3	10	----	2.4	339	286	8700	.46	19
JUL												
29...	--	--	----	--	--	----	---	---	---	-----	---	--
AUG												
27...	52	15	9.0	.3	9	----	3.6	270	230	5530	.37	14
SEP												
29...	47	19	17	.5	16	----	2.5	294	267	2540	.40	28

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 04...	45	.2	5.9	2.3	----	.68	---	----	.080	----	1.5	----
NOV 07...	42	.2	6.2	2.9	----	1.0	---	----	.160	----	1.7	1.8
DEC 03...	31	.1	8.6	3.0	2.7	.70	.47	.020	.010	.22	2.3	2.2
JAN 16...	40	.1	7.4	3.4	2.8	1.2	.79	.090	.140	.42	2.1	1.9
FEB 29...	48	.2	6.5	3.1	3.7	1.1	.89	.000	.040	.21	2.0	2.8
MAR 27...	35	.2	6.4	3.5	3.4	.70	.74	.000	.090	.05	2.7	2.7
APR 25...	45	.2	5.6	----	2.8	----	.31	.070	----	----	2.4	2.4
MAY 28...	39	.2	7.7	4.2	3.9	.72	.45	.030	.010	.25	3.5	3.4
JUN 20...	45	.2	7.5	4.0	3.2	.91	.22	.030	.020	.68	3.1	2.9
JUL 29...	--	--	---	----	----	----	---	----	----	----	----	----
AUG 27...	29	.3	8.8	2.3	2.0	.65	.20	.020	.000	.43	1.6	1.8
SEP 29...	56	.3	.2	1.6	.48	1.3	.18	.030	.040	1.1	.25	.27

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 04...	.10	---	10	.160	----	.49	---	---	---	1550	K181	243
NOV 07...	.19	---	13	.180	.070	.55	7.5	---	---	2960	K550	790
DEC 03...	.01	.03	13	.250	.160	.77	---	---	---	-----	----	-----
JAN 16...	.17	.12	15	.300	.090	.92	8.7	---	---	39000	3200	61500
FEB 29...	.05	.00	14	.190	.070	.58	---	4.2	.9	1500	368	379
MAR 27...	.11	.00	15	.230	.080	.71	5.7	---	---	3400	171	K135
APR 25...	---	.09	-----	.170	.130	.52	5.0	---	---	1200	K128	K26
MAY 28...	.01	.04	19	.210	.070	.64	---	5.1	.8	7200	460	150
JUN 20...	.02	.04	18	.290	.120	.89	4.3	---	---	3050	384	136
JUL 29...	---	---	-----	----	----	----	---	---	---	5660	700	K38
AUG 27...	.00	.03	10	.360	.140	1.1	---	4.6	1.3	-----	250	K47
SEP 29...	.05	.04	6.9	.210	.030	.64	5.1	---	---	-----	K114	K42

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)
OCT 04...	------	79	1580	--	--	--	--	--	---	4	--	--
NOV 07...	9200	65	1790	--	--	--	--	--	---	1	0	1
DEC 03...	------	176	26100	--	--	--	--	--	---	--	--	--
JAN 16...	------	180	2640	91	93	96	99	99	100	--	--	--
FEB 29...	------	113	5520	96	--	--	--	--	---	4	1	5
MAR 27...	------	197	26500	99	--	--	--	--	---	--	--	--
APR 25...	------	---	-----	--	--	--	--	--	---	--	--	--
MAY 28...	6300	---	-----	--	--	--	--	--	--	1	1	2
JUN 20...	4500	---	-----	--	--	--	--	--	--	--	--	--
JUL 29...	47000	135	2190	97	--	--	--	--	--	--	--	--
AUG 27...	29000	226	4630	97	--	--	--	--	--	2	0	2
SEP 29...	150000	169	1460	98	--	--	--	--	--	--	--	--

DATE	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)
OCT 04...	60	---	---	4	--	--	10	--	--	1	--
NOV 07...	60	200	300	0	0	0	10	--	--	1	0
DEC 03...	--	---	---	--	--	--	---	--	--	--	--
JAN 16...	--	---	---	--	--	--	---	--	--	--	--
FEB 29...	50	0	50	11	0	1	10	10	20	1	1
MAR 27...	--	--	---	--	--	--	---	--	--	--	--
APR 25...	--	--	---	--	--	--	---	--	--	--	--
MAY 28...	60	--	50	3	0	0	10	--	20	0	2
JUN 20...	--	--	---	--	--	--	---	--	--	--	--
JUL 29...	--	--	---	--	--	--	---	--	--	--	--
AUG 27...	0	--	50	0	1	1	10	--	20	0	4
SEP 29...	--	--	---	--	--	--	---	--	--	--	--

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	A-, -ED V. L N)
OCT 04...	--	3	--	--	----	----	30	1	--	--	---	
NOV 07...	1	8	0	7	2100	2100	40	1	14	15	150	
DEC 03...	--	--	--	--	----	----	--	--	--	--	---	
JAN 16...	--	--	--	--	----	----	--	--	--	--	---	
FEB 29...	2	3	12	15	2500	2600	90	0	14	14	110	
MAR 27...	--	--	--	--	----	----	--	--	--	--	---	
APR 25...	--	--	--	--	----	----	--	--	--	--	---	
MAY 28...	2	3	8	11	4000	4100	80	0	7	7	250	
JUN 20...	--	--	--	--	----	----	--	--	--	--	---	
JUL 29...	--	--	--	--	----	----	--	--	--	--	---	
AUG 27...	4	10	6	16	4800	4800	20	0	63	63	250	
SEP 29...	--	--	--	--	----	----	--	--	--	--	---	

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT 04...	---	3	3	--	--	--	--	--	0	--	---
NOV 07...	150	4	2	7	9	0	0	0	1	30	30
DEC 03...	---	--	--	--	--	--	--	--	--	--	---
JAN 16...	---	--	--	--	--	--	--	0	--	--	---
FEB 29...	120	10	1	4	5	0	0	0	50	0	20
MAR 27...	---	--	--	--	--	--	--	0	--	--	---
APR 25...	---	--	--	--	--	--	--	--	--	--	---
MAY 28...	260	6	1	9	10	0	0	0	0	40	40
JUN 20...	---	--	--	--	--	--	--	0	--	--	---
JUL 29...	---	--	--	--	--	--	--	--	--	--	---
AUG 27...	260	10	0	45	45	0	0	0	30	70	100
SEP 29...	---	--	--	--	--	--	--	0	--	--	---

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALDRIN, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)
NOV 07...	1300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	HEPTACHLOR EPOXIDE TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	PCB TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	METHYL TRITHION, TOTAL (UG/L)
NOV 07...	ND	ND	ND	ND	ND	ND	ND	.15	ND	ND	ND	ND

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	583	554	565	619	606	611	---	---	---	394	379	386
2	579	542	558	617	608	612	---	---	---	399	248	304
3	544	524	533	618	594	604	---	---	---	447	247	320
4	540	494	498	627	607	617	---	---	---	465	448	459
5	508	493	504	610	334	360	---	---	---	482	465	473
6	491	478	483	527	323	363	---	---	---	500	483	491
7	481	461	472	497	442	461	---	---	---	517	500	508
8	477	461	470	447	302	331	---	---	---	526	517	522
9	474	449	463	506	298	370	---	---	---	532	526	530
10	447	436	441	482	258	359	---	---	---	538	531	535
11	441	423	432	419	245	350	---	---	---	539	530	532
12	444	436	439	425	245	289	---	---	---	530	464	499
13	435	414	424	247	237	241	---	---	---	489	410	462
14	424	404	415	407	234	315	---	---	---	407	398	402
15	418	411	415	405	385	393	---	---	---	398	375	381
16	429	412	420	413	406	410	---	---	---	383	366	373
17	440	419	429	424	413	417	513	509	511	397	380	392
18	458	434	446	438	425	431	513	504	509	396	388	393
19	481	452	466	468	440	453	509	504	507	396	252	308
20	505	476	489	489	470	479	515	505	510	260	258	259
21	533	503	516	497	284	391	520	515	519	259	257	258
22	657	524	604	509	269	324	528	519	524	259	257	258
23	669	649	658	383	253	300	533	462	512	256	248	251
24	662	641	651	317	238	259	479	368	432	248	244	246
25	671	645	658	246	221	233	364	315	330	249	245	246
26	669	652	660	240	213	223	316	300	310	249	245	247
27	674	657	665	256	198	215	299	289	293	246	241	243
28	657	403	638	277	174	206	328	297	311	241	237	239
29	639	632	636	301	35	126	352	329	341	237	231	235
30	634	601	617	153	35	123	366	353	360	233	223	229
31	610	599	604	---	---	---	379	367	372	223	218	221
MONTH	674	403	525	627	35	362	533	289	423	539	218	361

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	523	213	242	593	382	436						
2	215	209	212	628	377	541						
3	218	211	214	639	627	632						
4	218	211	214	646	637	640						
5	216	210	213	660	647	653						
6	562	212	301	651	598	622						
7	567	219	265	620	538	577						
8	592	218	235	541	530	537						
9	607	593	602	541	532	536						
10	612	604	608	537	501	512						
11	617	237	488	537	506	521						
12	239	229	234	549	539	545						
13	236	227	232	539	530	532						
14	242	232	236	532	403	424						
15	248	240	244	419	406	412						
16	247	234	239	426	415	419						
17	730	228	575	433	426	431						
18	721	680	703	445	432	439						
19	697	672	681	449	441	445						
20	717	697	709	454	446	450						
21	715	679	696	457	451	454						
22	679	631	666	541	451	524						
23	628	584	614	537	514	525						
24	582	570	574	515	511	512						
25	571	549	562	519	511	516						
26	577	561	569	517	510	513						
27	578	566	572	517	458	494						
28	566	557	561	---	---	---						
29	589	567	577	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	730	209	443	660	377	513						

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.5	17.5	18.0	15.5	15.0	15.5	---	---	---	4.5	4.5	4.5
2	18.5	18.0	18.5	15.0	14.0	14.5	---	---	---	15.0	4.5	11.0
3	19.5	18.0	19.0	13.5	13.0	13.0	---	---	---	16.0	4.5	11.0
4	20.5	18.5	20.0	13.0	12.0	12.5	---	---	---	4.5	4.5	4.5
5	19.5	19.0	19.0	22.5	11.0	20.5	---	---	---	4.5	4.0	4.0
6	20.0	19.0	19.5	21.5	9.5	19.0	---	---	---	4.0	4.0	4.0
7	21.0	20.5	20.5	9.5	9.0	9.5	---	---	---	4.0	4.0	4.0
8	21.0	20.5	21.0	18.0	8.5	16.0	---	---	---	4.0	3.5	3.5
9	21.0	20.5	21.0	18.0	8.0	14.0	---	---	---	3.5	3.0	3.0
10	21.0	20.5	21.0	17.5	5.0	11.5	---	---	---	3.5	3.0	3.0
11	21.5	21.0	21.5	15.0	4.0	5.5	---	---	---	5.0	3.5	4.5
12	22.0	21.5	21.5	15.5	4.5	13.0	---	---	---	4.5	4.5	4.5
13	22.5	21.5	22.0	15.0	4.0	14.0	---	---	---	4.5	4.0	4.0
14	22.5	22.0	22.5	14.5	3.0	8.0	---	---	---	4.5	4.5	4.5
15	23.5	22.5	23.0	3.0	2.5	3.0	---	---	---	4.5	4.5	4.5
16	23.5	23.5	23.5	3.0	2.5	3.0	---	---	---	4.5	4.0	4.0
17	24.0	23.5	23.5	3.5	3.0	3.0	4.5	4.0	4.0	4.5	4.0	4.5
18	24.5	24.0	24.0	5.0	3.5	4.0	4.0	3.5	3.5	4.5	4.5	4.5
19	24.5	24.0	24.5	6.0	5.0	5.5	4.0	3.5	3.5	14.0	4.5	11.0
20	25.0	24.5	24.5	6.5	6.0	6.0	4.0	3.5	4.0	15.0	14.0	14.5
21	25.0	24.5	24.5	19.5	6.5	13.5	4.5	4.0	4.0	16.5	15.5	16.0
22	25.0	19.0	21.5	19.5	6.0	11.5	5.0	4.5	4.5	18.0	16.5	17.0
23	19.0	16.5	17.5	13.0	4.5	7.5	6.0	5.0	5.5	19.0	18.0	18.5
24	16.5	15.5	16.0	7.5	2.5	4.5	6.5	6.0	6.5	19.5	19.0	19.0
25	15.5	14.5	15.0	4.5	2.0	3.5	7.0	6.5	7.0	19.5	19.5	19.5
26	15.0	14.0	14.5	3.5	1.5	2.5	6.5	6.5	6.5	19.5	19.5	19.5
27	14.5	13.5	14.0	4.5	---	---	6.5	6.0	6.5	20.0	19.5	19.5
28	15.0	14.0	14.5	6.5	---	---	6.0	5.5	5.5	20.0	20.0	20.0
29	14.0	13.0	13.5	8.0	---	---	5.5	5.0	5.0	20.0	20.0	20.0
30	14.5	13.5	14.0	---	---	---	5.0	4.5	5.0	20.0	19.5	20.0
31	15.5	14.5	15.0	---	---	---	5.0	4.5	4.5	20.0	20.0	20.0
MONTH	25.0	13.0	19.5	22.5	1.5	10.0	7.0	3.5	5.0	20.0	3.0	10.5

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	20.0	1.5	19.0	23.5	13.5	21.0						
2	20.0	20.0	20.0	23.5	13.0	17.0						
3	20.0	20.0	20.0	13.0	12.5	13.0						
4	20.5	20.0	20.5	13.5	13.0	13.0						
5	20.5	20.0	20.5	13.5	13.5	13.5						
6	21.0	2.0	16.0	14.0	13.5	13.5						
7	22.0	2.0	20.0	14.0	13.5	14.0						
8	22.5	2.0	21.5	14.5	14.0	14.5						
9	2.5	2.0	2.0	14.5	14.5	14.5						
10	3.0	2.0	2.5	15.0	14.5	14.5						
11	24.0	3.0	10.5	15.5	14.5	15.0						
12	24.5	24.0	24.5	15.0	14.5	15.0						
13	25.0	24.5	24.5	15.0	14.5	14.5						
14	26.0	25.0	25.5	20.5	14.5	19.5						
15	26.0	25.5	26.0	21.0	20.5	20.5						
16	26.0	24.0	25.0	22.5	21.5	22.0						
17	27.5	2.5	17.5	23.0	22.5	22.5						
18	13.0	13.0	13.0	23.0	22.5	22.5						
19	13.5	13.0	13.5	22.5	21.5	22.0						
20	14.0	13.5	14.0	21.5	21.5	21.5						
21	14.5	14.0	14.5	22.0	21.0	21.5						
22	15.0	14.5	14.5	21.0	16.5	17.5						
23	15.0	15.0	15.0	17.0	17.0	17.0						
24	15.0	15.0	15.0	17.5	17.0	17.0						
25	21.5	14.0	15.0	17.0	17.0	17.0						
26	14.0	14.0	14.0	17.5	17.0	17.0						
27	14.0	13.5	13.5	19.5	17.0	18.0						
28	14.0	13.5	14.0	----	----	----						
29	14.0	13.5	14.0	----	----	----						
30	----	----	----	----	----	----						
31	----	----	----	----	----	----						
MONTH	27.5	1.5	16.5	23.5	12.5	17.5						

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 fair.

AVERAGE DISCHARGE.--12 years, 26.4 ft³/s (0.748 m³/s), 28.01 in/yr (711 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) (corrected); 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)
Nov. 23	2215	*1320	37.4	*7.13	2.173	May 17	2000	920	26.0	6.14	1.871
Jan. 10	2130	1180	33.4	6.82	2.079	July 2	2100	832	23.6	5.94	1.810

Minimum daily discharge, .14 ft³/s (0.001 m³/s) Sept. 30.

NOTE.--No gage-height record Nov. 26 to Jan 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	80	22	15	6.5	12	49	14	4.3	1.5	.74	.15
2	4.3	34	19	13	6.0	11	38	12	3.8	110	.76	.27
3	3.4	19	16	12	5.6	10	33	11	3.5	154	1.1	.24
4	3.4	13	15	11	5.2	11	33	10	3.2	167	1.1	.18
5	3.2	9.5	14	10	4.9	90	27	9.1	3.0	45	.74	.18
6	2.8	6.9	13	9.7	4.7	44	24	8.3	2.9	19	.67	.24
7	2.6	5.1	11	9.2	4.5	32	26	7.4	2.7	12	.58	.22
8	2.3	5.2	10	8.6	4.4	126	27	6.6	2.7	8.3	.52	.19
9	2.5	235	8.8	8.0	4.2	53	26	6.2	2.5	6.3	.47	.22
10	2.7	119	8.3	207	4.1	36	35	6.2	2.2	4.2	.42	.22
11	2.7	38	7.3	288	3.9	27	28	5.7	2.0	3.4	.35	.22
12	2.5	25	6.4	140	3.7	22	89	7.2	1.8	2.9	.37	.22
13	2.3	19	15	47	3.8	23	52	15	1.8	2.5	.32	.19
14	2.0	15	35	37	4.1	22	197	8.0	1.8	2.2	.28	.19
15	2.0	13	27	29	8.5	20	69	6.2	1.7	2.0	2.3	.17
16	2.1	11	21	26	77	19	44	15	2.6	1.8	1.2	.17
17	1.9	8.0	16	23	32	33	34	362	1.9	1.5	.70	.54
18	1.8	6.8	12	21	21	34	29	175	1.7	1.4	.61	.43
19	2.0	6.3	10	18	18	27	25	49	2.0	1.3	.98	.28
20	1.7	5.7	9.8	16	24	24	22	31	2.9	1.3	.69	.24
21	1.7	5.3	9.4	14	32	290	20	22	2.1	1.2	.46	.22
22	2.2	7.8	25	13	31	76	17	17	1.8	1.7	.34	1.2
23	4.2	601	80	12	25	46	15	16	2.1	1.3	.27	1.9
24	3.3	350	250	12	22	161	14	15	2.2	1.1	.22	.67
25	2.8	388	93	11	20	102	12	13	1.8	.98	.22	.48
26	2.5	115	54	10	16	53	12	9.4	1.6	.90	.19	.33
27	2.4	66	40	9.5	15	39	13	7.6	1.5	1.1	.17	.28
28	2.5	48	30	8.8	14	47	13	6.7	1.5	1.1	.15	.24
29	2.3	36	24	8.2	13	68	17	5.7	3.1	.98	.22	.19
30	2.2	28	20	7.6	-----	81	16	5.3	2.0	.88	.37	.14
31	2.1	------	17	6.9	-----	76	----	4.7	----	.74	.21	-----
TOTAL	79.0	2319.6	939.0	1061.5	434.1	1715	1056	887.3	70.7	559.58	17.72	10.41
MEAN	2.55	77.3	30.3	34.2	15.0	55.3	35.2	28.6	2.36	18.1	.57	.35
MAX	4.3	601	250	288	77	290	197	362	4.3	167	2.3	1.9
MIN	1.7	5.1	6.4	6.9	3.7	10	12	4.7	1.5	.74	.15	.14
CFSM	.20	6.04	2.37	2.67	1.17	4.32	2.75	2.23	.18	1.41	.05	.03
IN.	.23	6.74	2.73	3.08	1.26	4.98	3.07	2.58	.21	1.63	.05	.03

CAL YR 1979 TOTAL 15896.90 MEAN 43.6 MAX 1770 MIN 1.1 CFSM 3.41 IN 46.20
WTR YR 1980 TOTAL 9149.91 MEAN 25.0 MAX 601 MIN .14 CFSM 1.95 IN 26.59

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 05120109, in discharge tower of reservoir on Patoka River, 2.9 miles south of Cuzco and 5.0 miles upstream from Dillon Creek.

DRAINAGE AREA.--168 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, 256,000 acre-ft (316 hm^3) Nov. 30, elevation, 544.15 ft (165.857 m); minimum, 175,800 acre-ft (217 hm^3) Feb. 29, Mar. 1, elevation, 535.69 ft (163.278 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	543.33	247,600	
Oct. 31	540.63	221,200	-26,400
Nov. 30	544.14	255,900	+34,700
Dec. 31	542.99	244,200	-11,700
CAL YR 1979			+168,430
Jan. 31	540.14	216,600	-27,600
Feb. 29	535.69	175,800	-40,800
Mar. 31	538.24	198,800	+23,000
Apr. 30	539.12	206,900	+8,100
May 31	539.66	212,000	+5,100
June 30	538.75	203,400	-8,600
July 31	539.23	208,000	+4,600
Aug. 31	538.50	201,200	-6,800
Sept. 30	537.49	192,000	-9,200
WTR YR 1980			-55,600

03374500 PATOKA RIVER NEAR CUZCO, IN
(formerly published as near Ellsworth)

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, 2.2 miles (3.6 km) southwest of Cuzco, 2.8 miles (4.5 km) upstream from Dillon Creek, 4 miles (6 km) east of Dubois, and at mile 116.1 (186.8 km).

DRAINAGE AREA.--171 mi^2 (443 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 477.00 ft (145.390 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1961, nonrecording gage on downstream side of bridge, 200 ft (61 m) downstream at same datum. Prior to October, 1979, published as "near Ellsworth".

REMARKS.--Records good. Flow regulated by Patoka Lake (See sta 03374498).

AVERAGE DISCHARGE.--19 years, 226 ft^3/s (6.400 m^3/s), 17.95 in/yr (456 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, 1,280 ft^3/s (36.2 m^3/s) Feb. 1; maximum gage height, 10.58 ft (3.225 m); minimum daily, 4.2 ft^3/s (0.119 m^3/s) May 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	528	91	612	704	1260	129	213	153	202	61	83	102
2	540	78	742	738	1240	129	303	167	202	186	63	104
3	531	75	773	770	1210	129	303	189	206	185	62	106
4	531	72	813	744	1200	114	304	189	134	215	64	130
5	528	42	841	740	1190	88	301	192	64	89	64	157
6	526	21	869	737	1190	75	299	191	103	70	92	158
7	535	109	865	738	1190	113	300	189	185	65	115	158
8	541	171	861	558	1180	180	303	188	217	65	115	160
9	507	241	858	103	1180	134	309	187	217	64	115	174
10	457	153	856	188	1180	204	309	189	242	62	115	211
11	515	71	842	406	1170	277	306	143	265	62	89	209
12	516	97	795	101	1170	275	349	7.2	265	60	66	209
13	516	263	721	276	1160	279	314	4.2	264	58	93	144
14	516	497	576	626	1050	278	500	16	264	58	117	88
15	517	525	613	849	730	275	328	107	265	56	88	86
16	514	591	686	710	999	274	311	165	236	55	67	87
17	514	587	716	674	947	284	306	312	234	65	68	88
18	517	584	713	872	926	282	229	226	269	74	67	112
19	524	582	711	891	921	277	123	97	270	72	67	186
20	532	580	708	889	853	279	123	126	271	70	68	186
21	537	578	707	886	738	468	123	177	270	55	68	186
22	456	585	698	902	730	307	122	217	269	24	70	165
23	401	602	510	917	716	292	122	172	197	22	70	111
24	526	307	599	977	709	404	121	139	142	22	72	140
25	521	295	244	1090	676	406	120	138	42	38	93	199
26	518	488	142	1090	482	273	120	137	91	55	123	125
27	516	148	180	1090	274	180	120	146	90	54	103	72
28	455	255	406	1120	131	187	120	172	96	41	101	72
29	285	117	570	1180	129	190	121	187	126	76	101	70
30	282	284	568	1180	-----	219	133	202	76	99	101	70
31	224	----	613	1200	-----	207	----	202	----	117	101	----
TOTAL	15126	9089	20408	23946	26531	7208	7055	4926.4	5774	2295	2681	4065
MEAN	488	303	658	772	915	233	235	159	192	74.0	86.5	136
MAX	541	602	869	1200	1260	468	500	312	271	215	123	211
MIN	224	21	142	101	129	75	120	4.2	42	22	62	70
CFSM	2.85	1.77	3.85	4.52	5.35	1.36	1.37	.93	1.12	.43	.51	.80
IN.	3.29	1.98	4.44	5.21	5.77	1.57	1.53	1.07	1.26	.50	.58	.88

CAL YR 1979 TOTAL 107971.0 MEAN 296 MAX 869 MIN 21 CFSM 1.73 IN 23.49
WTR YR 1980 TOTAL 129104.4 MEAN 353 MAX 1260 MIN 4.2 CFSM 2.06 IN 28.09

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 mi^2 (679 km^2).

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 446.00 ft (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 ft^3/s (70.8 m^3/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.--32 years (1948 to current year), 367 ft^3/s (10.39 m^3/s), 19.02 in/yr (483 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft^3/s (399 m^3/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 ft^3/s (453 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft^3/s (50.13 m^3/s) Nov. 25, gage height, 14.59 ft (4.447 m); minimum daily, 24 ft^3/s (0.680 m^3/s) July 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	539	311	626	704	1220	184	615	173	215	168	133	90
2	585	259	714	741	1240	171	460	181	214	146	105	99
3	567	155	773	779	1260	199	463	213	209	855	74	96
4	551	118	801	795	1280	184	476	220	212	1150	68	94
5	544	104	838	782	1280	284	442	220	147	1230	61	138
6	537	84	876	769	1280	357	408	220	57	771	60	168
7	528	56	907	768	1280	257	396	220	75	225	83	170
8	533	100	913	754	1270	777	405	220	166	128	120	172
9	540	560	907	418	1270	878	424	220	208	95	121	175
10	501	1040	904	162	1260	460	469	210	212	76	121	191
11	470	951	903	801	1240	380	448	190	233	65	122	231
12	516	410	899	957	1230	394	661	130	249	59	101	238
13	514	239	928	504	1240	396	707	100	250	54	60	238
14	509	362	918	562	1240	418	1020	60	251	50	79	176
15	506	524	753	787	1260	393	1180	39	251	48	141	85
16	507	560	706	877	1270	374	1020	108	273	46	113	78
17	503	596	731	795	1270	405	615	444	237	45	62	91
18	503	594	745	810	1260	525	460	1030	227	49	56	90
19	509	593	746	884	1190	458	336	950	254	63	56	110
20	506	591	738	923	1150	413	216	365	265	64	55	212
21	495	590	731	933	1140	920	191	217	256	63	55	216
22	516	611	812	936	1090	1120	178	233	253	68	54	221
23	498	1040	1050	943	1000	897	168	277	330	40	54	219
24	425	1320	1380	956	905	806	158	254	798	27	54	135
25	491	1570	1540	1000	829	1110	147	189	383	24	55	147
26	493	1670	1510	1050	741	1140	142	161	96	24	73	219
27	487	1660	919	1090	541	744	139	146	86	65	114	161
28	486	1640	521	1110	355	439	144	148	105	64	98	73
29	414	1430	624	1140	224	516	156	176	816	49	87	64
30	278	963	670	1170	-----	560	150	198	539	66	89	64
31	260	-----	651	1200	-----	843	-----	216	----	105	88	----
TOTAL	15311	20701	26734	26100	31815	17002	12794	7728	7867	5982	2612	4461
MEAN	494	690	862	842	1097	548	426	249	262	193	84.3	149
MAX	585	1670	1540	1200	1280	1140	1180	1030	816	1230	141	238
MIN	260	56	521	162	224	171	139	39	57	24	54	64
CFSM	1.89	2.63	3.29	3.21	4.19	2.09	1.63	.95	1.00	.74	.32	.57
IN.	2.17	2.94	3.80	3.71	4.52	2.41	1.82	1.10	1.12	.85	.37	.63

CAL YR 1979 TOTAL 206937 MEAN 567 MAX 3220 MIN 42 CFSM 2.16 IN 29.38
WTR YR 1980 TOTAL 179107 MEAN 489 MAX 1670 MIN 24 CFSM 1.87 IN 25.43

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.--10 years, 35.4 ft³/s (1.00 m³/s), 22.05 in/yr (560 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)
Nov. 9	1500	1580	44.7	11.14	3.395	Apr. 14	0600	1140	32.3	10.81	3.295
Nov. 23	0800	1240	35.1	10.90	3.322	May 17	1900	1140	32.3	10.81	3.295
Nov. 25	1900	1730	49.0	11.23	3.423	June 24	0300	*2450	69.4	*11.59	3.533
Nov. 28	0200	1440	40.8	11.04	3.365	June 29	0600	1310	37.1	10.95	3.338
Mar. 8	0800	989	28.0	10.59	3.228						

Minimum daily discharge, 0.11 ft³/s (0.003 m³/s) Sept. 2.

NOTE.--No gage-height record for Dec. 23 to Feb. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	85	33	9.0	5.8	12	53	5.7	3.1	27	1.2	.12
2	23	25	20	8.6	5.6	11	37	5.0	2.7	145	1.3	.11
3	7.9	14	16	8.2	5.4	11	40	4.3	2.2	239	1.8	.25
4	8.2	9.9	15	8.2	5.8	15	38	3.8	1.8	354	1.6	218
5	6.5	6.0	14	8.2	6.2	83	24	3.4	1.8	113	.99	49
6	5.5	7.6	12	9.0	6.4	32	20	3.1	1.7	36	1.3	3.4
7	4.7	6.8	9.9	9.8	6.0	58	23	2.8	1.6	18	1.5	1.7
8	4.4	6.6	8.4	8.2	5.6	367	40	2.4	1.4	11	1.4	1.2
9	15	646	8.1	7.4	5.2	105	40	2.2	1.1	7.6	1.4	1.1
10	9.5	212	8.1	13	4.8	68	44	2.0	.65	5.8	1.2	.95
11	7.6	60	7.9	370	4.7	45	28	1.9	.56	4.4	.95	.68
12	6.4	32	17	80	4.3	38	163	43	.70	3.6	.85	.51
13	5.2	21	142	13	4.3	56	56	11	.82	3.1	.69	.43
14	4.5	15	55	14	6.0	53	467	5.1	.85	2.6	1.7	.45
15	4.5	12	35	13	78	43	89	4.0	.81	2.1	34	.39
16	4.4	9.7	28	44	171	38	45	18	5.0	1.7	2.1	.54
17	4.3	7.4	16	30	63	54	30	399	1.2	1.3	1.5	10
18	4.0	8.2	15	22	32	37	22	163	.88	1.0	1.3	2.0
19	4.1	7.8	14	15	20	26	18	46	.75	.94	2.1	1.1
20	4.4	7.2	13	12	33	37	14	24	1.1	.85	1.9	.92
21	4.8	6.9	14	11	61	450	12	15	.76	.72	1.7	.78
22	40	30	179	10	47	94	9.5	9.7	.72	28	1.4	14
23	28	824	150	9.6	39	53	8.5	22	75	7.0	1.2	31
24	9.0	364	420	9.0	28	278	7.5	15	754	1.8	1.1	3.4
25	8.0	720	170	8.4	25	133	6.0	8.9	60	1.6	.79	2.1
26	6.8	430	78	8.0	24	60	6.2	6.9	36	1.1	.71	1.4
27	6.2	182	25	7.2	19	39	6.1	5.4	24	1.7	.67	.99
28	6.5	511	11	6.6	22	69	5.9	4.6	66	1.6	.65	.88
29	5.9	94	9.8	6.2	15	74	8.4	4.1	543	1.1	.83	.72
30	5.5	49	9.6	6.0	-----	184	6.8	4.0	56	1.1	.52	.77
31	5.6	------	9.2	5.8	-----	104	------	3.4	-------	1.0	.17	------
TOTAL	270.3	4410.1	1563.0	790.4	753.1	2727	1367.9	848.7	1646.20	1024.71	70.52	348.89
MEAN	8.72	147	50.4	25.5	26.0	88.0	45.6	27.4	54.9	33.1	2.27	11.6
MAX	40	824	420	370	171	450	467	399	754	354	34	218
MIN	4.0	6.0	7.9	5.8	4.3	11	5.9	1.9	.56	.72	.17	.11
CFSM	.40	6.74	2.31	1.17	1.19	4.04	2.09	1.26	2.52	1.52	.10	.53
IN.	.46	7.53	2.67	1.35	1.29	4.65	2.33	1.45	2.81	1.75	.12	.60

CAL YR 1979 TOTAL 29723.54 MEAN 81.4 MAX 5110 MIN .94 CFSM 3.73 IN 50.72
WTR YR 1980 TOTAL 15820.82 MEAN 43.2 MAX 824 MIN .11 CFSM 1.98 IN 27.00

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 current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 448.00 ft (136.550 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--16 years, 23.3 ft^3/s (0.660 m^3/s), 14.86 in/yr (377 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)
Nov. 25	2200	*976	27.6	*11.95	3.642
July 4	1200	805	22.8	11.56	3.523

Minimum daily discharge, 0.75 ft^3/s (0.021 m^3/s) Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	110	30	5.9	4.4	8.2	38	14	10	24	1.9	2.5
2	17	54	19	5.7	4.3	7.0	27	20	9.7	111	2.3	3.2
3	1.1	20	18	5.3	4.2	6.6	29	16	8.7	130	3.1	5.2
4	1.1	11	17	5.4	4.3	8.6	33	14	8.3	367	2.6	10
5	1.1	8.0	18	5.5	4.5	56	19	13	7.9	88	2.2	6.2
6	.86	5.8	16	5.6	4.6	19	19	12	7.1	38	2.0	3.5
7	.75	3.2	12	6.4	4.4	27	19	11	6.6	19	2.0	2.9
8	.77	4.6	8.8	5.5	4.3	115	22	12	6.3	16	2.0	2.7
9	.96	262	7.6	5.3	4.1	36	23	9.8	5.1	14	1.8	2.5
10	1.6	150	12	5.0	4.0	22	27	8.9	4.3	13	1.7	3.0
11	1.3	66	10	170	3.8	15	21	9.6	3.6	12	2.0	2.4
12	1.2	39	12	42	3.7	12	99	48	3.2	10	2.2	2.1
13	1.1	24	64	22	3.8	15	37	23	2.9	9.1	1.9	2.4
14	1.0	8.6	30	22	5.0	15	313	13	2.9	7.3	155	2.5
15	1.1	5.4	22	19	44	12	68	12	3.0	5.6	188	2.4
16	1.2	4.3	28	38	107	9.7	35	40	3.2	4.6	31	5.0
17	1.2	3.5	14	33	76	52	24	165	3.2	3.5	12	14
18	1.2	3.5	8.6	18	26	38	21	60	2.9	2.7	8.7	8.0
19	1.1	3.8	8.4	14	16	18	19	25	2.7	2.0	6.0	3.0
20	1.1	3.5	7.6	14	38	22	18	21	3.0	1.8	4.6	2.2
21	1.1	3.2	7.8	14	55	297	18	17	2.7	1.8	4.3	3.0
22	28	45	96	13	49	52	17	14	2.5	8.2	3.8	4.5
23	39	381	171	12	22	25	16	20	67	6.4	3.2	7.3
24	12	179	314	11	18	143	16	30	207	3.7	2.7	1.9
25	8.8	383	134	11	14	71	14	21	35	2.7	3.1	1.6
26	8.1	356	45	9.2	11	34	14	15	18	2.2	3.3	1.3
27	7.5	178	13	9.0	12	23	13	12	14	2.2	2.8	.98
28	8.3	285	6.9	8.8	16	28	15	10	90	3.3	2.4	.81
29	11	83	6.4	7.6	11	41	16	12	242	2.8	2.1	1.1
30	11	42	6.4	6.5	-----	200	15	11	45	2.4	2.7	1.3
31	9.0	------	6.3	4.5	-----	87	----	9.6	-----	1.9	2.5	------
TOTAL	184.74	2725.4	1169.8	554.2	574.4	1515.1	1065	718.9	827.8	916.2	465.9	109.49
MEAN	5.96	90.8	37.7	17.9	19.8	48.9	35.5	23.2	27.6	29.6	15.0	3.65
MAX	39	383	314	170	107	297	313	165	242	367	188	14
MIN	.75	3.2	6.3	4.5	3.7	6.6	13	8.9	2.5	1.8	1.7	.81
CFSM	.28	4.26	1.77	.84	.93	2.30	1.67	1.09	1.30	1.39	.70	.17
IN.	.32	4.76	2.04	.97	1.00	2.65	1.86	1.26	1.45	1.60	.81	.19

CAL YR 1979 TOTAL 19060.54 MEAN 52.2 MAX 881 MIN .75 CFSM 2.45 IN 33.29
WTR YR 1980 TOTAL 10826.93 MEAN 29.6 MAX 383 MIN .75 CFSM 1.39 IN 18.91

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 poor. Regulation by coal-washing operation and strip-mining above gage.

AVERAGE DISCHARGE.--16 years, 51.2 ft³/s (1.450 m³/s), 16.24 in/yr (412 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)
Nov. 9	1300	1200	34.0	9.59	2.923						
Nov. 25	2000	*1980	56.1	*11.25	3.429						

Minimum daily discharge, 5.9 ft³/s (0.167 m³/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	130	72	49	24	27	91	32	21	24	14	8.8
2	41	47	58	45	23	26	75	31	21	122	12	9.8
3	26	31	54	39	23	26	67	32	18	132	15	7.6
4	30	26	50	44	24	31	60	31	19	187	10	20
5	28	24	50	40	27	106	50	28	19	64	9.2	10
6	25	31	49	40	28	50	48	27	17	31	9.9	7.9
7	21	21	44	46	24	86	49	25	17	21	9.6	8.7
8	21	23	39	36	22	320	52	26	21	18	9.3	8.2
9	37	499	38	35	21	98	51	23	18	16	9.1	7.5
10	32	171	40	35	20	65	50	22	13	23	10	9.4
11	27	81	37	266	19	46	50	23	13	19	12	6.2
12	26	57	73	98	19	42	180	81	13	16	9.1	6.4
13	20	46	187	72	20	51	84	54	11	15	8.5	7.9
14	18	41	79	65	27	44	383	30	11	14	12	7.6
15	19	38	60	53	91	37	120	26	11	13	24	7.0
16	19	35	55	79	166	35	81	43	13	13	13	11
17	18	32	42	71	67	85	68	253	12	13	14	43
18	17	32	47	55	46	66	58	148	14	13	13	11
19	18	33	37	51	41	47	52	72	15	13	9.7	7.5
20	19	30	37	50	73	73	49	48	17	15	8.3	6.4
21	18	29	39	44	88	421	45	38	15	17	7.6	6.0
22	83	88	141	42	70	105	40	33	15	56	7.1	21
23	54	543	143	35	66	75	38	40	60	20	6.8	18
24	28	248	374	34	52	296	36	53	82	15	7.9	7.8
25	25	591	216	38	43	144	34	42	24	14	8.2	6.9
26	25	368	102	34	36	85	42	32	18	11	7.2	6.7
27	24	180	73	35	30	66	43	27	15	47	7.1	5.9
28	29	305	60	31	28	88	40	23	25	32	6.9	6.8
29	33	116	55	30	28	82	43	24	286	17	9.5	7.6
30	25	87	56	25	----	267	36	24	39	14	7.5	6.5
31	20	----	52	25	----	152	----	20	----	12	6.8	-----
TOTAL	862	3983	2459	1642	1246	3142	2115	1411	893	1037	314.3	305.1
MEAN	27.8	133	79.3	53.0	43.0	101	70.5	45.5	29.8	33.5	10.1	10.2
MAX	83	591	374	266	166	421	383	253	286	187	24	43
MIN	17	21	37	25	19	26	34	20	11	11	6.8	5.9
CFSM	.65	3.11	1.85	1.24	1.01	2.36	1.65	1.06	.70	.78	.24	.24
IN.	.75	3.46	2.14	1.43	1.08	2.73	1.84	1.23	.78	.90	.27	.27

CAL YR 1979 TOTAL 47052.0 MEAN 129 MAX 3640 MIN 16 CFSM 3.01 IN 40.89
WTR YR 1980 TOTAL 19409.4 MEAN 53.0 MAX 591 MIN 5.9 CFSM 1.24 IN 16.87

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).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1934 to current year. Published as "at Patoka" August 1934 to September 1940. Records published for both sites October 1939 to September 1940 (monthly discharge only at present site, for October, November 1939, published in WSP 1305).

REVISED RECORDS.--WSP 1275: 1952. WSP 1335: 1935-36, 1938-39, 1949(M), 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.--46 years, 1,018 ft^3/s (28.83 m^3/s), 16.82 in/yr (427 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, 4,650 ft^3/s (132 m^3/s) Dec. 3, gage height, 16.34 ft (4.980 m); minimum daily, 85 ft^3/s (2.41 m^3/s) Aug. 9, 10, and 13.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: November 1963 to April 1975, October 1977 to current year (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	848	762	4280	2580	1250	1930	2990	632	530	1770	106	151
2	847	836	4470	2640	1230	1870	3000	597	481	1990	104	179
3	836	862	4590	2640	1220	1790	2960	567	432	2650	194	229
4	825	873	4470	2610	1210	1680	2900	546	380	2950	194	210
5	809	849	4230	2520	1210	1600	2820	502	347	3140	169	232
6	787	715	3930	2420	1210	1470	2740	476	334	3190	142	245
7	757	491	3590	2290	1220	1380	2640	467	318	3200	112	344
8	729	190	3240	2140	1220	1520	2580	448	298	3170	95	369
9	707	620	3040	1990	1230	1580	2490	429	207	3110	85	317
10	708	955	2810	1850	1240	1660	2330	397	166	3050	85	257
11	712	1040	2600	1820	1250	1710	2160	381	231	2980	122	236
12	720	1180	2400	1790	1250	1740	2140	502	274	2890	150	234
13	711	1270	2260	1800	1250	1740	2010	679	288	2740	85	244
14	693	1320	2120	1800	1270	1720	2250	679	307	2530	225	259
15	678	1360	2010	1790	1370	1700	2210	641	320	2200	579	262
16	667	1380	1910	1780	1570	1680	2230	514	322	1750	622	259
17	659	1400	1790	1800	1610	1760	2250	544	333	1110	693	302
18	652	1410	1710	1800	1690	1740	2240	887	345	529	680	302
19	648	1400	1630	1800	1750	1670	2210	1040	355	213	562	264
20	640	1370	1570	1800	1800	1610	2170	1140	325	135	338	229
21	632	1330	1520	1750	1880	1860	2130	1220	315	106	207	187
22	637	1310	1510	1750	1960	1870	2100	1270	328	382	148	412
23	723	1670	1570	1710	2000	1960	2050	1420	536	314	129	879
24	789	1750	1850	1670	2020	2220	1980	1960	1110	250	118	643
25	821	1970	2050	1620	2030	2390	1850	2020	1110	234	111	583
26	827	2430	2210	1560	2000	2510	1670	1920	1170	165	108	436
27	803	2630	2330	1510	2010	2560	1410	1780	1230	154	104	230
28	764	2910	2390	1450	2010	2570	1060	1580	1300	346	104	240
29	729	3130	2430	1380	1990	2570	820	1240	1770	221	108	240
30	705	3700	2470	1330	-----	2770	699	835	1690	165	142	240
31	689	-----	2520	1280	-----	2960	-----	618	-----	135	160	----
TOTAL	22752	43113	81500	58670	44950	59790	65089	27931	17152	47769	6781	9214
MEAN	734	1437	2629	1893	1550	1929	2170	901	572	1541	219	307
MAX	848	3700	4590	2640	2030	2960	3000	2020	1770	3200	693	879
MIN	632	190	1510	1280	1210	1380	699	381	166	106	85	151
CFSM	.83	1.63	2.98	2.15	1.76	2.19	2.46	1.02	.65	1.75	.25	.35
IN.	.96	1.82	3.44	2.47	1.90	2.52	2.75	1.18	.72	2.01	.29	.39

CAL YR 1979 TOTAL 813636 MEAN 2229 MAX 9450 MIN 190 CFSM 2.53 IN 34.32
WTR YR 1980 TOTAL 484711 MEAN 1324 MAX 4590 MIN 85 CFSM 1.50 IN 20.44

03377500 WABASH RIVER AT MOUNT CARMEL, IL

LOCATION.--Lat 38°24'07", long 87°45'10", in SE¼NW¼ sec.28, T.1 S., R.12 W., Wabash County, Illinois, Hydrologic Unit 05120113, on right bank on downstream side of Southern Railway bridge at Mount Carmel, 0.2 mile (0.3 km) downstream from Patoka River, and at mile 94.4 (151.9 km).

DRAINAGE AREA.--28,635 mi² (74,165 km²).

PERIOD OF RECORD.--January 1908 to September 1913 (gage heights only), October 1927 to current year. Gage-height records collected in this vicinity November 1874 to December 1878, are contained in files of Louisville office of the Corps of Engineers and since June 1884, are contained in reports of National Weather Service.

REVISED RECORDS.--WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 369.46 ft (112.611 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1949, to Feb. 8, 1977, datum 2.00 ft (0.610 m) higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

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

AVERAGE DISCHARGE.--53 years, 27,220 ft³/s (770.9 m³/s), 12.90 in/yr (328 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, 87,800 ft³/s (2,486 m³/s) Apr. 6, 7, gage height, 22.01 ft (6.709 m); minimum daily, 7,070 ft³/s (200.2 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12700	10700	68200	70800	18500	40200	83100	27400	18700	36900	12000	11300
2	12400	12000	71600	66800	17300	36100	83000	26500	17900	34800	11700	10700
3	12300	12100	73700	60300	16600	32700	83000	25500	25100	31300	12600	11500
4	12200	12500	73600	51900	16100	29300	83800	24200	35000	31700	13200	13100
5	12200	14100	71600	43800	15800	27200	85800	22800	43100	35600	13100	11800
6	12400	16100	67800	38300	15400	28700	87400	21700	45300	37700	12500	11200
7	12500	17300	62200	34900	14900	32900	87100	20700	46700	35300	11600	10900
8	12500	17300	54200	32300	14400	38000	83700	19700	48500	30700	10800	9980
9	12100	16400	44400	29900	14200	44100	79400	18700	50700	26400	10400	9130
10	11700	17500	36500	27600	14000	49800	76000	17800	53800	22900	10200	8450
11	11400	18100	32300	26500	13800	54900	73500	16800	57700	20000	11900	8150
12	11000	18600	30700	28800	13400	58100	72300	16100	59900	17600	13500	8090
13	10500	19700	29500	31400	13200	59900	71300	16200	60700	15900	12400	7910
14	9960	20700	28000	34000	12900	61000	71900	15900	59000	14800	11600	7690
15	9780	21000	26300	35400	12900	62400	74500	16200	55300	14100	12300	7310
16	9660	20600	25000	36200	14500	63800	76800	17000	47100	14000	13500	7070
17	9560	20100	24100	37300	16500	64700	77600	17800	37000	13600	15000	7530
18	9590	18600	23200	38500	17500	64800	76800	18500	31200	12300	17600	11000
19	9550	16500	22700	37700	17600	64400	74600	20300	29300	10800	19000	13600
20	9290	14800	22100	35700	17100	64400	72000	25600	28500	9810	21700	12800
21	8940	14000	20800	33300	18600	66700	69000	29200	27500	9090	26500	10800
22	8660	14000	20500	31300	24500	69300	64900	31100	26800	8670	27300	10700
23	8770	17200	22900	29500	31800	71900	58400	32600	26600	8920	28200	11800
24	9190	23700	32000	27800	40400	75900	50200	34300	29200	9790	28000	10600
25	9200	29100	44900	26200	46800	79500	43100	34700	29200	10400	25900	9610
26	9480	38600	53000	24700	49500	82100	38000	33900	26500	10100	23900	8850
27	10100	48300	58700	23700	50800	83900	34700	31900	25300	10100	21500	8160
28	10100	55300	63600	22900	50000	84000	32200	28500	24200	10700	18300	7740
29	9940	59600	67700	22000	45900	82500	30000	25900	28100	11600	15600	7650
30	9690	63900	70800	20700	------	81300	28400	23300	35900	12000	13800	7530
31	9550	------	72100	19700	------	82600	-------	20700	-------	12500	12500	------
TOTAL	326910	698400	1414700	1079900	664900	1837100	2022500	731500	1129800	580080	508100	292650
MEAN	10550	23280	45640	34840	22930	59260	67420	23600	37660	18710	16390	9755
MAX	12700	63900	73700	70800	50800	84000	87400	34700	60700	37700	28200	13600
MIN	8660	10700	20500	19700	12900	27200	28400	15900	17900	8670	10200	7070
CFSM	.37	.81	1.59	1.22	.80	2.07	2.35	.82	1.32	.65	.57	.34
IN.	.42	.91	1.84	1.40	.86	2.39	2.63	.95	1.47	.75	.66	.38

CAL YR 1979 TOTAL 15769210 MEAN 43200 MAX 168000 MIN 8660 CFSM 1.51 IN 20.49
WTR YR 1980 TOTAL 11286540 MEAN 30840 MAX 87400 MIN 7070 CFSM 1.08 IN 14.66

03378000 BONPAS CREEK AT BROWNS, IL

LOCATION.--Lat 38°23'11", long 87°58'32", in NW¼SE¼ sec.33, T.1 S., R.14 W., Wabash County, Illinois, Hydrologic Unit 05120114, near center of span on downstream side of bridge on State Highway 15, 0.5 mi (0.8 km) north of Browns, and 0.7 mi (1.1 km) upstream from Southern Railway bridge, and at mile 14.6 (23.6).

DRAINAGE AREA.--228 mi^2 (591 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 372.92 ft (113.666 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1968, water-stage recorder and concrete dam at site 0.4 mi (0.6 km) downstream at datum 2.0 ft (0.61 m) higher. Dec. 11, 1968, to Aug. 13, 1969, nonrecording gage at site 0.5 mi (0.8 km) downstream at datum 1.0 ft (0.30 m) lower. Auxiliary nonrecording gage near mouth on Wabash River at Grayville read twice daily.

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

AVERAGE DISCHARGE.--40 years, 221 ft^3/s (6.259 m^3/s), 13.16 in/yr (334 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,500 ft^3/s (212 m^3/s) May 9, 1961, gage height, 24.04 ft (7.327 m), site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,630 ft^3/s (46.2 m^3/s) Apr. 1, gage height, 14.67 ft (4.471 m); minimum daily, 0.10 ft^3/s (0.003 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	275	371	75	20	86	1620	22	6.9	1010	2.0	.16
2	3.8	217	107	65	20	59	1470	20	6.6	920	2.1	.19
3	4.0	73	71	55	20	56	1030	18	6.1	657	2.9	.12
4	2.9	31	61	48	20	50	590	17	5.2	546	9.2	.12
5	2.1	15	50	43	21	280	369	15	4.7	524	5.3	.27
6	1.6	9.4	45	39	21	411	163	14	4.5	193	3.5	1.0
7	1.2	6.7	40	35	20	321	119	13	4.4	145	2.3	.36
8	1.2	5.3	35	32	20	640	306	11	49	48	1.9	.21
9	1.3	164	33	30	20	676	497	10	49	19	1.8	.15
10	1.7	370	30	28	22	629	438	9.4	20	14	16	.10
11	1.7	167	28	504	24	278	200	9.4	8.9	12	45	.51
12	1.7	77	27	714	24	98	476	10	6.0	10	12	.36
13	1.5	43	30	713	24	85	399	16	4.6	9.2	5.6	.23
14	1.4	27	33	464	24	138	934	15	3.9	8.0	9.7	.15
15	1.3	19	30	152	131	171	1080	12	3.5	7.3	105	.11
16	1.4	15	27	121	666	218	1180	12	3.6	6.5	148	.19
17	1.4	13	20	257	654	1100	1040	17	3.7	5.8	38	2.5
18	1.4	11	18	254	289	1360	564	30	3.3	5.0	7.9	78
19	1.5	9.7	18	131	150	1460	145	30	3.0	4.1	5.0	29
20	1.6	8.7	18	83	213	1300	83	26	2.8	3.2	3.0	7.4
21	1.7	21	19	60	695	1370	65	16	2.7	2.6	2.0	4.0
22	2.8	317	37	50	998	1250	53	12	2.5	2.4	.85	6.1
23	5.4	893	381	44	1080	1080	45	55	11	2.2	.61	170
24	4.7	947	1110	38	1010	1280	37	115	459	2.0	.43	101
25	4.1	968	1340	35	612	1400	30	48	380	2.0	.37	23
26	3.8	1480	1440	30	130	1210	26	24	77	1.9	.28	7.4
27	3.5	1440	1310	27	84	812	24	14	18	2.5	.19	3.8
28	3.4	1600	908	24	112	308	23	10	40	2.2	.18	2.2
29	3.4	1390	311	22	120	277	24	8.8	910	2.0	.24	1.1
30	3.3	982	123	21	----	995	23	8.2	918	1.9	.21	.76
31	3.8	-------	95	21	----	1560	-----	7.4	------	1.8	.19	------
TOTAL	75.8	11594.8	8166	4215	7244	20958	13053	645.2	3017.9	4170.6	431.75	440.49
MEAN	2.45	386	263	136	250	676	435	20.8	101	135	13.9	14.7
MAX	5.4	1600	1440	714	1080	1560	1620	115	918	1010	148	170
MIN	1.2	5.3	18	21	20	50	23	7.4	2.5	1.8	.18	.10
CFSM	.01	1.69	1.15	.60	1.10	2.97	1.91	.09	.44	.59	.06	.06
IN.	.01	1.89	1.33	.69	1.18	3.42	2.13	.11	.49	.68	.07	.07

CAL YR 1979 TOTAL 145260.86 MEAN 398 MAX 4130 MIN .66 CFSM 1.75 IN 23.70
WTR YR 1980 TOTAL 74012.54 MEAN 202 MAX 1620 MIN .10 CFSM .89 IN 12.08

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 current year.
SEDIMENT DISCHARGE: October 1974 to current year.
WATER DISCHARGE: October 1938 to September 1947.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, Ill. (See sta 03377500). 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.
CORRECTIONS: Minimum conductance shown in IN-79-1 was in error.
WATER TEMPERATURE: Maximum, 32.0°C June 28, 1978, July 14-18, 1980; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum conductance, 650 micromhos, Oct. 30; minimum 340 micromhos June 4-11.
WATER TEMPERATURE: Maximum, 32.0°C July 14-18, 1980; minimum, 3.0°C Dec. 27-30, Feb. 28, 29.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	505	---	400	445	560	455	390	585	505	485	525	425
2	515	---	400	445	610	455	380	585	465	485	525	425
3	515	---	400	445	610	455	390	575	400	485	525	425
4	525	---	410	435	610	455	400	575	340	485	525	425
5	525	---	425	435	610	455	400	575	340	485	525	425
6	535	---	445	435	610	455	425	560	340	485	525	445
7	535	---	465	425	610	445	425	550	340	485	505	445
8	535	---	485	425	610	445	425	535	340	485	505	445
9	550	---	505	410	610	445	425	535	340	485	505	445
10	550	505	515	410	610	445	425	525	340	485	505	445
11	550	495	535	425	610	425	425	515	340	485	505	445
12	560	485	550	435	610	425	425	515	360	485	485	445
13	560	485	550	455	610	425	425	505	360	505	485	445
14	560	485	550	455	610	425	425	505	360	505	485	445
15	560	485	550	465	610	410	425	505	360	505	485	455
16	560	485	525	465	610	410	425	505	360	505	485	455
17	560	485	525	465	610	410	425	505	360	505	465	455
18	560	485	525	475	610	410	425	505	360	505	465	455
19	560	485	525	475	610	410	435	505	360	505	465	455
20	570	485	525	485	610	410	445	505	380	530	465	455
21	570	485	525	505	610	410	465	505	380	530	465	465
22	570	485	505	525	610	410	485	505	400	530	465	465
23	570	485	505	550	610	400	495	505	445	560	465	465
24	570	485	485	560	590	400	505	505	485	560	445	465
25	570	475	485	560	560	400	530	505	485	560	445	485
26	580	465	485	560	505	400	560	505	485	560	445	505
27	590	455	465	560	485	400	580	505	485	560	445	515
28	610	445	465	560	465	400	585	505	485	550	425	515
29	630	435	465	560	460	400	580	505	485	550	---	525
30	650	425	465	560	---	395	580	505	485	535	---	535
31	640	---	465	560	---	395	---	505	---	530	---	---
MEAN	563	476	488	483	588	422	458	523	399	513	484	460
MAX	650	505	550	560	610	455	585	585	505	560	525	535
MIN	505	425	400	410	460	395	380	505	340	485	425	425

WTR YR 1980 MEAN 488 MAX 650 MIN 340

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	----	5.0	6.0	5.0	4.0	11.0	13.0	24.0	28.0	28.0	28.0
2	22.0	----	5.0	6.0	5.0	4.0	12.0	13.0	25.0	28.0	28.0	28.0
3	22.0	----	5.0	6.0	5.0	4.0	12.0	14.0	25.0	28.0	28.0	28.0
4	21.0	----	6.0	6.0	4.0	4.0	13.0	14.0	25.0	29.0	28.0	28.0
5	21.0	----	7.0	6.0	4.0	4.0	13.0	15.0	25.0	29.0	28.0	28.0
6	20.0	----	7.0	5.0	4.0	5.0	14.0	16.0	25.0	29.0	28.0	27.0
7	20.0	----	7.0	5.0	4.0	5.0	14.0	16.0	25.0	30.0	28.0	27.0
8	20.0	----	7.0	5.0	4.0	6.0	13.0	17.0	25.0	30.0	28.0	27.0
9	19.0	----	7.0	4.0	4.0	6.0	13.0	18.0	24.0	30.0	28.0	27.0
10	18.0	14.0	7.0	4.0	5.0	6.0	13.0	19.0	24.0	31.0	28.0	27.0
11	18.0	14.0	8.0	5.0	5.0	7.0	12.0	20.0	24.0	31.0	28.0	27.0
12	17.0	14.0	8.0	5.0	5.0	7.0	12.0	21.0	24.0	31.0	28.0	26.0
13	17.0	13.0	8.0	6.0	5.0	7.0	12.0	21.0	24.0	31.0	28.0	26.0
14	17.0	13.0	8.0	6.0	5.0	7.0	12.0	21.0	24.0	32.0	28.0	26.0
15	17.0	13.0	8.0	6.0	5.0	8.0	11.0	21.0	24.0	32.0	28.0	26.0
16	17.0	13.0	7.0	7.0	5.0	8.0	11.0	21.0	25.0	32.0	28.0	26.0
17	17.0	12.0	7.0	7.0	5.0	8.0	11.0	21.0	25.0	32.0	28.0	25.0
18	17.0	12.0	7.0	7.0	5.0	8.0	12.0	21.0	25.0	32.0	28.0	25.0
19	17.0	12.0	7.0	7.0	5.0	9.0	12.0	21.0	25.0	31.0	28.0	25.0
20	17.0	12.0	7.0	7.0	6.0	9.0	12.0	22.0	25.0	30.0	28.0	25.0
21	17.0	12.0	6.0	7.0	6.0	9.0	12.0	22.0	25.0	29.0	28.0	24.0
22	17.0	12.0	6.0	6.0	6.0	9.0	12.0	22.0	25.0	29.0	28.0	24.0
23	17.0	12.0	6.0	6.0	6.0	9.0	12.0	22.0	25.0	28.0	28.0	24.0
24	16.0	12.0	5.0	6.0	6.0	10.0	12.0	22.0	25.0	28.0	28.0	24.0
25	16.0	11.0	4.0	6.0	6.0	10.0	12.0	22.0	26.0	28.0	28.0	24.0
26	16.0	11.0	4.0	6.0	5.0	10.0	11.0	23.0	26.0	28.0	28.0	22.0
27	16.0	10.0	3.0	6.0	4.0	10.0	11.0	23.0	26.0	28.0	28.0	22.0
28	16.0	9.0	3.0	5.0	3.0	10.0	11.0	23.0	27.0	28.0	28.0	22.0
29	16.0	8.0	3.0	5.0	3.0	10.0	12.0	23.0	27.0	28.0	----	22.0
30	16.0	6.0	3.0	5.0	---	10.0	12.0	24.0	28.0	28.0	----	21.0
31	16.0	----	4.0	5.0	---	11.0	----	----	----	28.0	----	----
MEAN	18.0	11.5	6.0	6.0	5.0	7.5	12.0	19.5	25.0	29.5	28.0	25.5
MAX	23.0	14.0	8.0	7.0	6.0	11.0	14.0	24.0	28.0	32.0	28.0	28.0
MIN	16.0	6.0	3.0	4.0	3.0	4.0	11.0	13.0	24.0	28.0	28.0	21.0

WTR YR 1980 MEAN 16.0 MAX 32.0 MIN 3.0

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER)	AGENCY ANALYZING SAMPLE (CODE NUMBER)	TEMPERATURE, WATER (DEG C)	TEMPERATURE, AIR (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	TURBIDITY (NTU)	SPECIFIC CONDUCTANCE (MICROMHOS)	OXYGEN, DISSOLVED (MG/L)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	PH FIELD (UNITS)	ALKALINITY (MG/L AS CACO3)
OCT												
03...	1330	-----	80010	20.0	----	12400	20	529	10.6	2.6	8.1	170
NOV												
08...	1400	-----	80010	10.5	----	17300	2.0	585	12.5	---	8.3	200
DEC												
04...	1300	-----	80010	3.0	----	73600	45	399	13.0	---	8.8	120
JAN												
17...	1300	-----	80010	4.0	----	37400	3.5	462	7.4	---	6.9	140
FEB												
28...	1000	-----	80010	6.0	9.0	50300	8.0	453	----	---	---	130
MAR												
28...	1100	-----	80010	8.7	7.0	84300	18	400	11.5	---	7.9	120
APR												
24...	1100	-----	80010	18.0	----	50700	32	493	9.5	---	---	160
MAY												
29...	1100	-----	80010	24.5	31.0	26000	45	500	7.8	---	7.7	150
29...	1105	17002	17002	24.5	30.5	26000	----	510	9.5	---	7.8	---
JUN												
19...	1100	-----	80010	24.0	19.1	29300	2.0	570	6.9	---	7.1	180
JUL												
29...	1100	-----	80010	27.0	28.0	15300	27	570	8.4	---	8.1	180
AUG												
28...	1000	-----	80010	27.0	34.0	18600	65	480	6.6	---	8.0	140
SEP												
30...	1100	-----	80010	21.0	25.5	7560	1.5	450	7.2	---	7.0	180
30...	1105	17002	17002	21.0	25.5	7560	----	450	---	---	7.1	---

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	SODIUM PERCENT	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT												
03...	240	70	63	20	16	.5	13	19	3.1	---	299	770
NOV												
08...	260	63	69	22	20	.5	20	24	4.1	359	338	16800
DEC												
04...	180	58	48	14	9.1	.3	14	13	3.4	248	225	49300
JAN												
17...	210	70	56	17	14	.4	18	16	2.3	280	270	28300
FEB												
28...	190	63	51	16	12	.4	12	15	2.9	281	256	38200
MAR												
28...	200	79	55	15	8.6	.3	8	11	2.7	264	240	60100
APR												
24...	220	63	58	19	12	.4	10	--	2.5	316	283	43300
MAY												
29...	230	85	61	20	15	.4	12	--	2.4	351	293	24600
29...	---	--	--	--	----	--	--	--	---	---	---	-----
JUN												
19...	240	56	63	19	12	.3	10	--	2.8	315	301	24900
JUL												
29...	240	60	60	22	22	.6	16	--	3.2	380	328	15700
AUG												
28...	210	70	56	17	10	.3	9	--	3.4	299	246	15000
SEP												
30...	250	70	64	22	20	.6	15	--	3.5	335	317	6840
30...	---	--	--	--	----	--	--	--	---	---	---	-----

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SULFATE DIS-SOLVED (MG/L AS SO4)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT											
03...	.03	26	64	.2	3.9	2.3	---	1.0	---	----	.080
NOV											
08...	.49	26	64	.3	5.2	2.3	---	.75	---	----	.030
DEC											
04...	.34	19	41	.2	7.3	3.5	3.3	.64	.71	.080	.000
JAN											
17...	.38	21	55	.2	7.9	3.7	3.6	1.0	.87	.070	.080
FEB											
28...	.38	23	57	.2	5.8	3.4	3.1	.98	.70	.230	.220
MAR											
28...	.36	17	44	.2	6.7	5.8	4.8	1.2	.61	.050	.090
APR											
24...	.43	20	54	.2	5.2	---	3.9	---	.33	.080	----
MAY											
29...	.48	22	58	.2	6.1	5.0	4.3	1.2	.26	.040	.020
29...	---	23	--	--	---	4.3	---	.50	---	----	.000
JUN											
19...	.43	19	47	.3	7.5	1.0	5.4	.97	.38	.000	.030
JUL											
29...	.52	33	70	.2	2.4	2.3	2.3	1.0	.82	.010	.060
AUG											
28...	.41	17	39	.3	8.0	2.1	2.9	.98	.43	.020	.010
SEP											
30...	.46	29	65	.3	1.5	2.3	1.1	1.4	.23	.020	.030
30...	---	30	--	--	---	---	---	---	---	----	.000

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS PO4)
OCT											
03...	---	---	1.1	1.2	---	.10	---	10	.150	----	.46
NOV											
08...	---	---	.78	1.5	1.7	.04	---	10	.150	.060	.46
DEC											
04...	.79	.00	.64	2.9	2.5	.00	.10	16	.250	.040	.77
JAN											
17...	.94	.16	1.1	2.6	2.7	.10	.09	16	.150	.060	.46
FEB											
28...	.93	.27	1.2	2.2	2.2	.27	.30	15	.630	.180	1.9
MAR											
28...	.66	.64	1.3	4.5	4.1	.11	.06	26	.210	.170	.64
APR											
24...	.41	----	----	3.6	3.5	---	.10	----	.220	.170	.67
MAY											
29...	.30	.90	1.2	3.8	4.0	.02	.05	22	.190	.050	.58
29...	---	----	.50	3.8	----	---	---	19	.210	----	----
JUN											
19...	.38	.62	1.0	.03	5.0	.04	.00	4.6	.490	.250	1.5
JUL											
29...	.83	.27	1.1	1.2	1.5	.07	.01	10	.130	.410	.40
AUG											
28...	.45	.54	.99	1.1	2.4	.01	.03	9.3	.340	.130	1.0
SEP											
30...	.25	1.2	1.4	.95	.87	.04	.03	10	.180	.050	.55
30...	---	----	----	.90	----	---	---	----	.170	----	----

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
03...	---	---	---	2050	---	271	400	------	74	2480	--
NOV											
08...	5.3	---	---	14100	---	457	468	20000	95	4440	--
DEC											
04...	---	---	---	------	---	-----	-----	------	122	24200	--
JAN											
17...	5.9	---	---	K47500	---	K3900	K7000	------	402	40600	--
FEB											
28...	---	4.6	2.2	2550	---	421	447	------	---	-----	--
MAR											
28...	6.3	---	---	6200	---	421	193	------	---	-----	--
APR											
24...	7.8	---	---	6400	---	150	164	------	---	-----	--
MAY											
29...	---	7.0	1.2	5000	---	620	221	19000	---	-----	--
29...	---	---	---	--	100	---	-----	------	---	-----	--
JUN											
19...	8.7	---	---	K900	---	263	K136	1500	242	19100	96
JUL											
29...	7.3	---	---	-----	---	---	-----	73000	116	4790	91
AUG											
28...	---	4.9	.9	-----	---	---	-----	12000	223	11200	97
SEP											
30...	6.3	---	---	-----	---	---	-----	120000	120	2450	99
30...	---	---	---	-----	10	---	-----	------	---	-----	--

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT											
03...	1330	-----	1	--	--	60	---	---	2	--	--
NOV											
08...	1400	-----	2	0	2	60	200	300	1	0	0
FEB											
28...	1000	-----	6	1	7	50	50	100	7	0	1
MAY											
29...	1100	-----	2	0	2	80	20	100	1	0	0
29...	1105	17002	--	--	2	---	--	70	--	--	0
AUG											
28...	1000	-----	2	0	2	100	0	100	0	1	1
SEP											
30...	1105	17002	--	--	2	---	--	60	--	--	0

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 03...	10	--	---	1	--	---	4	--	--	----	----
NOV 08...	20	--	---	1	0	0	6	0	4	1300	1300
FEB 28...	10	10	20	0	10	10	2	14	16	8500	8500
MAY 29...	10	--	10	0	2	2	3	8	11	3600	3600
29...	---	--	0	--	--	5	--	--	20	----	2400
AUG 28...	20	0	20	0	3	3	11	11	22	5400	5400
SEP 30...	---	--	0	--	--	10	--	--	20	----	980

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, DISSOLVED (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, DISSOLVED (UG/L AS AG)
OCT 03...	10	0	--	--	---	---	5	4	--	--	--
NOV 08...	10	0	3	3	120	130	7	0	8	8	0
FEB 28...	30	0	24	24	490	490	4	0	16	16	0
MAY 29...	10	0	8	8	240	240	1	0	10	10	0
29...	--	--	--	0	---	240	--	--	--	0	--
AUG 28...	10	0	15	15	250	260	10	3	31	34	0
SEP 30...	--	--	--	0	---	180	--	--	--	20	--

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT											
03...	--	--	0	--	---	0	--	--	.5	---	---
NOV											
08...	0	0	0	20	20	0	0	0	.1	.0	.1
FEB											
28...	0	0	110	30	140	0	0	0	.2	.0	.2
MAY											
29...	0	0	0	40	40	0	0	0	.1	---	.1
29...	--	0	---	--	20	--	--	--	---	---	.0
AUG											
28...	0	0	10	70	80	0	0	0	.1	---	.1
SEP											
30...	--	0	---	--	0	--	--	--	---	---	.0

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)
MAY								
29...	1105	17002	21	180	39	64	18	12
SEP								
30...	1105	17002	31	80	22	69	23	22

DATE	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	VANA-DIUM, TOTAL (UG/L AS V)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	PHENOLS (UG/L)
MAY							
29...	2.6	0	50	180	5.0	70	--
SEP							
30...	3.8	1	110	270	10	--	0

03378550 BIG CREEK NEAR WADESVILLE, IN

LOCATION.--Lat 38°04'58", long 87°46'10", in SW¼SW¼ sec.16, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, on left bank at downstream side of bridge on State Highway 66, 0.6 mile (1.0 km) northwest of Blairsville, and 1.6 miles (2.6 km) southeast of Wadesville.

DRAINAGE AREA.--104 mi² (269 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft (112.776 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 113 ft³/s (3.200 m³/s), 14.76 in/yr (375 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)
July 3	1000	*3440	97.4	*18.40	5.608

Minimum daily discharge, 0.12 ft³/s (0.003 m³/s) Sept 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	90	86	63	19	57	155	25	18	42	.34	.25
2	42	38	61	54	18	54	109	24	16	481	.30	.24
3	11	19	52	47	18	53	90	23	12	2940	12	.27
4	8.4	14	49	46	17	62	80	22	9.8	1100	10	.80
5	7.2	11	51	43	21	137	63	20	9.2	143	2.5	6.1
6	6.7	10	49	40	21	85	58	19	9.2	56	1.3	2.0
7	5.2	8.4	42	42	20	80	57	17	16	114	.84	.71
8	4.7	8.9	32	32	20	432	87	15	231	30	.65	.34
9	7.5	647	29	29	19	137	77	15	21	21	.54	17
10	20	434	31	28	18	91	66	15	12	15	.48	179
11	12	108	30	479	17	65	61	15	8.7	10	3.3	12
12	8.5	68	67	183	17	59	382	215	6.6	7.6	14	3.1
13	6.7	51	363	83	16	61	131	187	6.1	6.0	2.4	1.4
14	5.2	39	128	70	16	56	812	63	5.8	4.7	1.1	.34
15	4.9	35	75	60	152	50	195	26	5.4	3.7	1.3	.15
16	4.9	30	63	87	471	50	113	37	34	3.1	1.1	.12
17	4.8	26	43	145	133	199	84	140	13	2.7	.90	52
18	4.4	24	40	86	87	155	69	134	7.5	2.3	1.3	24
19	4.3	22	37	63	82	89	60	50	4.5	2.1	.97	4.3
20	4.3	19	32	54	114	89	54	37	3.9	1.9	.68	1.5
21	4.5	20	31	50	203	735	49	30	3.3	1.7	.55	.84
22	7.9	74	39	51	260	163	44	24	2.9	4.0	.47	.50
23	30	1280	94	43	174	104	40	92	104	5.8	.42	48
24	13	577	818	39	133	786	36	422	840	2.5	.38	9.4
25	3.3	791	613	37	97	406	31	83	49	1.0	.35	2.0
26	6.4	1360	211	29	77	139	31	48	19	.59	.33	.90
27	6.0	324	123	27	81	98	34	34	11	.71	.31	.55
28	6.1	861	89	24	74	105	31	27	114	3.3	.29	.37
29	5.8	204	77	22	64	129	30	24	1500	3.2	.28	.28
30	5.3	111	78	20	----	831	28	54	316	.84	.27	.22
31	5.3	------	75	19	----	459	----	21	------	.43	.26	------
TOTAL	273.7	7304.3	3608	2095	2459	6016	3157	1958	3408.9	5010.17	59.91	368.68
MEAN	8.83	243	116	67.6	84.8	194	105	63.2	114	162	1.93	12.3
MAX	42	1360	818	479	471	831	812	422	1500	2940	14	179
MIN	3.3	8.4	29	19	16	50	28	15	2.9	.43	.26	.12
CFSM	.09	2.34	1.12	.65	.82	1.87	1.01	.61	1.10	1.56	.02	.12
IN.	.10	2.61	1.29	.75	.88	2.15	1.13	.70	1.22	1.79	.02	.13

CAL YR 1979 TOTAL 65405.35 MEAN 179 MAX 2660 MIN .78 CFSM 1.72 IN 23.39
WTR YR 1980 TOTAL 35718.66 MEAN 97.6 MAX 2940 MIN .12 CFSM .94 IN 12.78

03378550 BIG CREEK NEAR WADESVILLE, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV						
06...	1015	10.5	10	44	1.2	---
FEB						
05...	1630	.0	21	50	2.8	---
27...	1500	2.0	78	76	16	98
APR						
23...	1045	--	43	74	8.6	---
JUN						
18...	1400	21.0	5.1	21	.29	100
SEP						
10...	1745	--	45	340	41	---

03381500 LITTLE WABASH RIVER AT CARMI, IL

LOCATION.--Lat 38°03'40", long 88°09'35", near center of E½ sec.25, T.5 S., R.9 E., White County, Hydrologic Unit 05120114, on right bank at upstream side of Possum Bridge, 2.3 mi (3.7 km) south of Main Street Bridge in Carmi, 7.8 mi (12.6 km) downstream from Skillet Fork, and at mile 30.5 (49.1 km).

DRAINAGE AREA.--3,102 mi² (8,034 km²).

PERIOD OF RECORD.--October 1908 to December 1912 (gage heights only), October 1939 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 339.91 ft (103.605 m) National Geodetic Vertical Datum of 1929. Prior to December 1912, nonrecording gage at site 3.1 mi (5.0 km) upstream at datum 0.4 ft (0.1 m) higher. Oct 1 to Nov. 9, 1939, nonrecording gage at present site and datum. Since Nov. 14, 1939, auxiliary water-stage recorder 3.1 mi (5.0 km) upstream.

REMARKS.--Records fair except those for winter periods, which are poor. There was no diversion through McHenry Slough during the year.

AVERAGE DISCHARGE.--41 years, 2,497 ft³/s (70.72 m³/s), 10.93 in/yr (278 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,900 ft³/s (1,330 m³/s) May 12, 1961; maximum gage height, 36.70 ft (11.186 m) May 13, 1961; no flow Sept. 16-17, 1952, result of temporary dam upstream; minimum unregulated discharge, 0.6 ft³/s (0.017 m³/s) Sept. 9, 1953, July 31, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,300 ft³/s (292 m³/s) Apr. 4, maximum gage height, 25.65 ft (7.818 m) Apr. 4; minimum discharge, 44 ft³/s (1.25 m³/s) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	146	1910	821	250	2000	9770	541	372	2370	138	80
2	87	160	949	500	230	1500	9960	517	313	2820	515	74
3	68	115	447	300	220	1230	10100	502	273	4260	375	62
4	69	96	300	250	210	1020	10200	480	236	4210	289	56
5	60	88	230	220	200	1360	10100	454	212	3650	321	52
6	52	85	190	200	200	2100	9800	427	445	2490	427	327
7	47	80	170	450	210	2120	9360	388	846	1560	510	575
8	49	75	150	700	220	3850	9110	362	876	1570	470	473
9	56	100	130	900	220	5180	9200	334	615	1880	363	364
10	59	150	120	1100	220	5310	8990	311	500	1890	263	337
11	55	120	110	1300	210	4820	8400	299	489	1340	196	284
12	54	100	100	1500	200	3990	7980	604	496	737	155	226
13	50	90	95	1400	200	3720	7370	1120	498	437	129	159
14	45	80	90	1000	220	3850	7400	508	478	311	114	93
15	44	75	85	800	300	3550	7720	370	398	247	116	67
16	46	70	80	650	2200	2880	7510	434	220	209	139	55
17	48	65	80	550	2870	4350	6990	520	160	181	222	80
18	55	60	80	450	2590	6250	6140	478	159	156	335	68
19	56	55	90	400	2280	6680	5300	438	150	139	531	100
20	57	50	167	450	1720	6890	4650	540	143	126	587	398
21	54	75	215	550	2870	7630	3730	537	130	114	583	1180
22	60	457	217	600	4670	7870	2290	490	123	123	532	1620
23	72	1660	373	600	5320	7590	1500	1500	216	109	666	1550
24	65	2110	1540	560	5430	7790	1100	2660	2170	98	793	1170
25	60	2050	3960	519	5100	8640	900	2870	1860	100	619	740
26	53	3840	4640	474	4440	8830	750	1810	1030	115	414	457
27	48	4680	4390	434	3930	8600	634	1010	676	190	279	330
28	52	4850	3460	392	3760	8080	603	820	632	388	202	258
29	54	3880	2720	344	3000	7600	581	737	771	306	152	195
30	56	2930	2210	318	-----	7940	558	582	1700	214	120	134
31	58	-----	1420	277	-----	9350	------	457	-----	147	98	-----
TOTAL	1784	28392	30718	19009	53490	162570	178696	23100	17187	32487	10653	11564
MEAN	57.5	946	991	613	1844	5244	5957	745	573	1048	344	385
MAX	95	4850	4640	1500	5430	9350	10200	2870	2170	4260	793	1620
MIN	44	50	80	200	200	1020	558	299	123	98	98	52
CFSM	.02	.31	.32	.20	.59	1.69	1.92	.24	.19	.34	.11	.12
IN.	.02	.34	.37	.23	.64	1.95	2.14	.28	.21	.39	.13	.14

CAL YR 1979 TOTAL 1556492 MEAN 4264 MAX 29700 MIN 44 CFSM 1.38 IN 18.67
WTR YR 1980 TOTAL 569650 MEAN 1556 MAX 10200 MIN 44 CFSM .50 IN 6.83

04093000 DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART, IN

LOCATION.--Lat 41°32'10", long 87°15'25", in NW¼NW¼ sec.32, T.36 N., R.7 W., Lake County, Hydrologic Unit 04040001, on left bank at upstream side of bridge on Center Street in Hobart, 300 ft (91 m) upstream from Duck Creek, and 400 ft (122 m) downstream from Lake George Dam.

DRAINAGE AREA.--124 mi² (321 km²).

PERIOD OF RECORD.--April 1947 to current year.

REVISED RECORDS.--WSP 1337: 1953. WSP 1507: 1956. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft (179.274 m) 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.--33 years, 103 ft³/s (2.917 m³/s), 11.28 in/yr (287 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,880 ft³/s (110 m³/s) Oct. 11, 1954, gage height, 19.48 ft (5.938 m) present datum, site then in use; no flow Nov. 5, 1978, due to regulation of Lake George Dam.

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)
Mar. 18	1600	*1060	30.0	*9.83	2.996
June 2	1800	722	20.4	8.41	2.563

Minimum daily discharge 6.0 ft³/s (0.17 m³/s) July 3. (regulated)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	40	85	157	21	70	273	75	270	18	12	257
2	32	90	80	136	21	66	242	49	634	43	12	450
3	34	50	79	104	20	63	218	50	646	6.0	10	295
4	22	23	76	84	19	65	231	54	498	10	11	159
5	17	22	74	76	20	67	225	50	370	13	16	94
6	14	20	84	69	21	70	185	46	298	13	16	60
7	13	19	100	64	21	82	151	40	259	14	15	53
8	13	19	120	58	20	105	178	38	212	11	12	97
9	13	21	98	55	20	185	467	37	163	18	22	143
10	13	27	83	51	19	344	506	36	130	25	65	114
11	14	25	72	64	19	585	379	34	59	23	77	79
12	16	23	83	54	18	627	334	34	60	16	77	61
13	19	21	113	50	18	463	309	72	65	13	83	58
14	15	20	98	47	18	325	270	75	64	13	254	54
15	12	19	82	58	18	293	337	57	77	11	249	46
16	26	19	69	108	17	540	442	44	96	10	143	62
17	80	20	53	138	17	868	372	56	79	9.3	92	340
18	45	18	46	124	17	1010	282	93	61	9.6	66	459
19	27	19	45	90	18	744	228	110	51	10	60	309
20	24	17	43	76	24	522	190	96	48	12	69	199
21	21	54	41	66	53	404	167	75	41	14	66	141
22	30	105	45	86	246	319	147	58	33	16	42	67
23	35	106	65	68	413	251	107	48	29	17	29	68
24	40	75	173	59	347	225	82	43	27	15	22	79
25	21	62	441	45	243	311	93	40	25	14	19	68
26	20	215	542	36	145	299	88	34	23	15	17	52
27	18	350	433	29	102	236	84	29	20	14	15	46
28	17	261	319	27	87	192	83	32	25	17	14	38
29	16	134	243	25	78	252	86	77	27	16	14	35
30	16	115	198	23	----	324	83	143	20	13	14	32
31	20	----	176	22	----	293	----	143	----	12	48	----
TOTAL	718	2009	4259	2149	2100	10200	6839	1868	4410	460.9	1661	4015
MEAN	23.2	67.0	137	69.3	72.4	329	228	60.3	147	14.9	53.6	134
MAX	80	350	542	157	413	1010	506	143	646	43	254	459
MIN	12	17	41	22	17	63	82	29	20	6.0	10	32
CFSM	.19	.54	1.11	.56	.58	2.65	1.84	.49	1.19	.12	.43	1.08
IN.	.22	.60	1.28	.64	.63	3.06	2.05	.56	1.32	.14	.50	1.20

CAL YR 1979 TOTAL 54913.0 MEAN 150 MAX 2390 MIN 9.0 CFSM 1.21 IN 16.47
WTR YR 1980 TOTAL 40688.9 MEAN 111 MAX 1010 MIN 6.0 CFSM .90 IN 12.21

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 1980, 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 good above 100 ft³/s (2.83 m³/s) and poor below. 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 stages on Lake Michigan, only periods free from backwater are shown.

AVERAGE DISCHARGE.--27 years (1943-50, 1955-73, 1977, 1978), 137 ft³/s (3.880 m³/s), 11.63 in/yr (295 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft³/s (97.1 m³/s) Oct. 11, 1954; maximum gage height, 16.44 ft (5.011 m) Mar. 16, 1944, from graph based on gage readings; minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Oct. 14, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,010 ft³/s (28.6 m³/s) Mar. 18, gage height, 9.50 ft (2.896 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	175	123	33	94	362	---	305		----	348
2		---	141	123	32	75	345	---	583		----	500
3		---	70	131	30	57	313	---	743		----	413
4		---	66	108	29	57	321	---	676		----	257
5		---	69	109	28	58	297	---	558		----	156
6		---	105	71	27	60	254	---	495		----	122
7		---	165	68	26	65	217	---	432		----	109
8		---	178	62	25	94	243	---	370		----	139
9		---	112	58	25	98	458	---	283		----	183
10		---	96	54	25	176	573	---	223		----	151
11		---	88	50	24	342	498	---	151		----	107
12		---	123	46	24	473	430	77	115		140	105
13		---	117	42	24	405	388	134	108		140	124
14		---	105	58	23	283	372	106	117		288	143
15		---	64	62	23	214	379	93	189		345	119
16		---	62	71	23	350	442	92	160		240	103
17		---	60	84	25	682	422	110	120		155	369
18		---	58	100	28	953	335	119	109		122	508
19		---	57	94	31	928	263	120	---		----	423
20		50	56	88	45	737	216	119	---		----	296
21		76	58	75	63	599	180	100	---		----	214
22		110	65	70	159	488	148	86	---		----	176
23		100	72	63	272	388	157	---	---		----	143
24		68	189	59	250	362	136	---	---		----	134
25		78	454	54	258	398	107	---	---		----	124
26		204	425	50	280	402	101	---	---		----	122
27		275	386	46	122	337	112	---	---		---	78
28		279	279	42	108	283	134	---	---		---	87
29		225	201	39	100	330	118	---	---		---	80
30		163	163	37	----	402	105	---	---		---	77
31		---	142	35	----	407	----	152	---		108	----
TOTAL		---	4401	2172	2162	10597	8426	---	---		---	5910
MEAN		---	142	70.1	74.6	342	281	---	---		---	197
MAX		---	454	131	280	953	573	---	---		---	508
MIN		---	56	35	23	57	101	---	---		---	77
CFSM		---	.89	.44	.47	2.14	1.76	---	---		---	1.23
IN.		---	1.02	.50	.50	2.46	1.96	---	---		---	1.37

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 mi² (171.5 km²).

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

REVISED RECORDS.--WSP 1084: 1945. WSP 1337: 1946-47. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 603.48 ft (183.941 m) National Geodetic Vertical Datum of 1929. Prior to June 26, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 72.0 ft³/s (2.039 m³/s), 14.77 in/yr (375 mm/yr).

REMARKS.--Records good except those for winter periods and period of no gage-height Feb. 6 to Apr. 2 which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft³/s (88.1 m³/s) Oct. 10, 1954, gage height, 11.66 ft (3.554 m); minimum daily, 17 ft³/s (0.48 m³/s) Aug. 24, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 8	1700	*707	20.0	*7.49	2.283

Minimum daily discharge, 25 ft³/s (0.71 m³/s) July 19, 20, 26, Aug. 1, 2, 4, 6-8.

NOTE.--No gage-height record Feb. 6 to Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	48	63	59	37	59	88	52	103	30	25	177
2	35	46	60	56	37	58	120	50	261	29	25	288
3	31	38	56	53	37	52	116	48	231	29	26	124
4	30	34	56	51	37	48	154	46	117	28	25	74
5	32	33	61	49	37	49	122	45	77	31	26	56
6	34	28	96	47	36	50	97	43	95	30	25	48
7	32	33	87	45	36	47	82	41	141	29	25	44
8	31	33	87	45	36	49	108	40	528	28	25	46
9	31	34	72	44	36	54	294	40	407	30	28	44
10	30	41	64	42	36	58	277	40	161	32	54	45
11	31	40	61	50	36	65	163	40	94	29	61	40
12	32	36	70	44	36	60	143	41	72	28	62	39
13	31	34	69	48	36	54	125	53	58	27	51	42
14	31	34	60	44	36	52	104	47	52	26	207	40
15	32	33	55	43	37	100	144	43	64	26	271	47
16	36	33	54	47	37	200	143	41	74	26	300	51
17	37	33	49	80	38	420	103	47	56	26	114	198
18	34	32	52	75	39	405	87	54	49	26	87	236
19	33	32	50	63	41	230	77	49	46	25	114	105
20	34	32	49	56	54	139	72	45	46	25	208	78
21	36	55	48	51	84	110	66	42	42	30	138	66
22	39	84	54	49	170	90	62	40	39	33	74	61
23	47	76	70	44	165	80	58	37	37	29	55	82
24	41	61	113	43	130	100	55	37	36	27	45	63
25	38	55	219	42	110	120	54	39	35	26	40	52
26	37	152	217	41	91	109	52	36	35	25	37	46
27	37	159	122	40	78	90	52	34	34	29	34	41
28	36	114	86	39	70	80	54	34	37	28	32	39
29	36	88	72	38	62	149	55	43	34	27	31	39
30	36	70	64	37	----	124	54	38	31	26	33	37
31	36	----	60	37	----	106	----	40	----	26	64	----
TOTAL	1065	1621	2396	1502	1715	3407	3181	1325	3092	866	2342	2348
MEAN	34.4	54.0	77.3	48.5	59.1	110	106	42.7	103	27.9	75.5	78.3
MAX	47	159	219	80	170	420	294	54	528	33	300	288
MIN	29	28	48	37	36	47	52	34	31	25	25	37
CFSM	.52	.82	1.17	.73	.89	1.66	1.60	.65	1.56	.42	1.14	1.18
IN.	.60	.91	1.35	.84	.96	1.91	1.79	.74	1.74	.49	1.32	1.32

CAL YR 1979 TOTAL 28303 MEAN 77.5 MAX 1320 MIN 27 CFSM 1.17 IN 15.90
WTR YR 1980 TOTAL 24860 MEAN 67.9 MAX 528 MIN 25 CFSM 1.03 IN 13.97

04094500 SALT CREEK NEAR McCOOL, IN

LOCATION.--Lat 41°35'48", long 87°08'40", in SE¼SE¼ sec.6, T.36 N., R.6 W., Porter County, Hydrologic Unit 04040001, on left bank on downstream side of highway bridge, 50 ft (15 m) downstream from New York Central Railroad bridge, 1.2 miles (1.9 km) north of McCool, 1.5 miles (2.4 km) upstream from Little Calumet River, and at mile 1.6 (2.6 km).

DRAINAGE AREA.--74.6 mi² (193.2 km²).

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

REVISED RECORDS.--WSP 1337: 1946-48(M), 1950(M). WSP 1911: 1958. WRD Ind. 1972: Drainage area.

GAGE.--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. July 25, 1955, to Apr. 28, 1977, water-stage recorder at same site and datum. No gage Apr. 29, 1977, to July 28, 1977. Nonrecording gage at same site and datum July 29, 1977, to Oct. 10, 1978.

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

AVERAGE DISCHARGE.--35 years, 71.7 ft³/s (2.030 m³/s), 13.05 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,180 ft³/s (90.1 m³/s) Oct. 11, 1954, gage height, 14.12 (4.304 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 8, 1964.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 17	1400	*716	20.3	*6.28	1.914
Aug. 16	0100	684	19.4	6.13	1.868

Minimum daily discharge, 27 ft³/s (0.765 m³/s) Oct. 1, Aug. 4, 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	52	57	54	33	55	92	44	113	33	29	245
2	38	46	54	51	33	52	98	44	222	33	30	301
3	34	39	49	49	33	49	101	42	128	33	30	92
4	34	38	47	47	33	46	180	42	88	31	27	56
5	33	36	54	45	33	44	123	41	77	32	28	48
6	34	37	92	44	33	43	91	39	118	34	28	44
7	34	39	79	41	33	42	77	38	140	31	27	44
8	34	39	76	38	33	47	184	38	160	31	27	48
9	34	44	59	41	33	55	485	37	100	34	34	44
10	34	53	54	37	33	68	289	37	81	42	114	44
11	34	48	51	47	33	80	152	37	65	33	63	43
12	34	40	63	44	33	64	154	37	56	31	65	42
13	34	39	59	44	33	50	122	54	51	30	40	44
14	34	39	51	39	33	86	103	43	45	29	334	42
15	34	38	46	39	33	264	190	39	51	29	465	37
16	43	38	44	41	33	500	179	37	76	29	387	39
17	43	38	39	90	34	698	112	43	57	29	108	246
18	36	38	41	78	36	475	88	56	50	29	76	172
19	35	38	39	61	39	206	76	43	52	29	85	69
20	35	38	40	52	45	149	68	42	49	29	106	48
21	34	74	39	47	100	116	62	39	41	31	66	44
22	36	102	44	45	281	91	58	37	36	34	44	50
23	48	82	64	41	212	83	55	36	35	30	40	54
24	39	60	151	38	129	92	52	36	49	29	37	48
25	36	54	286	37	86	142	50	36	51	28	36	44
26	36	234	195	36	75	101	47	35	37	28	35	44
27	35	166	119	35	68	85	47	34	35	33	35	43
28	35	127	86	34	62	157	48	34	40	30	35	43
29	36	90	70	34	58	230	50	55	39	30	35	43
30	37	67	62	33	----	134	47	42	34	28	41	43
31	36	----	57	33	----	121	----	37	----	28	65	----
TOTAL	1106	1873	2267	1395	1753	4425	3480	1254	2176	960	2572	2204
MEAN	35.7	62.4	73.1	45.0	60.4	143	116	40.5	72.5	31.0	83.0	73.5
MAX	48	234	286	90	281	698	485	56	222	42	465	301
MIN	27	36	39	33	33	42	47	34	34	28	27	37
CFSM	.48	.84	.98	.60	.81	1.92	1.56	.54	.97	.42	1.11	.99
IN.	.55	.93	1.13	.70	.87	2.21	1.74	.63	1.09	.48	1.28	1.10

CAL YR 1979 TOTAL 31413 MEAN 86.1 MAX 1310 MIN 24 CFSM 1.15 IN 15.66
WTR YR 1980 TOTAL 25465 MEAN 69.6 MAX 698 MIN 27 CFSM .93 IN 12.70

04095000 LITTLE CALUMET RIVER NEAR McCOOL, IN
(National stream-quality accounting network station)

LOCATION.--Lat 41°36'41", long 87°09'16", in NE¼SW¼ sec.31, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, at bridge on Samuelson Road, 1200 ft (365.8 m) downstream from Salt Creek, 1.15 mi (1.85 km) up stream from Burns Waterway, and 2.3 mi (3.70 km) north of McCool.

DRAINAGE AREA.--149 mi² (385.9 km²).

PERIOD OF RECORD.--April 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	TURBIDITY (NTU)	SPECIFIC CONDUCTANCE (MICROMHOS)	OXYGEN, DISSOLVED (MG/L)	PH FIELD (UNITS)	ALKALINITY (MG/L AS CACO3)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT											
11...	1400	80010	20.0	---	1.0	570	8.4	7.7	140	210	72
NOV											
15...	1430	80010	14.0	236	1.0	500	10.4	8.1	160	220	61
DEC											
11...	1100	80010	9.5	256	2.0	599	11.3	8.1	170	250	84
JAN											
15...	1130	80010	5.5	190	.21	535	12.0	8.1	160	240	80
FEB											
27...	1230	80010	7.3	220	.50	565	13.2	7.9	160	250	94
MAR											
12...	1200	80010	5.1	419	1.0	588	10.2	8.5	140	230	88
APR											
16...	1100	80010	10.0	440	3.0	565	----	8.0	160	240	81
MAY											
14...	1130	80010	18.0	213	2.5	695	9.3	7.9	180	260	80
28...	1635	-----	23.9	---	---	665	8.4	7.7	---	---	--
JUN											
11...	1100	80010	18.0	296	4.5	620	8.9	7.7	150	220	72
JUL											
11...	1230	80010	26.0	---	---	423	11.2	8.3	140	180	45
23...	1230	80010	24.5	191	6.2	580	8.2	7.8	150	210	61
SEP											
03...	1215	80010	20.5	443	1.0	492	----	7.7	150	220	74

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	SODIUM PERCENT	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, DISSOLVED (TONS PER AC-FT)
OCT											
11...	57	17	22	.7	24	27	4.6	303	285	---	.41
NOV											
15...	59	18	21	.6	23	25	4.0	317	299	202	.43
DEC											
11...	67	21	21	.6	21	25	3.8	363	341	251	.49
JAN											
15...	63	20	22	.6	23	27	5.2	332	322	170	.45
FEB											
27...	67	21	22	.6	16	26	4.0	354	335	210	.48
MAR											
12...	60	19	27	.8	20	32	4.7	382	322	432	.52
APR											
16...	62	21	21	.6	16	--	2.9	387	315	460	.53
MAY											
14...	66	23	24	.6	17	--	3.4	384	345	221	.52
28...	--	--	--	--	--	--	---	---	---	---	---
JUN											
11...	56	20	23	.7	18	--	4.0	351	300	281	.48
JUL											
11...	46	17	18	.6	17	--	2.8	---	241	---	.33
23...	55	18	22	.7	18	--	3.7	334	291	172	.45
SEP											
03...	60	18	15	.4	13	--	3.6	334	280	399	.45

04095000 LITTLE CALUMET RIVER NEAR McCOOL, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SULFATE DISSOLVED (MG/L AS SO4)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
OCT										
11...	42	52	.7	5.7	1.4	---	.27	---	----	.370
NOV										
15...	34	58	.6	5.3	1.5	1.1	.43	.23	.220	.230
DEC										
11...	39	75	.6	6.7	1.9	1.8	.55	.55	.180	.130
JAN										
15...	40	64	.9	6.9	2.0	2.1	.62	.83	.470	.480
FEB										
27...	40	72	.5	6.6	2.1	2.0	.47	.38	.430	.450
MAR										
12...	47	66	.5	7.2	2.7	2.7	.79	.82	.380	.410
APR										
16...	36	62	.4	6.8	---	2.0	---	.42	.130	----
MAY										
14...	39	68	.6	7.5	2.1	1.8	.68	.35	.300	.280
28...	--	--	--	----	---	---	---	---	----	----
JUN										
11...	31	60	.7	9.7	2.6	2.4	.92	.80	.400	.380
JUL										
11...	26	39	.5	4.2	---	1.2	---	.32	.180	----
23...	38	53	.8	6.5	---	1.5	---	.31	.260	----
SEP										
03...	25	54	.5	10	1.6	1.3	.66	.43	.140	.170

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS NH4)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS PO4)
OCT										
11...	---	---	.75	----	.45	---	6.2	.090	.050	.28
NOV										
15...	---	.21	.81	.68	.28	.28	6.5	.070	.050	.21
DEC										
11...	---	.00	1.2	1.1	.16	.23	8.3	.060	.020	.18
JAN										
15...	---	.00	.86	.82	.58	.61	8.7	.090	.100	.28
FEB										
27...	---	.11	1.2	1.2	.54	.55	9.4	.050	.040	.15
MAR										
12...	---	.00	1.5	1.5	.50	.49	12	.110	.040	.34
APR										
16...	---	---	1.6	1.4	---	.17	----	.090	.040	.28
MAY										
14...	---	.31	1.1	1.1	.34	.39	9.1	.110	.040	.34
28...	---	---	----	----	---	---	----	----	----	---
JUN										
11...	---	.10	1.3	1.2	.46	.52	12	.160	.100	.49
JUL										
11...	.50	---	----	.66	---	.23	----	----	.020	---
23...	---	---	1.3	.91	---	.33	----	.080	.050	.25
SEP										
03...	---	.26	.78	.77	.21	.18	7.1	.160	.060	.49

04095000 LITTLE CALUMET RIVER NEAR McCOOL, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT										
11...	----	----	--	-----	-----	---	----	--	--	--
NOV										
15...	5.3	----	--	-----	-----	---	3200	29	18	78
DEC										
11...	5.0	----	--	-----	-----	---	----	--	--	--
JAN										
15...	4.0	----	--	2200	K136	K71	----	--	--	--
FEB										
27...	----	6.4	.5	K4900	200	K36	----	37	22	98
MAR										
12...	9.2	----	--	27000	K4000	574	2000	39	44	92
APR										
16...	11	----	--	30000	K8000	920	----	--	--	--
MAY										
14...	----	4.4	.8	13700	K8000	250	2800	42	24	93
28...	----	----	--	-----	-----	---	----	--	--	--
JUN										
11...	11	----	--	10400	960	328	1800	67	54	91
JUL										
11...	----	2.6	--	-----	-----	---	----	--	--	--
23...	5.0	----	--	-----	-----	---	1300	24	12	95
SEP										
03...	----	11	1.2	-----	-----	---	5400	--	--	--

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 north (1.6 km) of Porter.

DRAINAGE AREA.--3.40 mi^2 (8.81 km^2).

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 585.00 ft (178.308 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair above 1.0 cfs and poor below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53 ft^3/s (1.50 m^3/s), Sept. 1, 1980, gage height, 4.91 ft (1.497 m); maximum gage height, 6.63 ft (2.021 m) Mar. 4, 1979, (backwater from ice); no flow at times each year.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 35 ft^3/s (0.99 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
June 2	0400	47	1.33	4.79	1.460
Sept. 1	1300	*53	1.50	*4.91	1.496

No flow at times during October, July and August.

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1500	*40	1.13	*6.63	2.021
Apr. 26	1200	38	1.08	4.59	1.399

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.69	3.0	1.9	.24	1.2	6.0	2.7	22	.18	.00	38
2	.00	.52	3.0	1.6	.22	1.0	6.8	2.4	37	.10	.00	19
3	.00	.35	2.3	1.3	.21	.98	6.8	2.2	17	.06	.00	4.3
4	.02	.21	2.3	1.1	.21	1.0	7.2	1.9	7.4	.04	.00	.55
5	.03	.14	5.0	.86	.21	1.0	5.7	1.6	3.6	.69	.00	.18
6	.06	.09	7.4	.72	.21	1.1	4.3	1.4	5.0	.51	.00	.07
7	.13	.06	7.2	.59	.21	1.2	3.6	1.1	15	.26	.00	.07
8	.19	.05	5.5	.48	.21	1.4	8.8	1.1	22	.09	.00	.09
9	.12	.07	3.6	.40	.21	2.4	14	.98	9.0	.40	.00	.13
10	.05	.70	2.7	.37	.21	4.0	11	.92	4.7	.55	.66	.14
11	.02	1.1	2.2	2.6	.21	6.2	7.8	.92	2.8	.26	1.1	.13
12	.01	.80	3.6	2.0	.21	4.5	8.4	.86	2.0	.10	1.3	.11
13	.00	.55	3.1	.69	.21	3.5	6.6	5.5	1.4	.06	.70	.10
14	.00	.39	2.8	.64	.21	2.7	7.0	4.7	1.2	.04	16	.08
15	.00	.29	2.3	.80	.21	3.9	9.4	3.9	1.5	.02	13	.07
16	.01	.21	2.1	3.5	.21	14	7.8	2.8	1.5	.00	6.0	1.5
17	.01	.17	1.8	7.0	.21	26	5.8	6.0	1.3	.00	5.3	13
18	.01	.14	1.2	6.4	.22	19	4.7	9.0	1.2	.00	3.9	9.5
19	.01	.13	1.2	4.6	.60	9.8	3.9	6.2	1.1	.00	12	6.4
20	.01	.12	1.7	4.2	1.6	8.4	3.4	4.3	1.1	.00	14	4.4
21	.01	4.0	2.0	2.3	7.8	8.0	3.0	3.2	.86	.04	6.4	3.0
22	.70	9.0	3.2	1.4	20	6.4	2.7	2.3	.64	.02	1.8	5.0
23	.50	8.4	4.5	1.1	14	4.6	2.2	1.8	.51	.02	.51	7.6
24	.35	5.0	10	.59	8.0	6.8	2.1	1.5	.51	.01	.14	4.5
25	.22	4.3	12	.50	7.2	7.2	2.1	1.2	.40	.00	.04	2.7
26	.15	19	9.0	.45	3.5	5.7	2.0	.98	.31	.00	.00	1.5
27	.10	15	6.0	.39	2.1	4.5	2.0	.74	.24	.00	.00	.95
28	.07	11	4.3	.34	1.8	7.6	2.2	.69	.74	.00	.00	.50
29	.04	6.6	3.5	.30	1.5	7.0	2.7	2.3	.51	.00	.00	.30
30	.10	4.0	2.8	.28	-----	6.3	2.8	1.9	.31	.00	.00	.20
31	.31	-----	2.4	.26	-----	5.4	-----	1.6	------	.00	5.8	------
TOTAL	3.23	93.08	123.7	49.66	71.93	182.78	162.8	78.69	162.83	3.45	88.65	124.07
MEAN	.10	3.10	3.99	1.60	2.48	5.90	5.43	2.54	5.43	.11	2.86	4.14
MAX	.70	19	12	7.0	20	26	14	9.0	37	.69	16	38
MIN	.00	.05	1.2	.26	.21	.98	2.0	.69	.24	.00	.00	.07
CFSM	.03	.91	1.17	.47	.73	1.74	1.60	.75	1.60	.03	.84	1.22
IN.	.04	1.02	1.35	.54	.79	2.00	1.78	.86	1.78	.04	.97	1.36

CAL YR 1979 TOTAL 941.28 MEAN 2.58 MAX 36 MIN .00 CFSM .76 IN 10.30
WTR YR 1980 TOTAL 1144.87 MEAN 3.13 MAX 38 MIN .00 CFSM .92 IN 12.52

04095100 DERBY DITCH AT BEVERLY SHORES, IN

LOCATION.--Lat 41°41'02", long 86°59'55", in SW¼SE¼ sec.4, T.37 N., R.5 W., Porter County, Hydrologic Unit 04040001, on left bank, 50 ft (15.2 m) above 48 in (1219 mm) corrugated metal pipe, which directs the flow under Fairwater Avenue and into Lake Michigan at Beverly Shores.

DRAINAGE AREA.--4.64 mi^2 (12.02 km^2).

PERIOD OF RECORD.--October 1979 to Current year.

GAGE.--Water Stage Recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair above 1.0 cfs and poor below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 28 ft^3/s (0.784 m^3/s) June 7, 1980, gage height 7.28 ft (2.219 m). Minimum daily, 0.10 (0.003 m^3/s) Oct. 1.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 37 ft^3/s (1.037 m^3/s) Mar. 4, 1979, gage height 7.73 ft (2.356 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge 28 ft^3/s (0.784 m^3/s) June 7, gage height 7.28 ft (2.219 m); minimum daily, 0.10 (0.003 m^3/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	1.5	3.8	3.2	.71	3.1	7.5	2.6	7.0	.81	.15	7.2
2	.18	1.2	3.4	2.7	.67	2.5	8.1	2.4	16	.70	.15	5.9
3	.10	.98	3.1	2.3	.64	2.2	8.7	2.1	15	.70	.15	4.1
4	.10	.65	2.9	1.9	.65	2.1	8.7	1.9	11	.65	.13	2.6
5	.18	.51	3.4	1.7	.65	2.1	7.5	1.8	8.3	1.5	.18	1.5
6	.65	.43	4.6	1.4	.65	2.1	5.9	1.5	9.7	.92	.18	1.0
7	1.1	.33	4.6	1.2	.65	2.2	5.1	1.4	11	.65	.15	.81
8	1.2	.26	4.6	1.0	.65	2.3	8.5	1.3	23	.46	.15	.92
9	.86	.23	4.2	.86	.65	2.5	15	1.2	17	.42	.15	.86
10	.52	1.5	3.4	.81	.65	3.2	13	1.2	14	.42	.30	.81
11	.30	1.0	3.2	1.9	.65	8.1	11	1.2	10	.23	.42	.60
12	.21	.70	3.6	1.5	.65	4.7	10	2.8	7.6	.20	.50	.50
13	.20	.47	3.7	1.3	.65	3.2	9.9	3.1	5.9	.23	.42	.50
14	.20	.40	3.4	1.0	.65	3.3	8.0	2.5	5.0	.18	1.0	.46
15	.19	.34	2.9	1.3	.65	4.3	8.5	2.0	4.8	.15	.86	.42
16	.19	.30	2.5	2.2	.66	8.3	9.0	2.3	4.2	.15	.42	.50
17	.19	.27	2.5	5.1	.66	19	7.6	3.3	3.5	.15	1.1	8.7
18	.19	.25	1.7	5.2	.69	17	6.4	3.4	3.0	.15	.98	7.5
19	.20	.25	1.6	4.8	.81	15	5.2	3.0	2.6	.15	1.4	5.1
20	.22	.24	1.6	3.6	1.1	12	4.8	2.5	2.5	.15	2.2	3.8
21	1.8	1.2	1.6	2.7	2.3	11	4.2	2.0	2.0	.30	1.5	2.8
22	2.7	2.1	2.4	2.4	8.5	9.0	3.8	1.7	1.6	.23	.86	2.3
23	2.8	2.2	3.6	2.1	11	7.3	3.5	1.5	1.3	.20	.50	5.1
24	1.8	1.9	7.5	1.5	8.0	8.1	2.9	1.3	1.2	.20	.38	3.7
25	1.2	1.8	11	1.2	5.2	8.8	2.7	1.2	1.0	.15	.34	2.7
26	.84	1.8	11	1.1	4.2	7.3	2.4	.98	.92	.15	.30	2.0
27	.52	4.4	9.2	1.0	4.2	6.1	2.3	.75	.92	.15	.23	1.5
28	.38	7.5	6.5	.98	3.5	5.8	2.3	.70	1.3	.18	.20	1.2
29	.25	6.2	5.2	.89	3.4	10	2.5	2.0	.98	.18	.18	.98
30	.25	4.8	4.2	.82	-----	9.7	2.7	1.6	.86	.18	.20	.86
31	.81	-----	3.7	.75	-----	8.8	-----	1.4	------	.15	1.7	-----
TOTAL	20.43	45.71	130.6	60.41	64.04	211.1	197.7	58.63	193.18	11.04	17.38	76.92
MEAN	.66	1.52	4.21	1.95	2.21	6.81	6.59	1.89	6.44	.36	.56	2.56
MAX	2.8	7.5	11	5.2	11	19	15	3.4	23	1.5	2.2	8.7
MIN	.10	.23	1.6	.75	.64	2.1	2.3	.70	.86	.15	.13	.42
CFSM	.14	.33	.91	.42	.48	1.47	1.42	.41	1.39	.08	.12	.55
IN.	.16	.37	1.05	.48	.51	1.69	1.58	.47	1.55	.09	.14	.62

WTR YR 1980 TOTAL 1087.14 MEAN 2.97 MAX 23 MIN .10 CFSM .64 IN 8.71

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).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 584.02 ft (178.009 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage height record Dec. 1 to Jan 14, which are fair.

AVERAGE DISCHARGE.--11 years, 68.2 ft³/s (1.931 m³/s), 17.12 in/yr (435 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 200 ft³/s (5.66 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. 26	1000	281	7.96	4.71	1.436	June 2	0900	368	10.4	5.42	1.652
Dec. 25	unknown	320	9.00	unknown		June 8	0500	*556	15.7	*6.91	2.106
Feb. 22	1700	235	6.66	4.33	1.320	Sept. 1	1300	226	6.40	4.25	1.295
Mar. 17	1700	486	13.8	6.37	1.942	Sept. 17	0700	281	7.96	4.71	1.436
Apr. 9	0400	285	8.07	4.74	1.445						

Minimum daily discharge, 28 ft³/s (0.79 m³/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	63	73	86	44	63	87	60	178	39	30	151
2	47	43	68	76	43	60	109	58	290	38	31	87
3	33	37	65	68	43	57	118	56	118	36	32	57
4	31	35	65	63	43	56	143	55	76	37	30	47
5	33	35	97	59	43	58	102	53	63	66	31	42
6	38	35	129	57	42	62	84	51	92	47	29	40
7	60	36	110	54	42	58	78	50	150	40	30	40
8	37	36	100	49	42	61	121	50	400	38	28	41
9	32	40	92	47	42	64	238	51	103	42	54	44
10	30	53	88	55	42	81	164	52	87	43	72	43
11	31	49	86	77	42	99	115	52	71	38	69	39
12	34	42	89	70	42	78	120	50	60	36	62	39
13	31	40	89	56	43	68	96	86	53	36	51	45
14	31	38	80	55	43	65	95	61	51	34	90	39
15	32	38	70	56	43	81	136	53	60	34	67	39
16	32	38	65	70	43	180	111	52	58	32	47	53
17	33	37	61	94	44	412	85	64	51	32	82	245
18	32	37	58	79	45	304	77	71	49	31	61	91
19	32	36	56	68	47	165	72	62	50	32	69	61
20	31	36	54	62	57	121	68	56	50	32	91	68
21	31	74	53	58	69	103	64	53	46	36	61	58
22	34	82	55	56	226	86	63	49	44	36	46	70
23	45	72	86	53	168	78	59	48	44	34	41	100
24	41	56	135	50	112	99	59	48	45	31	38	64
25	37	55	275	49	87	113	60	47	43	30	36	55
26	36	234	180	48	81	87	58	44	41	32	35	49
27	35	138	120	46	73	80	58	41	42	39	33	44
28	34	119	104	46	67	79	64	42	47	35	32	45
29	34	90	100	45	65	162	64	51	42	33	31	42
30	34	75	96	44	----	111	61	47	39	32	37	41
31	34	----	94	44	----	93	----	54	----	32	68	----
TOTAL	1094	1799	2893	1840	1823	3284	2829	1667	2543	1133	1514	1879
MEAN	35.3	60.0	93.3	59.4	62.9	106	94.3	53.8	84.8	36.5	48.8	62.6
MAX	60	234	275	94	226	412	238	86	400	66	91	245
MIN	30	35	53	44	42	56	58	41	39	30	28	39
CFSM	.65	1.11	1.73	1.10	1.16	1.96	1.74	.99	1.57	.68	.90	1.16
IN.	.75	1.24	1.99	1.27	1.25	2.26	1.95	1.15	1.75	.78	1.04	1.29

CAL YR 1979 TOTAL 26949 MEAN 73.8 MAX 1290 MIN 30 CFSM 1.36 IN 18.53
WTR YR 1980 TOTAL 24298 MEAN 66.4 MAX 412 MIN 28 CFSM 1.23 IN 16.71

04095300 TRAIL CREEK AT MICHIGAN CITY, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-
SEDIMENT DISCHARGE: October 1977 to Septmeber 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT 23...	1110	15.0	51	8	1.1	--	--	--	---
NOV 28...	1155	----	117	47	15	--	--	--	---
JAN 17...	0910	6.0	108	80	23	--	--	--	---
MAR 05...	0845	3.0	62	18	3.0	--	--	--	---
APR 22...	1555	17.5	63	37	6.3	93	--	--	---
JUN 11...	1015	----	73	75	15	94	97	99	100
AUG 08...	0845	21.5	28	33	2.5	--	--	--	---
SEP 17...	1130	----	265	180	129	--	--	--	---

04096100 GALENA RIVER NEAR LAPORTE, IN

LOCATION.--Lat 41°44'54", long 86°40'30", in SE¼NW¼ sec.17, T.38 N., R.2 W., LaPorte County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on County Road 125 East, 1.3 miles (2.1 km) upstream from Indiana-Michigan State line, and 9.8 miles (15.8 km) north of Courthouse in LaPorte.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft (190.500 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 24.8 ft³/s (0.705 m³/s), 19.58 in/yr (497 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft³/s (18.4 m³/s) Mar. 4, 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. 26	1300	109	3.09	4.38	1.335	Mar. 17	1600	*179	5.07	*5.20	1.585
Dec. 25	1700	127	3.60	4.52	1.378	June 8	0500	106	3.00	4.10	1.250

Minimum daily discharge, 11 ft³/s (0.31 m³/s) July 14-20, 24-26, Aug. 1, 4-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	26	28	27	14	16	30	19	44	13	11	35
2	22	23	26	28	14	16	34	18	75	13	12	30
3	17	19	24	26	13	15	38	17	43	12	12	21
4	15	17	30	24	13	17	49	17	29	12	11	19
5	16	16	37	20	12	22	38	16	21	23	11	18
6	33	16	50	18	12	22	33	15	28	18	11	15
7	63	15	41	17	12	19	30	15	38	15	11	15
8	30	15	35	16	12	16	40	15	82	13	11	15
9	26	17	31	15	12	20	74	15	34	15	15	16
10	24	24	30	15	12	26	58	15	30	15	19	16
11	22	26	29	30	12	30	41	15	25	13	23	15
12	21	22	31	27	12	24	42	15	21	13	24	15
13	20	20	27	21	12	22	37	23	20	12	24	16
14	19	18	22	18	12	22	37	18	19	11	66	16
15	19	18	20	17	12	27	49	16	20	11	32	16
16	18	17	19	25	13	58	40	15	20	11	20	16
17	18	16	18	37	13	145	31	19	17	11	30	62
18	17	16	18	30	13	95	26	23	16	11	25	37
19	17	16	18	26	14	58	24	19	16	11	22	26
20	17	16	17	24	15	45	23	17	16	11	26	23
21	16	28	17	22	21	39	22	16	16	12	22	21
22	18	40	20	21	75	32	21	15	15	12	18	22
23	21	38	31	20	60	29	19	14	15	12	16	29
24	21	29	55	18	42	37	19	14	15	11	15	23
25	19	25	107	17	28	42	19	13	14	11	14	22
26	17	89	74	16	22	32	18	12	14	11	14	21
27	17	57	46	15	19	29	18	12	13	17	13	18
28	17	52	39	15	18	29	20	12	15	14	13	17
29	17	39	35	15	17	50	21	13	14	13	13	17
30	16	32	31	15	----	38	19	16	13	12	13	16
31	16	----	29	15	----	33	----	18	----	12	19	----
TOTAL	641	802	1035	650	556	1105	970	497	758	401	586	648
MEAN	20.7	26.7	33.4	21.0	19.2	35.6	32.3	16.0	25.3	12.9	18.9	21.6
MAX	63	89	107	37	75	145	74	23	82	23	66	62
MIN	12	15	17	15	12	15	18	12	13	11	11	15
CFSM	1.20	1.55	1.94	1.22	1.12	2.07	1.88	.93	1.47	.75	1.10	1.26
IN.	1.39	1.73	2.24	1.41	1.20	2.39	2.10	1.07	1.64	.87	1.27	1.40

CAL YR 1979 TOTAL 9977.9 MEAN 27.3 MAX 406 MIN 9.9 CFSM 1.59 IN 21.58
WTR YR 1980 TOTAL 8649.0 MEAN 23.6 MAX 145 MIN 11 CFSM 1.37 IN 18.70

04096100 GALENA RIVER NEAR LAPORTE, IN--Continued

REVISIONS.--Some revised peak discharges for water years 1970-76, 1978 and revised daily discharges, in cubic feet per second, for high-water periods in 1970, 1972 and 1973, are given below. These figures supersede those publised in the Indiana WRD Reports for 1970-76, 1978.

PEAKS

Water year	Date	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
1970	Nov. 19, 1969	91	2.58	4.12	1.256
	Apr. 6, 1970	158	4.47	4.95	1.509
	Apr. 20, 1970	*211	5.98	*5.48	1.670
	May 15, 1970	174	4.93	5.16	1.573
	Sept. 24, 1970	179	5.07	5.20	1.585
1971	Feb. 20, 1971	114	3.23	4.44	1.353
1972	Dec. 11, 1971	172	4.87	5.14	1.567
	Dec. 30, 1971	213	6.03	5.50	1.676
	Mar. 13, 1972	*350	9.91	*6.23	1.899
	May 9, 1972	103	2.92	4.29	1.308
	Sept. 18, 1972	117	3.31	4.48	1.366
	Sept. 29, 1972	125	3.54	4.57	1.393
1973	Oct. 23, 1972	136	3.85	4.71	1.436
	Nov. 8, 1972	103	2.92	4.28	1.305
	Nov. 14, 1972	109	3.09	4.37	1.332
	Dec. 6, 1972	134	3.79	4.69	1.430
	Dec. 13, 1972	132	3.74	4.66	1.420
	Dec. 30, 1972	343	9.71	6.21	1.893
	Jan. 4, 1973	133	3.77	4.68	1.426
	Apr. 1, 1973	292	8.27	5.96	1.817
	Apr. 22, 1973	*433	12.3	*6.47	1.972
	May 28, 1973	171	4.84	5.13	1.564
1974	Jan. 21, 1974	*245	6.94	*5.70	1.737
	Apr. 4, 1974	164	4.64	5.02	1.530
1975	Jan. 10, 1975	*191	5.41	*5.31	1.618
1976	Feb. 21, 1976	266	7.53	5.82	1.774
	Mar. 5, 1976	316	8.95	*6.08	1.853
	Apr. 25, 1976	216	6.12	5.52	1.682
	May 6, 1976	219	6.20	5.54	1.689
1978	Mar. 21, 1978	*266	7.533	*5.82	1.774
	Apr. 6, 1978	185	5.239	5.26	1.603
	July 23, 1978	178	5.041	5.19	1.582

DAILY DISCHARGES

1970 Water Year

Apr 3... 66 Apr 5...110 Apr 7... 85 Apr 20...174
Apr 4... 91 Apr 6...140 Apr 8... 66 Apr 21... 87

Month	Total	Mean	Max	Min	Cfsm	In.
April 1970	1679	56.0	174	28	3.26	3.64
Wtr Yr 1970	8836	24.2	174	6.9	1.41	19.14
Cal Yr 1970	9068	24.8	174	6.9	1.44	19.55

1972 Water Year

Mar 13...240 Mar 14...124

Month	Total	Mean	Max	Min	Cfsm	In.
March 1972	1454	46.9	240	24	2.73	3.15
Wtr Yr 1972	9280.1	25.4	240	8.1	1.48	20.14

1973 Water Year

Dec 6...106 Dec 14... 56 Apr 1...200 Apr 22...258
Dec 7... 54 Dec 30...217 Apr 2... 76 Apr 23...125

Month	Total	Mean	Max	Min	Cfsm	In.
December 1972	1605	51.8	217	27	3.01	3.47
April 1973	1488	49.6	258	21	2.88	3.21
Wtr Yr 1973	11910.1	32.6	258	6.7	1.90	25.79
Cal Yr 1972	10918.1	29.8	217	8.1	1.73	23.55

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT 22...	1700	16.0	15	7	.28	--	--	--	---
NOV 28...	1330	5.0	55	19	2.8	--	--	--	---
JAN 17...	1130	4.5	38	40	4.1	--	--	--	---
MAR 05...	1130	3.0	22	18	1.1	--	--	--	---
APR 22...	1310	16.0	20	70	3.8	70	--	--	---
JUN 10...	1745	----	28	51	3.9	84	91	98	100
AUG 07...	0950	20.5	11	34	1.0	--	--	--	---
SEP 16...	1700	17.0	16	31	1.3	--	--	--	---

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 except those for winter periods which are poor. Occasional regulation by control structure for Lime Lake.

AVERAGE DISCHARGE.--11 years, 6.70 ft^3/s (0.190 m^3/s), 5.20 in/yr (132 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34 ft^3/s (0.96 m^3/s) Mar. 5, 1976, gage height, 4.59 ft (1.399 m); maximum gage height, 4.61 ft (1.405 m) June 7, 1980; no flow at times during 1971 and 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28 ft^3/s (0.79 m^3/s) June 7, gage height, 4.61 ft (1.405 m); minimum daily, 0.24 ft^3/s (0.007 m^3/s) Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.45	2.7	3.9	3.2	13	21	20	10	3.1	14	8.7
2	.52	.39	2.5	3.8	3.1	12	21	20	16	2.9	4.4	9.1
3	.51	.37	2.4	3.7	3.0	11	22	20	15	2.7	4.2	8.8
4	.48	.38	2.2	3.6	2.9	9.7	23	18	14	2.7	2.9	8.5
5	.47	.39	2.2	3.5	2.8	8.8	23	17	14	3.5	3.0	8.2
6	.43	.37	2.0	3.6	2.7	8.9	23	7.8	15	3.6	3.0	7.8
7	.45	.37	2.1	3.6	2.7	8.4	23	.86	18	3.4	3.1	7.6
8	.45	.37	2.0	3.4	2.6	8.8	23	.88	27	3.2	3.1	12
9	.44	.43	2.0	3.3	2.5	8.8	24	.96	24	3.9	3.1	20
10	.41	.52	1.9	3.2	2.5	8.6	24	1.2	22	4.3	4.5	18
11	.37	.50	1.9	3.9	2.4	8.2	23	1.3	20	4.0	5.4	17
12	.36	.49	2.0	4.0	2.4	8.0	23	1.5	19	4.4	5.4	15
13	.33	.45	1.9	4.0	2.3	8.0	23	2.0	13	5.4	5.3	14
14	.33	.45	1.8	3.9	2.5	7.9	24	2.2	4.9	5.3	5.9	13
15	.32	.45	1.9	3.9	2.4	7.6	24	2.3	6.5	4.9	5.5	12
16	.27	.43	1.7	4.1	2.4	7.5	23	2.4	7.5	5.1	5.1	12
17	.28	.45	1.6	4.4	2.3	9.7	23	3.7	8.0	4.7	5.9	13
18	.31	.44	1.5	4.3	2.3	11	23	6.8	8.2	4.3	6.4	13
19	.28	.49	1.4	4.1	2.2	12	22	7.4	8.6	4.0	6.3	12
20	.24	.48	1.4	4.0	2.1	13	22	7.6	8.6	3.9	8.8	12
21	.25	.57	1.4	3.9	2.1	15	22	7.8	8.8	3.7	10	12
22	.32	.76	1.8	3.8	2.3	16	22	8.0	8.9	3.6	9.7	12
23	.39	.99	2.1	3.8	2.7	17	21	8.2	8.2	3.1	8.8	12
24	.31	1.0	3.6	3.9	3.7	18	21	8.6	7.5	2.8	8.3	11
25	.29	1.1	4.6	4.0	13	19	20	8.3	6.9	2.5	7.9	11
26	.29	2.6	4.5	3.9	17	19	20	7.6	6.3	2.3	7.5	10
27	.31	3.1	4.4	3.8	16	19	20	7.2	5.7	2.2	7.1	9.6
28	.26	3.4	4.3	3.7	15	19	21	6.9	4.9	13	6.7	9.2
29	.27	3.1	4.1	3.6	14	20	21	6.9	4.2	22	6.6	8.9
30	.27	2.9	4.1	3.5	-----	21	21	7.6	3.3	20	6.4	8.7
31	.33	-----	4.0	3.3	-----	21	----	9.3	-----	18	7.2	-----
TOTAL	10.98	28.19	78.0	117.4	137.1	394.9	666	230.30	344.0	172.5	191.5	346.1
MEAN	.35	.94	2.52	3.79	4.73	12.7	22.2	7.43	11.5	5.56	6.18	11.5
MAX	.52	3.4	4.6	4.4	17	21	24	20	27	22	14	20
MIN	.24	.37	1.4	3.2	2.1	7.5	20	.86	3.3	2.2	2.9	7.6
CFSM	.02	.05	.14	.22	.27	.73	1.27	.43	.66	.32	.35	.66
IN.	.02	.06	.17	.25	.29	.84	1.42	.49	.73	.37	.41	.74

CAL YR 1979 TOTAL 1647.04 MEAN 4.51 MAX 18 MIN .24 CFSM .26 IN 3.50
WTR YR 1980 TOTAL 2716.97 MEAN 7.42 MAX 27 MIN .24 CFSM .42 IN 5.78

04099000 ST. JOSEPH RIVER AT MOTTVILLE, MI

LOCATION.--41°48'03", long 85°45'22", in SW¼ sec.6, T.8 S., R.12 W., Michigan meridian, St. Joseph County, Hydrologic Unit 04050001, on right bank 500 ft (152 m) upstream from bridge on U.S. Highway 12 at Mottville, 0.4 mi (0.6 km) downstream from Michigan Power Co. hydroelectric plant, 4 mi (6 km) upstream from Pigeon River, and at mile 96 (154 km).

DRAINAGE AREA.--1,866 mi^2 (4,833 km^2).

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1930, 1932, 1938, 1940-42, 1945. WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 755.3 ft (230.22 m) Michigan Power Co. datum. Prior to Oct. 1, 1951, at site 0.4 mi (0.6 km) upstream at datum 4.2 ft (1.28 m) higher.

REMARKS.--Records good. Flow regulated by powerplants above station. Several observations of water temperature were made during the year. National Weather Service gage-height telemark at station.

AVERAGE DISCHARGE.--57 years, 1,550 ft^3/s (43.90 m^3/s), 11.28 in/yr (287 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft^3/s (303 m^3/s) Apr. 27, 1950, gage height, 10.76 ft (3.280 m), present datum; minimum daily, 39 ft^3/s (1.10 m^3/s) Oct. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,660 ft^3/s (160 m^3/s) June 11, gage height, 7.17 ft (2.185 m); minimum, 78 ft^3/s (2.21 m^3/s) Oct. 31, gage height, 1.09 ft (0.332 m); minimum daily, 659 ft^3/s (18.7 m^3/s) Oct. 1, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	659	1230	2090	2720	1550	1870	3200	2440	1850	1360	1510	2060
2	1110	1190	2030	2630	1470	1760	3210	2230	2280	1580	1450	2590
3	945	1350	1900	2620	1480	1640	3180	2100	2660	1350	1470	2620
4	962	1340	1870	2450	1480	1610	3190	2210	3050	1250	1590	3020
5	687	1280	1750	2390	1390	1590	3490	2180	3200	1410	1700	3410
6	1140	1220	1800	2120	1340	1590	3540	2100	3630	1920	1630	3000
7	904	1280	1800	1960	1370	1580	3680	2050	3820	1990	1780	2940
8	687	1160	1860	1840	1390	1560	3900	1840	5080	1830	1560	2840
9	1070	1310	1820	1690	1370	1560	3850	1770	5020	1970	1400	2380
10	1350	1240	1830	1670	1390	1580	3900	1730	5650	2590	1490	2560
11	1090	1120	1810	1840	1250	1580	4070	1680	5500	2020	1590	2370
12	715	1270	1790	1940	1180	1540	4030	1910	5330	2140	1610	2250
13	880	1150	1790	1970	1330	1500	3930	1790	5030	2130	1640	2060
14	1040	1000	1790	2030	1380	1540	3890	1710	4620	2120	1570	1990
15	780	1260	1740	2060	1390	1560	3790	1830	4420	2080	1720	1860
16	1190	970	1700	2010	1390	1540	3660	1550	3810	1960	1700	1830
17	880	1240	1690	2010	1300	1680	3650	1760	3640	2060	1900	1950
18	825	995	1620	2030	1140	2290	3460	2020	3410	1910	2290	2190
19	920	864	1520	2010	1350	3090	3360	1950	3350	1790	2130	2180
20	970	1080	1540	2000	1450	3590	3230	1980	3060	1750	2320	2030
21	818	1410	1510	2020	1340	3750	3140	2220	2880	1780	2520	2210
22	659	1510	1510	1980	1610	3750	2920	2330	2820	1530	2520	2240
23	1060	1240	1520	1910	1720	3780	2940	2250	2330	1350	2480	2160
24	1150	1120	1690	1770	1940	3820	2740	2190	2390	1410	2440	2210
25	1070	1460	1670	1740	2260	3760	2590	2130	2110	1310	2410	2090
26	970	1900	2560	1770	2140	3670	2540	2020	2030	1310	2320	1880
27	1160	2050	3010	1740	2140	3700	2510	1820	1880	1310	2330	1940
28	1160	2090	3450	1610	2120	3530	2430	1780	1780	1340	2110	1910
29	929	2160	3120	1520	2000	3510	2150	1770	1700	1310	1910	1880
30	962	2110	3050	1440	-----	3500	2350	1640	1470	1250	1870	1920
31	958	-----	2830	1490	-----	3460	-----	1790	-----	1350	1690	-----
TOTAL	29700	40599	61660	60980	44660	76480	98520	60770	99800	52460	58650	68570
MEAN	958	1353	1989	1967	1540	2467	3284	1960	3327	1692	1892	2286
MAX	1350	2160	3450	2720	2260	3820	4070	2440	5650	2590	2520	3410
MIN	659	864	1510	1440	1140	1500	2150	1550	1470	1250	1400	1830
CFSM	.51	.73	1.07	1.05	.83	1.32	1.76	1.05	1.78	.91	1.01	1.23
IN.	.59	.81	1.23	1.22	.89	1.52	1.96	1.21	1.99	1.05	1.17	1.37

CAL YR 1979 TOTAL 660283 MEAN 1809 MAX 5230 MIN 526 CFSM .97 IN 13.16
WTR YR 1980 TOTAL 752849 MEAN 2057 MAX 5650 MIN 659 CFSM 1.10 IN 15.01

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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1947, published as "near Flint". Published as Pigeon Creek at Hogback Lake Outlet near Angola, October 1947 to September 1971, and Pigeon Creek and Hogback Lake near Angola, October 1971 to September 1974.

REVISED RECORDS.--WSP 1144: 1948. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft (286.512 m) National Geodetic Vertical Datum of 1929. Prior to October 1947, nonrecording gage at site 0.3 mile (0.5 km) downstream at different datum. October 1947 to Aug. 3, 1953, nonrecording gage at site 1.2 miles (1.9 km) upstream at same datum. Aug. 4, 1953, to Apr. 3, 1974, recording gage at site 1.3 miles (2.1 km) upstream at same datum. Apr. 18, 1974, to Sept. 2, 1974, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 75.3 ft^3/s (2.132 m^3/s), 9.65 in/yr (245 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft^3/s (21.1 m^3/s) Apr. 8, 1950, gage height, 14.95 ft (4.557 m); minimum daily, 3.4 ft^3/s (0.096 m^3/s) Oct. 25-27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 371 ft^3/s (10.5 m^3/s) Mar. 23, gage height, 10.87 ft (3.313 m); minimum daily, 15 ft^3/s (0.42 m^3/s) Oct. 20-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	85	168	46	83	277	108	71	46	87	58
2	17	17	83	153	45	76	268	103	79	46	86	58
3	16	17	78	138	44	70	260	98	96	44	82	59
4	16	17	73	121	43	66	277	93	129	43	77	61
5	16	17	68	109	43	64	310	87	151	45	73	64
6	16	17	65	98	42	61	328	83	151	48	69	69
7	17	17	62	89	42	59	334	79	148	50	65	72
8	17	17	59	81	41	58	331	75	156	53	62	71
9	17	18	58	74	41	59	324	72	176	58	58	69
10	17	18	57	69	40	63	319	70	190	65	57	66
11	17	18	55	68	40	72	310	68	196	71	58	63
12	16	18	54	66	39	86	296	67	188	79	58	60
13	16	18	54	65	39	94	280	66	172	83	60	58
14	16	18	54	65	39	95	266	67	154	85	62	56
15	16	18	54	65	38	93	260	68	139	82	62	54
16	16	18	53	64	38	93	260	68	123	79	62	52
17	16	17	53	63	38	123	257	69	109	73	62	53
18	16	17	51	63	38	183	247	81	97	69	63	56
19	16	17	49	63	39	249	232	102	87	65	65	60
20	15	17	48	63	40	295	216	126	80	63	69	61
21	15	17	47	63	41	327	198	144	73	59	75	61
22	15	21	46	62	45	356	178	145	68	55	81	59
23	15	25	47	62	55	369	167	137	65	51	83	56
24	15	27	53	60	70	369	153	124	61	50	81	54
25	15	33	75	58	86	366	141	112	58	48	78	52
26	15	36	123	56	96	359	127	100	56	46	74	50
27	16	45	166	53	98	346	116	90	54	45	69	47
28	16	57	190	52	96	324	114	83	52	51	65	45
29	16	70	199	50	89	310	112	77	49	60	62	44
30	16	83	194	49	----	295	110	72	46	72	59	43
31	16	----	182	48	----	286	----	70	----	82	58	----
TOTAL	496	762	2535	2358	1491	5749	7068	2804	3274	1866	2122	1731
MEAN	16.0	25.4	81.8	76.1	51.4	185	236	90.5	109	60.2	68.5	57.7
MAX	17	83	199	168	98	369	334	145	196	85	87	72
MIN	15	17	46	48	38	58	110	66	46	43	57	43
CFSM	.15	.24	.77	.72	.49	1.75	2.23	.85	1.03	.57	.65	.54
IN.	.17	.27	.89	.83	.52	2.02	2.48	.98	1.15	.65	.74	.61

CAL YR 1979 TOTAL 23896 MEAN 65.5 MAX 398 MIN 15 CFSM .62 IN 8.39
WTR YR 1980 TOTAL 32256 MEAN 88.1 MAX 369 MIN 15 CFSM .83 IN 11.32

04099510 PIGEON CREEK NEAR ANGOLA, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
OCT								
02...	1330	18.0	17	14	.64	---	---	---
09...	1330	17.0	17	8	.37	---	---	---
16...	1330	13.0	16	12	.52	---	---	---
24...	1230	----	15	2	.08	---	---	---
30...	1330	11.0	16	8	.35	---	---	---
NOV								
06...	1330	10.0	17	13	.60	---	---	---
13...	1330	6.0	18	18	.87	---	---	---
20...	1330	7.0	17	17	.78	---	---	---
27...	1330	5.0	45	8	.97	---	---	---
DEC								
04...	1330	4.0	78	6	1.3	---	---	---
12...	1600	4.0	56	5	.76	---	---	---
26...	1330	4.0	131	6	2.1	---	---	---
JAN								
02...	1330	4.0	154	5	2.1	---	---	---
08...	1330	3.0	73	6	1.2	---	---	---
15...	1330	3.0	63	4	.68	---	---	---
23...	1400	3.0	61	5	.82	---	---	---
28...	1330	4.0	53	3	.43	---	---	---
FEB								
04...	1330	4.0	44	3	.36	---	---	---
12...	1330	4.0	40	5	.54	---	---	---
19...	1330	4.0	39	5	.53	---	---	---
26...	1330	4.0	97	5	1.3	---	---	---
MAR								
05...	1530	2.0	61	5	.82	---	---	---
11...	1300	5.0	73	90	18	98	99	100
18...	1330	5.0	189	44	22	98	99	100
25...	1330	6.0	359	63	61	100	---	---
APR								
01...	1330	7.0	276	48	36	100	---	---
15...	1500	7.0	260	36	25	98	100	---
29...	1330	13.0	114	6	1.8	---	---	---
MAY								
06...	1300	14.0	84	21	4.8	---	---	---
07...	0940	12.0	79	65	14	---	---	---
13...	1300	15.0	64	22	3.8	---	---	---
20...	1300	17.0	127	16	5.5	---	---	---
27...	1400	20.0	95	14	3.6	---	---	---

04099510 PIGEON CREEK NEAR ANGOLA, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUN					
17...	1300	21.0	117	10	3.2
24...	1300	25.0	59	6	.96
JUL					
01...	1300	25.0	46	27	3.4
08...	1300	25.0	50	29	3.9
15...	1300	25.0	82	30	6.6
22...	0800	26.0	55	13	1.9
22...	0930	----	53	10	1.4
30...	1300	25.0	73	34	6.7
AUG					
05...	1300	25.0	72	29	5.6
12...	1300	25.0	58	15	2.3
19...	1330	25.0	66	24	4.3
25...	1300	25.0	78	17	3.6
SEP					
02...	1330	24.0	58	10	1.6
16...	1300	24.0	52	7	.98
23...	1300	23.0	56	5	.76
30...	1300	23.0	43	10	1.2

04099610 PRETTY LAKE INLET NEAR STROH, IN

LOCATION.--Lat 41°34'49", long 85°14'59", in SW¼NW¼ sec.15, T.36 N., R.11 E., Lagrange County, Hydrologic Unit 04050001, on left bank 400 ft (122 m) upstream from mouth, 2.6 miles (4.2 km) west of Stroh.

DRAINAGE AREA.--1.96 mi^2 (5.08 km^2), of which 1.32 mi^2 (3.42 km^2) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1911: Drainage area.

GAGE.--Water-stage recorder with steel V-notch weir, 0.5 ft^3/s (0.014 m^3/s) notch capacity. Datum of gage is 960.00 ft (292.608 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for periods of no gage-height record, Jan. 24 to Mar. 6, which are poor.

AVERAGE DISCHARGE.--17 years, 0.48 ft^3/s (0.014 m^3/s), 3.33 in/yr (85 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33 ft^3/s (0.93 m^3/s) Feb. 5, 1971, gage height, 9.30 ft (2.835 m); maximum gage height, 9.46 ft (2.883 m) Feb. 4, 1971 (backwater from ice); no flow at times during 1963-65.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13 ft^3/s (0.37 m^3/s) Mar. 17, gage height, 7.46 ft (2.274 m); minimum daily, 0.05 ft^3/s (0.001 m^3/s) Oct. 1, July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.11	.22	.45	.10	.36	.87	.53	.81	.20	.31	.36
2	.09	.08	.21	.41	.09	.29	.85	.48	3.2	.19	.28	.43
3	.07	.07	.21	.37	.09	.24	2.0	.48	1.4	.18	.28	.30
4	.07	.07	.20	.34	.09	.20	2.8	.46	.79	.18	.25	.35
5	.06	.07	.20	.31	.09	.19	1.3	.42	.74	.39	.23	.30
6	.07	.07	.21	.29	.09	.18	1.1	.39	.81	.35	.20	.24
7	.09	.07	.20	.27	.09	.19	.96	.38	1.4	.30	.19	.22
8	.07	.07	.20	.25	.08	.34	1.2	.38	1.7	.25	.14	.20
9	.07	.07	.18	.23	.08	1.0	1.2	.37	.97	.25	.12	.24
10	.07	.11	.18	.22	.08	1.1	1.1	.35	.70	.25	.57	.26
11	.08	.09	.16	.55	.08	.78	.99	.33	.58	.23	.67	.24
12	.08	.08	.22	.51	.08	.48	.99	.33	.48	.20	.72	.23
13	.07	.08	.22	.48	.08	.29	1.1	.46	.41	.10	.44	.23
14	.07	.08	.21	.28	.08	.33	1.5	.47	.38	.05	.68	.23
15	.07	.08	.19	.26	.08	.44	1.7	.39	.61	.07	.47	.21
16	.07	.08	.18	.28	.08	.60	1.3	.35	.66	.15	.35	.21
17	.07	.08	.17	.46	.08	8.0	1.1	.73	.47	.18	.51	.96
18	.06	.08	.17	.42	.08	2.4	1.0	1.4	.39	.15	.51	.64
19	.06	.08	.16	.40	.08	1.6	.88	.92	.37	.14	.46	.40
20	.07	.08	.16	.37	.09	1.2	.76	.74	.35	.12	1.2	.36
21	.06	.09	.16	.32	.15	1.6	.66	.57	.30	.11	.90	.28
22	.07	.11	.25	.25	.70	1.1	.58	.45	.26	.18	.60	.24
23	.12	.15	.41	.19	2.4	.97	.51	.40	.24	.15	.40	.28
24	.07	.22	1.8	.15	1.7	1.1	.48	.39	.23	.14	.32	.23
25	.07	.21	2.1	.13	1.1	1.2	.43	.36	.21	.13	.26	.20
26	.06	.40	1.2	.12	.74	.93	.40	.32	.20	.11	.23	.19
27	.06	.29	.96	.11	.58	.83	.37	.27	.19	.14	.21	.17
28	.06	.29	.78	.11	.52	.81	.68	.25	.17	1.2	.19	.16
29	.06	.26	.64	.10	.46	.95	.68	.23	.16	.66	.16	.14
30	.06	.24	.57	.10	-----	.91	.61	.25	.17	.41	.16	.13
31	.06	----	.50	.10	-----	.91	-----	.73	-----	.35	.24	----
TOTAL	2.16	3.86	13.22	8.83	10.04	31.52	30.10	14.58	19.35	7.51	12.25	8.63
MEAN	.070	.13	.43	.28	.35	1.02	1.00	.47	.65	.24	.40	.29
MAX	.12	.40	2.1	.55	2.4	8.0	2.8	1.4	3.2	1.2	1.2	.96
MIN	.05	.07	.16	.10	.08	.18	.37	.23	.16	.05	.12	.13
CFSM	.04	.07	.22	.14	.18	.52	.51	.24	.33	.12	.20	.15
IN.	.04	.07	.25	.17	.19	.60	.57	.28	.37	.14	.23	.16

CAL YR 1979 TOTAL 156.24 MEAN .43 MAX 13 MIN .05 CFSM .22 IN 2.96
WTR YR 1980 TOTAL 162.05 MEAN .44 MAX 8.0 MIN .05 CFSM .22 IN 3.07

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.

AVERAGE DISCHARGE.--12 years, 333 ft^3/s (9.431 m^3/s), 12.53 in/yr (318 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft^3/s (50.4 m^3/s) Mar. 5, 1976, gage height, 7.07 ft (2.155 m); minimum daily, 42 ft^3/s (1.19 m^3/s) Oct. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 978 ft^3/s (27.7 m^3/s) Apr. 10, gage height, 5.32 ft (1.622 m); minimum daily, 114 ft^3/s (3.23 m^3/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	156	310	501	233	312	764	442	378	205	244	471
2	133	193	307	487	231	302	740	431	554	209	243	480
3	141	170	299	470	228	295	738	421	597	196	251	401
4	133	157	296	442	225	288	825	409	524	185	245	352
5	125	151	296	424	222	282	950	396	476	189	230	333
6	126	145	304	398	219	274	923	378	481	200	221	310
7	149	148	313	380	217	267	864	361	505	197	211	295
8	152	147	306	360	217	271	855	346	570	191	201	294
9	139	149	290	365	215	284	899	337	623	191	193	293
10	134	174	278	350	215	305	966	325	577	204	211	287
11	133	179	273	340	210	363	949	322	539	200	263	278
12	126	169	277	330	207	358	910	322	521	202	266	270
13	126	162	282	325	200	352	868	326	505	209	248	267
14	130	159	273	320	197	352	845	329	489	214	252	261
15	127	157	262	310	194	355	857	316	475	202	252	252
16	126	189	256	305	190	384	855	168	464	213	238	247
17	128	145	248	328	186	461	807	273	438	225	248	308
18	128	132	235	335	182	578	755	371	404	209	266	358
19	125	155	230	320	178	606	718	405	377	201	265	308
20	123	159	228	310	175	613	684	383	360	198	309	282
21	122	162	228	303	250	664	650	377	336	190	406	275
22	124	183	237	298	370	727	612	379	311	191	409	273
23	152	218	275	293	420	771	549	378	293	192	359	287
24	166	245	342	285	390	786	518	378	282	177	334	288
25	142	237	475	280	370	838	505	368	272	168	324	274
26	140	293	535	270	354	879	488	349	260	163	314	264
27	136	326	514	261	335	841	467	329	246	170	301	256
28	134	325	457	254	330	807	462	312	235	200	285	247
29	130	321	480	250	322	801	471	299	227	277	274	242
30	130	313	509	248	----	800	456	293	215	265	266	237
31	130	----	506	238	----	787	-----	327	-----	247	272	----
TOTAL	4124	5819	10121	10380	7282	16003	21950	10850	12534	6280	8401	8990
MEAN	133	194	326	335	251	516	732	350	418	203	271	300
MAX	166	326	535	501	420	879	966	442	623	277	409	480
MIN	114	132	228	238	175	267	456	168	215	163	193	237
CFSM	.37	.54	.90	.93	.70	1.43	2.03	.97	1.16	.56	.75	.83
IN.	.42	.60	1.04	1.07	.75	1.65	2.26	1.12	1.29	.65	.87	.93

CAL YR 1979 TOTAL 108807 MEAN 298 MAX 1270 MIN 114 CFSM .83 IN 11.21
WTR YR 1980 TOTAL 122734 MEAN 335 MAX 966 MIN 114 CFSM .93 IN 12.65

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.--Oct. 1, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 918 ft³/s (26.0 m³/s), Apr. 4, 1980, gage height 7.57 ft (2.307m); minimum daily discharge 34 ft³/s (.962 m³/s Aug. 7, 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)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 24	1830	637	18.0	6.76	2.060	Apr. 4	0530	*918	26.0	*7.57	2.307
Feb. 22	1600	512	14.5	6.33	1.929	Apr. 9	0215	603	17.1	6.65	2.027
Mar. 17	1645	529	15.0	6.39	1.948						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	73	97	114	56	79	178	96	80	47	41	115
2	41	66	88	107	56	75	175	93	201	46	41	121
3	44	59	82	101	55	71	211	89	132	43	41	103
4	51	53	80	96	54	69	679	85	96	45	39	83
5	49	48	83	91	54	67	387	82	84	50	38	73
6	51	54	98	86	54	66	275	78	80	50	35	65
7	49	52	94	82	53	65	227	75	82	47	34	61
8	48	58	99	78	52	72	257	74	84	45	35	58
9	47	69	86	74	52	103	476	72	77	45	36	58
10	46	64	81	72	52	194	349	71	71	45	54	56
11	44	59	79	96	51	196	277	71	67	42	61	54
12	54	56	84	90	50	123	253	70	63	42	57	53
13	56	53	83	81	50	102	215	76	62	42	51	53
14	54	51	77	76	49	90	281	75	61	41	56	51
15	51	49	74	73	50	98	356	69	65	37	53	50
16	64	48	71	75	50	140	259	66	63	40	49	50
17	57	47	66	96	49	386	207	76	60	39	55	88
18	60	46	63	91	48	315	183	95	58	38	57	81
19	51	46	62	83	48	223	168	84	59	40	54	68
20	44	46	60	79	48	192	153	77	57	41	81	62
21	42	48	60	75	57	268	143	71	56	40	104	59
22	58	58	65	73	375	212	135	66	54	41	78	59
23	53	84	108	70	314	172	127	65	52	40	65	64
24	49	92	359	68	194	206	121	63	51	37	59	60
25	46	87	526	67	144	281	113	61	50	36	55	58
26	44	279	313	64	114	212	110	59	50	37	52	57
27	42	177	221	62	98	207	106	57	50	41	50	55
28	41	149	177	60	95	207	109	56	49	51	47	53
29	40	125	152	60	86	224	105	57	49	49	46	52
30	39	106	136	58	----	187	100	59	48	45	46	51
31	38	----	123	58	----	196	----	68	----	44	56	----
TOTAL	1495	2302	3847	2456	2508	5098	6735	2256	2111	1326	1626	1971
MEAN	48.2	76.7	124	79.2	86.5	164	225	72.8	70.4	42.8	52.5	65.7
MAX	64	279	526	114	375	386	679	96	201	51	104	121
MIN	38	46	60	58	48	65	100	56	48	36	34	50
CFSM	.49	.79	1.27	.81	.89	1.68	2.31	.75	.72	.44	.54	.67
IN.	.57	.88	1.47	.94	.96	1.94	2.57	.86	.80	.51	.62	.75

WTR YR 1980 TOTAL 33731 MEAN 92.2 MAX 679 MIN 34 CFSM .95 IN 12.86

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 mi^2 (80.3 km^2).

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 good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55 ft^3/s (1.55 m^3/s) March 18, 1980, gage height 5.95 ft (1.814 m); minimum daily, 3.8 ft^3/s (.108 m^3/s) July 26, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55 ft^3/s (1.55 m^3/s) March 18, 1980, gage height 5.95 ft (1.814 m); minimum daily, 3.8 ft^3/s (.108 m^3/s) July 26, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 55 ft^3/s (1.55 m^3/s) March 18, gage height 5.95 ft (1.814 m); minimum daily, 3.8 ft^3/s (.108 m^3/s) July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	10	17	16	8.0	11	23	16	16	9.6	6.4	28
2	6.9	11	16	15	7.8	11	23	15	43	9.2	5.9	32
3	7.3	9.4	14	14	7.6	11	26	15	33	8.9	6.6	21
4	8.4	8.7	14	13	7.5	11	47	14	23	8.3	5.5	16
5	8.1	8.3	14	13	7.4	10	39	14	20	9.8	5.0	14
6	8.7	8.3	16	12	7.4	10	29	14	19	9.7	4.8	12
7	8.4	8.0	16	11	7.3	10	24	13	19	8.8	4.2	11
8	8.0	8.1	16	11	7.3	11	25	13	21	7.5	3.9	10
9	7.8	8.6	14	11	7.2	13	36	13	18	7.9	4.2	10
10	7.7	10	13	10	7.1	22	35	13	17	9.0	6.2	10
11	7.6	9.7	13	14	7.0	24	31	13	16	7.4	8.3	9.7
12	8.6	9.1	13	14	6.9	16	29	13	15	7.4	9.0	9.3
13	9.3	8.7	13	13	6.8	14	25	15	15	7.2	7.0	9.2
14	8.7	8.5	12	12	6.7	14	29	14	15	6.9	8.3	8.8
15	8.4	8.4	12	11	6.6	16	38	13	16	6.3	7.0	8.5
16	10	8.3	11	12	6.6	22	31	13	15	6.3	6.2	8.4
17	9.2	8.1	10	16	6.5	42	26	14	15	5.6	8.5	20
18	9.7	7.9	10	15	6.5	49	23	18	14	5.0	8.3	18
19	8.8	7.8	10	14	6.4	34	21	16	14	5.5	7.2	13
20	8.0	7.7	9.8	13	6.4	29	20	15	14	6.8	12	11
21	7.7	7.9	9.7	12	8.4	34	19	14	14	6.5	13	10
22	8.8	9.9	11	12	38	30	18	13	13	5.8	9.3	11
23	9.2	14	15	11	43	24	17	13	13	5.2	7.8	14
24	8.5	14	28	9.4	29	27	17	13	13	4.7	7.0	12
25	8.1	13	48	9.2	22	35	17	13	12	4.1	6.6	11
26	7.8	35	41	8.9	17	27	16	12	12	3.8	6.2	11
27	7.6	34	29	8.7	15	23	16	12	11	6.0	5.8	10
28	7.5	27	23	8.6	13	21	17	12	11	9.7	5.5	9.5
29	7.4	22	20	8.5	12	28	17	13	10	8.6	5.2	9.0
30	7.3	19	19	8.4	-----	26	16	13	10	7.8	4.9	8.6
31	7.3	-----	17	8.3	-----	25	----	14	----	7.8	6.1	-----
TOTAL	253.8	370.4	524.5	365.0	338.4	680	750	426	497	223.1	211.9	386.0
MEAN	8.19	12.3	16.9	11.8	11.7	21.9	25.0	13.7	16.6	7.20	6.84	12.9
MAX	10	35	48	16	43	49	47	18	43	9.8	13	32
MIN	6.9	7.7	9.7	8.3	6.4	10	16	12	10	3.8	3.9	8.4
CFSM	.26	.40	.55	.38	.38	.71	.81	.44	.54	.23	.22	.42
IN.	.30	.44	.63	.44	.41	.82	.90	.51	.60	.27	.25	.46

WTR YR 1980 TOTAL 5026.1 MEAN 13.7 MAX 49 MIN 3.8 CFSM .44 IN 6.03

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 mi^2 (368 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to current year. October 1950 to September 1971 at site 3.1 miles (5.0 km) upstream, published as North Branch Elkhart River near Cosperville. Records may not be equivalent.

GAGE.--Water-stage recorder. Datum of gage is 880.12 ft (268.261 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated at times by dam at Waldron Lake.

AVERAGE DISCHARGE.--9 years, 125 ft^3/s (3.540 m^3/s), 11.95 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 682 ft^3/s (19.3 m^3/s) Apr. 7, 1978, gage height, 7.41 ft (2.258 m); minimum daily, 2.4 ft^3/s (0.068 m^3/s) Nov. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 348 ft^3/s (9.86 m^3/s) Jun. 7, gage height, 6.38 ft (1.945 m); minimum daily, 38 ft^3/s (1.08 m^3/s) July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	61	98	169	70	119	330	178	134	69	84	141
2	81	70	93	166	66	112	321	171	234	67	75	152
3	100	68	88	164	64	109	313	165	298	64	70	157
4	113	64	85	160	61	106	327	157	328	60	66	156
5	118	60	84	156	59	105	332	147	340	86	62	152
6	125	57	86	150	57	105	322	139	342	111	59	147
7	131	54	86	142	56	101	310	130	344	105	59	140
8	132	54	88	144	55	113	305	123	340	93	56	136
9	127	58	88	132	54	136	318	114	328	86	54	126
10	116	67	85	127	54	159	321	106	316	75	58	123
11	104	66	82	129	54	167	317	101	301	75	68	118
12	81	64	87	121	54	168	309	97	285	70	84	111
13	66	61	90	133	55	163	300	98	267	64	88	104
14	58	59	86	132	58	155	298	103	251	58	102	98
15	51	57	84	125	56	154	296	103	240	53	108	92
16	47	58	81	123	54	157	291	99	229	51	108	87
17	48	56	76	126	53	209	281	100	214	45	109	113
18	47	56	74	127	52	253	271	121	202	42	115	127
19	52	56	73	124	52	271	261	131	190	41	118	132
20	61	56	71	121	52	278	253	132	179	44	130	129
21	68	58	71	118	54	295	246	131	167	43	153	126
22	70	63	74	115	109	308	237	128	154	46	162	123
23	80	76	84	110	145	313	228	124	143	49	165	126
24	78	84	115	107	149	320	219	120	134	45	165	132
25	74	84	167	103	147	331	209	116	124	41	161	139
26	67	96	178	99	140	334	201	110	116	38	157	139
27	62	105	180	94	132	332	194	100	105	39	148	142
28	56	108	180	90	130	329	191	93	91	77	139	147
29	54	105	178	85	127	332	188	86	79	108	133	148
30	53	100	175	79	----	332	183	89	72	107	129	147
31	52	----	172	74	----	333	----	114	----	96	133	----
TOTAL	2440	2081	3259	3845	2269	6699	8172	3726	6547	2048	3318	3910
MEAN	78.7	69.4	105	124	78.2	216	272	120	218	66.1	107	130
MAX	132	108	180	169	149	334	332	178	344	111	165	157
MIN	47	54	71	74	52	101	183	86	72	38	54	87
CFSM	.55	.49	.74	.87	.55	1.52	1.92	.85	1.54	.47	.75	.92
IN.	.64	.55	.85	1.01	.59	1.75	2.14	.98	1.72	.54	.87	1.02

CAL YR 1979 TOTAL 36834 MEAN 101 MAX 417 MIN 11 CFSM .71 IN 9.65
WTR YR 1980 TOTAL 48314 MEAN 132 MAX 344 MIN 38 CFSM .93 IN 12.66

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
17...	1000	----	48	8	1.0	--
NOV						
28...	1020	----	107	57	16	--
JAN						
03...	1145	----	162	206	47	--
FEB						
06...	1050	----	58	142	22	--
MAY						
21...	1040	17.0	133	25	9.0	93
JUL						
16...	1200	----	49	25	3.3	--
AUG						
27...	1105	25.5	153	24	9.9	--

04100252 FORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE¼NE¼ sec.12, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank 300 ft (91 m) downstream from bridge on State Highway 9, 400 ft (122 m) downstream from Miller Lake Outlet, 0.8 mile (1.3 km) northeast of Burr Oak, and 4.5 miles (7.2 km) south of Albion.

DRAINAGE AREA.--19.2 mi² (49.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 889.00 ft (270.967 m) National Geodetic Vertical Datum of 1929 (Indiana State Highway Commission bench mark).

REMARKS.--Records good. Occasional regulation at Miller Lake Outlet.

AVERAGE DISCHARGE.--11 years, 15.7 ft³/s (0.445 m³/s), 11.10 in/yr (282 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 238 ft³/s (6.74 m³/s) Mar. 23, 1978, gage height, 5.67 ft (1.728 m); minimum daily, 0.13 ft³/s (0.004 m³/s) Sept. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 119 ft³/s (3.37 m³/s) Mar. 19, gage height, 3.95 ft (1.204 m); minimum daily, 0.15 ft³/s (0.004 m³/s) Oct. 15-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	4.1	14	25	3.4	14	52	11	9.0	5.0	19	6.5
2	.20	4.7	12	20	3.3	10	49	10	13	5.0	15	5.9
3	.20	4.1	9.3	17	3.2	7.8	51	9.3	22	5.0	12	5.4
4	.23	3.8	8.0	13	3.2	7.0	78	9.0	29	5.0	8.4	10
5	.23	3.8	6.5	10	3.1	6.5	73	9.0	30	9.3	6.2	19
6	.23	3.5	5.6	8.3	3.1	5.9	63	8.0	27	17	5.4	22
7	.23	3.0	5.0	7.0	2.9	5.4	58	7.0	25	19	4.1	20
8	.23	3.0	4.7	5.7	2.8	11	51	6.5	29	18	3.3	16
9	.23	4.1	4.4	4.7	2.7	18	53	6.2	28	14	3.0	12
10	.23	4.7	4.1	3.8	2.5	27	52	6.0	25	11	3.0	8.3
11	.23	4.1	3.8	5.9	2.4	33	48	6.5	21	7.7	3.8	5.4
12	.26	3.8	4.1	7.0	2.3	33	43	6.5	18	6.5	5.0	4.4
13	.26	3.5	4.1	6.7	2.2	30	38	7.3	16	5.4	4.7	3.5
14	.20	3.5	4.1	6.7	2.2	24	36	7.0	14	4.1	6.1	2.8
15	.15	3.5	4.1	6.7	2.1	22	38	7.3	15	3.5	8.0	2.4
16	.15	3.8	3.8	6.3	2.0	20	41	7.6	18	2.6	7.7	8.0
17	.15	3.8	3.5	7.0	2.0	52	40	9.7	17	2.2	14	25
18	.15	4.1	3.4	7.6	1.9	99	34	16	16	2.0	25	40
19	.16	4.1	3.0	8.0	1.9	117	29	19	15	2.0	30	41
20	.32	3.8	2.6	8.0	1.9	101	24	20	14	1.9	35	40
21	.77	3.5	2.2	8.0	2.8	101	19	18	12	2.0	45	31
22	1.2	4.4	3.5	7.6	12	103	18	16	11	3.8	47	30
23	1.2	5.6	5.4	7.3	27	91	16	14	10	4.4	40	27
24	1.2	5.6	18	6.2	38	76	14	12	9.3	4.1	30	22
25	1.2	6.5	40	5.4	40	68	12	12	8.3	3.5	23	17
26	1.1	9.7	57	4.8	36	60	10	10	7.7	3.0	17	13
27	1.1	12	61	4.3	30	53	9.8	9.3	7.4	3.3	11	9.7
28	1.2	13	58	4.1	24	45	16	8.6	6.5	15	6.2	7.7
29	1.2	14	48	3.9	19	44	14	8.3	5.9	26	4.4	6.2
30	1.1	14	40	3.7	-----	45	12	8.3	5.4	28	3.5	5.1
31	1.4	-----	31	3.6	-----	49	------	8.0	-----	25	5.9	-----
TOTAL	16.94	165.1	474.2	243.3	279.9	1378.6	1091.8	313.4	484.5	264.3	451.7	466.3
MEAN	.55	5.50	15.3	7.85	9.65	44.5	36.4	10.1	16.2	8.53	14.6	15.5
MAX	1.4	14	61	25	40	117	78	20	30	28	47	41
MIN	.15	3.0	2.2	3.6	1.9	5.4	9.8	6.0	5.4	1.9	3.0	2.4
CFSM	.03	.29	.80	.41	.50	2.32	1.90	.53	.84	.44	.76	.81
IN.	.03	.32	.92	.47	.54	2.67	2.12	.61	.94	.51	.88	.90

CAL YR 1979 TOTAL 3914.10 MEAN 10.7 MAX 168 MIN .15 CFSM .56 IN 7.58
WTR YR 1980 TOTAL 5630.04 MEAN 15.4 MAX 117 MIN .15 CFSM .80 IN 10.91

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 sq mi (27.7 km²).

PERIOD OF RECORD.--November 28, 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 poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 495 ft³/s (14.0 m³/s) April 3, 1980, gage height 9.88 ft (3.011 m), minimum daily, 0.14 ft³/s (.004 m³/s) many days throughout.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 495 ft³/s (14.0 m³/s) April 3, 1980, gage height 9.88 ft (3.011 m), minimum daily, 0.14 ft³/s (.004 m³/s) many days throughout the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	3.7	5.1	1.7		---	---	3.0	.14	2.1	3.2
2		---	3.2	4.4	1.6		25	---	152	.14	1.7	3.0
3		---	2.9	3.9	1.5		97	---	62	.15	1.7	3.1
4		---	3.0	3.3	1.4		193	---	25	.15	1.5	11
5		---	3.4	2.7	1.4		64	---	10	.69	1.4	9.8
6		---	4.1	2.3	3.0		32	---	4.9	.35	1.5	4.6
7		---	4.2	2.0	---		21	---	3.5	.25	1.3	2.7
8		---	4.5	1.8	---		27	---	5.7	.24	1.2	2.5
9		---	3.9	1.6	---		37	---	1.5	.23	1.3	2.3
10		---	3.6	1.5	---		38	---	.84	.24	1.6	2.3
11		---	3.4	8.9	---		---	---	.55	.23	3.3	2.2
12		---	4.8	8.5	---		---	---	.37	.22	5.4	2.1
13		---	5.0	3.7	---		---	---	.25	.23	3.1	---
14		---	4.1	2.9	---		---	---	.21	.22	12	---
15		---	3.5	2.6	---		---	---	.23	.23	7.2	---
16		---	2.8	2.9	---		---	---	.29	.23	3.9	---
17		---	2.4	6.1	---		---	---	.21	.22	7.6	---
18		---	2.1	5.6	---		---	---	.19	.21	10	---
19		---	1.9	4.6	---		---	---	.17	.21	8.5	---
20		---	1.7	4.0	---		---	---	.17	.21	24	---
21		---	1.6	3.4	---		---	5.6	.16	.41	22	---
22		---	2.6	3.0	---		---	5.1	.16	.51	9.4	---
23		---	8.7	2.7	---		---	4.6	.15	1.3	5.4	---
24		---	88	2.5	---		---	4.2	.15	.99	3.8	---
25		---	67	2.4	---		---	3.6	.15	.88	3.1	---
26		---	29	2.3	---		---	3.1	.14	.83	2.8	---
27		---	17	2.2	---		---	2.8	.14	.86	2.5	---
28		8.7	11	2.1	---		---	2.7	.14	34	2.3	---
29		6.4	8.5	2.0	---		---	2.6	.15	16	2.1	---
30		4.5	6.9	1.9	---		---	2.5	.14	5.2	2.0	---
31		---	5.8	1.8	---		---	2.6	------	3.0	2.9	---
TOTAL		---	314.3	104.7	---		---	---	272.56	68.77	158.6	---
MEAN		---	10.1	3.38	---		---	---	9.09	2.22	5.12	---
MAX		---	88	8.9	---		---	---	152	34	24	---
MIN		---	1.6	1.5	---		---	---	.14	.14	1.2	---
CFSM		---	.94	.32	---		---	---	.85	.21	.48	---
IN.		---	1.09	.36	---		---	---	.95	.24	.55	---

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.--11 years, 34.3 ft³/s (0.971 m³/s), 10.63 in/yr (270 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 167 ft³/s (4.73 m³/s) June 1, 1980, gage height, 5.07 ft (1.545 m); minimum daily, 0.82 ft³/s (0.023 m³/s) Oct. 8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 167 ft³/s (4.73 m³/s) June 1, gage height, 5.07 ft (1.547 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Oct 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	8.9	12	48	30	32	97	68	94	71	4.1	6.5
2	3.6	6.5	12	47	29	32	97	67	139	64	3.8	28
3	3.3	5.5	11	47	29	33	104	65	140	4.1	3.7	33
4	3.2	5.1	11	46	29	53	120	64	134	3.9	4.3	32
5	3.8	5.5	11	45	29	54	118	63	130	65	4.4	31
6	3.4	6.4	12	45	29	57	111	62	125	89	4.7	29
7	3.4	5.8	12	43	29	78	107	60	127	87	5.2	28
8	3.3	6.2	12	42	29	83	106	60	134	84	5.3	28
9	3.3	6.9	12	41	28	87	111	49	130	82	5.6	28
10	3.3	5.3	13	41	28	91	110	4.9	125	80	5.1	28
11	3.2	5.1	26	61	23	89	107	4.8	119	77	5.7	27
12	3.2	5.4	44	70	4.2	85	106	5.1	115	39	4.8	27
13	3.0	5.3	43	69	3.7	83	104	7.0	112	4.4	6.3	27
14	2.8	4.9	41	68	3.4	82	110	7.1	108	3.9	10	27
15	2.6	4.8	40	66	3.2	81	111	7.4	109	3.8	11	27
16	2.9	4.5	38	74	3.1	83	109	7.6	109	3.7	38	27
17	3.1	4.1	38	91	3.0	97	106	9.1	105	3.6	58	23
18	3.3	3.9	37	90	3.0	100	94	11	103	3.6	57	6.6
19	3.7	4.8	36	88	3.1	99	80	11	109	3.5	55	5.9
20	3.9	4.6	35	86	3.2	95	79	11	111	3.6	57	5.0
21	4.9	4.8	35	86	4.2	97	78	11	103	4.6	55	4.7
22	8.3	5.9	36	85	12	96	77	11	83	4.5	54	6.6
23	6.6	8.3	38	85	16	93	74	12	39	3.8	52	6.5
24	6.2	7.8	51	84	11	94	72	12	10	3.4	52	6.1
25	6.2	10	58	84	19	97	71	12	9.7	3.1	52	5.5
26	5.5	15	57	86	35	95	69	12	21	3.0	42	5.0
27	5.1	16	55	83	34	93	68	11	27	4.3	3.6	4.3
28	4.9	15	53	67	33	91	70	11	25	6.5	3.3	4.4
29	5.4	14	50	30	33	93	69	12	37	4.6	6.4	4.7
30	5.7	13	49	30	-----	96	68	17	73	4.3	4.1	4.7
31	6.4	-----	49	30	-----	97	----	61	------	4.1	6.0	-----
TOTAL	134.1	219.3	1027	1958	539.1	2536	2803	826.0	2805.7	822.3	679.4	526.5
MEAN	4.33	7.31	33.1	63.2	18.6	81.8	93.4	26.6	93.5	26.5	21.9	17.6
MAX	8.3	16	58	91	35	100	120	68	140	89	58	33
MIN	2.6	3.9	11	30	3.0	32	68	4.8	9.7	3.0	3.3	4.3
CFSM	.10	.17	.76	1.44	.43	1.87	2.13	.61	2.14	.61	.50	.40
IN.	.11	.19	.87	1.66	.46	2.15	2.38	.70	2.38	.70	.58	.45

CAL YR 1979 TOTAL 10223.4 MEAN 28.0 MAX 116 MIN 2.3 CFSM .64 IN 8.68
WTR YR 1980 TOTAL 14876.4 MEAN 40.6 MAX 140 MIN 2.6 CFSM .93 IN 12.63

04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE¼NE¼ sec.8, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 20 ft (6 m) downstream from River Avenue bridge at Goshen, 0.4 mile (0.6 km) upstream from Rock Run, and at mile 16.1 (25.9 km).

DRAINAGE AREA.--594 mi² (1,538 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--
WATER DISCHARGE: April 1931 to current year.

REVISED RECORDS.-WSP 1337: 1939(M). WSP 1557: 1954. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 769.43 ft (234.522 m) 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 fair.

AVERAGE DISCHARGE.--49 years, 502 ft³/s (14.22 m³/s), 11.48 in/yr (292 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,440 ft³/s (154 m³/s) Apr. 4, 1950, gage height, 10.15 ft (3.094 m); maximum gage height, 10.33 ft (3.149 m) July 10, 1951 and Mar. 5, 1979; minimum daily discharge, 7.0 ft³/s (0.20 m³/s) Aug. 11, 1964, result of extreme regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s (51.0 m³/s) and maximum (*):

Date	Time	Discharge (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)
Apr. 5	0300	*2390	67.7	*6.44	1.963	June 3	1100	1840	52.1	5.83	1.777
Apr. 10	0400	2000	56.6	5.77	1.759						

Minimum daily discharge, 157 ft³/s (4.45 m³/s) Oct. 31.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1963 to September 1977 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	185	462	660	271	445	1380	661	551	269	302	463
2	242	222	425	634	260	430	1300	642	1080	262	287	503
3	260	209	389	607	250	421	1350	623	1790	255	283	644
4	272	206	387	583	240	418	1950	603	1610	225	274	555
5	272	193	372	557	233	415	2210	585	1390	270	259	479
6	268	192	400	516	225	418	1760	567	1240	380	252	438
7	280	185	407	488	221	411	1500	550	1180	372	243	410
8	284	181	400	385	218	471	1420	536	1300	351	230	392
9	284	189	380	378	212	718	1700	520	1440	339	240	388
10	268	207	368	418	210	941	1930	501	1210	326	260	368
11	253	213	356	512	207	1010	1690	465	1020	308	277	345
12	249	208	363	481	205	846	1530	447	916	298	314	333
13	238	202	383	422	201	734	1430	473	833	283	314	326
14	214	194	381	483	230	666	1420	557	766	256	347	310
15	181	189	364	470	220	647	1650	498	728	235	413	298
16	187	183	351	461	210	748	1630	463	712	219	395	291
17	187	179	331	465	202	1070	1390	475	661	206	427	400
18	184	176	261	544	199	1680	1240	549	603	194	458	465
19	178	174	326	521	196	1590	1150	567	566	198	450	410
20	172	175	320	499	193	1350	1060	552	535	197	487	386
21	172	181	305	482	210	1360	1010	535	500	196	546	373
22	228	212	313	468	617	1500	948	517	472	205	528	372
23	221	270	367	455	1070	1380	891	502	439	210	488	383
24	214	332	630	321	890	1350	845	494	407	205	465	386
25	214	346	1270	364	686	1560	804	471	369	199	454	383
26	210	616	1340	361	537	1600	767	439	349	192	444	377
27	194	810	1010	345	490	1410	729	416	331	206	428	375
28	178	657	824	330	480	1310	721	393	315	246	385	370
29	166	579	746	317	465	1340	707	380	293	287	354	370
30	158	506	713	303	----	1440	679	382	278	307	357	366
31	157	----	688	288	----	1390	-----	451	-----	311	401	-----
TOTAL	6799	8371	15632	14118	9848	31069	38791	15814	23884	8007	11362	11959
MEAN	219	279	504	455	340	1002	1293	510	796	258	367	399
MAX	284	810	1340	660	1070	1680	2210	661	1790	380	546	644
MIN	157	174	261	288	193	411	679	380	278	192	230	291
CFSM	.37	.47	.85	.77	.57	1.69	2.18	.86	1.34	.43	.62	.67
IN.	.43	.52	.98	.88	.62	1.95	2.43	.99	1.50	.50	.71	.75

CAL YR 1979 TOTAL 168252 MEAN 461 MAX 4470 MIN 124 CFSM .78 IN 10.54
WTR YR 1980 TOTAL 195654 MEAN 535 MAX 2210 MIN 157 CFSM .90 IN 12.25

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 in the district office.

REVISED RECORDS.--WSP 2111: Drainage area.

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

REMARKS.--Records good. The flow is regulated by Elkhart Hydroelectric Plant.

AVERAGE DISCHARGE.--33 years, 3,092 ft^3/s (87.57 m^3/s), 12.46 in/yr (316 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft^3/s (521 m^3/s) Apr. 5, 1950, gage height, 27.82 ft (8.480 m); minimum daily, 336 ft^3/s (9.52 m^3/s) Aug. 5, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 10,100 ft^3/s (286 m^3/s) June 10, gage height, 23.62 ft (7.199 m); minimum daily, 1,220 ft^3/s (34.6 m^3/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	1920	3760	4810	2620	3290	6560	4480	3520	2290	2430	3700
2	2200	2210	3630	4670	2660	3220	6380	4270	4720	2720	2280	4410
3	2310	2230	3420	4580	2620	2930	6340	4010	5710	2410	2410	4510
4	1670	2200	3290	4410	2430	2970	7100	4060	6390	2170	2480	4630
5	1350	1950	3260	4180	2590	3090	7840	4040	5980	2400	2500	5070
6	1910	2180	3290	3900	2490	2950	7350	3860	6230	2860	2620	4540
7	1960	1930	3340	3390	2360	2920	7210	3720	6340	3040	2410	4360
8	1360	2150	3350	3120	2390	2990	7290	3540	7520	2920	2460	4210
9	1720	2030	3340	3090	2430	3210	7750	3350	7830	2950	2140	3830
10	2200	2260	3260	3050	2350	3630	8040	3290	8280	3470	2380	3770
11	1290	1960	3240	3750	2250	3880	7930	3140	8220	3170	2610	3730
12	1620	1970	3240	3560	2100	3610	7790	3390	7860	3050	2610	3420
13	1420	2240	3200	3600	2150	3370	7520	3310	7530	3070	2710	3180
14	1760	1780	3240	3630	2360	3340	7460	3270	6920	3040	2650	3080
15	1400	2180	3130	3590	2370	3290	7690	3290	6900	3000	2790	3010
16	1610	1710	3050	3540	2330	3500	7520	3140	6280	2860	2770	2940
17	1890	2190	3390	3620	2180	4090	7150	3040	5710	2830	3120	3390
18	1220	1840	2960	3700	2000	4930	6860	3580	5600	2850	3520	3660
19	1640	1580	2760	3700	2220	6150	6490	3700	5260	2590	3430	3540
20	1700	1860	2820	3590	2570	6530	6230	3680	4970	2570	3750	3470
21	1320	2190	2700	3590	2320	6850	5910	3830	4520	2570	4070	3360
22	1410	2690	2720	3460	3370	7000	5690	3940	4360	2400	3990	3500
23	1550	2410	2910	3390	4370	6990	5460	3800	3880	2140	3990	3430
24	1870	2320	3610	3090	4200	6990	5250	3710	3700	2140	3840	3440
25	1930	2670	4600	3030	4190	7390	4990	3650	3430	2020	3760	3300
26	1780	3910	5370	3170	3860	7270	4860	3450	3170	1930	3590	3240
27	1960	4330	5500	2960	3810	7100	4760	3230	3070	2040	3620	2970
28	1930	4190	5710	3020	3830	6830	4640	3100	2920	2170	3330	3080
29	1620	4040	5450	2630	3540	6850	4330	3070	2770	2200	3070	2970
30	1680	3940	5160	2630	-----	6870	4360	2990	2560	2190	2920	3050
31	1650	-----	5010	2720	-----	6810	------	3290	------	2290	2960	------
TOTAL	52180	73060	113710	109170	80960	150840	194750	110220	162150	80350	93210	108790
MEAN	1683	2435	3668	3522	2792	4866	6492	3555	5405	2592	3007	3626
MAX	2310	4330	5710	4810	4370	7390	8040	4480	8280	3470	4070	5070
MIN	1220	1580	2700	2630	2000	2920	4330	2990	2560	1930	2140	2940
CFSM	.50	.72	1.09	1.05	.83	1.44	1.93	1.06	1.60	.77	.89	1.08
IN.	.58	.81	1.26	1.21	.89	1.67	2.15	1.22	1.79	.89	1.03	1.20

CAL YR 1979 TOTAL 1171830 MEAN 3210 MAX 11400 MIN 1090 CFSM .95 IN 12.94
WTR YR 1980 TOTAL 1329390 MEAN 3632 MAX 8280 MIN 1220 CFSM 1.08 IN 14.67

04101500 ST. JOSEPH RIVER AT NILES, MI
(National stream-quality accounting network station)

LOCATION.--Lat 41°49'45", long 86°15'35", in SW¼ sec.26, T.7 S., R.17 W., Berrien County, Hydrologic Unit 04050001, on right bank 100 ft (30 m) upstream from Main Street bridge at Niles, 0.6 mi (1.0 km) downstream from dam at French Paper Co., 1 mi (2 km) upstream from Dowagiac River, and at mile 44 (71 km).

DRAINAGE AREA.--3,666 mi² (9,495 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1931, 1933-36, 1940-43, 1945-46(M). WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 633.02 ft (192.944 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, at datum 2.00 ft (0.610 m) higher. Oct. 1, 1930 to Feb. 11, 1931, nonrecording gage on Main Street bridge, and Feb. 12 to June 30, 1931, nonrecording gage 50 ft (15 m) upstream from present site (gage heights referred to NGVD). Since Apr. 13, 1970, auxiliary water-stage recorder at sewage-treatment plant, 1.1 mi (1.8 km) downstream from base gage at same datum. Oct. 1, 1943 to Apr. 12, 1970, auxiliary gage was headwater gage at hydroelectric plant at Buchanan Dam, 8 mi (13 km) downstream from base gage at different datum.

REMARKS.--Water-discharge records good. Flow regulated by powerplants above station.

AVERAGE DISCHARGE.--50 years, 3,184 ft³/s (90.17 m³/s), 11.79 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft³/s (572 m³/s) Apr. 5, 1950, gage height, 15.10 ft (4.602 m), present datum; minimum daily, 420 ft³/s (11.9 m³/s) Aug. 30, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,950 ft³/s (253 m³/s) Apr. 10, gage height, 9.38 (2.859 m); minimum daily, 994 ft³/s (28.15 m³/s) Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	2160	4050	5170	2890	3540	6920	4930	3690	2070	2480	4120
2	2520	2420	3860	4720	2820	3350	6470	4610	5330	2730	2900	4780
3	3070	2240	3680	4790	2950	3640	6920	4290	5900	2710	2540	4870
4	1900	2440	3590	4610	2530	3380	7280	4180	6760	2470	2640	4760
5	2100	2380	3330	4650	2910	3250	8230	4240	6320	2580	2620	5340
6	1890	2510	3540	4150	2580	3220	7980	4200	6560	2690	2810	4990
7	2420	2090	3550	3640	2750	3080	7390	4040	6590	3360	2700	4550
8	2050	2340	3770	3090	2550	3180	7680	3860	7480	3140	2940	4590
9	1800	2270	3590	3840	2790	3480	8630	3090	8420	3090	2400	4330
10	2330	2430	3320	3240	2590	4040	8900	3480	8300	3470	2750	3910
11	1820	2060	3470	3840	2520	4310	8710	3370	8370	3780	2740	4030
12	2050	2420	3430	3570	2370	4220	8330	3530	8180	2940	2920	3960
13	1900	2430	3510	3900	2330	3600	8010	3610	7750	3200	3050	3690
14	3470	2070	3460	3980	2670	3500	7800	3580	7240	3330	3320	3550
15	2920	2370	3270	3920	2680	3690	8290	3220	6840	2970	3030	2830
16	1970	2060	3240	3640	2560	3780	8360	3790	6800	3300	3060	3440
17	2400	2030	3390	3870	2470	4590	7470	3050	5720	2820	3660	3780
18	1650	2290	3260	4030	2280	5870	7290	3690	5830	3140	3360	4000
19	1950	1980	3140	3710	2330	6360	6860	4020	5360	2890	4020	4000
20	1940	1910	3040	3880	2990	6900	6630	3820	5440	2760	4000	3940
21	1890	2370	3020	3800	2500	6980	6130	3920	5370	2710	4410	3520
22	1270	2910	3030	3770	3530	7470	6220	4030	4560	2810	4380	3910
23	994	2600	2980	3680	5180	7380	5450	4210	4650	2380	4070	3820
24	1090	2680	3850	3180	4640	7310	5800	3960	3980	2380	4200	3540
25	1770	2800	5440	3480	4590	7890	4940	3810	3890	2210	4000	3890
26	2040	4350	5830	3050	4510	7530	5090	3890	3370	2370	4240	3530
27	1990	4980	6020	3330	4080	7690	5030	3280	3590	2370	3450	3010
28	2070	4590	5940	3050	4030	7000	5000	3350	2430	2230	3770	3480
29	2240	4350	5770	2960	4090	7140	4840	3310	3050	2580	3310	3220
30	1930	4190	5570	2800	-----	7510	4270	3370	2780	2230	3200	3240
31	1870	-----	4940	2840	-----	7100	------	3470	------	2570	3380	------
TOTAL	62894	80720	121880	116180	89710	161980	206920	117200	170550	86280	102350	118620
MEAN	2029	2691	3932	3748	3093	5225	6897	3781	5685	2783	3302	3954
MAX	3470	4980	6020	5170	5180	7890	8900	4930	8420	3780	4410	5340
MIN	994	1910	2980	2800	2280	3080	4270	3050	2430	2070	2400	2830
CFSM	.55	.73	1.07	1.02	.84	1.43	1.88	1.03	1.55	.76	.90	1.08
IN.	.64	.82	1.24	1.18	.91	1.64	2.10	1.19	1.73	.88	1.04	1.20

CAL YR 1979 TOTAL 1315744 MEAN 3605 MAX 13700 MIN 994 CFSM .98 IN 13.35
WTR YR 1980 TOTAL 1435284 MEAN 3922 MAX 8900 MIN 994 CFSM 1.07 IN 14.56

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE¼SW¼ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003 on left bank 6 ft (2 m) upstream from bridge on County Road 775 South, 0.5 mile (0.8 km) downstream from Hamilton Lake outlet, and 0.5 mile (0.8 km) southeast of Hamilton.

DRAINAGE AREA.--37.5 mi² (97.1 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft (267.005 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--11 years, 29.8 ft³/s (0.844 m³/s), 10.79 in/yr (274 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 497 ft³/s (14.1 m³/s) Mar. 23, 1978, gage height, 10.79 ft (3.289 m); minimum daily, 0.52 ft³/s (0.015 m³/s) Aug. 31, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 140 ft³/s (3.96 m³/s) and maximum (*):

Date	Time	Discharge (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. 25	1400	213	6.03	7.45	2.271	Apr. 4	1400	221	6.26	7.57	2.307
Mar. 18	0200	*236	6.68	*7.79	2.374	June 3	0300	144	4.08	6.39	1.948
Mar. 21	1900	202	5.72	7.29	2.222	June 8	1000	167	4.73	6.75	2.057

Minimum daily discharge, 2.3 ft³/s (0.065 m³/s) Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	15	37	44	7.7	26	94	40	49	9.2	22	9.7
2	2.9	13	31	37	7.0	22	86	35	130	9.4	18	19
3	3.0	9.2	24	33	6.4	20	93	29	141	10	17	16
4	2.9	6.8	21	29	7.3	19	213	29	109	12	14	39
5	3.0	5.6	19	25	6.8	18	194	25	74	27	13	55
6	3.4	6.2	19	22	6.5	19	151	24	60	32	12	39
7	4.1	5.3	20	18	6.2	19	112	21	70	35	9.7	30
8	3.6	4.4	19	16	5.8	27	94	18	161	32	7.7	25
9	3.3	6.8	15	14	6.1	38	98	17	136	33	6.2	22
10	3.0	10	15	13	5.8	55	98	16	104	33	12	18
11	2.8	8.6	14	12	5.6	56	83	18	79	30	30	14
12	2.8	6.8	23	21	5.4	48	76	17	64	28	47	12
13	2.3	6.5	22	19	5.2	42	63	23	54	35	33	11
14	2.8	5.8	20	17	5.0	39	86	26	48	34	49	11
15	3.7	5.5	17	16	6.4	39	111	24	47	30	48	8.8
16	3.3	5.3	16	17	5.7	42	103	21	44	23	31	8.0
17	3.0	4.8	13	28	5.3	167	81	46	38	17	36	31
18	2.8	4.6	11	29	5.0	227	66	129	35	12	42	29
19	2.8	4.7	10	27	5.2	193	55	117	33	9.6	37	24
20	2.8	5.5	9.5	24	5.8	156	47	90	28	8.6	56	20
21	2.7	5.6	8.9	22	8.0	182	42	67	25	6.8	69	17
22	3.5	9.8	8.4	20	56	183	40	52	24	17	52	19
23	8.0	30	31	18	74	142	38	43	23	17	34	25
24	6.4	39	109	16	68	124	32	38	25	11	24	19
25	4.5	38	205	14	57	140	28	35	23	9.0	19	16
26	3.5	65	188	15	47	115	26	27	22	7.2	16	15
27	2.9	61	147	13	40	91	25	23	18	8.4	12	11
28	3.3	66	109	12	35	76	48	20	16	52	9.9	9.4
29	2.7	55	81	11	30	95	49	18	14	57	8.3	8.6
30	3.0	44	65	9.8	-----	91	45	20	9.8	38	7.3	7.3
31	8.9	-----	53	8.7	-----	106	----	37	------	28	9.4	-----
TOTAL	110.2	553.8	1380.8	620.5	535.2	2617	2377	1145	1703.8	711.2	801.5	588.8
MEAN	3.55	18.5	44.5	20.0	18.5	84.4	79.2	36.9	56.8	22.9	25.9	19.6
MAX	8.9	66	205	44	74	227	213	129	161	57	69	55
MIN	2.3	4.4	8.4	8.7	5.0	18	25	16	9.8	6.8	6.2	7.3
CFSM	.10	.49	1.19	.53	.49	2.25	2.11	.98	1.52	.61	.69	.52
IN.	.11	.55	1.37	.62	.53	2.60	2.36	1.14	1.69	.71	.80	.58

CAL YR 1979 TOTAL 10179.9 MEAN 27.9 MAX 321 MIN 2.3 CFSM .74 IN 10.10
WTR YR 1980 TOTAL 13144.8 MEAN 35.9 MAX 227 MIN 2.3 CFSM .96 IN 13.04

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 mi^2 (1,580 km^2).

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft (242.438 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--34 years, 508 ft^3/s (14.4 m^3/s), 11.31 in/yr 287 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,710 ft^3/s (275 m^3/s) Apr. 6, 1950, gage height, 17.05 ft (5.197 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Sept. 10, 16, 1964.

EXTREMES FOR CURENT YEAR.--Maximum discharge, 3,940 ft^3/s (112 m^3/s) Mar. 21, gage height, 13.64 ft (4.157 m); minimum daily, 49 ft^3/s (1.39 m^3/s) Oct. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	80	891	1290	185	365	1870	738	336	123	386	181
2	53	84	658	890	175	313	1750	640	940	109	313	199
3	50	92	478	680	165	278	1680	550	1190	125	277	264
4	49	96	390	558	160	252	2240	497	1200	135	235	358
5	49	94	342	476	170	233	2670	443	1220	135	231	505
6	51	85	321	386	160	223	2810	394	1260	156	219	548
7	54	99	326	340	150	220	2780	356	1300	366	198	496
8	55	78	346	310	141	392	2540	330	1480	575	176	379
9	58	79	336	280	150	442	2260	302	1810	592	159	298
10	59	86	314	265	140	662	2040	273	1980	664	148	252
11	62	89	287	340	130	761	1850	264	2000	640	152	222
12	68	103	283	437	123	710	1700	264	1890	495	276	205
13	73	105	319	518	120	660	1560	280	1630	489	341	196
14	76	96	371	472	115	594	1530	298	1120	618	373	181
15	76	90	354	386	136	550	1800	366	706	687	359	171
16	74	86	304	318	124	600	1930	381	549	597	299	164
17	70	84	254	364	118	1510	1860	377	472	438	313	310
18	65	85	230	489	110	2570	1690	1020	435	347	506	445
19	62	85	209	562	110	2950	1450	1420	392	306	674	412
20	63	85	190	531	115	3310	1160	1590	328	261	865	331
21	62	84	180	465	125	3770	923	1620	286	228	1040	270
22	60	86	200	397	350	3800	735	1520	270	282	941	226
23	65	118	424	353	1210	3400	611	1280	226	589	840	201
24	62	302	1150	310	1330	3060	556	916	201	755	698	207
25	75	538	2120	280	1220	2910	504	642	195	503	522	194
26	79	751	2510	300	905	2670	478	497	184	308	382	172
27	74	921	2690	270	690	2380	445	414	176	236	304	154
28	71	1090	2800	250	545	2090	510	351	164	565	254	145
29	70	1180	2610	230	472	1940	736	305	151	743	218	135
30	70	1070	2200	212	----	1890	798	273	139	702	192	132
31	73	----	1790	198	----	1920	-----	268	-----	544	181	----
TOTAL	1988	7921	25877	13157	9644	47425	45466	18869	24230	13313	12072	7953
MEAN	64.1	264	835	424	333	1530	1516	609	808	429	389	265
MAX	79	1180	2800	1290	1330	3800	2810	1620	2000	755	1040	548
MIN	49	78	180	198	110	220	445	264	139	109	148	132
CFSM	.11	.43	1.37	.70	.55	2.51	2.49	1.00	1.33	.70	.64	.43
IN.	.12	.48	1.58	.80	.59	2.89	2.77	1.15	1.48	.81	.74	.49

CAL YR 1979 TOTAL 173295 MEAN 475 MAX 3490 MIN 49 CFSM .78 IN 10.57
WTR YR 1980 TOTAL 227915 MEAN 623 MAX 3800 MIN 49 CFSM 1.02 IN 13.90

04179000 ST. JOSEPH RIVER AT CEDARVILLE, IN

LOCATION.--Lat 41°11'46", long 85°01'27", in J. Hackley Reserve, T.32 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank 700 ft (213 m) upstream from highway bridge, 0.4 mile (0.6 km) south of Cedarville, 0.5 mile (0.8 km) upstream from Cedar Creek, 0.6 mile (1.0 km) downstream from Cedarville Dam, and at mile 13.9 (22.4 km).

DRAINAGE AREA.--763 mi^2 (1,976 km^2).

PERIOD OF RECORD.--January 1931 to May 1932, October 1955 to current year.

REVISED RECORDS.--WSP 1912: 1956. WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 757.94 ft (231.020 m) National Geodetic Vertical Datum of 1929. Jan. 1, 1931, to May 31, 1932, nonrecording gage on downstream side of highway bridge 700 ft (213 m) downstream from present site at datum approximately 20 ft (6 m) lower.

REMARKS.--Records fair. Flow regulated by Cedarville Reservoir and some flow diverted into storage of Hurshtown Reservoir. Stage-discharge relation affected at times by backwater from Cedar Creek.

AVERAGE DISCHARGE.--25 years (1955 to current year), 612 ft^3/s (17.33 m^3/s), 10.89 in/yr (277 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft^3/s (286 m^3/s) May 1, 1956, gage height, 18.07 ft (5.508 m), from floodmarks; maximum gage height, 18.62 ft (5.675 m) Mar. 24, 1978; minimum daily discharge, 1.6 ft^3/s (0.045 m^3/s) May 22, 27, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,820 ft^3/s (136 m^3/s) Mar. 22, maximum gage height, 12.89 ft (3.929 m) Mar. 22; minimum daily discharge, 53 ft^3/s (1.50 m^3/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	84	880	1450	191	465	2200	760	377	139	475	257
2	142	101	770	1240	179	393	2120	695	1020	163	432	268
3	85	150	564	609	169	352	1760	580	1480	179	343	282
4	58	141	465	500	161	322	2450	515	1220	153	282	492
5	53	118	294	430	155	302	2880	460	1270	432	260	741
6	61	125	370	375	199	281	3020	435	1190	401	263	540
7	71	116	409	335	160	268	2900	420	1580	248	246	579
8	85	111	423	308	152	832	3070	445	1410	486	227	486
9	80	116	345	285	183	820	3040	399	1520	567	220	359
10	79	132	343	336	150	1040	2570	374	1810	552	180	295
11	81	137	369	433	138	1060	2270	366	2050	573	178	265
12	83	114	364	422	130	780	1960	349	2060	567	216	273
13	88	121	392	390	124	750	1760	354	1850	470	374	203
14	106	127	396	504	120	672	1680	368	1500	472	429	261
15	118	128	429	531	160	681	2030	380	1010	570	489	187
16	114	124	415	433	141	783	2250	439	988	612	357	210
17	107	119	303	425	130	2130	2090	480	422	445	422	675
18	102	113	136	546	120	3110	1860	1090	549	393	549	726
19	95	116	274	663	118	3190	1500	1420	460	295	681	546
20	83	118	311	621	119	3370	1080	1420	433	321	1280	470
21	77	117	276	570	177	3960	777	1600	355	296	1630	341
22	79	117	254	498	884	4480	666	1590	346	784	1150	304
23	84	146	546	416	1370	4350	582	1250	300	404	1070	273
24	86	287	1780	332	1310	3930	552	1100	238	642	852	254
25	86	437	2690	276	1300	3600	495	702	225	696	603	268
26	115	753	2750	330	940	3340	483	489	231	424	504	220
27	75	1230	2940	291	700	3240	681	455	229	286	386	199
28	108	762	2880	261	630	2420	820	494	220	678	305	212
29	99	1470	3010	240	540	2200	824	429	211	1680	283	162
30	91	1030	2790	222	-----	2260	681	356	191	820	259	160
31	77	----	2300	206	-----	2430	-----	366	-----	720	255	-----
TOTAL	2761	8760	30468	14478	10850	57811	51051	20580	26745	15468	15200	10508
MEAN	89.1	292	983	467	374	1865	1702	664	892	499	490	350
MAX	142	1470	3010	1450	1370	4480	3070	1600	2060	1680	1630	741
MIN	53	84	136	206	118	268	483	349	191	139	178	160
CFSM	.12	.38	1.29	.61	.49	2.44	2.23	.87	1.17	.65	.64	.46
IN.	.13	.43	1.49	.71	.53	2.82	2.49	1.00	1.30	.75	.74	.51

CAL YR 1979 TOTAL 200039 MEAN 548 MAX 4160 MIN 53 CFSM .72 IN 9.75
WTR YR 1980 TOTAL 264680 MEAN 723 MAX 4480 MIN 53 CFSM .95 IN 12.90

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 mi² (699 km²).

WATER-DISCHARGE RECORDS

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 fair.

AVERAGE DISCHARGE.--34 years, 234 ft³/s (6.627 m³/s), 11.77 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft³/s (138 m³/s) Apr. 5, 1950, gage height, 11.67 ft (3.557 m); minimum daily, 13 ft³/s (0.37 m³/s) Oct. 3, 1949.

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

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 18	1100	*2470	70.0	*7.76	2.365

Minimum daily discharge, 26 ft³/s (.74 m³/s) Oct. 15, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	42	163	243	71	140	769	187	134	51	141	136
2	39	59	132	208	67	121	558	168	890	49	112	105
3	32	45	117	182	62	110	527	154	1670	47	111	100
4	28	39	103	161	66	100	1630	145	1080	45	93	168
5	29	36	95	143	66	93	1670	135	635	200	79	377
6	28	38	97	128	59	87	1010	129	446	251	69	228
7	32	36	98	115	55	83	664	120	358	142	62	153
8	30	34	100	105	50	414	517	113	455	110	54	121
9	29	38	95	99	54	445	586	108	333	93	53	106
10	29	57	89	95	50	593	643	104	247	91	52	93
11	29	52	86	90	49	508	531	105	194	80	54	81
12	30	46	111	166	48	328	457	105	161	53	112	73
13	28	43	163	202	47	248	406	115	140	81	110	70
14	27	42	145	138	46	204	477	116	126	87	137	65
15	26	40	125	121	51	221	782	103	166	52	149	61
16	28	39	114	113	48	254	698	99	352	44	108	61
17	31	38	101	150	45	1210	490	118	203	40	120	430
18	28	36	95	197	44	2330	395	482	147	37	200	500
19	31	35	89	180	45	1730	333	438	132	35	330	294
20	27	38	83	161	49	1110	290	314	152	37	530	202
21	27	37	78	140	59	1260	256	239	112	40	900	156
22	26	38	90	126	497	1500	229	191	96	120	634	132
23	39	74	224	119	776	938	208	161	86	282	403	200
24	42	144	758	111	524	714	188	145	83	160	278	166
25	36	138	1490	103	366	861	169	173	78	95	202	130
26	33	368	1230	115	270	656	156	131	72	54	156	114
27	32	414	781	102	210	512	146	114	67	47	128	97
28	31	336	548	92	180	434	202	104	62	130	109	88
29	30	294	417	84	160	563	255	96	58	310	95	81
30	29	213	340	79	----	617	216	93	52	230	85	78
31	31	----	285	74	----	904	-----	112	----	170	118	----
TOTAL	946	2889	8442	4142	4114	19288	15458	4917	8787	3263	5784	4666
MEAN	30.5	96.3	272	134	142	622	515	159	293	105	187	156
MAX	42	414	1490	243	776	2330	1670	482	1670	310	900	500
MIN	26	34	78	74	44	83	146	93	52	35	52	61
CFSM	.11	.36	1.01	.50	.53	2.30	1.91	.59	1.09	.39	.69	.58
IN.	.13	.40	1.16	.57	.57	2.66	2.13	.68	1.21	.45	.80	.64

CAL YR 1979 TOTAL 67331 MEAN 184 MAX 2790 MIN 26 CFSM .68 IN 9.28
WTR YR 1980 TOTAL 82696 MEAN 226 MAX 2330 MIN 26 CFSM .84 IN 11.39

0418000 CEDAR CREEK NEAR CEDARVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: February 1979 to September 1980 (partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
OCT 04...	1130	----	28	11	.83
NOV 07...	1150	----	33	53	4.7
MAY 07...	0940	12.0	127	65	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.--34 years, 492 ft³/s (13.93 m³/s), 10.76 in/yr (273 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s (320 m³/s) Feb. 10, 11, 1959; maximum gage height, 24.22 ft (7.382 m) Feb. 10, 1959 (ice jam); minimum daily discharge, 5.4 ft³/s (0.15 m³/s) Oct. 18, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s (82.1 m³/s) and maximum (*):

Date	Time	Discharge (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. 29	1400	3200	90.6	16.50	5.029	Mar. 22	0400	3100	87.8	16.27	4.959
Dec. 25	1100	3640	103	17.47	5.325	Mar. 25	1500	3270	92.6	16.67	5.081
Mar. 11	0500	4210	119	18.52	5.645	June 4	0800	*8710	247	*22.69	6.916

Minimum daily discharge, 20 ft³/s (0.57 m³/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	68	2460	570	66	280	1820	131	549	107	42	27
2	45	136	1790	399	63	220	1520	120	4670	96	44	26
3	44	137	1240	285	60	190	1440	108	7600	97	41	24
4	48	88	851	225	57	160	2040	99	8630	85	35	41
5	56	71	563	188	55	142	1710	94	8090	84	37	33
6	68	99	433	164	63	130	1160	90	6660	67	34	32
7	72	95	353	130	57	119	974	86	4760	62	29	31
8	69	81	301	120	54	2440	878	62	3220	74	30	27
9	78	85	255	110	56	3600	938	73	1800	84	30	27
10	75	151	227	100	55	3960	748	67	868	70	31	28
11	66	189	204	94	52	4170	565	67	464	65	46	26
12	57	163	181	635	51	3660	633	79	271	64	122	26
13	50	226	161	542	49	2850	642	86	189	70	277	23
14	47	219	144	640	48	1780	1560	82	149	68	361	21
15	51	164	126	616	52	1100	2210	93	135	59	1140	21
16	59	127	100	626	50	935	1540	121	136	52	572	23
17	52	103	84	687	48	1820	1230	145	137	47	295	33
18	49	87	76	635	45	2390	1190	607	147	42	486	27
19	43	78	72	494	49	1590	992	613	156	38	492	24
20	36	72	68	427	54	1290	702	506	143	35	275	21
21	49	66	66	302	120	2320	488	468	112	44	197	20
22	76	69	999	229	1630	2970	349	381	88	71	151	23
23	72	514	2280	170	1910	2440	294	266	76	83	106	34
24	65	1940	2840	132	1200	2530	259	207	68	79	71	47
25	58	2020	3600	112	800	3210	222	186	66	52	52	36
26	52	2340	3240	101	620	2830	190	147	60	45	43	30
27	49	2330	2720	93	450	2050	165	140	64	47	34	34
28	47	2700	2310	85	390	1590	172	132	159	66	30	34
29	47	3160	1820	78	345	1900	164	118	126	59	29	28
30	45	2970	1290	73	----	1830	145	124	152	55	35	22
31	43	-----	863	69	----	2120	-----	122	-----	46	35	----
TOTAL	1694	20548	31717	9131	8549	58616	26940	5620	49745	2013	5202	849
MEAN	54.6	685	1023	295	295	1891	898	181	1658	64.9	168	28.3
MAX	78	3160	3600	687	1910	4170	2210	613	8630	107	1140	47
MIN	26	66	66	69	45	119	145	62	60	35	29	20
CFSM	.09	1.10	1.65	.48	.48	3.05	1.45	.29	2.67	.11	.27	.05
IN.	.10	1.23	1.90	.55	.51	3.51	1.61	.34	2.98	.12	.31	.05

CAL YR 1979 TOTAL 189959 MEAN 520 MAX 7830 MIN 26 CFSM .84 IN 11.38
WTR YR 1980 TOTAL 220624 MEAN 603 MAX 8630 MIN 20 CFSM .97 IN 13.22

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 mi² (1,974 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307. Fragmentary gage-height records for period November 1924 to October 1927 are available in the District Office.

REVISED RECORDS.--WSP 974: 1942. WSP 1337: 1933, 1947. WSP 1912: 1954, 1955, 1960, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft (228.286 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal. During extreme floods, some water bypasses gage and flows through Houk ditch and Paul Trier ditch into the Maumee River.

AVERAGE DISCHARGE.--50 years, 573 ft³/s (16.23 m³/s), 10.21 in/yr 259 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s (385 m³/s) Feb. 11, 1959; maximum gage height, 19.42 ft (5.919 m) Feb. 11, 1959 (ice jam); minimum daily discharge, 3.4 ft³/s (0.010 m³/s) Oct. 19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (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. 25	1500	4860	138	11.59	3.533	Mar. 25	2400	4080	116	10.42	3.176
Mar. 10	2000	5420	153	12.34	3.761	June 5	1000	*8960	254	*15.82	4.822
Mar. 22	1400	4000	113	10.28	3.133						

Minimum daily discharge, 26 ft³/s (0.74 m³/s) Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	73	3460	803	84	340	2650	177	470	136	58	44
2	41	108	2580	560	81	260	1990	158	5560	102	53	38
3	53	164	1700	411	77	225	1850	141	7450	95	53	34
4	54	135	1150	323	75	203	2920	131	8450	94	49	36
5	56	94	784	273	72	182	2550	120	8900	83	45	47
6	63	84	572	234	77	167	1640	116	8340	75	45	43
7	73	106	465	210	71	150	1230	109	6950	68	45	39
8	74	100	392	190	67	2500	1120	102	5150	80	40	38
9	72	94	337	170	72	4160	1260	94	3010	90	40	37
10	80	111	298	155	67	5290	1110	89	1270	71	40	36
11	77	194	271	150	64	5180	828	86	671	65	43	33
12	69	190	249	944	62	4800	778	92	394	62	58	31
13	61	190	220	717	62	4300	869	109	267	61	185	28
14	55	244	195	784	61	2840	1810	110	196	63	472	26
15	52	209	174	807	66	1600	3150	96	160	62	1240	26
16	57	158	158	779	62	1290	2370	117	157	59	1260	28
17	64	125	149	929	59	2910	1590	199	148	53	573	39
18	59	103	138	921	59	3690	1450	873	151	50	586	41
19	55	89	129	702	63	2600	1280	962	163	49	674	33
20	53	82	121	564	86	1790	971	689	169	46	417	30
21	49	76	110	400	120	2880	700	602	143	45	275	27
22	62	72	742	310	2040	3950	500	520	115	72	201	29
23	102	206	3080	222	2620	3510	396	401	95	91	147	54
24	93	1800	4060	155	1730	3210	345	360	85	85	104	42
25	85	2620	4810	132	1100	3950	302	420	78	74	78	45
26	78	2890	4590	143	750	3940	255	248	75	57	66	40
27	73	3090	3900	123	540	3050	217	191	71	54	56	34
28	69	3220	3230	108	475	2130	223	178	101	67	47	35
29	67	3750	2540	99	420	2390	236	156	165	88	42	35
30	67	3860	1780	94	-----	2600	205	128	136	70	42	29
31	66	-----	1190	88	-----	2990	-----	220	-----	65	44	----
TOTAL	2010	24237	43574	12500	11182	79077	36795	7994	59090	2232	7078	1077
MEAN	64.8	808	1406	403	386	2551	1227	258	1970	72.0	228	35.9
MAX	102	3860	4810	944	2620	5290	3150	962	8900	136	1260	54
MIN	31	72	110	88	59	150	205	86	71	45	40	26
CFSM	.09	1.06	1.85	.53	.51	3.35	1.61	.34	2.59	.09	.30	.05
IN.	.10	1.18	2.13	.61	.55	3.86	1.80	.39	2.88	.11	.35	.05

CAL YR 1979 TOTAL 246616 MEAN 676 MAX 9530 MIN 31 CFSM .89 IN 12.04
WTR YR 1980 TOTAL 286846 MEAN 784 MAX 8900 MIN 26 CFSM 1.03 IN 14.00

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.--16 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, 891 ft^3/s (25.2 m^3/s) June 2, 1980, gage height, 11.52 ft (3.511 m); maximum gage height, 11.55 (3.520 m) Feb. 20, 1971; 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)
Dec. 24	1045	312	8.84	7.56	2.304	Apr. 3	2300	251	7.11	6.95	2.118
Feb. 22	0300	313	8.86	7.57	2.307	June 2	0400	*891	25.2	*11.52	3.511
Mar. 17	1045	508	14.4	9.13	2.783						

Minimum daily discharge, 0.23 ft^3/s (0.006 m^3/s) July 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	10	8.7	9.3	2.0	3.3	40	5.0	84	.63	.70	2.2
2	8.6	.98	4.8	7.6	1.9	2.9	28	4.0	695	.77	.56	1.6
3	1.6	.87	4.1	6.6	1.8	2.7	55	3.7	238	.67	.48	.91
4	3.2	.70	4.4	5.9	1.7	2.5	105	3.5	62	.66	.48	2.2
5	1.7	.76	4.4	4.9	1.6	5.0	40	3.5	34	1.8	.43	1.5
6	1.9	.77	4.6	4.2	1.6	4.6	26	3.5	21	.63	.34	1.3
7	1.6	.62	4.8	3.6	1.8	14	20	3.0	16	6.3	.34	.84
8	1.3	.51	4.6	3.2	1.7	140	42	2.6	6.6	1.6	.35	.81
9	1.6	6.0	3.8	2.9	1.6	98	47	2.3	5.1	.91	.67	1.3
10	1.3	2.3	3.7	2.6	1.5	104	36	2.4	4.2	.57	.81	.94
11	1.5	1.6	3.8	15	1.5	50	24	2.4	2.6	.49	4.4	.89
12	2.2	1.2	6.3	17	1.4	26	25	10	2.1	.40	1.6	.80
13	1.5	.95	4.4	9.2	1.4	19	20	9.6	2.0	.30	6.1	.84
14	1.4	.81	3.7	8.0	1.7	15	67	4.2	2.1	.33	24	.75
15	1.4	.80	3.2	5.5	1.6	20	63	3.5	3.5	.23	45	.76
16	3.4	.79	2.6	8.3	1.5	27	38	2.4	2.8	.23	31	3.2
17	1.2	.67	2.2	21	1.4	295	24	30	1.7	.25	55	26
18	1.3	.67	1.9	20	1.4	96	18	60	1.5	.32	56	10
19	1.7	1.1	1.7	14	1.4	55	14	26	2.4	3.7	25	4.1
20	1.8	1.2	1.6	11	1.9	40	13	17	2.1	.85	15	2.6
21	1.9	.94	1.5	9.2	5.2	138	9.9	10	1.4	12	7.3	1.9
22	5.7	3.0	38	7.6	168	51	7.3	6.9	1.3	12	3.7	12
23	1.9	22	92	6.2	47	32	6.4	5.6	1.5	2.1	2.3	9.6
24	.84	26	211	5.2	26	50	4.5	6.9	1.2	.93	1.5	5.4
25	.87	18	98	4.1	16	51	3.9	5.3	1.0	.51	1.3	3.6
26	.71	63	56	3.4	12	30	3.0	3.2	.88	.41	1.0	2.8
27	.70	31	35	2.7	7.6	22	3.7	2.6	.74	7.3	.81	2.3
28	.74	42	25	2.5	6.2	19	19	2.4	.64	27	.77	2.0
29	.97	28	18	2.3	4.2	47	11	2.4	.56	5.8	.78	2.0
30	1.0	14	14	2.2	-----	44	6.8	3.5	.48	1.8	2.2	1.7
31	.98	------	11	2.1	-----	89	-----	2.7	-------	1.1	5.7	------
TOTAL	61.11	281.24	678.8	227.3	324.6	1593.0	820.5	250.1	1198.40	92.59	295.62	106.84
MEAN	1.97	9.37	21.9	7.33	11.2	51.4	27.4	8.07	39.9	2.99	9.54	3.56
MAX	8.6	63	211	21	168	295	105	60	695	27	56	26
MIN	.70	.51	1.5	2.1	1.4	2.5	3.0	2.3	.48	.23	.34	.75
CFSM	.09	.43	1.00	.34	.51	2.35	1.25	.37	1.82	.14	.44	.16
IN.	.10	.48	1.15	.39	.55	2.71	1.39	.42	2.04	.16	.50	.18

CAL YR 1979 TOTAL 5924.77 MEAN 16.2 MAX 777 MIN .51 CFSM .74 IN 10.06
WTR YR 1980 TOTAL 5930.10 MEAN 16.2 MAX 695 MIN .23 CFSM .74 IN 10.07

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 except for those periods of no gage-height record, Oct. 29 to Nov. 19, and July 12 to Aug. 27, which are fair. 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.--24 years (1956 to current year), 1,596 ft³/s (45.2 m³/s), 11.02 in/yr (280 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s (634 m³/s) Mar. 24, 1978, gage height, 23.58 ft (7.187 m); minimum daily, 48 ft³/s (1.36 m³/s) Oct. 6, 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s (269 m³/s) and maximum (*):

Date	Time	Discharge (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. 18	0300	9520	270	15.48	4.718	June 3	2300	*10800	306	*16.61	5.063
Mar. 22	2200	9730	276	15.67	4.776						

Minimum daily discharge, 145 ft³/s (4.11 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	386	3900	3220	370	1100	6480	1440	1350	410	800	545
2	512	275	3250	2440	355	970	5100	1250	8400	367	630	499
3	380	275	2340	1660	340	900	4640	1090	10500	374	520	500
4	148	310	1830	1460	325	850	7340	1050	10600	291	445	568
5	174	270	1340	1140	315	810	7640	757	10400	629	400	1200
6	166	258	1100	1050	300	891	6410	501	9980	1000	375	957
7	215	250	1160	918	290	1350	5420	744	9100	471	370	912
8	190	285	1000	582	280	3890	5170	677	7930	713	350	814
9	218	391	860	703	275	5380	5570	663	5690	882	330	596
10	219	358	800	704	270	6810	5050	598	3850	832	370	634
11	218	345	860	880	265	7000	4220	592	3150	827	350	401
12	180	340	950	1080	260	6250	3650	687	2820	810	400	469
13	198	330	860	1220	260	5510	3360	765	2480	745	900	408
14	200	390	810	1370	255	4350	4160	681	2070	690	2000	385
15	206	390	820	1480	250	3010	6240	577	1870	780	2600	372
16	251	330	780	1420	325	2480	6110	523	2240	780	1880	347
17	238	292	705	1580	295	6610	4670	1270	1110	720	2100	1140
18	227	265	429	1790	275	9470	4040	2740	922	600	1700	1410
19	212	245	515	1810	265	8710	3600	3280	1030	450	1800	1130
20	207	238	598	1590	270	6930	3090	2920	1020	400	2900	835
21	184	235	557	1410	290	7800	2500	2620	739	1000	2550	691
22	178	378	879	1180	2970	9450	2010	2500	670	2000	2060	585
23	672	1320	3810	1030	5100	9260	1640	2270	699	1020	1580	785
24	322	2760	6820	732	4310	8010	1400	2020	511	920	1240	473
25	252	3900	9100	600	3180	8370	1260	1990	312	999	970	503
26	234	4300	9150	540	2320	8070	1140	1140	387	760	730	474
27	245	4600	7930	500	1600	7140	1040	963	473	850	630	394
28	216	4350	6910	470	1400	5540	1200	766	378	1700	578	421
29	224	4750	6130	440	1270	5460	1410	773	455	2120	491	339
30	216	4300	5330	425	-----	5830	1520	629	431	1320	490	320
31	245	-----	4200	395	-----	6760	------	774	------	1130	621	-----
TOTAL	7492	37116	85723	35819	28280	164961	117080	39250	101567	26590	33160	19107
MEAN	242	1237	2765	1155	975	5321	3903	1266	3386	858	1070	637
MAX	672	4750	9150	3220	5100	9470	7640	3280	10600	2120	2900	1410
MIN	145	235	429	395	250	810	1040	501	312	291	330	320
CFSM	.12	.63	1.41	.59	.50	2.71	1.98	.64	1.72	.44	.54	.32
IN.	.14	.70	1.62	.68	.53	3.12	2.21	.74	1.92	.50	.63	.36

CAL YR 1979 TOTAL 571262 MEAN 1565 MAX 15200 MIN 145 CFSM .80 IN 10.80
WTR YR 1980 TOTAL 696145 MEAN 1902 MAX 10600 MIN 145 CFSM .97 IN 13.17

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.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1915: 1952, 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.04 ft (207.276 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to June 26, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--29 years, 147 ft^3/s (4.163 m^3/s), 11.47 in/yr (291 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 686 ft^3/s (19.4 m^3/s) Oct. 10, 1954; 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, 374 ft^3/s (10.6 m^3/s) Apr. 9, gage height, 5.25 ft (1.600 m); minimum daily, 67 ft^3/s (1.90 m^3/s) July 26 and Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	133	200	194	132	144	190	152	153	111	79	170
2	125	151	186	187	130	141	184	146	264	107	86	210
3	118	141	176	179	128	137	186	142	258	108	89	194
4	111	132	173	173	127	136	215	140	216	119	74	172
5	123	127	180	168	127	134	205	138	193	128	72	162
6	120	122	218	164	127	128	187	129	183	127	67	151
7	168	118	216	163	122	128	179	125	199	118	70	143
8	156	119	214	154	121	132	194	125	340	107	89	138
9	138	119	199	150	122	131	353	124	273	107	102	134
10	133	130	188	149	121	142	358	124	245	112	108	132
11	130	134	182	164	121	163	309	125	219	102	117	127
12	127	131	183	166	118	153	280	125	199	108	134	124
13	119	127	182	160	117	149	257	132	186	105	124	124
14	112	121	173	154	117	141	249	119	179	92	190	120
15	108	120	167	150	117	141	271	117	180	87	186	118
16	104	115	164	152	117	162	254	116	178	84	157	120
17	100	113	156	186	113	229	228	130	168	86	180	204
18	98	110	154	196	113	277	211	140	160	84	199	214
19	100	107	152	187	115	247	200	134	157	79	173	183
20	102	104	146	179	116	231	189	129	154	94	202	167
21	102	111	144	172	120	225	180	121	151	78	251	157
22	108	141	148	167	189	209	171	116	152	77	183	152
23	129	187	170	161	235	193	167	117	139	76	153	166
24	140	183	218	156	211	199	164	111	133	76	141	158
25	136	170	320	153	193	239	162	117	130	71	132	150
26	131	270	318	145	173	218	158	111	122	67	125	143
27	128	277	275	142	168	199	155	100	117	86	120	138
28	123	260	247	140	161	188	157	95	129	92	115	137
29	116	241	229	137	151	218	157	99	129	89	110	132
30	110	215	215	136	----	227	155	106	119	89	108	129
31	108	----	204	133	----	208	----	110	----	94	112	----
TOTAL	3706	4529	6097	5017	4022	5569	6325	3815	5425	2960	4048	4569
MEAN	120	151	197	162	139	180	211	123	181	95.5	131	152
MAX	168	277	320	196	235	277	358	152	340	128	251	214
MIN	83	104	144	133	113	128	155	95	117	67	67	118
CFSM	.69	.87	1.13	.93	.80	1.03	1.21	.71	1.04	.55	.75	.87
IN.	.79	.97	1.30	1.07	.86	1.19	1.35	.82	1.16	.63	.87	.98

CAL YR 1979 TOTAL 60097 MEAN 165 MAX 589 MIN 71 CFSM .95 IN 12.85
WTR YR 1980 TOTAL 56082 MEAN 153 MAX 358 MIN 67 CFSM .88 IN 11.99

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN--Continued

WATER-QUALITY RECORDS

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
OCT											
06...	1115	11.5	114	32	9.8	--	--	--	--	---	---
22...	1430	16.0	101	24	6.5	--	--	--	--	---	---
NOV											
05...	1735	10.0	132	26	9.3	--	--	--	--	---	---
16...	1635	8.0	114	28	8.6	--	--	--	--	---	---
24...	1730	8.0	180	27	13	--	--	--	--	---	---
28...	1700	--	250	44	30	--	--	--	--	---	---
DEC											
01...	1400	9.0	195	16	8.4	--	--	--	--	---	---
08...	1145	7.0	214	22	13	--	--	--	--	---	---
23...	1600	9.0	169	25	11	--	--	--	--	---	---
JAN											
05...	1400	4.0	167	15	6.8	--	--	--	--	---	---
14...	1530	6.0	153	12	5.0	--	--	--	--	---	---
16...	1610	7.0	152	27	11	--	--	--	--	---	---
22...	1605	4.0	166	19	8.5	--	--	--	--	---	---
FEB											
01...	1615	3.5	131	8	2.8	--	--	--	--	---	---
09...	1715	5.5	118	7	2.2	--	--	--	--	---	---
16...	1545	3.0	113	12	3.7	--	--	--	--	---	---
25...	1705	3.0	183	16	7.9	--	--	--	--	---	---
MAR											
01...	1700	6.0	141	5	1.9	--	--	--	--	---	---
04...	1810	7.0	132	12	4.3	--	--	--	--	---	---
07...	1600	8.0	125	60	20	68	89	93	96	100	---
20...	1835	13.0	226	79	48	79	91	95	97	100	---
APR											
10...	1750	9.0	348	63	59	79	86	92	98	100	---
15...	1845	8.0	274	73	54	65	86	94	98	100	---
19...	1820	15.0	196	105	56	69	83	89	91	93	100
22...	0825	12.0	174	51	24	--	--	--	--	---	---
27...	1300	12.0	158	54	23	--	--	--	--	---	---
MAY											
05...	1045	15.0	144	46	18	--	--	--	--	---	---
18...	1250	13.5	145	43	17	--	--	--	--	---	---
25...	1250	17.0	119	60	19	--	--	--	--	---	---
JUN											
01...	1255	19.0	143	48	19	--	--	--	--	---	---
08...	1210	15.0	355	110	105	--	--	--	--	---	---
10...	1350	----	235	58	37	71	90	97	99	100	---

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
JUN					
17...	0740	19.0	173	68	32
27...	1830	----	116	86	27
30...	1705	----	113	76	23
JUL					
06...	1345	----	130	43	15
31...	1745	22.0	89	51	12
AUG					
04...	1900	24.0	72	57	11
06...	1555	19.0	68	27	5.0
21...	1325	21.0	252	54	37
SEP					
03...	1745	20.0	188	34	17
16...	1815	19.0	119	33	11
17...	1730	----	244	63	42
23...	1855	16.0	166	55	25
29...	1815	17.0	131	29	10

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.--10 years, 3.95 ft³/s (0.112 m³/s), 7.58 in/yr (193 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46 ft³/s (1.30 m³/s) June 7, 1980, gage height, 5.56 ft (1.695 m); minimum daily, 0.83 ft³/s (0.024 m³/s) Dec. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 15 ft³/s (0.425 m³/s) and maximum (*):

Date	Time	Discharge (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. 26	0200	17	0.48	4.30	1.311	Aug. 15	0300	40	1.13	5.31	1.618
Mar. 17	0700	19	0.54	4.46	1.359	Aug. 20	0900	35	0.99	5.10	1.554
June 7	1700	*46	1.30	*5.56	1.695	Sept. 17	0200	20	0.57	4.45	1.356
Aug. 13	2300	37	1.05	5.17	1.576						

Minimum daily discharge, 1.5 ft³/s (0.042 m³/s) many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	3.9	3.1	2.5	1.5	2.1	4.3	3.4	4.0	2.1	1.5	6.3
2	2.8	2.6	2.7	2.4	1.5	2.1	4.7	3.2	4.0	2.0	1.5	5.0
3	2.2	2.4	2.6	2.3	1.5	2.0	5.0	3.0	2.7	1.9	1.5	3.4
4	2.1	2.2	2.6	2.3	1.5	2.0	5.1	2.9	2.0	1.9	1.4	2.9
5	2.1	2.1	3.1	2.2	1.5	2.0	4.4	2.8	1.8	2.1	1.4	2.6
6	2.6	2.0	3.3	2.2	1.5	1.9	4.2	2.6	2.3	1.9	1.4	2.4
7	2.5	2.0	3.4	2.1	1.5	2.0	4.4	2.6	19	1.9	1.4	2.3
8	2.3	2.1	2.9	1.7	1.5	2.7	6.3	2.5	12	1.8	1.3	2.3
9	1.9	2.5	2.7	1.7	1.5	2.6	6.9	2.4	5.5	1.9	1.5	2.3
10	1.9	2.6	2.7	1.8	1.5	4.3	5.8	2.4	3.9	1.9	2.1	2.2
11	2.1	2.3	2.7	2.9	1.5	3.3	5.1	2.4	2.9	1.8	2.4	2.0
12	2.1	2.0	2.9	2.0	1.5	2.8	5.3	2.5	2.5	1.8	2.1	2.1
13	1.8	2.0	2.6	2.0	1.5	2.7	4.6	3.0	2.4	1.7	6.2	2.3
14	1.8	1.9	2.4	2.1	1.5	2.5	5.6	2.4	2.3	1.6	10	2.1
15	1.9	1.9	2.4	2.0	1.5	3.7	6.4	2.3	5.0	1.6	18	2.0
16	2.4	1.8	2.4	2.7	1.5	5.4	5.1	2.3	3.9	1.5	5.1	3.1
17	2.2	1.8	2.2	3.3	1.5	12	4.6	2.9	3.3	1.5	5.6	9.7
18	2.0	1.8	2.2	2.8	1.5	5.9	4.4	2.8	3.0	1.5	3.9	3.9
19	1.9	1.7	2.2	2.5	1.6	5.2	4.2	2.5	3.0	1.5	3.5	3.0
20	2.0	1.6	2.1	2.4	1.7	5.0	4.1	2.4	2.8	1.5	17	2.7
21	1.9	2.6	2.1	2.2	2.3	4.7	4.0	2.2	2.7	1.5	7.7	2.5
22	2.4	3.6	2.7	2.0	4.6	4.1	4.0	2.1	2.5	1.5	4.8	3.4
23	2.5	3.1	3.4	1.9	3.5	4.0	3.5	2.0	2.4	1.5	3.7	3.5
24	2.3	2.4	5.8	1.8	3.3	5.5	3.7	2.0	2.4	1.5	3.2	2.7
25	2.2	3.5	7.3	1.7	3.0	4.7	3.6	2.0	2.4	1.4	2.8	2.6
26	2.1	8.7	4.1	1.7	2.5	4.2	3.6	1.8	2.3	1.5	2.6	2.3
27	2.1	4.1	3.3	1.6	2.3	4.0	3.6	1.6	2.2	1.9	2.4	2.2
28	2.1	4.0	2.9	1.6	2.2	4.3	3.7	1.5	2.3	1.9	2.2	2.2
29	2.0	3.4	2.7	1.5	2.1	6.4	3.6	1.7	2.2	1.6	2.1	2.1
30	1.9	3.1	2.6	1.5	----	5.0	3.5	1.6	2.1	1.6	2.3	2.1
31	2.0	----	2.6	1.5	----	4.8	-----	1.5	-----	1.5	2.7	----
TOTAL	66.2	81.7	92.7	64.9	56.1	123.9	137.3	73.3	111.8	52.8	125.3	90.2
MEAN	2.14	2.72	2.99	2.09	1.93	4.00	4.58	2.36	3.73	1.70	4.04	3.01
MAX	2.8	8.7	7.3	3.3	4.6	12	6.9	3.4	19	2.1	18	9.7
MIN	1.8	1.6	2.1	1.5	1.5	1.9	3.5	1.5	1.8	1.4	1.3	2.0
CFSM	.30	.38	.42	.30	.27	.57	.65	.33	.53	.24	.57	.43
IN.	.35	.43	.49	.34	.29	.65	.72	.39	.59	.28	.66	.47

CAL YR 1979 TOTAL 1369.7 MEAN 3.75 MAX 21 MIN 1.5 CFSM .53 IN 7.20
WTR YR 1980 TOTAL 1076.2 MEAN 2.94 MAX 19 MIN 1.3 CFSM .42 IN 5.65

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.

AVERAGE DISCHARGE.--56 years, 1924 to current year, 494 ft^3/s (13.99 m^3/s), 12.49 in/yr (317 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,700 ft^3/s (48.1 m^3/s) Dec. 15, 1927, gage height, 9.50 ft (2.896 m), site and datum then in use, from rating curve extended above 520 ft^3/s (14.7 m^3/s); maximum gage height at present site and datum, 12.47 ft (3.801 m) Apr. 8, 9, 1978; minimum daily discharge, 154 ft^3/s (4.36 m^3/s) Aug. 30 to Sept. 3, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,140 ft^3/s (32.3 m^3/s) Apr. 10, gage height, 10.82 ft (3.298 m); minimum daily, 233 ft^3/s (6.60 m^3/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	405	603	620	444	482	734	570	462	380	273	559
2	372	445	575	599	435	467	703	559	651	369	260	693
3	384	433	556	583	432	455	699	549	743	361	269	670
4	365	414	543	567	433	451	777	539	682	358	255	606
5	369	401	534	554	431	447	809	533	615	382	247	561
6	376	391	569	539	430	433	746	523	586	402	244	528
7	440	380	588	524	424	431	701	511	571	383	239	498
8	459	376	590	515	421	451	702	502	731	371	233	482
9	423	380	575	500	422	513	978	497	781	356	250	470
10	397	403	560	487	419	567	1130	493	689	361	298	464
11	389	418	541	513	417	628	1100	493	619	353	334	449
12	386	415	537	538	410	602	1030	489	571	341	375	441
13	375	407	535	533	408	559	967	499	538	333	366	441
14	363	396	532	519	411	527	925	509	515	322	547	437
15	355	391	516	507	413	510	977	493	511	310	688	428
16	365	384	505	501	412	552	981	480	527	296	678	423
17	368	376	485	549	401	696	910	481	504	286	629	573
18	356	370	476	587	410	913	839	514	483	283	670	684
19	350	364	476	581	411	873	779	518	471	281	611	627
20	347	363	465	562	409	818	733	507	466	279	669	569
21	344	371	454	547	415	787	699	492	456	281	951	536
22	343	419	455	536	529	758	674	477	449	282	873	513
23	383	497	488	522	701	714	649	468	444	291	703	542
24	404	525	571	501	683	708	626	466	436	274	605	537
25	403	510	785	505	639	794	612	462	426	269	541	515
26	396	653	887	488	585	791	597	450	416	265	502	494
27	387	755	839	473	563	741	588	439	407	286	471	476
28	379	722	756	464	538	705	582	430	402	315	449	466
29	369	685	704	458	510	732	587	429	403	303	430	455
30	361	640	670	452	-----	795	579	427	392	286	426	449
31	355	-----	643	448	-----	764	-----	440	-----	286	434	-----
TOTAL	11664	13689	18013	16272	13556	19664	23413	15239	15947	9945	14520	15586
MEAN	376	456	581	525	467	634	780	492	532	321	468	520
MAX	459	755	887	620	701	913	1130	570	781	402	951	693
MIN	301	363	454	448	401	431	579	427	392	265	233	423
CFSM	.70	.85	1.08	.98	.87	1.18	1.45	.92	.99	.60	.87	.97
IN.	.81	.95	1.25	1.13	.94	1.36	1.62	1.06	1.10	.69	1.01	1.08

CAL YR 1979 TOTAL 198908 MEAN 545 MAX 1510 MIN 274 CFSM 1.02 IN 13.78
WTR YR 1980 TOTAL 187508 MEAN 512 MAX 1130 MIN 233 CFSM .95 IN 12.99

05516500 YELLOW RIVER AT PLYMOUTH, IN

LOCATION.--Lat 41°20'25", long 86°18'16", in SE¼NW¼ sec.13, T.33 N., R.2 E., Marshall County, Hydrologic Unit 07120001, on left bank 50 ft (15 m) upstream from LaPorte Street footbridge in Plymouth, 1.1 miles (1.8 km) downstream from Elmer Seltenright (formerly Baker) ditch, 8.1 miles (13.0 km) upstream from Wolf Creek, and at mile 40.3 (64.8 km).

DRAINAGE AREA.--294 mi² (761 km²), of which 22 mi² (57 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-51. WSP 2115: Drainage area. WRD Ind. 1973: 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 764.78 ft (233.105 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Aug. 27, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--32 years, 250 ft³/s (7.080 m³/s), 11.55 in/yr (293 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, 1,490 ft³/s (42.2 m³/s) Apr. 11, gage height, 10.58 ft (3.225 m); minimum daily, 28 ft³/s (0.79 m³/s) Oct. 15, 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	59	244	240	99	187	573	178	210	87	52	257
2	63	71	192	220	93	182	475	169	754	87	45	490
3	48	65	171	200	90	168	533	162	1040	85	44	549
4	40	53	167	190	89	162	825	148	976	76	43	366
5	34	47	163	170	89	161	1110	145	488	84	44	265
6	40	43	241	160	90	145	1000	141	314	107	41	208
7	44	41	267	150	87	144	605	133	273	107	37	174
8	41	46	254	122	84	270	526	126	643	88	35	152
9	37	70	241	120	86	605	999	121	850	80	39	137
10	33	79	220	141	84	743	1390	117	524	75	48	128
11	33	80	202	200	84	784	1420	120	316	76	62	118
12	31	73	192	230	79	473	1100	120	240	74	78	110
13	32	66	207	200	80	300	761	145	212	71	91	106
14	30	59	191	180	81	245	608	174	194	68	473	102
15	28	55	165	160	81	228	850	146	223	65	553	98
16	34	52	154	179	80	364	959	128	258	62	509	99
17	34	50	133	260	73	736	706	138	198	59	386	258
18	33	47	123	240	81	1140	473	190	174	55	371	362
19	30	50	127	215	81	1290	394	195	160	55	287	245
20	28	48	119	195	85	1060	345	176	152	53	498	184
21	28	52	113	180	104	789	307	153	140	51	679	150
22	37	76	118	165	578	746	278	143	130	57	475	178
23	46	137	254	155	946	524	255	133	124	71	295	190
24	48	176	506	137	1010	471	228	132	120	71	206	160
25	45	160	620	130	646	766	213	128	117	62	168	140
26	40	494	800	125	330	810	195	113	112	58	146	124
27	37	791	920	120	303	520	188	107	105	67	128	113
28	35	676	640	115	252	402	190	104	101	69	112	107
29	32	461	490	110	214	529	194	101	95	68	105	102
30	31	319	320	112	----	703	190	106	92	62	111	98
31	30	----	270	105	----	603	-----	164	----	57	144	----
TOTAL	1136	4496	8824	5226	6079	16250	17890	4356	9335	2207	6305	5770
MEAN	36.6	150	285	169	210	524	596	141	311	71.2	203	192
MAX	63	791	920	260	1010	1290	1420	195	1040	107	679	549
MIN	28	41	113	105	73	144	188	101	92	51	35	98
CFSM	.12	.51	.97	.58	.71	1.78	2.03	.48	1.06	.24	.69	.65
IN.	.14	.57	1.12	.66	.77	2.06	2.26	.55	1.18	.28	.80	.73

CAL YR 1979 TOTAL 92238 MEAN 253 MAX 2800 MIN 23 CFSM .86 IN 11.67
WTR YR 1980 TOTAL 87874 MEAN 240 MAX 1420 MIN 28 CFSM .82 IN 11.12

05516500 YELLOW RIVER AT PLYMOUTH, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
WATER TEMPERATURE: June 1979 to current year.
SEDIMENT DISCHARGE: June 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 25°C. July 13, 15, 16, 18, 20, Aug. 8, 1980; minimum, freezing point Jan. 8, 1980.
SEDIMENT CONCENTRATION: Maximum daily, 501 mg/L June 8, 1980; minimum daily, 5 mg/L Sept. 22-23, 1979.
SEDIMENT DISCHARGE: Maximum daily load, 980 tons (889 tonnes) Apr. 9, 1980; minimum daily load, 0.40 tons (0.36 tonnes) Sept. 22-24, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 25°C July 13, 15, 16, 18, 20, Aug. 8; minimum, freezing point Jan. 8.
SEDIMENT CONCENTRATIONS: Maximum daily, 501 mg/L June 8; minimum daily, 7 mg/L Nov. 6, 12-16, Dec. 10, 11, Feb 28.
SEDIMENT DISCHARGE: Maximum daily load, 980 tons (889 tonnes) Apr. 9; minimum daily load, 0.73 tons (0.66 tonnes) Oct. 31.

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14	1.8	21	3.5	11	7.2	19	12	17	4.5	15	7.6
2	27	4.6	15	2.9	11	5.7	19	11	22	5.5	11	5.4
3	15	2.0	10	1.8	9	4.2	16	8.6	19	4.6	11	5.0
4	12	1.3	9	1.3	8	3.6	14	7.2	19	4.6	10	4.4
5	10	.92	8	1.0	12	5.3	16	7.3	20	4.8	11	4.8
6	15	2.0	7	.81	17	11	14	6.0	14	3.4	9	3.5
7	16	1.9	9	1.0	10	7.2	16	6.5	16	3.8	12	4.7
8	14	1.5	17	2.3	8	5.5	23	7.6	14	3.2	45	42
9	11	1.1	20	3.8	8	5.2	31	10	16	3.7	70	112
10	12	1.1	10	2.1	7	4.2	22	8.4	14	3.2	58	116
11	12	1.1	8	1.7	7	3.8	58	33	16	3.6	44	93
12	14	1.2	7	1.4	10	5.2	75	47	19	4.1	21	27
13	21	1.8	7	1.2	13	7.3	34	18	17	3.7	14	11
14	19	1.5	7	1.1	9	4.6	19	9.2	23	5.0	10	6.6
15	18	1.4	7	1.0	9	4.0	22	9.5	22	4.8	12	7.4
16	22	2.2	7	.98	10	4.2	25	12	22	4.8	30	29
17	14	1.3	8	1.1	9	3.2	75	60	22	4.3	120	234
18	17	1.5	10	1.3	10	3.3	44	29	23	5.0	98	302
19	16	1.3	18	2.5	16	5.5	22	13	20	4.4	47	164
20	14	1.1	13	1.7	12	3.9	17	9.0	17	3.9	28	80
21	12	.91	10	1.4	8	2.4	12	5.8	29	8.9	34	72
22	19	2.1	16	3.3	20	6.6	12	5.3	255	396	34	68
23	17	2.1	30	11	43	37	12	5.0	---	-----	18	25
24	9	1.2	26	12	121	175	11	4.1	---	-----	29	39
25	8	.97	24	11	126	211	11	3.9	23	40	89	177
26	8	.86	170	249	62	134	11	3.7	19	17	24	52
27	8	.80	107	229	45	112	12	3.9	13	11	14	20
28	11	1.0	40	73	28	48	14	4.3	8	5.4	17	18
29	11	.95	22	27	23	30	12	3.6	7	4.0	34	52
30	11	.92	14	12	20	17	12	3.6	---	-----	29	55
31	9	.73	---	------	17	12	14	4.0	---	-----	18	29
TOTAL	---	45.16	---	663.19	---	889.1	---	371.5	---	567.2	---	1866.4

05516500 YELLOW RIVER AT PLYMOUTH, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	18	28	35	17	87	49	87	20	35	4.9	80	57
2	18	23	34	16	414	835	52	12	34	4.1	135	183
3	30	43	35	15	169	465	39	9.0	42	5.0	77	114
4	224	505	40	16	54	142	50	10	35	4.1	47	46
5	90	270	34	13	50	66	61	14	39	4.6	47	34
6	38	103	44	17	42	36	81	23	37	4.1	45	25
7	23	38	55	20	47	35	72	21	33	3.3	43	20
8	70	109	42	14	501	932	43	10	31	2.9	47	19
9	378	980	32	10	171	392	50	11	26	2.7	42	16
10	129	484	30	9.5	74	105	52	11	34	4.5	38	13
11	61	234	61	20	53	45	43	8.8	35	6.2	37	12
12	33	98	51	17	55	36	45	9.0	33	6.9	45	13
13	23	47	83	34	57	33	35	6.7	37	10	41	12
14	24	39	63	30	80	42	28	5.1	303	377	37	10
15	36	83	50	20	122	77	30	5.3	125	187	36	9.5
16	20	52	35	12	120	84	36	6.0	82	113	47	13
17	13	25	40	15	61	33	28	4.5	73	76	134	106
18	18	23	37	19	72	34	25	3.7	68	68	116	113
19	20	21	28	15	85	37	31	4.6	55	43	85	56
20	20	19	28	13	83	34	37	5.3	158	228	66	33
21	21	17	34	14	99	37	35	4.8	80	147	45	18
22	20	15	35	14	100	35	30	4.6	57	73	37	18
23	25	17	46	17	102	34	56	11	50	40	50	26
24	41	25	42	15	90	29	55	11	40	22	48	21
25	36	21	43	15	88	28	47	7.9	36	16	38	14
26	34	18	49	15	98	30	44	6.9	32	13	43	14
27	33	17	53	15	86	24	34	6.1	34	12	43	13
28	40	21	54	15	70	19	37	6.9	31	9.4	41	12
29	38	20	44	12	76	19	32	5.9	38	11	24	6.6
30	36	18	47	14	100	25	33	5.5	45	13	29	7.7
31	---	----	73	33	---	----	34	5.2	44	13	---	------
TOTAL	---	3413	---	521.5	---	3792	---	275.8	---	1524.7	---	1054.8

TOTAL LOAD FOR YEAR: 14984.35 TONS.

05516500 YELLOW RIVER AT PLYMOUTH, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	14.0	5.0	6.0	3.0	6.0	6.0	---	18.0	22.0	23.0	22.0
2	16.0	10.0	4.0	6.0	5.0	2.0	8.0	15.0	20.0	24.0	22.0	23.0
3	17.0	9.0	3.0	6.0	1.0	3.0	9.0	15.0	20.0	22.0	22.0	21.0
4	14.0	6.0	4.0	4.0	5.0	2.0	8.0	16.0	19.0	20.0	23.0	22.0
5	13.0	9.0	6.0	3.0	5.0	4.0	8.0	16.0	18.0	24.0	21.5	22.0
6	12.0	10.0	6.0	3.0	5.0	2.0	10.0	19.0	20.0	22.0	22.0	22.0
7	10.0	8.0	6.0	1.0	3.0	3.0	11.0	14.0	22.0	22.0	24.0	22.0
8	12.0	8.0	6.0	.0	4.0	4.0	11.0	12.0	18.0	24.0	25.0	22.0
9	13.0	8.0	4.0	1.0	5.0	4.0	9.0	13.0	16.5	24.0	24.0	20.0
10	10.0	9.0	6.0	3.0	5.0	4.0	---	14.0	17.0	24.0	22.0	19.0
11	9.0	8.0	8.0	6.0	5.0	3.0	---	14.0	18.0	24.0	23.0	18.0
12	10.0	9.0	8.0	4.0	4.0	2.0	---	14.0	18.0	22.0	22.0	18.0
13	9.0	6.0	6.0	2.0	7.0	3.0	---	16.0	20.0	25.0	22.0	19.0
14	9.0	5.0	5.0	2.0	5.0	2.0	---	15.0	21.0	24.0	22.0	20.0
15	9.0	7.0	4.0	3.5	4.0	10.0	---	15.0	20.0	25.0	22.0	18.0
16	12.0	6.0	4.0	6.0	4.0	8.0	---	15.0	18.0	25.0	20.0	20.0
17	13.0	7.0	.0	6.0	2.0	6.0	---	16.0	18.0	24.0	20.0	---
18	14.0	10.0	2.0	9.0	4.0	6.0	12.0	15.0	18.0	25.0	21.0	---
19	15.0	10.0	5.0	7.0	1.0	6.0	15.0	16.0	19.0	23.0	22.0	---
20	17.0	10.0	3.0	6.0	8.0	6.0	14.0	15.0	18.0	25.0	24.0	---
21	19.0	10.0	4.0	6.0	7.0	7.0	13.5	17.0	19.0	24.0	24.0	22.0
22	18.0	12.0	6.0	5.0	3.0	4.0	15.0	15.0	20.0	24.0	21.0	22.0
23	13.0	11.0	8.0	5.0	---	7.0	15.0	17.0	21.0	23.0	22.0	19.0
24	9.0	7.0	10.0	5.0	---	7.0	13.0	18.0	22.0	22.0	22.0	17.0
25	11.0	8.0	9.0	2.0	4.0	5.0	10.0	21.0	24.0	22.0	22.0	17.0
26	9.0	8.0	6.0	5.0	4.0	5.0	11.0	18.0	23.0	22.0	22.0	15.0
27	9.0	6.5	6.0	5.0	2.0	7.0	12.0	18.0	24.0	21.0	24.0	15.0
28	11.0	7.0	7.0	3.0	5.0	7.0	11.0	20.0	24.0	21.0	24.0	16.0
29	10.0	5.0	6.0	3.0	2.0	8.0	10.0	18.0	20.0	22.0	24.0	17.0
30	10.0	4.0	4.0	2.0	---	7.0	12.0	22.0	22.0	20.0	24.0	17.0
31	13.0	----	6.0	3.0	---	7.0	----	22.0	----	22.0	22.0	----
MAX	19.0	14.0	10.0	9.0	8.0	10.0	15.0	22.0	24.0	25.0	25.0	23.0
MIN	9.0	4.0	.0	.0	1.0	2.0	6.0	12.0	16.5	20.0	20.0	15.0

WTR YR 1980 MAX 25.0 MIN .0

05517000 YELLOW RIVER AT KNOX, IN

LOCATION.--Lat 41°18'10", long 86°37'14", in SW¼SW¼ sec.14, T.33 N., R.2 W., Starke County, Hydrologic Unit 07120001, on right bank 40 ft (12 m) upstream from bridge on U.S. Highway 35 in Knox, 1.4 miles (2.3 km) downstream from Eagle Creek, and 11.6 miles (18.7 km) upstream from mouth.

DRAINAGE AREA.--435 mi² (1,127 km²), of which 51 mi² (132 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1905 to July 1906, August 1943 to current year.

REVISED RECORDS.--WSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft (207.243 m) 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.--37 years (1943 to current year), 385 ft³/s (10.90 m³/s), 12.02 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft³/s (160 m³/s) Oct. 15, 16, 1954, gage height, 13.75 ft (4.191 m); minimum daily, 50 ft³/s (1.42 m³/s) Jan. 21-31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft³/s (44.5 m³/s) Apr. 12, gage height, 8.03 ft (2.448 m); minimum daily, 103 ft³/s (2.92 m³/s) Oct. 1 and Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	141	483	471	190	359	848	355	334	184	117	253
2	119	173	406	429	184	315	799	338	653	178	112	410
3	143	175	350	397	178	300	730	327	1000	173	114	621
4	128	167	320	365	175	285	826	307	1140	164	110	647
5	117	156	304	343	170	274	974	296	1100	164	110	484
6	117	151	311	322	170	271	1120	285	751	164	112	371
7	136	143	376	306	165	253	1140	278	540	173	110	307
8	136	146	395	265	165	296	902	267	499	167	103	263
9	131	151	383	250	165	575	969	260	735	164	108	240
10	126	178	366	260	160	815	1220	256	842	162	126	223
11	121	190	342	277	160	919	1430	253	647	154	148	208
12	119	187	332	360	160	913	1550	253	441	151	173	199
13	114	184	331	387	160	673	1370	267	375	146	173	193
14	112	175	334	352	160	479	1100	285	338	141	243	187
15	112	167	314	308	160	414	958	304	327	136	525	181
16	117	162	291	291	160	432	1050	274	384	128	590	178
17	124	159	270	313	160	688	1120	263	392	124	585	236
18	124	159	260	401	160	996	974	315	351	121	515	388
19	121	162	248	423	160	1160	746	351	296	119	465	446
20	117	159	243	380	170	1300	647	338	285	117	384	363
21	114	159	233	351	175	1250	580	311	263	117	575	292
22	119	175	231	331	338	1040	530	285	250	119	699	253
23	136	214	259	311	788	924	484	267	236	124	569	243
24	151	274	439	280	946	773	446	260	227	126	397	274
25	146	307	742	267	1030	773	414	256	223	126	304	274
26	141	384	913	250	821	908	401	243	217	117	260	243
27	136	637	1040	240	525	952	392	223	205	124	230	220
28	131	794	1110	230	450	751	384	217	199	136	202	205
29	128	788	941	220	388	678	371	217	196	131	190	193
30	126	625	651	210	----	778	367	233	187	126	181	187
31	126	----	534	200	----	886	-----	281	-----	121	205	----
TOTAL	3891	7642	13752	9790	8793	21430	24842	8665	13613	4397	8735	8782
MEAN	126	255	444	316	303	691	828	280	454	142	282	293
MAX	151	794	1110	471	1030	1300	1550	355	1140	184	699	647
MIN	103	141	231	200	160	253	367	217	187	117	103	178
CFSM	.29	.59	1.02	.73	.70	1.59	1.90	.64	1.04	.33	.65	.67
IN.	.33	.65	1.18	.84	.75	1.83	2.12	.74	1.16	.38	.75	.75

CAL YR 1979 TOTAL 139512 MEAN 382 MAX 3120 MIN 99 CFSM .88 IN 11.93
WTR YR 1980 TOTAL 134332 MEAN 367 MAX 1550 MIN 103 CFSM .84 IN 11.49

05517500 KANKAKEE RIVER AT DUNNS BRIDGE, IN

LOCATION.--Lat 41°13'17", long 86°57'52", in NE¼SE¼ sec.15, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank at downstream side of county highway bridge at Dunns Bridge, 1.8 miles (2.9 km) north of Tefft, 3.6 miles (5.8 km) upstream from Davis ditch, and at mile 90.8 (146.1 km).

DRAINAGE AREA.--1,352 mi² (3,502 km²), of which 192 mi² (497 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1728: 1954(m). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 649.65 ft (198.013 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 17, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--32 years, 1,286 ft³/s (36.42 m³/s), 12.92 in/yr (328 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft³/s (150 m³/s) Oct. 22, 1954, gage height, 13.20 ft (4.023 m); minimum daily, 280 ft³/s (7.93 m³/s) Jan. 25-29, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,170 ft³/s (89.8 m³/s) Apr. 14, gage height, 9.81 ft (2.990 m); minimum daily, 446 ft³/s (12.6 m³/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	722	1800	1810	970	1270	2500	1530	1100	846	528	973
2	574	826	1670	1680	960	1190	2450	1490	1610	816	501	1240
3	652	872	1550	1580	950	1140	2390	1450	2260	776	501	1550
4	646	856	1460	1500	940	1160	2370	1400	2510	763	496	1630
5	618	832	1400	1440	930	1140	2470	1370	2570	761	485	1550
6	624	820	1380	1380	920	1110	2550	1330	2500	782	482	1350
7	666	798	1410	1310	910	1100	2620	1280	2220	770	471	1200
8	733	784	1440	1220	910	1130	2650	1230	1950	754	446	1100
9	730	789	1430	1240	913	1340	2680	1200	1980	729	448	962
10	686	812	1440	1280	903	1700	2850	1180	2100	741	531	921
11	669	843	1450	1270	897	2010	2980	1170	2090	724	603	906
12	669	868	1440	1230	865	2110	3060	1140	1830	693	667	889
13	643	865	1460	1310	850	2060	3120	1170	1570	660	708	875
14	624	856	1430	1340	840	1790	3160	1200	1440	639	858	866
15	621	843	1400	1310	830	1580	3130	1180	1370	618	1210	849
16	632	846	1320	1240	820	1560	3070	1160	1360	600	1480	836
17	655	832	1230	1280	823	1820	3040	1140	1370	565	1540	963
18	660	812	1270	1360	831	2260	3010	1190	1290	539	1540	1320
19	641	803	1180	1440	830	2530	2910	1250	1210	523	1520	1430
20	618	800	1150	1420	840	2690	2700	1250	1170	510	1390	1380
21	613	795	1130	1360	887	2810	2490	1200	1130	515	1480	1290
22	621	829	1110	1320	1030	2820	2320	1150	1100	533	1770	1210
23	660	932	1150	1270	1520	2690	2160	1110	1060	538	1770	1150
24	728	1040	1290	1160	1860	2540	2010	1090	1040	522	1530	1120
25	750	1090	1730	1160	1990	2440	1870	1070	1020	507	1250	1100
26	747	1280	2090	1140	1940	2430	1760	1050	995	501	1090	1060
27	730	1670	2250	1100	1700	2470	1680	1010	953	518	999	1030
28	717	1860	2350	1050	1520	2460	1620	966	921	580	924	995
29	706	1940	2370	1020	1400	2360	1600	964	904	586	863	964
30	689	1910	2230	1000	-----	2370	1570	971	882	553	830	932
31	674	-----	1990	980	-----	2460	-----	1010	-----	540	849	-----
TOTAL	20496	29825	48000	40200	31579	60540	74790	36901	45505	19702	29760	33641
MEAN	661	994	1548	1297	1089	1953	2493	1190	1517	636	960	1121
MAX	750	1940	2370	1810	1990	2820	3160	1530	2570	846	1770	1630
MIN	500	722	1110	980	820	1100	1570	964	882	501	446	836
CFSM	.49	.74	1.15	.96	.81	1.45	1.84	.88	1.12	.47	.71	.83
IN.	.56	.82	1.32	1.11	.87	1.67	2.06	1.02	1.25	.54	.82	.93

CAL YR 1979 TOTAL 479068 MEAN 1313 MAX 4530 MIN 479 CFSM .97 IN 13.18
WTR YR 1980 TOTAL 470939 MEAN 1287 MAX 3160 MIN 446 CFSM .95 IN 12.96

05517530 KANKAKEE RIVER NEAR KOUTS, IN

LOCATION.--Lat 41°15'14", long 87°02'02", in SW¼NE¼ sec.6, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank, 20 ft (6 m) downstream from bridge on State Highway 49, 4.5 miles (7.2 km) south of Kouts, 0.7 mile (1.1 km) upstream from Cook ditch, and at mile 86.7 (139.5 km).

DRAINAGE AREA.--1,376 mi² (3,564 km²), of which 194 mi² (502 km²) does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

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 those for winter periods and period of no gage-height record, Dec. 5 to Jan 4, which are fair.

AVERAGE DISCHARGE.--6 years, 1,348 ft³/s (38.17 m³/s), 13.30 in/yr (338 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,610 ft³/s (131 m³/s) Mar. 12, 1979, gage height, 12.69 ft (3.868 m); maximum gage height, 13.29 ft (4.051 m) Jan. 13, 1978 (backwater from ice jam); minimum daily, 335 ft³/s (9.49 m³/s) Sept. 12, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,440 ft³/s (97.4 m³/s) Apr. 14, gage height, 10.69 ft (3.258 m); minimum daily, 414 ft³/s (11.7 m³/s) Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	463	698	1850	1870	990	1290	2670	1530	1060	883	487	888
2	524	789	1680	1760	980	1200	2610	1460	1600	806	463	1190
3	597	808	1550	1660	970	1160	2550	1420	2370	761	455	1550
4	608	775	1470	1590	960	1160	2540	1390	2650	742	453	1640
5	582	769	1450	1520	950	1160	2620	1380	2740	733	442	1590
6	610	758	1440	1440	950	1160	2670	1330	2690	755	474	1420
7	674	733	1450	1340	950	1140	2740	1320	2400	736	463	1250
8	736	720	1490	1300	952	1130	2840	1300	2120	711	437	1130
9	736	736	1500	1240	947	1320	2900	1280	2080	701	414	962
10	639	753	1500	1300	940	1620	2980	1260	2190	703	477	871
11	592	780	1500	1270	930	2030	3120	1240	2200	687	549	848
12	595	803	1490	1280	928	2140	3280	1160	1990	650	608	851
13	574	797	1480	1280	925	2100	3340	1180	1690	618	671	842
14	557	780	1470	1280	915	1850	3410	1230	1550	592	800	837
15	564	775	1450	1280	907	1650	3420	1200	1460	579	1150	831
16	564	778	1390	1290	893	1600	3360	1200	1420	562	1490	811
17	579	767	1300	1300	870	1850	3310	1200	1380	522	1570	953
18	582	753	1280	1340	853	2270	3200	1240	1330	500	1580	1370
19	585	755	1250	1420	891	2570	2900	1250	1240	479	1530	1450
20	547	786	1210	1420	903	2700	2700	1260	1210	497	1380	1430
21	529	778	1190	1360	922	2880	2550	1220	1180	517	1420	1320
22	539	800	1180	1330	1040	3000	2380	1180	1140	517	1700	1230
23	582	848	1190	1260	1450	2860	2210	1110	1050	522	1750	1160
24	684	947	1380	1180	1820	2690	2100	1090	1060	507	1510	1110
25	709	1010	1740	1160	1970	2570	2000	1090	1070	485	1210	1060
26	682	1240	2100	1150	1940	2540	1870	1110	1040	458	1030	980
27	650	1650	2300	1120	1720	2570	1740	1060	1000	469	962	992
28	626	1870	2390	1090	1540	2610	1670	1010	971	529	885	956
29	608	1990	2430	1070	1440	2570	1640	989	947	592	834	926
30	600	1970	2290	1030	-----	2540	1610	957	926	569	806	900
31	655	-----	2100	1000	-----	2630	-----	985	-----	507	814	-----
TOTAL	18772	28416	49490	40930	32446	62560	78930	37631	47754	18889	28814	33348
MEAN	606	947	1596	1320	1119	2018	2631	1214	1592	609	929	1112
MAX	736	1990	2430	1870	1970	3000	3420	1530	2740	883	1750	1640
MIN	463	698	1180	1000	853	1130	1610	957	926	458	414	811
CFSM	.44	.69	1.16	.96	.81	1.47	1.91	.88	1.16	.44	.68	.81
IN.	.51	.77	1.34	1.11	.88	1.69	2.13	1.02	1.29	.51	.78	.90

CAL YR 1979 TOTAL 513623 MEAN 1407 MAX 4600 MIN 460 CFSM 1.02 IN 13.89
WTR YR 1980 TOTAL 477980 MEAN 1306 MAX 3420 MIN 414 CFSM .95 IN 12.92

05517530 KANKAKEE RIVER NEAR KOUTS, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: July 1979 to current year (partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
JAN								
15...	1230	2.0	1350	124	452	--	--	--
MAR								
10...	1545	4.0	1790	32	155	--	--	--
APR								
10...	0850	7.0	2910	264	2070	50	66	75
25...	1500	---	1990	1130	6070	27	35	47
MAY								
06...	1045	---	2570	37	257	34	41	50
JUN								
05...	1010	---	1350	60	219	51	61	67
23...	1225	---	1060	46	132	36	44	54
JUL								
22...	1400	---	517	36	50	26	34	44
SEP								
25...	1740	---	1020	32	88	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
JAN							
15...	--	--	--	--	---	--	---
MAR							
10...	--	--	69	--	---	--	---
APR							
10...	83	85	85	89	93	99	100
25...	62	78	88	93	99	100	---
MAY							
06...	63	76	85	93	97	100	---
JUN							
05...	74	79	84	90	97	100	---
23...	66	77	86	90	92	97	100
JUL							
22...	57	71	85	98	100	--	---
SEP							
25...	--	--	--	--	---	--	---

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 (revised) of Kouts.

DRAINAGE AREA.--30.3 mi² (78.5 km²).

WATER-DISCHARGE RECORDS

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.--12 years, 31.6 ft³/s (0.895 m³/s), 14.16 in/yr (360 mm/yr). The runoff figure published in the 1979 report was in error; the correct figure is 14.61 in/yr (371 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 777 ft³/s (22.0 m³/s) Mar. 5, 1976, gage height, 9.85 ft (3.002 m) from flood mark at site then in use; minimum daily, 8.9 ft³/s (0.25 m³/s) Sept. 11, 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 10	2200	232	6.57	11.74	3.578
Mar. 17	1200	*252	7.14	*11.99	3.654

Minimum daily discharge, 10.0 ft³/s (0.28 m³/s) July 25, Aug. 7, 8, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	19	20	13	17	41	20	35	14	11	24
2	15	13	18	19	13	17	36	19	44	14	12	18
3	13	13	18	19	13	16	35	18	34	13	11	14
4	13	13	17	18	13	16	55	17	28	13	11	13
5	13	13	18	18	13	16	41	17	25	14	11	13
6	13	13	22	17	13	16	35	16	35	13	11	12
7	13	13	22	17	13	16	32	16	27	13	10	13
8	13	13	21	16	13	36	32	16	22	13	10	13
9	12	14	19	16	13	63	62	15	21	13	11	13
10	12	13	18	16	13	133	54	16	19	13	14	13
11	12	13	18	18	13	111	41	15	18	13	17	12
12	12	13	17	32	13	52	39	15	17	12	14	12
13	12	13	17	19	13	37	38	16	17	12	34	12
14	12	13	17	16	13	32	35	14	17	12	40	12
15	12	13	16	16	13	47	55	14	18	12	17	12
16	15	13	16	16	13	109	57	14	17	11	15	16
17	14	13	15	20	14	197	39	15	17	11	17	46
18	13	13	15	19	14	91	34	15	17	11	15	23
19	13	13	15	18	14	64	31	14	16	11	14	18
20	13	13	15	17	14	55	29	14	16	11	14	16
21	13	15	14	17	33	51	27	13	16	12	13	15
22	13	17	15	16	53	43	25	13	16	12	13	15
23	13	17	20	16	28	39	24	13	16	11	12	14
24	13	16	30	16	22	44	23	14	16	11	12	14
25	13	16	50	15	21	62	23	13	15	10	12	14
26	13	43	37	15	19	43	23	13	14	12	11	13
27	13	27	28	14	18	38	22	13	14	17	11	13
28	13	25	24	14	17	35	22	13	15	13	10	13
29	13	23	22	14	17	56	21	15	14	12	11	12
30	13	20	21	14	----	48	21	13	14	12	11	12
31	13	----	20	13	----	43	----	13	----	12	12	----
TOTAL	402	481	634	531	492	1643	1052	462	610	383	437	460
MEAN	13.0	16.0	20.5	17.1	17.0	53.0	35.1	14.9	20.3	12.4	14.1	15.3
MAX	15	43	50	32	53	197	62	20	44	17	40	46
MIN	12	13	14	13	13	16	21	13	14	10	10	12
CFSM	.41	.51	.65	.54	.54	1.67	1.11	.47	.64	.39	.45	.48
IN.	.47	.56	.74	.62	.58	1.93	1.23	.54	.72	.45	.51	.54

CAL YR 1979 TOTAL 11228 MEAN 30.8 MAX 522 MIN 12 CFSM .97 IN 13.18
WTR YR 1980 TOTAL 7587 MEAN 20.7 MAX 197 MIN 10 CFSM .65 IN 8.90

05517890 COBB DITCH NEAR KOUTS, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: March 1979 to September 1980.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV						
21...	1105	10.0	15	30	1.2	--
JAN						
17...	1740	4.5	22	35	2.1	--
MAR						
11...	1710	2.5	88	166	39	81
JUN						
03...	1840	18.5	31	143	12	81
26...	1140	21.5	14	33	1.2	90
AUG						
08...	1540	21.0	11	34	1.0	--

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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1005: 1928(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 628.13 ft (191.454 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 19, 1934, nonrecording gage at highway bridge about 400 ft (122 m) upstream. Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft (15 m) downstream, and Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft (61 m) upstream. All at same datum.

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

AVERAGE DISCHARGE.--58 years, 1,584 ft³/s (44.86 m³/s), 12.09 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft³/s (204 m³/s) Dec. 21, 1927, gage height, 11.40 ft (3.475 m), site then in use, from rating curve extended above 3,000 ft³/s (85.0 m³/s) by gage-height relation study with site below railroad bridge; maximum gage height, 11.60 ft (3.536 m) Mar. 5, 1979; minimum daily, 260 ft³/s (7.36 m³/s) Jan. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,030 ft³/s (114 m³/s) Apr. 16, gage height, 9.78 ft (2.981 m); minimum daily discharge, 605 ft³/s (17.1 m³/s) Aug. 8.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1963 to September 1979 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	662	885	2300	2510	1270	1600	3450	2160	1250	1110	670	1280
2	704	931	2180	2350	1250	1500	3410	2070	1760	1030	659	1510
3	739	988	2040	2180	1240	1400	3360	1980	2630	977	661	1780
4	767	986	1940	2070	1230	1370	3350	1880	3130	961	670	1980
5	766	961	1860	2010	1210	1360	3340	1800	3300	954	659	1990
6	762	948	1820	1900	1200	1350	3320	1760	3360	964	665	1910
7	814	940	1830	1800	1200	1350	3330	1690	3320	925	620	1750
8	863	924	1850	1700	1200	1370	3390	1620	3080	898	605	1660
9	889	931	1850	1670	1190	1550	3510	1580	2820	928	616	1560
10	846	948	1820	1680	1190	2000	3620	1540	2720	901	666	1420
11	807	955	1820	1700	1180	2350	3710	1510	2720	878	730	1290
12	796	988	1850	1690	1180	2500	3770	1480	2650	850	762	1250
13	781	985	1840	1730	1170	2600	3810	1440	2450	817	925	1240
14	749	985	1840	1790	1160	2610	3880	1440	2210	781	1280	1210
15	738	970	1810	1800	1140	2410	3970	1440	2030	765	1370	1200
16	760	974	1750	1730	1100	2340	4020	1410	1890	744	1660	1200
17	774	966	1600	1580	1090	2580	3980	1430	1820	709	1790	1520
18	785	954	1540	1590	1080	3010	3940	1450	1770	659	1830	1930
19	786	945	1560	1640	1080	3220	3900	1460	1690	650	1840	2060
20	771	980	1530	1680	1120	3350	3800	1470	1580	644	1770	2040
21	744	989	1470	1650	1150	3460	3640	1460	1500	681	1720	1910
22	747	1030	1440	1610	1300	3530	3470	1410	1440	685	1820	1770
23	757	1060	1460	1540	1650	3520	3280	1370	1400	674	1960	1640
24	819	1120	1580	1460	2050	3470	3080	1340	1360	669	1920	1540
25	876	1200	1910	1410	2350	3430	2900	1310	1340	642	1680	1470
26	883	1420	2310	1440	2300	3360	2730	1300	1320	648	1430	1370
27	860	1770	2530	1460	2100	3290	2580	1300	1250	699	1310	1320
28	831	2040	2640	1430	1850	3270	2430	1260	1200	761	1220	1280
29	815	2210	2720	1330	1750	3330	2330	1260	1170	782	1150	1230
30	805	2300	2750	1320	-----	3360	2250	1220	1140	759	1120	1190
31	834	----	2650	1290	-----	3400	------	1200	-----	711	1180	-----
TOTAL	24530	34283	60090	52740	39980	79240	101550	47040	61300	24856	36958	46500
MEAN	791	1143	1938	1701	1379	2556	3385	1517	2043	802	1192	1550
MAX	889	2300	2750	2510	2350	3530	4020	2160	3360	1110	1960	2060
MIN	662	885	1440	1290	1080	1350	2250	1200	1140	642	605	1190
CFSM	.45	.64	1.09	.96	.78	1.44	1.90	.85	1.15	.45	.67	.87
IN.	.51	.72	1.26	1.10	.84	1.66	2.12	.98	1.28	.52	.77	.97

CAL YR 1979 TOTAL 667846 MEAN 1830 MAX 5390 MIN 650 CFSM 1.03 IN 13.97
WTR YR 1980 TOTAL 609067 MEAN 1664 MAX 4020 MIN 605 CFSM .94 IN 12.74

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).

WATER-DISCHARGE RECORDS

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 poor.

AVERAGE DISCHARGE.--32 years, 104 ft^3/s (2.945 m^3/s), 11.48 in/yr (292 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.--Maximum discharge, 525 ft^3/s (14.9 m^3/s) June 2, gage height, 4.78 ft (1.457 m) no peak above base of 730 cfs (20.7 m^3/s); minimum daily, 20 ft^3/s (0.57 m^3/s) July 20-25, 31, Aug. 1-8.

NOTE.--No gage-height record Nov. 27 to Jan. 16, Mar. 14 to May 8, and July 5 to Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	30	86	86	35	54	395	82	142	32	20	88
2	44	46	81	80	34	53	320	78	452	31	20	143
3	35	62	81	76	33	52	265	76	467	28	20	115
4	30	35	81	72	33	51	270	72	315	26	20	94
5	26	26	86	68	33	52	295	67	205	25	20	80
6	26	24	91	63	33	53	220	62	180	25	20	73
7	26	23	96	65	32	54	185	55	160	25	20	69
8	26	24	94	78	32	71	210	51	140	30	20	83
9	25	24	82	70	32	156	260	52	130	66	30	94
10	24	24	78	64	32	286	330	55	115	43	50	84
11	25	23	75	71	32	305	290	56	105	30	69	76
12	24	22	73	79	32	205	260	54	96	26	32	71
13	24	22	71	90	33	168	230	61	89	23	28	73
14	23	22	77	80	33	140	205	57	82	23	26	73
15	23	22	63	67	33	130	280	54	76	23	26	69
16	29	22	58	60	33	140	340	53	72	22	27	69
17	30	22	55	58	32	200	260	61	68	22	34	260
18	29	22	57	62	32	300	230	70	64	22	51	277
19	27	22	61	57	32	370	210	66	60	21	78	195
20	26	21	60	54	33	290	185	64	58	20	105	153
21	25	28	60	48	37	250	160	63	55	20	89	129
22	25	35	60	47	96	215	140	63	52	20	71	104
23	28	34	60	56	150	190	125	64	49	20	61	94
24	27	31	100	57	170	200	110	66	46	20	53	82
25	27	30	180	58	96	225	105	68	46	20	48	72
26	26	80	160	50	78	260	98	68	46	25	44	64
27	26	205	140	52	70	205	94	69	44	35	41	60
28	27	165	125	48	66	180	90	72	46	30	39	57
29	26	130	110	43	58	210	88	101	44	26	37	54
30	25	105	100	39	----	265	86	98	38	21	40	52
31	25	----	92	36	----	320	----	95	----	20	48	----
TOTAL	846	1381	2693	1934	1475	5650	6336	2073	3542	820	1287	3007
MEAN	27.3	46.0	86.9	62.4	50.9	182	211	66.9	118	26.5	41.5	100
MAX	44	205	180	90	170	370	395	101	467	66	105	277
MIN	23	21	55	36	32	51	86	51	38	20	20	52
CFSM	.22	.37	.71	.51	.41	1.48	1.72	.54	.96	.22	.34	.81
IN.	.26	.42	.81	.58	.45	1.71	1.92	.63	1.07	.25	.39	.91

CAL YR 1979 TOTAL 45637 MEAN 125 MAX 1600 MIN 20 CFSM 1.02 IN 13.80
WTR YR 1980 TOTAL 31044 MEAN 84.8 MAX 467 MIN 20 CFSM .69 IN 9.39

05519000 SINGLETON DITCH AT SCHNEIDER, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: April 1979 to September 1980 (discontinued partial-record stations).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 16...	1345	10.0	31	37	3.1	--
JAN 17...	1550	----	59	17	2.7	--
MAR 13...	1445	----	153	26	11	96
JUN 24...	1500	21.0	47	63	8.0	--
AUG 20...	1520	25.5	107	82	24	--
SEP 30...	1250	17.0	52	49	6.9	--

05520500 KANKAKEE RIVER AT MOMENCE, IL

LOCATION.--Lat 41°09'36", long 87°40'07", in NE¼ sec.24, T.31 N., R.13 E., Kankakee County, Illinois, Hydrologic Unit 07120001, on right bank at Hill Street in Momemce, 0.2 mi (0.3 km) downstream from bridge on State Highways 1 and 17, and 1.2 mi (1.9 km) upstream from Tower Creek, and at mile 47.9 (77.1 km).

DRAINAGE AREA.--2,294 mi² (5,941 km²).

PERIOD OF RECORD.--February to December 1905, February to July 1906, December 1914 to current year.

REVISED RECORDS.--WSP 1238: 1916, 1930. WSP 1308: 1915(M), 1917(M), 1919(M), 1922(M), 1926(M), 1934-35(M), 1938(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.18 ft (185.678 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1938, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 1.00 ft (0.305 m) higher. Aug. 1, 1938, to Aug. 8, 1969, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

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

AVERAGE DISCHARGE.--65 years (water years 1916-80), 1,928 ft³/s (54.60 m³/s), 11.41 in/yr (290 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) Mar. 6, 1979, gage height, 10.51 ft (3.203 m), ice jam; minimum observed, 306 ft³/s (8.67 m³/s) Sept. 1, 6, 17, 1919.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,800 ft³/s (136 m³/s) Apr. 15, gage height, 3.79 ft (1.155 m); maximum gage height, 5.19 ft (1.582 m) Jan. 30, ice jam; minimum discharge, 574 ft³/s (16.3 m³/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	606	814	2280	2730	1470	1880	4250	2520	2130	1230	675	1570
2	644	844	2280	2620	1440	1800	4170	2430	3790	1200	630	1880
3	672	901	2220	2470	1400	1700	4080	2350	3880	1110	601	1900
4	706	939	2150	2320	1380	1650	4110	2250	3720	1050	600	1930
5	721	925	2080	2190	1350	1600	3990	2170	3710	1020	600	1980
6	722	906	2020	2000	1320	1570	3880	2120	3780	1000	598	2000
7	724	887	1970	1920	1300	1590	3800	2070	3840	995	592	2010
8	762	879	1950	1880	1300	1810	3830	2010	3780	963	577	2230
9	808	873	1930	1800	1300	2150	4200	1950	3570	919	606	2120
10	824	881	1930	1750	1300	2700	4270	1900	3330	941	599	1950
11	790	884	1920	1720	1290	3050	4230	1860	3110	917	636	1750
12	750	899	1940	1850	1280	3030	4240	1820	3030	893	694	1630
13	737	917	1940	1750	1270	3020	4230	1830	2890	859	728	1600
14	713	917	1900	1650	1260	3010	4260	1800	2690	821	1190	1560
15	680	911	1870	1680	1240	2980	4620	1770	2490	780	1450	1500
16	692	906	1830	1710	1220	3290	4710	1750	2290	748	1410	1500
17	712	906	1900	1740	1200	3860	4560	1790	2130	723	1530	2080
18	722	906	1900	1750	1190	3990	4440	1890	2030	684	1600	2510
19	731	898	1740	1750	1170	3930	4310	1870	1950	637	1720	2520
20	732	903	1650	1770	1250	3960	4200	1850	1850	625	1880	2520
21	707	960	1550	1780	1400	4000	4100	1820	1740	614	1890	2510
22	695	1000	1540	1770	1670	3980	3960	1760	1660	645	1820	2400
23	693	1030	1530	1700	1950	3950	3800	1710	1600	645	1810	2220
24	707	1050	1610	1630	2300	3980	3630	1660	1550	633	1810	2070
25	776	1130	1960	1600	2600	4140	3470	1600	1500	624	1810	1970
26	804	1390	2220	1600	2580	4020	3300	1540	1480	609	1710	1850
27	809	1660	2380	1590	2400	3890	3080	1510	1440	637	1490	1740
28	792	1850	2530	1550	2250	3790	2900	1500	1400	696	1350	1680
29	770	2010	2630	1510	2050	3920	2750	2070	1330	732	1250	1630
30	763	2170	2700	1470	-----	4020	2620	1860	1270	753	1190	1550
31	758	-----	2740	1400	-----	4190	------	1660	-----	731	1360	-----
TOTAL	22722	32146	62790	56650	45130	96450	117990	58690	74960	25434	36406	58360
MEAN	733	1072	2025	1827	1556	3111	3933	1893	2499	820	1174	1945
MAX	824	2170	2740	2730	2600	4190	4710	2520	3880	1230	1890	2520
MIN	606	814	1530	1400	1170	1570	2620	1500	1270	609	577	1500
CFSM	.32	.47	.88	.80	.68	1.36	1.71	.83	1.09	.36	.51	.85
IN.	.37	.52	1.02	.92	.73	1.56	1.91	.95	1.22	.41	.59	.95

CAL YR 1979 TOTAL 831635 MEAN 2278 MAX 14800 MIN 606 CFSM .99 IN 13.49
WTR YR 1980 TOTAL 687728 MEAN 1879 MAX 4710 MIN 577 CFSM .82 IN 11.15

05521000 IROQUOIS RIVER AT ROSEBUD, IN

LOCATION.--Lat 41°02'00", long 87°10'49", in NW¼SW¼ sec.24, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank 100 ft (30 m) downstream from bridge on county road, 0.5 mile (0.8 km) north of Rosebud, 0.5 mile (0.8 km) downstream from confluence of Swain and Dexter ditches, 1.5 miles (2.4 km) upstream from Davidson ditch, 2 miles (3 km) east of Parr, and at mile 93.5 (150.4 km).

DRAINAGE AREA.--35.6 mi² (92.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-53. WSP 1728: 1959-60(M). WSP 1915: 1949-60. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 661.47 ft (201.616 m) National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1953, nonrecording gage on downstream side of county road bridge at same datum.

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

AVERAGE DISCHARGE.--32 years, 26.1 ft³/s (0.739 m³/s), 9.96 in/yr (253 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 435 ft³/s (12.3 m³/s) May 17, 1974; maximum gage height, 8.86 ft (2.700 m) Feb. 10, 1959; minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Oct. 11, 12, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 2	2100	*255	7.22	*6.11	1.862
Sept. 17	1500	158	4.47	4.74	1.445

Minimum daily discharge, 4.2 ft³/s (0.119 m³/s) Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	9.9	21	22	10	16	87	24	39	13	4.7	78
2	6.6	8.3	20	22	9.9	16	68	24	239	13	4.7	86
3	6.3	7.2	23	20	9.8	16	61	23	229	12	4.5	76
4	6.3	6.6	18	20	9.8	17	67	22	157	12	4.2	45
5	6.5	6.8	20	19	9.8	20	55	22	104	12	5.5	33
6	6.1	7.0	24	19	9.7	25	48	21	84	11	5.0	27
7	6.1	6.5	23	22	9.7	28	45	20	21	10	4.5	26
8	6.0	7.0	21	23	9.6	126	56	20	58	9.5	4.4	34
9	6.0	7.7	19	19	9.6	110	97	19	52	9.6	6.5	33
10	6.1	8.5	19	18	9.7	90	77	20	46	9.6	7.0	29
11	6.5	7.3	18	18	9.7	63	61	19	42	8.9	6.8	24
12	6.3	7.2	18	28	9.7	44	58	20	38	8.4	6.5	26
13	6.1	7.5	18	20	9.6	36	51	20	33	8.0	5.7	32
14	6.1	8.1	16	17	9.5	30	60	18	31	7.5	6.3	32
15	6.5	6.5	17	14	9.5	35	87	17	29	6.7	6.0	27
16	8.3	6.8	15	15	9.6	47	73	16	28	6.6	6.4	29
17	7.3	6.6	13	18	9.7	108	59	19	26	6.3	15	139
18	6.8	6.6	15	18	9.9	97	52	19	25	6.1	12	122
19	6.5	6.6	17	18	12	74	46	18	23	6.0	22	77
20	6.3	6.5	15	17	17	62	42	17	21	6.0	35	57
21	6.3	7.2	14	16	30	57	38	16	20	6.1	19	45
22	7.3	8.7	15	17	90	47	36	16	19	6.1	13	38
23	8.1	11	17	22	50	43	34	16	18	5.5	11	36
24	7.2	9.3	35	21	30	50	32	17	17	5.1	9.5	31
25	6.8	12	47	17	25	63	30	18	16	5.0	8.9	28
26	6.6	61	39	14	21	51	28	17	16	5.2	8.1	25
27	6.8	44	32	13	18	44	28	15	15	6.2	7.7	24
28	6.8	33	28	12	17	42	28	14	16	5.8	7.2	23
29	6.6	28	26	11	16	63	27	16	15	5.2	7.0	22
30	6.6	24	25	10	-----	62	26	16	14	5.0	7.3	21
31	6.6	-----	23	10	-----	108	----	15	----	5.0	82	----
TOTAL	205.7	383.4	671	550	500.8	1690	1557	574	1491	242.4	353.4	1325
MEAN	6.64	12.8	21.6	17.7	17.3	54.5	51.9	18.5	49.7	7.82	11.4	44.2
MAX	8.3	61	47	28	90	126	97	24	239	13	82	139
MIN	6.0	6.5	13	10	9.5	16	26	14	14	5.0	4.2	21
CFSM	.19	.36	.61	.50	.49	1.53	1.46	.52	1.40	.22	.32	1.24
IN.	.21	.40	.70	.57	.52	1.77	1.63	.60	1.56	.25	.37	1.38

CAL YR 1979 TOTAL 11210.5 MEAN 30.7 MAX 388 MIN 5.1 CFSM .86 IN 11.71
WTR YR 1980 TOTAL 9543.7 MEAN 26.1 MAX 239 MIN 4.2 CFSM .73 IN 9.97

05521000 IROQUOIS RIVER AT ROSEBUD, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SEDIMENT DISCHARGE: October 1977 to September 1980 (discontinued partial-record station).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
10...	1750	10.0	6.1	18	.30	--
JAN						
18...	1125	2.0	17	11	.50	--
MAR						
12...	1840	1.0	44	15	1.8	83
JUN						
04...	0830	17.0	174	72	34	76
25...	1800	27.0	16	43	1.9	92
SEP						
26...	1130	13.0	27	14	1.0	--

05522000 IROQUOIS RIVER NEAR NORTH MARION, IN

LOCATION.--Lat 40°58'12", long 87°06'50", in NE¼NW¼ sec.16, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on downstream side of county highway bridge, 1.2 miles (1.9 km) upstream from Ryan ditch, 2 miles (3 km) east of North Marion, 3.5 miles (5.6 km) northeast of Rensselaer, and at mile 87.7 (141.1 km).

DRAINAGE AREA.--144 mi² (373 km²).

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.68 ft (197.108 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water from Oliver ditch, an upstream tributary, can be diverted to Ryan ditch and thus enter the Iroquois River below station.

AVERAGE DISCHARGE.--31 years (1949 to current year), 127 ft³/s (3.597 m³/s), 11.98 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft³/s (57.8 m³/s) June 10, 1958, gage height, 15.09 ft (4.599 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 420 ft³/s (11.9 m³/s) and maximum (*):

Date	Time	Discharge (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. 23	1500	421	11.9	6.90	2.103	Apr. 16	1300	463	13.1	7.08	2.158
Mar. 10	1500	572	16.2	8.59	2.618	June 4	0900	*996	28.2	*12.33	3.758
Mar. 19	0200	616	17.4	8.59	2.618	Sept. 3	----	570	16.1	unknown	-----
Apr. 1	1500	555	15.7	8.00	2.438	Sept. 18	----	550	15.6	unknown	-----
Apr. 10	1500	524	14.8	7.69	2.344						

Minimum daily discharge, 6.3 ft³/s (0.18 m³/s) Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	31	165	130	50	88	546	121	116	38	7.2	470
2	17	58	126	121	49	85	523	116	571	41	6.9	520
3	32	58	129	112	49	84	451	111	959	34	6.7	560
4	39	49	129	105	48	83	445	104	992	31	6.3	460
5	38	43	114	99	48	88	443	98	972	38	6.7	360
6	30	37	126	90	48	95	384	88	880	43	11	250
7	26	33	138	97	47	120	327	77	751	36	12	165
8	23	31	136	116	47	319	306	76	640	25	12	162
9	22	30	121	106	47	544	417	77	509	31	11	205
10	21	37	111	91	47	567	516	75	386	32	20	180
11	20	42	110	99	47	501	494	76	273	25	30	150
12	20	41	106	109	47	372	434	76	208	25	49	130
13	22	40	102	138	47	249	381	84	175	20	40	140
14	18	37	96	107	47	179	342	78	160	23	49	140
15	16	33	87	95	47	162	402	63	149	16	62	120
16	20	31	84	81	47	204	458	65	146	15	56	250
17	25	33	78	86	47	367	424	68	124	12	83	400
18	26	36	83	102	47	574	356	80	105	11	103	540
19	25	34	88	104	48	604	302	83	97	12	114	500
20	24	32	87	100	54	537	265	86	98	11	167	380
21	23	28	85	93	71	475	231	86	94	12	125	320
22	21	30	85	92	238	412	198	81	84	12	86	250
23	23	43	83	90	410	347	182	71	78	11	63	208
24	28	56	125	115	335	310	160	75	76	8.6	49	176
25	27	58	268	107	188	343	151	143	69	7.6	42	150
26	24	194	323	85	124	377	145	164	67	7.4	35	129
27	23	354	288	74	108	350	139	112	59	9.1	30	112
28	23	356	224	66	97	305	134	100	57	15	27	101
29	23	289	181	60	93	312	132	92	57	12	23	93
30	23	213	159	55	----	380	130	110	53	11	24	90
31	23	----	143	52	----	454	----	117	----	8.1	250	----
TOTAL	737	2387	4180	2977	2622	9887	9818	2853	9005	632.8	1606.8	7711
MEAN	23.8	79.6	135	96.0	90.4	319	327	92.0	300	20.4	51.8	257
MAX	39	356	323	138	410	604	546	164	992	43	250	560
MIN	12	28	78	52	47	83	130	63	53	7.4	6.3	90
CFSM	.17	.55	.94	.67	.63	2.22	2.27	.64	2.08	.14	.36	1.79
IN.	.19	.62	1.08	.77	.68	2.55	2.54	.74	2.33	.16	.42	1.99

CAL YR 1979 TOTAL 59363.0 MEAN 163 MAX 1800 MIN 12 CFSM 1.13 IN 15.34
WTR YR 1980 TOTAL 54416.6 MEAN 149 MAX 992 MIN 6.3 CFSM 1.04 IN 14.06

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.--32 years, 163 ft^3/s (4.616 m^3/s), 10.90 in/yr (277 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, 1,360 ft^3/s (38.5 m^3/s) June 4, gage height, 12.39 ft (3.776 m); minimum daily, 7.8 ft^3/s (0.22 m^3/s) Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	70	183	154	56	107	659	117	138	49	9.2	551
2	42	90	138	145	56	106	574	116	825	52	8.1	635
3	55	69	128	133	55	102	500	111	1240	44	8.5	667
4	54	57	135	127	55	105	554	104	1350	42	7.8	577
5	45	48	135	121	54	131	498	99	1230	49	11	428
6	33	45	164	111	54	137	404	90	1000	50	19	305
7	27	41	167	93	54	145	339	82	877	44	14	199
8	23	40	153	115	54	536	348	83	752	35	10	198
9	27	43	134	108	54	745	546	83	566	43	13	246
10	24	57	128	93	54	755	603	81	404	41	35	224
11	23	55	128	118	54	635	533	83	297	33	42	175
12	24	52	123	108	54	480	450	83	223	33	55	148
13	26	48	120	132	54	343	386	94	186	28	37	168
14	19	44	111	111	54	251	375	78	168	31	57	165
15	21	38	106	98	53	240	486	71	158	23	70	148
16	30	41	94	103	53	308	507	72	152	22	55	143
17	34	41	85	129	53	602	428	81	124	18	71	420
18	30	44	89	145	55	791	355	93	112	18	92	669
19	26	39	94	139	57	716	305	87	105	18	101	644
20	25	36	92	131	63	609	268	93	104	15	152	529
21	23	33	89	121	77	536	232	90	99	20	114	395
22	23	47	93	105	381	441	206	80	90	20	80	292
23	36	70	108	100	486	366	185	77	84	17	61	218
24	38	79	242	119	375	342	162	85	84	12	49	182
25	32	79	393	109	196	424	151	204	81	13	41	163
26	28	366	386	92	137	417	144	185	73	11	39	137
27	26	445	330	82	120	364	138	119	67	17	35	118
28	26	391	266	74	117	319	136	103	65	21	32	106
29	27	318	216	66	116	383	137	97	64	13	28	98
30	28	239	191	61	----	439	132	119	60	11	28	95
31	30	----	170	58	----	614	-----	114	-----	9.7	268	----
TOTAL	920	3065	4991	3401	3101	12489	10741	3074	10778	852.7	1642.6	9043
MEAN	29.7	102	161	110	107	403	358	99.2	359	27.5	53.0	301
MAX	55	445	393	154	486	791	659	204	1350	52	268	669
MIN	15	33	85	58	53	102	132	71	60	9.7	7.8	95
CFSM	.15	.50	.79	.54	.53	1.99	1.76	.49	1.77	.14	.26	1.48
IN.	.17	.56	.91	.62	.57	2.29	1.97	.56	1.98	.16	.30	1.66

CAL YR 1979 TOTAL 67782.0 MEAN 186 MAX 2060 MIN 12 CFSM .92 IN 12.42
WTR YR 1980 TOTAL 64098.3 MEAN 175 MAX 1350 MIN 7.8 CFSM .86 IN 11.75

05523000 BICE DITCH NEAR SOUTH MARION, IN

LOCATION.--Lat 40°52'00", long 87°05'32", in NE¼NW¼ sec.22, T.28 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on State Highway 16, 2.3 miles (3.7 km) upstream from mouth, 3 miles (5 km) southeast of South Marion, and 5 miles (8 km) southeast of Rensselaer.

DRAINAGE AREA.--21.8 mi² (56.5 km²).

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 1508: 1956. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 651.30 ft (198.516 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1955, nonrecording gage, and Aug. 5, 1955, to Sept. 30, 1965, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

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

AVERAGE DISCHARGE.--31 years (1949 to current year), 16.8 ft³/s (0.476 m³/s), 10.47 in/yr (266 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s (30.6 m³/s) Mar. 4, 1979, gage height, 11.41 ft (3.478 m); no flow at times during 1952, 1955, and 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 340 ft³/s (9.63 m³/s) and maximum (*):

Date	Time	Discharge (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. 17	0900	407	11.5	6.80	2.073	June 7	2400	346	9.80	6.24	1.902
June 2	1900	*428	12.1	*7.89	2.405						

Minimum daily discharge, 0.68 ft³/s (0.019 m³/s) Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	15	21	19	3.0	11	82	8.2	43	2.6	.92	1.8
2	2.8	5.7	16	17	2.6	11	57	8.2	383	2.5	.92	14
3	1.4	3.9	16	15	2.5	12	66	7.8	192	2.2	.92	4.5
4	1.1	3.0	15	14	2.5	12	97	7.0	73	2.2	.92	1.7
5	1.1	2.8	21	13	2.6	18	55	7.0	48	2.3	.92	1.3
6	1.2	2.8	24	12	2.8	19	41	6.7	40	2.1	.92	1.1
7	1.2	2.5	22	11	2.8	18	35	5.7	83	1.9	.92	1.1
8	1.1	2.8	16	7.8	2.5	152	58	5.4	165	1.8	.85	9.1
9	1.1	3.7	15	6.7	2.6	101	80	5.4	54	1.8	.98	4.7
10	1.1	6.0	15	6.3	2.6	96	55	5.7	39	1.8	.98	2.1
11	1.1	4.2	14	15	2.6	51	42	5.7	24	1.7	1.3	1.6
12	1.2	3.7	17	14	2.3	37	40	5.4	18	1.6	2.3	1.4
13	1.1	3.7	18	13	2.2	28	30	7.0	15	1.5	.98	1.4
14	1.1	3.2	14	10	2.3	21	69	5.4	14	1.4	.85	1.2
15	1.1	3.2	13	8.7	2.3	30	84	5.0	14	1.3	.73	1.1
16	1.9	3.2	11	11	2.5	42	56	4.7	17	1.2	.73	1.6
17	1.8	3.0	7.4	22	2.3	294	40	5.4	14	1.1	.98	62
18	1.5	3.0	6.8	23	2.3	135	30	6.0	11	1.1	1.1	24
19	1.4	3.0	6.5	20	2.5	86	25	5.7	9.5	1.1	4.5	11
20	1.4	2.8	6.3	19	2.8	64	20	5.4	7.0	1.1	8.2	6.0
21	1.4	3.0	6.7	17	15	64	17	4.7	6.3	1.1	1.5	4.2
22	1.7	8.2	9.1	15	132	45	15	4.2	6.0	1.1	1.1	3.2
23	2.6	16	23	9.9	49	39	14	4.2	5.4	.98	.85	2.8
24	1.9	13	95	9.1	31	59	12	4.1	5.4	.98	.85	2.5
25	1.7	15	87	8.7	18	65	10	3.9	4.7	.98	.79	2.3
26	1.7	126	58	5.7	18	45	9.9	3.8	4.2	1.1	.79	2.2
27	1.6	65	43	5.0	16	36	9.5	3.6	3.9	1.4	.73	2.1
28	1.7	51	33	4.5	14	33	9.9	3.4	3.7	1.4	.73	1.9
29	1.7	38	27	3.4	13	66	9.9	3.4	3.4	1.1	.68	1.9
30	1.6	27	25	3.4	-----	68	9.1	3.3	2.8	.98	.73	1.8
31	1.7	-----	21	3.4	-----	175	------	3.3	------	.98	4.7	-----
TOTAL	46.5	443.4	722.8	362.6	356.6	1933	1178.3	164.7	1309.3	46.40	44.37	177.6
MEAN	1.50	14.8	23.3	11.7	12.3	62.4	39.3	5.31	43.6	1.50	1.43	5.92
MAX	2.8	126	95	23	132	294	97	8.2	383	2.6	8.2	62
MIN	1.1	2.5	6.3	3.4	2.2	11	9.1	3.3	2.8	.98	.68	1.1
CFSM	.07	.68	1.07	.54	.56	2.86	1.80	.24	2.00	.07	.07	.27
IN.	.08	.76	1.23	.62	.61	3.30	2.01	.28	2.23	.08	.08	.30

CAL YR 1979 TOTAL 7791.17 MEAN 21.3 MAX 912 MIN .90 CFSM .98 IN 13.29
WTR YR 1980 TOTAL 6785.57 MEAN 18.5 MAX 383 MIN .68 CFSM .85 IN 11.58

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 mi^2 (216.8 km^2).

PERIOD OF RECORD.--July 1948 to December 1951, October 1952 to current year. Prior to October 1965, published as Big Slough Creek near Collegeville.

REVISED RECORDS.--WSP 1558: 1955(M), 1956(M), 1957. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 634.75 ft (193.472 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1955, nonrecording gage and Aug. 5, 1955, to Oct. 8, 1958, water-stage recorder at same site at datum 3.00 ft (0.914 m) higher.

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

AVERAGE DISCHARGE.--31 years (1948-51, 1952 to current year), 69.7 ft^3/s (1.974 m^3/s), 11.31 in/yr (287 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,390 ft^3/s (67.7 m^3/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, 0.7 ft^3/s (0.020 m^3/s) Dec. 20-26, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 710 ft^3/s (20.1 m^3/s) Mar. 17, gage height, 13.00 ft (3.962 m); minimum daily, 4.5 ft^3/s (0.127 m^3/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	29	85	78	15	55	392	44	20	17	6.9	10
2	14	31	66	70	14	61	301	41	337	16	6.6	22
3	8.0	21	69	61	13	61	262	40	593	15	6.4	28
4	4.9	16	59	55	13	62	382	38	200	14	6.1	15
5	4.5	15	69	52	13	66	287	36	145	14	5.9	9.4
6	4.9	15	85	48	14	84	170	34	200	14	5.8	8.2
7	5.3	16	80	41	14	71	135	32	344	13	5.7	7.8
8	4.9	14	68	38	13	406	187	30	544	12	5.6	12
9	4.9	16	57	28	13	300	332	28	365	12	5.5	15
10	4.7	22	56	25	13	230	285	26	237	12	11	10
11	5.1	21	54	52	13	190	221	26	140	12	9.4	8.5
12	5.5	18	58	61	12	150	197	26	78	11	12	7.9
13	5.3	15	67	61	11	108	150	28	63	11	11	8.2
14	5.7	14	56	48	11	94	205	29	59	10	11	7.7
15	5.9	14	50	35	12	111	312	27	55	9.8	9.5	7.3
16	9.9	15	43	38	12	155	266	26	61	9.3	7.8	9.1
17	9.6	15	35	73	12	562	193	25	58	9.0	8.4	94
18	8.6	15	29	92	12	587	144	27	49	8.6	8.3	103
19	8.8	15	28	80	13	370	113	28	41	8.4	13	60
20	8.3	16	27	74	17	300	93	27	37	8.2	40	37
21	8.3	16	32	68	58	280	79	26	33	8.0	16	24
22	9.1	24	37	62	435	220	72	24	30	7.8	9.9	20
23	13	46	69	55	279	160	65	23	27	7.7	9.1	17
24	12	52	213	43	153	191	58	22	26	7.5	7.8	16
25	10	51	329	36	82	275	54	22	23	7.2	7.2	15
26	9.6	312	249	30	94	201	50	21	22	7.0	7.0	14
27	9.9	278	181	25	82	157	47	19	21	7.6	6.2	12
28	10	207	137	22	70	135	46	18	20	7.9	5.7	11
29	9.6	155	111	18	64	238	47	17	20	7.7	5.6	11
30	8.8	108	99	17	----	227	46	17	18	7.4	5.7	10
31	8.8	----	87	17	----	483	----	16	----	7.2	12	-----
TOTAL	245.4	1602	2685	1503	1577	6590	5191	843	3866	319.3	288.1	630.1
MEAN	7.92	53.4	86.6	48.5	54.4	213	173	27.2	129	10.3	9.29	21.0
MAX	14	312	329	92	435	587	392	44	593	17	40	103
MIN	4.5	14	27	17	11	55	46	16	18	7.0	5.5	7.3
CFSM	.10	.64	1.04	.58	.65	2.55	2.07	.33	1.54	.12	.11	.25
IN.	.11	.71	1.19	.67	.70	2.93	2.31	.37	1.72	.14	.13	.28

CAL YR 1979 TOTAL 25041.1 MEAN 68.6 MAX 1240 MIN 3.2 CFSM .82 IN 11.13
WTR YR 1980 TOTAL 25339.9 MEAN 69.2 MAX 593 MIN 4.5 CFSM .83 IN 11.26

05524000 CARPENTER CREEK AT EGYPT, IN

LOCATION.--Lat 40°51'58", long 87°12'20", in SE¼SW¼ sec.15, T.28 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on left bank at downstream side of bridge on State Highway 16, 0.5 mile (0.8 km) north of Egypt, 4 miles (6 km) southwest of Collegeville, and at mile 4.0 (6.4 km).

DRAINAGE AREA.--44.8 mi^2 (116.0 km^2).

PERIOD OF RECORD.--July 1948 to December 1951, October 1952 to current year.

REVISED RECORDS.--WSP 1175: 1949(M). WSP 1558: 1955-57. WSP 1728: 1951(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 641.79 ft (195.618 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--31 years, 38.0 ft^3/s (1.076 m^3/s), 11.52 in/yr (293 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)
June 2	1900	*2330	66.0	*11.05	3.368

Minimum daily discharge, 0.65 ft^3/s (0.018 m^3/s) Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	17	56	40	6.6	23	244	19	26	6.5	.91	1.8
2	6.4	18	40	35	5.8	23	155	18	1100	6.4	.86	9.0
3	5.7	8.4	36	30	5.6	25	121	17	1010	5.7	.86	3.7
4	4.2	5.2	35	28	5.6	27	248	16	313	5.4	.82	1.6
5	3.3	4.2	39	27	5.6	29	159	16	182	5.5	.78	1.0
6	2.9	4.0	43	24	5.6	32	107	16	121	5.1	.78	1.0
7	2.1	4.0	39	21	5.6	39	84	14	152	4.3	.78	1.2
8	2.0	4.0	32	17	5.6	320	101	13	296	4.1	.78	4.5
9	1.5	4.9	28	15	5.4	250	253	12	113	4.1	.74	3.1
10	1.0	9.2	30	14	5.2	200	181	12	77	5.1	.74	2.8
11	1.1	7.4	29	34	5.2	110	120	13	51	4.2	.78	2.1
12	1.1	5.2	30	75	5.0	72	100	12	41	3.7	1.4	1.8
13	1.1	4.8	28	32	5.0	60	78	14	36	3.2	1.3	1.3
14	.99	4.5	25	28	5.0	43	108	12	32	2.9	1.2	1.1
15	.94	4.2	23	21	5.0	53	197	11	31	2.7	.91	.86
16	1.7	4.3	20	21	5.0	72	166	10	32	2.3	.86	1.1
17	3.8	4.1	17	32	5.2	383	110	11	26	2.2	1.5	39
18	3.8	3.9	15	38	5.3	349	83	12	22	1.9	1.6	16
19	3.4	3.9	14	34	5.5	233	66	11	20	1.8	3.7	64
20	3.2	3.8	14	32	10	168	55	10	17	1.6	4.3	3.8
21	2.7	3.7	15	31	60	154	46	9.8	16	1.5	1.8	2.8
22	2.9	6.5	18	31	280	110	39	9.4	14	1.5	1.1	2.3
23	4.5	18	30	22	130	89	36	9.4	13	1.3	.91	2.3
24	4.9	23	169	20	66	96	31	10	13	1.2	.74	2.3
25	4.6	24	242	18	38	154	27	56	11	1.1	.74	2.2
26	4.2	289	147	14	33	108	25	32	10	1.1	.74	2.2
27	4.3	217	100	11	29	84	23	19	9.3	1.6	.74	2.1
28	4.2	138	74	9.6	25	71	23	15	8.8	1.9	.74	2.0
29	4.2	99	60	7.6	25	121	23	13	8.1	1.3	.65	2.1
30	4.0	71	54	7.4	-----	128	21	13	7.1	1.2	.65	1.4
31	4.1	------	46	7.0	-----	353	----	12	------	1.1	3.0	------
TOTAL	98.63	1014.2	1548	776.6	798.8	3979	3030	467.6	3808.3	93.5	37.41	182.46
MEAN	3.18	33.8	49.9	25.1	27.5	128	101	15.1	127	3.02	1.21	6.08
MAX	6.4	289	242	75	280	383	253	56	1100	6.5	4.3	64
MIN	.94	3.7	14	7.0	5.0	23	21	9.4	7.1	1.1	.65	.86
CFSM	.07	.75	1.11	.56	.61	2.86	2.25	.34	2.84	.07	.03	.14
IN.	.08	.84	1.29	.64	.66	3.30	2.52	.39	3.16	.08	.03	.15

CAL YR 1979 TOTAL 18598.13 MEAN 51.0 MAX 1800 MIN .94 CFSM 1.14 IN 15.44
WTR YR 1980 TOTAL 15834.50 MEAN 43.3 MAX 1100 MIN .65 CFSM .97 IN 13.15

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 mi^2 (1,163 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 1338: 1953. WSP 1438: 1955. WSP 1508: 1956. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.00 ft (190.195 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1955, nonrecording gage 2.5 miles (4.0 km) upstream at datum 3.54 ft (1.079 m) higher.

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

AVERAGE DISCHARGE.--31 years, 371 ft^3/s (10.51 m^3/s), 11.22 in/yr (285 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,930 ft^3/s (168 m^3/s) June 14, 1958, gage height, 24.42 ft (7.443 m); minimum daily, 6.3 ft^3/s (0.18 m^3/s) Sept. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,710 ft^3/s (76.7 m^3/s) June 4, gage height, 17.95 ft (5.471 m); minimum daily, 29 ft^3/s (0.82 m^3/s) Aug. 4, 5 and 9.

WATER-QUALITY RECORDS

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	74	490	397	140	305	1470	301	259	116	32	493
2	67	148	358	372	132	290	1490	285	1260	104	31	655
3	88	125	296	344	130	280	1400	276	2480	95	30	747
4	76	97	296	320	130	275	1390	262	2680	87	29	739
5	71	83	294	307	129	285	1380	252	2490	92	29	648
6	62	74	331	289	128	325	1280	241	2220	100	33	479
7	56	72	344	272	128	390	1130	218	1960	89	40	337
8	51	68	322	252	128	902	1000	192	2070	79	33	289
9	47	71	284	297	128	1350	1150	189	1930	74	29	328
10	47	86	273	255	128	1510	1240	182	1650	81	39	318
11	44	98	272	291	128	1520	1260	187	1380	77	57	277
12	43	92	267	267	129	1300	1180	186	1070	65	75	240
13	42	87	270	331	129	1380	1070	226	729	59	69	245
14	41	82	258	330	130	780	984	194	484	59	61	259
15	38	77	240	276	130	598	1110	162	398	55	93	241
16	45	74	210	253	130	661	1210	157	386	47	83	233
17	53	74	177	284	131	1100	1180	168	352	44	87	561
18	52	75	195	353	132	1600	1060	198	306	40	126	827
19	48	79	228	353	138	1740	895	214	280	40	137	860
20	46	73	196	335	150	1690	729	200	265	40	256	815
21	47	69	183	320	182	1580	598	194	244	37	240	685
22	49	75	195	313	722	1450	509	177	234	42	153	504
23	50	122	228	271	1090	1280	455	162	214	40	107	370
24	57	177	449	271	1180	1110	405	170	197	38	87	306
25	55	168	883	329	993	1120	374	265	181	35	69	270
26	50	567	992	252	606	1110	353	371	167	35	62	243
27	47	906	929	203	454	1030	335	277	153	37	58	197
28	45	951	778	180	388	910	329	228	146	45	53	178
29	49	871	609	160	335	920	328	188	142	43	48	165
30	47	692	507	150	----	1030	320	214	131	36	47	156
31	45	----	445	145	----	1280	-----	241	-----	33	173	-----
TOTAL	1604	6307	11799	8772	8578	31101	27614	6777	26458	1864	2466	12665
MEAN	51.7	210	381	283	296	1003	920	219	882	60.1	79.5	422
MAX	88	951	992	397	1180	1740	1490	371	2680	116	256	860
MIN	38	68	177	145	128	275	320	157	131	33	29	156
CFSM	.12	.47	.85	.63	.66	2.23	2.05	.49	1.96	.13	.18	.94
IN.	.13	.52	.98	.73	.71	2.58	2.29	.56	2.19	.15	.20	1.05

CAL YR 1979 TOTAL 160206 MEAN 439 MAX 4590 MIN 38 CFSM .98 IN 13.27
WTR YR 1980 TOTAL 146005 MEAN 399 MAX 2680 MIN 29 CFSM .89 IN 12.10

05525000 IROQUOIS RIVER AT IROQUOIS, IL

LOCATION.--Lat 40°49'25", long 87°34'55", in SE¼ sec.15, T.27 N., R.11 W., Iroquois County, Illinois, Hydrologic Unit 07120002, on left bank at upstream side of bridge on U.S. Highway 52 in Iroquois, 500 ft (152 m) upstream from Penn Central bridge, 4.5 mi (7.2 km) downstream from Indiana-Illinois State line, and at mile 50.4 (81.1 km).

DRAINAGE AREA.--686 mi^2 (1,777 km^2).

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.34 ft (187.251 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--36 years, 536 ft^3/s (15.18 m^3/s), 10.61 in/yr (269 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s (295 m^3/s) June 13, 1958, gage height, 26.31 ft (8.019 m); minimum, 5.2 ft^3/s (0.15 m^3/s) Sept. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,570 ft^3/s (129 m^3/s) June 3, gage height, 20.04 ft (6.108 m); minimum daily, 27 ft^3/s (0.76 m^3/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	53	634	454	140	640	2010	375	325	168	41	197
2	31	90	451	407	130	560	2160	352	2010	154	36	524
3	36	148	458	368	120	500	2110	337	4340	138	33	659
4	59	137	309	333	115	450	2070	323	4460	129	31	684
5	71	111	302	312	120	410	1950	310	4270	121	29	666
6	64	94	341	294	120	450	1830	299	3970	118	28	570
7	57	82	356	278	120	585	1640	277	3560	117	28	431
8	50	78	354	257	120	1240	1420	253	3370	112	32	325
9	45	76	302	250	125	2060	1380	242	3230	102	40	302
10	40	74	276	250	130	2400	1520	235	2940	116	36	315
11	37	85	266	250	130	2280	1590	233	2540	119	31	294
12	38	103	250	260	130	2080	1570	231	2050	103	64	256
13	37	92	248	280	120	1780	1440	240	1520	89	78	224
14	36	83	240	310	120	1370	1300	242	1020	78	75	226
15	36	81	230	280	120	1020	1340	220	709	72	68	233
16	36	74	227	258	120	936	1510	197	579	70	89	223
17	36	67	224	241	120	1470	1570	199	525	61	97	377
18	43	64	213	280	120	2300	1490	214	475	54	99	712
19	52	67	228	329	120	2550	1310	228	420	50	124	806
20	53	61	221	325	130	2650	1080	225	377	45	153	803
21	48	58	209	308	135	2530	878	220	342	44	221	743
22	47	62	202	303	350	1840	738	210	315	41	194	614
23	50	72	213	283	580	1230	646	197	293	39	145	464
24	53	113	298	255	1050	1730	576	192	281	43	109	353
25	56	155	719	287	1150	1580	517	198	253	43	89	290
26	64	327	949	309	1100	1520	468	284	233	40	73	251
27	62	740	997	260	860	1410	437	311	216	36	66	220
28	57	900	902	229	740	1260	417	251	202	42	62	196
29	53	915	747	196	690	1180	408	216	193	44	57	179
30	51	836	606	170	----	1370	395	198	182	49	54	167
31	52	----	517	154	----	1610	-----	207	-----	48	58	-----
TOTAL	1481	5898	12489	8770	9125	44991	37770	7716	45200	2485	2340	12304
MEAN	47.8	197	403	283	315	1451	1259	249	1507	80.2	75.5	410
MAX	71	915	997	454	1150	2650	2160	375	4460	168	221	806
MIN	31	53	202	154	115	410	395	192	182	36	28	167
CFSM	.07	.29	.59	.41	.46	2.12	1.84	.36	2.20	.12	.11	.60
IN.	.08	.32	.68	.48	.49	2.44	2.05	.42	2.45	.13	.13	.67

CAL YR 1979 TOTAL 229217 MEAN 628 MAX 6770 MIN 31 CFSM .92 IN 12.43
WTR YR 1980 TOTAL 190569 MEAN 521 MAX 4460 MIN 28 CFSM .76 IN 10.33

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 mi^2 (183.1 km^2).

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 for winter periods which are fair. High flow occasionally in backwater from Little Calumet River.

AVERAGE DISCHARGE.--38 years, 59.3 ft^3/s (1.677 m^3/s), 11.39 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft^3/s (75.6 m^3/s) Apr. 28, 1959; maximum gage height, 7.83 ft (2.387 m) Oct. 11, 1954; minimum daily discharge, 1.6 ft^3/s (0.045 m^3/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 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)
June 2	1400	*1380	39.1	*6.92	2.109
Sept. 1	0700	896	25.3	3.87	1.180

Minimum daily discharge, 5.2 ft^3/s (0.147 m^3/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	26	44	38	10	30	164	33	705	11	5.4	396
2	31	9.4	34	36	9.8	28	121	29	1270	11	8.6	193
3	14	8.1	32	32	9.7	27	110	25	826	12	7.8	81
4	9.3	8.4	32	30	9.2	27	140	23	412	11	7.0	46
5	6.4	8.1	34	28	9.1	28	105	20	236	11	8.6	34
6	7.0	10	40	25	11	29	70	20	216	11	5.4	25
7	6.5	8.6	47	24	11	32	60	18	137	9.5	5.4	60
8	5.7	11	42	22	9.7	40	164	16	92	9.5	11	124
9	5.7	14	34	18	9.8	78	294	16	70	36	20	70
10	5.3	12	30	16	10	213	193	14	58	20	78	46
11	5.2	11	30	21	10	322	124	15	47	13	34	33
12	6.5	9.1	36	17	10	238	148	15	41	10	19	38
13	5.7	8.8	32	16	10	132	113	47	42	9.0	83	31
14	5.7	8.3	27	15	10	84	105	27	38	7.7	105	25
15	5.3	8.2	24	17	10	122	252	21	76	8.6	74	23
16	41	8.5	19	29	9.2	479	224	21	46	7.5	38	64
17	24	8.8	16	52	9.4	712	118	51	35	7.8	49	409
18	11	10	16	48	9.6	502	83	103	30	6.6	27	261
19	8.0	11	17	37	11	301	64	64	37	6.2	49	129
20	7.1	11	18	31	17	187	54	44	27	7.1	62	91
21	7.7	68	20	26	38	161	44	34	24	21	39	65
22	14	49	22	23	247	113	39	27	19	7.3	25	70
23	8.2	35	27	20	243	76	34	24	18	6.6	19	56
24	6.7	28	131	18	117	115	30	23	17	7.4	15	43
25	7.3	51	274	16	53	208	26	20	16	6.4	14	36
26	7.3	218	183	15	47	110	25	16	15	7.7	12	32
27	7.2	170	103	13	40	78	25	14	14	12	11	29
28	6.8	115	71	12	33	72	29	76	31	8.0	11	26
29	6.7	80	56	11	31	199	37	289	18	7.7	11	24
30	7.1	55	48	11	------	161	35	181	15	7.5	18	21
31	15	------	42	10	------	187	----	129	----	7.3	88	----
TOTAL	344.4	1079.3	1581	727	1054.5	5091	3030	1455	4628	324.4	960.2	2581
MEAN	11.1	36.0	51.0	23.5	36.4	164	101	46.9	154	10.5	31.0	86.0
MAX	41	218	274	52	247	712	294	289	1270	36	105	409
MIN	5.2	8.1	16	10	9.1	27	25	14	14	6.2	5.4	21
CFSM	.16	.51	.72	.33	.52	2.32	1.43	.66	2.18	.15	.44	1.22
IN.	.18	.57	.83	.38	.55	2.68	1.59	.77	2.44	.17	.51	1.36

CAL YR 1979 TOTAL 29501.2 MEAN 80.8 MAX 1300 MIN 5.2 CFSM 1.14 IN 15.52
WTR YR 1980 TOTAL 22855.8 MEAN 62.4 MAX 1270 MIN 5.2 CFSM .88 IN 12.03

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 mi^2 (233 km^2). During times of floods on Deep River, flow may enter basin from eastern portion of Little Calumet River basin; or during times of floods on Hart ditch, flow may leave the basin and enter eastern portion of the Little Calumet River basin.

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

GAGE.--Water-stage recorder. Datum of gage is 580.72 ft (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.--22 years, 71.4 ft^3/s (2.022 m^3/s), 10.77 in/yr (274 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft^3/s (42.8 m^3/s) Apr. 28, 1959, gage height, 13.67 ft (4.167 m); maximum gage height, 14.43 ft (4.398 m) Dec. 25, 1965; minimum daily discharge, 1.9 ft^3/s (0.054 m^3/s) Aug. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 764 ft^3/s (21.6 m^3/s) Jun. 2, gage height, 13.04 ft (3.975 m); minimum daily, 8.7 ft^3/s (0.246 m^3/s) Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	53	80	82	19	56	212	53	381	20	9.2	336
2	67	22	65	74	18	46	199	48	719	18	9.9	315
3	27	18	57	68	17	42	190	42	648	16	10	184
4	20	18	54	62	16	42	199	37	434	15	9.2	139
5	17	17	54	57	16	42	175	34	329	14	15	102
6	16	18	62	50	15	43	148	31	293	13	9.5	84
7	14	18	78	45	15	44	137	28	247	12	8.7	108
8	14	17	70	41	15	54	212	27	203	11	11	182
9	13	19	60	37	14	86	269	26	168	43	26	140
10	13	21	54	34	14	172	245	24	148	31	125	110
11	12	17	51	36	14	257	215	24	125	22	67	89
12	14	16	62	33	14	238	227	23	109	18	46	86
13	13	15	58	30	13	183	198	69	99	15	103	77
14	11	14	49	28	13	141	193	44	98	13	156	63
15	9.9	13	43	27	13	148	246	37	122	13	112	56
16	47	13	40	34	13	293	245	33	103	12	77	77
17	36	13	39	74	14	475	203	58	84	11	97	349
18	21	13	36	72	15	442	168	104	70	10	63	294
19	18	14	34	59	17	339	144	86	73	9.9	92	199
20	17	14	32	50	21	285	125	66	62	9.9	97	158
21	16	94	33	44	59	259	107	52	51	35	76	130
22	21	73	35	40	199	227	91	43	42	14	53	135
23	25	52	46	37	231	189	79	36	36	12	42	120
24	16	41	145	33	166	197	68	33	33	11	34	93
25	15	52	244	30	126	231	61	30	28	9.5	28	78
26	15	212	215	27	100	198	53	26	26	9.7	26	66
27	14	187	171	25	80	170	52	23	23	14	22	57
28	13	159	136	23	70	158	56	55	45	11	19	50
29	12	124	113	22	64	215	67	255	30	12	17	44
30	12	95	100	21	----	213	59	200	23	11	22	40
31	14	----	90	20	----	214	----	170	----	9.5	119	----
TOTAL	596.9	1452	2406	1315	1401	5699	4643	1817	4852	475.5	1601.5	3961
MEAN	19.3	48.4	77.6	42.4	48.3	184	155	58.6	162	15.3	51.7	132
MAX	67	212	244	82	231	475	269	255	719	43	156	349
MIN	9.9	13	32	20	13	42	52	23	23	9.5	8.7	40
CFSM	.21	.54	.86	.47	.54	2.04	1.72	.65	1.80	.17	.57	1.47
IN.	.25	.60	.99	.54	.58	2.36	1.92	.75	2.01	.20	.66	1.64

CAL YR 1979 TOTAL 33995.0 MEAN 93.1 MAX 830 MIN 6.6 CFSM 1.03 IN 14.05
WTR YR 1980 TOTAL 30219.9 MEAN 82.6 MAX 719 MIN 8.7 CFSM .92 IN 12.49

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'05", long 87°34'38", in SW¼SW¼ sec.13, T.36 N., R.14 E., Cook County, Illinois, Hydrologic Unit 07120003, on right bank at downstream side of bridge on U.S. Highway 6, 0.6 mi (1.0 km) downstream from Thorn Creek, 1.6 mi (2.6 km) east of South Holland, and at mile 24.4 (39.3 km).

DRAINAGE AREA.--205 mi^2 (531 km^2).

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1507: 1950, 1953.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft (175.260 m) National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Prior to Oct. 27, 1947, nonrecording gage at same site and datum. Nov. 17, 1947, to Nov. 19, 1970, auxiliary water-stage recorder at Dixmoor, 6.1 mi (9.8 km) downstream; prior to Nov. 17, 1947, nonrecording gage at same site read twice daily.

REMARKS.--Records good except those for winter periods, which are poor. Flow from upper Little Calumet River is diverted to Lake Michigan by Burns ditch. Calumet Sag Channel, 8 mi (13 km) below station, diverts the entire flow to the Mississippi River basin. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--33 years, 178 ft^3/s (5.041 m^3/s), 11.79 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft^3/s (126 m^3/s) July 14, 1957, gage height, 20.11 ft (6.130 m); minimum daily, 7.9 ft^3/s (0.22 m^3/s) Oct. 6, 1950.

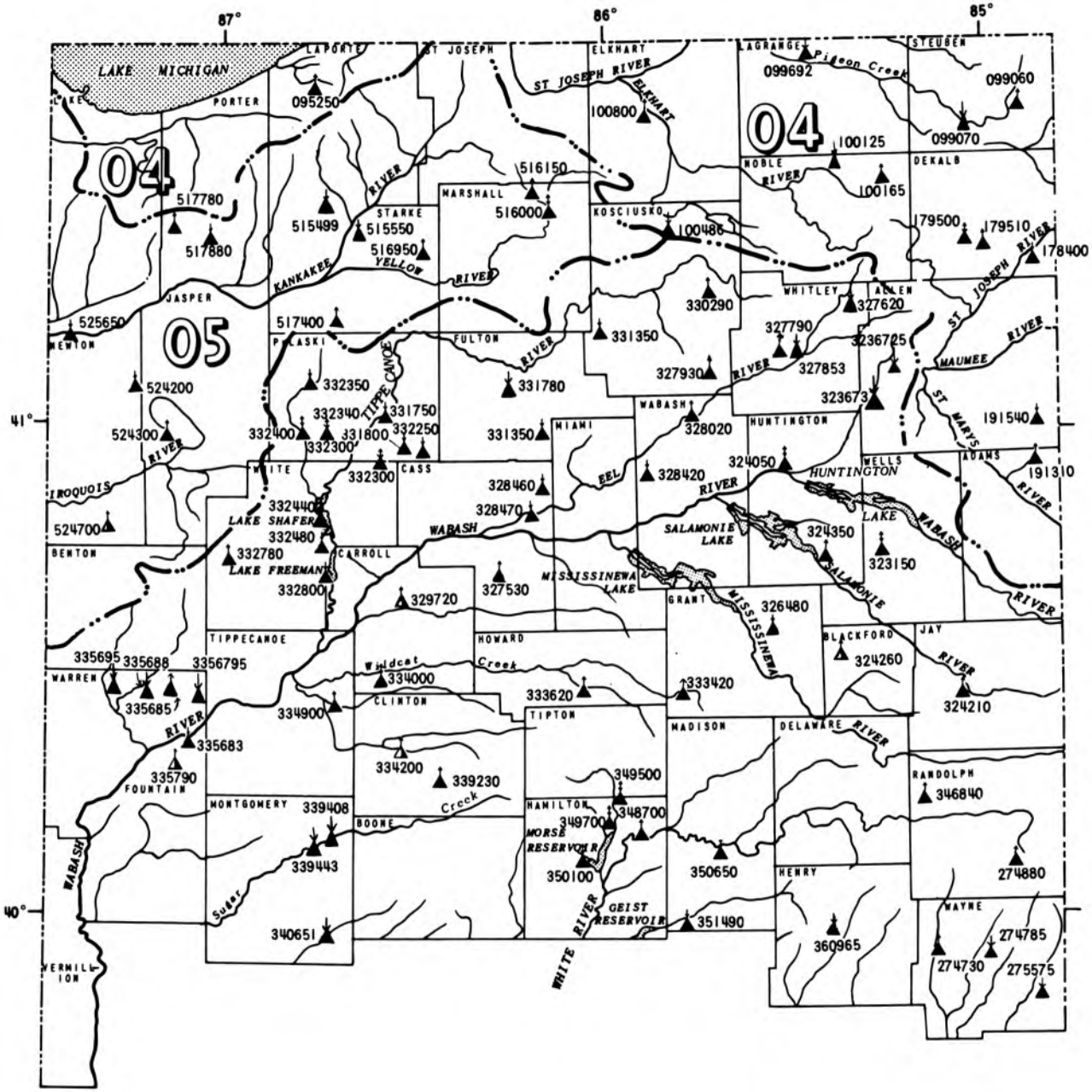
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1947, reached a stage of 19.24 ft (5.864 m), from flood-marks, discharge, 4,760 ft^3/s (135 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,320 ft^3/s (65.7 m^3/s) June 2, gage height, 15.68 ft (4.779 m); minimum daily, 37 ft^3/s (1.05 m^3/s) July 24, Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	188	165	147	52	142	410	105	852	72	39	1120
2	279	95	139	131	50	102	378	91	2070	71	39	1210
3	125	65	122	123	48	96	353	83	1990	70	46	527
4	83	56	117	116	49	95	395	77	1090	68	40	299
5	71	52	116	109	50	114	331	73	663	71	50	219
6	65	57	121	99	48	107	261	68	583	70	43	178
7	63	62	147	106	45	99	236	66	488	70	38	249
8	59	58	145	112	43	111	571	61	366	65	37	470
9	60	60	128	96	42	158	776	63	275	197	75	345
10	53	71	115	81	41	367	604	59	236	216	388	260
11	54	59	110	91	41	565	456	63	193	101	219	187
12	56	54	127	77	42	471	540	60	164	76	142	170
13	54	54	119	75	42	350	433	189	147	67	218	178
14	50	52	107	74	41	253	410	111	145	58	377	145
15	48	51	97	69	40	305	683	85	207	56	322	123
16	148	50	103	73	39	804	603	80	193	52	188	184
17	116	50	89	146	39	1460	419	142	137	47	274	1270
18	80	50	83	139	40	1350	313	299	116	42	164	938
19	67	50	76	118	44	796	253	207	118	40	242	483
20	63	51	74	103	57	610	216	154	120	41	301	324
21	62	343	75	91	97	555	182	122	90	90	189	254
22	60	274	80	96	509	456	158	101	80	54	122	253
23	96	166	110	81	602	352	137	89	70	38	94	275
24	67	118	460	90	368	386	119	85	67	37	77	194
25	59	132	806	81	226	502	111	81	63	38	66	158
26	60	674	568	69	206	391	100	75	61	40	66	139
27	58	489	366	62	173	309	102	71	63	79	65	125
28	57	386	266	57	141	277	119	133	150	56	60	110
29	52	273	213	57	118	448	145	832	112	40	57	97
30	48	202	181	55	----	430	125	564	79	44	61	97
31	54	----	162	54	----	420	----	440	-----	42	452	-----
TOTAL	2349	4342	5587	2878	3333	12881	9939	4729	10988	2108	4551	10581
MEAN	75.8	145	180	92.8	115	416	331	153	366	68.0	147	353
MAX	279	674	806	147	602	1460	776	832	2070	216	452	1270
MIN	48	50	74	54	39	95	100	59	61	37	37	97
CFSM	.37	.71	.88	.45	.56	2.03	1.62	.75	1.79	.33	.72	1.72
IN.	.43	.79	1.01	.52	.60	2.34	1.80	.86	1.99	.38	.83	1.92

CAL YR 1979 TOTAL 83504 MEAN 229 MAX 2960 MIN 35 CFSM 1.12 IN 15.15
WTR YR 1980 TOTAL 74266 MEAN 203 MAX 2070 MIN 37 CFSM .99 IN 13.48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PULASKI
FULTON
WHITLEY
ALLEN
WABASH
HUNTINGTON
WELLS
ADAMS
IROQUOIS
WHITE
CASS
MIAMI
BENTON
CARROLL
GRANT
BLACKFORD
JAY
TIPPECANOE
HOWARD
WARREN
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
VERMILLION
KANKAKEE RIVER
YELLOW RIVER
TIPPECANOE RIVER
ST JOSEPH RIVER
ELKHART RIVER
Pigeon Creek
NOBLE RIVER
MAUMEE RIVER
ST MARYS RIVER
WABASH RIVER
EEL RIVER
HUNTINGTON LAKE
SALAMONIE LAKE
SALAMONIE RIVER
MISSISSINEWA LAKE
MISSISSINEWA RIVER
LAKE SHAFER
LAKE FREEMAN
Wildcat Creek
Sugar Creek
MORSE RESERVOIR
GEIST RESERVOIR
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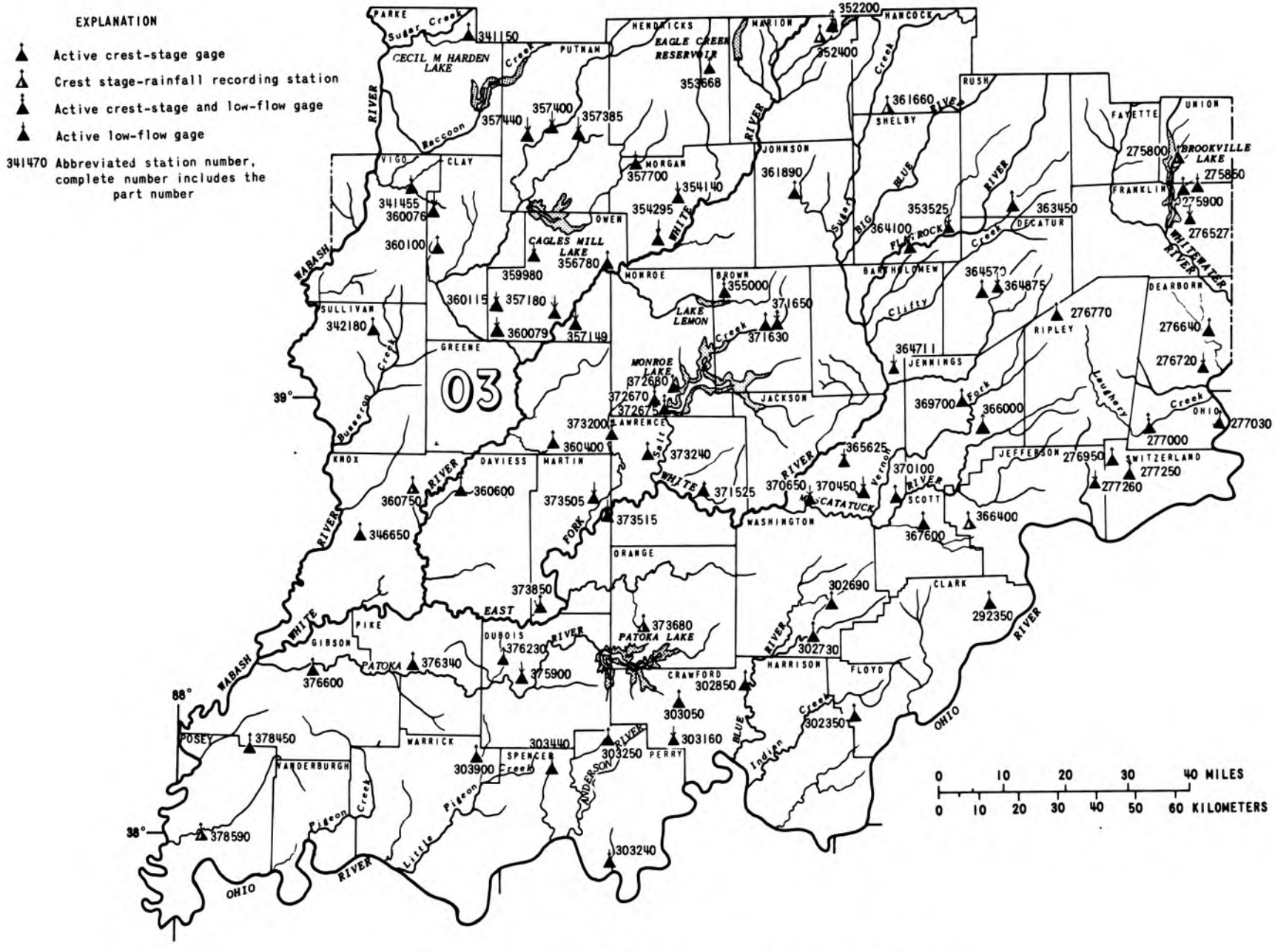

Figure 3.--Location of partial-record stations in Indiana

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during Water Year 1980

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements: Date	Measurements: Discharge (ft^3/s)
		OHIO RIVER BASIN				
		Great Miami River basin				
03274785	Martindale Creek near Greensfork, Ind.	Lat 39°52'38", long 85°06'28", on line between secs 31 and 32, T.17 N., R.13 E., Wayne County, at bridge on Jacksonburg Road, 1.8 miles south of State Road 38, and 4.2 miles west of Greensfork.	48.7	1980	05-05-80	22.6
03275575	Elkhorn Creek near Richmond, Ind.	Lat 39°45'11", long 84°55'15", in NW¼NE¼, sec.31, T.13 N., R.1 W., Wayne County, at bridge on Endsley Road, 0.1 mile east of State Road 27, and 4.1 miles south of Richmond.	21.1	1980	05-06-80 09-23-80	13.5 1.5
03275850	Hannah Creek near Roseburg, Ind.	Lat 39°34'58", long 84°56'48", in SW¼SW¼ sec.25, T.11 N., R.2 W., Union County, at bridge on State Highway 101, 0.5 mile south of Roseburg.	22.3	1976-80	09-23-80	2.0
03276527	Big Cedar Creek at Cedar Grove Ind.	Lat 39°21'27", long 84°56'26", NW¼SW¼ sec. 13, T.8 N., R.2 W., Franklin County, at bridge on State Road 52 in Cedar Grove, 5.4 miles east of Brookville.	29.6	1980	05-05-80	.0
		South Hogan Creek basin				
03276720	North Hogan Creek near Aurora, Ind.	Lat 39°04'58", long 84°57'48", SW¼ sec.23, T.5 N., R.2 W., Dearborn County, 800 feet above the junction of Cross and North Hogan Roads, 3 miles northwest of Aurora.	52.2	1980	05-06-80	9.9
		Laughery Creek basin				
03277260	Laughery Creek near Farmers Retreat, Ind.	Lat 38°57'08", long 85°04'15", in NW¼SE¼ sec.2, T.4 N., R.3 W., Ohio County, on right bank, 2.4 miles southeast of Farmers Retreat and 3.8 miles downstream from Bear Creek.	248	1941 1942-73a	09-24-80 05-07-80	2.7 61.9
		Indian Creek basin				
0327260	Indian Creek near Mount Sterling, Ind.	Lat 38°47'52", long 85°05'38", in SE¼NW¼ sec.34, T.3 N., R.3 W., Jefferson County, at bridge on Bennington Pike, 1.3 miles west of Mount Sterling.	40.5	1980	05.07-80 09-24-80	7.3 .1
		Little Blue River basin				
03303160	Little Blue River near Grantsburg, Ind.	Lat 38°16'53", long 86°28'03", in SW¼SE¼ sec.1 T.3 S., R.1 W., Crawsford County, at bridge on State Highway 37, 0.5 mile south of Grantsburg.	54.4	1979	10-30-79 05-07-80	17.4 23.0
03303205	Little Blue River near Beechwood, Ind.	Lat 38°10'01", long 86°24'57", in SW¼NW¼SE¼ sec.16, T.4 S., R.1 E., 0.5 mile above confluence with Turkey Fork, at county road 3.0 miles south of Beechwood.	109	1979-80	10-30-79 05-07-80	32 60
		Wabash River basin				
033236725	Aboite Creek near Fort Wayne, Ind.	Lat 41°03'15", long 85°17'48", between sec. 9 and sec.16, T.30 N., R.11 E., Allen County, at bridge on Covington Road, 3.1 miles west of Fort Wayne.	4.43	1979-80	11-21-79 05-05-80	.1 7.4

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin				
03327620	Blue River near Churubusco, Ind.	Lat 41°13'49", long 85°23'27", in E½ sec. 17, T.32 N., R.10 E., at bridge on Anderson Road, 4 miles west of Churubusco and 0.75 mile east of County Road 450 East.	35.8	1979-80	11-21-79 09-05-80	2.8 7.1
03327853	Spring Creek near Columbia City, Ind.	Lat 41°09'55", long 85°34'05", in SE¼SE¼ sec.1, T.31 N., R.8 E., at bridge on County Road 400 West, 1 mile south and 4.1 miles west of intersection of U.S. Highway 30 and State Highway 109 in Columbia City.	8.12	1979-80	11-21-79 05-05-80	.3 3.1
03328460	East Branch Twelvemile Creek near Twelve Mile, Ind.	Lat 40°50'16", long 86°12'22", on line between secs.28 and 29, T.28 N., R.3 E., Cass County, at bridge on County Road 900 East, 2 miles southeast of Twelve Mile.	22.7	1976-80	05-06-80	12.2
03328470	Twelvemile Creek near Hoover, Ind.	Lat 40°48'03", long 86°13'22", in NE¼SW¼ of Little Charlie's Reserve, T.27 N., R.3 E., Cass County, at bridge on County Road 300 North, 1.2 miles west of Hoover.	53.0	1976-80	05-06-80	23.97
03331750	Quigley Marsh ditch at Winamac, Ind.	Lat 48°03'10", long 86°36'12", on the line between secs.11 and 12, T.30 N., R.2 E., Pulaski County, at the north edge of Winamac at the Indiana Head Motel on U.S. 35 bridge 0.3 mile north of State Highway 14 east of Winamac.	14.8	1977-80	05-06-80	16.5
03331780	Mill Creek near Fulton, Ind.	Lat 40°57'28", long 86°20'06", in S½NW¼SW¼ sec.17, T.29 N., R.2 E., at bridge on Fulton County Road, 1 mile north of State Road 114, and 5miles west of Fulton and 0.75 mile north of Marshtown.	24.8	1980	05-06-80	11.6
03331800	Mill Creek near Winamac, Ind.	Lat 42°01'00", long 86°34'07", in SW¼NE¼SE¼ sec.30, T.30 N., R.1 W., Pulaski County, at bridge on County Road 175 East, about 3 miles southeast of Winamac.	79.0	1977-80	05-05-80	61.7
03332300	Little Indian Creek near Royal Center, Ind.	Lat 40°52'53", long 86°35'26", in NE¼NW¼ sec.13, T.28 N., R.2 W., White County, on right bank at downstream side of county road bridge, 2.9 miles upstream from mouth, 3.2 miles downstream from Fredericks ditch, and 4.8 miles northwest of Royal Center Post Office.	35	1959-73a 1974-	05-05-80	19.2
03332400	Big Monon Creek near Francesville, Ind.	Lat 40°59'03", long 86°51'43", in NW¼NE¼ sec.10, T.29 N., R.4 W., Pulaski County, on right bank at downstream side of county road bridge, 1.1 miles east of Francesville, 1.6 miles downstream from right-bank tributary, and 10.2 miles upstream from mouth.	152	1959-73a 1974-	05-07-80	110
03332480	Honey Creek near Reynolds, Ind.	Lat 40°46'53", long 86°48'52", on line between secs.19 and 24, T.27 N., and on line between R.3 W., and 4 W., White County, at bridge on County Road 300 East, about 3 miles northwest of Monticello.	38.4	1977-80	05-07-80	11.6
03332440	Hoagland ditch near Monon, Ind.	Lat 40°48'52", long 86°48'51", in NE¼NE¼SE¼ sec.1, on line with sec.6, T.27 N., R.4 W., at bridge on White County Road, 3.75 miles south of State Road 16, 1 mile west of confluence at Lake Shaefer, and 7 miles southeast of Monon.	78.8	1980	05-07-80	19.7
03334000	Wildcat Creek at Owasco, Ind.	Lat 40°27'50", long 86°38'15", in SE¼SE¼ sec.4, T.23 N., R.2 W., Carroll County, on left bank 500 ft downstream from bridge on State Highway 39, 0.5 mile northwest of Owasco, and 15 miles upstream from South Fork Wildcat Creek.	396	1944-73a 1974	05-07-80	137
033356795	Little Pine Creek at Green Hill, Ind.	Lat 40°21'15", long 87°06'30", in NW¼NW¼ sec.28, T.23 N., R.6 W., Warren county road bridge, 100 feet northwest of Green Hill, approximately 6 miles south of Otterbein.	2.82	1979-80	05-08-80	15.1
03335688	Big Pine Creek near Rainsville, Ind.	Lat 40°24'47", long 87°19'29", in NE¼NW¼SE¼ sec.28, T.23 N., R.8 W., below confluence with unnamed tributary, 0.7 mile west of Rainsville, 0.2 mile above private bridge crossing.	179	1979-80	05-06-80	100
03335695	Mud Pine Creek near Brisco, Ind.	Lat 40°24'52", long 87°19'21", in center of NE¼ sec.29, T.23 N., R.8 W., at bridge on Warren County Road, 0.75 mile east of Brisco and Old Highway 41.	88	1979	05-06-80	42.7

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
03335683	Kickapoo Creek near Attica, Ind.	Lat 40°19'27", long 87°14'05", in SE¼NW¼ sec.29, T.22 N., R.7 W., Warren County, at bridge on Kickapoo Road, 0.5 mile north of Independence Road.	36.4	1976-80	05-06-80	14.3
03339408	Little Potato Creek near Darlington, Ind.	Lat 40°09'48", long 86°45'08", on line between sec.21 and sec.22, T.20 N., R.3 W., at bridge on Montgomery County Road 800 East, 150 feet north of intersection with County Road 850 North, 5 miles northeast of Darlington.	31.8	1979-80	05-06-80	11.3
03339443	Lye Creek near Darlington, Ind.	Lat 40°07'10", long 86°48'53", in center of E½ sec.1, T.19 N., R.4 W., at bridge on Montgomery County Road 550 North, 0.3 mile west of intersection with County Road 500 East, and 3 miles northwest of Darlington.	78.1	1979-80	05-05-80	31.6
03340651	Big Raccoon Creek near Ladoga, Ind.	Lat 39°54'32", long 86°47'58", in SE¼SE¼SW¼ sec.18, T.17 N., R.3 W., at bridge on Montgomery County Road, 0.25 mile south of Ladoga, and 200 feet downstream from Monon Railroad.	56.2	1979-80	05-05-80	22.1
03341455	Sulphur Creek near Burnett, Ind.	Lat 39°31'26", long 87°17'25", in SE¼SW¼ sec.34, T.13 N., R.8 W., Vigo County, at triple barrel culvert on County Road 15 North, 1.5 miles south of Burnett.	20.4	1976-80	05-05-80	15.3
03349500	Cicero Creek near Arcadia, Ind.	Lat 40°10'34", long 85°59'43", in NW¼NW¼ sec.20, T.20 N., R.5 E., Hamilton County, on left bank at downstream side of bridge, 1.5 miles east of Arcadia, 12.5 miles upstream from Morse Dam, and at mile 17.2.	131	1955-76a 1977-	05-05-80 10-08-80	43.9 11.9
03349700	Little Cicero Creek near Arcadia, Ind.	Lat 40°10'32", long 86°02'45", in NE¼NW¼ sec.23, T.20 N., R.4 E., Hamilton County, on left bank on downstream side of county road bridge, 0.5 mile downstream from Taylor Creek, 1.3 miles west of Arcadia, 3.9 miles upstream from mouth, and 9.3 miles northwest of Noblesville.	40.4	1956-76a 1977	05-05-80 10-08-80	12.0 1.8
03350100	Hinkle Creek near Cicero, Ind.	Lat 40°06'05", long 86°05'10", in NW¼NW¼ sec.16, T.19 N., R.4 E., Hamilton County on left bank on downstream side of bridge on county road, 3.7 miles above mouth, 4.0 miles upstream from Morse Reservoir Dam, 4.2 miles southwest of Cicero, and 5.7 miles northwest of Noblesville.	18.5	1956-76a	10-08-80 05-04-80	1.4 8.4
03352200	Mud Creek at Indianapolis, Ind.	Lat 39°53'30", long 86°00'57", in SE¼NE¼ sec.25, T.17 N., R.4 E., Marion County, on left bank at downstream side of Lantern Road bridge at Indianapolis, 0.2 mile northeast of intersection of 75th Street and Sargent Road, 1.5 miles upstream from mouth, and 2.0 miles southeast of Castleton.	42.4	1958-76a 1977-	05-04-80	13.9
03355000	Bear Creek near Trevlac, Ind.	Lat 39°16'40", long 86°20'45", in NE¼NE¼ sec.30, T.10 N., R.2 E., Brown County, on left bank 15 ft west of Bear Creek Road, 100 ft upstream from Slippery Elm Shoot Road ford, 1.1 miles northwest of Trevlac, and 1.3 miles upstream from mouth.	6.94	1952-73a 1974	05-05-80	2.4
03354140	Lambs Creek near Martinsville, Ind.	Lat 39°25'26", long 86°28'01", in the NE¼NW¼ sec.1, T.11 N., R.1 W., on a county road parallel to and upstream from State Road 67, 2.5 miles west of Martinsville and 0.5 mile northeast of intersection with Mosier Road.	30.9	1979-80	05-05-80 09-22-80	16.7 5.05
03354295	Burkhart Creek near Paragon, Ind.	Lat 39°24'59", long 86°32'40", in the center of the SE¼ sec.5, T.11 N., R.1 W., along Duckworth Road, 1.5 miles north of intersection of State Road 67 and County Road 600 West, 1.2 miles northeast of Paragon.	6.91	1979-80	05-05-80 09-22-80	3.4 .50
03357149	Raccoon Creek at Adel, Ind.	Lat 39°11'32", long 86°47'45", in SE¼NE¼NE¼ sec.25, T.9 N., R.4 W., at bridge at Adel, 1.3 miles southeast of Pottersville and 4 miles east of Freedom.	28.2	1979-80	05-05-80	19.0
03357180	Fish Creek near Freedom, Ind.	Lat 39°17'18", long 86°53'30", in SW¼SE¼ sec.18, T.9 N., R.4 W., in Owen County at bridge on county road 2 miles west of Freedom.	49.4	1979-80	05-05-80	18.14

Station number	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (ft³/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
03357385	Miller Creek near Fillmore, Ind.	Lat 39°42'52", long 86°45'03", in NE¼NE¼ sec.33, T.15 N., R.3 W., 1.2 miles north of Conrail tracks just north of Fillmore, and 0.4 mile upstream from confluence with Clear Creek.	10.9	1979-80	05-05-80	3.65
03357400	Big Walnut Creek above Greencastle, Ind.	Lat 39°40'47", long 86°48'39", in SW¼ sec.1, T.14 N., R.4 W., at Pinhook bridge, 0.50 mile upstream from Monon Railroad bridge, and 2.50 miles northeast of Greencastle.	198	1979-80	05-05-80	91.8
03357440	Little Walnut Creek near Greencastle, Ind.	Lat 39°36'58", long 86°57'29", in NW¼SW¼ sec.27, T.14 N., R.5 W., at New York Central Railroad bridge, 100 feet upstream from confluence with Big Walnut Creek, and 4 miles west of Greencastle.	64.2	1979-80	05-05-80	34.2
03359980	Jordan Creek near Jordan, Ind.	Lat 39°24'09", long 86°55'33", in SE¼SE¼ sec.11, T.11 N., R.4 W., at bridge on an Owen County road, 0.9 miles east of Owen-Clay county line, and 0.5 mile northwest of Jordan.	25.9	1979-80	05-06-80	16.43
03357700	Mud Creek near Little Point, Ind.	Lat 39°34'34", long 86°37'54", on line between secs.9 and 10, T.13 N., R.2 W., Morgan County, at bridge on County Road 1100 West, 0.8 mile north of Little Point and 1.7 miles south of the Hendricks-Morgan County line.	34.8	1976-80	05-05-80 09-22-80	12.5 14.3
03360076	Birch Creek near Old Hill, Ind.	Lat 39°19'36", long 87°10'30", in NW¼SE¼NW¼ sec.10, T.10 N., R.7 W., in Clay County, at county road bridge and 0.7 mile from the mouth. The bridge may be reached from Highway 59 by turning west on the third county road, north of Clay City, and proceeding 4 miles west to bridge.	71.3	1979-80	05-06-80	17.60
03360079	Connelly ditch near Jasonville, Ind.	Lat 39°12'45", long 87°07'40", in NE¼NE¼NE¼ sec.24, T.9 N., R.7 W., on Clay county road, 1.75 miles above mouth and 7.5 miles northwest of Jasonville.	31.2	1979-80	05-05-80	13.47
03360115	Lick Creek near Coal City, Ind.	Lat 39°10'48", long 86°59'47", in SW¼SW¼ sec.19, T.9 N., R.5 W., on Owen county road, 1.5 miles upstream from confluence with Beech Creek and 3 miles southeast of Coal City.	38.8	1979-80	05-05-80	10.26
03360965	Duck Creek at Greensboro, Ind.	Lat 39°52'46", long 85°28'03", in SW¼NE¼ sec.35, T.17 N., R.9 E., Henry County, at bridge on County Road 350 South at west edge of Greensboro.	24.9	1976-79	09-27-80	6.97
03363525	Conn's Creek near Waldron, Ind.	Lat 39°25'11", long 85°40'42", in SE¼NW¼ sec.7, T.11 N., R.8 E., Shelby County, at bridge on County Road 700 S, 25 miles above mouth, and 2.3 miles south of Waldron.	80.0	1980	05-05-80 09-22-80	37 6.3
03364711	Little Sand Creek tributary near Elizabethtown Ind.	Lat 39°07'44", long 85°51'21", in NE¼NE¼ sec.21, T.8 N., R.6 E., Bartholomew County, at bridge on county road, 1.1 miles west of U.S. Highway 31, and 2.5 miles west of Elizabethtown.	43.1	1980	05-09-80 09-23-80	7.4 .5
03364875	Sand Creek tributary at Greensburg, Ind.	Lat 39°19'43", long 85°29'10", in NW¼SE¼ sec.11, T.10 N., R.9 E., Decatur County, at culvert 150 feet east of the Greensburg sewage treatment plant.	4.45	1980	05-05-80 09-23-80	.6 .1
0336525	Oathout ditch (White Creek) near Brownstown, Ind.	Lat 38°56'18", long 86°03'30", on line between sec.22, and 23, T.6 N., R.4 E., Jackson County, at bridge on county road, 1000 feet upstream from Spray Creek, 2.3 miles south of Surprise, and 4.2 miles north of Brownstown.	106	1980	05-09-80	13.8
03370450	Grassy Fork at Tampico, Ind.	Lat 38°47'48", long 85°57'12", in SE¼SW¼ sec.10, T.4 N., R.5 E., Jackson County, at bridge on State Highway 39, 0.25 mile south of Tampico.	31.6	1976-79	09-24-80	7.8
03371525	Guthrie Creek near Tunnelton, Ind.	Lat 38°47'22", long 86°21'33", in SE¼SE¼SW¼ sec.12, T.4 N., R.1 E., 100 feet below county road bridge, 0.8 mile north of intersection with road that goes from Buddha to Tunnelton, 1.1miles northwest of Tunnelton.	68.9	1979-80	10-30-79 05-06-80 10-30-79	5.5 24.3 5.5
03370650	Pond Creek near Vallonia, Ind.	Lat 38°46'51", long 86°01'56", in SW¼SW¼ of sec.13, T.4 N., R.4 E., Jackson County, at bridge on county road, 1.5 miles above mouth, 3.8 miles east of State Road 135, and 5.7 miles southeast of Vallonia	25.2	1980	05-08-80 09-23-80	2.1 3.8

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
03371650	North Fork Salt Creek at Nashville, Ind.	Lat 39°12'06", long 86°14'51", in NW¼SW¼ sec.19, T.9 N., R.3 E., Brown County, on right bank 90 ft downstream from bridge on State Highway 46, 800 ft downstream from Greasy Creek, and 0.4 mile south of center of Nashville.	76.1	1962-76a 1974	05-06-80	23.9
03373200	Indian Creek near Springville, Ind.	Lat 38°57'01", long 86°40'30", in SE¼SW¼ sec.18, T.6 N., R.2 W., Lawrence County, on left bank at downstream side of bridge on State Highway 54, 0.2 mile downstream from Popcorn Creek, and 4 miles northwest of Springville.	60.7	1961-73a 1974	05-06-80 09-22-80	16.0 2.4
03373505	Beaver Creek at Huron, Ind.	Lat 38°43'07", long 86°41'07", in SE¼SE¼ sec.1, T.3 N., R.3 W., at county road bridge, 0.3 mile southwest from U.S. 50 at Martin-Lawrence county line, and 8 miles west of Huron and 7.5 miles northeast of Shoals.	40.0	1979-80	05-06-80	.37
03373515	Bogg Creek near Loogootee, Ind.	Lat 38°43'51", long 86°51'29", in SW¼NW¼NE¼ sec.4, T.3 N., R.4 W., 5 miles northeast of Loogootee.	45.9	1979	10-29-79 05-06-80	4.2 14.1
03375900	Straight River near Jasper, Ind.	Lat 38°21'20", long 86°53'32", in NW¼SE¼ sec.7, T.2 S., R.4 W., at bridge on U.S. 162, 0.6 mile north of Maltersville, and 2 miles south of Jasper.	62.4	1980	10-29-79 05-07-80	12.9 10.5
		STREAMS TRIBUTARY TO LAKE MICHIGAN				
		St. Joseph River basin				
04099070	Pigeon Creek near Hamilton, Ind.	Lat 41°36'16", long 84°56'32", in NW¼SW¼SE¼ sec.5, T.36 N., R.14 E., 3.3 miles southeast of Angola, then south 1.5 miles to a "y" road, turn northeast 0.3 mile to bridge.	43.3	1980	05-05-80	22.2
04099692	Rowe ditch near Howe, Ind.	Lat 41°42'32", long 85°26'18", in NW¼SE¼ sec.5, T.38 N., R.9 E., LaGrange County, at bridge on County Road 450 N, 900 feet above mouth, 0.9 miles south of intersection with State Road 120, and 2.0 miles west of Howe.	7.52	1979	05-06-80	7.3
04100125	North Branch River near Wolcottville, Ind.	Lat 41°31'31", long 85°27'37", in SW¼SW¼ sec.35 T.35 N., R.9 E., at bridge on county line road,5.1 miles west of Wolcottville.	64.4	1980	11-20-79	15.56
04100486	Turkey Creek near Milford, Ind.	Lat 41°24'57", long 85°51'52", in center of W½W½W½ sec.8, T.34 N., R.6 E., at bridge on Kosciusko County Road 1250 North, 0.75 mile west of State Highway 15 in Milford.	75.9	1979	11-21-79 05-06-80	13.7 84
		Maumee River basin				
04179500	Cedar Creek at Auburn, Ind.	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	1943-73a 1974	05-05-80	45.4
		UPPER MISSISSIPPI RIVER BASIN				
		Illinois River basin				
05515499	Whitham ditch near Hanna, Ind.	Lat 41°25'08", long 86°42'27, on line and centered between sec.1 and sec.12, T.34 N., R.3 W., at bridge on LaPorte County Road 1300 South, 1.25 miles north of U.S. Highway 30 and 1.5 miles east of State Road 39, and 4 miles east of Hanna.	42.6	1979-80	05-06-80	40.2
05515550	Robbins ditch near Brems, Ind.	Lat 41°22'25", long 86°39'33", in NE¼NE¼ sec.29, on line with sec.28, T.34 N., R.2 W., at bridge on LaPorte County Road 200 East, 2 miles west of U.S. Highway 35, and 4 miles west of Hamlet.	66.8	1980	05-06-80	47.6

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements Date	Measurements Discharge (ft^3/s)
		UPPER MISSISSIPPI RIVER BASIN--Continued				
		Illinois River basin--Continued				
05516000	Yellow River near Bremen, Ind.	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	1955-73a 1974	05-06-80	43.0
05525650	Beaver Creek near Morocco, Ind.	Lat 40°57'57", long 87°27'00", in NW¼SW¼SW¼ sec.15, T.29 N., R.9 W., Newton County, at bridge on U.S. Highway 41, about 2 miles north of Morocco.	41.5	1977-80	05-08-80	20.3

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	Date	Gage height (ft)	Discharge (ft^3/s)
		OHIO RIVER BASIN					
		Great Miami River basin					
03274730	Whitewater River tributary near Hagerstown, IN	Lat 39°54'38", long 85°08'57", in 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-	08-18-80	5.58	7
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-	06-02-80	6.95	170
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	1972-	08-18-80	6.47	68
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-	03-21-80	11.13	295
		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-	09-10-80	11.25	60
		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-	05-17-80	6.21	22
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-	11-25-79	6.01	15
03277000	Laughery Creek near Farmers Retreat, IN	Lat 38°57'08", long 85°04'15", in NW¼SE¼ sec.2, T.4 N., R.3 W., Ohio County, on right bank, 2.4 miles southeast of Farmers Retreat, and 3.8 miles downstream from Bear Creek.	248	1941[a,b] 1942-73[b] 1974-[a]	11-25-79	11.35	9890
		Buck Run basin					
03277030	Buck Run near Rising Sun, IN	Lat 38°59'36", long 84°51'16", in SW¼NW¼SW¼ sec.23, T.4 N., R.1 W., Ohio County, at culvert on State Highway 56, 3.3 miles north of State highway 262 in Rising Sun.	.03	1973-	--------	(c)	----

Crest-stage and high-flow, low-flow partial-reco-d stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		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.	0.16	1973-	11-01-79	5.72	25
		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-	08-20-80	5.58	9
		Indian Creek basin					
03302350	Georgetown Creek near tributary 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-	07-05-80	13.15	1000
		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	1972-	07-04-80	5.36	9
03302730	South Fork Blue River near Palmyra, IN	Lat 38°28'07", long 86°04'55", in NE¼NW¼ sec.4, T.15 N., R.4 E., Washington County, at bridge on Old Palmyra Road, 0.2 mile north of State Highway 135, and 4.7 miles north of the intersection of U.S. Highway 150 and State Highway 135 in Palmyra.	64.3	1974-	01-11-80	15.84	1590
		Little Blue River basin					
03303050	Bird Hollow Creek at English, IN	Lat 38°21'02", long 86°28'01", in SE¼NE¼NW¼ sec.13, T.2 S., R.1 W., Crawford County, at bridge on State Highway 37, 0.7 mile north of State Highway 64.	9.31	1974-	07-26-79 01-10-80	17.80 13.20	850[d] 175
		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-	11-25-79	5.85	26
		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-	04-14-80	8.92	120
		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[e]	1973-	--------	(f)	----

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Wabash River basin					
03323150	Rock Creek near Rockford, IN	Lat 40°44'31", long 85°18'24", in NW¼NE¼ sec.5, T.26 N., R.11 E., Wells County, at bridge on State Highway 124, 1.3 miles south of Rockford, and 3.5 miles east of State Highway 3.	77[e]	1974-	03-08-80	13.93	1900
03324050	Clear Creek near Huntington, IN	Lat 40°54'57", long 85°32'42", in SE¼NE¼NW¼ sec.5, T.28 N., R.9 E., Huntington County, at bridge on State Highway 16, 0.8 mile west of State Highway 5, and 3.4 miles northwest of Huntington.	49[e]	1974-	06-03-80	14.95	>5000
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	1972-	06-03-80	7.59	68
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	1972-	06-02-80	6.66	88
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 at culvert on State Highway 5, 1.6 miles northwest of Interstate Highway 69.	.52	1972-	06-03-80	7.72	95
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	1972-	06-01-80	5.24	98
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	1972-	06-04-80	7.71	50
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.	2.5[e]	1972-	06-01-80	11.39	284
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	1972-	06-01-80	6.59	160
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	1972-	06-02-80	7.47	380
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	1972-	06-01-80	5.45	11

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Wabash River basin--Continued					
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]	03-17-80	5.36	218
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-	03-17-80	5.05	7
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]	03-17-80	14.16	1620
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-	06-02-80	10.23	210
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-	06-03-80	7.20	125
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-	06-02-80	9.75	74
03334000	Wildcat Creek at Owasco, IN	Lat 40°27'50", long 86°38'15", in SE¼SE¼ sec.4, T.23 N., R.2 W., Carroll County, on left bank 500 ft downstream from bridge on State Highway 39, 0.5 mile northwest of Owasco, and 15 miles upstream from South Fork Wildcat Creek.	396	1944-73[b] 1944-[a]	06-04-80	11.58	10800
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	1972-	06-02-80	10.07	145
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	1972-	06-03-80	5.95	37
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	1972-	06-07-80	5.03	33

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Wabash River basin--Continued					
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-	02-22-80	6.85	150
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-	06-02-80	9.32	140
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-	06-03-80	7.70	100
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	1972-	06-20-80	7.72	130
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-	07-21-80	7.28	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	1972-	06-03-80	5.87	17
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-	03-18-80	6.55	18
03349500	Cicero Creek near Arcadia, IN	Lat 40°10'34", long 85°59'43", in NW¼NW¼ sec.20, T.20 N., R.5 E., Hamilton County, on left bank at downstream side of bridge, 1.5 miles east of Arcadia, 12.5 miles upstream from Morse Dam, and at mile 17.2.	131	1955-76[b] 1977-[a]	06-03-80	10.22	2470
03349700	Little Cicero Creek near Arcadia, IN	Lat 40°10'32", long 86°02'45", in NE¼NW¼ sec.23, T.20 N., R.4 E., Hamilton County, on left bank on downstream side of county road bridge, 0.5 mile downstream from Taylor Creek, 1.3 miles west of Arcadia, 3.9 miles upstream from mouth, and 9.3 miles northwest of Noblesville.	40.4	1956-76[b] 1977-[a]	06-03-80	7.46	728
03350100	Hinkle Creek near Cicero, IN	Lat 40°06'05", long 86°05'10", in NW¼NW¼ sec.16, T.19 N., R.4 E., Hamilton County, on left bank on downstream side of bridge on county road, 3.7 miles above mouth, 4.0 miles upstream from Morse Reservoir Dam, 4.2 miles southwest of Cicero, and 5.7 miles northwest of Noblesville.	18.5	1956-76[b]	03-08-80	5.31	1250

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Wabash River basin--Continued					
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-	06-03-80	6.51	120
03352200	Mud Creek at Indianapolis, IN	Lat 39°53'30", long 86°00'57", in SE¼NE¼ sec.25, T.17 N., R.4 E., Marion County, on left bank at downstream side of Lantern Road bridge at Indianapolis, 0.2 mile northeast of intersection of 75th Street and Sargent Road 1.5 miles upstream from mouth, and 2.0 miles southeast of Castleton.	42.4	1958-76[b] 1977-[a]	05-24-80	6.74	714
03352400	Blue Creek near Castleton, IN	Lat 39°53'23", long 86°02'46", in NW¼NE¼SE¼ sec.26, T.17 N., R.4 E., Marion County, at culvert on State Highway 100, 0.1 mile south of 75th Street, 1.2 miles south of Castleton.	.77	1972-	05-24-80	7.08	72
03353668	White Lick Creek tributary near Brownsburg, IN	Lat 39°53'54", long 86°23'34", in SE¼NE¼SE¼ sec.22, T.17 N., R.1 E., Hendricks County, at culvert on State Highway 267, 4.0 miles north of U.S. Highway 136 in Brownsburg.	.31	1972-	06-01-80	6.14	76
03355000	Bear Creek near Trevlac, IN	Lat 39°16'40", long 86°20'45", in NE¼NE¼ sec.30, T.10 N., R.2 E., Brown County, on left bank 15 ft west of Bear Creek Road, 100 ft upstream from Slippery Elm Shoot Road ford, 1.1 miles northwest of Trevlac, and 1.3 miles upstream from mouth.	6.94	1952-73[b] 1974-[a]	06-01-80	2.89	104
03356780	Limestone Creek tributary near Gosport, IN	Lat 39°21'12", long 86°40'58", in NE¼NW¼NW¼ sec.31, T.11 N., R.2 W., Owen County, at culvert on State Highway 67, 0.9 mile west of Gosport.	.72	1972-	06-01-80	6.45	130
03360100	Clear Branch at Cory, IN	Lat 39°23'20", long 87°11'58", in SE¼SW¼SW¼ sec.16, T.11 N., R.7 at W., Clay County, culvert on State Highway 46, 4.9 miles west of State Highway 59.	.27	1973-	06-01-80	8.38	94
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-	03-17-80	6.62	60
03360600	Smothers Creek near Plainville, IN	Lat 38°48'43", long 87°07'48", in SE¼NW¼ sec.1, T.4 N., R.7 W., Daviess County, at county road bridge, 1.3 miles northeast of State Highway 57 in Plainville.	33[e]	1974-	11-26-79	14.97	720
03360750	Miller ditch tributary near Bicknell, IN	Lat 38°47'08", long 87°18'36", in SE¼NW¼NW¼ sec.16, T.4 N., R.8 W., Knox County, at culvert on State Highway 159, 0.4 mile north of State Highway 67 in Bicknell.	.50	1973-	--------	(c)	----
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-	07-21-80	6.21	75

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Wabash River basin--Continued					
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.	0.70	1973-	08-18-80	7.96	230
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-	08-02-80	7.87	140
03363450	Little Flatrock Creek at Milroy, IN	Lat 39°29'49", long 85°28'24", in NE¼NW¼ sec.13, T.12 N., R.9 E., Rush County, at bridge on State Highway 244, 800 ft east of State Highway 3, and at west edge of Milroy.	34.8	1974-	--------	(f)	---
03364100	Tough Creek near Norristown, IN	Lat 39°22'19", long 85°45'38", in SW¼SW¼NW¼ sec.28, T.11 N., R.7 E., Shelby County, at culvert on county road, 0.5 mile north of Norristown.	1.46	1973-	07-23-80	7.51	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-	08-19-80	7.74	110
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-	08-19-80	6.38	74
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-	01-11-80	5.84	56
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-	05-17-80	7.53	61
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-	08-27-79[d] 05-17-80	7.32 6.70	35[d] 26
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-	08-15-80	6.49	21
03371650	North Fork Salt Creek at Nashville, IN	Lat 39°12'06", long 86°14'51", in NW¼SW¼ sec.19, T.9 N., R.3 E., Brown County, on right bank 90 ft downstream from bridge on State Highway 46, 800 ft downstream from Greasy Creek, and and 0.4 mile south of center of Nashville.	76.1	1962-76[b] 1974-[a]	12-24-79	10.80	2560
03372670	Jackson Creek near Bloomington, IN	Lat 39°07'17", long 86°30'50", in SW¼SW¼ sec.15, T.8 N., R.1 W., Monroe County, at bridge on Rhorer Road 0.95 mile east of State Highway 37 on the south side of Bloomington.	4.66	1974-76[b] 1977-[a]	--------	(f)	----

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Wabash River basin--Continued					
03372675	Jackson Creek at Clear Creek, IN	Lat 39°06'01", long 86°32'18", in SE¼NE¼ sec.29, T.8 N., R.1 W., Monroe County, at bridge on Rogers Street, 400 ft north of State Highway 37 and 0.5 mile south of Clear Creek Road in Clear Creek.	10.8	1975-	--------	(f)	----
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	1972-	06-01-80	9.13	180
03373200	Indian Creek near Springville, IN	Lat 38°57'01", long 86°40'30", in SE¼SW¼ sec.18, T.6 N., R.2 W., Lawrence County, on left bank at downstream side of bridge on State Highway 54, 0.2 mile downstream from Popcorn Creek, and 4 miles northwest of Springville.	60.7	1961-73[b] 1974-[a]	12-24-79	8.34	2900
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	1972-	12-24-79	5.65	21
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-	07-04-80	6.51	88
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-	11-26-79	6.69	80
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-	07-04-80	10.18	275
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-	06-29-80	8.61	230
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-	06-29-80	8.17	92
03378450	Black River near Poseyville, IN	Lat 38°12'00", long 87°46'51", on line between SW¼SW¼ sec.5, and SE¼SE¼ sec.6, T.4 S., R.12 W., Posey County, at bridge on State Highway 165, 500 ft south of Gibson-Posey County line, and 2.0 miles north of State Highway 68 in Poseyville.	22.9	1974-	07-03-80	13.94	2100

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Wabash River basin--Continued					
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.	0.32	1973-	07-03-80	7.08	52
		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	1972-	07-05-80	6.29	25
		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	1972-	03-23-80	4.82	39
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	1972-	03-04-79 04-05-80	4.03 5.95	28[d] 85
04100800	Yellow Creek at Dunlap, IN	Lat 41°38'44", long 85°56'00", in NE¼NE¼ sec.27, T.37 N., R.5 E., Elkhart County, at bridge on U.S. Highway 33, at northwest edge of Dunlap.	33[e]	1974-	--------	(f)	---
		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-[a]	11-01-79	7.87	46
04179510	Cecil Metcalf ditch near Aubu-n, IN	Lat 41°21'55", long 85°01'07", in SW¼NE¼NW¼ sec.34, T.34 N., R.13 E., DeKalb County, culvert on State Highway 8, 2.0 miles east of State Highway 427 in Auburn.	.78	1972-	06-03-80	9.08	200
04191310	Flatrock Creek tributary near Monroeville, IN	Lat 40°53'42", long 84°51'42", in NW¼SW¼SW¼ sec.8, T.28 N., R.15 E., Adams County, at culvert on State Highway 101, 1.8 miles south of Adams-Allen County Line.	.83	1972-	08-17-80	7.91	150
		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-[a]	04-11-80	11.20	900

Crest-stage and high-flow, low-flow partial-record stations--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		Illinois River basin--Continued					
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	1972-	04-11-80	6.91	46
05516950	Eagle Creek near Grovertown, IN	Lat 41°18'44", long 86°31'27", in SE¼NE¼ sec.16, T.33 N., R.1 W., Starke County, at bridge on State Highway 23, 0.3 mile south of County Road 100 North, and 5.2 miles south of U.S. Highway 30 in Grovertown.	32[c]	1973-	--------	(c)	---
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-	--------	(c)	----
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	1972-	09-24-80	6.31	31
05524300	Yeoman ditch tributary near Rensselaer, IN	Lat 40°56'27", long 87°14'10", in SW¼SW¼SW¼ sec.21, T.29 N., R.7 W., Jasper County, at culvert on State Highway 114, 4.5 miles west of U.S. Highway 231 in Rensselaer.	.57	1972-	06-04-80	7.78	110
05524700	Talley ditch near Kentland, IN	Lat 40°46'02", long 87°24'31", in SW¼SW¼SE¼ sec.23, T.27 N., R.9 W., Newton County, at culvert on U.S. Highway 24, 1.6 miles east of U.S. Highways 41 and 52.	4.16	1972-	06-03-80	8.67	380

[a]Nonrecording.
[b]Recording.
[c]No peak recorded.
[d]Revised.
[e]About.
[f]Insufficient data for peaks.

Discharge measurements made at crest-stage and high-flow, low-flow partial-record stations

Station No.	Station name	Location	Drainage area (mi^2)	Date	Discharge (ft^3/s)
03329720	Robinson Branch near Delphi, IN	Lat 40°37'10", long 86°37'01", in NE¼NW¼NW¼sec.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	06-02-80 06-03-80	172 48.6
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	06-02-80	245
03349500	Cicero Creek near Arcadia, IN	Lat 40°10'34", long 85°59'43", in NW¼NW¼ sec.20, T.10 N., R.5 E., Hamilton County, on left bank at downstream side of bridge, 1.5 miles east of Arcadia, 12.5 miles upstream from Morse Dam, and at mile 17.2.	131	08-07-80	1060
03349700	Little Cicero Creek near Arcadia, IN	Lat 40°10'32", long 86°02'45", in NE¼NW¼ sec.23, T.20 N., R.4 E., Hamilton County, on left bank on downstream side of county road bridge, 0.5 mile downstream from Taylor Creek, 1.3 miles west of Arcadia, 3.9 miles upstream from mouth, and 9.3 miles northwest of Noblesville.	40.4	08-07-80	536

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 years 1977-1980

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN				
Cypress Creek	Ohio River	Lat 38°03'30", long 87°17'25", in NW¼NE¼ sec.27, T.5 S., R.8 W., Warrick County, at bridge on county road, 0.9 mile west of State Highway 61, and 1.1 mile northwest of County Courthouse in Boonville.			06-12-79 08-14-79	13.2 6.07
Cypress Creek	Ohio River	Lat 38°02'51", long 87°17'25", in NW¼NE¼ sec.34, T.5 S., R.8 W., Warrick County, at bridge on State Highway 62 and U.S. Highway 460, 400 ft west of sewage treatment plant, and 0.9 mile southwest of County Courthouse in Boonville.			06-12-79 08-14-79	11.1 4.26
Cypress Creek tributary	Cypress Creek	Lat 38°01'39", long 87°17'02", in SE¼NE¼ sec. 3, T.6 S., R.8 W., Warrick County, at bridge on State Highway 61, 1.5 mile south of State Highway 62, and 1.6 miles southwest of County Courthouse in Boonville.			06-13-79	1.09
Cypress Creek tributary	Cypress Creek	Lat 38°00'46", long 87°18'07", in SW¼NW¼ sec.10, T.6 S., R.8 W., Warrick County, at bridge on County Road 300 West and Yankeetown Dock Corporation Railroad bridge, 0.7 mile upstream from mouth and 3.0 miles southwest of Boonville.			06-13-79	1.20
Cypress Creek	Ohio River	Lat 37°59'25", long 87°19'00", in NW¼NW¼ sec.21, T.6 S., R.8 W., Warrick County, at bridge on County Road 300 South 1.7 miles west of State Highway 61, 0.3 mile northwest of Friendship Church, and 3.3 miles west of Pelzer.			06-12-79 08-14-79	23.2 12.0
McCool ditch	Cypress Creek	Lat 37°59'12", long 87°18'45", in NW¼NE¼ sec.21, T.6 S., R.8 W., Warrick County, at bridge on County Road 350 West, 0.1 mile south of Friendship Church, 0.2 mile north of County Road 350 South 0.4 mile upstream from mouth and 3.1 miles west of Pelzer.			06-12-79	1.47
Cypress Creek	Ohio River	Lat 37°57'16", long 87°19'50", in SW¼NE¼ sec.32, T.6 S., R.8 W., Warrick County, at bridge on County Road 550 South, 200 ft upstream from Koehler ditch, and 0.4 mile west of Dayville.			06-12-79	28.1
Summer Pecka ditch	Cypress Creek	Lat 37°58'10", long 87°21'42" in SE¼NE¼ sec.25, T.6 S., R.9 W., Warrick County, at bridge on County Road 450 South, 0.1 mile west of County Road 600 West 0.4 mile east of County Road 650 West 1.9 miles upstream from mouth and 2.4 miles northwest of Dayville.			06-12-79	.16
Deer Creek	Wabash River	Lat 40°33'52", long 85°58'43", in SE¼SE¼ sec.32, T.25 S., R.5 E., Miami County, 50 ft downstream from bridge on Miami-Howard County line, 0.1 mile west of County Road 500 East, and 3.3 miles southwest of Amboy.			05-15-80	1.36

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
Deer Creek	Wabash River	Lat 40°36'13", long 86°00'52", in SE¼NE¼ sec.24, T.25 N., R.4 E., Miami County, 150 ft downstream from bridge on County Road 300 East, 15 ft downstream from Copper Creek, 116 miles (2.6 km) north of State Highway 18 and 4.5 miles west of Amboy.			05-15-80 09-11-80	2.79 .40
Dear Creek	Wabash River	Lat 40°36'33", long 86°08'47", in SE¼SE¼ sec.14, T.25 N., R.3 E., Miami County, at bridge on County Road 100 West 1.7 miles north of State Highway 18, 1 mile west U.S. Highway 31 and 3.0 miles northeast of Galveston.			05-15-80 09-11-80	8.79 2.60
South Fork Deer Creek	Deer Creek	Lat 40°31'45", long 86°01'55", in SE¼NE¼ sec.14, T.24 N., R.4 E., Howard County, 60 ft downstream from bridge on County Road 500 East, 0.6 mile north of County Road 300 North, and 5 miles northeast of Kokomo.			05-15-80	.60
South Fork Deer Creek	Deer Creek	Lat 40°33'56", long 86°07'39", in SE¼SE¼ sec.36, T.25 N., R.3 E., Miami County, 120 ft downstream from State Highway 31 bridge, 0.2 mile north of Miami-Howard County line, 4.2 miles north of the intersection of State Highway 31 and Howard County Road 200 North (E. Morgan St) in Kokomo.			05-15-80 09-11-80	6.02 1.10
South Fork Deer Creek	Deer Creek	Lat 40°35'45", long 86°13'15",SW¼ NW¼ sec.20, T.25 N., R.3 E., Cass County, 70 ft downstream from culvert on County Road 1150 South, 1.2 miles west of State Highway 35, and 2 miles northwest of Galveston.			05-16-80 09-11-80	11.3 3.60
Deer Creek	Wabash River	Lat 40°36'03", long 86°15'38", on line between SE¼NE¼ sec.23 and SW¼NW¼ sec.24, T.25 N., R.2 E., Cass County, 0.6 mile north of intersection between County Road 1185 South and County Road 600 East, 1.6 miles north of State Highway 18, and 4.1 miles northwest of Galveston.			05-16-80 09-11-80	23.8 7.34
Deer Creek	Wabash River	Lat 40°36'21", long 86°21'55", in SE¼SW¼ sec.13, T.25 N., R.1 E., Cass County 120 ft downstream from bridge on County Road 50 East, 0.6 mile north of County Road 1150 South, 0.5 mile east of Cass-Carroll County line, and 2.9 miles northwest of Young America.			05-16-80 09-12-80	29.7 10.0
Harness ditch	Deer Creek	Lat 40°35'50", long 86°24'38", in NW¼SW¼ sec.22, T.25 N., R.1 E., Carroll County, at bridge on County Road 600 East, 0.3 mile upstream from mouth, 0.5 mile north of County Road 300 North, 1.0 mile west of State Highways 29 and 218, and 1.6 miles southwest of Deer Creek.			05-15-80 09-11-80	5.5 2.11

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
McKay Dredge ditch	Little Deer Creek	Lat 40°32'12", long 86°16'50", in NE¼SE¼ sec.10, T.24 N., R.2 E., Howard County, 70 ft downstream from bridge on County Road 800 West, 0.3 mile north of County 400 North, and 5.5 mile southwest of Galveston.			05-16-80 09-11-80	3.36 1.64
Mathias-Young ditch	Little Deer Creek	Lat 40°32'49", long 86°21'23", in SW¼SW¼ sec.6, T.24 N., R.2 E., Howard County, at bridge on County Road 500 North, 0.5 mile west of County Road 1150 West, 1.5 mile south of State Highway 18, and 1.6 mile southwest of Young America.			05-16-80 09-11-80	3.32 1.70
Little Deer Creek	Deer Creek	Lat 40°33'23", long 86°23'30", in SE¼NE¼ sec.3, T.24 N., R.1 E., Carroll County, 15 ft downstream from bridge on State Highways 18 and 29, 0.7 mile north of junction between State Highways 18 and 29, and 3.9 miles south of Deer Creek.			05-15-80 09-12-80	11.9 4.41
Little Deer Creek	Deer Creek	Lat 40°35'25", long 86°28'00", in SW¼SW¼ sec.19, T.25 N., R.1 E., Carroll County, 40 ft downstream from bridge on County Road 300 North, 0.1 mile east of County Road 300 East, 0.1 mile upstream from mouth, 3.9 miles west of State Highways 29 and 218, and 4.0 miles southeast of Camden.			05-15-80 09-12-80	20.0 6.70
Deer Creek	Wabash River	Lat 40°35'33", long 86°29'13", in SW¼SW¼ sec.24, T.25 N., R.1 W., Carroll County, 100 ft downstream from bridge on County Road 200 East, 0.2 mile north of County Road 300 North, 0.8 mile south of State Highway 218, 2.8 miles southeast of Camden.			05-15-80 09-12-80	62.2 21.0
Middle Fork ditch	Wildcat Creek	Lat 40°26'00", long 85°53'27", in NE¼NW¼ sec.19, T.23 N., R.6 E., Howard County, 75 ft downstream from bridge on County Road 1250 East, 0.8 mile north of State Highway 26, and 5.3 miles southeast of Greentown.			05-15-80 09-12-80	6.56 1.80
Grassy Fork ditch	Wildcat Creek	Lat 40°26'21", long 85°49'28", in SE¼SE¼ sec.15, T.23 N., R.6 E., Grant County, 40 ft downstream from bridge on State Highway 13, 2.8 miles south of U.S. Highway 35 (State Highway 22), 1.1 miles north of State Highway 26 and Point Isabel.			05-15-80 09-12-80	2.25 .21
Grassy Fork	Wildcat Creek	Lat 40°26'02", long 85°53'26", in NW¼NE¼ sec.19, T.23 N., R.6 E., Howard County, at bridge on County Road 1250 East, 0.9 mile north of State Highway 26, 3.1 miles south of U.S. Highway 35 (State Highway 22), 5.3 miles southeast of Greentown.			05-15-80 09-12-80	5.33 1.26
Mud Creek	Wildcat Creek	Lat 40°22'18", long 86°06'21" in SW¼NW¼ sec.8, T.22 N, R.4 E., Tipton County, 1.0 mile downstream from County Road 50 East, 1.0 mile upstream from County Road 200 East, and 1.1 mile southwest of Sharpsville.			05-16-80 09-13-80	2.99 .23

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
Mud Creek	Wildcat Creek	Lat 40°23'46", long 85°58'33", in NW¼SW¼ sec.33, T.23 N., R.5 E., Tipton County, 50 ft downstream from bridge on County Road 200 East, 0.7 mile south of Tipton-Howard County line, 1.0 mile west of State Highway 213, 2.5 miles northwest of Windfall.			05-15-80 09-12-80	6.55 .68
Turkey Creek	Mud Creek	Lat 40°19'04", long 86°01'57", in NE¼NE¼ sec.35, T.22 N., R.4 E., Tipton County, at bridge on State Highway 19, 2.4 miles north of State Highway 28, 0.1 mile south of County Road 100 N., 2.5 miles northeast of Tipton.			05-16-80 09-11-80	2.14 .28
Turkey Creek	Mud Creek	Lat 40°23'31", long 85°57'08", in SW¼SW¼ sec.34, T.23 N., R.5 E., Tipton County, 50 ft downstream from bridge on County Road 600 North, 0.2 mile east of State Highway 213, 0.8 mile west of County Road 400 East and 2.0 miles northeast of Windfall.			05-15-80 09-12-80	8.17 1.39
Irwin Creek	Mud Creek	Lat 40°24'23", long 85°56'26", in SE¼SE¼ of sec.27, T.23 N., R.5 E., on Howard-Tipton County Line Road 500 south, 3.5 miles south of Jerome.			09-12-80	.61
Mud Creek	Wildcat Creek	Lat 40°26'08", long 85°54'36", in NE¼NW¼ sec.24, T.23 N., R.5 E., Howard County, 75 ft upstream from bridge on County Road 300 South, 0.4 mile east of County Road 1100 East, 0.1 mile upstream from Wildcat Creek, and 4.1 miles southeast of Greentown.			05-15-80 09-12-80	20.6 5.27
Wildcat Creek	Wabash River	Lat 40°29'08", long 86°03'05", in SE¼NE¼ sec.34 T.24 N., R.4 E., Howard County, 150 ft downstream from bridge on County Road 400 East, 0.1 mile north of County Road 50 North, 0.6 mile north of U.S. Highway 35 (State Highway 22), 0.1 mile downstream from spillway for Kokomo Waterworks Reservoir No. 2, 3.0 miles east of U.S. Highway 31 bypass in Kokomo.			05-16-80 09-11-80	43.2 30.8
Wildcat Creek	Wabash River	Lat 40°24'23", long 85°56'26", in SE¼SW¼, of sec.28, T.24 N., R.4 E., Howard County upstream of bridge on County Road 100 North 1.5 miles east of Kokomo.			09-12-80	.61
Wildcat Creek	Wabash River	Lat 40°29'10", long 86°06'28", in SE¼NE¼ sec. 31, T.24 N., R.4 E., Howard County at bridge on U.S. Highway 31 bypass, 0.6 mile north of U.S. Highway 35 (State Highway 22), in Kokomo.			09-12-80	24.4
Kokomo Creek	Wildcat Creek	Lat 40°26'07", long 85°59'40", in SE¼SE¼ sec.18, T.23 N., R.5 E., Howard County, at bridge on County Road 300 South, 50 ft west of County Road 700 East, 1.0 mile north of State Highway 26, 2.0 mile west of State Road 213, 3.2 miles southwest of Greentown.			05-15-80 09-12-80	2.05 .10

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
Kokomo Creek	Wildcat Creek	Lat 40°28'14", long 86°09'04", in SW¼NE¼ sec.2, T.23 N., R.3 E., Howard County, 0.1 mile upstream from mouth, 0.1 mile north of County Road 50 South, 1.0 mile southwest of intersection of U.S. Highway 31 and Markland Street in Kokomo.			05-15-80 09-12-80	10.7 3.97
Little Wildcat Creek	Wildcat Creek	Lat 40°26'14", long 86°09'54", in NW¼SW¼ sec.14, T.23 N., R.3 E., Howard County, 75 ft upstream from bridge on County Road 200 West, 2.0 miles west of U.S. Highway 31, 1.3 miles north of State Highway 26, and 0.2 mile south of County Road 250 South and Alto.			05-15-80 09-11-80	2.56 .23
West Fork	Little Wildcat Creek	Lat 40°25'58", long 86°09'55", in SE¼SE¼ sec.15, T.23 N., R.3 E., Howard County, 20 ft downstream from bridge at intersection between County Roads 200 West and 300 South and 0.5 mile south of Alto, 2.0 mile west of U.S. Highway 31.			05-15-80 09-11-80	2.70 .58
Little Wildcat Creek	Wildcat Creek	Lat 40°27'47", long 86°14'53", in SW¼SE¼ sec.1, T.23 N., R.2 E., Howard County, at bridge on County Road 85 South, 0.3 mile west of County Road 600 West, 0.6 mile upstream from mouth, and 1.8 miles south of State Road 22.			05-15-80 09-11-80	9.71 1.61
Wildcat Creek	Wabash River	Lat 40°28'18", long 86°16'17", in NW¼NE¼ sec.2, T.23 N., R.2 E., Howard County, 100 ft upstream from bridge on County Road 750 West, 1.2 miles south of State Highway 22, and 1.8 miles north of New London.			05-16-80 09-11-80	72.9 41.9
West Honey Creek	Honey Creek	Lat. 40°26'54", long 86°16'26", in SE¼SW¼ sec.11, T.23 N., R.2 E., Howard County, at bridge on County Road 180 South, 0.1 mile west of County Road 750 West, and 0.4 mile north of New London.			05-15-80 09-11-80	5.05 2.09
Honey Creek	Wildcat Creek	Lat 40°27'39", long 86°17'03", in SE¼SE¼ sec.3, T.23 N., R.2 E., Howard County, 50 ft downstream from bridge on County Road 100 South, 0.7 mile west of County Road 750 West, 2.0 miles south of State Highway 22, 1.3 miles northwest of New London.			05-15-80 09-11-80	9.28 3.42
Petes Run	Wildcat Creek	Lat 40°28'54", long 86°21'39", in NE¼SE¼ sec.36, T.24 N., R.1 E., Howard County, 0.5 mile upstream from mouth, 0.5 mile south of State Highway 22, 0.7 mile west of County Road 1150 West, and 1.8 miles east of Burlington.			05-16-80 09-11-80	3.08 .30
Wildcat Creek	Wabash River	Lat 40°29'13", long 86°23'42", in NE¼NE¼ sec.34, T.24 N., R.1 E., Carroll County, 60 ft upstream from bridge on State Highway 29, 0.5 mile north of State Highway 22 in Burlington.			05-16-80 09-11-80	105 52.0

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
Wildcat Creek	Wabash River	Lat 40°29'01", long 86°30'43", in SW¼NE¼ sec.34, T.24 N., R.1 W., Carroll County, 20 ft downstream from bridge on County Road 75 East, 0.5 mile south of County Road 400 South, 1.0 mile east of State Highway 75, 0.8 mile northeast of Cutler.			05-16-80	100
					09-12-80	48.6
Middle Fork Wildcat Creek	South Fork Wildcat Creek	Lat 40°25'00", long 86°24'42", in NE¼NE¼ sec.28, T.23 N., R.1 E., Clinton County, 100 ft downstream from bridge on County Road 500 East, 1.0 mile south of Clinton-Carroll County line, and 1.0 mile west of State Highway 29, and 4.5 miles south of Burlington.			05-15-80	2.70
					09-11-80	.38
Middle Fork Wildcat Creek	South Fork Wildcat Creek	Lat 40°26'35", long 86°30'21", in NE¼NE¼ sec.15, T.23 N., R.1 W., Carroll County, at bridge on County Road 100 East, 0.2 mile south of County Road 700 South, 1.0 mile east of State Highway 75, 1.9 mile northeast of Sedalia.			05-15-80	8.22
					09-12-80	.90
Honey Creek	Wabash River	Lat 39°27'44", long 87°14'56", in NE¼NW¼ sec 32, T.12 N., R.7 W., Vigo County, at bridge on State Road 42, 0.2 mile east of County Road 25 South and 3 miles southwest of Staunton.			11-16-77	11
					11-18-77	.36
					01-05-78	.15
					05-16-78	2.0
					06-01-78	.25
					07-20-78	.15
					08-24-78	.06
					10-04-78	.03
					10-24-78	.02
					11-17-78	2.1
					12-13-78	.26
					01-18-79	.26
					02-21-79	5.7
					03-24-79	7.9
					04-26-79	1.5
					05-26-79	.06
					07-03-79	.04
					08-16-79	.25
					09-20-79	.03
					10-10-79	.03
Honey Creek	Wabash River	Lat 39°26'32", long 87°15'09", in SW¼NW¼ sec.36, T.12 N., R.7 W., Vigo County, at bridge on Lower Bloominton Road, and 2.4 miles southeast of Swalls.			11-16-77	23
					11-17-77	7.1
					01-05-78	2.1
					03-22-78	19
					03-29-78	5.6
					05-16-78	7.6
					06-01-78	.0
					07-19-78	.0
					08-24-78	2.1
					09-27-78	0.00
					10-04-78	0.00
					10-24-78	0.00
					11-17-78	16
					12-12-78	1.3
					01-09-78	3.4
					02-21-79	9.1
					03-24-79	2.2
					04-26-79	11
					05-26-79	4.5
					07-03-79	2.8
					08-14-79	3.6
					09-20-79	3.6
					10-10-79	6.1
					11-07-79	3.9
					12-05-79	2.4
					01-17-80	8.1
					02-27-80	6.9

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
Honey Creek Tributary	Honey Creek	Lat 39°27'11", long 87°15'31", in SW¼NW¼SW¼, sec.25, T.12 N., R.7 W., Vigo County, at bridge on 82 South Road, 1 mile above mouth, and 3 mile south of Seelyville			09-29-77	0.02
					11-16-77	37
					11-17-77	3.0
					01-05-78	.67
					03-22-78	6.6
					03-29-78	3.5
					05-16-78	5.8
					06-01-78	.23
					07-20-78	.14
					08-24-78	0.00
					10-04-78	0.00
					11-17-78	9
					12-12-78	1.1
					01-19-79	1.4
					02-21-79	5.3
					03-24-79	21
					04-26-79	3.6
					05-26-79	.62
					07-03-79	1.9
					08-14-79	2.3
					09-21-79	.47
					10-10-79	.27
					11-07-79	.36
					12-05-79	2.5
					01-17-80	5.5
					02-28-80	2.0
Pleasant Run	White River	Lat 39°43'36", long 86°10'27", in NW¼SW¼, sec.23, T.15 N., R.3 E., Marion County, 30 ft upstream from mouth.	2.93		09-30-80	2.99
Eagle Creek	White River	Lat 39°43'05", long 86°11'49", in NW¼NW¼, sec.27, T.15 N., R.3 E., Marion County, 300 ft upstream from mouth.	49.9		09-30-80	31.1
Lick Creek	White River	Lat 39°30'01", long 86°12'03", in SE¼SE¼, Sec.28, T.15 N., R.3 E., Marion County, 250 ft upstream from mouth.				
Pleasant Run Creek	White River	Lat 39°37'20", long 86°13'38", in SE¼SW¼, Sec.29, T.14 N., R.3 E., Johnson County, 0.25 mile above mouth.	4.88		09-30-80	2.47
Honey Creek	White River	Lat 39°36'41", long 86°13'55", in NW¼SW¼, sec.32, T.14 N., R.3 E., Johnson County, 100 ft downstream from State Highway 37 bridge.			09-30-80	.55
Goose Creek	White River	Lat 39°35'34", long 86°15'36", in SW¼SE¼, sec.1, T.12 N., R.2 E., Morgan County, 150 ft upstream from mouth.			09-30-80	.07
Sinking Creek	White River	Lat 39°33'40", long 86°17'11", in SW¼SW¼, sec.14, T.13 N., R.2 E., Morgan County, 100 ft upstream from mouth.			09-30-80	0.00
North Bluff Creek	White River	Lat 39°34'10", long 86°15'17", in SE¼NE¼, sec.13, T.13 N., R.2 E., Morgan County, 150 ft above mouth.			09-30-80	108
White River	Wabash River	Lat 39°34'03", long 86°15'22", in NW¼SE¼, sec.13, T.13 N., R.2 E., Morgan County, at White River 400 ft above bridge at new State Road 144.			09-30-80	544
Bluff Creek	White River	Lat 39°33'38", long 86°15'57", in SW¼SW¼, sec.13, T.13 N., R.2 E., Morgan County, 170 ft above mouth.			09-30-80	.23
Crooked Creek	White River	Lat 39°31'22", long 86°18'36", in NE¼SE¼, sec.33, T.13 N., R.2 E., Morgan County, 100 ft above mouth.			09-30-80	0.00

Stream	Tributary to	Location	Drainage (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		OHIO RIVER BASIN--Continued				
White River	Wabash River	Lat 39°26'00", long 86°27'08", in NE¼SW¼, sec.32, T.12 N., R.1 E., Morgan County, 1000 ft downstream from bridge at Martinsville.			09-30-80	638
Lambs Creek	White River	Lat 39°24'50", long 86°28'01", in SE¼SE¼, sec.1, T.11 N., R.1 W., Morgan County, 150 ft above State Highway 67.			09-30-80	2.67
Indian Creek	White River	Lat 39°23'33", long 86°28'43", in SE¼NW¼, sec.13, T.11 N., R.1 W., Morgan County, 100 ft below State Highway 37 bridge.			09-30-80	5.50
Little Indian Creek	White River	Lat 39°22'16", long 86°29'51", in NE¼NW¼, sec.23, T.11 N., R.1 W., Morgan County, 1000 ft above mouth.			09-30-80	1.19
White River	Wabash River	Lat 39°22'24", long 86°33'35", in NE¼SE¼, sec.19, T.11 N., R.1 W., Morgan County, 500 ft downstream from Paragon bridge.			09-30-80	699
Bryant Creek	White River	Lat 39°22'21", long 86°33'46", in SE¼SE¼, sec.19, T.11 N., R.1 W., Morgan County, 100 ft above mouth.			09-30-80	.09
Fall Creek	White River	Lat 39°22'10", long 86°34'55", in SW¼SE¼, sec.24, T.11 N., R.2 W., Morgan County, 100 ft above mouth.			09-30-80	0.00
Butler Creek	White River	Lat 39°22'21", long 86°36'43", in SW¼SW¼, sec.23, T.11 N., R.2 W., Morgan County, 100 ft above mouth.			09-30-80	.08
Pocket Hollow Creek	White River	Lat 39°21'20", long 86°36'32", in SW¼SW¼, sec.26, T.11 N., R.2 W., Morgan County 100 ft above mouth.			09-30-80	.10
Indian Creek	White River	Lat 39°21'10", long 86°39'26", in NW¼NE¼, sec.32, T.11 N., R.2 W., Owen County 750 ft above mouth.			09-30-80	.26
Beanblossom Creek	White River	Lat 39°19'43", long 86°39'32", in SE¼SW¼, sec.5, T.10 N., R.2 W., Monroe County, 0.75 mile above mouth.			09-30-80	43.2
White River	Wabash River	Lat 39°19'58", long 86°40'39", in SE¼NW¼, sec.6, T.10 N., R.2 W., Monroe County, at bridge near Gosport.			09-30-80	912

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]
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	1959-73[a]
03332400	Big Monon Creek near Francesville	Pulaski	152	1959-73[a]
03333500	Wildcat Creek at Greentown	Howard	168	1945-61
03334000	Wildcat Creek at Owasco	Carroll	396	1944-73[a]
03339120	Coal Creek at Coal Creek	Fountain	214	1965-72
03339150	Little Vermilion River near Newport	Vermillion	237	1965-72
03340000	Sugar Creek near Byron	Parke	670	1941-71[b]
03341000	Big Raccoon Creek at Mansfield	Parke	248	1939-58[c]
03341200	Little Raccoon Creek near Catlin	Parke	134	1957-71[c,d]
03341420	Brouilletts Creek near Universal	Vermillion	321	1966-71[b]
03341470	North Coal Creek near Terre Haute	Vigo	1.91	1974-76
03342350	Buttermilk Creek near Paxton	Sullivan	16.5	1966-73
03342360	Buttermilk Creek near Sullivan	Sullivan	17.6	1975-78
03342800	South Fork Smalls Creek at Bruceville	Knox	4.94	1972-75[b,d]
03348100	Killbuck Creek near Anderson	Madison	97.8	1964-68
03348500	White River near Noblesville	Hamilton	828	1915-26, 1929-74[b]
03349500	Cicero Creek near Arcadia	Hamilton	131	1955-76[a]
03349700	Little Cicero Creek near Arcadia	Hamilton	40.4	1956-76[a]
03350000	Cicero Creek near Cicero	Hamilton	196	1946-54
03350100	Hinkle Creek near Cicero	Hamilton	18.5	1956-76[a]
03352000	Lawrence Creek at Fort Benjamin Harrison	Marion	2.74	1952-56, 1958-69
03352200	Mud Creek at Indianapolis	Marion	42.4	1958-76[a]
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[c]
03359500	Deer Creek near Putnamville	Putnam	59.0	1955-65, 1968-72
03366000	Graham Creek near Vernon	Jennings	77.2	1955-73
03367000	Muscatatuck River near Austin	Jackson	359	1932-43 1944-71[e]
03367500	Stucker Creek near Austin	Scott	127	1932-33
03370000	Vernon Fork near Crothersville	Jackson	391	1932-33
03370500	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[f]
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[c]
03373200	Indian Creek near Springville	Lawrence	60.7	1961-73[a]
03374100	White River at Hazleton	Gibson	11,305	1928-38
03376000	Patoka River near Jasper	Dubois	348	1944-47[d]
03376300	Patoka River at Winslow	Pike	603	1964-74
03378500	Wabash River at New Harmony	Posey	29,234	1939-47[b]
	STREAMS TRIBUTARY TO LAKE MICHIGAN			
04093200	Little Calumet River at Gary	Lake	5.82	1958-67, 1969-71
04098000	Fawn River at Orland	Steuben	86.4	1943-47
04099500	Pigeon Creek and Hogback Lake near Angola	Steuben	103	1946-74
04100000	Christiana Creek at Elkhart	Elkhart	127	1947-52
04100220	North Branch Elkhart River near Cosperville	Noble	134	1951-71
	STREAMS TRIBUTARY TO LAKE ERIE			
04178500	St. Joseph River at Hursh	Allen	734	1950-54
04179500	Cedar Creek near Auburn	DeKalb	87.3	1943-73[a]
04180500	St. Joseph River near Ft. Wayne	Allen	1,057	1905-06, 1941-55
04182700	St. Marys River at Ft. Wayne	Allen	810	1905-06

Station no.	Station name	County	Drainage area (mi^2)	Period of Record
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]Continued as a stage only station.
[d]Some record fragmentary.
[e]High-water records only.
[f]Stage only station 1972-75.

05517528 DAVIS DITCH NR KOUTS, IN

LOCATION.--Lat 41°13'49", long 87°01'31", at culvert on county road 1 mile (1.6 km) above mouth, and 6 miles (9.7 km) southeast of Kouts.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR								
10...	1030	4.0	22	18	1.1	--	--	--
APR								
10...	1425	---	30	23	1.9	--	--	--
25...	1900	---	20	22	1.2	44	46	48
JUN								
05...	0900	---	28	20	1.5	40	43	51
05...	1510	---	16	21	.91	30	33	40
JUL								
23...	0900	---	3.2	33	.29	13	13	14
AUG								
12...	1515	---	2.0	49	.26	--	--	--
SEP								
25...	1100	---	16	30	1.3	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
MAR							
10...	--	--	50	--	--	---	---
APR							
10...	--	--	81	97	99	100	---
25...	54	69	85	96	99	99	100
JUN							
05...	61	75	88	96	98	99	100
05...	50	64	83	95	99	100	---
JUL							
23...	16	24	48	93	98	100	---
AUG							
12...	--	--	--	--	--	---	---
SEP							
25...	--	--	--	--	--	---	---

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
APR								
10...	----	1	2	43	96	100	---	---
25...	1925	1	3	46	96	99	100	---
JUN								
05...	1445	1	2	43	96	100	---	---
JUL								
23...	1000	2	6	48	94	98	99	100

For many years records of the water-surface elevations of many of the lakes in Indiana have been collected by the Geological Survey under cooperative agreement with the Indiana Department of Natural Resources. Basic data for a few selected lakes have been published in WSP 1363, entitled "Hydrology of Indiana Lakes." Records which have not been published are available in the files of the District Office of the Geological Survey in Indianapolis, Indiana. In general, the records before 1976 were based on once-daily readings of a staff gage by a local observer and consist of daily, monthly, and yearly mean water-surface elevations. Starting in 1976, water-stage recorders were installed at many stations which had previously been non-recording gages. Discharge measurements, made at the outflow, are also available in some instances.

The lakes for which records have been collected are listed by downstream order number in the following table. The established level, sometimes referred to as the legal level, is that elevation set by the courts to which the average level of the lake is to be held; it is normally set at about the average level that has prevailed for a number of years prior to the establishment of the level. Surface area and capacity of lake is that surface area and capacity at the established level. Depth contour maps are only those surveyed by the Water Resources Division of the Geological Survey. The inclusive years that records of stage have been collected at a lake are shown in the last column. If records are still being collected on a current basis, there is no closing date shown.

Lakes in the Ohio River basin for which records are available

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
		LAUGHERY CREEK BASIN						
03276800	Versailles Lake near Versailles	Ripley	168.0	232	------	------	-	1957-
		BAYOU DRAIN BASIN						
03322300	Hovey Lake near Mount Vernon	Posey	6.36	253	------	------	-	1950-69
		WABASH RIVER BASIN						
03327550	Everett Lake at Levert	Allen	1.07	43	835.13	650	+	1946-66
03327600	Blue Lake near Churubusco	Whitley	3.58	239	850.28	5,010	+	1946-69, 1976-
03327650	Shriner Lake at Tri-Lakes	Whitley	.94	111	907.04	------	-	1943-
03327700	Cedar Lake at Tri-Lakes	Whitley	.79	131	901.90	------	-	1943-49
03327750	Round Lake at Tri-Lakes	Whitley	3.36	125	901.90	------	-	1943-53
03327800	Wilson Lake near Larwill	Whitley	.46	29	865.39	390	+	1946-52
03327850	Little Wilson Lake near Larwill	Whitley	.52	8	865.39	130	+	1946-52
03328100	Long Lake at Laketon	Wabash	.55	48	751.19	760	+	1946-51, 1959-
03328250	North Little Lake at Silver Lake	Kosciusko	2.89	12	861.73	170	+	1947-
03328350	Silver Lake at Silver Lake	Kosciusko	6.31	102	861.73	1,520	+	1947-
03328400	Lukens Lake near Disko	Wabash	1.76	46	763.60	1,010	+	1948-49, 1959-
03330020	Crooked Lake near Wolflake	Noble	1.51	206	905.69	9,040	+	1943-53
03330040	Big Lake near Wolflake	Noble	8.89	228	898.18	5,630	+	1943-75 1976-
03330060	Goose Lake near Lorane	Whitley	1.51	84	910.96	2,180	+	1945-53
03330080	Loon Lake at Ormas	Whitley	11.1	222	895.14	5,730	+	1943-66
03330100	New Lake near Etna	Whitley	.29	50	903.91	880	+	1945-53
03330120	Old Lake near Etna	Whitley	2.81	32	898.07	620	+	1949-66
03330140	Smalley Lake near Washington Center	Noble	27.1	69	------	1,520	+	1943-
03330160	Gilbert Lake near Washington Center	Noble	.37	28	------	490	+	1954-
03330180	Horseshoe Lake nr Washington Center	Noble	1.62	18	901.80	250	+	1945-66
03330200	Baugher Lake near Washington Center	Noble	31.0	32	878.52	390	+	1945-51
03330220	Wilmot Pond at Wilmot[a]	Noble	35.2	10	------	------	-	1945-51
03330240	Webster Lake at North Webster	Kosciusko	49.2	774	852.75	------	-	1943-
03330243	James Lake at Oswego	Kosciusko	55.9	282	836.40	7,580	+	1943-
03330260	Robinson Lake near Pierceton	Kosciusko	7.15	59	851.09	1,170	+	1946-51
03330280	Troy Cedar Lake near Lorane	Whitley	5.33	93	905.41	2,540	+	1945-52
03330300	Ridinger Lake near Pierceton	Kosciusko	34.6	136	843.12	2,900	+	1943-
03330320	Kuhn Lake near North Webster	Kosciusko	3.85	137	837.50	1,290	+	1945-
03330340	Big Barbee Lake near North Webster	Kosciusko	44.7	304	837.50	5,640	+	1945-
03330360	Little Barbee Lake nr North Webster	Kosciusko	49.0	74	837.50	960	+	1945-
03330380	Shoe Lake near Oswego	Kosciusko	.34	40	841.57	------	-	1946-53, 1972,74, 1976-
03330400	Banning Lake near North Webster	Kosciusko	.48	12	837.50	110	+	1945-
03330420	Irish Lake near North Webster	Kosciusko	50.9	182	837.50	2,330	+	1945-
03330440	Sechrist Lake near North Webster	Kosciusko	.58	105	837.50	2,490	+	1945-
03330460	Sawmill Lake near North Webster	Kosciusko	51.8	36	837.50	370	+	1945-
03330480	Tippecanoe Lake at Oswego	Kosciusko	113	768	836.40	28,380	+	1943-
03330495	Oswego Lake at Oswego	Kosciusko	113	83	836.40	780	+	1943-
03331010	Big Chapman Lake near Warsaw[b]	Kosciusko	4.17	581	827.75	6,080	+	1945-72, 1976-
03331020	Little Chapman Lake near Warsaw	Kosciusko	7.13	177	827.75	1,990	+	1945-72, 1976-
03331040	Pike Lake at Warsaw	Kosciusko	41.5	203	805.64	2,830	+	1954-
03331060	Fish Lake near Warsaw	Kosciusko	4.93	15	845.52	------	-	1951-66
03331080	Muskelonge Lake near Warsaw	Kosciusko	11.8	32	842.67	300	+	1943-53, 1959-71
03331100	Carr Lake near Claypool	Kosciusko	2.27	79	848.88	1,340	+	1947-53
03331120	Sherburn Lake near Pierceton[c]	Kosciusko	5.51	15	881.00	230	+	1954-
03331140	Winona Lake at Warsaw	Kosciusko	32.1	562	811.06	16,680	+	1943-

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[d]	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[j]	Lake	5.72	999	------	------	-	1946-49
04092990	Lake George at Hobart	Lake	124	282	602.23	------	-	1946-
04097520	Lake Pleasant near Nevada Mills	Steuben	3.18	424	------	3,490	+	1954-71, 1976-
04097550	Lake George at Jamestown	Steuben	[h]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	[h]40.2	310	964.96	7,998	+	1943-49
04097660	Lake James at Lake James	Steuben	[h]47.8	1,034	964.96	33,585	+	1943-49
04097680	Jimmerson Lake at Nevada Mills[e]	Steuben	[h]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	[h]17.3	332	954.25	10,140	+	1946-
04097960	Lime Lake at Panama	Steuben	[h]17.5	57	954.25	427	+	1946-
04098100	Wall Lake near Orland	Lagrange	1.61	141	942.25	1,640	+	1953-54
04098110	Mud Lake near Orland	Steuben	1.85	25	939.01	------	-	1956-67
04098300	Cedar Lake near Ontario	Lagrange	1.60	120	871.90	1,020	+	1948-51
04099050	Pigeon Lake near Angola	Steuben	[h]35.2	61	988.24	930	+	1954-63
04099100	Fox Lake near Angola	Steuben	[h]1.25	142	1,018.83	3,150	+	1946-53
04099190	Pleasant Lake at Pleasant Lake	Steuben	[h]1.12	53	963.52	1,190	+	1946-66
04099200	Long Lake at Moonlight	Steuben	[h]67.9	92	-	1,540	+	1946-
04099250	Bower Lake near Pleasant Lake	Steuben	[h]84.6	25	948.50	280	+	1946-71, 1976-
04099260	Golden Lake near Pleasant Lake	Steuben	[h]88.8	119	948.50	1,810	+	1946-71, 1976-
04099400	Silver Lake near Angola	Steuben	[h]3.79	238	959.40	2,540	+	1945-53
04099430	Bass Lake near Angola	Steuben	[h].39	61	979.68	450	+	1954-66
04099440	Howard Lake near Angola	Steuben	[h]3.90	27	977.34	130	+	1954-63
04099500	Hogback Lake near Angola	Steuben	[h]103	146	948.50	1,450	+	1946-
04099520	Otter Lake near Flint	Steuben	[h]6.91	118	934.15	1,960	+	1954-66
04099540	Story Lake near Hudson	DeKalb	3.16	77	942.20	1,020	+	1946, 1954-66
04099560	Big Turkey Lake at Stroh	Lagrange	35.8	450	926.61	7,300	+	1945-66
04099575	McClish Lake near Helmer	Lagrange	1.28	35	951.09	1,210	+	1951-74, 1976-
04099580	Lake of the Woods near Helmer	Lagrange	5.25	136	951.09	5,470	+	1951-74, 1976-
04099600	Big Long Lake near Stroh	Lagrange	4.77	388	956.21	------	-	1954-
04099620	Pretty Lake near Stroh	Lagrange	2.89	184	965.50	4,720	+	1949-53, 1963-65
04099640	Little Turkey Lake at Elmira	Lagrange	56.5	135	925.72	1,550	+	1945-66
04099660	Royer Lake near Plato	Lagrange	4.69	69	936.50	1,630	+	1952-
04099670	Fish Lake near Plato	Lagrange	[h]10.6	100	936.50	4,050	+	1945-
04099700	North Twin Lake near Howe	Lagrange	1.54	135	843.56	2,120	+	1953-
04099710	South Twin Lake near Howe	Lagrange	2.22	116	843.56	3,600	+	1953-70
04099740	Shipshewana Lake near Shipshewana	Lagrange	[h]6.74	202	852.04	1,350	+	1951-
04099760	Fish Lake near Scott	Lagrange	[h]6.21	139	814.42	2,560	+	1954-73, 1976-
04099780	Stone Lake near Scott	Lagrange	1.51	152	818.76	2,060	+	1954-73, 1976-

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							
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	h1.29	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	282	772.19	1,560	+	1946-
04099950	Indiana Lake near Bristol	Elkhart	.62	122	759.73	3,400	+	1946-53
04100010	Cree Lake near Kendallville	Noble	4.85	58	945.23	910	+	1949-66
04100020	Blackman Lake near Wolcottville	Lagrange	.98	67	974.20	1,210	+	1953-59
04100030	Adams Lake near Wolcottville	Lagrange	5.62	308	953.59	7,690	+	1946-
04100040	Atwood Lake near Wolcottville	Lagrange	1.23	170	899.99	1,560	+	1948-53
04100050	Witmer Lake near Wolcottville	Lagrange	36.1	204	897.36	7,040	+	1945-
04100060	Westler Lake near Wolcottville	Lagrange	37.8	88	897.36	1,770	+	1945-
04100070	Dallas Lake near Wolcottville	Lagrange	39.8	283	897.36	9,970	+	1945-
04100080	Martin Lake near Valentine	Lagrange	4.93	26	899.45	890	+	1945-
04100090	Olin Lake near Valentine	Lagrange	5.81	103	899.45	9,180	+	1945-
04100100	Oliver Lake near Valentine	Lagrange	11.1	362	899.45	------	-	1945-
04100110	Hackenburg Lake near Wolcottville	Lagrange	55.4	42	897.36	510	+	1945-
04100120	Messick Lake near Wolcottville	Lagrange	56.4	68	897.36	1,450	+	1945-
04100130	Jones Lake near Cosperville[f]	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	h4.19	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[g]	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	h8.05	551	867.70	9,000	+	1945-
04100480	Wabee Lake near Milford	Kosciusko	h14.6	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	h2.34	74	781.21	2,190	+	1946-50
05514741	Hudson Lake at Hudson Lake	LaPorte	7.92	432	763.09	5,060	+	1946-
05514750	North Chain Lake at Lydick	St. Joseph	h3.89	88	721.17	1,400	+	1946-53
05514760	South Chain Lake at Westfield	St. Joseph	h6.32	90	717.04	270	-	1946-53
05514770	Wharton Lake near South Bend	St. Joseph	h1.85	-----	--------	------	-	1960-

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
		ILLINOIS RIVER BASIN--Continued						
05514900	Silver Lake near Rolling Prairie	LaPorte	1.72	54	795.20	------	-	1946-66
05515200	Upper Fish Lake near Stillwell	LaPorte	[h]9.65	139	688.22	1,040	+	1946-53
05515210	Lower Fish Lake near Stillwell	LaPorte	[h]10.4	134	688.22	870	+	1946-53
05515220	Pine Lake at LaPorte	LaPorte	[h]10.7	564	796.20	------	-	1946-75 1980-
05515230	Stone Lake at LaPorte	LaPorte	[h]10.7	140	796.20	------	-	1946-75 1980-
05515240	Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1942-49, 1952-75 1980-
05515600	Koontz Lake at Koontz Lake	Starke	[h]6.25	346	714.56	3,170	+	1943-
05515800	Riddles Lake near Lakeville	St. Joseph	[h]11.7	77	817.50	640	+	1946-73, 1976-
05516200	Lake of the Woods near Bremen	Marshall	[h]9.45	416	803.85	6,810	+	1945-
05516600	Pretty Lake near Plymouth	Marshall	.85	97	787.36	2,140	+	1954-66
05516700	Myers Lake near Twin Lakes	Marshall	1.41	96	768.69	2,000	+	1945-53
05516800	Mill Pond and Kreighbaum Lake near Twin Lakes	Marshall	[h]5.34	168	767.75	1,020	+	1945-53
05516900	Eagle Lake near Ober	Starke	[h]25.5	24	713.25	160	+	1946-53
05517100	Skitz Lake near Knox	Starke	------	1,000	--------	------	-	1949-53
05517200	Bass Lake at Bass Lake	Starke	5.18	1,400	713.65	------	-	1943-
05517600	Wauhob Lake near Valparaiso	Porter	.40	21	--------	------	-	1946-
05517650	Long Lake near Valparaiso	Porter	1.31	65	797.66	520	+	1947-52
05517670	Spectacle Lake near Valparaiso	Porter	.53	62	812.82	540	+	1946-53
05517700	Flint Lake near Valparaiso	Porter	2.62	86	797.66	------	-	1946-
05517800	Lake Eliza near Beatrice	Porter	1.70	45	--------	------	-	1954-74, 1976-
05518700	Cedar Lake at Cedar Lake	Lake	8.14	781	--------	6,750	+	1943-
05518800	Dalecarlia Lake near Creston	Lake	20.1	193	--------	------	-	1947-52
05521300	Ringneck Lake near Medaryville	Jasper	1.94	1,400	--------	------	-	1949-55
05525700	J.C. Murphy Lake near Morocco	Newton	13.0	1,515	--------	------	-	1952-61

[+]Depth contour maps available for sale by Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.
[xx]Elevation, in feet, above mean sea level.
[a]Formerly published as Rider Lake at Wilmot.
[b]Formerly published as Chapman Lake near Warsaw.
[c]Formerly published as Johnson Lake near Pierceton.
[d]Formerly published as Hawks Lake near Culver.
[e]Formerly published as Jimerson Lake at Nevada Mills.
[f]Formerly published as Sanford Lake near Cosperville.
[g]Formerly published as Duley Lake near Cromwell, and Druely Lake near Cromwell, and Druley Lake near Cromwell.
[h]Contains drainage area (5 percent or greater) that does not contribute directly to surface-water runoff.
[j]Same as Wolf Lake at Chicago, Illinois 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

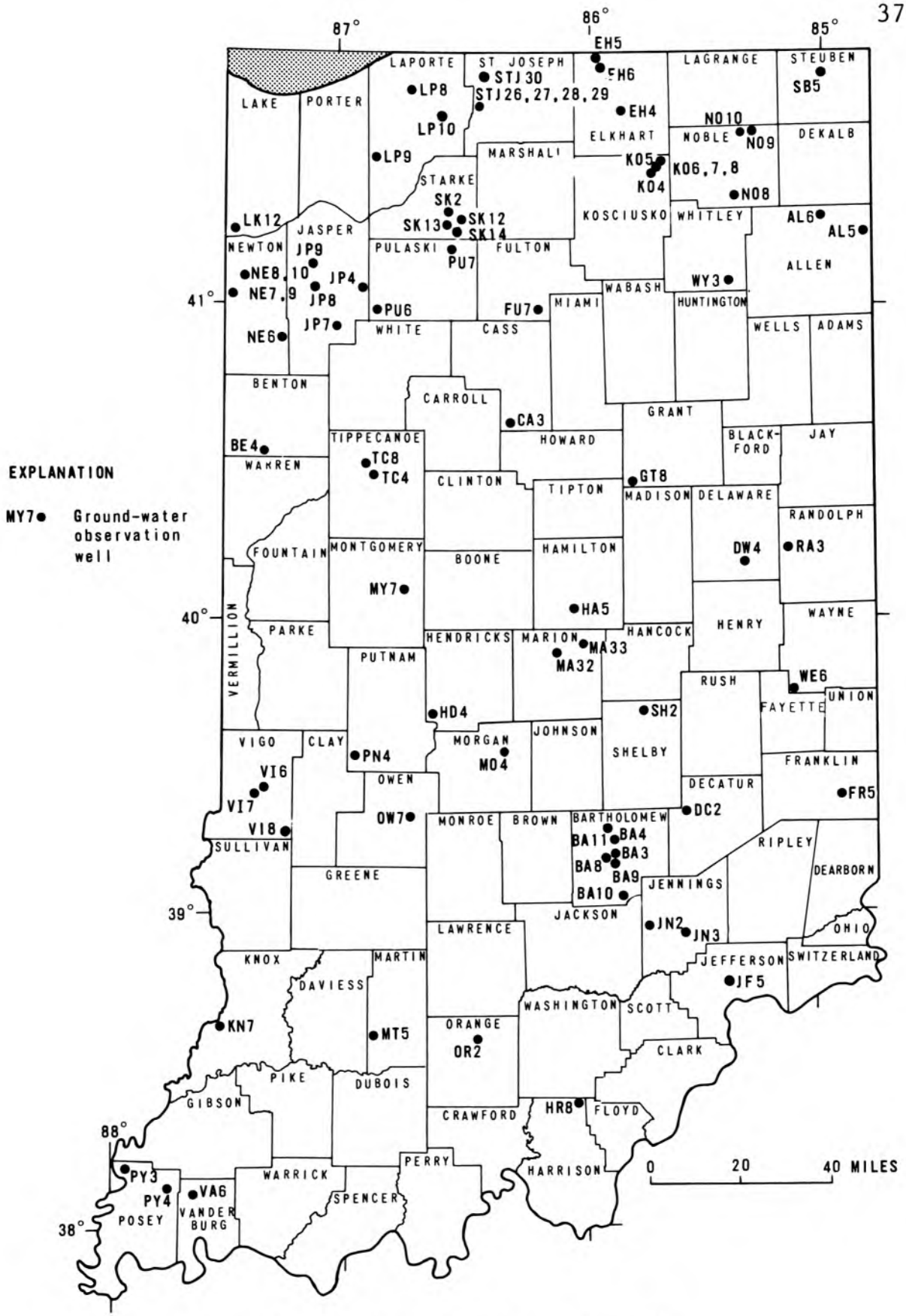

Figure 4. -- Location of ground-water observation wells.

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.--Salina Formation.

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-level recorder.

DATUM.--Altitude of land-surface datum is 760 ft (232 m). Measuring point: Top of floor of shelter 0.17 ft (0.05 m) above land- surface datum.

REMARKS.--Water level affected by nearby quarry operations.

PERIOD OF RECORD.--July 1962 to December 1971. January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.04 ft (3.06 m) below land-surface datum, July 8, 9, 1962; lowest, 38.41 ft (11.71 m) below land-surface datum, May 4, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.17	33.52	32.88	32.67	32.48	32.27	32.46	31.93	32.65	32.42	32.24	31.88
10	33.27	33.17	33.17	32.50	32.42	32.13	32.17	31.98	32.57	32.44	32.16	31.99
15	33.51	33.37	33.04	32.73	32.41	32.72	31.90	32.59	32.38	32.38	32.14	31.88
20	33.24	33.63	33.11	32.70	32.42	32.04	32.34	32.42	32.53	32.45	31.98	31.74
25	33.30	32.93	32.38	31.98	32.41	32.36	32.14	32.38	32.43	32.44	32.13	31.63
EOM	33.10	33.42	32.73	32.66	32.72	32.10	31.98	32.44	32.46	32.28	31.89	31.59
MIN	33.78	33.90	34.00	33.10	33.10	32.99	32.68	32.92	33.05	32.71	32.47	32.11
MAX	32.93	32.83	32.32	31.93	32.22	31.91	31.88	31.92	32.25	32.26	31.89	31.43

WTR YR 1980 HIGH 31.43 SEP 17 LOW 34.00 DEC 2

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, 8.20 ft (2.50 m) below land-surface datum, May 1, 1970; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.89	12.41	10.82	10.10	11.06	10.82	8.82	10.57	10.04	10.97	11.67	11.43
10	12.01	12.33	11.11	10.48	11.17	10.22	9.16	10.78	9.96	10.99	11.90	11.66
15	12.15	12.31	11.26	10.66	11.28	10.25	9.08	10.96	10.24	11.25	11.84	11.84
20	12.21	12.46	11.41	10.54	11.41	9.01	9.45	10.17	10.02	11.60	11.55	11.69
25	12.29	11.67	9.68	10.46	10.70	8.98	9.92	10.40	10.42	11.25	11.55	11.78
EOM	12.40	10.91	9.67	10.89	10.79	9.00	10.26	10.78	10.80	11.50	11.52	11.88
MIN	12.57	12.63	11.54	11.06	11.53	11.01	10.32	11.23	11.08	11.82	12.01	11.96
MAX	11.85	10.91	9.55	9.75	10.68	8.82	8.82	10.17	9.90	10.90	11.43	11.37

WTR YR 1980 HIGH 8.82 MAR 22, APR 4, 5 LOW 12.63 NOV 16

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 Quaternary 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.59	19.44	18.92	19.11	19.48	19.50	18.15	18.79	19.24	19.35	19.51	19.98
10	19.58	19.66	18.93	19.85	19.30	18.79	18.55	19.03	19.25	19.83	19.70	19.91
15	19.59	19.76	19.24	19.45	20.06	19.03	18.29	19.23	19.14	19.78	19.82	19.86
20	20.01	19.80	19.54	19.17	19.73	19.17	18.62	18.53	19.63	20.00	19.69	19.98
25	19.86	18.70	18.28	19.29	19.16	18.45	18.99	18.62	19.50	19.97	19.62	20.25
EOM	19.96	18.60	18.52	19.68	19.46	18.33	18.92	18.99	19.36	19.65	19.77	20.36
MIN	21.64	20.35	20.38	20.81	20.81	19.92	19.97	19.86	20.45	20.70	20.57	21.04
MAX	19.27	18.49	18.27	18.62	19.16	18.33	18.13	18.53	18.84	19.26	19.46	19.71

WTR YR 1980 HIGH 18.13 APR 6, 7 LOW 21.64 OCT 26

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.--Altitude of land-surface datum is 646 ft (197 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.25 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.

REVISIONS.--The highest water level for Dec. 25, 1978, has been revised to 17.18 ft. The maximum water level for August 1979, has been revised to 15.03 ft, and the maximum water level for September 1979, has been revised to 15.32 ft. These figures supersede those published in WRD for Indiana 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.24	17.18	16.68	15.44	15.80	16.27	15.07	14.68	14.86	15.40	16.09	16.53
10	16.42	17.26	16.31	15.32	15.90	16.32	14.86	14.82	14.90	15.50	16.21	16.65
15	16.58	17.34	16.17	15.40	16.01	16.21	14.65	15.01	14.97	15.61	16.27	16.74
20	16.72	17.42	16.18	15.48	16.12	16.02	14.57	15.07	15.08	15.72	16.35	16.88
25	16.87	17.44	16.17	15.52	16.16	15.79	14.52	14.93	15.17	15.84	16.38	17.02
EOM	17.04	17.22	15.78	15.70	16.23	15.26	14.54	14.83	15.30	15.97	16.42	17.17
MIN	17.06	17.49	17.20	15.79	16.25	16.36	15.25	15.09	15.32	15.99	16.43	17.19
MAX	16.11	17.07	15.78	15.31	15.72	15.26	14.50	14.58	14.81	15.33	16.01	16.44

WTR YR 1980 HIGH 14.50 APR 24, 26-28 LOW 17.49 NOV 26, 27

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. about 4 mi (6.4 km) south of Columbus.
Owner: Meadows Metal Products Co., Inc.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 49 ft (15 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 618.5 ft (188.5 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.06 ft (2.46 m) below land-surface datum, June 3, 1968; lowest, 23.17 ft (7.06 m) below land-surface datum, Nov. 30, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.39	17.76	16.19	14.27	15.13	16.03	13.70	13.49	14.04	15.21	16.63	17.37
10	16.68	17.83	15.74	14.29	15.35	15.94	13.30	13.81	14.20	15.46	16.85	17.52
15	16.98	17.88	15.68	14.43	15.58	15.78	13.07	14.13	14.37	15.71	17.02	17.70
20	17.20	17.96	15.79	14.58	15.79	15.45	12.95	14.15	14.54	15.92	17.17	17.91
25	17.43	17.77	15.61	14.64	15.93	14.90	13.00	13.91	14.74	16.15	17.22	18.12
EOM	17.64	17.24	14.64	14.90	16.03	14.12	13.20	13.88	14.97	16.42	17.21	18.26
MIN	17.66	17.99	17.18	14.95	16.05	16.10	14.10	14.27	15.01	16.46	17.23	18.30
MAX	16.15	17.24	14.64	14.20	14.96	14.12	12.91	13.26	13.91	15.02	16.47	17.23

WTR YR 1980 HIGH 12.91 APR 23 LOW 18.30 SEP 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.--Altitude of land-surface datum is 621.5 ft (189.4 m). Measuring point: Top of floor of shelter 1.65 ft (0.50 m) above land-surface datum.

REMARKS.--Water level affected by pumpage from municipal supply well field.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.75 ft (3.89 m) below land-surface datum, Apr. 27-30, 1973; lowest, 38.75 ft (11.81 m) below land-surface datum, Sept. 15, 1977.

REVISIONS.--The maximum water level for water year 1979 has been revised to 24.86 ft, Aug. 6. Revised levels for part of May and June, are given below. These figures supersede those published in WRD for Indiana 1979.

DAY	MAY	JUNE	DAY	MAY	JUNE
10		27.97	MIN	28.50	
15		28.16	MAX	26.22	27.18
25	26.99				
EOM	27.51	28.93			

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.64	27.59	27.41	24.90	25.73	26.51	24.39	23.20	23.70	25.28	27.69	28.26
10	26.61	28.00	27.16	25.55	25.89	26.41	24.14	23.50	24.02	25.89	28.02	28.27
15	26.66	28.31	26.92	25.79	25.79	26.45	23.80	23.75	24.00	26.38	28.16	-----
20	26.92	28.08	26.74	25.46	26.04	26.09	23.39	23.67	24.25	26.98	28.16	-----
25	27.01	28.16	26.36	25.50	26.14	25.48	23.11	23.67	24.41	26.87	28.18	-----
EOM	27.12	27.99	25.47	25.47	26.41	24.80	23.27	23.83	25.06	27.10	28.31	28.40
MIN	29.16	30.14	29.38	27.81	27.75	27.90	26.29	25.48	26.09	28.51	29.84	29.65
MAX	26.34	27.25	25.47	24.84	25.56	24.80	23.11	23.09	23.65	25.05	27.18	28.22

WTR YR 1980 HIGH 23.09 MAY 1 LOW 30.41 NOV 16

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 (22.9 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, 9.60 ft (2.93 m) below land-surface datum, Oct. 30, 31, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.76	8.96	5.53	6.23	7.72	7.69	4.77	7.37	6.59	8.09	8.81	8.13
10	8.98	8.81	6.51	6.74	8.00	4.93	5.93	7.67	6.77	8.35	8.75	8.56
15	9.10	8.54	6.79	6.29	8.15	6.00	5.28	7.89	7.14	8.46	8.75	8.92
20	9.27	8.79	7.28	6.65	8.36	6.05	6.03	5.70	7.45	8.74	8.12	----
25	9.40	3.85	3.00	6.95	7.55	4.46	6.60	6.31	7.74	8.72	6.62	----
EOM	9.45	3.24	5.26	7.43	7.77	5.34	7.03	7.01	8.03	8.84	7.62	9.51
MIN	9.60	9.58	7.45	7.61	8.45	7.94	7.16	8.05	8.18	8.95	9.02	9.56
MAX	8.62	3.12	3.00	5.55	7.49	3.56	4.77	5.69	6.58	8.01	5.75	7.74

WTR YR 1980 HIGH 3.00 DEC 25 LOW 9.60 OCT 30, 31

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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.88 ft (0.27 m) below land-surface datum, Mar. 8, 1979; lowest, 7.23 ft (2.20 m) below land-surface datum, Dec. 13, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.65	6.18	6.56	6.38	6.16	6.23	5.85	5.46	5.29	5.29	5.61	5.96
10	5.71	6.25	6.56	6.34	6.15	6.21	5.76	5.46	5.27	5.32	5.68	6.02
15	5.84	6.35	6.55	6.28	6.16	6.18	5.66	5.44	5.26	5.36	5.75	6.07
20	5.89	6.44	6.56	6.23	6.18	6.12	5.60	5.41	5.26	5.42	5.78	6.14
25	5.98	6.52	6.53	6.19	6.17	6.05	5.54	5.35	5.26	5.47	5.85	6.22
EOM	6.10	6.55	6.44	6.18	6.18	5.93	5.47	5.31	5.27	5.54	5.90	6.33
MIN	6.12	6.55	6.56	6.44	6.18	6.24	5.93	5.48	5.32	5.56	5.91	6.34
MAX	5.59	6.12	6.44	6.18	6.15	5.93	5.47	5.31	5.23	5.29	5.55	5.91

WTR YR 1980 HIGH 5.23 JUN 24 LOW 6.56 DEC 4-12, 19-24

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 since June 20, 1980.

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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.95 ft (2.728 m) below land surface datum, May 2, 1980; lowest, 12.39 ft (3.776 m) below land-surface datum, Nov. 20, 1979.

WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	11.49	NOV 6	12.11	DEC 4	10.90	FEB 13	9.91	APR 11	9.03	JUNE 4	9.28
		20	12.39	20	11.09	MAR 5	11.02	MAY 2	8.95	19	9.77
		26	11.98	JAN 8	10.32						

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM

DAY	JUNE	JULY	AUG	SEPT
5		9.76	10.83	11.02
10		9.96	10.85	11.21
15		10.07	10.81	11.35
20	9.32	10.65	10.66	11.40
25	9.50	10.48	10.72	11.53
EOM	9.63	10.17	10.90	11.66
MIN	9.28	9.62	10.60	10.91
MAX	9.98	10.87	11.32	11.97

WATER YR 1980 HIGH 8.95 MAY 2 LOW 12.39 NOV 20

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, 11.52 ft (3.51 m) below land-surface datum May 13, 1980; lowest, 15.59 (4.75 m) below land-surface datum, Feb. 17, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-----	13.85	13.97	13.96	13.69		-----	11.58	11.83	11.93	12.65	13.60
10	13.24	13.73	14.09	13.80	13.66		12.33	11.54	11.79	12.03	12.83	13.72
15	13.44	13.93	14.17	13.83	-----		12.00	11.69	11.74	12.17	12.97	13.79
20	13.45	14.07	14.21	13.87	-----		12.02	11.72	11.85	12.34	13.04	13.83
25	13.60	13.79	13.86	13.51	-----		11.82	11.71	11.81	12.49	13.29	13.96
EOM	13.60	14.10	14.02	13.81	-----		11.63	11.86	11.85	12.51	13.42	14.10
MIN	13.75	14.12	14.34	14.04	13.86		12.39	11.93	11.98	12.56	13.45	14.16
MAX	13.17	13.58	13.83	13.51	13.63		11.63	11.52	11.56	11.89	12.54	13.42

WTR YR 1980 HIGH 11.52 MAY 13 LOW 14.34 DEC 17

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.31	6.35	5.98	5.88	5.96	5.96	5.59	5.83	5.77	5.93	6.15	6.05
10	6.32	6.28	6.07	5.82	5.96	5.83	5.55	5.84	5.72	6.00	6.11	6.11
15	6.37	6.22	6.00	5.92	5.94	6.01	5.46	5.97	5.71	6.11	6.05	6.13
20	6.31	6.30	6.05	5.96	6.02	5.63	5.67	5.92	5.90	6.23	5.92	6.08
25	6.36	5.16	5.17	5.81	5.93	5.48	5.74	5.92	5.84	6.13	5.95	6.08
EOM	6.30	6.16	5.86	5.97	6.09	5.60	5.70	6.01	5.93	6.05	5.99	6.17
MIN	6.48	6.47	6.30	6.06	6.18	6.17	5.88	6.16	6.09	6.30	6.27	6.27
MAX	6.26	5.09	4.85	5.76	5.33	4.66	4.94	5.75	4.79	5.79	5.47	6.01

WTR YR 1980 HIGH 4.66 MAR 17. LOW 6.48 OCT 14

DECATUR COUNTY

392022085371801. Local number, DC 2.

LOCATION.--Lat 39°20'22", long 85°37'18", in SE¼NE¼SW¼ sec.3, T.10 N., R.8 E., Decatur County, Hydrologic Unit 05120206, at the intersection of County Roads 50 North and 750 West and 7.5 mi (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.--Elevation of land-surface datum is 840.8 ft (256.28 m). 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.60	4.93	1.99	3.12	5.00	2.47	.67	4.76	3.81	6.02	7.35	7.63
10	5.14	4.24	3.23	4.12	5.39	.91	1.51	5.14	3.89	6.29	7.33	6.63
15	5.58	4.40	3.79	2.48	5.74	1.48	----	5.48	4.50	6.54	6.85	6.95
20	5.97	5.02	4.33	3.39	5.55	1.02	----	2.70	----	6.80	6.02	----
25	6.21	.66	.58	3.96	3.75	.94	----	2.95	----	6.88	6.64	----
EOM	6.48	1.07	1.69	4.58	4.34	.88	4.38	4.23	5.73	7.13	7.26	7.72
MIN	6.52	6.54	4.54	4.67	5.93	4.78	4.44	5.60	5.80	7.18	7.59	7.86
MAX	4.43	.55	.57	1.60	3.75	.49	.54	2.51	2.85	5.80	5.78	6.60

WTR YR 1980 HIGH .49 MAR 21 LOW 7.86 SEP 9

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 about 8.0 mi (13 km) south of Muncie.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.29	-----	-----	47.66	-----		-----	47.73	46.20	47.70	48.27	48.14
10	48.34	-----	-----	47.85	-----		47.28	47.84	46.73	47.86	48.03	48.26
15	48.36	-----	-----	47.72	48.22		47.06	47.93	47.22	48.01	48.01	48.34
20	48.34	-----	-----	-----	-----		47.23	47.50	47.28	48.11	47.39	48.38
25	48.34	-----	-----	-----	-----		47.46	47.65	47.52	48.19	47.72	48.43
EOM	48.38	46.18	-----	-----	-----		47.60	47.84	47.42	48.18	48.02	-----
MIN	48.38	48.27	46.84	47.85	48.24		47.62	47.94	47.85	48.22	48.29	48.44
MAX	48.28	45.82	46.39	47.55	48.22		47.06	47.50	45.40	47.49	47.36	48.03

WTR YR 1980 HIGH 45.40 JUN 2 LOW 48.44 SEP 26, 27

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, 12.04 ft (3.67 m) below land-surface datum, Apr. 8, 19, 1978; lowest, 16.18 ft (4.93 m) below land-surface datum, Dec. 1-5, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.32	14.57	14.34	13.89	13.98	13.88	13.38	12.69	12.87	13.48	14.31	14.31
10	14.34	14.61	14.25	13.78	14.04	13.71	13.15	12.80	12.83	13.58	14.42	14.35
15	14.38	14.65	14.22	13.77	14.10	13.66	12.92	12.91	12.86	13.82	14.34	14.40
20	14.43	14.71	14.23	13.77	14.15	13.45	12.78	12.98	12.96	13.99	14.30	14.43
25	14.47	14.70	14.19	13.77	13.80	13.46	12.69	13.05	13.06	14.14	14.29	14.45
EOM	14.53	14.52	14.05	13.91	13.85	13.42	12.66	13.13	13.15	14.15	14.32	14.48
MIN	14.54	14.73	14.52	14.05	14.17	13.97	13.44	13.14	13.19	14.26	14.46	14.49
MAX	14.31	14.52	14.05	13.75	13.80	13.42	12.66	12.67	12.83	13.19	14.15	14.31

WTR YR 1980 HIGH 12.66 APR 28-30 LOW 14.73 NOV 22-25

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, about 3.5 mi (5.6 km) east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (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, 2.36 ft (0.72 m) below land-surface datum, Apr. 7, 8, 1978; lowest, 5.57 ft (1.70 m) below land-surface datum, Jan. 28, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.38	4.30	3.26	3.25	3.59	3.51	3.04	3.34	3.00	----	4.61	----
10	4.34	4.21	3.31	3.39	3.67	3.48	2.86	3.39	3.13	----	4.62	----
15	4.42	4.24	3.38	3.37	3.73	3.49	2.83	3.42	3.28	----	4.56	3.76
20	4.45	4.26	3.49	3.32	3.79	3.15	3.05	3.31	----	----	4.09	3.51
25	4.31	3.51	3.09	3.41	3.29	3.07	3.16	3.44	----	4.37	4.32	3.60
EOM	4.41	3.24	3.16	3.51	3.39	3.10	3.20	3.46	----	4.44	----	3.75
MIN	4.54	4.30	3.50	3.55	3.79	3.56	3.22	3.54	3.32	4.48	4.78	3.78
MAX	4.27	3.24	3.08	3.18	3.29	3.07	2.83	3.24	2.92	4.33	4.09	3.43

WTR YR 1980 HIGH 2.83 APR 14 LOW 4.78 AUG 9

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, 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, 6.25 ft (1.90 m) below land-surface datum, Apr. 11, 1978; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.13	9.14	9.13	7.73	8.26	8.22	7.55		7.09	7.85	9.08	----
10	9.13	9.13	9.12	7.82	8.36	8.26	7.33		7.06	8.04	----	----
15	9.13	9.13	7.96	7.89	8.43	8.29	7.14		7.16	8.37	----	8.28
20	9.13	9.12	8.09	7.91	8.53	7.98	7.11		7.28	8.55	----	8.18
25	9.13	9.12	7.97	8.00	8.29	7.82	----		7.44	8.86	----	8.23
EOM	9.14	9.12	7.76	8.18	8.26	7.64	----		7.65	9.00	----	8.36
MIN	9.14	9.14	9.13	8.19	8.54	8.31	7.64		7.70	9.04	9.08	8.37
MAX	9.13	9.12	7.76	7.70	8.19	7.64	7.11		7.06	7.71	9.05	8.18

WTR YR 1980 HIGH 7.06 JUN 7-10 LOW 9.14 OCT 31, Nov 2, 4, 5

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 about 1.0 mi (1.6 km) south of Brookville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 61 ft (19 m), cased to 57 ft (17 m), screened to 59 ft (18 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 625 ft (190 m). Measuring point: Top of floor of shelter 2.71 ft (0.83 m) above land-surface datum.

PERIOD OF RECORD.--March 1968 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.95 ft (3.64 m) below land-surface datum, May 24, 1968; lowest, 27.32 ft (8.33 m) below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.43	25.05	22.35	23.69	25.17	24.54	22.82	25.10	23.40	24.91	25.31	25.26
10	25.56	24.66	23.62	24.46	25.39	23.52	23.45	25.34	23.20	24.63	25.07	25.60
15	25.58	24.67	24.19	23.73	25.55	23.69	23.18	25.29	24.28	24.65	24.93	25.85
20	25.36	24.98	24.72	24.04	25.55	23.82	23.72	23.59	24.75	25.25	23.67	25.96
25	25.33	22.38	22.40	24.55	24.53	22.54	24.34	23.69	25.09	25.24	23.92	26.12
EOM	25.55	21.76	22.85	24.90	24.42	22.73	24.77	24.45	25.03	25.35	24.76	26.18
MIN	25.59	25.58	24.90	24.95	25.61	24.99	24.84	25.42	25.30	25.47	25.52	26.20
MAX	25.33	21.60	21.90	22.93	24.42	22.42	22.63	23.44	23.12	24.49	23.67	24.89

WTR YR 1980 HIGH 21.60 NOV 29 LOW 26.20 SEP 30

FULTON COUNTY

405829086175801. Local number, FU 7.

LOCATION.--Lat 40°58'29", long 86°17'58", in NW¼NW¼SW¼ sec.10, T.29 N., R.2 E., Fulton County, Hydrologic Unit 05120106, 2.5 mi (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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.89	12.19	11.50	10.58	10.85	10.70	8.67	9.08	9.07	-----	11.13	11.50
10	11.99	12.10	11.53	10.60	10.92	10.44	8.31	9.27	9.07	-----	-----	11.56
15	12.09	12.16	11.49	10.69	10.96	10.34	8.14	9.49	9.27	-----	11.22	11.60
20	12.08	12.24	11.51	10.69	11.05	9.56	8.35	9.57	9.49	-----	11.25	11.38
25	12.14	11.97	11.13	10.54	10.69	9.41	8.62	9.64	9.68	-----	11.40	11.28
EOM	12.16	11.72	10.62	10.79	10.73	9.13	8.83	9.78	9.86	-----	11.43	11.30
MIN	12.22	12.26	11.75	10.83	11.10	10.83	9.14	9.83	9.92	10.01	11.53	11.61
MAX	11.78	11.72	10.62	10.50	10.66	9.13	8.14	8.89	9.01	9.92	11.13	11.26

WTR YR 1980 HIGH 8.14 APR 15 LOW 12.26 NOV 20, 21

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 about 1.0 mi (1.6 km) northwest of Rigdon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (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, 1.30 ft (0.40 m) below land-surface datum, Feb. 24, 1975; lowest, 10.66 ft (3.25 m) below land-surface datum, Oct. 29, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.85	3.80	2.82	3.20	3.94	3.81	1.68	----	2.36	4.07	5.17	5.37
10	5.01	3.59	3.19	3.54	4.10	2.55	1.96	----	2.70	4.27	4.77	5.63
15	5.18	3.59	3.53	3.32	4.17	3.14	1.68	4.05	3.21	4.57	4.66	5.83
20	4.90	3.99	3.83	3.09	4.34	1.89	2.56	3.20	3.36	4.90	3.74	5.91
25	4.74	2.17	1.68	3.14	3.50	1.65	----	2.43	3.67	5.14	4.50	5.95
EOM	4.72	2.17	2.56	3.82	3.88	1.70	----	3.17	3.89	4.79	5.00	6.01
MIN	5.48	4.72	3.90	3.90	4.42	4.08	2.73	4.11	4.08	5.37	5.50	6.35
MAX	4.62	1.89	1.68	2.73	3.50	1.62	1.64	2.43	2.00	3.98	3.74	5.04

WTR YR 1980 HIGH 1.62 MAR 21, 22 LOW 6.35 SEP 26

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.--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, 8.02 ft (2.44 m) below land-surface datum, Mar. 21, 22, 1978; lowest, 11.66 ft (3.55 m) below land-surface datum, Sept. 19, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.32	10.20	9.56	9.57	9.98	9.67	9.11	9.60	9.22	9.69	10.11	10.00
10	10.35	10.19	9.71	9.75	10.03	9.29	9.08	9.73	8.59	9.67	9.97	10.07
15	10.38	10.22	9.82	9.61	10.09	9.44	9.02	9.80	8.90	9.86	9.94	-----
20	10.35	10.30	9.92	9.68	10.10	9.29	9.13	9.73	9.11	10.02	9.54	11.02
25	10.32	9.87	9.46	9.77	9.62	9.22	9.34	----	9.33	9.85	9.70	10.95
EOM	10.38	9.55	9.41	9.90	9.73	9.13	9.45	----	9.52	10.00	9.90	10.89
MIN	10.39	10.31	9.94	9.90	10.14	9.80	9.47	9.84	9.54	10.04	10.12	11.09
MAX	10.29	9.55	9.40	9.44	9.62	9.13	9.02	9.48	8.59	9.57	9.54	9.92

WTR YR 1980 HIGH 8.59 JUN 10 LOW 11.09 SEP 17

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 3.08 ft (0.94 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.59	6.41	3.60	4.31	6.43	4.05	3.62	7.09	7.19	10.47	12.62	14.56
10	6.83	3.41	4.76	4.64	7.06	3.16	4.33	7.96	8.00	10.60	13.00	14.85
15	7.26	4.25	4.01	3.23	6.47	4.63	2.47	8.27	8.79	11.04	13.35	15.13
20	8.00	5.48	4.66	4.08	4.90	4.02	3.95	6.02	9.49	11.47	13.60	15.40
25	8.54	1.15	1.91	4.48	4.71	2.33	5.22	5.23	10.02	11.82	13.90	15.67
EOM	9.29	2.46	3.34	5.68	5.23	2.29	6.13	6.08	10.54	12.24	14.25	15.94
MIN	9.38	9.41	5.11	5.92	7.77	5.86	6.35	8.42	10.63	12.32	14.31	15.99
MAX	6.50	1.15	1.91	2.57	4.71	2.29	2.45	5.23	6.31	10.44	12.32	14.31

WTR YR 1980 HIGH 1.15 NOV 25 LOW 15.99 SEP 30

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 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.72	22.87	20.68	20.71	21.52	21.33	20.01	21.52	22.07	22.52	22.72	22.46
10	22.89	22.38	21.00	21.02	21.66	20.91	20.11	21.69	21.94	22.71	22.79	22.59
15	23.08	22.60	21.18	21.16	21.90	20.74	20.11	21.98	22.20	23.17	22.54	22.59
20	23.08	22.52	21.46	20.71	21.98	20.22	20.19	22.04	22.33	23.50	21.79	22.30
25	23.06	21.84	21.08	20.58	21.54	20.12	20.55	22.17	22.40	23.13	21.71	22.40
EOM	23.02	20.80	20.51	21.10	21.39	19.73	21.18	22.42	22.47	22.64	22.29	22.47
MAX	23.72	23.55	21.79	21.96	22.41	21.66	21.46	22.79	22.64	24.14	23.15	22.94
MIN	22.61	20.80	20.51	20.47	21.15	19.73	19.76	21.16	21.94	22.46	21.60	22.28

WTR YR 1980 HIGH 19.73 MAR 31 LOW 24.14 JUL 21

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 observation 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.33	7.95	4.54	----		----	2.76	2.67	4.30	15.67	21.25	8.95
10	10.57	7.00	4.54	----		----	2.53	7.94	3.70	23.79	15.42	8.36
15	10.04	6.24	4.36	----		3.30	2.31	10.24	3.40	23.03	12.68	8.28
20	10.14	6.01	4.35	3.83		2.95	2.54	7.55	10.10	28.25	11.17	8.27
25	9.64	5.19	4.02	3.49		3.08	2.59	8.95	15.35	35.56	10.91	8.22
EOM	8.57	5.15	3.87	----		2.67	2.59	5.91	13.32	29.75	10.58	7.39
MIN	12.71	8.92	5.35	4.03		3.52	2.98	15.57	21.32	40.17	31.02	10.56
MAX	8.57	5.15	3.86	3.43		2.66	2.25	2.67	3.40	13.71	10.58	7.39

WTR YR 1980 HIGH 2.25 APR 14 LOW 40.17 JUL 25

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 and 4.0 mi (6.4 km) south of Tefft.
Owner: U.S. Geological Survey.

AQUIFER.--Middle Devonian Dolomite.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 130 ft (39.6 m), cased to 94 ft (29 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, 6.42 ft (1.96 m) below land-surface datum, May 13, 1978; lowest, 9.25 ft (2.82 m) below land-surface datum, Oct. 11, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.89	8.20	7.52	7.81	7.69	7.39	7.33	7.12	7.15	7.42	7.90	7.87
10	8.04	7.94	7.81	7.56	7.63	7.27	7.09	7.11	----	7.48	7.92	7.81
15	8.22	7.98	7.87	7.76	7.54	7.58	6.90	7.47	----	7.59	7.99	7.65
20	8.00	8.26	7.99	7.87	7.54	7.21	7.29	7.37	----	7.76	7.81	7.52
25	8.26	7.59	7.51	7.35	7.57	7.45	7.24	7.26	7.32	7.82	7.99	7.54
EOM	8.00	7.96	7.74	7.93	7.86	7.04	7.16	7.32	7.41	7.79	7.80	7.55
MIN	8.46	8.48	8.43	8.10	8.09	8.10	7.61	7.65	7.59	7.99	8.22	8.06
MAX	7.74	7.55	7.38	7.27	7.40	7.02	6.83	7.07	7.10	7.41	7.75	7.38

WTR YR 1980 HIGH 6.83 APR 14 LOW 8.48 NOV 7

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.--Silurian Limestone.

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, 9.57 ft (2.92 m) below land-surface datum, May 7, 1979; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.90	12.62	11.62	11.37	11.38	11.22	10.57	10.54	-----	14.59	20.30	
10	12.85	12.19	11.64	11.29	11.32	11.10	10.34	11.12	-----	16.37	-----	
15	12.76	12.16	11.65	11.35	11.31	11.18	10.19	11.63	-----	17.05	16.10	
20	12.70	12.21	11.66	11.33	11.30	10.89	10.33	-----	-----	17.98	14.92	
25	12.69	11.82	11.38	11.19	11.29	10.86	10.30	-----	-----	24.50	14.46	
EOM	12.57	11.83	11.39	11.41	11.32	10.64	10.35	-----	13.66	18.64	13.80	
MIN	13.11	12.62	11.95	11.50	11.51	11.39	10.68	11.82	14.17	25.11	23.72	
MAX	12.57	11.78	11.35	11.13	11.22	10.64	10.19	10.39	12.79	14.15	13.80	

WTR YR 1980 HIGH 10.19 APR 14, 15 LOW 25.11 JUL 26

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, 5.19 ft (1.58 m) below land-surface datum, May 1, 2, 1979; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	----	----		----	6.83	6.78	6.01	6.30	-----	30.01	-----	8.50
10	----	----		----	6.80	6.70	5.75	8.71	-----	30.01	-----	7.83
15	----	----		----	6.84	6.81	5.57	9.57	-----	-----	15.59	7.37
20	----	7.55		----	6.84	6.40	5.77	8.24	-----	-----	12.33	6.85
25	----	----		6.54	6.87	6.36	5.75	7.56	-----	-----	10.74	6.67
EOM	----	----		6.93	6.96	6.03	5.77	----	22.15	-----	9.38	6.59
MIN	8.86	7.74		6.97	7.12	7.13	6.17	9.89	23.24	30.01	20.08	9.36
MAX	8.86	7.55		6.53	6.78	6.03	5.57	5.83	15.33	19.00	9.38	6.59

WTR YR 1980 HIGH 5.57 APR 15 LOW 30.01 JUL 3-6, 8-10

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.--Illinoian and older drift.

WELL CHARACTERISTICS.--Drilled observation artesian watertable well, diameter 5 in (127 mm) depth 200 ft (61.0 m) cased to 33 ft (10.1 m).
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 6.80 ft (2.07 m) below land surface datum Sept 27, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5						----	3.74	4.44	4.58	----	6.02	6.25
10						----	3.72	4.65	4.58	----	6.09	6.36
15						----	3.64	4.87	4.68	----	6.23	6.42
20						----	3.84	4.58	4.94	----	6.13	6.47
25						----	4.04	4.39	5.11	5.71	6.13	6.51
EOM						3.64	4.22	4.56	5.31	5.91	6.15	6.59
MIN						3.64	4.34	5.00	5.46	5.97	6.35	6.80
MAX						3.64	3.48	4.33	4.52	5.40	5.89	6.13

WTR YR 1980 HIGH 3.48 APR 14 LOW 6.80 SEP 27

JENNINGS COUNTY

385557085431701. Local number, JN 2.

LOCATION.--Lat 38°55'57", long 85°43'17", in NE¼NE¼SE¼ sec.27, T.6 N., R.7 E., Jennings County, Hydrologic Unit 05120207, on property of Melvin Gerringe Farm, 3.5 mi (5.6 km) south of Hayden.
Owner: U.S. Geological Survey.

AQUIFER.--Silurian and Devonian Carbonates.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 7 in (178 mm), depth 249 ft (79.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 579 ft (176 m) from topographic map. Measuring point: Top of floor of shelter 5.00 ft (1.52 m) above land-surface datum.

PERIOD OF RECORD.--December 1977 to Nov 1979 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.02 ft (1.53 m) below land-surface datum, Feb. 26, 1979, Nov 26, 1979; lowest, 12.51 ft (3.81 m) below land-surface datum, Feb. 22, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, PERIOD OCTOBER 1979 TO NOVEMBER 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.52	7.31										
10	7.83	6.55										
15	8.14	6.91										
20	8.07	7.34										
25	8.22	5.12										
EOM	8.25	----										
MIN	8.38	8.26										
MAX	7.42	5.02										

WTR YR 1980 HIGH 5.02 NOV 26 LOW 8.29 OCT 26

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 135 ft (41.1 m).
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, 39.95 ft (12.18 m) below land-surface datum, Sept 3, 5, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.02	37.99	37.71	38.26	38.49	38.32	38.39	38.69	38.74	39.34	39.54	39.88
10	38.00	37.80	38.13	38.32	38.57	38.02	38.36	38.75	38.84	39.47	39.60	39.49
15	38.30	37.90	38.06	38.16	38.44	38.47	38.05	38.67	38.94	39.69	39.80	39.59
20	38.25	38.14	38.23	38.37	38.38	38.02	38.38	38.47	39.14	39.84	39.57	39.64
25	38.30	37.40	37.67	38.19	38.36	38.16	38.55	38.58	39.15	39.79	39.73	39.68
EOM	38.18	37.80	38.05	38.58	38.61	38.08	38.61	38.96	39.22	39.82	39.82	39.75
MIN	38.50	38.21	38.43	38.71	38.82	38.80	38.71	38.98	39.34	39.91	39.91	39.95
MAX	37.91	37.40	37.67	38.05	38.28	37.98	37.95	38.29	38.59	39.34	39.51	38.87

WTR YR 1980 HIGH 37.40 NOV 25, 26 LOW 39.95 SEP 3, 5

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.21	10.52	8.69	9.01	10.01	----	8.36	8.54	9.54	11.11	10.40	10.61
10	10.29	10.48	9.29	9.51	10.10	----	8.07	8.66	9.79	10.76	10.39	10.67
15	10.35	10.49	9.61	9.55	10.05	----	8.79	8.77	10.02	10.51	10.42	10.67
20	10.40	10.54	9.79	9.68	9.83	----	8.60	8.95	10.12	10.34	10.47	10.68
25	10.45	9.56	8.92	9.74	9.35	----	8.49	9.14	10.40	10.25	10.52	10.75
EOM	10.49	8.20	8.37	9.93	----	8.85	8.45	9.33	10.89	10.24	10.57	10.74
MIN	10.50	10.55	9.86	9.96	10.17	9.04	8.94	9.36	10.95	11.15	10.58	10.78
MAX	10.14	8.03	8.31	8.41	9.35	7.78	8.07	8.45	9.37	10.24	10.27	10.57

WTR YR 1980 HIGH 7.78 MAR 29 LOW 11.15 JUL 5

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, 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, 9.91 ft (3.02 m) below land-surface datum, Apr. 12, 13, 1978; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.31	12.86	12.74	12.55	12.59			-----		-----	12.04	11.50
10	12.51	12.85	12.83	12.55	-----			-----		-----	12.06	11.53
15	12.69	12.85	12.91	12.56	-----			-----		11.90	11.73	11.55
20	12.78	12.86	12.96	12.56	-----			11.66		11.95	11.48	11.48
25	12.81	12.81	12.86	12.56	-----			-----		12.02	11.42	11.46
EOM	12.86	12.60	12.65	12.58	-----			-----		12.00	11.49	11.46
MIN	12.87	12.87	12.96	12.65	12.84			11.68		12.05	12.07	11.55
MAX	12.26	12.60	12.60	12.55	12.58			11.66		11.90	11.42	11.46

WTR YR 1980 HIGH 11.42 AUG 22-26 LOW 12.96 DEC 19-24

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, 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, 2.06 ft (0.63 m) below land-surface datum, Apr. 6, 7, 1978; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.99	6.18	5.84	5.27	5.47	5.04	3.05	3.36	2.97	3.51		
10	6.04	6.19	5.87	5.31	5.56	4.71	2.98	3.46	2.97	3.68		
15	6.08	6.21	5.87	5.33	5.61	4.65	2.94	3.54	3.15	3.87		
20	6.11	6.25	5.90	5.33	5.66	4.00	3.05	3.52	3.26	----		
25	6.13	6.10	5.56	5.32	5.11	3.80	3.16	3.64	3.44	----		
EOM	6.20	5.86	5.31	5.44	5.00	3.66	3.23	3.78	3.62	----		
MIN	6.21	6.27	5.91	5.44	5.66	5.04	3.66	3.82	3.79	3.89		
MAX	5.97	5.86	5.31	5.25	4.99	3.66	2.94	3.26	2.50	3.51		

WTR YR 1980 HIGH 2.50 JUN 2 LOW 6.27 NOV 20-23

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, 8.77 ft (2.67 m) below land-surface datum, Aug 26, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.95	10.22	10.03	9.76	10.00	10.01	9.17	----		----	----	----
10	9.97	10.22	10.05	9.82	10.07	9.91	8.98	----		----	----	----
15	10.00	10.22	10.06	9.82	10.06	9.86	8.86	----		9.00	----	----
20	10.16	10.22	10.09	9.86	10.14	9.71	8.87	8.91		9.11	----	----
25	10.16	---	9.92	9.89	9.97	9.62	8.91	----		9.13	----	----
EOM	10.24	10.03	9.81	10.00	10.04	9.39	----	----		9.13	8.85	----
MIN	10.24	10.24	10.13	10.03	10.15	10.04	9.38	8.95		9.17	9.20	8.87
MAX	9.95	10.03	9.81	9.76	9.93	9.39	8.86	8.91		9.00	8.77	8.85

WTR YR 1980 HIGH 8.77 AUG 26 LOW 10.24 OCT 29-NOV 4

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 4.90 ft (1.49 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.98 ft (0.91 m) below land-surface datum, Apr. 4, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.04	4.84	4.26	4.10	4.79	4.62	3.00	4.23	3.30	4.31	4.91	3.60
10	5.03	4.76	4.35	4.30	4.87	4.26	3.08	4.41	3.26	4.48	4.95	4.03
15	5.05	4.78	4.38	4.38	4.93	4.35	3.17	4.41	3.74	4.68	4.61	4.33
20	5.01	4.86	4.47	4.39	4.95	3.74	3.54	4.31	3.96	4.82	4.39	4.34
25	4.88	4.33	3.73	4.49	4.43	3.55	3.82	4.47	4.21	4.94	4.56	4.40
EOM	4.96	4.09	3.87	4.67	4.52	3.53	4.00	4.44	4.50	4.74	3.99	4.60
MIN	5.27	4.98	4.50	4.70	4.96	4.66	4.05	4.61	4.55	4.99	5.01	4.64
MAX	4.88	4.08	3.69	3.92	4.42	3.53	2.98	4.05	3.15	4.31	3.99	3.37

WTR YR 1980 HIGH 2.98 APR 4 LOW 5.27 OCT 1

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.
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, 3.25 ft (0.99 m) below land-surface datum, APR. 4, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.09	5.02	4.42	4.64	5.09		3.28	4.56	3.98	4.84	5.28	4.71
10	5.09	4.93	4.44	4.88	5.14		3.49	4.71	3.99	----	5.32	4.90
15	5.09	4.91	4.46	4.95	5.16		3.64	4.71	4.34	5.25	4.78	5.07
20	5.16	4.96	4.51	4.92	5.17		3.98	4.55	4.47	5.33	4.70	4.92
25	5.07	4.44	----	4.97	----		4.19	4.67	4.75	5.35	5.02	4.92
EOM	5.10	4.27	----	5.09	----		4.33	4.69	4.96	5.12	5.02	5.07
MIN	5.24	5.11	4.54	5.13	5.21		4.34	4.84	5.06	5.53	5.48	5.11
MAX	5.07	4.26	4.30	4.64	5.09		3.25	4.34	3.84	4.70	4.68	4.65

WTR YR 1980 HIGH 3.25 APR 4 LOW 5.53 JUL 26

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 SR 120 and County Road 475 E.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation watertable 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 910 ft (277 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, 13.91 ft (4.24 m) below land surface datum June 19, 21-25, 1980; lowest 15.29 ft (4.66 m) below land surface datum, Aug. 10, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5								-----	14.19	14.43	15.11	15.03
10								-----	14.02	-----	15.26	14.97
15								-----	13.94	-----	15.21	14.94
20								14.47	13.92	-----	15.17	14.93
25								14.48	13.91	14.96	15.16	14.93
EOM								14.51	14.28	14.97	15.19	14.95
MIN								14.52	14.52	15.08	15.29	15.19
MAX								14.47	13.91	14.25	14.97	14.92

WTR YR 1980 HIGH 13.91 JUN 19 AND OTHERS LOW 15.29 AUG 10

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.20	5.05	4.06	3.69	3.42	3.40	2.50	2.49	2.17	2.90	11.61	9.00
10	5.94	4.85	4.13	3.63	3.40	3.28	2.34	2.53	2.18	3.28	12.30	8.09
15	5.86	4.76	4.11	3.65	3.36	3.15	2.20	2.65	2.35	5.90	12.04	7.38
20	5.57	4.75	4.11	3.60	3.37	2.87	2.20	2.64	2.52	8.34	10.39	6.61
25	5.42	4.33	3.89	3.45	3.37	2.80	2.32	2.69	2.63	10.08	9.62	6.33
EOM	5.14	4.20	3.64	3.50	3.40	2.59	2.40	2.68	2.78	11.20	10.12	6.08
MIN	6.86	5.37	4.49	4.14	3.88	3.69	2.74	3.02	3.21	11.39	12.84	10.26
MAX	5.14	4.20	3.64	3.43	3.30	2.59	2.20	2.43	2.12	2.82	9.62	6.08

WTR YR 1980 HIGH 2.12 JUN 6, 7 LOW 12.84 AUG 12

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, 4.15 ft (1.26 m) below land-surface datum May 27, 29, 1976; lowest, 7.04 ft (2.15 m) below land-surface datum, Mar. 8-11, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.88	5.97	5.70	5.67	5.86	5.81	5.45	5.39	5.45	5.68	6.14	6.02
10	5.87	5.88	5.77	5.67	5.85	5.77	5.31	5.43	----	5.74	6.06	6.03
15	5.94	5.92	5.78	5.76	5.88	5.84	5.22	5.50	5.34	5.84	6.00	6.06
20	5.91	5.99	5.82	5.74	5.90	5.55	5.30	5.44	5.43	5.96	5.94	6.03
25	5.92	5.71	5.61	5.69	5.78	5.57	5.32	5.50	5.52	6.06	6.01	6.07
EOM	5.93	5.76	5.62	5.80	5.82	5.47	5.32	5.58	5.60	6.06	6.04	6.13
MIN	5.98	6.03	5.86	5.82	5.91	5.88	5.52	5.62	5.62	6.09	6.20	6.14
MAX	5.83	5.67	5.60	5.59	5.77	5.47	5.22	5.33	5.23	5.61	5.93	5.99

WTR YR 1980 HIGH 5.22 APR 14, 15 LOW 6.20 AUG 7

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, 2.22 ft (0.68 m) below land-surface datum, June 30, 1976; lowest, 7.98 ft (2.43 m) below land-surface datum, Dec. 1, 2, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.02	7.46	6.98	6.61	----	7.25	5.53	5.65	6.19	6.67	----	7.47
10	7.11	7.51	6.92	6.61	----	6.75	5.36	5.80	6.19	6.76	7.38	7.57
15	7.19	7.58	6.89	6.71	----	6.68	5.17	6.00	6.27	6.87	7.36	7.62
20	7.26	7.63	6.92	6.78	----	6.08	5.10	6.13	6.41	6.98	7.32	7.36
25	7.33	7.59	6.83	6.80	----	5.89	5.27	6.23	6.49	----	7.47	7.37
EOM	7.40	7.11	6.64	6.96	----	5.63	5.47	6.36	6.58	----	7.57	7.41
MIN	7.41	7.66	7.11	6.98	7.00	7.25	5.65	6.39	6.60	7.09	7.57	7.64
MAX	6.95	7.11	6.64	6.58	6.98	5.63	5.07	5.55	6.16	6.59	7.30	7.36

WTR YR 1980 HIGH 5.07 APR 22 LOW 7.66 NOV 24, 25

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 the Kankakee aquifer.

WELL CHARACTERISTICS.--Drilled observation artesian watertable 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, 7.93 ft (2.42 m) below land surface datum, Sept 2-22, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5											----	8.05
10											----	8.09
15											8.98	8.18
20											8.59	7.93
25											8.43	7.98
EOM											8.52	8.10
MIN											9.16	8.53
MAX											8.43	7.93

WTR YR 1980 HIGH 7.93 SEP 20-22 LOW 9.16 AUG 13

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.--Altitude of land-surface datum is 720 ft (219 m). 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.27	10.23	9.68	9.70	9.85	9.67	9.16	9.99	7.53	10.57	10.82	10.86
10	10.33	10.27	9.91	9.82	9.91	8.76	9.12	9.80	8.71	11.39	10.81	10.51
15	10.39	10.19	10.05	9.70	9.88	9.33	9.09	9.92	9.63	11.63	10.26	10.22
20	10.34	10.35	10.10	9.74	9.94	9.13	9.28	9.73	9.87	11.60	9.75	10.39
25	10.34	9.57	9.28	9.75	9.46	9.13	9.41	9.84	10.21	10.70	10.57	10.26
EOM	10.33	9.33	9.51	9.85	9.67	9.03	9.49	10.59	11.10	11.06	11.16	10.38
MIN	11.06	10.40	10.20	9.91	10.02	9.77	9.78	11.00	11.80	12.72	12.13	11.25
MAX	10.22	9.33	9.21	9.55	9.38	8.76	8.97	9.35	7.53	10.26	9.75	10.10

WTR YR 1980 HIGH 7.53 JUN 5 LOW 12.72 JUL 21

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, and 0.3 mi (0.5 km) west of Shadeland Avenue and 1½ 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).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 810 ft (247 m). 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, 73.66 ft (22.45 m) below land-surface datum, Oct. 8, 9, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.73	73.25	72.36	72.63	72.67	72.23	72.14	72.08	72.39	72.36	72.69	72.95
10	72.95	72.51	72.83	72.66	72.45	72.23	71.92	72.12	72.07	72.41	72.77	72.91
15	73.21	72.97	72.91	72.70	72.38	72.69	71.75	72.43	71.96	72.61	72.85	72.81
20	72.88	72.98	72.72	72.90	72.34	72.20	72.24	72.32	72.09	72.80	72.74	72.93
25	73.00	72.68	72.12	72.02	72.56	72.16	71.94	72.12	72.12	72.84	72.94	72.95
EOM	72.92	72.95	72.58	72.93	72.64	71.88	71.92	72.26	72.09	72.70	72.76	72.92
MIN	73.31	73.33	73.36	73.00	73.01	73.06	72.51	72.61	72.53	72.87	73.04	73.29
MAX	72.55	72.48	72.12	72.02	72.26	71.88	71.75	72.00	71.96	72.25	72.59	72.59

WTR YR 1980 HIGH 71.75 APR 15 LOW 73.36 DEC 3

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.22	-----	25.21	25.40	24.85	24.57	-----	24.22	24.59	25.01	25.34	26.10
10	25.36	25.38	25.62	25.16	24.86	24.59	-----	24.11	24.53	25.02	25.38	26.18
15	25.62	25.64	25.64	25.38	24.78	-----	24.17	24.56	24.57	25.13	25.54	26.08
20	25.41	25.87	25.67	25.58	24.74	-----	24.53	24.44	24.92	25.29	25.56	26.18
25	25.66	25.09	24.94	24.71	24.86	-----	24.42	24.31	24.88	25.31	25.89	26.26
EOM	-----	25.80	25.32	24.83	25.13	-----	24.24	24.53	24.92	25.32	25.82	26.27
MIN	25.90	26.10	26.38	25.71	25.51	25.47	24.89	24.73	25.07	25.39	26.05	26.69
MIN	25.05	25.09	24.93	24.71	24.58	24.56	23.91	24.10	24.41	24.93	25.15	25.76

WTR YR 1980 HIGH 23.91 APR 14 LOW 26.69 SEP 26, 27

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, about 4.5 mi (7.2 km) east of Crawfordsville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 111 ft (34.0 m), cased to 107 ft (32.6 m), screened to 109 ft (33.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 801 ft (244 m). Measuring point: Top of floor of shelter 2.38 ft (0.73 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.10 ft (7.96 m) below land-surface datum, Apr. 13, 1974; lowest, 32.06 ft (9.77 m) below land-surface datum, June 4, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.23	29.88	29.66	29.67	29.77	29.32	28.21	27.76	28.63	29.21	29.79	30.51
10	29.40	29.74	29.79	29.62	29.76	29.11	27.86	27.94	28.50	29.31	29.91	30.53
15	29.59	29.88	29.85	29.68	29.76	29.10	27.51	28.19	28.54	29.53	30.03	30.57
20	29.61	30.02	29.89	29.74	29.81	28.66	27.46	28.33	28.73	29.62	30.08	30.58
25	29.72	29.82	29.62	29.49	29.60	28.59	27.41	28.42	28.87	29.64	30.31	30.66
EOM	29.75	29.87	29.68	29.80	29.58	28.31	27.52	28.67	29.07	29.72	30.40	30.77
MIN	29.82	30.09	30.02	29.84	29.92	29.67	28.42	28.75	29.11	29.75	30.43	30.85
MAX	29.08	29.69	29.59	29.48	29.50	28.31	27.36	27.58	28.50	29.11	29.73	30.39

WTR YR 1980 HIGH 27.36 APR 24 LOW 30.85 SEP 27

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.--Alluvium.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 60 ft (18.3 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 645 ft (197 m) from topographic map. Measuring point: Top of floor of shelter 2.90 ft (0.88 m) above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 976 ft (2.97 m) below land-surface datum, May 26-28, 1978; lowest, 13.89 ft (4.23 m) below land-surface datum, Nov. 16, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.55	12.59	11.59	11.11	11.86	12.00	10.20	10.95	10.63	11.48	12.72	12.75
10	11.81	12.67	11.61	11.32	11.98	11.50	10.25	11.17	10.36	11.71	12.58	12.89
15	12.04	12.74	11.74	11.34	12.12	11.34	10.30	11.37	10.54	11.92	12.68	13.00
20	12.22	12.84	11.89	11.45	12.18	11.07	10.38	11.40	10.81	12.15	12.35	13.07
25	12.38	12.54	11.46	11.53	11.87	10.63	10.54	11.49	11.06	12.31	12.42	13.17
EOM	12.57	11.84	11.06	11.72	11.95	10.35	10.73	11.66	11.28	12.51	12.61	13.29
MIN	12.59	12.96	11.95	11.75	12.22	12.03	10.78	11.69	11.70	12.55	12.79	13.32
MAX	11.36	11.84	11.06	11.06	11.75	10.35	10.19	10.78	10.35	11.31	12.35	12.64

WTR YR 1980 HIGH 10.19 APR 4 LOW 13.32 SEP 30

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 observation 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, 8.42 ft (2.57 m) below land-surface datum, Apr. 24, 1973; lowest, 15.67 ft (4.78 m) below land-surface datum, Oct. 14, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.33	14.48	13.57	12.68	12.77	12.36	9.87	11.38	10.97	12.47	14.48	14.85
10	14.45	14.39	13.51	12.57	12.82	11.79	9.82	11.73	10.34	12.85	14.82	14.77
15	14.52	14.37	13.45	12.67	12.85	11.59	9.79	11.97	10.75	13.22	14.83	14.69
20	14.46	14.45	13.46	12.69	12.92	10.44	10.04	12.07	11.23	13.56	14.70	14.25
25	14.52	14.16	13.17	12.50	12.43	10.46	10.57	12.23	11.63	14.01	14.86	14.12
EOM	14.45	13.85	12.76	12.77	12.48	10.05	10.94	12.63	12.01	14.18	15.05	14.11
MIN	14.56	14.53	13.88	12.81	12.98	12.56	11.06	12.75	12.73	14.25	15.13	15.06
MAX	14.11	13.85	12.76	12.46	12.37	10.05	9.78	11.07	10.32	12.09	14.24	14.11

WTR YR 1980 HIGH 9.78 APR 3, 4, 14 LOW 15.13 AUG 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.66	37.58	36.39	36.02	35.63	35.21	35.00	34.84	35.38	36.62	66.80	59.14
10	38.49	37.27	36.43	35.81	35.56	35.09	34.82	34.82	35.36	39.11	69.78	57.22
15	38.44	37.13	36.38	35.91	35.43	35.23	34.68	35.08	35.31	42.95	66.94	55.48
20	38.09	37.11	36.35	35.91	35.39	35.02	34.91	35.12	35.42	48.89	66.29	53.99
25	38.03	36.58	36.00	35.57	35.33	35.12	34.90	35.11	35.33	55.32	63.78	52.98
EOM	37.62	36.69	36.04	35.84	35.48	34.89	34.85	35.38	35.52	62.22	61.04	52.07
MIN	39.06	37.75	36.90	36.14	35.90	35.61	35.09	35.50	35.70	63.16	70.13	61.03
MAX	37.62	36.55	35.91	35.51	35.27	34.88	34.65	34.80	35.21	35.70	61.04	52.07

WTR YR 1980 HIGH 34.65 APR 14 LOW 70.13 AUG 11, 12

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, 42.85 ft (13.06 m) below land-surface datum, July 12, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.07	5.73	4.99	4.77	4.49	4.10	3.96	3.85	4.90	4.69	-----	22.03
10	6.04	5.52	5.07	4.58	4.41	3.97	5.47	4.24	5.11	4.64	-----	20.59
15	6.06	5.54	5.09	4.67	4.35	4.13	4.24	5.01	4.03	13.49	-----	19.32
20	5.83	5.51	5.10	4.69	4.27	3.93	4.35	4.78	3.96	-----	29.67	18.21
25	5.90	5.08	4.74	4.39	4.22	3.98	3.95	4.38	3.97	-----	26.60	17.41
EOM	5.67	5.24	4.79	4.65	4.31	3.75	3.66	5.92	5.52	-----	23.69	16.60
MIN	6.29	5.83	5.38	4.85	4.69	4.44	6.98	8.96	10.70	24.70	30.04	23.67
MAX	5.67	5.03	4.67	4.37	4.18	3.75	3.66	3.69	3.67	4.49	23.69	16.60

WTR YR 1980 HIGH 3.66 APR 30 LOW 30.04 AUG 20

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.--Datum is 663.3 ft (202.17 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.--May 1978 to current year. Record prior to October 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.69 ft (0.21 m) below land-surface datum May 3, 4, 1979; lowest, 5.17 ft (1.58 m) below land-surface datum, Feb. 27 to Mar. 4, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979, TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.45	4.77	4.96	4.93	4.97			4.00	4.08	4.13	4.60	4.87
10	4.54	4.78	4.96	4.92	4.98			4.02	3.93	4.19	4.65	4.85
15	4.60	4.89	4.96	4.93	5.00			4.05	3.90	4.26	4.69	4.75
20	4.65	4.96	4.96	4.93	----			4.07	3.94	4.35	4.72	4.28
25	4.69	4.97	4.94	4.93	----			4.15	4.03	4.44	4.85	4.17
EOM	4.75	4.96	4.94	4.94	----			4.24	4.10	4.52	4.87	4.17
MIN	4.76	4.97	4.97	4.95	5.01	----		4.26	4.26	4.54	4.88	4.88
MAX	4.43	4.75	4.94	4.92	4.94	5.09		3.99	3.90	4.10	4.54	4.16

WTR YR 1980 HIGH 3.90 JUN 15, 16 LOW 5.09 MAR 13

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, about 5.0 mi (8.0 km) south of Albion.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 190 ft (58 m), cased to 146 ft (44.5 m), screened to 148 ft (45.1 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 928 ft (283 m). Measuring point: Top of floor of shelter 2.65 ft (0.81 m) above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.07 ft (8.86 m) below land-surface datum, May 13, 1978; lowest, 32.49 ft (9.90 m) below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.80	31.26	30.93	31.23	31.15	31.03	30.99	30.34	30.52	30.34	30.60	30.66
10	30.89	31.15	31.19	31.06	31.06	30.97	30.87	30.37	30.30	30.42	30.54	30.66
15	31.19	31.13	31.18	31.32	31.08	31.37	31.03	30.64	30.28	30.45	30.64	-----
20	31.05	31.41	31.33	31.34	31.11	30.87	30.68	30.50	30.43	30.55	30.50	-----
25	31.25	30.88	31.29	31.00	31.18	31.00	30.61	30.31	30.42	30.55	30.66	-----
EOM	31.09	31.25	31.18	31.41	31.56	-----	30.63	30.30	30.38	30.47	30.51	-----
MIN	31.38	31.44	31.70	31.52	31.61	31.59	31.07	30.72	30.66	30.61	30.79	30.73
MAX	30.78	30.88	30.88	30.84	31.02	30.74	30.41	30.28	30.23	30.34	30.37	30.55

WTR YR 1980 HIGH 30.23 JUN 2 LOW 31.70 DEC 1

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 about 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 159 ft (48 m), cased to 39 ft (12 m), screened to 42 ft (13 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 930 ft (283 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.98 ft (2.74 m) below land-surface datum, Apr. 8, 1978; lowest, 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.87	17.20	16.64	-----	15.76	15.03	11.25	11.99	11.38	13.61	14.31	13.64
10	16.94	17.24	16.71	-----	15.81	14.61	10.80	12.38	11.79	13.75	14.53	14.00
15	17.04	17.20	-----	-----	15.92	14.58	10.54	12.81	12.24	13.99	14.47	14.28
20	17.05	17.36	-----	-----	16.02	12.87	10.93	12.61	12.72	-----	14.01	13.82
25	17.16	17.05	-----	15.49	15.00	12.42	11.53	12.75	13.05	14.39	13.77	13.97
EOM	17.15	16.85	-----	15.77	15.25	12.01	11.70	12.92	13.40	13.94	14.17	14.17
MIN	17.24	17.36	16.96	15.79	16.09	15.37	12.13	13.06	13.46	14.43	14.58	14.28
MAX	16.77	16.85	16.64	15.43	14.95	12.01	10.54	11.82	11.37	13.47	13.61	13.59

WTR YR 1980 HIGH 10.54 APR 15 LOW 17.36 NOV 20

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, Indiana.
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, 4.91 ft (1.50 m) below land-surface datum, Jun 6, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.97	12.38	12.45	12.04	12.58	-----	10.01	6.03	4.93	----	6.40	6.35
10	10.16	12.46	12.49	12.25	12.64	12.13	8.45	6.15	5.34	----	6.42	6.42
15	10.98	12.58	12.52	12.32	12.70	11.96	7.23	6.16	5.84	----	6.24	6.59
20	11.43	12.68	12.61	12.31	-----	11.26	6.38	5.93	6.03	----	5.91	6.49
25	11.75	12.54	12.32	12.33	-----	10.65	5.90	5.95	6.16	6.51	6.00	6.85
EOM	12.22	12.42	12.01	12.43	-----	10.57	5.92	6.05	----	6.25	6.30	7.70
MIN	12.27	12.70	12.63	12.46	12.74	12.27	10.62	6.21	6.28	6.54	6.49	7.89
MAX	8.24	12.28	12.01	12.01	12.46	10.56	5.87	5.91	4.91	6.21	5.85	6.30

WTR YR 1980 HIGH 4.91 JUN 6 LOW 12.74 FEB 17

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.

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, 41.78 ft (12.7 m) below land-surface datum, Sep. 30, 1980.

CORRECTION.--The highest water level shown in the 1979 WRD Report should have been for Dec. 9, 1978 instead of Dec. 9, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.12	28.54	11.54	16.22			-----	26.66	27.19	18.68	33.28	39.21
10	31.15	17.79	14.80	21.44			16.91	-----	27.08	22.59	35.51	40.53
15	33.58	21.63	17.83	14.89			13.07	-----	29.04	25.75	36.60	40.81
20	35.05	25.46	23.12	-----			17.16	-----	29.86	27.07	37.88	40.76
25	34.71	8.32	9.76	-----			21.88	-----	27.32	29.74	38.47	40.69
EOM	36.31	8.14	12.90	-----			25.23	-----	27.32	32.53	38.89	41.50
MIN	36.53	36.55	24.65	22.03			25.68	26.97	31.83	33.26	39.24	41.78
MAX	28.04	7.39	8.70	13.06			12.97	25.69	26.67	18.52	32.16	38.94

WTR YR 1980 HIGH 7.39 NOV 28 LOW 41.78 SEP 30

OWEN COUNTY

391731086421401. Local number, OW 7.

LOCATION.--Lat 39°17'31", long 86°42'14", in NE¼SE¼NE¼ sec.23, T.10 N., R.3 W., Owen County, Hydrologic Unit 05120202, at the east edge of McCormicks Creek State Park 3.0 mi (4.8 km) east of Spencer.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (152 mm), depth 150 ft (46 m), cased to 15 ft (4.6 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft (245 m). Measuring point: Top of floor of shelter 2.38 ft (0.73 m) above land-surface datum.

REMARKS.--Water level affected by White River.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 98.77 ft (30.11 m) below land-surface datum, May 24, 1968; lowest, 121.25 ft (36.96 m) below land-surface datum, June 6, 1973.

REVISIONS.--A revised table for the 1978 water year is given below. These figures supersede those published in WRD for Indiana 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	115.84	115.89	115.40	115.51	115.65	111.95	115.21	115.65	115.45	115.87	115.77	115.88
10	115.87	115.81	115.58	115.56	115.68	115.06	113.58	115.68	115.31	115.89	115.86	115.90
15	115.89	115.85	115.63	115.44	115.55	115.21	112.98	115.76	115.65	115.93	115.52	115.91
20	115.89	115.91	115.70	115.54	115.33	112.91	115.28	115.56	115.74	115.96	115.59	115.88
25	115.90	107.47	113.50	115.55	115.31	114.26	115.52	115.66	115.79	115.81	115.82	115.90
EOM	115.88	114.69	115.30	115.63	115.51	111.85	115.60	115.75	115.82	115.74	115.88	115.91
MIN	115.93	115.93	115.73	115.65	115.73	115.54	115.62	115.77	115.87	116.00	115.91	115.94
MAX	115.79	107.47	112.79	113.45	112.26	110.76	111.68	112.59	108.43	111.25	113.35	115.81

WTR YR 1980 HIGH 107.47 NOV 25, 27 LOW 116.00 JUL 18, 19

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 (18 m), cased to 54 ft (16 m), screened to 56 ft (17 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 380 ft (116 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

REMARKS.--Water level affected by Wabash River floods.

PERIOD OF RECORD.--April 1967 to September 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.78 ft (1.76 m) below land-surface datum, Apr. 25, 1975; lowest, 21.25 ft (6.48 m) below land-surface datum, Feb. 15-20, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.05	16.54	14.00	13.14	14.21	14.08	10.11	10.88	13.04	11.07	14.76	16.33
10	15.35	16.34	13.83	13.27	14.50	13.83	9.80	11.42	12.96	12.08	15.10	16.57
15	15.64	16.33	14.04	13.36	14.67	13.46	9.18	11.99	12.80	12.86	15.43	16.80
20	15.87	16.53	14.37	13.44	14.62	12.57	9.36	12.28	13.14	13.49	15.69	17.03
25	16.14	15.67	14.13	13.43	14.54	11.49	9.80	12.24	11.98	13.93	15.86	17.21
EOM	16.39	14.64	13.43	13.95	14.30	10.22	10.29	12.63	12.70	14.41	16.06	17.39
MIN	16.43	16.62	14.63	14.04	14.78	14.29	10.46	12.72	13.36	14.48	16.11	17.42
MAX	14.79	14.64	13.43	13.03	14.04	10.22	9.00	10.46	11.98	10.93	14.48	16.11

WTR YR 1980 HIGH 9.00 APR 14 LOW 17.42 SEP 30

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 (203 mm), depth 280 ft (85.3 m), cased to 200 ft (61 m), open hole.
Instrumentation: Analog to digital recorder.

DATUM.--Altitude of land-surface datum is 458 ft (140 m) from topographic map. Measuring point: Top of floor of shelter 2.00 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.99 ft (34.44 m) below land-surface datum, Apr. 2, 1979; lowest, 126.40 ft (38.5 m) below land-surface datum, Aug. 17, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	117.57	117.20	117.39	120.30	116.92	117.31	116.61	116.28	119.00	118.81	121.74	123.08
10	117.77	116.84	118.08	120.82	116.91	117.21	116.48	116.55	118.46	119.99	122.48	123.06
15	118.17	117.21	116.65	121.05	119.63	117.24	116.16	117.09	119.66	120.97	121.93	122.89
20	117.79	117.22	116.69	118.47	117.07	116.82	116.29	116.75	118.39	121.74	121.54	122.88
25	118.01	119.63	119.14	117.35	117.83	116.64	116.78	116.65	118.68	120.94	122.54	122.84
EOM	117.91	117.43	120.03	117.27	117.76	116.24	116.06	118.07	119.12	121.32	122.89	122.94
MIN	118.41	119.63	120.15	121.05	119.63	119.54	116.78	118.07	119.66	121.74	123.19	124.15
MAX	117.23	116.84	116.34	117.25	116.82	116.17	115.45	115.91	118.13	118.71	121.13	122.66

WTR YR 1980 HIGH 115.45 APR 22 LOW 124.15 SEP 22

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.76	15.31	11.45	9.68	10.18	-----	7.23	9.00	8.23	10.22	13.02	13.32
10	15.12	15.06	11.54	9.76	10.55	8.92	6.94	9.25	8.18	10.62	13.40	13.34
15	15.51	14.97	11.70	10.03	10.80	8.80	6.85	9.80	8.52	11.19	13.52	13.47
20	15.40	15.25	11.49	10.07	11.02	7.31	7.54	9.78	9.20	11.72	13.58	12.08
25	15.63	14.35	10.99	9.51	10.27	7.70	8.09	9.91	9.51	12.11	13.85	11.90
EOM	15.48	12.70	9.46	10.38	10.58	7.15	8.42	9.99	9.85	12.37	13.88	12.19
MIN	15.84	16.46	13.78	12.09	11.77	10.60	9.80	10.29	11.01	13.99	15.92	13.87
MAX	14.53	12.70	9.46	9.36	10.15	7.15	6.82	8.85	8.16	9.98	12.57	11.90

WTR YR 1980 HIGH 6.82 APR 14 LOW 16.46 NOV 17

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.--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, 5.27 ft (1.61 m) below land-surface datum, Apr. 6, 1968; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.54	10.79	9.86	9.27	9.44	9.46	7.54	7.68	6.57	8.41	9.76	9.31
10	10.61	10.80	9.83	9.25	9.55	9.10	7.04	7.84	6.86	8.66	9.87	9.29
15	10.69	10.76	9.79	9.32	9.62	8.90	6.88	8.00	7.32	8.93	9.90	9.35
20	10.73	10.83	9.84	9.25	9.73	8.17	7.06	7.98	7.64	9.20	9.88	8.96
25	10.76	10.58	9.66	9.19	9.45	8.08	7.35	8.13	7.88	9.43	10.00	9.02
EOM	10.77	10.13	9.31	9.38	9.55	7.79	7.52	7.95	8.16	9.57	9.86	9.20
MIN	10.82	10.85	10.12	9.42	9.78	9.61	7.82	8.29	8.21	9.63	10.13	9.86
MAX	10.43	10.13	9.31	9.15	9.42	7.79	6.88	7.58	6.55	8.21	9.63	8.95

WTR YR 1980 HIGH 6.55 JUN 3, 4 LOW 10.85 NOV 7, 11

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.66	16.90	15.81	16.09	-----	15.89	-----	16.73	-----	17.82	17.47	16.59
10	17.08	16.99	16.33	-----	-----	14.64	-----	17.02	-----	17.49	17.54	16.88
15	17.42	17.04	16.69	16.60	-----	14.06	-----	17.02	-----	17.42	16.89	17.29
20	17.47	17.24	16.87	-----	-----	13.67	-----	17.58	17.24	17.56	13.66	17.02
25	17.02	16.28	14.92	-----	-----	14.40	15.82	15.90	17.20	17.52	15.66	17.39
EOM	17.37	14.71	15.63	-----	16.22	-----	16.22	17.07	17.60	17.02	16.30	17.44
MIN	17.59	17.47	17.02	16.66	16.44	16.49	16.50	17.93	17.80	18.11	17.74	17.73
MAX	16.42	14.04	14.83	15.75	15.79	13.58	15.47	15.51	17.07	16.62	12.96	16.23

WTR YR 1980 HIGH 12.96 AUG 19 LOW 18.11 JUL 9

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, 7.98 ft (2.43 m) below land-surface datum, May 27, 1968; lowest, 15.00 ft (4.57 m) below land-surface datum, Feb. 10, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.81	11.23	9.21	9.81	10.36	10.27	8.95	10.18	9.17	10.85	11.82	11.48
10	12.04	10.70	9.77	10.04	10.55	9.34	9.10	10.38	9.57	11.00	11.86	11.74
15	12.14	10.64	10.07	9.70	10.62	9.82	8.73	10.80	9.98	11.21	11.43	11.93
20	11.83	10.73	10.48	9.65	10.77	9.04	9.16	10.04	10.49	11.56	10.71	12.11
25	11.84	9.48	9.08	9.68	9.91	8.92	9.57	10.16	10.72	11.54	11.20	12.28
EOM	11.87	9.01	9.38	10.34	10.42	8.54	9.91	10.65	10.71	11.48	11.42	12.43
MIN	12.23	11.86	10.48	10.37	10.90	10.44	10.07	10.85	10.86	11.66	11.95	12.50
MAX	11.73	8.69	8.93	9.39	9.91	8.51	8.72	10.04	8.47	10.72	10.71	11.36

WTR YR 1980 HIGH 8.47 JUN 2 LOW 12.50 SEP 26

ST. JOSEPH COUNTY

413255086211026. Local number, SJ 26.

LOCATION.--Lat 41°32'50", long 86°21'10", in NW¼NE¼NE¼ sec.25, T.36 N., R.1 E., St. Joseph County, Hydrologic Unit 07120001, in Porter Cemetery, 4.3 mi (6.9 km) northwest of Lakeville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 1.5 in (38 mm).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 770.85 ft (234.955 m) National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--Sept. 1975 to current year. Fragmentary record prior to May 1976 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 769.20 ft (234.452 m) National Geodetic Vertical Datum of 1929, May 10, 1976; lowest, 764.69 ft (233.078 m) National Geodetic Vertical Datum of 1929, Feb. 8-11, 1977.

MEAN WATER LEVEL, IN FEET, NATIONAL GEODETIC VERTICAL DATUM OF 1929, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	------	------		------		------	768.50	768.13	767.42		------	766.92
10	------	------		------		------	768.84	767.92	767.56		766.17	766.87
15	------	------		------		------	768.89	767.73	767.39		766.22	766.79
20	------	------		------		------	768.68	767.76	767.21		766.36	766.97
25	766.16	------		------		------	768.50	767.62	767.03		766.40	767.02
EOM	------	------		------		------	768.39	767.37	------		766.30	766.96
MIN	766.02	767.52		767.54		767.59	768.37	767.35	767.00		766.17	766.31
MAX	766.16	767.52		767.74		767.59	768.90	768.37	767.61		766.44	767.02

WTR YR 1980 MAX 768.90 APR 15 MIN 766.02 OCT 22

ST. JOSEPH COUNTY

413257086211027. Local number, SJ 27.

LOCATION.--Lat 41°32'57", long 86°21'10", in NW¼NE¼NE¼ sec.25, T.36 N., R.1 E., St. Joseph Conty, Hydrologic Unit 07120001, in Porter Cemetery, 4.3 mi (6.9 km) northwest of Lakeville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 1.5 in (38 mm).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 766.60 ft (233.660 m) National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1975 to current year. Fragmentary record prior to May 1976 available in district files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 765.40 ft (233.294 m) National Geodetic Vertical Datum of 1929, May 10, 1976; lowest, 759.26 ft (231.422 m) National Geodetic Vertical Datum of 1929, Aug. 28, 1977.

MEAN WATER LEVEL, IN FEET, NATIONAL GEODETIC VERTICAL DATUM OF 1929, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	759.63	759.96	760.76	760.98	760.56	------	------	761.10	------	760.07	759.53	760.15
10	759.75	759.97	760.82	760.84	760.49	------	------	760.97	760.79	759.98	759.53	760.10
15	759.77	760.02	760.77	760.79	760.43	------	------	760.84	760.60	759.83	759.68	760.07
20	759.80	760.01	760.69	761.04	760.40	------	------	760.96	760.43	759.70	759.81	760.20
25	759.85	760.24	761.30	760.83	761.11	------	761.33	760.77	760.28	759.65	759.82	760.23
EOM	759.89	760.84	761.12	760.67	760.94	------	761.25	760.60	760.16	759.64	759.76	760.16
MIN	759.50	759.88	760.69	760.66	760.40	760.85	761.23	760.56	760.14	759.62	759.47	759.79
MAX	759.91	760.85	761.42	761.10	761.11	760.92	761.44	761.23	760.85	760.14	759.87	760.23

WTR YR 1980 MAX 761.44 APR 21, 22 MIN 759.47 AUG 8, 9

ST. JOSEPH COUNTY

413255086211228. Local number, SJ 28.

LOCATION.--Lat 41°32'55", long 86°21'12", in NW¼NE¼NE¼ sec.25, T.36 N., R.1 E., St. Joseph County, Hydrologic Unit 07120001, in Porter Cemetery, 4.3 mi (6.9 km) northwest of Lakeville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 1.5 in (38 mm).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 770.58 ft (234.873 m) National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--Sept. 1975 to current year. Fragmentary record prior to May 1976 available in district files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 761.10 ft (231.983 m) National Geodetic Vertical Datum of 1929, Mar. 7, 1979; lowest, 755.30 ft (230.215 m) National Geodetic Vertical Datum of 1929, Aug. 25, 1976.

MEAN WATER LEVEL, IN FEET, NATIONAL GEODETIC VERTICAL DATUM OF 1929, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	759.02	------	759.89	759.90	759.55	759.66	760.28	759.92	759.65	759.01	------	------
10	759.12	------	759.81	759.71	759.53	759.90	760.58	759.77	759.68	758.98	758.86	------
15	759.03	------	759.76	759.76	759.50	759.74	760.58	759.70	759.45	758.82	759.16	------
20	759.07	------	759.67	759.87	759.49	760.09	760.37	759.82	759.33	------	759.39	759.55
25	------	------	760.11	759.75	760.01	760.07	760.12	759.63	759.20	------	------	759.51
EOM	------	759.91	760.04	759.62	759.81	760.11	760.07	759.48	759.06	------	------	759.35
MIN	758.74	759.89	759.66	759.62	759.48	759.64	760.05	759.44	759.03	758.79	758.74	759.34
MAX	759.21	759.92	760.14	760.03	760.04	760.15	760.59	760.05	759.81	759.05	759.48	759.58

WTR YR 1980 MAX 760.59 APR 9, 10, 14, 15 MIN 758.74 OCT 1, AUG 8, 9

ST. JOSEPH COUNTY

413257086211229. Local number, SJ 29.

LOCATION.--Lat 41°32'57", long 86°21'12", in NW¼NE¼NE¼ sec.25, T.36 N., R.1 E., St. Joseph County, Hydrologic Unit 07120001, in Porter Cemetery, 4.3 mi (6.9 km) northwest of Lakeville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 1.5 in (38 mm).
Instrumentation: Water-stage recorder.

DATUM.--Datum is 767.54 ft (233.946 m) National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--Sept. 1975 to current year. Fragmentary record prior to May 1976 available in district files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 762.02 ft (232.264 m) National Geodetic Vertical Datum of 1929, Apr. 9, 10, 1978; lowest, 754.31 ft (229.914 m) National Geodetic Vertical Datum of 1929, Oct. 1, 14, 15, 17, 18, Nov. 16, 20, 23, 1977.

MEAN WATER LEVEL, IN FEET, NATIONAL GEODETIC VERTICAL DATUM OF 1929, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	758.17	758.57	759.42	759.91	759.46	759.67	760.58	760.66	759.72	758.85	758.11	758.55
10	758.27	758.66	759.43	759.82	759.40	759.78	760.99	760.44	759.64	758.71	758.08	758.61
15	758.28	758.67	759.44	759.77	759.33	759.76	761.28	760.17	759.49	758.50	758.19	758.61
20	758.34	758.63	759.42	759.83	759.27	760.10	761.16	760.17	759.34	758.36	758.34	758.71
25	758.46	758.84	759.68	759.71	759.70	760.19	761.02	759.97	759.19	758.27	758.32	758.74
EOM	758.55	759.16	759.87	759.55	759.65	760.39	760.90	759.73	758.99	758.22	758.28	758.73
MIN	758.04	758.52	759.16	759.54	759.26	759.60	760.37	759.70	758.97	758.20	758.05	758.33
MAX	758.60	759.16	759.88	760.08	759.75	760.41	761.30	760.86	759.85	758.99	758.38	758.76

WTR YR 1980 MAX 761.30 APR 14, 15 MIN 758.04 OCT 1

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 observation 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, 6.42 ft (1.96 m) below land surface datum June 9, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5								----	6.70	7.42	8.43	8.55
10								----	6.44	7.63	8.51	8.49
15								6.72	6.51	7.81	8.54	8.52
20								6.87	6.79	8.01	8.53	8.38
25								7.03	6.99	8.18	8.57	8.21
EOM								7.27	7.21	8.32	8.62	8.11
MIN								7.32	7.32	8.35	8.64	8.63
MAX								6.71	6.42	7.25	8.35	8.11

WTR YR 1980 HIGH 6.42 JUN 9 LOW 8.64 AUG 31

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.--Altitude of land-surface datum is 818 ft (249 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.90 ft (4.85 m) below land-surface datum, May 27, 1968; lowest, 22.65 ft (6.91 m) below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.53	19.06	17.34	17.84	18.74	18.71	17.00	18.64	18.44	19.15	20.26	-----
10	19.68	19.00	17.98	18.28	18.93	17.66	17.41	18.84	18.49	19.39	20.17	20.00
15	19.82	18.89	18.35	17.86	19.04	17.87	17.20	19.14	18.76	19.64	19.71	20.17
20	19.85	19.23	18.63	17.92	19.20	17.23	17.42	17.95	19.07	19.89	18.16	20.25
25	19.87	17.32	17.02	17.98	18.28	16.87	17.96	18.13	19.19	19.89	-----	20.39
EOM	19.87	16.76	17.25	18.57	18.60	16.77	18.32	18.65	19.24	20.09	-----	20.49
MIN	19.95	19.89	18.71	18.59	19.26	18.81	18.44	19.20	19.41	20.19	20.39	20.56
MAX	19.41	16.72	16.86	17.39	18.28	16.77	16.73	17.94	18.43	19.15	18.16	19.93

WTR YR 1980 HIGH 16.72 NOV 29 LOW 20.56 SEP 27

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.99	5.69	4.95	4.88	5.17	4.99	3.96	4.62	4.34	5.33	6.05	5.44
10	6.05	5.58	5.00	5.00	5.23	4.43	3.46	4.75	4.60	5.41	6.08	5.58
15	6.10	5.59	5.03	5.04	5.26	4.60	3.47	4.84	4.83	5.56	5.72	5.68
20	6.03	5.67	5.13	4.84	5.31	4.13	4.00	4.82	4.96	5.73	5.82	5.30
25	5.85	5.11	4.48	4.93	4.79	4.08	4.36	4.93	5.10	5.87	5.98	5.42
EOM	5.84	4.93	4.72	5.11	4.96	3.95	4.47	5.07	5.23	5.90	5.81	5.54
MIN	6.11	5.83	5.14	5.14	5.32	5.14	4.53	5.11	5.25	5.94	6.13	5.86
MAX	5.80	4.88	4.48	4.75	4.77	3.95	3.46	4.53	4.17	5.25	5.65	5.19

WTR YR 1980 HIGH 3.46 APR 9, 10 LOW 6.13 AUG 8, 9

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, about 5.0 mi (8.0 km) southeast of Knox.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (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, 0.82 ft (0.25 m) below land surface datum, Oct. 11, 12, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.55	2.65	2.26	2.71	2.89	2.60	2.35	1.51	1.70	2.33	2.69	2.47
10	1.04	2.43	2.69	2.92	2.80	2.11	1.76	1.65	1.97	2.22	2.56	2.54
15	1.48	2.72	2.81	2.63	2.54	2.35	2.08	1.57	2.17	2.35	2.30	2.58
20	1.34	2.83	2.54	2.55	2.64	2.05	2.35	1.52	2.24	2.74	2.46	2.44
25	1.94	2.00	2.05	2.87	2.14	2.11	2.38	1.94	2.20	2.65	2.67	2.57
EOM	2.56	2.52	2.61	2.98	2.49	2.32	1.75	2.08	2.26	2.61	2.31	2.68
MIN	2.56	2.86	2.85	3.07	2.98	2.63	2.58	2.16	2.30	2.75	2.71	2.69
MAX	.82	1.93	2.05	2.34	1.84	1.87	1.75	1.48	1.27	2.22	2.16	2.13

WTR YR 1980 HIGH .82 OCT 11, 12 LOW 3.07 JAN 9, 10

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, 1.44 ft (0.44 m) below land-surface datum, Mar. 28, 1977; lowest, 3.40 ft (1.03 m) below land-surface datum, Sept. 11, 12, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	----	2.69	2.49	2.44	2.57	2.44	1.93	2.45	2.04	2.62	3.01	2.32
10	----	2.51	2.56	2.61	2.60	1.93	1.71	2.50	2.24	2.64	2.90	2.49
15	----	2.69	2.59	2.46	2.62	2.17	1.77	2.45	2.26	2.83	2.43	2.52
20	----	2.79	2.59	2.27	2.63	1.99	2.11	2.33	2.41	2.96	2.48	2.31
25	2.67	1.99	1.94	2.44	2.22	1.87	2.28	2.46	2.51	3.02	2.80	2.36
EOM	2.82	2.31	2.33	2.55	2.35	1.94	2.33	2.34	2.61	2.92	2.02	2.55
MIN	2.90	2.82	2.60	2.61	2.63	2.47	2.34	2.63	2.67	3.11	3.15	2.58
MAX	2.65	1.98	1.94	2.23	2.05	1.75	1.60	2.28	1.64	2.62	2.02	1.78

WTR YR 1980 HIGH 1.60 APR 8 LOW 3.15 AUG 7, 8

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) 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, 1.29 ft (0.39 m) below land-surface datum, Mar. 4, 1979; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.64	3.48	3.00	2.96	3.22	2.98	2.20	2.76	2.30	3.23	3.85	2.91
10	3.67	3.29	3.06	2.63	3.24	2.21	1.89	2.87	2.52	3.31	3.65	3.07
15	3.75	3.42	3.09	2.76	3.27	2.46	1.95	2.88	2.56	3.51	3.01	3.16
20	3.72	3.51	3.18	2.84	3.25	2.25	2.35	2.68	2.81	3.71	3.04	2.81
25	3.48	2.55	2.47	3.01	2.75	2.14	2.54	2.96	2.99	3.79	3.40	3.03
EOM	3.64	2.86	2.84	3.14	2.90	2.10	2.56	2.53	3.15	3.69	2.48	3.21
MIN	3.95	3.64	3.23	3.16	3.29	3.01	2.60	3.16	3.20	3.94	3.99	3.23
MAX	3.41	2.49	2.35	2.60	2.46	1.94	1.63	2.53	1.39	3.17	2.48	2.15

WTR YR 1980 HIGH 1.39 JUN 2 LOW 3.99 AUG 9

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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 60.60 ft (18.5 m) below land-surface datum, Aug. 31, Sept. 1, 8, 13-17, 20-22, 1980 lowest, 62.82 ft (19.1 m) below land-surface datum, Feb. 18-20, Mar. 1, 2, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	62.03	62.36	62.53	62.63	62.79	62.80	62.23	61.70	61.18	60.89	60.68	60.61
10	62.07	62.37	62.57	62.67	62.79	62.77	62.10	61.60	61.13	60.85	60.67	60.63
15	62.14	62.43	62.57	62.70	62.79	62.76	61.98	61.55	61.01	60.81	60.68	60.60
20	62.15	62.46	62.65	62.67	62.82	62.57	61.90	61.46	61.02	60.82	60.67	60.60
25	62.22	62.40	62.61	62.69	62.77	62.48	61.84	61.39	60.94	60.73	60.67	60.64
EOM	62.30	62.49	62.61	62.77	62.81	62.32	61.76	61.32	60.91	60.69	60.60	60.69
MIN	62.31	62.50	62.65	62.77	62.82	62.82	62.32	61.75	61.29	60.91	60.69	60.69
MAX	62.01	62.30	62.50	62.60	62.77	61.78	61.76	61.32	60.91	60.69	60.60	60.60

WTR YR 1980 HIGH 60.60 AUG 31 AND OTHERS LOW 62.82 FEB 18 AND OTHERS

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, 7.50 ft (2.29 m) above land-surface datum, Apr. 2, 1980; 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.82	16.67	14.16	12.08	18.32	16.95	9.84	21.10	8.45	-----	-----	-----
10	17.72	18.02	13.59	14.76	18.80	16.11	11.84	15.73	-----	-----	-----	19.08
15	17.97	20.21	14.17	14.57	21.42	13.04	14.44	14.54	-----	-----	-----	17.12
20	20.30	18.46	17.39	17.99	19.63	11.90	15.03	-----	-----	-----	-----	16.55
25	17.03	16.70	12.16	16.56	20.12	11.83	16.34	-----	-----	-----	-----	16.77
EOM	18.21	15.04	11.19	17.18	18.84	8.81	18.58	-----	-----	19.20	-----	18.25
MIN	26.24	25.60	23.49	24.62	26.04	23.41	23.88	25.40	15.59	22.76	28.60	25.62
MAX	16.87	12.97	10.76	10.62	16.32	8.34	7.50	13.34	8.45	19.20	14.10	15.47

WTR YR 1980 HIGH 7.50 APR 2 LOW 28.60 AUG 2

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.85		-----	18.89	20.93	20.89	13.95	19.48	12.18	19.44		-----
10	-----		20.45	20.24	21.15	16.91	14.63	20.27	15.37	20.86		22.62
15	-----		21.41	20.30	21.35	16.89	16.13	20.67	17.27	21.70		23.05
20	-----		21.39	20.46	21.53	14.25	16.21	19.91	17.78	22.81		22.47
25	-----		18.49	20.76	18.98	15.28	18.01	20.12	18.36	21.65		22.62
EOM	-----		17.79	21.60	19.51	14.76	18.80	21.15	18.91	21.02		22.89
MAX	26.13		23.31	23.21	23.47	22.78	20.94	23.32	22.14	25.12		24.75
MIN	23.76		17.46	18.08	18.98	14.19	13.95	18.90	12.18	19.07		22.25

WTR YR 1980 HIGH 12.18 JUN 5 LOW 26.13 OCT 1

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, 33.00 ft (10.06 m) below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.07	31.31	30.61	30.48	30.25	30.08	30.04	30.05	30.76	31.05	31.83	32.62
10	31.08	31.22	30.77	30.35	30.24	30.03	29.93	30.26	30.77	31.17	32.00	32.61
15	31.17	31.19	30.67	30.41	30.06	30.24	29.78	30.44	30.95	31.36	32.06	32.56
20	31.15	31.25	30.66	30.42	30.09	29.89	30.03	30.34	31.05	31.74	32.14	32.37
25	31.25	30.60	30.35	30.05	30.12	30.08	30.03	30.23	31.06	31.61	32.34	32.37
EOM	31.15	30.84	30.39	30.31	30.28	29.93	29.90	30.51	31.09	31.68	32.65	32.44
MIN	31.34	31.52	31.12	30.65	30.48	30.43	30.17	30.84	31.25	31.83	32.69	32.81
MAX	30.92	30.60	30.29	30.03	30.01	29.83	29.63	29.94	30.46	31.02	31.69	32.35

WTR YR 1980 HIGH 29.63 APR 14 LOW 32.81 SEP 4

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 Quaternary Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (152 mm), depth 138 ft (42 m), cased to 137 ft (41.7 m), with perforated pipe.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 511 ft (156 m). Measuring point: Top of floor of shelter 3.47 ft (1.06 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.43 ft (12.93 m) below land-surface datum, June 28, 1958; lowest, 52.25 ft (15.93 m) below land-surface datum, Nov. 15-25, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.08	46.58	47.61	47.15	47.07	47.79	46.62	45.20	46.28	46.11	46.90	47.60
10	45.31	46.79	47.59	47.08	47.20	47.74	46.18	45.26	46.30	46.13	47.14	47.69
15	45.52	46.99	47.50	47.04	47.36	47.64	45.85	45.37	46.20	46.21	47.32	47.80
20	45.72	47.09	47.38	47.03	47.44	47.52	45.52	45.57	46.06	46.34	47.42	47.84
25	45.93	47.22	47.29	47.03	47.65	47.33	45.31	45.82	45.96	46.51	47.47	47.91
EOM	46.21	47.37	47.22	47.04	47.71	47.04	45.19	46.11	45.98	46.71	47.53	48.01
MIN	46.33	47.44	47.61	47.22	47.78	47.79	47.04	46.14	46.30	46.74	47.53	48.02
MAX	44.89	46.33	47.22	47.03	47.04	47.04	45.19	45.19	45.96	45.99	46.74	47.54

WTR YR 1980 HIGH 44.89 OCT 1 LOW 48.02 SEP 30

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 Quaternary Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (152 mm), depth 70 ft (21 m), cased to 67 ft (20.4 m), screened to 70 ft (21 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 502 ft (153 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.80 ft (12.74 m) below land-surface datum, June 7, 1974; lowest, 51.90 ft (15.82 m) below land-surface datum, Sept. 29 to Oct. 1, 1972.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.42	47.04	46.84	46.34	46.69	47.01	45.09	44.46	45.59	44.83	46.40	47.01
10	46.57	47.09	46.70	46.19	46.85	46.96	44.72	44.66	45.22	44.99	46.56	47.14
15	46.68	47.08	46.64	46.25	47.02	46.81	44.42	44.91	44.70	45.28	46.73	47.29
20	46.80	47.11	46.67	46.36	47.16	46.42	44.25	45.13	44.55	45.59	46.86	-----
25	46.91	47.09	46.70	46.40	47.24	46.04	44.27	45.38	44.55	45.91	46.87	-----
EOM	46.96	47.05	46.56	46.55	47.18	45.51	44.31	45.55	44.66	46.21	46.93	-----
MIN	46.98	47.15	47.05	46.58	47.28	47.18	45.51	45.58	45.64	46.26	46.93	47.33
MAX	46.27	46.98	46.56	46.19	46.58	45.51	44.24	44.35	44.53	44.69	46.26	46.93

WTR YR 1980 HIGH 44.24 APR 22 LOW 47.33 SEP 16

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 140 ft (43 m).
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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 77.87 ft (23.7 m) below land-surface datum, June 25, 1979; lowest, 79.58 ft (24.3 m) below land-surface datum, Sep 27, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	79.15	79.21	78.82	79.03	78.88		-----	78.34	78.52	78.68	79.06	79.39
10	79.17	79.01	79.03	78.95	78.86		-----	78.27	78.47	78.72	79.06	79.46
15	79.29	79.06	79.06	78.98	78.69		-----	78.49	-----	78.87	79.14	79.44
20	79.16	79.20	79.14	79.07	78.65		-----	78.46	78.72	79.02	79.13	79.38
25	79.24	78.73	78.73	78.71	78.63		78.39	78.42	78.64	78.99	79.33	79.37
EOM	79.06	79.06	78.96	79.05	-----		78.29	78.51	78.63	78.98	79.31	79.40
MIN	79.46	79.39	79.39	79.26	79.15		78.39	78.59	78.72	79.05	79.43	79.58
MAX	79.03	78.73	78.69	78.60	78.58		78.25	78.27	78.38	78.65	78.95	79.25

WTR YR 1980 HIGH 78.25 APR 28 LOW 79.58 SEP 27

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 near the intersection of State Highway 1 and Bentonville Road, 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 3.25 ft (0.99 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.07 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.86	13.89	12.20	12.41	13.67	13.74	12.27	12.98		12.81	12.67	12.99
10	13.10	13.95	12.53	12.74	13.84	13.27	12.11	-----		11.66	12.70	13.27
15	13.33	14.00	12.83	12.84	14.02	13.28	12.17	-----		11.82	12.77	13.57
20	13.52	14.11	13.17	13.02	14.15	13.43	12.27	-----		12.24	12.28	13.85
25	13.69	13.64	12.69	13.22	13.75	12.61	12.48	-----		12.47	12.35	14.13
EOM	13.86	12.33	12.15	13.47	13.84	12.50	12.72	-----		12.40	12.69	14.40
MIN	13.88	14.16	13.28	13.49	14.17	13.98	12.74	13.08		13.07	12.88	14.43
MAX	12.67	12.33	12.14	12.19	13.51	12.50	12.11	12.77		11.60	12.24	12.76

WTR YR 1980 HIGH 12.11 APR 10 LOW 14.43 SEP 30

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, 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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.89	52.30	52.05	51.96	51.94	51.71	51.50	51.10	51.18	51.36	51.57	51.69
10	51.87	52.37	52.17	51.72	51.82	51.64	51.25	51.08	51.19	51.36	51.62	51.70
15	52.15	52.39	52.31	51.88	51.78	52.03	51.13	51.44	51.11	51.46	51.57	51.60
20	52.13	52.35	52.32	51.93	51.74	51.78	51.28	51.28	51.20	51.62	51.50	51.59
25	52.27	51.97	52.18	51.87	51.74	51.73	51.21	51.28	51.22	51.53	51.70	51.63
EOM	52.15	52.26	52.06	52.06	51.97	51.43	51.17	51.35	51.32	51.45	51.55	51.61
MIN	52.27	52.48	52.60	52.17	52.09	52.14	51.66	51.50	51.36	51.69	51.77	51.82
MAX	51.87	51.97	51.91	51.54	51.64	51.43	51.02	51.08	51.06	51.31	51.41	51.42

WTR YR 1980 HIGH 51.02 APR 14 LOW 52.60 DEC 2

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