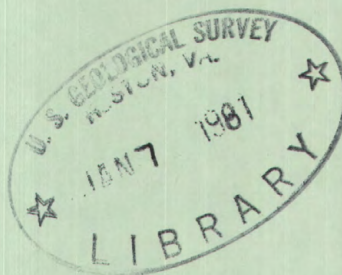


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1972  
pt. 1

# Water Resources Data for Ohio

## Part 1. Surface Water Records



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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



# CALENDAR FOR WATER YEAR 1972

## OCTOBER 1971

| 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 1971

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
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| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 |    |    |    |    |

## DECEMBER 1971

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
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| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 |    |

## JANUARY 1972

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
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| 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 |    |    |    |    |    |

## FEBRUARY 1972

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
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| 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 |    |    |    |    |

## MARCH 1972

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
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| 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 1972

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
|    |    |    |    |    |    | 1  |
| 2  | 3  | 4  | 5  | 6  | 7  | 8  |
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| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 |    |    |    |    |    |    |

## MAY 1972

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
|    | 1  | 2  | 3  | 4  | 5  | 6  |
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| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 |    |    |    |

## JUNE 1972

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

## JULY 1972

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
|    |    |    |    |    |    | 1  |
| 2  | 3  | 4  | 5  | 6  | 7  | 8  |
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| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 |    |    |    |    |    |

## AUGUST 1972

| 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 1972

| 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 |



1972

# **Water Resources Data for Ohio**

## **Part 1. Surface Water Records**



**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

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



Prepared in cooperation with  
Ohio Department of Highways  
Ohio Department of Natural Resources, Division of Water  
Miami Conservancy District  
City of Columbus, Department of Public Service  
Corps of Engineers, U. S. Army

Water resources records, 1972, for Ohio are in  
the following reports of the U.S. Geological Survey:

1. Water Resources Data for Ohio  
Part 1: Surface Water Records
2. Water Resources Data for Ohio  
Part 2: Water Quality Records

Copies of this report may be obtained from  
District Chief, Water Resources Division  
U.S. Geological Survey  
975 W. Third Avenue  
Columbus, Ohio 43212

1973



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# WATER RESOURCES DATA FOR OHIO, 1972

## PART 1. SURFACE-WATER RECORDS

---

### INTRODUCTION

Surface-water records for the 1972 water year for Ohio, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report and their locations shown in figure 1. Records for a few pertinent gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. J. Molloy, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

Through September 30, 1960, the records of discharge and stage of streams and canals and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States."

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir storage records for 1961-65 were also published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65."

### COOPERATION

The U.S. Geological Survey and organizations of the State of Ohio have had cooperative agreements for the systematic collection of surface-water records since 1898. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Ohio Department of Natural Resources, William B. Nye, director, and Roy Winkle, chief, Division of Water.

Ohio Department of Highways, J. Phillip Richley, director.

Miami Conservancy District, L. Bennett Coy, general manager and secretary.

City of Columbus, Department of Public Service, W. J. Cremean, director, succeeded by Richard D. Jackson.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 127 gaging stations published in this report, and by the Environmental Protection Agency, in collecting records for one gaging station published in this report. Assistance was also furnished by National Weather Service, NOAA, U.S. Department of Commerce.

The City of Canton furnished financial assistance in the collection of records for one gaging station published in this report.

### DEFINITION OF TERMS

Definition of terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

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 325,851 gallons.

CFS-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, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

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 (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 (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

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

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

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

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

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

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.

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

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

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

### SPECIAL NETWORKS AND PROGRAMS

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 man-made 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.



## DOWNSTREAM ORDER AND STATION NUMBERS

Records 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 list of gaging stations in the front of this report the rank of tributaries is indicated by indentation, each indentation representing one rank.

As an added means of identification, each gaging station and partial-record 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 continuous-record 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. Gaps are left in the 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 03156400, includes the part number "03" and a 6-digit station number. In this report, complete number 03156400 appears just to the left of the station name. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

## EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage and contents of 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 a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.)

For a stream-gaging station rating tables giving the discharge for any stage are prepared from stage-discharge relation curves de-

defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, 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), velocity-area studies, and logarithmic plotting. The application of the daily mean gage heights to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on 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 changes 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 determining discharge. Information required for determining 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 determining 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 being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

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

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 basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on 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 1972 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, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In reference to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" and all supplementary adjustments as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height (or elevation), the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height (or elevation) if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the



time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "m" that only the instantaneous minimum was revised; and "P" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with non-recording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The monthly summary for stream-gaging stations is given below the daily table. The line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" given 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 inches (line headed "IN."). Figures of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion.

For reservoir stations the monthly summary gives the elevation and contents at the end of the month and the change in contents during the month.

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.

For reservoir stations the yearly summary gives the change in contents for the calendar year and for the water year.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, 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 00300 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE" certain periods are indicated 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 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. Footnotes to reservoir tables may be used to explain the use of new capacity tables or for other special conditions.

#### ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is un-

stable, 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 is 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 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. 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, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

#### PUBLICATIONS

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for station in Ohio for the period October 1960 to September 1965 are in Water-Supply Papers 1907, 1908, and 1912.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1305(3A) and 1307(4), records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1725(3A) and 1727(4). These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the 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.

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

#### OTHER DATA AVAILABLE

Data collected at partial-record stations and at miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurement at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites. Occasionally, a series of discharge measurements are made within a short time period to determine the low-flow characteristics of an area. Such measurements are given in special tables following the tables of partial-record stations and miscellaneous sites.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in Ohio through 1967 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year. Ten of the longer records have been analyzed to give the lowest daily discharge not exceeded during selected numbers of consecutive days (deficiency tables). Discharge records for 50 stations have also been analyzed to provide the data for plotting flow-volume curves.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on the water temperature, and on the sediment. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

#### HYDROLOGIC CONDITIONS

Streamflow for the water year was near or slightly above average. Discharges were generally below normal during the first half of the year and above normal during the second half. Runoff was deficient in November in the Little Beaver Creek basin and in

February in the Great Miami River basin.

Streamflow was excessive in the Little Beaver Creek basin in March. During April a series of heavy thunderstorms caused moderate rises on many streams, and runoff for the month was excessive at all index stations. Locally intense thunderstorms caused flooding on small streams during April, June, and September. Streamflow was excessive at one or more of the index stations each of the last seven months of the year.

Figure 2, on page 12, for which three long-term representative gaging stations were used, shows a comparison of the monthly and yearly mean discharges during the 1972 water year with the monthly and yearly median discharges for the period 1931-60.

#### RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

Records of discharge not published by the Geological Survey were collected in Ohio at 24 sites during the water year 1972 by the following agencies: Records at 23 sites were collected by the National Weather Service; and by the Corps of Engineers, U.S. Army, at 1 site. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Washington, D. C., 20242, maintains an index of these sites. Information on records at specific sites can be obtained from that office upon request.

#### SELECTED REFERENCES

- Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.
- Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

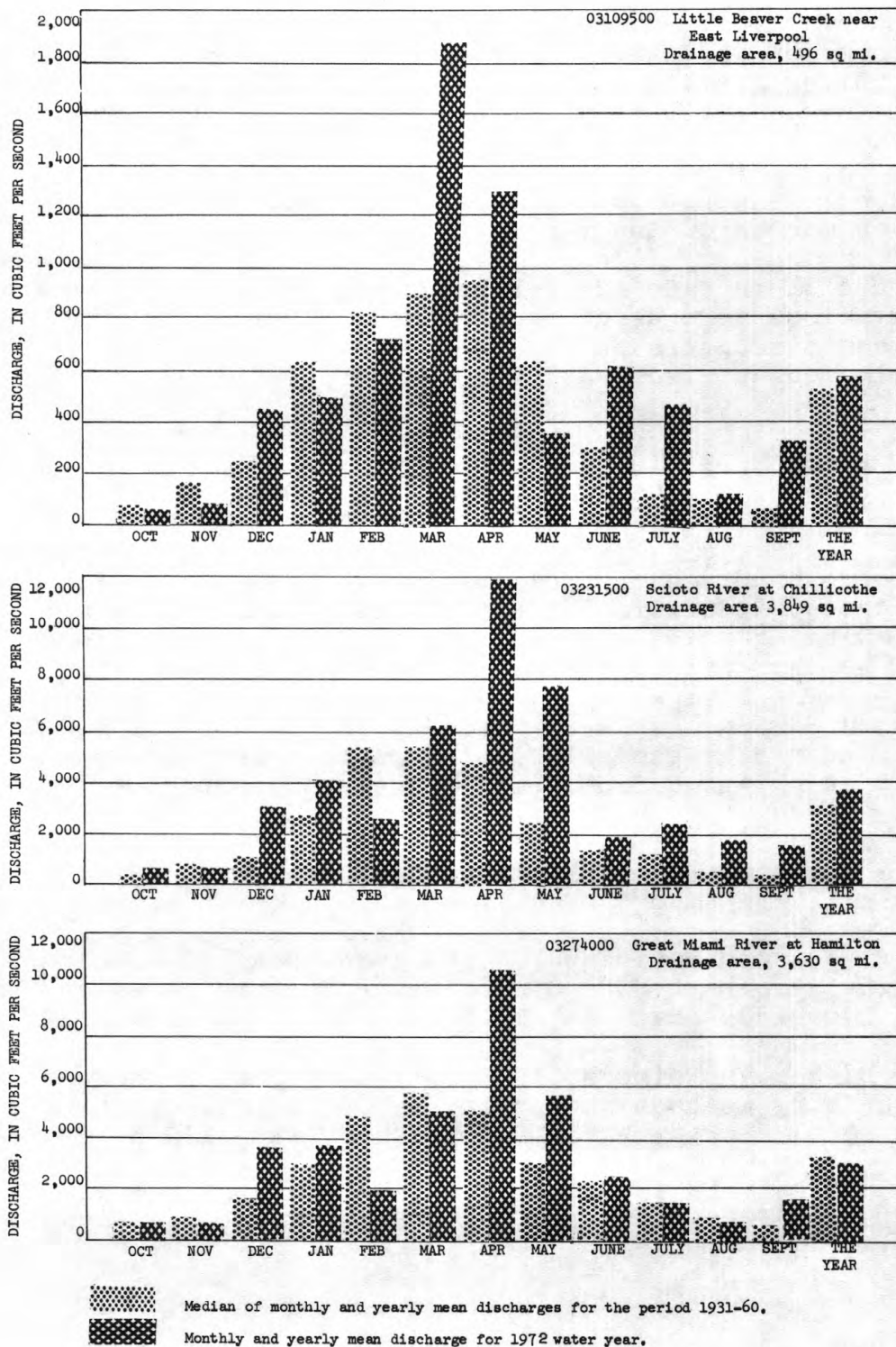


FIGURE 2.--RUNOFF DURING 1972 WATER YEAR COMPARED WITH MEDIAN RUNOFF  
FOR THE PERIOD 1931-60 FOR THREE REPRESENTATIVE GAGING STATIONS.



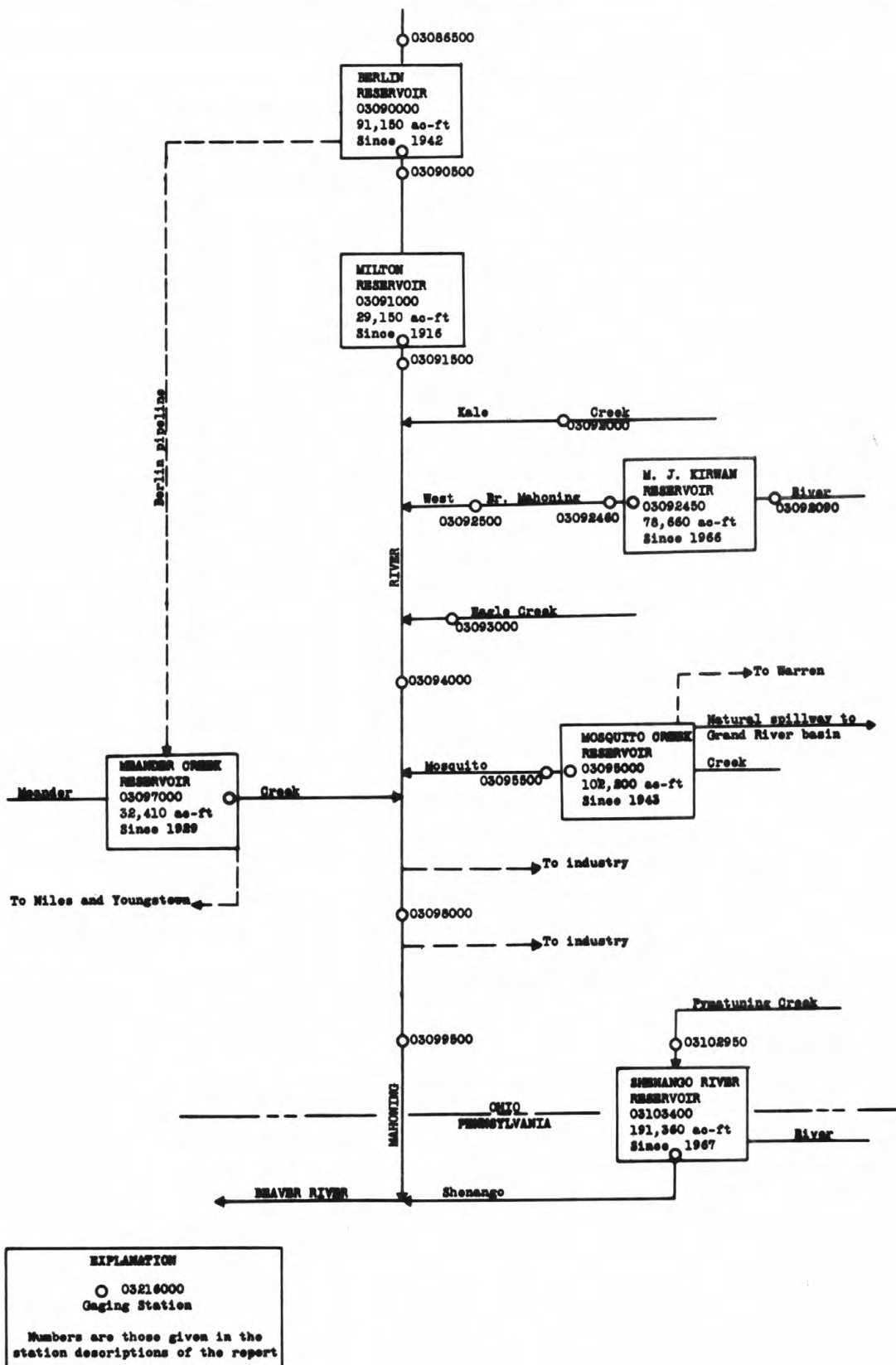


Figure 3.--Schematic diagram showing diversions and storage in the Beaver River basin in Ohio.

## SURFACE WATER RECORDS

## OHIO RIVER BASIN

## BEAVER RIVER BASIN

03086500 Mahoning River at Alliance, Ohio

LOCATION.--Lat 40°55'58", long 81°05'41", in SE 1/4 sec.24, T.19 N., R.6 W., Stark County, on right bank 15 ft upstream from Webb Avenue Bridge in Alliance, 0.2 mile upstream from waterworks dam, and 4 miles upstream from Beech Creek.

DRAINAGE AREA.--89.2 sq mi.

PERIOD OF RECORD.--August 1941 to current year.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 1,037.3 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--31 years, 79.6 cfs (12.12 inches per year) unadjusted for diversion 1941-55.

EXTREMES.--Current year: Maximum discharge, 1,240 cfs Apr. 17 (gage height, 3.71 ft); minimum, 6.1 cfs Nov. 2, 3; minimum gage height, 1.51 ft several days in August and September.

Period of record: Maximum discharge, 9,740 cfs Jan. 21, 1959 (gage height, 9.11 ft), from rating curve extended above 3,300 cfs on basis of computation of peak flow over dam; no flow at times.

REMARKS.--Records good. Flow slightly regulated by Westville Reservoir 9.3 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC     | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL     | AUG   | SEP     |
|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|---------|-------|---------|
| 1     | 22    | 9.7   | 26      | 220   | 20    | 407   | 69    | 57    | 26    | 24      | 9.3   | 7.9     |
| 2     | 20    | 9.7   | 16      | 130   | 22    | 690   | 69    | 86    | 31    | 20      | 9.3   | 7.9     |
| 3     | 20    | 7.2   | 11      | 153   | 34    | 656   | 69    | 253   | 24    | 166     | 9.3   | 53      |
| 4     | 20    | 8.4   | 11      | 107   | 39    | 314   | 66    | 145   | 20    | 196     | 9.3   | 29      |
| 5     | 20    | 8.4   | 9.7     | 122   | 42    | 179   | 66    | 93    | 16    | 111     | 7.9   | 14      |
| 6     | 20    | 9.7   | 57      | 92    | 37    | 110   | 63    | 69    | 14    | 157     | 7.9   | 11      |
| 7     | 24    | 9.7   | 201     | 64    | 34    | 137   | 145   | 57    | 12    | 73      | 9.3   | 11      |
| 8     | 22    | 11    | 210     | 54    | 30    | 482   | 134   | 53    | 12    | 50      | 9.3   | 11      |
| 9     | 26    | 11    | 92      | 51    | 28    | 309   | 100   | 141   | 14    | 47      | 9.3   | 9.3     |
| 10    | 24    | 11    | 71      | 92    | 26    | 145   | 93    | 166   | 16    | 50      | 7.9   | 11      |
| 11    | 22    | 11    | 61      | 107   | 24    | 118   | 79    | 93    | 14    | 53      | 6.7   | 11      |
| 12    | 22    | 11    | 34      | 82    | 26    | 179   | 63    | 66    | 11    | 34      | 6.7   | 20      |
| 13    | 24    | 11    | 26      | 71    | 39    | 724   | 196   | 50    | 16    | 44      | 7.9   | 57      |
| 14    | 24    | 11    | 34      | 114   | 75    | 934   | 205   | 53    | 20    | 157     | 7.9   | 464     |
| 15    | 22    | 11    | 175     | 61    | 118   | 703   | 335   | 53    | 34    | 122     | 6.7   | 696     |
| 16    | 22    | 11    | 162     | 40    | 175   | 458   | 560   | 47    | 122   | 273     | 6.7   | 179     |
| 17    | 20    | 11    | 82      | 30    | 134   | 597   | 1,040 | 47    | 69    | 215     | 24    | 69      |
| 18    | 18    | 11    | 54      | 28    | 122   | 390   | 452   | 44    | 34    | 79      | 18    | 330     |
| 19    | 18    | 18    | 39      | 39    | 96    | 205   | 183   | 29    | 22    | 47      | 16    | 379     |
| 20    | 18    | 16    | 42      | 37    | 61    | 141   | 357   | 29    | 20    | 166     | 12    | 107     |
| 21    | 18    | 20    | 48      | 39    | 71    | 122   | 523   | 24    | 18    | 53      | 9.3   | 60      |
| 22    | 18    | 22    | 39      | 39    | 134   | 215   | 268   | 22    | 22    | 31      | 7.9   | 41      |
| 23    | 16    | 18    | 31      | 92    | 103   | 298   | 224   | 22    | 111   | 24      | 7.9   | 34      |
| 24    | 18    | 16    | 31      | 153   | 85    | 170   | 145   | 20    | 162   | 20      | 9.3   | 31      |
| 25    | 20    | 18    | 31      | 118   | 75    | 130   | 104   | 20    | 149   | 16      | 7.9   | 29      |
| 26    | 18    | 18    | 31      | 57    | 114   | 104   | 79    | 18    | 111   | 14      | 36    | 31      |
| 27    | 9.7   | 20    | 37      | 45    | 96    | 93    | 63    | 16    | 63    | 14      | 22    | 31      |
| 28    | 9.7   | 26    | 57      | 30    | 137   | 83    | 57    | 14    | 39    | 12      | 12    | 31      |
| 29    | 9.7   | 37    | 68      | 26    | 273   | 76    | 50    | 12    | 29    | 11      | 9.3   | 29      |
| 30    | 9.7   | 48    | 210     | 24    | ----- | 79    | 47    | 22    | 29    | 9.3     | 9.3   | 83      |
| 31    | 9.7   | ----- | 505     | 22    | ----- | 73    | ----- | 16    | ----- | 9.3     | 9.3   | -----   |
| TOTAL | 594.5 | 460.8 | 2,501.7 | 2,339 | 2,270 | 9,321 | 5,904 | 1,837 | 1,280 | 2,297.6 | 341.6 | 2,877.1 |
| MEAN  | 18.9  | 15.4  | 80.7    | 75.5  | 78.3  | 301   | 197   | 59.3  | 42.7  | 74.1    | 11.0  | 95.9    |
| MAX   | 26    | 48    | 505     | 220   | 273   | 934   | 1,040 | 253   | 162   | 273     | 36    | 696     |
| MIN   | 9.7   | 7.2   | 9.7     | 22    | 20    | 73    | 47    | 12    | 11    | 9.3     | 6.7   | 7.9     |
| CFSM  | .21   | .17   | .90     | .85   | .88   | 3.37  | 2.21  | .66   | .48   | .83     | .12   | 1.08    |
| IN.   | .24   | .19   | 1.04    | .98   | .95   | 3.89  | 2.46  | .77   | .53   | .96     | .14   | 1.20    |

CAL YR 1971 TOTAL 24,781.8 MEAN 67.9 MAX 1,900 MIN 4.3 CFSM .76 IN 10.34  
WTR YR 1972 TOTAL 32,014.3 MEAN 87.5 MAX 1,040 MIN 6.7 CFSM .98 IN 13.35

## PEAK DISCHARGE (BASE, 900 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-13 | 2200 | 3.56  | 1,110     | 4-17 | 0700 | 3.71  | 1,240     |

## BEAVER RIVER BASIN

15

03090500 Mahoning River below Berlin Dam, near Berlin Center, Ohio

LOCATION.--Lat 41°02'54", long 81°00'05", in T.1 N., R.6 W., Mahoning County, on left bank 600 ft downstream from Berlin Dam and 3.2 miles northwest of Berlin Center.

DRAINAGE AREA.--248 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1942, published as "near Berlin Center".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 958.00 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1942, at site 1.8 miles upstream at datum 966.15 ft above mean sea level, adjustment of 1912 (levels by Mahoning Valley Sanitary District). Oct. 1, 1942, to May 11, 1949, at site 200 ft downstream from present site at datum 8.00 ft lower than present datum.

AVERAGE DISCHARGE.--42 years, 218 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 2,220 cfs Apr. 21 (gage height, 4.62 ft); minimum daily, 1.3 cfs July 27.

Period of record: Maximum discharge, 8,630 cfs Jan. 25, 1937 (gage height, 10.97 ft, site and datum then in use); no flow at times during 1948-49, 1967, 1970-71.

REMARKS.--Records good. Flow regulated since 1942 by Berlin Lake (see station 03090000). Small diversion since 1958 from Berlin Lake to Meander Creek Reservoir (see station 03097000) by the Berlin Pipeline. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Eleven discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 743: 1932. WSP 853: 1936. WSP 873: 1932-34, 1935(M), 1936-38. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC  | JAN  | FEB   | MAR    | APR    | MAY   | JUN   | JUL      | AUG   | SEP    |
|-------|------|-------|------|------|-------|--------|--------|-------|-------|----------|-------|--------|
| 1     | 74   | 23    | 22   | 24   | 26    | 224    | 215    | 26    | 220   | 113      | 444   | 207    |
| 2     | 38   | 23    | 22   | 24   | 25    | 376    | 215    | 27    | 211   | 113      | 444   | 220    |
| 3     | 23   | 23    | 22   | 24   | 25    | 710    | 215    | 30    | 199   | 113      | 444   | 220    |
| 4     | 23   | 23    | 22   | 24   | 25    | 1,040  | 175    | 113   | 199   | 113      | 448   | 220    |
| 5     | 23   | 23    | 22   | 24   | 26    | 1,030  | 143    | 215   | 203   | 113      | 448   | 220    |
| 6     | 23   | 23    | 23   | 24   | 26    | 1,000  | 143    | 215   | 187   | 228      | 346   | 220    |
| 7     | 24   | 23    | 24   | 24   | 26    | 702    | 143    | 215   | 195   | 310      | 251   | 215    |
| 8     | 23   | 23    | 23   | 24   | 26    | 406    | 143    | 215   | 195   | 310      | 251   | 215    |
| 9     | 23   | 23    | 23   | 24   | 26    | 412    | 143    | 220   | 195   | 182      | 251   | 215    |
| 10    | 24   | 23    | 22   | 25   | 26    | 478    | 143    | 215   | 195   | 5.7      | 251   | 215    |
| 11    | 24   | 23    | 22   | 25   | 26    | 532    | 143    | 295   | 165   | 14       | 256   | 215    |
| 12    | 24   | 23    | 23   | 25   | 26    | 532    | 143    | 376   | 52    | 220      | 256   | 260    |
| 13    | 24   | 23    | 23   | 25   | 26    | 558    | 147    | 346   | 147   | 430      | 256   | 310    |
| 14    | 24   | 23    | 23   | 25   | 26    | 590    | 147    | 316   | 143   | 448      | 256   | 310    |
| 15    | 24   | 23    | 24   | 25   | 26    | 614    | 155    | 270   | 147   | 364      | 256   | 316    |
| 16    | 24   | 23    | 23   | 25   | 26    | 622    | 151    | 224   | 147   | 334      | 256   | 328    |
| 17    | 24   | 23    | 23   | 25   | 26    | 638    | 285    | 224   | 147   | 624      | 256   | 346    |
| 18    | 24   | 23    | 23   | 25   | 26    | 638    | 1,060  | 224   | 151   | 910      | 256   | 346    |
| 19    | 24   | 23    | 23   | 25   | 26    | 934    | 1,940  | 147   | 120   | 1,060    | 215   | 454    |
| 20    | 24   | 23    | 23   | 25   | 26    | 1,220  | 1,010  | 69    | 93    | 1,040    | 143   | 646    |
| 21    | 24   | 22    | 23   | 25   | 26    | 1,050  | 1,290  | 100   | 109   | 1,040    | 195   | 726    |
| 22    | 24   | 22    | 23   | 25   | 27    | 902    | 1,910  | 175   | 117   | 1,020    | 300   | 662    |
| 23    | 24   | 23    | 23   | 25   | 26    | 902    | 1,700  | 220   | 117   | 1,000    | 251   | 590    |
| 24    | 24   | 23    | 23   | 25   | 26    | 804    | 1,820  | 220   | 117   | 934      | 199   | 590    |
| 25    | 24   | 23    | 23   | 25   | 38    | 742    | 1,770  | 220   | 117   | 554      | 199   | 590    |
| 26    | 24   | 22    | 23   | 26   | 87    | 598    | 1,450  | 220   | 117   | 3.7      | 199   | 582    |
| 27    | 23   | 22    | 23   | 26   | 171   | 442    | 1,160  | 220   | 113   | 1.3      | 199   | 582    |
| 28    | 23   | 22    | 23   | 25   | 207   | 300    | 646    | 220   | 113   | 189      | 199   | 582    |
| 29    | 23   | 22    | 23   | 26   | 211   | 300    | 54     | 220   | 113   | 444      | 199   | 582    |
| 30    | 23   | 22    | 28   | 26   | ----- | 295    | 27     | 220   | 113   | 444      | 199   | 582    |
| 31    | 23   | ----- | 24   | 26   | ----- | 251    | -----  | 224   | ----- | 444      | 199   | -----  |
| TOTAL | 799  | 683   | 714  | 771  | 1,336 | 19,932 | 18,686 | 6,241 | 4,457 | 13,118.7 | 8,322 | 11,766 |
| MEAN  | 25.8 | 22.8  | 23.0 | 24.9 | 46.1  | 643    | 623    | 201   | 149   | 423      | 268   | 392    |
| MAX   | 76   | 23    | 28   | 26   | 211   | 1,220  | 1,940  | 376   | 220   | 1,060    | 448   | 726    |
| MIN   | 23   | 22    | 22   | 24   | 25    | 224    | 27     | 26    | 52    | 1.3      | 143   | 207    |
| (+)   | 22.3 | 22.9  | 20.7 | 5.14 | 0     | 0      | 0      | 0     | 0     | 0        | 0     | 0      |

CAL YR 1971 TOTAL 69,321.50 MEAN 187 MAX 3,150 MIN 0 (+) 11.2  
 WTR YR 1972 TOTAL 86,825.70 MEAN 237 MAX 1,940 MIN 1.3 (+) 5.95

+ Mean diversion in cubic feet per second; furnished by Mahoning Valley Sanitary District.



## BEAVER RIVER BASIN

03091500 Mahoning River at Pricetown, Ohio

LOCATION.--Lat 41°07'53", long 80°58'17", in T.2 N., R.5 W., Mahoning County, on left bank 0.3 mile downstream from Milton Dam, 0.5 mile southwest of Pricetown, and 3 miles upstream from Kale Creek.

DRAINAGE AREA.--273 sq mi.

PERIOD OF RECORD.--July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 905.00 ft above mean sea level, adjustment of 1912. Prior to Aug. 14, 1929 nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 240 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 2,380 cfs Apr. 22 (gage height, 7.42 ft); minimum, 52 cfs Dec. 2. Period of record: Maximum discharge, 6,770 cfs Jan. 25, 1937 (gage height, 15.01 ft), from rating curve extended above 4,200 cfs on basis of velocity-area studies; minimum, 0.4 cfs Nov. 9, 10, 1941, Feb. 19-21, Oct. 10-21, 1945.

REMARKS.--Records good. Flow regulated by Berlin Lake beginning 1942 and Milton Reservoir (see stations 03090000 and 03091000). Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Twenty-two discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 728: 1930(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL    | AUG   | SEP    |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|--------|-------|--------|
| 1     | 62    | 100   | 60    | 54    | 59    | 62     | 284    | 261   | 199   | 138    | 421   | 197    |
| 2     | 62    | 100   | 56    | 54    | 59    | 64     | 284    | 62    | 182   | 138    | 421   | 197    |
| 3     | 62    | 100   | 53    | 53    | 60    | 63     | 284    | 63    | 174   | 139    | 421   | 197    |
| 4     | 62    | 100   | 53    | 54    | 59    | 63     | 189    | 217   | 172   | 138    | 420   | 197    |
| 5     | 62    | 100   | 53    | 54    | 59    | 63     | 136    | 367   | 172   | 142    | 371   | 197    |
| 6     | 62    | 102   | 54    | 54    | 59    | 64     | 136    | 370   | 169   | 140    | 319   | 197    |
| 7     | 62    | 102   | 55    | 54    | 59    | 372    | 136    | 370   | 167   | 140    | 315   | 197    |
| 8     | 62    | 100   | 53    | 54    | 58    | 613    | 136    | 272   | 167   | 181    | 301   | 197    |
| 9     | 62    | 100   | 53    | 54    | 58    | 610    | 136    | 197   | 167   | 226    | 301   | 197    |
| 10    | 62    | 100   | 53    | 54    | 58    | 746    | 136    | 199   | 165   | 239    | 264   | 194    |
| 11    | 62    | 100   | 53    | 54    | 58    | 892    | 136    | 202   | 165   | 237    | 215   | 194    |
| 12    | 62    | 100   | 53    | 53    | 58    | 884    | 136    | 275   | 165   | 294    | 212   | 220    |
| 13    | 104   | 100   | 53    | 53    | 58    | 791    | 142    | 331   | 163   | 333    | 212   | 293    |
| 14    | 127   | 100   | 53    | 53    | 59    | 603    | 167    | 331   | 149   | 334    | 212   | 298    |
| 15    | 125   | 100   | 54    | 55    | 59    | 602    | 199    | 334   | 149   | 334    | 212   | 301    |
| 16    | 125   | 102   | 53    | 62    | 59    | 716    | 192    | 334   | 149   | 487    | 212   | 316    |
| 17    | 125   | 100   | 53    | 62    | 59    | 890    | 403    | 346   | 149   | 743    | 212   | 319    |
| 18    | 125   | 100   | 53    | 63    | 59    | 951    | 928    | 355   | 151   | 1,090  | 212   | 385    |
| 19    | 125   | 100   | 54    | 62    | 58    | 1,150  | 1,190  | 194   | 151   | 1,200  | 212   | 497    |
| 20    | 125   | 100   | 53    | 62    | 58    | 1,140  | 1,190  | 86    | 151   | 1,200  | 212   | 525    |
| 21    | 127   | 102   | 53    | 62    | 58    | 1,150  | 1,090  | 153   | 150   | 1,210  | 212   | 644    |
| 22    | 127   | 100   | 53    | 62    | 58    | 1,150  | 2,150  | 217   | 151   | 1,210  | 212   | 728    |
| 23    | 127   | 93    | 53    | 62    | 58    | 1,140  | 1,860  | 209   | 151   | 1,200  | 212   | 728    |
| 24    | 127   | 86    | 53    | 62    | 58    | 1,140  | 1,870  | 204   | 149   | 1,090  | 212   | 728    |
| 25    | 127   | 86    | 53    | 62    | 58    | 801    | 1,830  | 207   | 135   | 738    | 212   | 724    |
| 26    | 125   | 86    | 53    | 61    | 58    | 586    | 1,690  | 204   | 135   | 460    | 212   | 724    |
| 27    | 109   | 86    | 53    | 60    | 58    | 398    | 1,290  | 212   | 135   | 322    | 212   | 720    |
| 28    | 100   | 86    | 53    | 59    | 59    | 281    | 1,180  | 215   | 136   | 319    | 212   | 716    |
| 29    | 100   | 86    | 53    | 59    | 60    | 283    | 974    | 212   | 137   | 378    | 207   | 716    |
| 30    | 100   | 69    | 58    | 59    | ----- | 284    | 684    | 209   | 138   | 421    | 197   | 712    |
| 31    | 100   | ----- | 54    | 59    | ----- | 284    | -----  | 204   | ----- | 421    | 197   | -----  |
| TOTAL | 2,994 | 2,886 | 1,664 | 1,785 | 1,698 | 18,836 | 21,158 | 7,412 | 4,693 | 15,642 | 7,974 | 12,455 |
| MEAN  | 96.6  | 96.2  | 53.7  | 57.6  | 58.6  | 608    | 705    | 239   | 156   | 505    | 257   | 415    |
| MAX   | 127   | 102   | 60    | 63    | 60    | 1,150  | 2,150  | 370   | 199   | 1,210  | 421   | 728    |
| MIN   | 62    | 69    | 53    | 53    | 58    | 62     | 136    | 62    | 135   | 138    | 197   | 194    |

CAL YR 1971 TOTAL 74,167 MEAN 203 MAX 2,650 MIN 24  
WTR YR 1972 TOTAL 99,197 MEAN 271 MAX 2,150 MIN 53

03092000 Kale Creek near Pricetown, Ohio

LOCATION.--Lat 41°08'23", long 80°59'43", in T.3 N., R.5 W., Trumbull County, on right bank at downstream side of county line road bridge, 0.4 mile north of Mahoning-Trumbull County line, 1.5 miles northwest of Pricetown, 2.2 miles upstream from mouth, and 3.5 miles south of Newton Falls.

DRAINAGE AREA.--21.9 sq mi.

PERIOD OF RECORD.--October 1940 to current year. Prior to June 1941 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 914.70 ft above mean sea level, adjustment of 1912. Prior to June 27, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 20.8 cfs (12.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,780 cfs Apr. 15 (gage height, 6.50 ft); minimum, 0.13 cfs Sept. 10, 11, 12.

Period of record: Maximum discharge, 3,890 cfs Jan. 21, 1959 (gage height, 8.52 ft); no flow at times in 1952-55, 1962-66.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 973: 1942. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC     | JAN    | FEB    | MAR     | APR     | MAY   | JUN   | JUL      | AUG   | SEP   |
|-------|------|-------|---------|--------|--------|---------|---------|-------|-------|----------|-------|-------|
| 1     | 2.6  | 1.2   | 12      | 40     | .88    | 220     | 3.9     | 3.9   | 4.9   | 5.2      | .66   | .21   |
| 2     | 1.6  | 1.1   | 6.2     | 23     | .96    | 361     | 3.9     | 6.2   | 4.4   | 3.2      | .59   | .19   |
| 3     | 2.0  | 1.0   | 3.5     | 26     | 1.3    | 136     | 4.7     | 35    | 3.9   | 33       | .59   | .19   |
| 4     | 2.5  | .88   | 2.3     | 23     | 2.8    | 66      | 5.2     | 29    | 3.3   | 125      | .53   | .17   |
| 5     | 2.3  | .81   | 1.8     | 35     | 3.3    | 34      | 5.7     | 14    | 2.3   | 63       | .47   | .15   |
| 6     | 2.3  | .70   | 23      | 22     | 2.8    | 18      | 4.9     | 8.8   | 1.9   | 191      | .41   | .17   |
| 7     | 3.0  | .70   | 177     | 9.5    | 2.5    | 40      | 12      | 6.2   | 1.5   | 34       | .44   | .15   |
| 8     | 3.2  | .66   | 188     | 5.2    | 2.0    | 263     | 18      | 6.6   | 1.2   | 12       | .53   | .17   |
| 9     | 3.7  | .62   | 38      | 4.9    | 1.8    | 54      | 9.9     | 90    | 1.2   | 7.5      | .53   | .15   |
| 10    | 5.7  | .59   | 17      | 21     | 1.6    | 26      | 8.1     | 82    | 1.2   | 17       | .47   | .15   |
| 11    | 6.6  | .53   | 12      | 35     | 1.5    | 23      | 6.2     | 24    | 1.1   | 47       | .44   | .13   |
| 12    | 5.2  | .50   | 8.5     | 18     | 1.5    | 30      | 3.7     | 12    | 1.1   | 11       | .41   | .17   |
| 13    | 4.2  | .47   | 4.7     | 10     | 2.2    | 300     | 277     | 7.8   | 1.6   | 7.9      | .41   | .51   |
| 14    | 3.9  | .47   | 7.6     | 7.8    | 6.6    | 385     | 108     | 7.5   | 2.0   | 78       | .41   | 3.3   |
| 15    | 3.9  | .41   | 190     | 4.9    | 38     | 129     | 992     | 11    | 2.6   | 21       | .38   | 4.4   |
| 16    | 3.7  | .38   | 110     | 2.5    | 70     | 95      | 278     | 9.9   | 5.7   | 625      | .35   | 1.8   |
| 17    | 3.3  | .41   | 24      | 1.3    | 44     | 202     | 190     | 8.8   | 9.9   | 336      | .38   | .75   |
| 18    | 3.0  | .38   | 12      | 1.0    | 27     | 54      | 48      | 7.5   | 4.2   | 29       | .47   | 2.9   |
| 19    | 2.6  | .44   | 7.2     | 1.8    | 19     | 25      | 22      | 6.2   | 2.6   | 8.8      | .47   | 2.0   |
| 20    | 2.3  | .47   | 7.5     | 2.5    | 13     | 14      | 292     | 4.7   | 2.0   | 4.4      | .41   | 1.0   |
| 21    | 2.2  | .53   | 22      | 3.3    | 11     | 9.5     | 132     | 3.7   | 1.9   | 2.6      | .38   | .59   |
| 22    | 2.2  | .53   | 15      | 3.9    | 30     | 54      | 158     | 3.0   | 2.6   | 1.9      | .35   | .41   |
| 23    | 2.2  | .81   | 6.6     | 13     | 33     | 75      | 98      | 2.3   | 16    | 1.5      | .41   | .35   |
| 24    | 2.0  | .88   | 4.4     | 27     | 14     | 27      | 30      | 1.8   | 60    | 1.2      | .44   | .41   |
| 25    | 2.3  | .88   | 3.9     | 21     | 9.2    | 18      | 16      | 1.5   | 40    | 1.0      | .30   | .47   |
| 26    | 2.3  | .81   | 3.7     | 12     | 17     | 11      | 9.9     | 1.2   | 32    | .96      | .33   | 1.1   |
| 27    | 2.2  | .88   | 6.0     | 3.7    | 19     | 9.5     | 6.9     | 1.0   | 13    | .88      | .41   | 4.3   |
| 28    | 1.8  | 1.3   | 14      | 2.0    | 32     | 5.7     | 4.7     | 1.0   | 5.7   | .88      | .38   | 3.2   |
| 29    | 1.6  | 1.3   | 17      | 1.4    | 141    | 4.4     | 3.9     | 1.0   | 3.7   | .81      | .33   | 1.1   |
| 30    | 1.4  | .81   | 326     | 1.1    | -----  | 4.9     | 3.5     | 1.2   | 6.6   | .70      | .25   | 3.4   |
| 31    | 1.4  | ----- | 303     | .96    | -----  | 5.4     | -----   | 3.3   | ----- | .66      | .23   | ----- |
| TOTAL | 99.2 | 28.74 | 1,573.9 | 383.76 | 548.94 | 2,699.4 | 2,756.1 | 402.1 | 240.1 | 1,672.09 | 13.16 | 33.99 |
| MEAN  | 2.88 | .96   | 50.8    | 12.4   | 18.9   | 87.1    | 91.9    | 13.0  | 8.00  | 53.9     | .42   | 1.13  |
| MAX   | 6.6  | 8.1   | 326     | 40     | 141    | 385     | 992     | 90    | 60    | 625      | .66   | 4.4   |
| MIN   | 1.4  | .38   | 1.8     | .96    | .88    | 4.4     | 3.5     | 1.0   | 1.1   | .66      | .23   | .13   |
| CFSM  | .13  | .04   | 2.32    | .57    | .86    | 3.98    | 4.20    | .59   | .37   | 2.46     | .02   | .05   |
| IN.   | .15  | .05   | 2.67    | .65    | .93    | 4.59    | 4.68    | .68   | .41   | 2.84     | .02   | .06   |

CAL YR 1971 TOTAL 7,261.31 MEAN 19.9 MAX 592 MIN .30 CFSM .91 IN 12.33  
 WTR YR 1972 TOTAL 10,441.48 MEAN 28.5 MAX 992 MIN .13 CFSM 1.30 IN 17.74

## PEAK DISCHARGE (BASE, 500 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 2330 | 5.28  | 902       | 4-15 | 1130 | 6.50  | 1,780     |
| 3-13  | 2100 | 4.83  | 672       | 4-20 | 1900 | 4.54  | 584       |
| 4-13  | 1900 | 4.49  | 542       | 7-16 | 2000 | 6.16  | 1,510     |

## BEAVER RIVER BASIN

03092090 West Branch Mahoning River near Ravenna, Ohio

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 W., Portage County, on left bank at downstream side of bridge on Newton Falls Road, 2.5 miles east of Ravenna.

DRAINAGE AREA.--21.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,011.8 ft above mean sea level (Portage County bench mark).

AVERAGE DISCHARGE.--7 years, 24.2 cfs (15.08 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,090 cfs Apr. 15 (gage height, 8.81 ft); minimum, 0.45 cfs Sept. 11.

Period of record: Maximum discharge, 2,090 cfs Apr. 15, 1972 (gage height, 8.81 ft); minimum, 0.45 cfs Sept. 11, 1972.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG  | SEP    |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------|
| 1     | 17    | 2.7   | 57    | 45    | 5.6   | 250   | 17    | 31    | 10    | 12    | 1.5  | .99    |
| 2     | 9.9   | 3.6   | 29    | 34    | 6.2   | 346   | 21    | 47    | 17    | 6.2   | 1.4  | .99    |
| 3     | 6.9   | 3.8   | 20    | 31    | 11    | 100   | 20    | 58    | 11    | 37    | 1.5  | 1.1    |
| 4     | 5.6   | 4.0   | 16    | 31    | 16    | 48    | 20    | 32    | 6.2   | 23    | 1.6  | .99    |
| 5     | 4.6   | 3.6   | 15    | 35    | 14    | 30    | 18    | 24    | 4.3   | 30    | 1.3  | .99    |
| 6     | 3.8   | 3.6   | 250   | 22    | 10    | 22    | 15    | 18    | 3.4   | 38    | 1.3  | .99    |
| 7     | 7.2   | 5.0   | 422   | 17    | 8.4   | 47    | 23    | 15    | 3.0   | 18    | 1.5  | .86    |
| 8     | 9.5   | 5.0   | 208   | 14    | 7.7   | 175   | 19    | 22    | 2.3   | 12    | 1.9  | .99    |
| 9     | 16    | 4.6   | 61    | 18    | 7.2   | 42    | 17    | 176   | 2.7   | 9.5   | 2.3  | .99    |
| 10    | 59    | 5.0   | 41    | 54    | 6.7   | 27    | 17    | 69    | 3.4   | 12    | 2.3  | .86    |
| 11    | 23    | 5.0   | 38    | 49    | 6.5   | 25    | 15    | 32    | 3.8   | 8.7   | 1.9  | .73    |
| 12    | 13    | 5.0   | 26    | 29    | 7.0   | 37    | 12    | 22    | 2.3   | 5.9   | 1.6  | 1.4    |
| 13    | 9.1   | 4.3   | 20    | 23    | 15    | 236   | 48    | 17    | 5.9   | 3.6   | 1.5  | 4.6    |
| 14    | 6.9   | 3.8   | 53    | 20    | 25    | 268   | 32    | 24    | 6.6   | 3.2   | 1.2  | 20     |
| 15    | 5.6   | 4.6   | 283   | 14    | 37    | 105   | 1,020 | 28    | 5.9   | 4.3   | 1.4  | 12     |
| 16    | 4.3   | 4.6   | 106   | 8.0   | 42    | 119   | 263   | 56    | 17    | 22    | 1.3  | 4.3    |
| 17    | 3.8   | 4.6   | 40    | 6.9   | 32    | 136   | 139   | 35    | 7.2   | 17    | 4.3  | 2.3    |
| 18    | 3.4   | 4.0   | 26    | 7.6   | 25    | 54    | 55    | 26    | 3.6   | 8.0   | 2.7  | 29     |
| 19    | 3.2   | 5.6   | 22    | 16    | 22    | 32    | 40    | 19    | 2.7   | 4.6   | 3.2  | 23     |
| 20    | 3.0   | 7.2   | 32    | 17    | 18    | 24    | 172   | 14    | 2.5   | 3.4   | 2.5  | 7.6    |
| 21    | 3.0   | 11    | 53    | 19    | 16    | 22    | 73    | 12    | 3.0   | 2.3   | 2.3  | 5.0    |
| 22    | 3.2   | 17    | 31    | 18    | 33    | 123   | 156   | 9.5   | 4.3   | 1.9   | 1.5  | 3.0    |
| 23    | 3.4   | 17    | 19    | 32    | 28    | 78    | 70    | 7.6   | 29    | 1.6   | 1.8  | 2.7    |
| 24    | 4.0   | 16    | 18    | 28    | 18    | 40    | 41    | 5.9   | 32    | 2.1   | 1.9  | 3.0    |
| 25    | 5.0   | 17    | 17    | 23    | 16    | 36    | 32    | 4.3   | 39    | 1.8   | 1.5  | 3.2    |
| 26    | 5.3   | 19    | 20    | 15    | 18    | 29    | 26    | 3.2   | 28    | 1.8   | 1.8  | 29     |
| 27    | 4.6   | 25    | 26    | 8.7   | 17    | 23    | 21    | 2.7   | 15    | 2.7   | 1.5  | 39     |
| 28    | 4.0   | 48    | 37    | 7.6   | 23    | 19    | 18    | 2.3   | 8.7   | 2.3   | 1.6  | 17     |
| 29    | 3.6   | 66    | 26    | 6.9   | 128   | 17    | 16    | 2.3   | 11    | 1.6   | 1.4  | 11     |
| 30    | 3.4   | 167   | 346   | 6.2   | ----- | 22    | 14    | 5.9   | 26    | 1.6   | 1.3  | 199    |
| 31    | 3.2   | ----- | 155   | 5.6   | ----- | 18    | ----- | 16    | ----- | 1.4   | 1.1  | -----  |
| TOTAL | 257.5 | 492.6 | 2,513 | 661.5 | 619.3 | 2,550 | 2,450 | 836.7 | 316.8 | 299.5 | 55.9 | 426.58 |
| MEAN  | 8.31  | 16.4  | 81.1  | 21.3  | 21.4  | 82.3  | 81.7  | 27.0  | 10.6  | 9.66  | 1.80 | 14.2   |
| MAX   | 59    | 167   | 422   | 54    | 128   | 346   | 1,020 | 176   | 39    | 38    | 4.3  | 199    |
| MIN   | 3.0   | 2.7   | 15    | 5.6   | 5.6   | 17    | 12    | 2.3   | 2.3   | 1.4   | 1.1  | .73    |
| CFSM  | .38   | .75   | 3.72  | .98   | .98   | 3.78  | 3.75  | 1.24  | .49   | .44   | .08  | .65    |
| IN.   | .44   | .84   | 4.29  | 1.13  | 1.06  | 4.35  | 4.18  | 1.43  | .54   | .51   | .10  | .73    |

CAL YR 1971 TOTAL 9,848.30 MEAN 27.0 MAX 422 MIN .86 CFSM 1.24 IN 16.81  
WTR YR 1972 TOTAL 11,479.38 MEAN 31.4 MAX 1,020 MIN .73 CFSM 1.44 IN 19.59

## PEAK DISCHARGE (BASE, 450 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-6  | 2330 | 5.54  | 505       | 3-2  | 0200 | 5.57  | 512       |
| 12-7  | 1700 | 5.60  | 520       | 4-15 | 1000 | 8.81  | 2,090     |
| 12-30 | 1430 | 6.04  | 642       |      |      |       |           |



## BEAVER RIVER BASIN

19

03092460 West Branch Mahoning River below Michael J. Kirwan Dam, at Wayland, Ohio

LOCATION.--Lat 41°09'25", long 81°04'19", in T.3 N., R.6 W., Portage County, on right bank 200 ft upstream from bridge on Wayland Road, 0.4 mile downstream from Michael J. Kirwan Dam, and 0.2 mile south of Wayland.

DRAINAGE AREA.--81.7 sq mi.

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1969 published as West Branch Mahoning River below West Branch Dam, at Wayland.

GAGE.--Water-stage recorder. Datum of gage is 926.44 ft above mean sea level, levels by Corps of Engineers. Prior to October 1971 at datum 0.89 ft higher.

EXTREMES.--Current year: Maximum discharge, 994 cfs Apr. 20 (gage height, 10.30 ft); minimum, 1.5 cfs July 13. Period of record: Maximum discharge, 1,380 cfs Feb. 25, 1971 (gage height, 11.82 ft present datum); minimum, 1.3 cfs Apr. 9, 1969.

REMARKS.--Records good. Flow completely regulated by Michael J. Kirwan Reservoir (see station 03092450). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Fifteen discharge measurements furnished by Corps of Engineers.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN  | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG   | SEP   |
|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|
| 1     | 129   | 21    | 19    | 22   | 72    | 23    | 22    | 184   | 63    | 87   | 16    | 94    |
| 2     | 129   | 22    | 19    | 22   | 72    | 25    | 22    | 144   | 62    | 87   | 15    | 94    |
| 3     | 131   | 22    | 19    | 22   | 72    | 21    | 22    | 146   | 62    | 87   | 15    | 94    |
| 4     | 131   | 22    | 18    | 22   | 72    | 20    | 22    | 111   | 62    | 61   | 15    | 93    |
| 5     | 133   | 21    | 18    | 22   | 72    | 20    | 22    | 64    | 62    | 52   | 15    | 93    |
| 6     | 134   | 21    | 28    | 21   | 53    | 19    | 22    | 45    | 68    | 41   | 15    | 92    |
| 7     | 134   | 21    | 38    | 20   | 35    | 22    | 23    | 45    | 79    | 30   | 22    | 92    |
| 8     | 125   | 21    | 23    | 20   | 37    | 23    | 22    | 46    | 79    | 30   | 36    | 92    |
| 9     | 119   | 21    | 102   | 20   | 48    | 20    | 22    | 97    | 79    | 30   | 37    | 92    |
| 10    | 94    | 20    | 190   | 20   | 70    | 20    | 22    | 146   | 79    | 30   | 43    | 92    |
| 11    | 45    | 20    | 289   | 18   | 70    | 20    | 22    | 144   | 79    | 30   | 72    | 92    |
| 12    | 21    | 20    | 380   | 18   | 70    | 20    | 22    | 144   | 90    | 30   | 95    | 93    |
| 13    | 21    | 19    | 378   | 18   | 72    | 33    | 27    | 144   | 102   | 17   | 95    | 75    |
| 14    | 21    | 19    | 386   | 18   | 50    | 25    | 88    | 143   | 102   | 16   | 96    | 58    |
| 15    | 21    | 19    | 407   | 18   | 22    | 20    | 255   | 143   | 102   | 16   | 96    | 56    |
| 16    | 21    | 19    | 444   | 21   | 20    | 56    | 167   | 98    | 91    | 21   | 96    | 47    |
| 17    | 21    | 19    | 502   | 20   | 20    | 81    | 292   | 45    | 83    | 17   | 96    | 38    |
| 18    | 20    | 19    | 498   | 18   | 20    | 107   | 733   | 45    | 83    | 16   | 96    | 39    |
| 19    | 21    | 20    | 493   | 17   | 19    | 171   | 967   | 45    | 91    | 16   | 96    | 25    |
| 20    | 21    | 20    | 439   | 17   | 19    | 193   | 630   | 44    | 95    | 16   | 96    | 16    |
| 21    | 22    | 20    | 324   | 17   | 19    | 193   | 460   | 52    | 88    | 16   | 96    | 16    |
| 22    | 21    | 20    | 211   | 16   | 20    | 201   | 651   | 62    | 78    | 16   | 96    | 16    |
| 23    | 22    | 20    | 103   | 17   | 19    | 285   | 690   | 62    | 59    | 16   | 96    | 16    |
| 24    | 22    | 20    | 72    | 17   | 19    | 395   | 960   | 62    | 31    | 16   | 96    | 17    |
| 25    | 23    | 20    | 50    | 21   | 19    | 402   | 947   | 62    | 31    | 16   | 96    | 17    |
| 26    | 22    | 20    | 23    | 25   | 19    | 297   | 859   | 72    | 31    | 16   | 96    | 18    |
| 27    | 20    | 21    | 23    | 18   | 19    | 188   | 635   | 82    | 30    | 16   | 95    | 17    |
| 28    | 20    | 20    | 23    | 17   | 21    | 167   | 373   | 82    | 54    | 16   | 95    | 17    |
| 29    | 21    | 21    | 22    | 17   | 21    | 110   | 237   | 82    | 89    | 16   | 95    | 17    |
| 30    | 20    | 22    | 51    | 47   | ----- | 50    | 227   | 82    | 89    | 16   | 95    | 22    |
| 31    | 21    | ----- | 24    | 74   | ----- | 22    | ----- | 72    | ----- | 16   | 95    | ----- |
| TOTAL | 1,726 | 610   | 5,616 | 680  | 1,161 | 3,249 | 9,463 | 2,795 | 2,193 | 906  | 2,214 | 1,640 |
| MEAN  | 55.7  | 20.3  | 181   | 21.9 | 40.0  | 105   | 315   | 90.2  | 73.1  | 29.2 | 71.4  | 54.7  |
| MAX   | 134   | 22    | 502   | 74   | 72    | 402   | 967   | 194   | 102   | 87   | 96    | 94    |
| MIN   | 20    | 19    | 18    | 16   | 19    | 19    | 22    | 44    | 30    | 16   | 15    | 16    |

CAL YR 1971 TOTAL 34,289 MEAN 93.9 MAX 1,120 MIN 14  
WTR YR 1972 TOTAL 32,253 MEAN 88.1 MAX 967 MIN 15

## BEAVER RIVER BASIN

03092500 West Branch Mahoning River near Newton Falls, Ohio

LOCATION.--Lat 41°10'18", long 81°01'16", in T.3 N., R.6 W., Trumbull County, on right bank 250 ft downstream from bridge on Newton Falls Road, 2.5 miles southwest of Newton Falls, 6 miles upstream from mouth, and 5 miles downstream from Michael J. Kirwan Dam.

DRAINAGE AREA.--96.3 sq mi.

PERIOD OF RECORD.--June 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is 912.2 ft above mean sea level (Corps of Engineers bench mark). Prior to Aug. 30, 1929, nonrecording gage at site 75 ft upstream at same datum.

AVERAGE DISCHARGE.--46 years, 94.4 cfs.

EXTREMES.--Current year: Maximum discharge, 1,480 cfs Apr. 15 (gage height, 8.02 ft); minimum, 6.7 cfs Jan. 25, 26.

Period of record: Maximum discharge, 8,340 cfs Jan. 22, 1959 (gage height, 13.60 ft); minimum, 2.1 cfs Sept. 20, 1964.

REMARKS.--Records good. Flow regulated by Michael J. Kirwan Reservoir (see station 03092450) since December 1966. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 973: 1926-30, 1933, 1934(M), 1936-38, 1939(M), 1940. WSP 1385: 1929(M), 1945. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECCND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | CCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1     | 142   | 21    | 39    | 55    | 83    | 109   | 29     | 191   | 66    | 93    | 20    | 96    |
| 2     | 140   | 21    | 29    | 46    | 80    | 165   | 30     | 151   | 67    | 88    | 20    | 96    |
| 3     | 140   | 23    | 25    | 48    | 81    | 80    | 30     | 166   | 65    | 147   | 20    | 96    |
| 4     | 140   | 22    | 23    | 45    | 84    | 49    | 31     | 141   | 63    | 110   | 20    | 96    |
| 5     | 140   | 21    | 23    | 51    | 90    | 37    | 30     | 85    | 62    | 88    | 20    | 96    |
| 6     | 140   | 21    | 75    | 38    | 76    | 32    | 29     | 52    | 63    | 118   | 20    | 95    |
| 7     | 142   | 21    | 230   | 31    | 48    | 50    | 37     | 49    | 79    | 49    | 21    | 95    |
| 8     | 138   | 21    | 184   | 29    | 50    | 138   | 34     | 51    | 79    | 37    | 42    | 95    |
| 9     | 129   | 22    | 95    | 30    | 61    | 47    | 31     | 145   | 79    | 35    | 42    | 95    |
| 10    | 125   | 21    | 190   | 46    | 104   | 36    | 31     | 179   | 80    | 35    | 43    | 95    |
| 11    | 74    | 21    | 236   | 43    | 97    | 33    | 29     | 153   | 79    | 34    | 68    | 95    |
| 12    | 28    | 21    | 356   | 34    | 96    | 41    | 28     | 146   | 83    | 33    | 96    | 95    |
| 13    | 25    | 21    | 353   | 30    | 96    | 182   | 99     | 143   | 104   | 27    | 97    | 90    |
| 14    | 24    | 21    | 366   | 29    | 83    | 195   | 97     | 144   | 102   | 17    | 96    | 66    |
| 15    | 24    | 28    | 528   | 33    | 49    | 95    | 883    | 146   | 103   | 19    | 96    | 63    |
| 16    | 24    | 24    | 462   | 34    | 44    | 114   | 339    | 122   | 101   | 91    | 96    | 55    |
| 17    | 24    | 22    | 488   | 23    | 38    | 172   | 308    | 51    | 84    | 60    | 97    | 39    |
| 18    | 24    | 22    | 474   | 22    | 36    | 132   | 598    | 49    | 82    | 30    | 96    | 40    |
| 19    | 24    | 22    | 467   | 25    | 33    | 173   | 905    | 46    | 86    | 23    | 97    | 35    |
| 20    | 24    | 23    | 443   | 25    | 31    | 191   | 934    | 44    | 96    | 22    | 96    | 19    |
| 21    | 24    | 24    | 348   | 28    | 27    | 190   | 395    | 47    | 90    | 21    | 96    | 19    |
| 22    | 24    | 28    | 236   | 27    | 26    | 225   | 735    | 62    | 79    | 20    | 96    | 19    |
| 23    | 24    | 25    | 134   | 33    | 26    | 264   | 588    | 62    | 87    | 20    | 96    | 19    |
| 24    | 24    | 25    | 89    | 34    | 28    | 373   | 899    | 62    | 44    | 20    | 96    | 21    |
| 25    | 24    | 25    | 77    | 30    | 27    | 373   | 903    | 60    | 43    | 20    | 96    | 20    |
| 26    | 24    | 25    | 31    | 22    | 34    | 320   | 864    | 65    | 39    | 20    | 97    | 23    |
| 27    | 23    | 28    | 34    | 22    | 33    | 191   | 644    | 80    | 34    | 21    | 96    | 28    |
| 28    | 21    | 35    | 41    | 19    | 38    | 180   | 404    | 80    | 42    | 21    | 96    | 22    |
| 29    | 21    | 35    | 38    | 35    | 84    | 138   | 219    | 80    | 87    | 20    | 96    | 20    |
| 30    | 21    | 55    | 292   | 25    | ----- | 81    | 206    | 83    | 103   | 20    | 96    | 40    |
| 31    | 21    | ----- | 154   | 90    | ----- | 31    | -----  | 82    | ----- | 20    | 96    | ----- |
| TOTAL | 1,922 | 744   | 6,560 | 1,082 | 1,683 | 4,437 | 10,389 | 3,017 | 2,271 | 1,379 | 2,260 | 1,783 |
| MEAN  | 62.0  | 24.8  | 212   | 34.9  | 58.0  | 143   | 346    | 97.3  | 75.7  | 44.5  | 72.9  | 59.4  |
| MAX   | 142   | 55    | 528   | 90    | 104   | 373   | 934    | 191   | 104   | 147   | 97    | 96    |
| MIN   | 21    | 21    | 23    | 19    | 26    | 31    | 28     | 44    | 34    | 17    | 20    | 19    |

CAL YR 1971 TOTAL 39,291 MEAN 108 MAX 1,310 MIN 21  
WTR YR 1972 TOTAL 37,527 MEAN 103 MAX 934 MIN 17

## 03093000 Eagle Creek at Phalanx Station, Ohio

LOCATION.--Lat 41°15'40", long 80°57'16", Trumbull County, on right bank 75 ft downstream from county road bridge, 1 mile north of Phalanx Station, 2 miles downstream from Tinkers Creek, and 4 miles upstream from mouth.

DRAINAGE AREA.--97.6 sq mi.

PERIOD OF RECORD.--June 1926 to September 1934, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 887.42 ft above mean sea level, adjustment of 1912 (levels by Mahoning Valley Sanitary District). Prior to Sept. 14, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 103 cfs (14.34 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,650 cfs Apr. 15 (gage height, 12.38 ft); minimum, 7.6 cfs Sept. 8.

Period of record: Maximum discharge, 6,700 cfs Jan. 22, 1959 (gage height, 13.12 ft); minimum, 0.6 cfs Aug. 4, 1939; minimum daily, 0.9 cfs Aug. 4, 1939.

REMARKS.--Records good. Low flow slightly regulated by mill several miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 953: 1938-41. WSP 1385: 1927-30, 1931-32(M), 1934, 1938-41(P). WSP 1555: 1928(M), 1929. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR   | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|---------|
| 1     | 57    | 26    | 339   | 430   | 30    | 496    | 86    | 52    | 71    | 50    | 14    | 9.5     |
| 2     | 37    | 23    | 177   | 225   | 31    | 1,200  | 97    | 94    | 48    | 36    | 14    | 12      |
| 3     | 29    | 24    | 105   | 193   | 38    | 953    | 101   | 162   | 41    | 49    | 14    | 10      |
| 4     | 24    | 21    | 78    | 167   | 72    | 443    | 98    | 180   | 34    | 99    | 15    | 10      |
| 5     | 18    | 21    | 65    | 167   | 77    | 246    | 105   | 103   | 27    | 64    | 14    | 11      |
| 6     | 15    | 23    | 148   | 139   | 64    | 170    | 88    | 67    | 22    | 153   | 13    | 11      |
| 7     | 26    | 28    | 889   | 109   | 48    | 167    | 91    | 48    | 21    | 102   | 14    | 10      |
| 8     | 55    | 29    | 1,460 | 82    | 44    | 467    | 101   | 48    | 20    | 54    | 15    | 8.5     |
| 9     | 44    | 28    | 575   | 78    | 40    | 444    | 87    | 223   | 18    | 39    | 16    | 8.5     |
| 10    | 150   | 28    | 275   | 142   | 38    | 208    | 83    | 426   | 20    | 36    | 16    | 10      |
| 11    | 170   | 31    | 201   | 202   | 36    | 147    | 79    | 216   | 21    | 36    | 17    | 11      |
| 12    | 78    | 30    | 171   | 167   | 37    | 162    | 71    | 109   | 17    | 30    | 14    | 9.0     |
| 13    | 50    | 28    | 131   | 122   | 44    | 301    | 101   | 70    | 25    | 46    | 14    | 12      |
| 14    | 38    | 27    | 120   | 105   | 95    | 844    | 154   | 72    | 44    | 35    | 13    | 33      |
| 15    | 33    | 31    | 467   | 83    | 154   | 722    | 1,210 | 90    | 34    | 32    | 12    | 48      |
| 16    | 31    | 35    | 844   | 60    | 206   | 403    | 1,910 | 127   | 123   | 50    | 10    | 22      |
| 17    | 29    | 32    | 364   | 44    | 224   | 554    | 738   | 130   | 94    | 93    | 10    | 17      |
| 18    | 25    | 28    | 198   | 38    | 171   | 392    | 407   | 109   | 44    | 51    | 10    | 274     |
| 19    | 21    | 29    | 146   | 59    | 142   | 236    | 234   | 85    | 29    | 35    | 16    | 644     |
| 20    | 20    | 36    | 136   | 76    | 106   | 170    | 255   | 68    | 24    | 32    | 15    | 156     |
| 21    | 19    | 45    | 195   | 75    | 95    | 141    | 444   | 56    | 22    | 25    | 14    | 57      |
| 22    | 21    | 66    | 197   | 72    | 135   | 206    | 350   | 49    | 24    | 24    | 9.5   | 35      |
| 23    | 22    | 74    | 127   | 104   | 150   | 433    | 502   | 40    | 66    | 24    | 13    | 31      |
| 24    | 28    | 51    | 100   | 130   | 131   | 269    | 281   | 35    | 150   | 28    | 13    | 31      |
| 25    | 31    | 47    | 95    | 117   | 98    | 202    | 164   | 30    | 139   | 19    | 12    | 34      |
| 26    | 32    | 52    | 88    | 73    | 96    | 171    | 120   | 26    | 117   | 18    | 10    | 43      |
| 27    | 31    | 76    | 109   | 61    | 88    | 142    | 90    | 25    | 75    | 18    | 13    | 199     |
| 28    | 28    | 124   | 132   | 42    | 97    | 118    | 68    | 22    | 46    | 19    | 13    | 197     |
| 29    | 25    | 155   | 160   | 36    | 198   | 99     | 55    | 22    | 34    | 19    | 9.5   | 100     |
| 30    | 28    | 225   | 316   | 34    | ----- | 113    | 52    | 21    | 48    | 18    | 8.5   | 182     |
| 31    | 26    | ----- | 1,340 | 32    | ----- | 102    | ----- | 91    | ----- | 20    | 8.5   | -----   |
| TOTAL | 1,241 | 1,473 | 9,748 | 3,464 | 2,785 | 10,721 | 8,222 | 2,896 | 1,498 | 1,354 | 400.0 | 2,235.5 |
| MEAN  | 40.0  | 49.1  | 314   | 112   | 96.0  | 346    | 274   | 93.4  | 49.9  | 43.7  | 12.9  | 74.5    |
| MAX   | 170   | 225   | 1,460 | 430   | 224   | 1,200  | 1,910 | 426   | 150   | 153   | 17    | 644     |
| MIN   | 15    | 21    | 65    | 32    | 30    | 99     | 52    | 21    | 17    | 18    | 8.5   | 8.5     |
| CFSM  | .41   | .50   | 3.22  | 1.15  | .98   | 3.55   | 2.81  | .96   | .51   | .45   | .13   | .76     |
| IN.   | .47   | .56   | 3.72  | 1.32  | 1.06  | 4.09   | 3.13  | 1.10  | .57   | .52   | .15   | .85     |

CAL YR 1971 TOTAL 42,748.5 MEAN 117 MAX 1,710 MIN 5.9 CFSM 1.20 IN 16.29  
WTR YR 1972 TOTAL 46,037.5 MEAN 126 MAX 1,910 MIN 8.5 CFSM 1.29 IN 17.55

## PEAK DISCHARGE (BASE, 1,300 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-8  | 1130 | 11.34 | 1,770     | 3-2  | 1800 | 10.46 | 1,750     |
| 12-31 | 0900 | 11.15 | 1,860     | 4-15 | 2300 | 12.38 | 3,650     |



## BEAVER RIVER BASIN

03094000 Mahoning River at Leavittsburg, Ohio

LOCATION.--Lat 41°14'21", long 80°52'51", in T.4 N., R.4 W., Trumbull County, on right bank at upstream side of Leavitt Road Bridge at Leavittsburg, 300 ft downstream from Duck Creek and 1.2 miles downstream from Eagle Creek.

DRAINAGE AREA.--575 sq mi.

PERIOD OF RECORD.--October 1940 to current year. Prior to June 1941 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 871.25 ft above mean sea level, adjustment of 1912. Prior to July 2, 1941, nonrecording gage, and July 2, 1941, to July 22, 1952, water-stage recorder, at site 50 ft downstream at same datum.

AVERAGE DISCHARGE.--32 years, 531 cfs.

EXTREMES.--Current year: Maximum discharge, 7,140 cfs Apr. 16 (gage height, 13.82 ft); minimum, 140 cfs Oct. 13, Jan. 29, Feb. 9.

Period of record: Maximum discharge, 20,300 cfs Jan. 22, 1959 (gage height, 19.37 ft); minimum, 55 cfs July 7, 1952.

Flood of Mar. 26, 1913 reached a stage of about 24 ft. Flood of Jan. 25 or 26, 1937, reached a stage of 17.8 ft.

REMARKS.--Records good. Flow regulated by Berlin Lake (25 miles upstream), beginning in 1942, by Milton Reservoir (17 miles upstream), and by Michael J. Kirwan Reservoir (20 miles upstream) on West Branch, beginning in 1966 (see stations 03090000, 03091000 and 03092450). Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Seven discharge measurements furnished by Corps of Engineers.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG    | SEP    |
|-------|-------|-------|--------|-------|-------|--------|--------|--------|-------|--------|--------|--------|
| 1     | 269   | 175   | 414    | 1,240 | 204   | 1,040  | 459    | 866    | 359   | 324    | 454    | 307    |
| 2     | 244   | 178   | 321    | 589   | 205   | 1,940  | 456    | 435    | 334   | 298    | 450    | 310    |
| 3     | 229   | 181   | 223    | 474   | 222   | 1,890  | 462    | 553    | 312   | 390    | 450    | 313    |
| 4     | 220   | 178   | 187    | 426   | 249   | 981    | 447    | 621    | 302   | 567    | 451    | 309    |
| 5     | 211   | 172   | 163    | 434   | 244   | 589    | 332    | 690    | 288   | 463    | 443    | 307    |
| 6     | 211   | 175   | 259    | 360   | 248   | 398    | 307    | 606    | 279   | 756    | 363    | 307    |
| 7     | 220   | 181   | 1,070  | 283   | 190   | 509    | 329    | 560    | 280   | 522    | 356    | 307    |
| 8     | 241   | 181   | 2,360  | 241   | 160   | 1,700  | 362    | 531    | 282   | 342    | 353    | 307    |
| 9     | 238   | 181   | 1,390  | 229   | 140   | 1,570  | 332    | 701    | 282   | 339    | 358    | 306    |
| 10    | 293   | 181   | 724    | 307   | 150   | 1,080  | 317    | 1,150  | 286   | 354    | 353    | 304    |
| 11    | 321   | 181   | 544    | 406   | 160   | 1,140  | 304    | 808    | 282   | 381    | 302    | 307    |
| 12    | 217   | 184   | 589    | 363   | 190   | 1,180  | 288    | 600    | 280   | 364    | 319    | 311    |
| 13    | 148   | 190   | 553    | 290   | 248   | 1,700  | 442    | 623    | 312   | 469    | 331    | 399    |
| 14    | 187   | 184   | 567    | 253   | 312   | 3,080  | 846    | 629    | 319   | 473    | 330    | 433    |
| 15    | 184   | 178   | 1,180  | 193   | 406   | 2,650  | 3,110  | 724    | 309   | 462    | 329    | 436    |
| 16    | 181   | 181   | 1,820  | 169   | 536   | 1,700  | 5,810  | 756    | 380   | 624    | 325    | 422    |
| 17    | 178   | 172   | 1,240  | 148   | 536   | 2,230  | 2,570  | 701    | 374   | 1,650  | 328    | 405    |
| 18    | 175   | 148   | 835    | 145   | 448   | 1,930  | 2,050  | 627    | 314   | 1,240  | 331    | 499    |
| 19    | 172   | 148   | 702    | 172   | 369   | 1,680  | 2,280  | 511    | 291   | 1,330  | 336    | 1,100  |
| 20    | 169   | 148   | 675    | 205   | 301   | 1,600  | 2,660  | 279    | 293   | 1,310  | 332    | 860    |
| 21    | 172   | 166   | 684    | 220   | 278   | 1,550  | 2,680  | 248    | 293   | 1,280  | 333    | 702    |
| 22    | 175   | 187   | 621    | 221   | 354   | 1,710  | 3,000  | 332    | 297   | 1,260  | 327    | 770    |
| 23    | 181   | 202   | 434    | 269   | 387   | 2,120  | 3,610  | 340    | 397   | 1,250  | 332    | 777    |
| 24    | 190   | 190   | 314    | 328   | 332   | 1,990  | 3,130  | 330    | 485   | 1,240  | 330    | 790    |
| 25    | 196   | 181   | 283    | 310   | 281   | 1,720  | 2,970  | 322    | 438   | 940    | 327    | 781    |
| 26    | 196   | 178   | 244    | 230   | 295   | 1,230  | 2,850  | 303    | 408   | 640    | 330    | 809    |
| 27    | 199   | 187   | 241    | 199   | 281   | 996    | 2,450  | 306    | 326   | 396    | 328    | 895    |
| 28    | 181   | 226   | 286    | 177   | 310   | 689    | 1,910  | 311    | 269   | 372    | 328    | 937    |
| 29    | 172   | 259   | 314    | 154   | 532   | 617    | 1,520  | 307    | 277   | 377    | 324    | 852    |
| 30    | 175   | 318   | 970    | 154   | ----- | 565    | 1,170  | 319    | 311   | 453    | 311    | 913    |
| 31    | 178   | ----- | 2,530  | 167   | ----- | 501    | -----  | 356    | ----- | 459    | 307    | -----  |
| TOTAL | 6,323 | 5,591 | 22,737 | 9,356 | 8,568 | 44,275 | 49,453 | 16,445 | 9,659 | 21,325 | 10,871 | 16,475 |
| MEAN  | 204   | 186   | 733    | 302   | 295   | 1,428  | 1,648  | 530    | 322   | 688    | 351    | 549    |
| MAX   | 321   | 318   | 2,530  | 1,240 | 536   | 3,080  | 5,810  | 1,150  | 485   | 1,650  | 454    | 1,100  |
| MIN   | 148   | 148   | 163    | 145   | 140   | 398    | 288    | 248    | 269   | 298    | 302    | 304    |

CAL YR 1971 TOTAL 177,665 MEAN 487 MAX 3,300 MIN 148  
WTR YR 1972 TOTAL 221,078 MEAN 604 MAX 5,810 MIN 140

## BEAVER RIVER BASIN

23

03095500 Mosquito Creek below Mosquito Creek Dam, near Cortland, Ohio

LOCATION.--Lat 41°17'59", long 80°45'31", in T.5 N., R.3 W., Trumbull County, on right bank 100 ft downstream from Mosquito Creek Dam, 0.8 mile upstream from Confusion Run, and 2.5 miles southwest of Cortland.

DRAINAGE AREA.--97.5 sq mi.

PERIOD OF RECORD.--May 1926 to September 1929 (published as "near Cortland"), May 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 873.98 ft above mean sea level (Corps of Engineers bench mark). Prior to Aug. 23, 1943, nonrecording gage, and Aug. 23, 1943, to Feb. 14, 1951, water-stage recorder, at site 900 ft downstream at datum 6.63 ft lower.

AVERAGE DISCHARGE.--32 years, 85.4 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 618 cfs Mar. 25 (gage height, 3.72 ft); minimum, 0.63 cfs June 21 (gage height, 0.81 ft).

Period of record: Maximum discharge, 1,890 cfs Jan. 19, 1929 (gage height, 11.5 ft, from floodmark, site and datum then in use); no flow at times.

REMARKS.--Records good. Flow completely regulated by Mosquito Creek Lake beginning 1943 (see station 03095000). Diversion at lake outlet for municipal supply of city of Warren since May 1954; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Six discharge measurements furnished by Corps of Engineers.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC     | JAN     | FEB      | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|-----------|---------|---------|----------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 32             | 25        | 13      | 14      | 14       | 13    | 22    | 50    | 22    | 185   | 65    | 47    |
| 2           | 32             | 25        | 13      | 14      | 14       | 15    | 22    | 22    | 22    | 185   | 41    | 47    |
| 3           | 32             | 25        | 13      | 15      | 15       | 16    | 22    | 22    | 22    | 185   | 41    | 47    |
| 4           | 32             | 25        | 13      | 15      | 15       | 16    | 22    | 22    | 22    | 185   | 41    | 47    |
| 5           | 32             | 26        | 13      | 15      | 15       | 16    | 22    | 22    | 22    | 185   | 41    | 47    |
| 6           | 33             | 25        | 13      | 15      | 15       | 16    | 22    | 22    | 22    | 185   | 41    | 47    |
| 7           | 33             | 26        | 13      | 15      | 15       | 16    | 22    | 22    | 21    | 185   | 41    | 47    |
| 8           | 33             | 26        | 13      | 15      | 15       | 19    | 22    | 22    | 19    | 185   | 41    | 47    |
| 9           | 33             | 26        | 13      | 15      | 16       | 21    | 22    | 22    | 19    | 185   | 41    | 47    |
| 10          | 32             | 26        | 13      | 15      | 16       | 21    | 22    | 22    | 19    | 185   | 41    | 47    |
| 11          | 32             | 26        | 13      | 15      | 15       | 21    | 22    | 22    | 19    | 168   | 41    | 47    |
| 12          | 32             | 25        | 13      | 15      | 15       | 21    | 22    | 21    | 17    | 122   | 41    | 47    |
| 13          | 32             | 25        | 13      | 15      | 14       | 18    | 22    | 21    | 14    | 97    | 41    | 47    |
| 14          | 32             | 25        | 14      | 15      | 14       | 21    | 22    | 21    | 14    | 97    | 41    | 47    |
| 15          | 32             | 25        | 14      | 15      | 14       | 21    | 22    | 21    | 14    | 97    | 41    | 47    |
| 16          | 32             | 26        | 14      | 15      | 15       | 112   | 22    | 56    | 14    | 97    | 64    | 47    |
| 17          | 31             | 26        | 14      | 15      | 15       | 188   | 138   | 90    | 14    | 97    | 88    | 47    |
| 18          | 27             | 26        | 14      | 15      | 15       | 188   | 274   | 90    | 14    | 97    | 68    | 47    |
| 19          | 25             | 26        | 14      | 15      | 15       | 188   | 274   | 90    | 14    | 57    | 47    | 47    |
| 20          | 25             | 26        | 14      | 15      | 14       | 318   | 274   | 90    | 14    | 19    | 47    | 47    |
| 21          | 25             | 26        | 14      | 15      | 14       | 396   | 271   | 90    | 14    | 19    | 47    | 47    |
| 22          | 26             | 26        | 14      | 15      | 14       | 396   | 271   | 90    | 16    | 19    | 47    | 47    |
| 23          | 26             | 20        | 14      | 15      | 14       | 501   | 271   | 90    | 16    | 19    | 47    | 47    |
| 24          | 26             | 13        | 14      | 15      | 14       | 610   | 271   | 90    | 16    | 19    | 47    | 47    |
| 25          | 26             | 13        | 14      | 15      | 14       | 610   | 271   | 90    | 17    | 19    | 47    | 47    |
| 26          | 25             | 13        | 14      | 15      | 14       | 501   | 268   | 73    | 16    | 53    | 47    | 47    |
| 27          | 25             | 13        | 14      | 15      | 14       | 282   | 173   | 56    | 51    | 90    | 47    | 47    |
| 28          | 25             | 13        | 14      | 15      | 14       | 138   | 92    | 56    | 135   | 90    | 47    | 47    |
| 29          | 25             | 13        | 14      | 15      | 14       | 56    | 92    | 57    | 185   | 90    | 47    | 47    |
| 30          | 25             | 13        | 14      | 14      | -----    | 22    | 92    | 40    | 185   | 88    | 47    | 47    |
| 31          | 25             | -----     | 14      | 14      | -----    | 22    | ----- | 22    | ----- | 88    | 47    | ----- |
| TOTAL       | 903            | 674       | 421     | 461     | 422      | 4,799 | 3,384 | 1,524 | 1,009 | 3,392 | 1,470 | 1,410 |
| MEAN        | 29.1           | 22.5      | 13.6    | 14.9    | 14.6     | 155   | 113   | 49.2  | 33.6  | 109   | 47.4  | 47.0  |
| MAX         | 33             | 26        | 14      | 15      | 16       | 610   | 274   | 90    | 185   | 185   | 88    | 47    |
| MIN         | 25             | 13        | 13      | 14      | 14       | 13    | 22    | 21    | 14    | 19    | 41    | 47    |
| (+)         | 23.3           | 22.4      | 21.4    | 22.5    | 22.8     | 21.5  | 22.3  | 23.7  | 23.5  | 23.5  | 24.4  | 23.4  |
| CAL YR 1971 | TOTAL 22,934.9 | MEAN 62.8 | MAX 915 | MIN 5.7 | (+) 23.8 |       |       |       |       |       |       |       |
| WTR YR 1972 | TOTAL 19,869.0 | MEAN 54.3 | MAX 610 | MIN 13  | (+) 22.9 |       |       |       |       |       |       |       |

+ Diversion in cubic feet per second; furnished by city of Warren.

## BEAVER RIVER BASIN

03098000 Mahoning River at Youngstown, Ohio

LOCATION.--Lat 41°06'40", long 80°40'23", Mahoning County, on left bank 400 ft upstream from Bridge Street Bridge in Youngstown, and 0.8 mile upstream from Mill Creek.

DRAINAGE AREA.--898 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Records for May 1903 to July 1906, published in WSP 98, 128, 169, and 205, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 826.53 ft above mean sea level, adjustment of 1912 (levels by Mahoning Valley Sanitary District). Prior to Nov. 16, 1926, nonrecording gage at site 400 ft downstream at same datum.

AVERAGE DISCHARGE.--51 years, 821 cfs.

EXTREMES.--Current year: Maximum discharge, 9,950 cfs Apr. 16 (gage height, 13.48 ft); minimum, 201 cfs Nov. 1, 6, 9.

Period of record: Maximum discharge, 17,600 cfs Jan. 25, 1937 (gage height, 14.92 ft); from rating curve extended above 9,500 cfs on basis of velocity-area studies; maximum gage height, 18.62 ft Jan. 22, 1959 (backwater from Mill Creek); minimum discharge, 28 cfs Aug. 14, 1930; minimum daily, 30 cfs Aug. 16, 1930. Flood of Mar. 26, 1913 reached a stage of 26.5 ft (discharge, 42,500 cfs, estimated by Corps of Engineers).

REMARKS.--Records good. Water diverted upstream from station for municipal supply for city of Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station by a private company for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake (48 miles upstream), beginning in 1942, by Milton Reservoir (40 miles upstream), by Michael J. Kirwan Reservoir (43 miles upstream) on West Branch, beginning in 1966, by Mosquito Creek Lake (22 miles upstream), beginning in 1943, by Meander Creek Reservoir (11 miles upstream), beginning in 1929, (see pp. 27, 28), and by reservoir on Squaw Creek (5 miles upstream). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Four discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 623: 1924(M). WSP 1907: Drainage area. See also PERIOD OF RECORD.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1     | 390   | 206   | 649    | 2,900  | 267    | 1,880  | 587    | 1,310  | 474    | 500    | 587    | 414    |
| 2     | 354   | 228   | 597    | 1,190  | 289    | 3,380  | 580    | 1,020  | 438    | 470    | 580    | 552    |
| 3     | 318   | 228   | 402    | 901    | 366    | 3,530  | 587    | 1,620  | 438    | 650    | 566    | 601    |
| 4     | 312   | 218   | 306    | 850    | 408    | 2,060  | 622    | 1,240  | 432    | 750    | 559    | 432    |
| 5     | 300   | 206   | 262    | 775    | 372    | 1,120  | 517    | 1,070  | 372    | 900    | 552    | 408    |
| 6     | 294   | 212   | 682    | 714    | 348    | 720    | 444    | 944    | 360    | 950    | 492    | 408    |
| 7     | 354   | 234   | 2,080  | 668    | 289    | 852    | 531    | 776    | 348    | 950    | 462    | 402    |
| 8     | 318   | 228   | 3,460  | 438    | 228    | 2,570  | 531    | 741    | 354    | 811    | 474    | 402    |
| 9     | 372   | 228   | 2,860  | 408    | 206    | 2,720  | 486    | 881    | 366    | 818    | 456    | 396    |
| 10    | 462   | 240   | 1,280  | 493    | 218    | 1,690  | 456    | 1,480  | 360    | 699    | 456    | 384    |
| 11    | 462   | 228   | 831    | 649    | 234    | 1,480  | 444    | 1,260  | 336    | 650    | 420    | 390    |
| 12    | 384   | 228   | 747    | 649    | 272    | 1,560  | 408    | 839    | 336    | 678    | 396    | 414    |
| 13    | 267   | 234   | 747    | 545    | 384    | 2,740  | 832    | 776    | 480    | 832    | 414    | 643    |
| 14    | 245   | 228   | 852    | 474    | 526    | 4,620  | 1,250  | 804    | 420    | 818    | 420    | 825    |
| 15    | 262   | 245   | 1,830  | 372    | 694    | 4,590  | 6,780  | 881    | 456    | 741    | 450    | 643    |
| 16    | 256   | 240   | 2,680  | 272    | 915    | 3,400  | 9,320  | 1,060  | 545    | 1,630  | 420    | 559    |
| 17    | 245   | 234   | 2,090  | 267    | 894    | 3,750  | 6,920  | 1,130  | 498    | 2,110  | 450    | 545    |
| 18    | 245   | 228   | 1,250  | 267    | 701    | 3,520  | 3,630  | 1,020  | 420    | 1,860  | 480    | 902    |
| 19    | 240   | 272   | 971    | 300    | 610    | 2,800  | 2,880  | 832    | 366    | 1,600  | 456    | 1,100  |
| 20    | 228   | 256   | 936    | 342    | 630    | 2,620  | 4,100  | 559    | 360    | 1,500  | 432    | 1,240  |
| 21    | 228   | 306   | 992    | 360    | 675    | 2,960  | 4,410  | 426    | 366    | 1,400  | 426    | 874    |
| 22    | 223   | 318   | 915    | 372    | 538    | 2,780  | 4,180  | 450    | 390    | 1,380  | 432    | 902    |
| 23    | 234   | 318   | 701    | 486    | 552    | 3,300  | 4,870  | 498    | 811    | 1,400  | 444    | 937    |
| 24    | 245   | 312   | 519    | 584    | 500    | 3,170  | 4,200  | 486    | 860    | 1,430  | 444    | 1,000  |
| 25    | 245   | 289   | 426    | 578    | 438    | 2,930  | 3,750  | 468    | 784    | 1,170  | 438    | 965    |
| 26    | 245   | 284   | 408    | 420    | 444    | 2,380  | 3,480  | 438    | 637    | 832    | 468    | 1,090  |
| 27    | 245   | 324   | 384    | 336    | 420    | 1,920  | 3,140  | 420    | 524    | 671    | 438    | 1,210  |
| 28    | 234   | 372   | 480    | 289    | 493    | 1,360  | 2,530  | 402    | 444    | 524    | 444    | 1,210  |
| 29    | 218   | 462   | 512    | 240    | 915    | 1,020  | 2,020  | 402    | 498    | 510    | 432    | 1,100  |
| 30    | 212   | 616   | 1,830  | 228    | -----  | 846    | 1,560  | 432    | 500    | 566    | 420    | 1,290  |
| 31    | 206   | ----- | 3,560  | 218    | -----  | 692    | -----  | 450    | -----  | 615    | 414    | -----  |
| TOTAL | 8,943 | 8,222 | 36,239 | 17,585 | 13,826 | 74,960 | 76,045 | 25,115 | 13,973 | 30,415 | 14,322 | 22,238 |
| MEAN  | 285   | 274   | 1,169  | 567    | 477    | 2,418  | 2,535  | 810    | 466    | 981    | 462    | 741    |
| MAX   | 462   | 616   | 3,560  | 2,900  | 915    | 4,620  | 9,320  | 1,620  | 860    | 2,110  | 587    | 1,290  |
| MIN   | 206   | 206   | 262    | 218    | 206    | 692    | 408    | 402    | 336    | 470    | 396    | 384    |

CAL YR 1971 TOTAL 282,238 MEAN 773 MAX 5,790 MIN 206  
WTR YR 1972 TOTAL 341,783 MEAN 934 MAX 9,320 MIN 206



BEAVER RIVER BASIN

25

03099500 Mahoning River at Lowellville, Ohio

LOCATION.--Lat 41°02'12", long 80°32'11", in T.1 N., R.1 W., Mahoning County, on left bank 100 ft upstream from First Street Bridge at Lowellville, 1 mile upstream from Ohio-Pennsylvania State line, and 3 miles downstream from Yellow Creek.

DRAINAGE AREA.--1,073 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Prior to August 1943 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 796.84 ft above mean sea level, adjustment of 1912. Prior to Oct. 26, 1944, nonrecording gage at site 300 ft downstream at same datum.

AVERAGE DISCHARGE.--30 years, 1,011 cfs.

EXTREMES.--Current year: Maximum discharge, 13,500 cfs Apr. 15 (gage height, 10.98 ft); minimum, 260 cfs Nov. 6.

Period of record: Maximum discharge, 21,000 cfs Jan. 21, 1959 (gage height, 14.43 ft); minimum, 125 cfs June 29, 1952.

Flood in March 1913 reached a stage of 17.8 ft.

REMARKS.--Records good. Flow regulated by 5 flood control reservoirs at points 21 to 58 miles upstream (see pp. 27, 28 and REMARKS for station 03098000), and by reservoirs on Squaw Creek (15 miles upstream), on Dry Run (9 miles upstream), and on Yellow Creek (5 miles upstream). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1555: 1946(M), 1952(M), 1955(M), 1956. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1     | 426    | 265   | 692    | 3,090  | 340    | 2,270  | 778    | 1,520  | 655    | 746    | 655    | 460    |
| 2     | 402    | 285   | 650    | 1,470  | 365    | 4,030  | 746    | 1,350  | 613    | 698    | 641    | 532    |
| 3     | 380    | 290   | 468    | 1,040  | 442    | 4,110  | 738    | 2,320  | 627    | 980    | 613    | 746    |
| 4     | 365    | 275   | 396    | 868    | 478    | 4,280  | 778    | 1,560  | 599    | 1,080  | 613    | 514    |
| 5     | 360    | 265   | 350    | 895    | 414    | 1,530  | 669    | 1,300  | 484    | 1,330  | 585    | 478    |
| 6     | 350    | 265   | 1,030  | 770    | 424    | 980    | 599    | 1,140  | 478    | 1,480  | 544    | 478    |
| 7     | 414    | 280   | 2,240  | 599    | 392    | 1,090  | 802    | 940    | 460    | 1,430  | 520    | 478    |
| 8     | 380    | 275   | 3,420  | 496    | 370    | 3,200  | 738    | 886    | 460    | 1,000  | 544    | 478    |
| 9     | 426    | 280   | 2,960  | 454    | 355    | 3,180  | 676    | 1,040  | 490    | 810    | 514    | 472    |
| 10    | 552    | 280   | 1,400  | 532    | 340    | 2,120  | 620    | 1,610  | 514    | 960    | 514    | 454    |
| 11    | 504    | 280   | 895    | 690    | 370    | 1,680  | 599    | 1,500  | 472    | 842    | 490    | 460    |
| 12    | 456    | 280   | 732    | 698    | 392    | 1,740  | 550    | 1,010  | 472    | 886    | 478    | 520    |
| 13    | 365    | 280   | 732    | 641    | 652    | 3,180  | 1,260  | 886    | 662    | 1,350  | 502    | 834    |
| 14    | 315    | 275   | 886    | 585    | 778    | 5,610  | 1,580  | 913    | 606    | 1,180  | 484    | 1,140  |
| 15    | 320    | 310   | 1,920  | 460    | 960    | 5,470  | 9,370  | 970    | 634    | 1,000  | 514    | 802    |
| 16    | 320    | 295   | 2,560  | 375    | 1,130  | 3,990  | 10,600 | 1,150  | 834    | 2,370  | 478    | 655    |
| 17    | 310    | 285   | 2,150  | 375    | 1,060  | 4,300  | 8,390  | 1,260  | 714    | 2,640  | 514    | 620    |
| 18    | 305    | 285   | 1,310  | 375    | 913    | 3,980  | 4,400  | 1,170  | 648    | 2,060  | 544    | 1,500  |
| 19    | 310    | 330   | 990    | 375    | 762    | 3,130  | 3,280  | 990    | 538    | 1,720  | 520    | 1,200  |
| 20    | 295    | 330   | 922    | 380    | 606    | 3,060  | 4,900  | 746    | 496    | 1,610  | 484    | 1,410  |
| 21    | 290    | 365   | 990    | 392    | 571    | 3,010  | 5,060  | 557    | 544    | 1,500  | 484    | 980    |
| 22    | 290    | 370   | 913    | 408    | 746    | 3,080  | 4,740  | 550    | 571    | 1,470  | 484    | 940    |
| 23    | 290    | 370   | 730    | 585    | 746    | 3,620  | 5,250  | 613    | 1,420  | 1,440  | 502    | 970    |
| 24    | 295    | 360   | 544    | 690    | 706    | 3,450  | 4,660  | 592    | 1,380  | 1,530  | 490    | 1,040  |
| 25    | 305    | 340   | 454    | 683    | 613    | 3,140  | 4,040  | 578    | 1,600  | 1,290  | 484    | 1,000  |
| 26    | 305    | 340   | 436    | 502    | 641    | 2,600  | 3,760  | 550    | 1,340  | 931    | 544    | 1,140  |
| 27    | 300    | 380   | 430    | 392    | 606    | 2,160  | 3,480  | 520    | 886    | 738    | 502    | 1,270  |
| 28    | 300    | 450   | 526    | 375    | 683    | 1,610  | 2,840  | 496    | 690    | 599    | 496    | 1,260  |
| 29    | 285    | 538   | 550    | 350    | 1,180  | 1,250  | 2,270  | 496    | 762    | 585    | 484    | 1,170  |
| 30    | 275    | 728   | 2,460  | 330    | -----  | 1,020  | 1,810  | 578    | 762    | 613    | 472    | 1,480  |
| 31    | 265    | ----- | 3,720  | 325    | -----  | 859    | -----  | 606    | -----  | 655    | 460    | -----  |
| TOTAL | 10,755 | 9,951 | 38,456 | 20,200 | 18,035 | 88,729 | 89,983 | 30,397 | 21,411 | 37,523 | 16,153 | 25,481 |
| MEAN  | 347    | 332   | 1,241  | 652    | 622    | 2,862  | 2,999  | 981    | 714    | 1,210  | 521    | 849    |
| MAX   | 552    | 728   | 3,720  | 3,090  | 1,180  | 5,610  | 10,600 | 2,320  | 1,600  | 2,640  | 655    | 1,500  |
| MIN   | 265    | 265   | 350    | 325    | 340    | 859    | 550    | 496    | 460    | 585    | 460    | 454    |

CAL YR 1971 TOTAL 323,239 MEAN 886 MAX 6,820 MIN 265  
WTR YR 1972 TOTAL 407,074 MEAN 1,112 MAX 10,600 MIN 265

## BEAVER RIVER BASIN

03102950 Pymatuning Creek at Kinsman, Ohio

LOCATION.--Lat 41°26'34", long 80°35'18", in T.7 N., R.1 W., Trumbull County, on left bank at downstream side of bridge on State Highway 7 at Kinsman, 0.8 mile downstream from Sugar Creek and 1.2 miles upstream from Stratton Creek.

DRAINAGE AREA.--96.7 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 906.8 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 107 cfs (15.03 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,660 cfs Mar. 3 (gage height, 11.54 ft); minimum, 0.10 cfs Aug. 8.  
Period of record: Maximum discharge, 1,660 cfs Mar. 3, 1972; maximum gage height, 11.61 ft Dec. 29, 1968; minimum discharge, 0.10 cfs Aug. 8, 1972.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR   | MAY   | JUN   | JUL      | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|----------|-------|-------|
| 1     | 3.2   | 28    | 141   | 501   | 39    | 252    | 93    | 43    | 39    | 257      | .58   | 3.1   |
| 2     | 3.8   | 29    | 153   | 433   | 36    | 1,230  | 86    | 46    | 46    | 192      | .38   | 4.2   |
| 3     | 4.2   | 33    | 152   | 334   | 39    | 1,490  | 80    | 149   | 124   | 234      | .30   | 4.9   |
| 4     | 5.1   | 35    | 126   | 248   | 53    | 1,120  | 79    | 195   | 136   | 225      | .27   | 4.3   |
| 5     | 5.2   | 38    | 92    | 198   | 70    | 681    | 82    | 175   | 93    | 181      | .21   | 4.9   |
| 6     | 5.9   | 40    | 114   | 156   | 70    | 470    | 79    | 133   | 71    | 314      | .18   | 5.1   |
| 7     | 6.6   | 41    | 332   | 109   | 65    | 319    | 78    | 93    | 57    | 287      | .15   | 5.1   |
| 8     | 6.9   | 42    | 800   | 93    | 55    | 525    | 76    | 72    | 44    | 235      | .13   | 5.2   |
| 9     | 8.8   | 44    | 800   | 73    | 46    | 516    | 70    | 83    | 37    | 200      | .18   | 5.6   |
| 10    | 12    | 43    | 605   | 88    | 42    | 445    | 64    | 128   | 35    | 166      | .27   | 6.0   |
| 11    | 17    | 43    | 448   | 124   | 42    | 350    | 60    | 148   | 31    | 123      | .30   | 6.5   |
| 12    | 23    | 43    | 317   | 138   | 46    | 277    | 54    | 154   | 30    | 88       | .28   | 7.0   |
| 13    | 23    | 44    | 232   | 135   | 58    | 317    | 54    | 119   | 58    | 69       | .22   | 7.6   |
| 14    | 18    | 43    | 179   | 121   | 84    | 605    | 57    | 92    | 85    | 70       | .18   | 8.8   |
| 15    | 13    | 42    | 293   | 115   | 120   | 637    | 160   | 175   | 93    | 54       | .15   | 11    |
| 16    | 10    | 41    | 458   | 83    | 176   | 561    | 378   | 180   | 197   | 60       | .36   | 12    |
| 17    | 9.6   | 42    | 448   | 57    | 217   | 609    | 558   | 149   | 216   | 77       | 1.1   | 12    |
| 18    | 11    | 41    | 400   | 47    | 219   | 537    | 504   | 122   | 196   | 55       | 1.4   | 11    |
| 19    | 12    | 42    | 305   | 56    | 202   | 440    | 403   | 97    | 196   | 43       | 1.8   | 9.0   |
| 20    | 12    | 42    | 228   | 72    | 171   | 319    | 305   | 78    | 172   | 42       | 2.2   | 7.8   |
| 21    | 13    | 43    | 194   | 89    | 143   | 238    | 280   | 65    | 131   | 42       | 2.2   | 6.9   |
| 22    | 14    | 45    | 168   | 100   | 137   | 257    | 259   | 52    | 98    | 37       | 1.9   | 6.4   |
| 23    | 14    | 48    | 135   | 121   | 133   | 408    | 317   | 42    | 127   | 31       | 1.9   | 5.6   |
| 24    | 15    | 53    | 116   | 141   | 122   | 366    | 271   | 35    | 212   | 24       | 2.2   | 5.1   |
| 25    | 16    | 52    | 99    | 145   | 114   | 324    | 221   | 29    | 364   | 15       | 2.4   | 4.8   |
| 26    | 18    | 51    | 91    | 127   | 109   | 265    | 167   | 22    | 567   | 7.3      | 2.7   | 7.1   |
| 27    | 19    | 50    | 101   | 110   | 101   | 213    | 118   | 17    | 681   | 4.0      | 2.7   | 10    |
| 28    | 19    | 55    | 136   | 85    | 94    | 172    | 86    | 14    | 584   | 2.8      | 2.6   | 15    |
| 29    | 23    | 69    | 170   | 70    | 108   | 140    | 66    | 12    | 453   | 2.0      | 2.3   | 22    |
| 30    | 25    | 107   | 254   | 55    | ----- | 120    | 52    | 14    | 338   | 1.4      | 2.2   | 28    |
| 31    | 27    | ----- | 595   | 46    | ----- | 107    | ----- | 32    | ----- | .92      | 2.5   | ----- |
| TOTAL | 413.3 | 1,369 | 8,682 | 4,270 | 2,911 | 14,310 | 5,157 | 2,765 | 5,511 | 3,139.42 | 36.24 | 252.0 |
| MEAN  | 13.3  | 45.6  | 280   | 138   | 100   | 462    | 172   | 89.2  | 184   | 101      | 1.17  | 8.40  |
| MAX   | 27    | 107   | 800   | 501   | 219   | 1,490  | 558   | 195   | 681   | 314      | 2.7   | 28    |
| MIN   | 3.2   | 28    | 91    | 46    | 36    | 107    | 52    | 12    | 30    | .92      | .13   | 3.1   |
| CFSM  | .14   | .47   | 2.90  | 1.43  | 1.03  | 4.78   | 1.78  | .92   | 1.90  | 1.04     | .01   | .09   |
| IN.   | .16   | .53   | 3.34  | 1.64  | 1.12  | 5.50   | 1.98  | 1.06  | 2.12  | 1.21     | .01   | .10   |

CAL YR 1971 TOTAL 35,185.13 MEAN 96.4 MAX 1,280 MIN .15 CFSM 1.00 IN 13.54  
WTR YR 1972 TOTAL 48,815.96 MEAN 133 MAX 1,490 MIN .13 CFSM 1.38 IN 18.78

## PEAK DISCHARGE (BASE, 700 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 12-8 | 1900 | 10.55 | 858       | 6-27 | 0700 | 10.46 | 739       |
| 3-3  | 0500 | 11.54 | 1,660     |      |      |       |           |

## BEAVER RIVER BASIN

27

## Reservoirs in Beaver River basin

03090000 BERLIN LAKE (formerly published as Berlin Reservoir).--Lat 41°02'46", long 81°00'10", in T.1 N., R.6 W., Portage County at dam on Mahoning River, 3.2 miles northwest of Berlin Center. Drainage area, 248 sq mi. Period of record, December 1942 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 74,260 acre-ft Apr. 18 (elevation, 1,028.63 ft); minimum, 13,640 acre-ft Nov. 26, 27 (elevation, 1,001.75 ft). Extremes for period of record: Maximum contents, 91,150 acre-ft July 9, 1943 (elevation, 1,232.0 ft); minimum, 1,540 acre-ft Jan. 10, 1944 (elevation, 978.82 ft).

Lake is formed by earthfill dam with concrete spillway; storage began in December 1942. Usable capacity 91,150 acre-ft between elevations 956.5 ft (invert of lowest outlet) and 1,032.0 ft (top of taintor gates on controlled section) of which 1,800 acre-ft is in the conservation pool (elevation, 980.0 ft). No dead storage. Flow is normally controlled by sluiceways through dam but additional releases can be made through gates on controlled section of spillway. Lake is used for flood control and to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Gage-height graph and capacity curve furnished by Corps of Engineers.

03091000 MILTON RESERVOIR.--Lat 41°07'38", long 80°58'40", in T.2 N., R.5 W., Mahoning County at dam on Mahoning River, 0.8 mile southwest of Pricetown. Drainage area, 273 sq mi. Period of record, December 1923 to current year. Month-end contents for some periods published in WSP 1305. Water-stage recorder. Datum of gage is at mean sea level (levels by city of Youngstown). Prior to Oct. 7, 1941, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 30,520 acre-ft Apr. 20 (elevation, 951.67 ft); minimum, 14,830 acre-ft Feb. 25 (elevation, 942.14 ft). Extremes for period of record: Maximum contents, 35,020 acre-ft June 29, 1924 (elevation, 953.8 ft) of which 5,870 acre-ft was in uncontrolled storage; minimum, 1,220 acre-ft Jan. 23, 1954 (elevation, 924.27 ft, from graph based on gage readings).

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1916. Usable capacity 29,150 acre-ft between elevations 906.0 ft (bottom of gates) and 951.0 ft (top of gates). No dead storage. Flow is regulated by two 16-inch and four 36-inch gates on spillway. Reservoir is used to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Capacity table computed from base data furnished by city of Youngstown, Division of Water.

03092450 MICHAEL J. KIRWAN RESERVOIR.--Lat 41°09'24", long 81°04'47", in T.3 N., R.6 W., Portage County at dam on West Branch Mahoning River, 0.5 mile southwest of Wayland. Drainage area, 80.5 sq mi. Period of record, December 1966 to current year (prior to October 1969 published as West Branch Reservoir). Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 66,940 acre-ft Apr. 18 (elevation, 989.19 ft); minimum, 32,040 acre-ft Nov. 18 (elevation, 974.64 ft). Extremes for period of record: Maximum contents, 66,940 acre-ft Apr. 18, 1972 (elevation, 989.19 ft); minimum, 5,370 acre-ft Jan. 5, 1967 (elevation, 953.50 ft).

Reservoir is formed by earthfill dam with concrete spillway; storage began in December 1966. Usable capacity 78,660 acre-ft between elevations 936.8 ft (lowest outlet) and 993.0 ft (crest of spillway) of which 3,740 acre-ft is in conservation pool. Dead storage below elevation 936.8 ft, 85 acre-ft. Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits in dam. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Gage-height graph and capacity curve furnished by Corps of Engineers.

03095000 MOSQUITO CREEK LAKE (formerly published as Mosquito Creek Reservoir).--Lat 41°17'58", long 80°45'31", in T.5 N., R.3 W., Trumbull County at dam on Mosquito Creek, 3.0 miles southwest of Cortland. Drainage area, 97.5 sq mi. Period of record, October 1943 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 85,730 acre-ft June 27 (elevation, 902.07 ft); minimum, 42,200 acre-ft Nov. 21 (elevation, 895.68 ft). Extremes for period of record: Maximum contents, 99,100 acre-ft June 3, 1947 (elevation, 903.65 ft); minimum, 8,600 acre-ft Nov. 16, 1944 (elevation, 886.97 ft).

Lake is formed by earthfill dam. A natural wasteway (elevation, 903.5 ft) discharges into the Grand River basin; storage began in October 1943. Usable capacity 102,200 acre-ft between elevations 881.0 ft (lowest outlet) and 904.00 ft (lake-full level). Dead storage below 881.0 ft, 2,000 acre-ft. Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits through dam. Lake is used for flood control and to augment flow of Mahoning River during periods of low flow. Water is used for industrial purposes in vicinity of Warren and Youngstown; and for municipal supply of city of Warren. Gage-height graph and capacity curve furnished by Corps of Engineers.

03097000 MEANDER CREEK RESERVOIR.--Lat 41°09'12", long 80°46'45", in T.3 N., R.3 W., Trumbull County on right side of spillway near center of dam on Meander Creek, 0.8 mile northwest of Mineral Ridge. Drainage area, 83.9 sq mi. Period of record, November 1929 to current year. Month-end contents for some periods published in WSP 1305. Water-stage recorder. Datum of gage is at mean sea level (levels by Mahoning Valley Sanitary District). Extremes for current year: Maximum contents, 39,060 acre-ft Apr. 15 (elevation, 908.10 ft); minimum, 19,150 acre-ft Dec. 6 (elevation, 897.14 ft). Extremes for period of record: Maximum contents, 41,800 acre-ft Jan. 21, 1959 (elevation, 909.25 ft); minimum, 9,370 acre-ft Feb. 28, 1954 (elevation, 888.78 ft).

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1929. Usable capacity at spillway level (elevation, 905 ft), 32,410 acre-ft. No dead storage. Figures given herein represent usable contents. Water is used for municipal supply of cities of Niles and Youngstown. Gage-height graph furnished by Corps of Engineers. Capacity table computed from base data furnished by Mahoning Valley Sanitary District.



## BEAVER RIVER BASIN

## Reservoirs in Beaver River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| Date                 | Elevation<br>(feet) | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) | Elevation<br>(feet)       | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) |
|----------------------|---------------------|-----------------------------|--------------------------------------|---------------------------|-----------------------------|--------------------------------------|
| 03090000 Berlin Lake |                     |                             |                                      | 03091000 Milton Reservoir |                             |                                      |
| Sept. 30             | 1,005.05            | 16,920                      | -                                    | 947.95                    | 23,430                      | -                                    |
| Oct. 31              | 1,003.07            | 14,870                      | -2,050                               | 945.21                    | 18,980                      | -4,450                               |
| Nov. 30              | 1,002.07            | 13,930                      | -940                                 | 942.41                    | 15,170                      | -3,810                               |
| Dec. 31              | 1,011.91            | 26,380                      | +12,450                              | 943.17                    | 16,160                      | +990                                 |
| CAL YR 1971          | -                   | -                           | -12,510                              | -                         | -                           | +2,930                               |
| Jan. 31              | 1,016.86            | 36,000                      | +9,620                               | 942.65                    | 15,480                      | -680                                 |
| Feb. 29              | 1,020.89            | 45,570                      | +9,570                               | 943.09                    | 16,050                      | +570                                 |
| Mar. 31              | 1,024.80            | 58,660                      | +13,090                              | 948.24                    | 23,950                      | +7,900                               |
| Apr. 30              | 1,024.66            | 57,810                      | -850                                 | 948.77                    | 24,910                      | +960                                 |
| May 31               | 1,024.49            | 57,560                      | -250                                 | 948.13                    | 23,750                      | -1,160                               |
| June 30              | 1,024.05            | 56,010                      | -1,550                               | 948.02                    | 23,560                      | -190                                 |
| July 31              | 1,024.47            | 57,490                      | +1,480                               | 947.88                    | 23,310                      | -250                                 |
| Aug. 31              | 1,019.89            | 43,380                      | -14,110                              | 947.94                    | 23,420                      | +110                                 |
| Sept. 30             | 1,015.39            | 32,870                      | -10,510                              | 947.01                    | 21,810                      | -1,610                               |
| WTR YR 1972          | -                   | -                           | +15,950                              | -                         | -                           | -1,620                               |

|                                      |        |        |         |                              |        |         |
|--------------------------------------|--------|--------|---------|------------------------------|--------|---------|
| 03092450 Michael J. Kirwan Reservoir |        |        |         | 03095000 Mosquito Creek Lake |        |         |
| Sept. 30                             | 975.95 | 34,550 | -       | 896.59                       | 47,390 | -       |
| Oct. 31                              | 974.85 | 32,430 | -2,120  | 896.06                       | 44,290 | -3,100  |
| Nov. 30                              | 975.68 | 34,020 | +1,590  | 896.00                       | 43,940 | -350    |
| Dec. 31                              | 979.03 | 40,940 | +6,920  | 898.64                       | 60,310 | +16,370 |
| CAL YR 1971                          | -      | -      | -1,610  | -                            | -      | -3,320  |
| Jan. 31                              | 980.24 | 43,660 | +2,720  | 899.01                       | 62,780 | +2,470  |
| Feb. 29                              | 981.40 | 46,360 | +2,700  | 899.54                       | 66,530 | +3,750  |
| Mar. 31                              | 985.74 | 57,290 | +10,930 | 901.30                       | 79,630 | +13,100 |
| Apr. 30                              | 985.97 | 57,900 | +610    | 901.52                       | 81,360 | +1,730  |
| May 31                               | 985.54 | 56,760 | -1,140  | 901.51                       | 81,280 | -80     |
| June 30                              | 984.57 | 54,220 | -2,540  | 901.95                       | 84,760 | +3,480  |
| July 31                              | 985.21 | 55,890 | +1,670  | 901.13                       | 78,290 | -6,470  |
| Aug. 31                              | 983.52 | 51,540 | -4,350  | 900.26                       | 71,720 | -6,570  |
| Sept. 30                             | 983.22 | 50,780 | -760    | 899.92                       | 69,210 | -2,510  |
| WTR YR 1972                          | -      | -      | +16,230 | -                            | -      | +21,820 |

|                                  |        |        |        |  |  |  |
|----------------------------------|--------|--------|--------|--|--|--|
| 03097000 Meander Creek Reservoir |        |        |        |  |  |  |
| Sept. 30                         | 899.41 | 22,550 | -      |  |  |  |
| Oct. 31                          | 898.16 | 20,650 | -1,900 |  |  |  |
| Nov. 30                          | 897.30 | 19,380 | -1,270 |  |  |  |
| Dec. 31                          | 900.20 | 23,800 | +4,420 |  |  |  |
| CAL YR 1971                      | -      | -      | -6,560 |  |  |  |
| Jan. 31                          | 900.40 | 24,130 | +330   |  |  |  |
| Feb. 29                          | 901.02 | 25,130 | +1,000 |  |  |  |
| Mar. 31                          | 906.01 | 34,450 | +9,320 |  |  |  |
| Apr. 30                          | 906.36 | 35,200 | +750   |  |  |  |
| May 31                           | 905.50 | 33,420 | -1,780 |  |  |  |
| June 30                          | 904.83 | 32,080 | -1,340 |  |  |  |
| July 31                          | 905.74 | 33,900 | +1,820 |  |  |  |
| Aug. 31                          | 903.62 | 29,760 | -4,140 |  |  |  |
| Sept. 30                         | 903.10 | 28,790 | -970   |  |  |  |
| WTR YR 1972                      | -      | -      | +6,240 |  |  |  |

## LITTLE BEAVER CREEK BASIN

29

03109500 Little Beaver Creek near East Liverpool, Ohio

LOCATION.--Lat 40°40'33", long 80°32'27", Columbiana County, on right bank at downstream side of Grimms Bridge, 1.5 miles upstream from Island Run, 4 miles upstream from mouth and 4 miles northeast of East Liverpool.

DRAINAGE AREA.--496 sq mi.

PERIOD OF RECORD.--May 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft above mean sea level, adjustment of 1912. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--57 years, 502 cfs (13.75 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,150 cfs Apr. 16 (gage height, 8.82 ft); minimum, 41 cfs Oct. 21, 22.

Period of record: Maximum discharge, 25,000 cfs July 19, 1941 (gage height, 17.4 ft), from rating curve extended above 16,000 cfs on basis of slope-area measurement of peak flow; minimum, 12 cfs several days in 1918, 1930, 1932, 1936.

Maximum stage observed, about 20 ft.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1937(M). WSP 1305: 1916-18(M), 1921-22(M), 1924-30(M), 1933(M), 1936(M). WSP 1907: 1950(P), drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1     | 67    | 51    | 263    | 1,070  | 280    | 2,220  | 548    | 557    | 266    | 630    | 132   | 78    |
| 2     | 59    | 53    | 208    | 872    | 310    | 3,290  | 544    | 616    | 312    | 498    | 130   | 71    |
| 3     | 53    | 58    | 263    | 858    | 344    | 3,110  | 514    | 630    | 350    | 514    | 142   | 90    |
| 4     | 51    | 56    | 225    | 680    | 526    | 3,020  | 502    | 625    | 284    | 1,020  | 130   | 144   |
| 5     | 47    | 54    | 205    | 725    | 470    | 1,450  | 494    | 522    | 205    | 760    | 115   | 100   |
| 6     | 45    | 51    | 278    | 620    | 410    | 1,060  | 454    | 446    | 172    | 770    | 107   | 90    |
| 7     | 47    | 53    | 1,010  | 502    | 370    | 1,220  | 890    | 400    | 157    | 611    | 107   | 85    |
| 8     | 49    | 54    | 1,060  | 450    | 340    | 3,080  | 932    | 378    | 142    | 498    | 110   | 80    |
| 9     | 52    | 55    | 606    | 422    | 310    | 2,200  | 755    | 474    | 130    | 458    | 142   | 76    |
| 10    | 94    | 58    | 418    | 498    | 290    | 1,530  | 700    | 552    | 242    | 1,020  | 126   | 69    |
| 11    | 88    | 60    | 330    | 506    | 280    | 1,220  | 640    | 434    | 230    | 908    | 114   | 60    |
| 12    | 76    | 61    | 263    | 450    | 320    | 1,360  | 580    | 368    | 166    | 635    | 104   | 75    |
| 13    | 66    | 61    | 230    | 422    | 740    | 3,750  | 1,060  | 330    | 150    | 522    | 102   | 112   |
| 14    | 59    | 59    | 245    | 438    | 1,320  | 4,280  | 1,250  | 340    | 212    | 486    | 97    | 1,170 |
| 15    | 54    | 58    | 782    | 420    | 1,410  | 3,510  | 2,020  | 347    | 275    | 566    | 91    | 788   |
| 16    | 51    | 56    | 818    | 400    | 1,670  | 2,760  | 3,660  | 358    | 1,500  | 530    | 84    | 450   |
| 17    | 51    | 54    | 566    | 390    | 1,490  | 3,040  | 4,560  | 389    | 1,020  | 580    | 97    | 263   |
| 18    | 52    | 62    | 406    | 390    | 1,400  | 2,330  | 2,760  | 422    | 530    | 450    | 128   | 1,720 |
| 19    | 50    | 78    | 326    | 420    | 1,270  | 1,690  | 1,720  | 372    | 364    | 364    | 123   | 1,270 |
| 20    | 45    | 92    | 319    | 390    | 962    | 1,290  | 2,290  | 322    | 305    | 330    | 107   | 730   |
| 21    | 41    | 107   | 322    | 370    | 800    | 1,100  | 2,360  | 299    | 422    | 322    | 96    | 422   |
| 22    | 41    | 117   | 284    | 462    | 700    | 1,270  | 1,980  | 269    | 454    | 263    | 86    | 305   |
| 23    | 42    | 108   | 225    | 539    | 650    | 1,530  | 1,630  | 242    | 1,810  | 232    | 108   | 242   |
| 24    | 47    | 114   | 230    | 670    | 600    | 1,240  | 1,270  | 225    | 2,000  | 210    | 108   | 220   |
| 25    | 54    | 124   | 215    | 645    | 550    | 1,060  | 1,040  | 205    | 1,970  | 192    | 91    | 208   |
| 26    | 56    | 121   | 208    | 430    | 500    | 914    | 860    | 182    | 1,530  | 178    | 108   | 192   |
| 27    | 54    | 130   | 220    | 400    | 500    | 806    | 735    | 161    | 1,090  | 178    | 208   | 183   |
| 28    | 53    | 161   | 290    | 350    | 735    | 720    | 650    | 148    | 750    | 180    | 180   | 180   |
| 29    | 51    | 188   | 312    | 326    | 1,330  | 650    | 593    | 136    | 630    | 170    | 128   | 172   |
| 30    | 49    | 293   | 985    | 300    | -----  | 650    | 552    | 148    | 705    | 152    | 99    | 222   |
| 31    | 49    | ----- | 1,770  | 290    | -----  | 598    | -----  | 257    | -----  | 138    | 85    | ----- |
| TOTAL | 1,683 | 2,647 | 13,882 | 15,705 | 20,877 | 57,948 | 38,543 | 11,154 | 18,373 | 14,365 | 3,585 | 9,872 |
| MEAN  | 54.3  | 88.2  | 448    | 507    | 720    | 1,869  | 1,285  | 360    | 612    | 463    | 116   | 329   |
| MAX   | 88    | 293   | 1,770  | 1,070  | 1,670  | 4,280  | 4,560  | 630    | 2,000  | 1,020  | 208   | 1,720 |
| MIN   | 41    | 51    | 205    | 290    | 280    | 598    | 454    | 136    | 130    | 138    | 84    | 60    |
| CFSM  | .11   | .18   | .90    | 1.02   | 1.45   | 3.77   | 2.59   | .73    | 1.23   | .93    | .23   | .66   |
| IN.   | .13   | .20   | 1.04   | 1.18   | 1.57   | 4.35   | 2.89   | .84    | 1.38   | 1.08   | .27   | .74   |

CAL YR 1971 TOTAL 152,621 MEAN 418 MAX 6,630 MIN 36 CFSM .84 IN 11.45  
WTR YR 1972 TOTAL 208,634 MEAN 570 MAX 4,560 MIN 41 CFSM 1.15 IN 15.65

PEAK DISCHARGE (BASE, 5,000 CFS).--Apr. 16 (2200) 5,150 cfs (8.82 ft).

## YELLOW CREEK BASIN

03110000 Yellow Creek near Hammondsville, Ohio

LOCATION.--Lat 40°32'16", long 80°43'31", in sec.29, T.8 N., R.2 W., Jefferson County, on right bank 1,000 ft upstream from Lowery Run, 0.9 mile upstream from Brush Creek, and 1.6 miles southwest of Hammondsville.

DRAINAGE AREA.--147 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 692.10 ft above mean sea level (Ohio State Highway Department bench mark).

AVERAGE DISCHARGE.--32 years, 152 cfs (14.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,180 cfs Mar. 13 (gage height, 4.88 ft); minimum, 5.2 cfs Sept. 11, 12.

Period of record: Maximum discharge, 9,580 cfs Jan. 27, 1952 (gage height, 12.17 ft); minimum, 0.8 cfs Sept. 24 to Oct. 1, Oct. 7, 8, 1963.

The highest stage observed is reported to have occurred in 1912.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG  | SEP     |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|------|---------|
| 1     | 21    | 18    | 63    | 308   | 95    | 536    | 163    | 187   | 69    | 54    | 15   | 9.3     |
| 2     | 15    | 21    | 42    | 269   | 107   | 618    | 168    | 195   | 77    | 44    | 15   | 8.5     |
| 3     | 12    | 23    | 38    | 260   | 115   | 671    | 155    | 175   | 75    | 40    | 30   | 8.5     |
| 4     | 10    | 37    | 27    | 212   | 152   | 492    | 154    | 142   | 59    | 42    | 45   | 10      |
| 5     | 9.2   | 27    | 23    | 241   | 115   | 398    | 146    | 126   | 48    | 40    | 32   | 9.6     |
| 6     | 8.7   | 23    | 70    | 206   | 130   | 304    | 137    | 109   | 42    | 53    | 21   | 9.0     |
| 7     | 8.3   | 22    | 462   | 185   | 110   | 316    | 649    | 101   | 40    | 43    | 17   | 7.5     |
| 8     | 9.8   | 20    | 393   | 163   | 95    | 714    | 661    | 97    | 35    | 34    | 17   | 6.8     |
| 9     | 9.1   | 21    | 192   | 152   | 90    | 519    | 467    | 140   | 32    | 31    | 20   | 6.4     |
| 10    | 13    | 44    | 133   | 189   | 85    | 411    | 395    | 169   | 29    | 113   | 27   | 5.7     |
| 11    | 21    | 111   | 104   | 174   | 85    | 329    | 337    | 131   | 26    | 185   | 19   | 5.6     |
| 12    | 18    | 80    | 79    | 157   | 100   | 303    | 289    | 116   | 25    | 88    | 15   | 6.1     |
| 13    | 14    | 29    | 67    | 154   | 333   | 828    | 458    | 106   | 31    | 61    | 14   | 37      |
| 14    | 13    | 15    | 67    | 166   | 597   | 822    | 483    | 112   | 56    | 62    | 16   | 283     |
| 15    | 11    | 12    | 350   | 117   | 382   | 669    | 447    | 109   | 45    | 48    | 13   | 174     |
| 16    | 12    | 9.6   | 305   | 130   | 434   | 659    | 542    | 110   | 54    | 50    | 11   | 79      |
| 17    | 12    | 8.9   | 211   | 130   | 349   | 893    | 708    | 112   | 50    | 117   | 16   | 50      |
| 18    | 12    | 8.6   | 156   | 120   | 310   | 649    | 514    | 115   | 35    | 77    | 32   | 50      |
| 19    | 12    | 9.5   | 119   | 120   | 283   | 472    | 414    | 119   | 30    | 58    | 33   | 65      |
| 20    | 11    | 11    | 117   | 110   | 218   | 370    | 705    | 107   | 30    | 109   | 29   | 39      |
| 21    | 11    | 15    | 120   | 110   | 200   | 325    | 680    | 104   | 48    | 64    | 21   | 31      |
| 22    | 11    | 17    | 96    | 109   | 180   | 393    | 715    | 94    | 51    | 47    | 16   | 25      |
| 23    | 12    | 17    | 74    | 194   | 170   | 445    | 619    | 84    | 143   | 36    | 12   | 21      |
| 24    | 14    | 15    | 81    | 226   | 160   | 372    | 478    | 75    | 156   | 33    | 11   | 21      |
| 25    | 16    | 15    | 75    | 248   | 150   | 324    | 377    | 69    | 109   | 27    | 10   | 24      |
| 26    | 24    | 15    | 71    | 199   | 140   | 284    | 303    | 61    | 98    | 23    | 10   | 24      |
| 27    | 23    | 17    | 78    | 160   | 150   | 257    | 259    | 52    | 80    | 24    | 33   | 25      |
| 28    | 23    | 22    | 95    | 140   | 230   | 229    | 224    | 48    | 62    | 26    | 34   | 27      |
| 29    | 21    | 34    | 119   | 120   | 411   | 210    | 200    | 46    | 56    | 23    | 19   | 25      |
| 30    | 19    | 72    | 265   | 110   | ----- | 203    | 185    | 47    | 62    | 19    | 14   | 32      |
| 31    | 18    | ----- | 553   | 100   | ----- | 174    | -----  | 80    | ----- | 17    | 11   | -----   |
| TOTAL | 444.1 | 789.6 | 4,645 | 5,279 | 5,976 | 14,189 | 12,032 | 3,338 | 1,753 | 1,688 | 628  | 1,125.0 |
| MEAN  | 14.3  | 26.3  | 150   | 170   | 206   | 458    | 401    | 108   | 58.4  | 54.5  | 20.3 | 37.5    |
| MAX   | 24    | 111   | 553   | 308   | 597   | 893    | 715    | 195   | 156   | 185   | 45   | 283     |
| MIN   | 8.3   | 8.6   | 23    | 100   | 85    | 174    | 137    | 46    | 25    | 17    | 10   | 5.6     |
| CFSM  | .10   | .18   | 1.02  | 1.16  | 1.40  | 3.12   | 2.73   | .73   | .40   | .37   | .14  | .26     |
| IN.   | .11   | .20   | 1.18  | 1.34  | 1.51  | 3.59   | 3.04   | .84   | .44   | .43   | .16  | .28     |

CAL YR 1971 TOTAL 49,256.7 MEAN 135 MAX 1,840 MIN 5.2 CFSM .92 IN 12.46

WTR YR 1972 TOTAL 51,886.7 MEAN 142 MAX 893 MIN 5.6 CFSM .97 IN 13.13

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.



## 03111500 Short Creek near Dillonvale, Ohio

LOCATION.--Lat 40°11'36", long 80°44'04", in sec.30, T.4 N., R.2 W., Jefferson County, on right bank at downstream side of bridge on State Highway 150, 2.1 miles east of Dillonvale, 2.2 miles downstream from Jug Run, and 2.9 miles upstream from Little Short Creek.

DRAINAGE AREA.--123 sq mi.

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 676.1 ft above mean sea level (State of Ohio bench mark). Prior to Oct. 21, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 119 cfs (13.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,820 cfs Mar. 13 (gage height, 5.63 ft); minimum, 22 cfs Sept. 9, 10, 11, 12.

Period of record: Maximum discharge, 6,500 cfs Mar. 6, 1945; maximum gage height, 10.15 ft Mar. 5, 1963 (from graph based on gage readings); minimum daily, 2.8 cfs Sept. 21, 27, 1947.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1003: 1942-43. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1     | 40    | 48    | 51    | 110   | 65    | 200   | 155    | 203   | 71    | 84    | 33    | 25    |
| 2     | 35    | 54    | 31    | 116   | 81    | 242   | 157    | 218   | 66    | 69    | 34    | 31    |
| 3     | 32    | 58    | 31    | 124   | 92    | 335   | 143    | 209   | 64    | 66    | 60    | 36    |
| 4     | 31    | 49    | 31    | 107   | 109   | 250   | 160    | 188   | 59    | 64    | 48    | 31    |
| 5     | 31    | 44    | 31    | 148   | 75    | 226   | 146    | 172   | 57    | 71    | 38    | 27    |
| 6     | 30    | 42    | 160   | 124   | 101   | 210   | 136    | 160   | 55    | 76    | 35    | 25    |
| 7     | 30    | 43    | 405   | 104   | 94    | 240   | 691    | 155   | 54    | 59    | 38    | 24    |
| 8     | 29    | 41    | 290   | 94    | 80    | 345   | 469    | 150   | 50    | 56    | 38    | 24    |
| 9     | 30    | 40    | 139   | 93    | 70    | 242   | 340    | 174   | 48    | 59    | 38    | 24    |
| 10    | 54    | 41    | 104   | 121   | 60    | 216   | 285    | 160   | 49    | 71    | 34    | 22    |
| 11    | 43    | 39    | 87    | 108   | 60    | 192   | 250    | 136   | 46    | 74    | 31    | 22    |
| 12    | 36    | 36    | 72    | 99    | 90    | 202   | 223    | 126   | 45    | 56    | 32    | 24    |
| 13    | 35    | 35    | 65    | 95    | 416   | 1,190 | 1,120  | 123   | 113   | 50    | 35    | 26    |
| 14    | 39    | 32    | 69    | 95    | 380   | 586   | 568    | 129   | 164   | 48    | 31    | 31    |
| 15    | 42    | 31    | 107   | 71    | 303   | 448   | 430    | 127   | 100   | 47    | 29    | 30    |
| 16    | 40    | 31    | 118   | 48    | 275   | 538   | 433    | 113   | 88    | 64    | 32    | 25    |
| 17    | 41    | 30    | 89    | 70    | 230   | 574   | 481    | 123   | 69    | 59    | 42    | 25    |
| 18    | 42    | 29    | 78    | 70    | 210   | 406   | 358    | 116   | 60    | 51    | 54    | 25    |
| 19    | 42    | 29    | 71    | 65    | 190   | 328   | 320    | 107   | 55    | 47    | 77    | 25    |
| 20    | 42    | 35    | 76    | 65    | 180   | 288   | 390    | 107   | 64    | 69    | 70    | 24    |
| 21    | 43    | 34    | 75    | 65    | 210   | 263   | 330    | 104   | 107   | 49    | 46    | 24    |
| 22    | 46    | 32    | 63    | 82    | 180   | 320   | 547    | 95    | 97    | 46    | 37    | 25    |
| 23    | 50    | 26    | 56    | 109   | 170   | 303   | 424    | 90    | 223   | 44    | 33    | 25    |
| 24    | 57    | 29    | 58    | 122   | 180   | 260   | 348    | 84    | 159   | 42    | 32    | 28    |
| 25    | 65    | 31    | 56    | 133   | 210   | 234   | 300    | 80    | 118   | 40    | 30    | 34    |
| 26    | 56    | 30    | 58    | 110   | 234   | 216   | 258    | 74    | 100   | 38    | 42    | 34    |
| 27    | 52    | 33    | 63    | 100   | 190   | 201   | 234    | 71    | 90    | 40    | 35    | 51    |
| 28    | 51    | 52    | 77    | 90    | 170   | 184   | 218    | 69    | 77    | 43    | 31    | 43    |
| 29    | 49    | 54    | 80    | 80    | 204   | 180   | 207    | 68    | 88    | 37    | 28    | 35    |
| 30    | 48    | 89    | 124   | 70    | ----- | 174   | 212    | 69    | 106   | 36    | 25    | 71    |
| 31    | 48    | ----- | 162   | 65    | ----- | 157   | -----  | 78    | ----- | 35    | 25    | ----- |
| TOTAL | 1,309 | 1,197 | 2,977 | 2,953 | 4,909 | 9,750 | 10,333 | 3,878 | 2,542 | 1,690 | 1,193 | 896   |
| MEAN  | 42.2  | 39.9  | 96.0  | 95.3  | 169   | 315   | 344    | 125   | 84.7  | 54.5  | 38.5  | 29.9  |
| MAX   | 65    | 89    | 405   | 148   | 416   | 1,190 | 1,120  | 218   | 223   | 84    | 77    | 71    |
| MIN   | 29    | 26    | 31    | 48    | 60    | 157   | 136    | 68    | 45    | 35    | 25    | 22    |
| CFSM  | .34   | .32   | .78   | .77   | 1.37  | 2.56  | 2.80   | 1.02  | .69   | .44   | .31   | .24   |
| IN.   | .40   | .36   | .90   | .89   | 1.48  | 2.95  | 3.13   | 1.17  | .77   | .51   | .36   | .27   |

CAL YR 1971 TOTAL 43,243 MEAN 118 MAX 1,550 MIN 20 CFSM .96 IN 13.08  
WTR YR 1972 TOTAL 43,627 MEAN 119 MAX 1,190 MIN 22 CFSM .97 IN 13.19

## PEAK DISCHARGE (BASE, 1,200 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-13 | 0700 | 5.63  | 1,820     | 4-13 | 0800 | 5.19  | 1,610     |
| 4-7  | 1500 | 4.22  | 1,230     |      |      |       |           |

## CAPTINA CREEK BASIN

03114000 Captina Creek at Armstrongs Mills, Ohio

LOCATION.--Lat 39°54'31", long 80°55'27", in NE 1/4 sec.10, T.5 N., R.4 W., Belmont County, on left bank at downstream side of bridge on State Highway 148, 0.5 mile east of Armstrongs Mills, and 0.7 mile downstream from Anderson Run.

DRAINAGE AREA.--134 sq mi.

PERIOD OF RECORD.--August 1926 to September 1935, October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 739.53 ft above mean sea level. Aug. 20, 1926, to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft higher.

AVERAGE DISCHARGE.--23 years, 151 cfs (15.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,490 cfs July 15 (gage height, 10.61 ft); no flow, all or part of each day Sept. 19-24.

Period of record: Maximum discharge, about 11,800 cfs Mar. 4, 1963; maximum gage height, 14.40 ft, present datum, Aug. 7, 1935; no flow at times during 1929-30, 1932, 1934, 1959, 1963-66, 1972.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------------|---|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|--------|
| 1           | 78  | 19    | 158   | 235   | 100   | 245    | 140    | 128   | 26    | 74    | 22    | 6.8    |
| 2           | 54  | 32    | 105   | 360   | 100   | 662    | 150    | 162   | 24    | 50    | 20    | 5.0    |
| 3           | 45  | 46    | 90    | 336   | 140   | 1,010  | 135    | 162   | 24    | 68    | 25    | 6.8    |
| 4           | 37  | 31    | 86    | 296   | 204   | 510    | 228    | 130   | 21    | 104   | 29    | 14     |
| 5           | 32  | 25    | 82    | 698   | 150   | 388    | 221    | 116   | 19    | 102   | 26    | 12     |
| 6           | 28  | 22    | 1,210 | 400   | 189   | 300    | 189    | 100   | 16    | 145   | 19    | 7.4    |
| 7           | 26  | 23    | 1,240 | 300   | 165   | 495    | 410    | 92    | 15    | 88    | 22    | 5.6    |
| 8           | 23  | 21    | 630   | 242   | 150   | 698    | 400    | 88    | 12    | 70    | 29    | 4.5    |
| 9           | 22  | 20    | 352   | 263   | 130   | 392    | 332    | 111   | 11    | 61    | 21    | 3.0    |
| 10          | 38  | 21    | 266   | 445   | 110   | 312    | 284    | 116   | 30    | 67    | 17    | 2.5    |
| 11          | 33  | 21    | 231   | 324   | 95    | 256    | 245    | 86    | 20    | 86    | 14    | 1.6    |
| 12          | 25  | 20    | 186   | 263   | 95    | 235    | 210    | 77    | 14    | 55    | 12    | .80    |
| 13          | 21  | 19    | 162   | 235   | 1,200 | 500    | 698    | 72    | 13    | 53    | 11    | 1.6    |
| 14          | 26  | 18    | 165   | 204   | 734   | 344    | 495    | 74    | 19    | 75    | 12    | 2.5    |
| 15          | 29  | 17    | 231   | 140   | 625   | 308    | 1,760  | 75    | 17    | 1,130 | 9.8   | 4.5    |
| 16          | 26  | 17    | 235   | 104   | 570   | 1,580  | 1,280  | 82    | 26    | 1,480 | 8.0   | 4.0    |
| 17          | 26  | 16    | 195   | 100   | 425   | 1,020  | 818    | 74    | 27    | 480   | 42    | 3.0    |
| 18          | 23  | 16    | 168   | 100   | 376   | 565    | 470    | 68    | 17    | 249   | 100   | 2.0    |
| 19          | 21  | 17    | 145   | 110   | 368   | 372    | 344    | 58    | 13    | 148   | 65    | .80    |
| 20          | 18  | 24    | 171   | 110   | 273   | 292    | 364    | 53    | 17    | 109   | 49    | 0      |
| 21          | 17  | 26    | 165   | 100   | 256   | 252    | 266    | 52    | 45    | 90    | 26    | 0      |
| 22          | 17  | 26    | 138   | 95    | 312   | 396    | 600    | 45    | 44    | 65    | 19    | 0      |
| 23          | 19  | 19    | 120   | 198   | 256   | 396    | 445    | 40    | 214   | 55    | 19    | 0      |
| 24          | 34  | 23    | 123   | 224   | 263   | 308    | 348    | 36    | 133   | 44    | 18    | .40    |
| 25          | 51  | 25    | 111   | 316   | 263   | 259    | 308    | 33    | 77    | 38    | 14    | 3.0    |
| 26          | 34  | 22    | 116   | 242   | 352   | 224    | 238    | 29    | 56    | 34    | 12    | 5.6    |
| 27          | 29  | 31    | 120   | 214   | 277   | 204    | 198    | 26    | 74    | 32    | 19    | 43     |
| 28          | 25  | 133   | 159   | 180   | 263   | 183    | 171    | 25    | 61    | 34    | 22    | 98     |
| 29          | 22  | 181   | 177   | 150   | 259   | 171    | 148    | 22    | 84    | 28    | 15    | 49     |
| 30          | 21  | 253   | 256   | 130   | ----- | 174    | 135    | 23    | 111   | 26    | 11    | 88     |
| 31          | 20  | ----- | 308   | 110   | ----- | 145    | -----  | 32    | ----- | 23    | 8.0   | -----  |
| TOTAL       | 920   | 1,184 | 7,901 | 7,224 | 8,700 | 13,196 | 12,030 | 2,287 | 1,280 | 5,163 | 735.8 | 375.40 |
| MEAN        | 29.7  | 39.5  | 255   | 233   | 300   | 426    | 401    | 73.8  | 42.7  | 167   | 23.7  | 12.5   |
| MAX         | 78  | 253   | 1,240 | 698   | 1,200 | 1,580  | 1,760  | 162   | 214   | 1,480 | 100   | 98     |
| MIN         | 17  | 16    | 82    | 95    | 95    | 145    | 135    | 22    | 11    | 23    | 8.0   | 0      |
| CFSM        | .22   | .29   | 1.90  | 1.74  | 2.24  | 3.18   | 2.99   | .55   | .32   | 1.25  | .18   | .09    |
| IN.         | .26   | .33   | 2.19  | 2.01  | 2.42  | 3.66   | 3.34   | .63   | .36   | 1.43  | .20   | .10    |
| CAL YR 1971 | TOTAL 50,976.60 MEAN 140 MAX 2,550 MIN .80 CFSM 1.04 IN 14.15 |       |       |       |       |        |        |       |       |       |       |        |
| WTR YR 1972 | TOTAL 60,996.20 MEAN 167 MAX 1,760 MIN 0 CFSM 1.25 IN 16.93   |       |       |       |       |        |        |       |       |       |       |        |

## PEAK DISCHARGE (BASE, 3,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-15 | 1400 | 8.06  | 4,350     | 7-15 | 2200 | 10.61 | 7,490     |

03115400 Little Muskingum River at Bloomfield, Ohio

LOCATION.--Lat 39°33'47", long 81°12'14", in sec.22, T.3 N., R.6 W., Washington County, on left bank 400 ft upstream from bridge on State Highway 260 at Bloomfield, 2.2 miles downstream from Wilson Run.

DRAINAGE AREA.--210 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 645.99 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 231 cfs (14.94 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,400 cfs Apr. 13 (gage height, 18.66 ft); minimum, 2.5 cfs Sept. 23.

Period of record: Maximum discharge, 21,200 cfs Mar. 5, 1963 (gage height, 28.08 ft), from rating curve extended above 8,000 cfs on basis of velocity-area study and flow over road computations; no flow Sept. 18, 26, 27, 1967.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

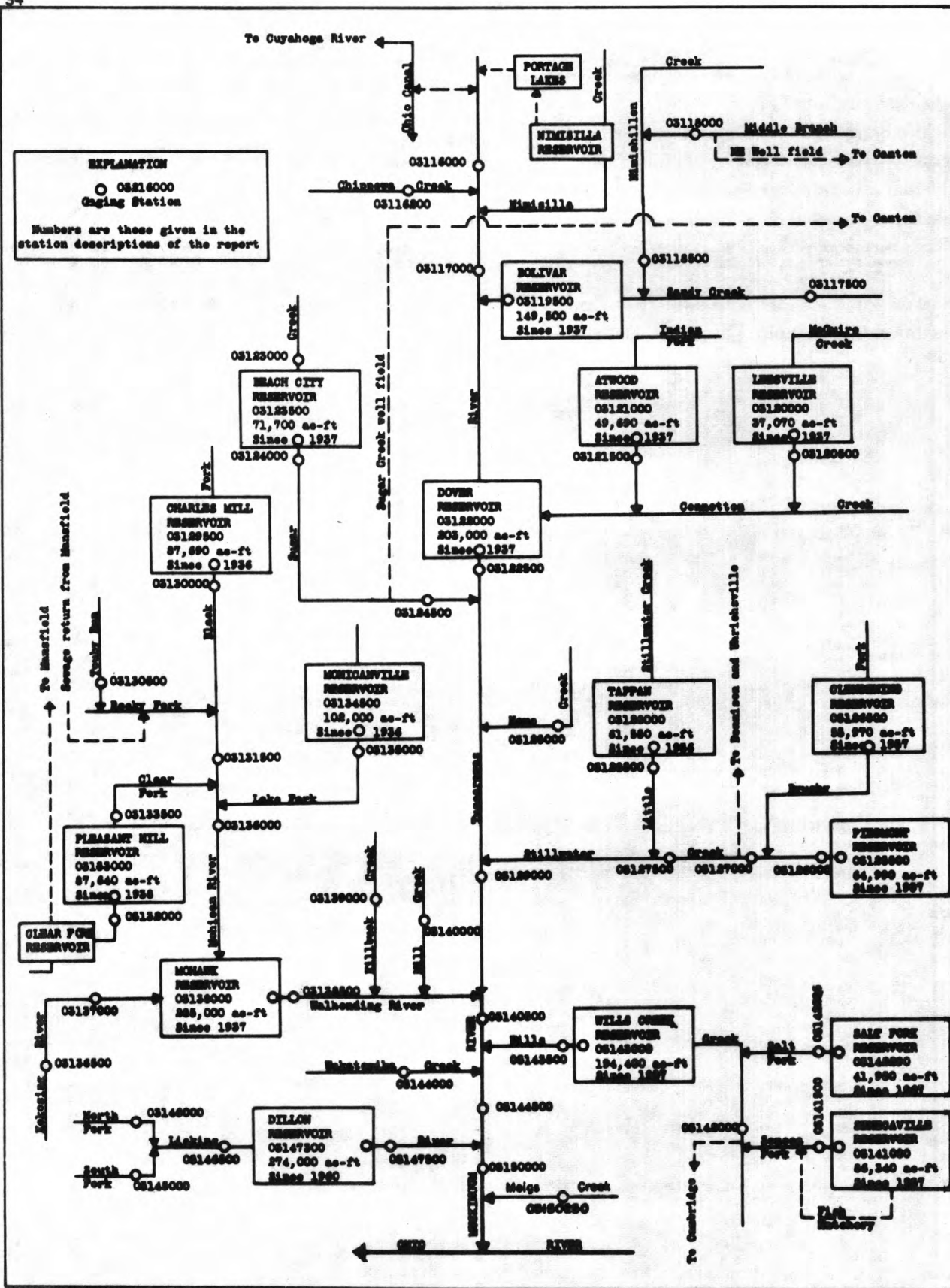
REVISIONS (WATER YEARS).--WSP 1705: 1959.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV   | DEC      | JAN       | FEB     | MAR       | APR      | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------------|----------------|-------|----------|-----------|---------|-----------|----------|-------|-------|-------|---------|-------|
| 1           | 66             | 18    | 230      | 209       | 154     | 328       | 286      | 173   | 38    | 269   | 17      | 14    |
| 2           | 55             | 21    | 227      | 393       | 145     | 545       | 265      | 176   | 34    | 170   | 15      | 10    |
| 3           | 44             | 65    | 185      | 748       | 192     | 2,710     | 241      | 200   | 32    | 236   | 14      | 10    |
| 4           | 36             | 56    | 152      | 463       | 466     | 967       | 575      | 191   | 28    | 260   | 628     | 56    |
| 5           | 31             | 42    | 125      | 1,250     | 293     | 704       | 736      | 164   | 26    | 260   | 242     | 48    |
| 6           | 27             | 32    | 221      | 876       | 315     | 512       | 460      | 140   | 24    | 435   | 110     | 27    |
| 7           | 24             | 30    | 230      | 518       | 279     | 520       | 1,070    | 125   | 22    | 266   | 60      | 18    |
| 8           | 20             | 29    | 230      | 351       | 225     | 930       | 1,500    | 120   | 18    | 185   | 42      | 12    |
| 9           | 18             | 26    | 230      | 323       | 201     | 640       | 903      | 149   | 16    | 155   | 34      | 9.9   |
| 10          | 18             | 24    | 272      | 1,030     | 162     | 443       | 613      | 160   | 20    | 108   | 25      | 8.2   |
| 11          | 21             | 24    | 299      | 751       | 140     | 338       | 455      | 120   | 16    | 82    | 19      | 7.2   |
| 12          | 23             | 23    | 230      | 459       | 137     | 298       | 355      | 110   | 14    | 72    | 16      | 6.6   |
| 13          | 20             | 21    | 194      | 351       | 1,970   | 268       | 2,970    | 100   | 12    | 54    | 16      | 6.0   |
| 14          | 18             | 20    | 164      | 288       | 2,200   | 243       | 1,860    | 100   | 16    | 44    | 12      | 5.0   |
| 15          | 17             | 19    | 170      | 218       | 1,110   | 224       | 798      | 110   | 28    | 62    | 12      | 4.3   |
| 16          | 18             | 18    | 185      | 162       | 1,000   | 285       | 825      | 110   | 42    | 536   | 9.9     | 4.1   |
| 17          | 20             | 18    | 179      | 157       | 686     | 894       | 972      | 100   | 62    | 545   | 23      | 4.1   |
| 18          | 17             | 18    | 158      | 155       | 545     | 598       | 608      | 90    | 46    | 326   | 482     | 4.1   |
| 19          | 15             | 18    | 133      | 175       | 691     | 405       | 435      | 80    | 27    | 203   | 209     | 3.9   |
| 20          | 14             | 21    | 155      | 153       | 477     | 320       | 376      | 75    | 40    | 131   | 128     | 3.2   |
| 21          | 12             | 28    | 200      | 151       | 354     | 282       | 311      | 70    | 242   | 90    | 86      | 2.8   |
| 22          | 12             | 32    | 179      | 138       | 418     | 623       | 910      | 65    | 149   | 72    | 50      | 3.0   |
| 23          | 13             | 33    | 152      | 175       | 381     | 1,060     | 860      | 55    | 758   | 57    | 38      | 2.7   |
| 24          | 21             | 31    | 147      | 425       | 607     | 648       | 539      | 50    | 638   | 47    | 54      | 3.0   |
| 25          | 52             | 35    | 135      | 534       | 697     | 474       | 432      | 46    | 284   | 36    | 37      | 3.5   |
| 26          | 52             | 35    | 127      | 446       | 840     | 370       | 335      | 42    | 182   | 30    | 27      | 4.1   |
| 27          | 40             | 44    | 133      | 313       | 631     | 315       | 281      | 38    | 137   | 25    | 33      | 9.9   |
| 28          | 30             | 212   | 138      | 273       | 461     | 277       | 242      | 34    | 140   | 23    | 68      | 25    |
| 29          | 26             | 230   | 155      | 218       | 381     | 258       | 212      | 32    | 194   | 31    | 46      | 53    |
| 30          | 22             | 230   | 185      | 200       | -----   | 463       | 188      | 32    | 411   | 25    | 28      | 209   |
| 31          | 21             | ----- | 236      | 166       | -----   | 341       | -----    | 42    | ----- | 20    | 19      | ----- |
| TOTAL       | 823            | 1,453 | 5,756    | 12,069    | 16,158  | 17,283    | 20,613   | 3,099 | 3,696 | 4,855 | 2,599.9 | 577.6 |
| MEAN        | 26.5           | 48.4  | 186      | 389       | 557     | 558       | 687      | 100   | 123   | 157   | 83.9    | 19.3  |
| MAX         | 66             | 230   | 299      | 1,250     | 2,200   | 2,710     | 2,970    | 200   | 758   | 545   | 628     | 209   |
| MIN         | 12             | 18    | 125      | 138       | 137     | 224       | 188      | 32    | 12    | 20    | 9.9     | 2.7   |
| CFSM        | .13            | .23   | .89      | 1.85      | 2.65    | 2.66      | 3.27     | .48   | .59   | .75   | .40     | .09   |
| IN.         | .15            | .26   | 1.02     | 2.14      | 2.86    | 3.06      | 3.65     | .55   | .65   | .86   | .46     | .10   |
| CAL YR 1971 | TOTAL 67,448.0 |       | MEAN 185 | MAX 3,500 | MIN 1.7 | CFSM .88  | IN 11.95 |       |       |       |         |       |
| WTR YR 1972 | TOTAL 88,982.5 |       | MEAN 243 | MAX 2,970 | MIN 2.7 | CFSM 1.16 | IN 15.76 |       |       |       |         |       |

## PEAK DISCHARGE (BASE, 3,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 2-13 | 2300 | 17.71 | 3,860     | 4-13 | 2000 | 18.66 | 4,400     |
| 3-3  | 0800 | 17.26 | 3,630     |      |      |       |           |





## MUSKINGUM RIVER BASIN

35

03116000 Tuscarawas River at Clinton, Ohio

LOCATION.--Lat 40°55'40", long 81°37'58", in NW 1/4 sec.32, T.2 N., R.10 W., Summit County, on right bank 100 ft downstream from highway bridge at Clinton, and 1 mile upstream from Chippewa Creek.

DRAINAGE AREA.--174 sq mi.

PERIOD OF RECORD.--May 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is 933.28 ft above mean sea level, adjustment of 1912. Prior to Nov. 18, 1928, nonrecording gage at site 100 ft upstream at datum 4.00 ft higher. Nov. 18, 1928, to July 24, 1930, nonrecording gage at same site at present datum.

AVERAGE DISCHARGE.--43 years, (1929-72), 138 cfs.

EXTREMES.--Current year: Maximum daily discharge, 962 cfs Mar. 16; maximum gage height, 10.95 ft Mar. 14 (backwater from Chippewa Creek); minimum discharge, 47 cfs Oct. 22.  
Period of record: Maximum discharge, 2,700 cfs Aug. 8, 1935; maximum gage height, 17.00 ft July 7, 1969 (backwater from Chippewa Creek); minimum discharge, 10 cfs Nov. 6, 1928.

REMARKS.--Records fair. Some water diverted through the Portage Lakes into the Ohio Canal at Long Lake 12 miles upstream and 3 miles south of Akron. Part of the diverted water flows through the Ohio Canal into the Cuyahoga River basin. Flow affected by industrial plants upstream from station and supplemented at times by diversion from Nimisila Reservoir (capacity, 6,500 acre-ft) since 1939. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT          | NOV      | DEC       | JAN    | FEB   | MAR    | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|--------------|----------|-----------|--------|-------|--------|-------|-------|-------|-------|-------|-------|
| 1           | 63           | 54       | 74        | 310    | 75    | 330    | 144   | 154   | 104   | 163   | 74    | 69    |
| 2           | 63           | 59       | 68        | 198    | 76    | 569    | 143   | 149   | 126   | 106   | 74    | 68    |
| 3           | 62           | 60       | 60        | 169    | 80    | 778    | 134   | 158   | 95    | 228   | 74    | 66    |
| 4           | 60           | 58       | 60        | 144    | 88    | 643    | 138   | 156   | 83    | 316   | 69    | 64    |
| 5           | 60           | 60       | 60        | 158    | 80    | 435    | 127   | 140   | 76    | 202   | 66    | 66    |
| 6           | 64           | 54       | 79        | 132    | 77    | 249    | 119   | 120   | 78    | 178   | 67    | 66    |
| 7           | 64           | 58       | 142       | 114    | 75    | 208    | 172   | 107   | 73    | 127   | 68    | 66    |
| 8           | 64           | 56       | 162       | 99     | 74    | 419    | 155   | 114   | 75    | 108   | 70    | 67    |
| 9           | 66           | 56       | 108       | 103    | 71    | 334    | 127   | 294   | 73    | 102   | 67    | 66    |
| 10          | 88           | 56       | 88        | 144    | 71    | 218    | 124   | 340   | 75    | 145   | 67    | 68    |
| 11          | 70           | 57       | 84        | 155    | 70    | 180    | 121   | 248   | 71    | 177   | 64    | 67    |
| 12          | 62           | 54       | 75        | 130    | 72    | 240    | 112   | 149   | 71    | 137   | 66    | 75    |
| 13          | 60           | 56       | 71        | 121    | 98    | 500    | 384   | 135   | 87    | 93    | 62    | 109   |
| 14          | 59           | 55       | 80        | 116    | 156   | 750    | 433   | 150   | 88    | 96    | 68    | 414   |
| 15          | 59           | 54       | 200       | 92     | 191   | 950    | 402   | 151   | 82    | 121   | 64    | 623   |
| 16          | 56           | 56       | 194       | 86     | 264   | 962    | 391   | 147   | 108   | 409   | 66    | 446   |
| 17          | 55           | 56       | 121       | 82     | 188   | 959    | 558   | 134   | 92    | 581   | 100   | 242   |
| 18          | 56           | 56       | 100       | 83     | 175   | 854    | 498   | 121   | 80    | 525   | 130   | 235   |
| 19          | 58           | 60       | 89        | 87     | 164   | 550    | 306   | 110   | 77    | 277   | 118   | 311   |
| 20          | 55           | 58       | 91        | 83     | 114   | 240    | 550   | 112   | 77    | 177   | 126   | 177   |
| 21          | 56           | 60       | 101       | 83     | 121   | 170    | 750   | 107   | 74    | 103   | 78    | 144   |
| 22          | 54           | 60       | 98        | 83     | 190   | 140    | 800   | 102   | 77    | 91    | 73    | 119   |
| 23          | 57           | 60       | 88        | 98     | 191   | 120    | 800   | 89    | 95    | 116   | 81    | 99    |
| 24          | 58           | 62       | 84        | 101    | 133   | 200    | 750   | 87    | 101   | 102   | 85    | 119   |
| 25          | 60           | 57       | 82        | 105    | 117   | 270    | 469   | 84    | 97    | 91    | 70    | 100   |
| 26          | 55           | 57       | 82        | 86     | 137   | 255    | 297   | 83    | 96    | 81    | 99    | 85    |
| 27          | 57           | 59       | 86        | 83     | 117   | 211    | 191   | 80    | 86    | 84    | 105   | 240   |
| 28          | 56           | 60       | 100       | 81     | 133   | 175    | 165   | 79    | 75    | 85    | 87    | 330   |
| 29          | 59           | 64       | 93        | 77     | 236   | 161    | 152   | 78    | 104   | 78    | 75    | 420   |
| 30          | 56           | 84       | 256       | 77     | ----- | 176    | 146   | 88    | 243   | 75    | 65    | 420   |
| 31          | 54           | -----    | 462       | 74     | ----- | 154    | ----- | 124   | ----- | 75    | 70    | ----- |
| TOTAL       | 1,866        | 1,756    | 3,538     | 3,554  | 3,634 | 12,400 | 9,658 | 4,190 | 2,739 | 5,249 | 2,448 | 5,441 |
| MEAN        | 60.2         | 58.5     | 114       | 115    | 125   | 400    | 322   | 135   | 91.3  | 169   | 79.0  | 181   |
| MAX         | 88           | 84       | 462       | 310    | 264   | 962    | 800   | 340   | 243   | 581   | 130   | 623   |
| MIN         | 54           | 54       | 60        | 74     | 70    | 120    | 112   | 78    | 71    | 75    | 62    | 64    |
| CAL YR 1971 | TOTAL 45,941 | MEAN 126 | MAX 1,070 | MIN 54 |       |        |       |       |       |       |       |       |
| WTR YR 1972 | TOTAL 56,473 | MEAN 154 | MAX 962   | MIN 54 |       |        |       |       |       |       |       |       |

## MUSKINGUM RIVER BASIN

03116200 Chippewa Creek at Easton, Ohio

LOCATION.--Lat 40°56'47", long 81°44'35", in SW 1/4 sec. 17, T.18 N., R.11 W., Wayne County, on left bank at downstream side of bridge on State Highway 585, 0.5 mile southwest of Easton, and 1.5 miles upstream from Red Run.

DRAINAGE AREA.--146 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 939.60 ft above mean sea level. Prior to June 10, 1960, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 114 cfs (10.61 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,090 cfs Mar. 14 (gage height, 10.90 ft); minimum, 9.0 cfs Oct. 4. Period of record: Maximum discharge, 12,500 cfs July 5, 1969 (gage height, 16.02 ft); minimum, 2.8 cfs July 6, 1963.

Flood of Jan. 21, 1959 reached a stage of 14.17 ft (discharge, 10,100 cfs, result of contracted-opening Measurement of peak flow).

REMARKS.--Records good. Low flow slightly regulated by industry at Rittman 2.5 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR    | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|
| 1     | 12   | 11    | 27    | 214   | 32    | 326    | 110   | 108   | 46    | 177   | 23    | 22    |
| 2     | 12   | 13    | 19    | 160   | 31    | 732    | 106   | 118   | 41    | 112   | 23    | 22    |
| 3     | 11   | 14    | 15    | 144   | 38    | 630    | 96    | 127   | 33    | 215   | 26    | 21    |
| 4     | 10   | 11    | 14    | 126   | 45    | 430    | 94    | 104   | 29    | 221   | 21    | 21    |
| 5     | 11   | 11    | 13    | 149   | 62    | 260    | 86    | 89    | 26    | 123   | 20    | 20    |
| 6     | 10   | 12    | 36    | 112   | 41    | 180    | 82    | 79    | 25    | 104   | 18    | 18    |
| 7     | 13   | 14    | 124   | 96    | 40    | 192    | 148   | 70    | 24    | 80    | 20    | 17    |
| 8     | 12   | 12    | 130   | 77    | 40    | 457    | 123   | 74    | 22    | 81    | 21    | 17    |
| 9     | 18   | 12    | 64    | 84    | 40    | 251    | 97    | 304   | 22    | 81    | 20    | 18    |
| 10    | 35   | 14    | 50    | 159   | 38    | 176    | 94    | 296   | 23    | 136   | 19    | 16    |
| 11    | 19   | 14    | 48    | 156   | 37    | 158    | 88    | 171   | 20    | 99    | 18    | 16    |
| 12    | 14   | 12    | 39    | 115   | 33    | 268    | 82    | 118   | 20    | 61    | 17    | 25    |
| 13    | 13   | 12    | 33    | 98    | 91    | 778    | 422   | 98    | 28    | 62    | 16    | 74    |
| 14    | 13   | 11    | 43    | 87    | 163   | 1,050  | 360   | 113   | 31    | 90    | 16    | 669   |
| 15    | 11   | 11    | 229   | 79    | 217   | 979    | 326   | 104   | 27    | 112   | 20    | 778   |
| 16    | 10   | 11    | 190   | 60    | 264   | 803    | 406   | 95    | 75    | 493   | 18    | 442   |
| 17    | 10   | 12    | 109   | 55    | 162   | 798    | 600   | 84    | 39    | 439   | 73    | 245   |
| 18    | 10   | 12    | 78    | 55    | 165   | 609    | 347   | 80    | 28    | 250   | 160   | 243   |
| 19    | 10   | 15    | 65    | 68    | 149   | 433    | 220   | 63    | 25    | 156   | 147   | 295   |
| 20    | 11   | 16    | 67    | 52    | 112   | 314    | 716   | 52    | 24    | 90    | 120   | 181   |
| 21    | 11   | 14    | 82    | 51    | 101   | 246    | 1,050 | 49    | 24    | 63    | 52    | 138   |
| 22    | 12   | 13    | 68    | 50    | 216   | 526    | 955   | 43    | 25    | 61    | 40    | 110   |
| 23    | 13   | 13    | 56    | 77    | 129   | 566    | 778   | 39    | 40    | 142   | 61    | 94    |
| 24    | 12   | 14    | 51    | 84    | 101   | 379    | 484   | 37    | 68    | 97    | 64    | 115   |
| 25    | 12   | 15    | 46    | 81    | 86    | 288    | 323   | 35    | 71    | 64    | 43    | 94    |
| 26    | 13   | 13    | 44    | 59    | 121   | 221    | 224   | 32    | 70    | 43    | 121   | 285   |
| 27    | 13   | 15    | 50    | 50    | 88    | 185    | 169   | 28    | 56    | 37    | 92    | 787   |
| 28    | 13   | 16    | 62    | 45    | 118   | 160    | 137   | 26    | 41    | 33    | 54    | 708   |
| 29    | 13   | 18    | 57    | 45    | 255   | 141    | 115   | 25    | 142   | 29    | 39    | 475   |
| 30    | 12   | 41    | 334   | 39    | ----- | 151    | 104   | 48    | 331   | 24    | 32    | 971   |
| 31    | 12   | ----- | 442   | 38    | ----- | 123    | ----- | 77    | ----- | 22    | 26    | ----- |
| TOTAL | 401  | 422   | 2,685 | 2,765 | 3,015 | 12,810 | 8,942 | 2,786 | 1,476 | 3,797 | 1,440 | 6,937 |
| MEAN  | 12.9 | 14.1  | 86.6  | 89.2  | 104   | 413    | 298   | 89.9  | 49.2  | 122   | 46.5  | 231   |
| MAX   | 35   | 41    | 442   | 214   | 264   | 1,050  | 1,050 | 304   | 331   | 493   | 160   | 971   |
| MIN   | 10   | 11    | 13    | 38    | 31    | 123    | 82    | 25    | 20    | 22    | 16    | 16    |
| CFSM  | .09  | .10   | .59   | .61   | .71   | 2.83   | 2.04  | .62   | .34   | .84   | .32   | 1.58  |
| IN.   | .10  | .11   | .68   | .70   | .77   | 3.26   | 2.28  | .71   | .38   | .97   | .37   | 1.77  |

CAL YR 1971 TOTAL 32,932.3 MEAN 90.2 MAX 1,370 MIN 5.5 CFSM .62 IN 8.39  
WTR YR 1972 TOTAL 47,476.0 MEAN 130 MAX 1,050 MIN 10 CFSM .89 IN 12.10

## PEAK DISCHARGE (BASE, 1,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-14 | 1700 | 10.90 | 1,090     | 4-21 | 1300 | 10.84 | 1,070     |

03117000 Tuscarawas River at Massillon, Ohio

LOCATION.--Lat 40°46'13", long 81°31'27", in sec. 20, T.10 N., R.9 W., Stark County, on left bank at sewage-treatment works, 0.7 mile south of Massillon, and 3 miles downstream from Newman Creek.

DRAINAGE AREA.--518 sq mi.

PERIOD OF RECORD.--October 1937 to current year. Prior to April 1938 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 916.00 ft above mean sea level, adjustment of 1912. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 408 cfs.

EXTREMES.--Current year: Maximum discharge, 3,290 cfs July 16 (gage height, 8.22 ft); minimum, 87 cfs Nov. 15. Period of record: Maximum discharge, 10,700 cfs July 5, 1969 (gage height, 16.43 ft); minimum, 54 cfs July 25, 1954, Aug. 20, 1962, Oct. 13, 1963.

REMARKS.--Records good. Diversion from basin and regulation at Portage Lakes (including Nimisila Reservoir since 1939). See REMARKS for station 03116000. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV      | DEC       | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP    |
|-------------|---------------|----------|-----------|--------|-------|--------|--------|--------|-------|--------|-------|--------|
| 1           | 131           | 103      | 161       | 842    | 149   | 765    | 420    | 352    | 298   | 554    | 146   | 150    |
| 2           | 125           | 115      | 127       | 527    | 154   | 1,370  | 407    | 377    | 272   | 377    | 148   | 139    |
| 3           | 115           | 117      | 109       | 451    | 171   | 1,600  | 380    | 463    | 238   | 521    | 159   | 135    |
| 4           | 113           | 117      | 98        | 382    | 200   | 1,460  | 361    | 409    | 176   | 890    | 156   | 135    |
| 5           | 111           | 105      | 92        | 421    | 158   | 1,090  | 355    | 352    | 154   | 660    | 139   | 137    |
| 6           | 121           | 107      | 161       | 363    | 160   | 679    | 343    | 300    | 152   | 551    | 129   | 139    |
| 7           | 131           | 102      | 429       | 303    | 154   | 533    | 461    | 275    | 150   | 426    | 133   | 135    |
| 8           | 129           | 105      | 486       | 258    | 152   | 962    | 492    | 308    | 150   | 350    | 139   | 137    |
| 9           | 135           | 103      | 308       | 243    | 147   | 950    | 366    | 708    | 152   | 339    | 139   | 133    |
| 10          | 195           | 105      | 223       | 342    | 140   | 644    | 338    | 974    | 152   | 542    | 135   | 129    |
| 11          | 188           | 109      | 192       | 418    | 139   | 491    | 327    | 716    | 148   | 578    | 129   | 133    |
| 12          | 150           | 103      | 167       | 358    | 142   | 586    | 293    | 451    | 146   | 421    | 119   | 167    |
| 13          | 135           | 98       | 152       | 303    | 219   | 1,780  | 788    | 347    | 156   | 303    | 119   | 233    |
| 14          | 133           | 92       | 174       | 303    | 412   | 2,670  | 1,080  | 379    | 238   | 352    | 123   | 910    |
| 15          | 133           | 96       | 474       | 228    | 508   | 2,770  | 1,070  | 407    | 262   | 379    | 119   | 1,300  |
| 16          | 121           | 100      | 584       | 183    | 714   | 2,540  | 1,210  | 382    | 316   | 2,420  | 137   | 1,150  |
| 17          | 115           | 100      | 352       | 192    | 538   | 2,430  | 1,540  | 350    | 245   | 2,690  | 288   | 726    |
| 18          | 119           | 100      | 255       | 185    | 489   | 2,100  | 1,330  | 324    | 188   | 2,020  | 388   | 593    |
| 19          | 123           | 107      | 211       | 203    | 450   | 1,600  | 914    | 280    | 170   | 1,170  | 305   | 814    |
| 20          | 127           | 109      | 209       | 207    | 302   | 1,240  | 1,680  | 272    | 156   | 677    | 390   | 533    |
| 21          | 125           | 105      | 233       | 202    | 307   | 817    | 2,390  | 260    | 174   | 437    | 228   | 407    |
| 22          | 117           | 105      | 226       | 196    | 481   | 763    | 2,440  | 255    | 183   | 318    | 190   | 344    |
| 23          | 117           | 105      | 192       | 236    | 442   | 769    | 2,300  | 221    | 248   | 344    | 204   | 290    |
| 24          | 115           | 103      | 174       | 274    | 348   | 774    | 1,840  | 181    | 288   | 334    | 235   | 331    |
| 25          | 117           | 98       | 161       | 285    | 293   | 777    | 1,260  | 176    | 272   | 295    | 202   | 334    |
| 26          | 121           | 92       | 159       | 217    | 349   | 760    | 806    | 174    | 300   | 240    | 498   | 429    |
| 27          | 107           | 98       | 176       | 195    | 313   | 647    | 539    | 154    | 255   | 216    | 414   | 1,160  |
| 28          | 105           | 100      | 199       | 181    | 342   | 545    | 412    | 148    | 221   | 204    | 262   | 1,300  |
| 29          | 107           | 113      | 202       | 166    | 542   | 459    | 360    | 152    | 245   | 181    | 202   | 1,150  |
| 30          | 105           | 163      | 593       | 156    | ----- | 435    | 331    | 202    | 670   | 159    | 163   | 1,650  |
| 31          | 100           | -----    | 1,150     | 147    | ----- | 433    | -----  | 300    | ----- | 146    | 161   | -----  |
| TOTAL       | 3,886         | 3,175    | 8,429     | 8,967  | 8,915 | 35,439 | 26,833 | 10,649 | 6,775 | 19,094 | 6,299 | 15,323 |
| MEAN        | 125           | 106      | 272       | 289    | 307   | 1,143  | 894    | 344    | 226   | 616    | 203   | 511    |
| MAX         | 195           | 163      | 1,150     | 842    | 714   | 2,770  | 2,440  | 974    | 670   | 2,690  | 498   | 1,650  |
| MIN         | 100           | 92       | 92        | 147    | 139   | 433    | 293    | 148    | 146   | 146    | 119   | 129    |
| CAL YR 1971 | TOTAL 124,259 | MEAN 340 | MAX 3,850 | MIN 74 |       |        |        |        |       |        |       |        |
| WTR YR 1972 | TOTAL 153,784 | MEAN 420 | MAX 2,770 | MIN 92 |       |        |        |        |       |        |       |        |

## PEAK DISCHARGE (BASE, 2,200 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-14 | 2200 | 7.42  | 2,860     | 7-16 | 1300 | 8.22  | 3,290     |
| 4-21 | 1700 | 6.75  | 2,490     |      |      |       |           |

## MUSKINGUM RIVER BASIN

03117500 Sandy Creek at Waynesburg, Ohio

LOCATION.--Lat 40°40'21", long 81°15'36", in sec. 21, T.17 N., R.7 W., Stark County, on upstream side of left pier of bridge on State Highway 183 in Waynesburg, 300 ft downstream from Little Sandy Creek, and 0.6 mile upstream from Indian Run.

DRAINAGE AREA.--253 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to December 1938 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--34 years, 249 cfs (13.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,220 cfs Mar. 13 (gage height, 5.35 ft); minimum, 22 cfs Nov. 20. Period of record: Maximum discharge, 15,000 cfs Jan. 22, 1959 (gage height, 10.05 ft), from rating curve extended above 4,700 cfs on basis of contracted-opening and flow over road measurement of peak flow; minimum, 6.9 cfs Sept. 12, 13, 1971.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 923: 1939-40. WSP 1555: 1940(M), 1943(M), 1947(M), 1952, 1956(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1     | 35   | 28    | 93    | 538   | 104   | 782    | 270    | 245   | 129   | 133   | 40    | 41    |
| 2     | 35   | 33    | 63    | 443   | 99    | 1,260  | 272    | 262   | 160   | 111   | 39    | 37    |
| 3     | 33   | 30    | 50    | 421   | 118   | 1,260  | 258    | 352   | 147   | 116   | 38    | 158   |
| 4     | 28   | 28    | 45    | 326   | 146   | 1,020  | 248    | 271   | 115   | 145   | 37    | 87    |
| 5     | 28   | 28    | 40    | 343   | 130   | 785    | 237    | 240   | 92    | 144   | 37    | 55    |
| 6     | 28   | 28    | 88    | 301   | 120   | 558    | 216    | 212   | 80    | 177   | 35    | 45    |
| 7     | 28   | 30    | 349   | 237   | 130   | 511    | 437    | 193   | 74    | 138   | 38    | 42    |
| 8     | 28   | 28    | 400   | 217   | 110   | 1,010  | 499    | 198   | 68    | 117   | 37    | 40    |
| 9     | 30   | 25    | 242   | 204   | 100   | 864    | 421    | 337   | 63    | 109   | 37    | 38    |
| 10    | 33   | 28    | 177   | 258   | 100   | 712    | 384    | 376   | 64    | 232   | 37    | 35    |
| 11    | 35   | 28    | 144   | 265   | 95    | 578    | 344    | 274   | 60    | 305   | 34    | 35    |
| 12    | 30   | 28    | 122   | 221   | 93    | 574    | 306    | 223   | 56    | 281   | 33    | 39    |
| 13    | 28   | 28    | 102   | 207   | 112   | 1,640  | 665    | 201   | 64    | 221   | 33    | 48    |
| 14    | 30   | 28    | 113   | 250   | 216   | 1,840  | 701    | 215   | 82    | 220   | 32    | 254   |
| 15    | 28   | 25    | 466   | 188   | 324   | 1,550  | 667    | 215   | 97    | 209   | 29    | 380   |
| 16    | 25   | 25    | 462   | 150   | 436   | 1,370  | 835    | 207   | 309   | 188   | 27    | 222   |
| 17    | 23   | 25    | 309   | 140   | 415   | 1,510  | 1,310  | 202   | 188   | 191   | 39    | 135   |
| 18    | 23   | 25    | 221   | 134   | 399   | 1,190  | 1,000  | 195   | 121   | 145   | 44    | 251   |
| 19    | 23   | 30    | 172   | 137   | 370   | 888    | 775    | 170   | 92    | 116   | 44    | 271   |
| 20    | 23   | 33    | 167   | 141   | 275   | 647    | 1,160  | 149   | 80    | 163   | 43    | 169   |
| 21    | 25   | 35    | 174   | 136   | 273   | 523    | 1,150  | 142   | 80    | 125   | 35    | 121   |
| 22    | 23   | 42    | 146   | 135   | 377   | 649    | 1,020  | 129   | 86    | 93    | 32    | 95    |
| 23    | 23   | 45    | 114   | 252   | 342   | 745    | 864    | 118   | 194   | 79    | 40    | 78    |
| 24    | 28   | 52    | 114   | 330   | 308   | 594    | 641    | 108   | 283   | 70    | 33    | 72    |
| 25    | 30   | 69    | 104   | 276   | 296   | 514    | 508    | 98    | 275   | 62    | 30    | 68    |
| 26    | 33   | 69    | 102   | 177   | 391   | 444    | 421    | 90    | 282   | 56    | 77    | 66    |
| 27    | 30   | 71    | 110   | 150   | 344   | 399    | 352    | 83    | 222   | 55    | 79    | 66    |
| 28    | 28   | 74    | 140   | 140   | 381   | 357    | 301    | 79    | 171   | 56    | 59    | 65    |
| 29    | 28   | 90    | 169   | 130   | 600   | 324    | 271    | 76    | 146   | 47    | 49    | 68    |
| 30    | 28   | 117   | 383   | 120   | ----- | 331    | 254    | 80    | 153   | 44    | 51    | 142   |
| 31    | 28   | ----- | 795   | 110   | ----- | 294    | -----  | 90    | ----- | 42    | 48    | ----- |
| TOTAL | 878  | 1,225 | 6,176 | 7,077 | 7,204 | 25,723 | 16,787 | 5,830 | 4,033 | 4,190 | 1,266 | 3,223 |
| MEAN  | 28.3 | 40.8  | 199   | 228   | 248   | 830    | 560    | 188   | 134   | 135   | 40.8  | 107   |
| MAX   | 35   | 117   | 795   | 538   | 600   | 1,840  | 1,310  | 376   | 309   | 305   | 79    | 380   |
| MIN   | 23   | 25    | 40    | 110   | 93    | 294    | 216    | 76    | 56    | 42    | 27    | 35    |
| CFSM  | .11  | .16   | .79   | .90   | .98   | 3.28   | 2.21   | .74   | .53   | .53   | .16   | .42   |
| IN.   | .13  | .18   | .91   | 1.04  | 1.06  | 3.78   | 2.47   | .86   | .59   | .62   | .19   | .47   |

CAL YR 1971 TOTAL 75,837 MEAN 208 MAX 3,640 MIN 19 CFSM .82 IN 11.15  
WTR YR 1972 TOTAL 83,612 MEAN 228 MAX 1,840 MIN 23 CFSM .90 IN 12.29

PEAK DISCHARGE (BASE, 1,800 CFS).--Mar. 13 (2130) 2,220 cfs (5.35 ft).



## 03118000 Middle Branch Nimishillen Creek at Canton, Ohio

LOCATION.--Lat 40°50'29", long 81°21'14", in NE 1/4 sec. 27, T.11 N., R.8 W., Stark County, on right bank at downstream side of bridge on Martindale Road, 2.4 miles upstream from mouth, and 0.5 mile northeast of Canton.

DRAINAGE AREA.--43.1 sq mi.

PERIOD OF RECORD.--September 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,046.60 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--31 years, 31.3 cfs.

EXTREMES.--Current year: Maximum discharge, 864 cfs July 17 (gage height, 5.59 ft); minimum, 1.3 cfs Nov. 1. Period of record: Maximum discharge, 2,470 cfs Jan. 22, 1959 (gage height, 6.50 ft), from rating curve extended above 1,600 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.2 cfs Nov. 9, 1944, Sept. 19, 1962.

REMARKS.--Records good. Part of municipal water supply for city of Canton is pumped from its northeast well field; a large portion of pumpage is believed to be derived indirectly from creek as recharge for aquifer supplying well field. Mean pumpage for water year 1972, 11.1 cfs. At times low flow regulated by small pools above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1033: 1942(M), 1943(P), 1944(M). WSP 1305: 1946(M). WSP 1143: 1948, WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV   | DEC       | JAN   | FEB     | MAR   | APR     | MAY   | JUN   | JUL   | AUG  | SEP     |
|-------------|----------------|-------|-----------|-------|---------|-------|---------|-------|-------|-------|------|---------|
| 1           | 3.3            | 1.6   | 22        | 80    | 9.0     | 104   | 33      | 33    | 44    | 19    | 16   | 11      |
| 2           | 3.1            | 1.7   | 13        | 44    | 9.7     | 207   | 33      | 45    | 53    | 16    | 16   | 11      |
| 3           | 2.8            | 1.9   | 8.4       | 39    | 11      | 173   | 31      | 191   | 33    | 139   | 15   | 11      |
| 4           | 2.7            | 1.9   | 6.7       | 33    | 11      | 82    | 31      | 83    | 23    | 279   | 14   | 11      |
| 5           | 2.7            | 1.9   | 6.4       | 42    | 10      | 52    | 29      | 55    | 19    | 126   | 13   | 10      |
| 6           | 2.9            | 2.0   | 20        | 32    | 11      | 35    | 27      | 41    | 17    | 152   | 13   | 10      |
| 7           | 3.0            | 2.3   | 91        | 23    | 10      | 36    | 50      | 35    | 16    | 80    | 13   | 10      |
| 8           | 3.2            | 2.0   | 147       | 22    | 9.5     | 150   | 43      | 38    | 15    | 53    | 13   | 10      |
| 9           | 3.4            | 1.6   | 70        | 18    | 9.0     | 73    | 34      | 116   | 15    | 48    | 13   | 10      |
| 10          | 4.5            | 1.7   | 38        | 28    | 8.5     | 40    | 33      | 116   | 14    | 45    | 13   | 9.7     |
| 11          | 3.8            | 1.7   | 27        | 36    | 8.5     | 34    | 32      | 62    | 13    | 43    | 13   | 9.4     |
| 12          | 2.7            | 1.9   | 18        | 28    | 10      | 48    | 28      | 44    | 14    | 33    | 13   | 17      |
| 13          | 2.7            | 2.0   | 15        | 23    | 13      | 336   | 75      | 36    | 16    | 28    | 13   | 19      |
| 14          | 2.6            | 2.0   | 14        | 20    | 21      | 483   | 74      | 41    | 19    | 83    | 13   | 131     |
| 15          | 2.4            | 2.0   | 73        | 12    | 28      | 254   | 115     | 40    | 23    | 86    | 12   | 129     |
| 16          | 2.4            | 2.1   | 92        | 12    | 52      | 166   | 137     | 37    | 42    | 274   | 12   | 47      |
| 17          | 2.1            | 2.6   | 41        | 10    | 40      | 260   | 274     | 34    | 25    | 720   | 19   | 28      |
| 18          | 3.2            | 2.7   | 25        | 10    | 37      | 131   | 107     | 32    | 18    | 382   | 16   | 97      |
| 19          | 3.2            | 3.8   | 18        | 13    | 32      | 83    | 65      | 28    | 15    | 152   | 18   | 121     |
| 20          | 2.1            | 4.3   | 16        | 13    | 18      | 64    | 203     | 26    | 14    | 81    | 15   | 51      |
| 21          | 1.9            | 4.5   | 22        | 14    | 24      | 57    | 244     | 25    | 15    | 57    | 13   | 31      |
| 22          | 2.3            | 4.8   | 18        | 14    | 60      | 86    | 137     | 22    | 15    | 42    | 12   | 24      |
| 23          | 1.9            | 3.6   | 14        | 18    | 61      | 102   | 118     | 21    | 24    | 35    | 13   | 20      |
| 24          | 2.0            | 5.0   | 12        | 25    | 28      | 66    | 74      | 19    | 33    | 31    | 11   | 21      |
| 25          | 1.9            | 5.0   | 11        | 25    | 23      | 57    | 61      | 18    | 40    | 28    | 13   | 21      |
| 26          | 2.0            | 5.3   | 11        | 14    | 40      | 47    | 45      | 17    | 39    | 25    | 37   | 22      |
| 27          | 2.3            | 5.3   | 13        | 12    | 29      | 43    | 40      | 16    | 26    | 23    | 23   | 45      |
| 28          | 2.3            | 7.4   | 16        | 11    | 36      | 40    | 40      | 15    | 20    | 23    | 15   | 41      |
| 29          | 2.1            | 13    | 15        | 10    | 81      | 36    | 34      | 15    | 19    | 21    | 13   | 33      |
| 30          | 2.0            | 27    | 62        | 9.4   | -----   | 39    | 32      | 18    | 19    | 19    | 12   | 70      |
| 31          | 1.9            | ----- | 221       | 8.6   | -----   | 35    | -----   | 30    | ----- | 17    | 12   | -----   |
| TOTAL       | 81.4           | 124.6 | 1,176.5   | 699.0 | 740.2   | 3,419 | 2,279   | 1,349 | 698   | 3,160 | 457  | 1,081.1 |
| MEAN        | 2.63           | 4.15  | 38.0      | 22.5  | 25.5    | 110   | 76.0    | 43.5  | 23.3  | 102   | 14.7 | 36.0    |
| MAX         | 4.5            | 27    | 221       | 80    | 81      | 483   | 274     | 191   | 53    | 720   | 37   | 131     |
| MIN         | 1.9            | 1.6   | 6.4       | 8.6   | 8.5     | 34    | 27      | 15    | 13    | 16    | 11   | 9.4     |
| CAL YR 1971 | TOTAL 10,371.4 |       | MEAN 28.4 |       | MAX 603 |       | MIN 1.6 |       |       |       |      |         |
| WTR YR 1972 | TOTAL 15,264.8 |       | MEAN 41.7 |       | MAX 720 |       | MIN 1.6 |       |       |       |      |         |

## PEAK DISCHARGE (BASE, 400 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-14 | 0600 | 4.94  | 552       | 7-17 | 1300 | 5.59  | 864       |

## MUSKINGUM RIVER BASIN

03118500 Nimishillen Creek at North Industry, Ohio

LOCATION.--Lat 40°44'03", long 81°21'08", in sec. 35, T.10 N., R.8 W., Stark County, on left bank just downstream from railroad bridge, 1 mile southeast of North Industry, and 3 miles downstream from Sherrick Run.

DRAINAGE AREA.--175 sq mi.

PERIOD OF RECORD.--October 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 970.77 ft above mean sea level, adjustment of 1912. Prior to Dec. 13, 1923, nonrecording gage at site 1 mile upstream at different datum.

AVERAGE DISCHARGE.--51 years, 168 cfs.

EXTREMES.--Current year: Maximum discharge, 2,290 cfs Mar. 13 (gage height, 5.36 ft); minimum, 56 cfs Oct. 31. Period of record: Maximum discharge, 8,600 cfs Jan. 21, 1959 (gage height, 11.29 ft), from rating curve extended above 6,500 cfs on basis of slope-area measurement of peak flow; minimum, 3.6 cfs Sept. 2, 1934.

REMARKS.--Records good. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1972 water year 17.6 cfs. See REMARKS for station 03124500. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1113: 1924-30, 1932-37, 1938(M), 1939-40, 1943(M), 1945(P). WSP 1555: 1929, 1935, 1937(M), 1940(M), 1950(M).

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT          | NOV   | DEC      | JAN       | FEB    | MAR    | APR    | MAY   | JUN   | JUL    | AUG   | SEP   |
|-------------|--------------|-------|----------|-----------|--------|--------|--------|-------|-------|--------|-------|-------|
| 1           | 80           | 67    | 106      | 273       | 96     | 455    | 198    | 200   | 332   | 140    | 137   | 105   |
| 2           | 75           | 95    | 87       | 235       | 99     | 890    | 193    | 310   | 270   | 117    | 135   | 99    |
| 3           | 69           | 71    | 80       | 210       | 142    | 586    | 187    | 687   | 178   | 615    | 131   | 97    |
| 4           | 74           | 69    | 76       | 199       | 117    | 341    | 199    | 319   | 141   | 506    | 131   | 93    |
| 5           | 73           | 69    | 72       | 231       | 97     | 254    | 177    | 238   | 129   | 490    | 130   | 97    |
| 6           | 76           | 69    | 272      | 176       | 104    | 209    | 177    | 202   | 127   | 435    | 123   | 101   |
| 7           | 88           | 73    | 514      | 147       | 104    | 269    | 412    | 176   | 122   | 272    | 125   | 99    |
| 8           | 73           | 68    | 351      | 131       | 99     | 583    | 254    | 273   | 118   | 255    | 133   | 99    |
| 9           | 97           | 71    | 212      | 137       | 96     | 297    | 212    | 559   | 120   | 230    | 142   | 94    |
| 10          | 101          | 72    | 158      | 176       | 93     | 241    | 210    | 417   | 112   | 480    | 149   | 85    |
| 11          | 79           | 71    | 129      | 183       | 96     | 226    | 200    | 267   | 101   | 260    | 121   | 93    |
| 12          | 77           | 73    | 107      | 155       | 103    | 311    | 182    | 223   | 106   | 195    | 107   | 172   |
| 13          | 78           | 68    | 103      | 156       | 219    | 1,830  | 608    | 198   | 169   | 177    | 106   | 159   |
| 14          | 78           | 64    | 205      | 152       | 214    | 1,300  | 359    | 249   | 180   | 255    | 107   | 700   |
| 15          | 75           | 68    | 402      | 115       | 269    | 775    | 664    | 230   | 362   | 249    | 108   | 414   |
| 16          | 60           | 69    | 281      | 96        | 286    | 870    | 808    | 202   | 359   | 1,260  | 105   | 199   |
| 17          | 64           | 70    | 175      | 96        | 234    | 899    | 1,040  | 194   | 167   | 1,190  | 229   | 143   |
| 18          | 69           | 71    | 134      | 105       | 256    | 498    | 436    | 183   | 128   | 650    | 140   | 418   |
| 19          | 74           | 104   | 115      | 120       | 205    | 349    | 313    | 168   | 123   | 352    | 171   | 319   |
| 20          | 71           | 72    | 130      | 117       | 141    | 297    | 1,140  | 157   | 121   | 860    | 124   | 190   |
| 21          | 70           | 76    | 126      | 118       | 169    | 289    | 718    | 150   | 135   | 272    | 109   | 148   |
| 22          | 74           | 77    | 115      | 118       | 285    | 476    | 561    | 149   | 144   | 211    | 107   | 128   |
| 23          | 69           | 75    | 103      | 186       | 205    | 427    | 438    | 149   | 276   | 181    | 108   | 119   |
| 24          | 67           | 77    | 97       | 196       | 185    | 318    | 319    | 147   | 220   | 187    | 109   | 119   |
| 25          | 74           | 75    | 89       | 164       | 171    | 283    | 273    | 139   | 283   | 180    | 111   | 124   |
| 26          | 77           | 73    | 97       | 120       | 249    | 246    | 234    | 133   | 277   | 159    | 346   | 153   |
| 27          | 72           | 80    | 106      | 113       | 183    | 237    | 220    | 126   | 177   | 176    | 168   | 199   |
| 28          | 72           | 77    | 122      | 111       | 223    | 223    | 207    | 123   | 146   | 155    | 123   | 169   |
| 29          | 69           | 126   | 108      | 101       | 350    | 224    | 194    | 111   | 233   | 140    | 113   | 158   |
| 30          | 68           | 141   | 743      | 94        | -----  | 230    | 185    | 237   | 182   | 130    | 106   | 362   |
| 31          | 63           | ----- | 568      | 93        | -----  | 201    | -----  | 191   | ----- | 134    | 104   | ----- |
| TOTAL       | 2,315        | 2,331 | 5,983    | 4,624     | 5,090  | 14,634 | 11,318 | 7,107 | 5,538 | 10,913 | 4,158 | 5,455 |
| MEAN        | 74.7         | 77.7  | 193      | 149       | 176    | 472    | 377    | 229   | 185   | 352    | 134   | 182   |
| MAX         | 101          | 141   | 743      | 273       | 350    | 1,830  | 1,140  | 687   | 362   | 1,260  | 346   | 700   |
| MIN         | 63           | 64    | 72       | 93        | 93     | 201    | 177    | 111   | 101   | 117    | 104   | 85    |
| CAL YR 1971 | TOTAL 64,743 |       | MEAN 177 | MAX 1,940 | MIN 61 |        |        |       |       |        |       |       |
| WTR YR 1972 | TOTAL 79,466 |       | MEAN 217 | MAX 1,830 | MIN 63 |        |        |       |       |        |       |       |

## PEAK DISCHARGE (BASE, 1,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-13 | 1500 | 5.36  | 2,290     | 7-16 | 1800 | 4.50  | 1,650     |
| 4-17 | 0300 | 4.41  | 1,590     | 7-20 | 0630 | 4.36  | 1,560     |
| 7-3  | 1200 | 4.50  | 1,650     |      |      |       |           |

## MUSKINGUM RIVER BASIN

41

03120500 McGuire Creek below Leesville Dam, near Leesville, Ohio

LOCATION.--Lat 40°28'13", long 81°11'48", in E 1/2 sec. 36, T.13 N., R.6 W., Carroll County, on left bank at outlet of Leesville Dam, 1.3 miles upstream from mouth, and 1.4 miles northeast of Leesville.

DRAINAGE AREA.--48.3 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as McGuire Creek near Leesville 1938-39.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 915.00 ft above mean sea level. Prior to May 27, 1942, nonrecording gage at site 100 ft upstream at present datum.

AVERAGE DISCHARGE.--34 years, 50.6 cfs.

EXTREMES.--Current year: Maximum discharge, 286 cfs Mar. 23 (gage height, 4.66 ft); minimum, 0.30 cfs Jan. 12, 13 (gage height 1.75 ft).

Period of record: Maximum discharge, 740 cfs Mar. 4, 1940; maximum gage height, 7.88 ft Mar. 4, 1940 (backwater from Conotton Creek); no flow several days during 1939-41.

REMARKS.--Records good. Flow regulated by Leesville Lake (see station 03120000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV     | DEC       | JAN     | FEB     | MAR   | APR     | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|---------|-----------|---------|---------|-------|---------|-------|-------|-------|-------|-------|
| 1           | 1.8            | 1.7     | 184       | 73      | 52      | 23    | 55      | 50    | 23    | 15    | 4.7   | 4.4   |
| 2           | 1.9            | 2.0     | 183       | 121     | 64      | 46    | 55      | 53    | 22    | 12    | 4.6   | 4.1   |
| 3           | 1.9            | 2.3     | 181       | 142     | 64      | 46    | 53      | 52    | 27    | 11    | 5.2   | 4.1   |
| 4           | 1.7            | 1.8     | 179       | 125     | 22      | 46    | 53      | 49    | 20    | 10    | 6.3   | 3.9   |
| 5           | 1.6            | 1.4     | 177       | 34      | 3.8     | 46    | 50      | 45    | 15    | 13    | 6.1   | 3.3   |
| 6           | 1.4            | 1.6     | 177       | 2.9     | 3.8     | 46    | 48      | 40    | 13    | 13    | 5.5   | 2.9   |
| 7           | 1.7            | 1.6     | 176       | 3.4     | 3.7     | 45    | 93      | 37    | 11    | 11    | 5.2   | 2.5   |
| 8           | 1.8            | 1.5     | 174       | 5.8     | 3.7     | 95    | 120     | 37    | 9.6   | 10    | 4.9   | 2.3   |
| 9           | 1.7            | 2.1     | 171       | 5.9     | 3.7     | 149   | 122     | 53    | 9.1   | 9.9   | 5.5   | 2.0   |
| 10          | 2.1            | 2.3     | 96        | 59      | 3.7     | 149   | 201     | 60    | 8.3   | 35    | 5.2   | 1.6   |
| 11          | 1.9            | 2.0     | 44        | 72      | 3.7     | 149   | 264     | 58    | 7.4   | 53    | 4.7   | 1.5   |
| 12          | 2.0            | 1.4     | 44        | 43      | 3.7     | 138   | 221     | 53    | 7.0   | 45    | 5.0   | 1.6   |
| 13          | 2.0            | 1.3     | 67        | 56      | 3.8     | 39    | 171     | 49    | 7.8   | 35    | 5.5   | 1.8   |
| 14          | 1.9            | 1.2     | 38        | 84      | 2.3     | 100   | 104     | 50    | 9.6   | 25    | 5.2   | 6.3   |
| 15          | 1.9            | 2.2     | 52        | 32      | 1.7     | 118   | 87      | 54    | 10    | 17    | 4.7   | 8.0   |
| 16          | 1.8            | 2.9     | 104       | 1.4     | 1.7     | 122   | 99      | 57    | 12    | 19    | 4.3   | 7.8   |
| 17          | 1.7            | 2.8     | 53        | 1.3     | 1.8     | 124   | 162     | 55    | 11    | 31    | 5.5   | 7.4   |
| 18          | 1.6            | 2.9     | 1.4       | 1.2     | 1.7     | 124   | 239     | 52    | 9.9   | 24    | 6.6   | 7.4   |
| 19          | 1.5            | 2.9     | 1.0       | 1.2     | 1.7     | 122   | 235     | 48    | 9.1   | 19    | 7.0   | 7.0   |
| 20          | 1.4            | 2.9     | 1.5       | 14      | 1.7     | 198   | 176     | 43    | 9.1   | 19    | 7.0   | 6.5   |
| 21          | 1.4            | 2.9     | 1.5       | 58      | 1.8     | 282   | 127     | 40    | 9.4   | 16    | 6.6   | 5.9   |
| 22          | 1.4            | 3.0     | 1.5       | 73      | 1.8     | 226   | 124     | 35    | 9.1   | 12    | 6.1   | 5.3   |
| 23          | 1.4            | 3.1     | 1.5       | 73      | 1.8     | 255   | 120     | 29    | 22    | 9.9   | 5.9   | 4.9   |
| 24          | 1.5            | 50      | 1.5       | 73      | 1.8     | 280   | 190     | 23    | 28    | 8.8   | 5.5   | 5.3   |
| 25          | 1.6            | 70      | 1.2       | 73      | 1.8     | 252   | 257     | 19    | 28    | 8.0   | 5.2   | 5.5   |
| 26          | 1.6            | 150     | 1.1       | 33      | 1.8     | 205   | 205     | 14    | 29    | 7.4   | 5.8   | 5.8   |
| 27          | 1.6            | 194     | 21        | 8.5     | 1.8     | 87    | 82      | 12    | 25    | 7.2   | 6.5   | 6.3   |
| 28          | 1.6            | 190     | 80        | 8.5     | 1.9     | 53    | 45      | 10    | 19    | 6.8   | 6.3   | 6.1   |
| 29          | 1.6            | 189     | 130       | 8.5     | 1.9     | 57    | 46      | 10    | 16    | 6.1   | 5.9   | 6.1   |
| 30          | 1.6            | 187     | 51        | 8.5     | -----   | 59    | 48      | 13    | 16    | 5.6   | 5.3   | 7.8   |
| 31          | 1.6            | -----   | 25        | 21      | -----   | 58    | -----   | 17    | ----- | 5.2   | 4.7   | ----- |
| TOTAL       | 52.2           | 1,079.8 | 2,419.2   | 1,316.1 | 264.6   | 3,739 | 3,852   | 1,217 | 452.4 | 519.9 | 172.5 | 145.4 |
| MEAN        | 1.68           | 36.0    | 78.0      | 42.5    | 9.12    | 121   | 128     | 39.3  | 15.1  | 16.8  | 5.56  | 4.85  |
| MAX         | 2.1            | 194     | 184       | 142     | 64      | 282   | 264     | 60    | 29    | 53    | 7.0   | 8.0   |
| MIN         | 1.4            | 1.2     | 1.0       | 1.2     | 1.7     | 23    | 45      | 10    | 7.0   | 5.2   | 4.3   | 1.5   |
| CAL YR 1971 | TOTAL 15,615.4 |         | MEAN 42.8 |         | MAX 265 |       | MIN 1.0 |       |       |       |       |       |
| WTR YR 1972 | TOTAL 15,230.1 |         | MEAN 41.6 |         | MAX 282 |       | MIN 1.0 |       |       |       |       |       |

## MUSKINGUM RIVER BASIN

03121500 Indian Fork below Atwood Dam, near New Cumberland, Ohio

LOCATION.--Lat 40°31'31", long 81°17'18", in SE 1/4 sec. 28, T.15 N., R.7 W., Tuscarawas County, on left bank 500 ft downstream from Atwood Dam, 0.5 mile upstream from mouth, and 1.5 miles southeast of New Cumberland.

DRAINAGE AREA.--70.0 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Indian Fork near New Cumberland prior to 1940.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 884.00 ft above mean sea level, adjustment of 1912. Prior to Aug. 28, 1943, nonrecording gage at site 250 ft upstream at same datum.

AVERAGE DISCHARGE.--34 years, 69.5 cfs.

EXTREMES.--Current year: Maximum discharge, 478 cfs Mar. 21; maximum gage height, 10.98 ft Mar. 23 (backwater from Conotton Creek); minimum discharge, 0.10 cfs Feb. 9 (gage height 5.50 ft).

Period of record: Maximum discharge, 1,610 cfs Apr. 7, 1945; maximum gage height, 21.23 ft July 12, 1969 (from floodmark in gage house), backwater from Dover Lake; minimum discharge, 0.10 cfs at times during 1939, 1944, 1946-47, 1952, 1961, 1963, 1970, 1972.

REMARKS.--Records good. Flow completely regulated by Atwood Lake (see station 03121000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC     | JAN     | FEB   | MAR     | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|-----------|---------|---------|-------|---------|-------|-------|-------|-------|-------|-------|
| 1           | 5.7            | 3.0       | 90      | 124     | 4.8   | 1.1     | 98    | 89    | 21    | 18    | 7.5   | 10    |
| 2           | 5.4            | 3.0       | 132     | 124     | 6.0   | 1.1     | 96    | 88    | 21    | 18    | 7.1   | 9.5   |
| 3           | 5.4            | 3.3       | 131     | 194     | 32    | 1.1     | 94    | 85    | 20    | 17    | 6.3   | 9.1   |
| 4           | 5.0            | 2.9       | 130     | 244     | 68    | 1.1     | 91    | 82    | 20    | 16    | 7.9   | 8.3   |
| 5           | 4.7            | 2.8       | 130     | 244     | 66    | 1.4     | 86    | 78    | 20    | 17    | 7.9   | 8.3   |
| 6           | 4.2            | 2.5       | 157     | 244     | 66    | 2.5     | 82    | 67    | 18    | 18    | 7.9   | 7.5   |
| 7           | 4.0            | 2.4       | 194     | 85      | 25    | 4.0     | 158   | 60    | 16    | 17    | 7.5   | 6.3   |
| 8           | 3.7            | 2.3       | 194     | 3.9     | 9.9   | 18      | 241   | 52    | 13    | 17    | 7.1   | 6.1   |
| 9           | 3.6            | 2.3       | 233     | 4.1     | 4.3   | 203     | 242   | 63    | 10    | 17    | 7.9   | 5.9   |
| 10          | 4.1            | 2.0       | 296     | 68      | 1.6   | 245     | 237   | 71    | 9.9   | 36    | 7.9   | 5.4   |
| 11          | 3.7            | 1.9       | 320     | 124     | 1.6   | 218     | 140   | 76    | 9.1   | 86    | 7.9   | 4.8   |
| 12          | 3.8            | 1.7       | 315     | 82      | 1.5   | 206     | 102   | 74    | 8.3   | 88    | 7.9   | 4.8   |
| 13          | 3.6            | 1.9       | 190     | 23      | 1.5   | 198     | 243   | 69    | 7.9   | 85    | 7.9   | 5.6   |
| 14          | 3.7            | 1.8       | 128     | 66      | 1.5   | 144     | 199   | 67    | 9.5   | 78    | 8.3   | 10    |
| 15          | 3.7            | 1.6       | 206     | 124     | 1.5   | 124     | 102   | 67    | 9.9   | 69    | 8.3   | 28    |
| 16          | 3.6            | 1.8       | 252     | 123     | 1.5   | 125     | 108   | 67    | 16    | 63    | 7.1   | 30    |
| 17          | 3.6            | 1.9       | 190     | 44      | 1.5   | 126     | 205   | 67    | 15    | 60    | 7.1   | 25    |
| 18          | 3.6            | 1.8       | 128     | 4.6     | 1.5   | 127     | 341   | 63    | 15    | 48    | 9.1   | 28    |
| 19          | 3.6            | 1.9       | 128     | 4.6     | 1.5   | 127     | 370   | 56    | 14    | 33    | 9.5   | 30    |
| 20          | 3.5            | 1.9       | 126     | 4.7     | 1.3   | 278     | 239   | 52    | 14    | 28    | 9.9   | 22    |
| 21          | 3.4            | 1.9       | 207     | 21      | 1.2   | 429     | 187   | 44    | 14    | 22    | 9.9   | 20    |
| 22          | 3.2            | 1.9       | 248     | 42      | 1.2   | 477     | 148   | 33    | 14    | 20    | 9.5   | 18    |
| 23          | 3.3            | 2.0       | 172     | 42      | 1.2   | 474     | 125   | 28    | 17    | 17    | 9.1   | 16    |
| 24          | 3.4            | 2.0       | 126     | 42      | 1.2   | 363     | 247   | 25    | 22    | 15    | 9.1   | 16    |
| 25          | 3.6            | 2.2       | 124     | 42      | 1.1   | 252     | 318   | 22    | 22    | 13    | 8.7   | 15    |
| 26          | 3.6            | 2.2       | 124     | 60      | 1.1   | 250     | 331   | 22    | 22    | 10    | 9.9   | 15    |
| 27          | 3.5            | 2.4       | 124     | 68      | 1.2   | 244     | 232   | 18    | 22    | 9.9   | 18    | 15    |
| 28          | 3.5            | 2.4       | 124     | 68      | 1.1   | 143     | 99    | 17    | 21    | 9.9   | 18    | 16    |
| 29          | 3.3            | 3.0       | 124     | 66      | 1.1   | 103     | 95    | 14    | 18    | 9.1   | 17    | 16    |
| 30          | 3.3            | 3.6       | 124     | 66      | ----- | 102     | 92    | 13    | 18    | 9.1   | 16    | 20    |
| 31          | 3.1            | -----     | 124     | 22      | ----- | 100     | ----- | 15    | ----- | 7.9   | 14    | ----- |
| TOTAL       | 119.4          | 68.3      | 5,291   | 2,473.9 | 308.9 | 5,088.3 | 5,348 | 1,644 | 477.6 | 971.9 | 297.2 | 431.6 |
| MEAN        | 3.85           | 2.28      | 171     | 79.8    | 10.7  | 164     | 178   | 53.0  | 15.9  | 31.4  | 9.59  | 14.4  |
| MAX         | 5.7            | 3.6       | 320     | 244     | 68    | 477     | 370   | 89    | 22    | 88    | 18    | 30    |
| MIN         | 3.1            | 1.6       | 90      | 3.9     | 1.1   | 1.1     | 82    | 13    | 7.9   | 7.9   | 6.3   | 4.8   |
| CAL YR 1971 | TOTAL 21,966.0 | MEAN 60.2 | MAX 506 | MIN 1.6 |       |         |       |       |       |       |       |       |
| WTR YR 1972 | TOTAL 22,520.1 | MEAN 61.5 | MAX 477 | MIN 1.1 |       |         |       |       |       |       |       |       |



## MUSKINGUM RIVER BASIN

43

03122500 Tuscarawas River below Dover Dam, near Dover, Ohio

LOCATION.--Lat 40°31'47", long 81°25'48", in T.9 N., R.2 W., Tuscarawas County, on left bank at downstream side of bridge on State Highway 416, 2.2 miles downstream from Dover Dam, 1.5 miles east of Dover, and 3.4 miles upstream from Sugar Creek.

DRAINAGE AREA.--1,405 sq mi.

PERIOD OF RECORD.--October 1923 to current year. Published as Tuscarawas River near Dover 1923-39.

GAGE.--Water-stage recorder. Datum of gage is 861.51 ft above mean sea level, adjustment of 1912. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--49 years, 1,346 cfs.

EXTREMES.--Current year: Maximum discharge, 5,630 cfs Mar. 15 (gage height, 6.94 ft); minimum, 186 cfs Oct. 6. Period of record: Maximum discharge, 26,400 cfs Jan. 26, 1937 (gage height, 15.51 ft); minimum, 2.3 cfs July 20, 1946, Oct. 27, 1948; minimum daily, 6.5 cfs Oct. 26, 1948.

Flood in March 1913 reached a stage of about 23.5 ft (discharge, 62,000 cfs, computed by Corps of Engineers).

REMARKS.--Records good. Diversion from basin at Portage Lakes (see REMARKS for stations 03116000 and 03117000). Records include diversion from Sugar Creek well field. Mean pumpage for the 1972 water year, 17.6 cfs (see REMARKS for station 03124500). Flow regulated by four flood-control reservoirs since 1936 at points 2.2 to 25 miles upstream (see stations 03119500, 03120000, 03121000, and 03122000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: 1933(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR     | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|-------|-------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
| 1     | 382   | 231   | 649    | 3,020  | 700    | 2,300   | 1,540  | 1,440  | 1,080  | 1,510  | 455    | 408    |
| 2     | 340   | 260   | 649    | 2,260  | 700    | 3,240   | 1,500  | 1,470  | 1,050  | 1,230  | 441    | 390    |
| 3     | 217   | 302   | 577    | 2,030  | 715    | 4,240   | 1,440  | 1,990  | 987    | 1,150  | 441    | 378    |
| 4     | 199   | 280   | 538    | 1,910  | 944    | 4,330   | 1,390  | 1,920  | 798    | 2,150  | 448    | 455    |
| 5     | 199   | 265   | 519    | 1,890  | 800    | 3,680   | 1,370  | 1,520  | 675    | 1,840  | 420    | 402    |
| 6     | 195   | 260   | 616    | 1,750  | 750    | 2,740   | 1,270  | 1,340  | 619    | 1,890  | 384    | 396    |
| 7     | 204   | 280   | 1,290  | 1,450  | 700    | 2,130   | 1,940  | 1,170  | 596    | 1,530  | 396    | 390    |
| 8     | 213   | 260   | 2,110  | 1,110  | 650    | 2,820   | 2,790  | 1,120  | 582    | 1,220  | 414    | 378    |
| 9     | 208   | 260   | 1,750  | 988    | 650    | 3,480   | 2,560  | 1,770  | 561    | 1,120  | 434    | 378    |
| 10    | 275   | 275   | 1,300  | 1,070  | 650    | 3,080   | 2,320  | 2,660  | 547    | 1,650  | 414    | 360    |
| 11    | 302   | 275   | 1,080  | 1,470  | 600    | 2,560   | 2,130  | 2,240  | 529    | 2,150  | 396    | 348    |
| 12    | 270   | 280   | 916    | 1,440  | 600    | 2,400   | 1,880  | 1,710  | 513    | 1,680  | 396    | 390    |
| 13    | 240   | 270   | 811    | 1,190  | 882    | 3,990   | 2,320  | 1,390  | 557    | 1,380  | 390    | 497    |
| 14    | 231   | 260   | 707    | 1,220  | 1,270  | 5,150   | 3,720  | 1,370  | 750    | 1,200  | 372    | 1,240  |
| 15    | 222   | 250   | 1,440  | 1,100  | 1,600  | 5,390   | 3,510  | 1,450  | 797    | 1,350  | 378    | 2,230  |
| 16    | 213   | 260   | 2,200  | 900    | 2,120  | 5,280   | 3,650  | 1,400  | 1,430  | 1,960  | 366    | 1,980  |
| 17    | 199   | 265   | 1,790  | 750    | 2,060  | 5,440   | 4,510  | 1,330  | 1,230  | 4,080  | 476    | 1,440  |
| 18    | 190   | 270   | 1,220  | 850    | 1,890  | 5,430   | 4,770  | 1,250  | 889    | 3,910  | 788    | 1,280  |
| 19    | 199   | 291   | 923    | 950    | 1,810  | 5,410   | 4,210  | 1,140  | 719    | 3,190  | 748    | 1,590  |
| 20    | 208   | 335   | 825    | 850    | 1,490  | 5,230   | 4,200  | 1,040  | 669    | 2,160  | 756    | 1,350  |
| 21    | 213   | 296   | 846    | 767    | 1,200  | 4,770   | 5,330  | 972    | 665    | 1,560  | 665    | 954    |
| 22    | 217   | 280   | 930    | 834    | 1,460  | 4,830   | 5,360  | 898    | 713    | 1,010  | 504    | 777    |
| 23    | 226   | 280   | 853    | 1,010  | 1,680  | 4,790   | 4,710  | 839    | 900    | 844    | 490    | 662    |
| 24    | 231   | 291   | 701    | 1,320  | 1,430  | 4,450   | 4,840  | 759    | 1,330  | 836    | 532    | 625    |
| 25    | 240   | 324   | 636    | 1,400  | 1,300  | 4,000   | 4,860  | 702    | 1,330  | 764    | 539    | 678    |
| 26    | 250   | 358   | 616    | 1,180  | 1,380  | 3,050   | 4,170  | 654    | 1,530  | 665    | 724    | 694    |
| 27    | 260   | 418   | 629    | 936    | 1,520  | 1,740   | 2,700  | 608    | 1,330  | 602    | 1,100  | 1,170  |
| 28    | 250   | 467   | 860    | 850    | 1,410  | 2,100   | 1,890  | 569    | 1,100  | 595    | 716    | 1,630  |
| 29    | 245   | 499   | 839    | 800    | 1,720  | 2,670   | 1,630  | 550    | 1,010  | 546    | 567    | 1,630  |
| 30    | 240   | 623   | 1,210  | 750    | -----  | 1,880   | 1,490  | 566    | 1,380  | 483    | 469    | 1,790  |
| 31    | 240   | ----- | 3,050  | 700    | -----  | 1,720   | -----  | 883    | -----  | 434    | 414    | -----  |
| TOTAL | 7,318 | 9,265 | 33,080 | 38,745 | 34,681 | 114,320 | 90,000 | 38,720 | 26,866 | 46,689 | 16,033 | 26,890 |
| MEAN  | 236   | 309   | 1,067  | 1,250  | 1,196  | 3,688   | 3,000  | 1,249  | 896    | 1,506  | 517    | 896    |
| MAX   | 382   | 623   | 3,050  | 3,020  | 2,120  | 5,440   | 5,360  | 2,660  | 1,530  | 4,080  | 1,100  | 2,230  |
| MIN   | 190   | 231   | 519    | 700    | 600    | 1,720   | 1,270  | 550    | 513    | 434    | 366    | 348    |

CAL YR 1971 TOTAL 406,751 MEAN 1,114 MAX 5,570 MIN 190  
WTR YR 1972 TOTAL 482,607 MEAN 1,319 MAX 5,440 MIN 190

## MUSKINGUM RIVER BASIN

03123000 Sugar Creek above Beach City Dam, at Beach City, Ohio

LOCATION.--Lat 40°39'24", long 81°34'37", in NE 1/4 sec.35, T.11 N., R.10 W., Stark County, on right bank at downstream side of Third Avenue bridge at Beach City, 2.3 miles upstream from Beach City Dam.

DRAINAGE AREA.--160 sq mi.

PERIOD OF RECORD.--October 1944 to current year. Prior to May 1945 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 953.20 ft above mean sea level, adjustment of 1912. Water-stage recorder for Beach City Lake (station 03123500) used as auxiliary gage for this station.

AVERAGE DISCHARGE.--28 years, 132 cfs (11.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,530 cfs Mar. 14 (gage height, 5.36 ft); minimum daily, 6.5 cfs Oct. 7, 8.

Period of record: Maximum daily discharge, 7,960 cfs Jan. 22, 1959; maximum gage height, 23.76 ft July 6, 1969 (backwater from Beach City Lake); minimum discharge, 1.4 cfs Aug. 27, 1952.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|
| 1     | 11    | 14    | 44    | 288   | 34    | 343    | 133   | 124   | 101   | 110   | 51    | 44    |
| 2     | 9.8   | 14    | 27    | 162   | 35    | 583    | 138   | 126   | 74    | 65    | 47    | 41    |
| 3     | 9.4   | 18    | 21    | 151   | 42    | 850    | 128   | 264   | 58    | 117   | 48    | 39    |
| 4     | 8.8   | 18    | 20    | 120   | 56    | 627    | 123   | 188   | 50    | 295   | 48    | 41    |
| 5     | 8.0   | 15    | 20    | 160   | 48    | 331    | 113   | 141   | 44    | 154   | 42    | 38    |
| 6     | 7.2   | 14    | 28    | 137   | 42    | 208    | 104   | 118   | 42    | 150   | 37    | 34    |
| 7     | 6.5   | 14    | 132   | 122   | 40    | 226    | 308   | 104   | 42    | 102   | 37    | 33    |
| 8     | 6.5   | 16    | 189   | 82    | 36    | 481    | 359   | 106   | 38    | 81    | 38    | 30    |
| 9     | 8.0   | 16    | 91    | 76    | 32    | 440    | 230   | 298   | 35    | 81    | 38    | 30    |
| 10    | 16    | 16    | 60    | 129   | 30    | 250    | 200   | 424   | 36    | 192   | 36    | 28    |
| 11    | 20    | 17    | 51    | 168   | 30    | 212    | 176   | 242   | 36    | 230   | 34    | 26    |
| 12    | 15    | 16    | 43    | 129   | 32    | 254    | 148   | 159   | 33    | 116   | 31    | 27    |
| 13    | 12    | 16    | 37    | 98    | 44    | 633    | 308   | 131   | 35    | 80    | 35    | 32    |
| 14    | 11    | 15    | 37    | 85    | 221   | 1,360  | 474   | 159   | 56    | 73    | 32    | 139   |
| 15    | 11    | 14    | 284   | 64    | 242   | 1,020  | 311   | 170   | 50    | 81    | 29    | 311   |
| 16    | 9.4   | 13    | 256   | 62    | 432   | 700    | 370   | 138   | 174   | 367   | 34    | 148   |
| 17    | 9.8   | 11    | 124   | 40    | 336   | 832    | 536   | 124   | 75    | 965   | 87    | 80    |
| 18    | 9.0   | 11    | 78    | 43    | 305   | 733    | 546   | 118   | 51    | 1,220 | 452   | 76    |
| 19    | 8.2   | 13    | 58    | 61    | 269   | 486    | 306   | 100   | 43    | 514   | 379   | 80    |
| 20    | 7.4   | 19    | 57    | 67    | 149   | 326    | 542   | 87    | 38    | 212   | 266   | 61    |
| 21    | 6.6   | 19    | 60    | 65    | 147   | 266    | 1,280 | 81    | 39    | 136   | 124   | 50    |
| 22    | 6.6   | 18    | 49    | 61    | 333   | 333    | 962   | 74    | 42    | 115   | 88    | 44    |
| 23    | 6.6   | 13    | 41    | 82    | 227   | 428    | 670   | 66    | 54    | 397   | 100   | 40    |
| 24    | 13    | 13    | 39    | 113   | 174   | 324    | 414   | 60    | 65    | 412   | 82    | 44    |
| 25    | 15    | 13    | 36    | 109   | 126   | 248    | 260   | 55    | 58    | 216   | 67    | 58    |
| 26    | 13    | 13    | 36    | 59    | 212   | 206    | 198   | 52    | 65    | 129   | 109   | 51    |
| 27    | 12    | 16    | 40    | 61    | 155   | 182    | 169   | 47    | 77    | 98    | 220   | 182   |
| 28    | 13    | 19    | 44    | 56    | 189   | 163    | 145   | 44    | 57    | 87    | 102   | 258   |
| 29    | 13    | 21    | 46    | 43    | 278   | 147    | 131   | 44    | 48    | 71    | 73    | 169   |
| 30    | 12    | 38    | 182   | 41    | ----- | 161    | 121   | 44    | 154   | 62    | 58    | 311   |
| 31    | 12    | ----- | 502   | 35    | ----- | 143    | ----- | 88    | ----- | 56    | 49    | ----- |
| TOTAL | 326.8 | 483   | 2,732 | 2,969 | 4,296 | 13,496 | 9,903 | 3,976 | 1,770 | 6,984 | 2,873 | 2,545 |
| MEAN  | 10.5  | 16.1  | 88.1  | 95.8  | 148   | 435    | 330   | 128   | 59.0  | 225   | 92.7  | 84.8  |
| MAX   | 20    | 38    | 502   | 288   | 432   | 1,360  | 1,280 | 424   | 174   | 1,220 | 452   | 311   |
| MIN   | 6.5   | 11    | 20    | 35    | 30    | 143    | 104   | 44    | 33    | 56    | 29    | 26    |
| CFSM  | .07   | .10   | .55   | .60   | .93   | 2.72   | 2.06  | .80   | .37   | 1.41  | .58   | .53   |
| IN.   | .08   | .11   | .64   | .69   | 1.00  | 3.14   | 2.30  | .92   | .41   | 1.62  | .67   | .59   |

CAL YR 1971 TOTAL 40,245.0 MEAN 110 MAX 2,740 MIN 6.5 CFSM .69 IN 9.36  
WTR YR 1972 TOTAL 52,353.8 MEAN 143 MAX 1,360 MIN 6.5 CFSM .89 IN 12.17

## MUSKINGUM RIVER BASIN

45

03124000 Sugar Creek below Beach City Dam, near Beach City, Ohio

LOCATION.--Lat 40°38'08", long 81°33'11", in T.10 N., R.3 W., Tuscarawas County, on right bank 1,000 ft downstream from Beach City Dam, 0.4 mile downstream from South Fork, and 1.8 miles southeast of Beach City.

DRAINAGE AREA.--300 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Sugar Creek near Beach City prior to 1940.

GAGE.--Water-stage recorder. Datum of gage is 928.00 ft above mean sea level, adjustment of 1912. Prior to Mar. 23, 1939, nonrecording gage at site 500 ft downstream at datum 1 ft higher. Mar. 23, 1939, to Sept. 26, 1949, water-stage recorder at site 300 ft downstream at present datum.

AVERAGE DISCHARGE.--34 years, 255 cfs.

EXTREMES.--Current year: Maximum discharge, 1,710 cfs Mar. 14 (gage height, 6.12 ft); minimum, 9.2 cfs Oct. 7, 8.

Period of record: Maximum discharge, 7,520 cfs July 6, 1969 (gage height, 11.26 ft, from floodmark in well); no flow Oct. 7-30, 1963.

REMARKS.--Records good. Flood flow regulated by Beach City Lake (see station 03123500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 953: 1941. WRD Ohio 1969: 1968.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1     | 19    | 16    | 65    | 734   | 77    | 471    | 238    | 240   | 160   | 160   | 62    | 71    |
| 2     | 17    | 19    | 48    | 413   | 78    | 822    | 238    | 234   | 157   | 110   | 56    | 64    |
| 3     | 15    | 23    | 33    | 362   | 87    | 1,370  | 226    | 342   | 110   | 94    | 56    | 60    |
| 4     | 13    | 28    | 28    | 290   | 110   | 1,240  | 212    | 345   | 86    | 254   | 59    | 60    |
| 5     | 12    | 24    | 25    | 304   | 96    | 782    | 202    | 260   | 72    | 224   | 52    | 57    |
| 6     | 11    | 21    | 33    | 299   | 86    | 492    | 180    | 212   | 64    | 198   | 44    | 51    |
| 7     | 9.6   | 20    | 191   | 232   | 82    | 416    | 370    | 180   | 62    | 157   | 42    | 47    |
| 8     | 9.6   | 21    | 433   | 209   | 78    | 681    | 882    | 172   | 58    | 117   | 43    | 44    |
| 9     | 12    | 22    | 305   | 172   | 66    | 790    | 692    | 352   | 54    | 111   | 45    | 41    |
| 10    | 18    | 23    | 185   | 232   | 57    | 536    | 526    | 674   | 52    | 177   | 50    | 39    |
| 11    | 29    | 23    | 130   | 306   | 60    | 411    | 448    | 508   | 51    | 362   | 44    | 35    |
| 12    | 25    | 24    | 100   | 273   | 65    | 402    | 373    | 333   | 47    | 224   | 38    | 35    |
| 13    | 20    | 23    | 81    | 224   | 86    | 854    | 480    | 258   | 54    | 145   | 41    | 41    |
| 14    | 16    | 22    | 78    | 214   | 292   | 1,650  | 982    | 269   | 143   | 111   | 41    | 141   |
| 15    | 15    | 21    | 390   | 152   | 448   | 1,690  | 786    | 342   | 145   | 107   | 35    | 448   |
| 16    | 15    | 20    | 619   | 121   | 667   | 1,470  | 667    | 294   | 273   | 228   | 32    | 282   |
| 17    | 14    | 18    | 382   | 95    | 667   | 1,480  | 894    | 249   | 218   | 762   | 64    | 149   |
| 18    | 13    | 16    | 239   | 90    | 558   | 1,540  | 966    | 247   | 126   | 1,250 | 511   | 112   |
| 19    | 12    | 19    | 164   | 117   | 501   | 1,110  | 681    | 207   | 91    | 770   | 588   | 123   |
| 20    | 10    | 24    | 136   | 139   | 330   | 742    | 858    | 175   | 75    | 345   | 486   | 98    |
| 21    | 10    | 29    | 146   | 132   | 267   | 581    | 1,600  | 160   | 70    | 198   | 267   | 77    |
| 22    | 10    | 30    | 128   | 129   | 405   | 581    | 1,520  | 142   | 75    | 142   | 155   | 64    |
| 23    | 12    | 26    | 101   | 164   | 381   | 730    | 1,600  | 125   | 90    | 278   | 161   | 58    |
| 24    | 18    | 22    | 89    | 236   | 302   | 639    | 1,410  | 111   | 116   | 442   | 145   | 55    |
| 25    | 21    | 21    | 86    | 238   | 240   | 492    | 707    | 100   | 106   | 309   | 114   | 66    |
| 26    | 22    | 22    | 82    | 166   | 287   | 411    | 480    | 89    | 102   | 178   | 154   | 69    |
| 27    | 20    | 24    | 87    | 114   | 292   | 357    | 383    | 79    | 112   | 126   | 402   | 126   |
| 28    | 19    | 28    | 95    | 125   | 273   | 318    | 321    | 72    | 99    | 107   | 249   | 238   |
| 29    | 19    | 34    | 117   | 110   | 355   | 280    | 278    | 70    | 83    | 91    | 152   | 222   |
| 30    | 18    | 48    | 167   | 99    | ----- | 290    | 249    | 70    | 132   | 78    | 108   | 299   |
| 31    | 17    | ----- | 797   | 87    | ----- | 267    | -----  | 106   | ----- | 68    | 84    | ----- |
| TOTAL | 491.2 | 711   | 5,560 | 6,578 | 7,293 | 23,895 | 19,449 | 7,017 | 3,083 | 7,923 | 4,380 | 3,272 |
| MEAN  | 15.8  | 23.7  | 179   | 212   | 251   | 771    | 648    | 226   | 103   | 256   | 141   | 109   |
| MAX   | 29    | 48    | 797   | 734   | 667   | 1,690  | 1,600  | 674   | 273   | 1,250 | 588   | 448   |
| MIN   | 9.6   | 16    | 25    | 87    | 57    | 267    | 180    | 70    | 47    | 68    | 32    | 35    |

CAL YR 1971 TOTAL 75,663.7 MEAN 207 MAX 2,130 MIN 8.7  
WTR YR 1972 TOTAL 89,652.2 MEAN 245 MAX 1,690 MIN 9.6

## MUSKINGUM RIVER BASIN

03124500 Sugar Creek at Strasburg, Ohio

LOCATION.--Lat 40°35'15", long 81°31'24", in NW 1/4 sec. 1, T.9 N., R.3 W., Tuscarawas County, on left bank 150 ft upstream from bridge on State Highway 21, 0.8 mile upstream from Broad Run, and 0.1 mile southeast of Strasburg.

DRAINAGE AREA.--311 sq mi.

PERIOD OF RECORD.--August 1931 to March 1933, January 1935 to July 1939, October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 896.24 ft above mean sea level, adjustment of 1912. July 29, 1931, to Mar. 31, 1933, and Dec. 10, 1934, to July 31, 1939, nonrecording gage, and Oct. 1, 1961, to May 26, 1964, water-stage recorder at datum 2.00 ft higher.

AVERAGE DISCHARGE.--15 years (1931-32, 1935-38, 1961-72), 268 cfs.

EXTREMES.--Current year: Maximum discharge, 1,930 cfs Mar. 14 (gage height, 4.81 ft); minimum, 15 cfs Oct. 8, 9, 21-23.

Period of record: Maximum discharge, 19,700 cfs Aug. 7, 1935 (gage height, 14.70 ft, present datum) from rating curve extended above 8,400 cfs; no flow all or part of each day Sept. 29 to Nov. 6, 1963, Sept. 20, Dec. 3, 4, 1966.

REMARKS.--Records good. Flood flow regulated by Beach City Lake 5.0 miles upstream, since August 1937 (see station 03123500). Part of municipal water supply for city of Canton, starting May 1962, is pumped from well field 4.3 miles upstream; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 1972, 17.6 cfs. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1305: 1932-33(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1     | 25   | 18    | 71    | 861   | 84    | 502    | 255    | 254   | 203   | 176   | 63    | 70    |
| 2     | 23   | 19    | 54    | 456   | 82    | 866    | 252    | 248   | 208   | 123   | 57    | 60    |
| 3     | 21   | 20    | 38    | 384   | 92    | 1,410  | 246    | 337   | 142   | 95    | 54    | 60    |
| 4     | 19   | 26    | 33    | 306   | 120   | 1,380  | 230    | 365   | 107   | 246   | 55    | 60    |
| 5     | 17   | 25    | 30    | 310   | 110   | 932    | 223    | 274   | 89    | 243   | 52    | 55    |
| 6     | 17   | 22    | 41    | 316   | 95    | 605    | 200    | 230   | 77    | 208   | 43    | 49    |
| 7     | 16   | 21    | 187   | 253   | 90    | 495    | 390    | 196   | 72    | 176   | 39    | 44    |
| 8     | 15   | 21    | 463   | 228   | 85    | 740    | 992    | 187   | 68    | 130   | 39    | 40    |
| 9     | 17   | 21    | 298   | 193   | 75    | 914    | 782    | 358   | 61    | 119   | 42    | 38    |
| 10    | 21   | 23    | 190   | 242   | 60    | 645    | 585    | 695   | 57    | 173   | 45    | 36    |
| 11    | 31   | 23    | 140   | 317   | 65    | 495    | 490    | 536   | 55    | 376   | 42    | 34    |
| 12    | 31   | 24    | 110   | 293   | 70    | 470    | 398    | 351   | 52    | 243   | 38    | 31    |
| 13    | 26   | 23    | 90    | 247   | 95    | 938    | 500    | 274   | 55    | 161   | 38    | 38    |
| 14    | 23   | 23    | 85    | 231   | 300   | 1,820  | 1,100  | 277   | 144   | 121   | 38    | 128   |
| 15    | 20   | 23    | 422   | 170   | 460   | 1,910  | 896    | 351   | 163   | 112   | 38    | 445   |
| 16    | 20   | 21    | 722   | 140   | 700   | 1,700  | 752    | 311   | 271   | 220   | 31    | 303   |
| 17    | 20   | 20    | 406   | 112   | 750   | 1,630  | 992    | 262   | 243   | 775   | 65    | 168   |
| 18    | 19   | 19    | 241   | 100   | 650   | 1,700  | 1,110  | 257   | 146   | 1,290 | 500   | 122   |
| 19    | 17   | 20    | 169   | 125   | 550   | 1,260  | 794    | 228   | 102   | 830   | 550   | 130   |
| 20    | 16   | 23    | 141   | 150   | 408   | 860    | 957    | 196   | 81    | 376   | 480   | 106   |
| 21    | 15   | 31    | 148   | 142   | 290   | 656    | 1,760  | 178   | 75    | 218   | 250   | 81    |
| 22    | 15   | 31    | 134   | 140   | 450   | 625    | 1,570  | 163   | 77    | 159   | 150   | 67    |
| 23    | 15   | 29    | 108   | 171   | 420   | 794    | 1,580  | 142   | 92    | 257   | 160   | 60    |
| 24    | 19   | 25    | 98    | 246   | 318   | 728    | 1,420  | 128   | 123   | 448   | 140   | 56    |
| 25    | 23   | 25    | 94    | 258   | 266   | 545    | 745    | 119   | 115   | 334   | 120   | 63    |
| 26    | 24   | 25    | 90    | 186   | 290   | 442    | 500    | 108   | 108   | 203   | 160   | 69    |
| 27    | 23   | 27    | 94    | 124   | 313   | 382    | 400    | 100   | 119   | 144   | 400   | 117   |
| 28    | 21   | 29    | 102   | 134   | 280   | 334    | 334    | 95    | 108   | 115   | 220   | 239   |
| 29    | 20   | 37    | 122   | 120   | 358   | 300    | 292    | 96    | 90    | 98    | 150   | 244   |
| 30    | 19   | 51    | 170   | 110   | ----- | 300    | 262    | 107   | 130   | 83    | 110   | 290   |
| 31    | 19   | ----- | 884   | 95    | ----- | 282    | -----  | 140   | ----- | 72    | 80    | ----- |
| TOTAL | 627  | 745   | 5,975 | 7,160 | 7,926 | 26,660 | 21,007 | 7,563 | 3,433 | 8,324 | 4,249 | 3,303 |
| MEAN  | 20.2 | 24.8  | 193   | 231   | 273   | 860    | 700    | 244   | 114   | 269   | 137   | 110   |
| MAX   | 31   | 51    | 884   | 861   | 750   | 1,910  | 1,760  | 695   | 271   | 1,290 | 550   | 445   |
| MIN   | 15   | 18    | 30    | 95    | 60    | 282    | 200    | 95    | 52    | 72    | 31    | 31    |

CAL YR 1971 TOTAL 79,286 MEAN 217 MAX 2,100 MIN 12  
WTR YR 1972 TOTAL 96,972 MEAN 265 MAX 1,910 MIN 15



## MUSKINGUM RIVER BASIN

47

03125000 Home Creek near New Philadelphia, Ohio

LOCATION.--Lat 40°28'06", long 81°24'10", Tuscarawas County, on right bank 100 ft downstream from highway bridge, 0.5 mile upstream from the mouth, and 1.5 miles southeast of New Philadelphia.

DRAINAGE AREA.--1.64 sq mi.

PERIOD OF RECORD.--December 1936 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 872.49 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--35 years (1937-72), 1.21 cfs (10.02 inches per year).

EXTREMES.--Current year: Maximum discharge, 34 cfs Apr. 20 (gage height, 2.15 ft); no flow several days in Oct., Nov., Aug., and Sept.

Period of record: Maximum discharge, 378 cfs July 7, 1969 (gage height, 5.77 ft); no flow at times in 1938-40, 1942-68, 1970-72.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1173: 1941(M). WSP 1385: 1951-53(M).

| DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 |      |       |       |       |       |       |       |       |       |      |       |       |
|--|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| DAY  | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG   | SEP   |
| 1  | .02  | 0     | .12   | 1.6   | .27   | 2.3   | 1.5   | 1.0   | .52   | .08  | 0     | .06   |
| 2  | .01  | .14   | .06   | 2.4   | .32   | 8.7   | 1.4   | 1.2   | .19   | .05  | 0     | .05   |
| 3  | .01  | .04   | .04   | 1.4   | .74   | 6.0   | 1.2   | .91   | .12   | .07  | .02   | .07   |
| 4  | .01  | .01   | .06   | 1.5   | .64   | 3.7   | 1.6   | .84   | .08   | .05  | .01   | .06   |
| 5  | 0    | .01   | .11   | 1.9   | .27   | 2.7   | 1.1   | .70   | .07   | .47  | .01   | .03   |
| 6  | .04  | .01   | 2.1   | 1.2   | .28   | 2.3   | 1.5   | .57   | .08   | .19  | .01   | .03   |
| 7  | 0    | .04   | 2.8   | .96   | .30   | 4.0   | 12    | .52   | .06   | .08  | .02   | .02   |
| 8  | 0    | .02   | 1.2   | .74   | .21   | 5.3   | 4.0   | 1.3   | .04   | .12  | .01   | .02   |
| 9  | .04  | .03   | .61   | 1.3   | .18   | 3.6   | 1.9   | 3.3   | .04   | .08  | .04   | .02   |
| 10   | .09  | .04   | .47   | 1.5   | .15   | 2.2   | 1.6   | 1.6   | .03   | 1.8  | .01   | .01   |
| 11   | .02  | .05   | .40   | 1.1   | .18   | 1.8   | 1.7   | 1.1   | .03   | .40  | .01   | 0     |
| 12   | .01  | .06   | .27   | .87   | .25   | 2.6   | 1.8   | .87   | .03   | .19  | .01   | .01   |
| 13   | 0    | .03   | .21   | .96   | 2.5   | 10    | 4.7   | .80   | 1.0   | .10  | .01   | .03   |
| 14   | .04  | .02   | 1.8   | .77   | 3.1   | 5.4   | 3.4   | 1.1   | .24   | .08  | 0     | .61   |
| 15   | .01  | .03   | 2.4   | .42   | 4.0   | 4.7   | 2.7   | .91   | .30   | .08  | 0     | .12   |
| 16   | .01  | .02   | 1.2   | .21   | 2.8   | 8.7   | 3.4   | .74   | .35   | .18  | 0     | .05   |
| 17   | .01  | .02   | .70   | .37   | 2.0   | 6.5   | 3.9   | .74   | .10   | .16  | .84   | .03   |
| 18   | 0    | .02   | .44   | .47   | 2.5   | 3.9   | 2.7   | .61   | .06   | .08  | .21   | .40   |
| 19   | 0    | .06   | .35   | .54   | 1.8   | 2.5   | 2.5   | .44   | .05   | .04  | .21   | .08   |
| 20   | 0    | .05   | .70   | .47   | 1.8   | 2.1   | 14    | .44   | .08   | .03  | .05   | .04   |
| 21   | 0    | .07   | .52   | .47   | 1.3   | 2.1   | 5.8   | .37   | .16   | .02  | .02   | .02   |
| 22   | 0    | .04   | .30   | .77   | 1.1   | 5.1   | 5.1   | .30   | .28   | .02  | .01   | .02   |
| 23   | .01  | .02   | .25   | 1.6   | 1.0   | 3.3   | 3.6   | .24   | 1.4   | .02  | .02   | .02   |
| 24   | .02  | .04   | .28   | 1.4   | 1.1   | 2.4   | 2.5   | .21   | .54   | .15  | .02   | .12   |
| 25   | .03  | .05   | .24   | 1.0   | 1.1   | 1.9   | 1.9   | .18   | .40   | .02  | .02   | .08   |
| 26   | .02  | .05   | .35   | .57   | 1.5   | 1.6   | 1.6   | .14   | .28   | .01  | 4.0   | .16   |
| 27   | .01  | .12   | .42   | .49   | 1.4   | 1.5   | 1.4   | .14   | .18   | .04  | 4.9   | .18   |
| 28   | .01  | .09   | 1.0   | .49   | 1.3   | 1.3   | 1.2   | .10   | .11   | .02  | .57   | .15   |
| 29   | 0    | .49   | .57   | .37   | 1.5   | 1.7   | 1.1   | .10   | .12   | .01  | .25   | .42   |
| 30   | 0    | .32   | 9.0   | .32   | ----- | 1.9   | 1.0   | .16   | .12   | .01  | .16   | 2.4   |
| 31   | 0    | ----- | 3.3   | .22   | ----- | 1.6   | ----- | .25   | ----- | .01  | .08   | ----- |
| TOTAL  | .42  | 1.99  | 32.27 | 28.38 | 35.59 | 113.4 | 93.8  | 21.88 | 7.06  | 4.66 | 11.52 | 5.31  |
| MEAN   | .014 | .066  | 1.04  | .92   | 1.23  | 3.66  | 3.13  | .71   | .24   | .15  | .37   | .18   |
| MAX  | .09  | .49   | 9.0   | 2.4   | 4.0   | 10    | 14    | 3.3   | 1.4   | 1.8  | 4.9   | 2.4   |
| MIN  | 0    | 0     | .04   | .21   | .15   | 1.3   | 1.0   | .10   | .03   | .01  | 0     | 0     |
| CFSM   | .009 | .04   | .63   | .56   | .75   | 2.23  | 1.91  | .43   | .15   | .09  | .23   | .11   |
| IN.  | .009 | .05   | .73   | .64   | .81   | 2.57  | 2.13  | .50   | .16   | .11  | .26   | .12   |

CAL YR 1971 TOTAL 377.21 MEAN 1.03 MAX 45 MIN 0 CFSM .63 IN 8.56  
WTR YR 1972 TOTAL 356.28 MEAN .97 MAX 14 MIN 0 CFSM .59 IN 8.08

PEAK DISCHARGE (BASE, 50 CFS).--No peak above base.

## MUSKINGUM RIVER BASIN

03126000 Stillwater Creek at Piedmont, Ohio

LOCATION.--Lat 40°11'41", long 81°12'56", in sec. 35, T.10 N., R.6 W., Harrison County, on left bank 400 ft downstream from outlet of Piedmont Dam and Boggs Fork, and 0.7 mile northwest of Piedmont.

DRAINAGE AREA.--122 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to February 1939 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft above mean sea level, adjustment of 1912. Prior to Sept. 9, 1949, at site 1,000 ft downstream at datum 1.00 ft higher.

AVERAGE DISCHARGE.--34 years, 129 cfs.

EXTREMES.--Current year: Maximum discharge, 877 cfs Apr. 13 (gage height, 8.32 ft); minimum, 8.9 cfs Aug. 16, 17.

Period of record: Maximum discharge, 1,470 cfs Dec. 4, 1950; maximum gage height, 11.44 ft Mar. 5, 1963; minimum discharge, 0.1 cfs Sept. 4, 1953.

REMARKS.--Records good. Flow regulated by Piedmont Lake (see station 03125500). Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1     | 50   | 17    | 250   | 264   | 84    | 101   | 47    | 416   | 58    | 80    | 13      | 26    |
| 2     | 48   | 20    | 283   | 267   | 84    | 79    | 56    | 414   | 53    | 67    | 14      | 20    |
| 3     | 46   | 21    | 277   | 264   | 117   | 112   | 67    | 404   | 50    | 64    | 24      | 18    |
| 4     | 41   | 18    | 275   | 273   | 152   | 166   | 78    | 404   | 45    | 61    | 22      | 18    |
| 5     | 38   | 17    | 231   | 332   | 142   | 202   | 83    | 398   | 45    | 63    | 17      | 15    |
| 6     | 35   | 16    | 273   | 313   | 140   | 184   | 83    | 386   | 32    | 66    | 14      | 14    |
| 7     | 28   | 17    | 434   | 242   | 131   | 207   | 281   | 342   | 28    | 58    | 14      | 13    |
| 8     | 24   | 16    | 332   | 142   | 79    | 257   | 276   | 161   | 23    | 54    | 14      | 13    |
| 9     | 23   | 17    | 304   | 143   | 56    | 245   | 206   | 144   | 21    | 53    | 15      | 12    |
| 10    | 35   | 16    | 308   | 226   | 25    | 257   | 220   | 141   | 21    | 58    | 13      | 11    |
| 11    | 31   | 16    | 309   | 266   | 49    | 234   | 287   | 128   | 20    | 61    | 10      | 10    |
| 12    | 26   | 15    | 296   | 193   | 64    | 177   | 284   | 124   | 19    | 58    | 11      | 11    |
| 13    | 25   | 14    | 288   | 152   | 153   | 240   | 660   | 120   | 32    | 53    | 12      | 12    |
| 14    | 26   | 14    | 324   | 152   | 198   | 243   | 440   | 125   | 70    | 51    | 12      | 15    |
| 15    | 26   | 97    | 383   | 116   | 222   | 247   | 302   | 125   | 56    | 49    | 11      | 16    |
| 16    | 24   | 152   | 376   | 56    | 181   | 330   | 284   | 121   | 51    | 58    | 9.6     | 15    |
| 17    | 23   | 151   | 349   | 56    | 137   | 377   | 374   | 119   | 41    | 61    | 63      | 15    |
| 18    | 20   | 149   | 299   | 60    | 127   | 318   | 394   | 118   | 35    | 55    | 110     | 16    |
| 19    | 18   | 153   | 233   | 87    | 127   | 272   | 407   | 115   | 31    | 51    | 117     | 15    |
| 20    | 17   | 151   | 178   | 114   | 101   | 294   | 359   | 110   | 35    | 47    | 116     | 14    |
| 21    | 16   | 151   | 122   | 129   | 97    | 309   | 329   | 105   | 47    | 44    | 83      | 13    |
| 22    | 17   | 170   | 51    | 127   | 162   | 332   | 406   | 99    | 44    | 42    | 67      | 13    |
| 23    | 18   | 179   | 29    | 141   | 225   | 342   | 383   | 88    | 95    | 41    | 60      | 12    |
| 24    | 23   | 172   | 30    | 199   | 230   | 360   | 330   | 76    | 100   | 34    | 55      | 17    |
| 25    | 26   | 161   | 28    | 239   | 191   | 364   | 335   | 73    | 81    | 23    | 51      | 21    |
| 26    | 25   | 161   | 30    | 211   | 193   | 273   | 382   | 70    | 72    | 19    | 59      | 24    |
| 27    | 23   | 163   | 57    | 203   | 182   | 164   | 423   | 63    | 66    | 19    | 53      | 28    |
| 28    | 21   | 169   | 112   | 130   | 178   | 128   | 432   | 60    | 87    | 18    | 47      | 61    |
| 29    | 19   | 173   | 125   | 89    | 176   | 83    | 423   | 56    | 75    | 16    | 42      | 75    |
| 30    | 18   | 187   | 157   | 88    | ----- | 48    | 420   | 58    | 95    | 14    | 38      | 88    |
| 31    | 18   | ----- | 222   | 83    | ----- | 45    | ----- | 61    | ----- | 13    | 34      | ----- |
| TOTAL | 828  | 2,773 | 6,965 | 5,357 | 4,003 | 6,990 | 9,051 | 5,224 | 1,528 | 1,451 | 1,220.6 | 651   |
| MEAN  | 26.7 | 92.4  | 225   | 173   | 138   | 225   | 302   | 169   | 50.9  | 46.8  | 39.4    | 21.7  |
| MAX   | 50   | 187   | 434   | 332   | 230   | 377   | 660   | 416   | 100   | 80    | 117     | 88    |
| MIN   | 16   | 14    | 28    | 56    | 25    | 45    | 47    | 56    | 19    | 13    | 9.6     | 10    |

CAL YR 1971 TOTAL 39,944.1 MEAN 109 MAX 638 MIN 6.7  
WTR YR 1972 TOTAL 46,041.6 MEAN 126 MAX 660 MIN 9.6

## MUSKINGUM RIVER BASIN

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03127000 Stillwater Creek at Tiptecanoe, Ohio

LOCATION.--Lat 40°16'13", long 81°17'26", in NW 1/4 sec. 22, T.12 N., R.7 W., Harrison County, on left bank at downstream side of highway bridge at Tiptecanoe, 0.4 mile downstream from Brushy Fork, 3.6 miles upstream from Weaver Run, 6 miles upstream from Laurel Creek, and 9 miles south of Dennison.

DRAINAGE AREA.--282 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 849.00 ft above mean sea level, adjustment of 1912. Prior to Feb. 9, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 300 cfs.

EXTREMES.--Current year: Maximum discharge, 1,660 cfs Apr. 14 (gage height, 13.32 ft); minimum daily, 17 cfs Aug. 12, 13, 16.

Period of record: Maximum discharge, 4,410 cfs Mar. 7, 1945, Mar. 5, 1963; maximum gage height, 17.29 ft Mar. 5, 1963; minimum discharge, 1.0 cfs Oct. 3, 4, 1940.

REMARKS.--Records good. Flow regulated by Clendenning Lake on Brushy Fork (1.9 miles upstream) and Piedmont Lake (16 miles upstream) see stations 03126500 and 03125500. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT   | NOV     | DEC    | JAN    | FEB    | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|-------|---------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1           | 82    | 27      | 374    | 640    | 204    | 363    | 166    | 802   | 138   | 206   | 18    | 52    |
| 2           | 80    | 30      | 406    | 645    | 193    | 321    | 180    | 630   | 128   | 178   | 19    | 39    |
| 3           | 75    | 34      | 400    | 631    | 217    | 464    | 187    | 515   | 120   | 160   | 27    | 32    |
| 4           | 64    | 31      | 403    | 527    | 315    | 472    | 204    | 494   | 106   | 149   | 34    | 32    |
| 5           | 57    | 28      | 385    | 613    | 299    | 488    | 229    | 488   | 94    | 146   | 28    | 29    |
| 6           | 51    | 26      | 357    | 649    | 280    | 472    | 218    | 468   | 78    | 165   | 22    | 27    |
| 7           | 45    | 26      | 729    | 525    | 274    | 479    | 613    | 447   | 54    | 147   | 21    | 26    |
| 8           | 37    | 24      | 1,170  | 337    | 217    | 667    | 1,050  | 350   | 43    | 129   | 23    | 24    |
| 9           | 34    | 24      | 1,100  | 304    | 199    | 652    | 787    | 292   | 36    | 124   | 24    | 23    |
| 10          | 40    | 24      | 780    | 383    | 141    | 567    | 706    | 334   | 36    | 131   | 22    | 22    |
| 11          | 52    | 24      | 696    | 460    | 139    | 516    | 786    | 301   | 46    | 151   | 19    | 21    |
| 12          | 48    | 24      | 642    | 416    | 175    | 459    | 760    | 273   | 41    | 143   | 17    | 20    |
| 13          | 37    | 23      | 612    | 363    | 284    | 572    | 1,210  | 257   | 61    | 122   | 17    | 21    |
| 14          | 34    | 23      | 610    | 409    | 609    | 651    | 1,570  | 254   | 155   | 108   | 18    | 23    |
| 15          | 35    | 60      | 751    | 365    | 684    | 592    | 1,100  | 263   | 165   | 101   | 18    | 26    |
| 16          | 31    | 100     | 742    | 269    | 708    | 696    | 714    | 274   | 145   | 113   | 17    | 26    |
| 17          | 26    | 190     | 548    | 196    | 540    | 1,080  | 900    | 255   | 127   | 132   | 69    | 24    |
| 18          | 25    | 200     | 476    | 161    | 401    | 1,100  | 1,070  | 248   | 103   | 117   | 355   | 24    |
| 19          | 22    | 200     | 382    | 192    | 430    | 790    | 952    | 250   | 86    | 101   | 252   | 23    |
| 20          | 19    | 200     | 357    | 227    | 377    | 612    | 1,010  | 240   | 75    | 87    | 311   | 22    |
| 21          | 19    | 210     | 317    | 288    | 353    | 603    | 824    | 232   | 96    | 73    | 212   | 20    |
| 22          | 20    | 210     | 242    | 300    | 390    | 621    | 924    | 217   | 103   | 61    | 153   | 19    |
| 23          | 23    | 240     | 159    | 340    | 437    | 715    | 1,080  | 200   | 152   | 56    | 131   | 18    |
| 24          | 28    | 270     | 146    | 394    | 475    | 685    | 932    | 178   | 248   | 47    | 121   | 19    |
| 25          | 35    | 300     | 143    | 498    | 488    | 664    | 741    | 166   | 226   | 36    | 108   | 22    |
| 26          | 41    | 300     | 140    | 488    | 555    | 618    | 834    | 155   | 197   | 25    | 115   | 24    |
| 27          | 38    | 300     | 199    | 423    | 541    | 460    | 904    | 141   | 173   | 22    | 127   | 25    |
| 28          | 32    | 300     | 285    | 359    | 415    | 403    | 904    | 129   | 251   | 22    | 108   | 27    |
| 29          | 27    | 320     | 361    | 257    | 394    | 349    | 870    | 119   | 230   | 21    | 90    | 81    |
| 30          | 25    | 350     | 393    | 256    | -----  | 226    | 844    | 121   | 215   | 19    | 73    | 82    |
| 31          | 25    | -----   | 561    | 202    | -----  | 182    | -----  | 143   | ----- | 18    | 61    | ----- |
| TOTAL       | 1,207 | 4,118   | 14,866 | 12,117 | 10,734 | 17,539 | 23,269 | 9,236 | 3,728 | 3,110 | 2,630 | 873   |
| MEAN        | 38.9  | 137     | 480    | 391    | 370    | 566    | 776    | 298   | 124   | 100   | 84.8  | 29.1  |
| MAX         | 82    | 350     | 1,170  | 649    | 708    | 1,100  | 1,570  | 802   | 251   | 206   | 355   | 82    |
| MIN         | 19    | 23      | 140    | 161    | 139    | 182    | 166    | 119   | 36    | 18    | 17    | 18    |
| CAL YR 1971 | TOTAL | 86,541  | MEAN   | 237    | MAX    | 2,350  | MIN    | 14    |       |       |       |       |
| WTR YR 1972 | TOTAL | 103,427 | MEAN   | 283    | MAX    | 1,570  | MIN    | 17    |       |       |       |       |

## MUSKINGUM RIVER BASIN

03127500 Stillwater Creek at Uhrichsville, Ohio

LOCATION.--Lat 40°23'10", long 81°20'50", Tuscarawas County, on left bank at concrete dam of Dennison Water Supply Co., at Uhrichsville, 2.2 miles upstream from Little Stillwater Creek.

DRAINAGE AREA.--367 sq mi.

PERIOD OF RECORD.--July 1922 to current year.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 839.37 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1936, nonrecording gage at site 1.7 miles upstream at same datum. Auxiliary water-stage recorder below concrete dam at datum 10.00 ft lower.

AVERAGE DISCHARGE.--50 years, 417 cfs.

EXTREMES.--Current year: Maximum discharge, 2,120 cfs Apr. 14 (gage height, 3.09 ft); minimum, 25 cfs Nov. 4-12, Sept. 11; minimum gage height, 0.12 ft Nov. 4-12.

Period of record: Maximum discharge, 7,650 cfs Aug. 8, 9, 1935 (gage height, 14.2 ft at former site, 12.8 ft at present site); no flow at times in 1930, 1932, 1936, 1939-40, 1953.

Flood in March 1913 reached a stage of about 17.5 ft at former site, and about 15.5 ft at present site.

REMARKS.--Records good. Flow regulated by Piedmont Lake (35 miles upstream) and Clendening Lake on Brushy Fork (22 miles upstream) beginning in 1938 (see stations 03125500 and 03126500). Water is diverted from Dennison Water Supply dam 1.7 miles upstream from station for municipal supply of cities of Dennison and Uhrichsville; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 853: Drainage area. WSP 1113: 1923-24, 1926-31, 1932(M), 1933-35.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 80    | 37    | 409    | 743    | 227    | 502    | 182    | 884    | 185   | 295   | 35    | 76    |
| 2     | 87    | 31    | 445    | 765    | 212    | 476    | 179    | 806    | 161   | 253   | 38    | 91    |
| 3     | 87    | 31    | 475    | 810    | 214    | 665    | 189    | 631    | 143   | 216   | 47    | 111   |
| 4     | 83    | 31    | 460    | 691    | 194    | 706    | 197    | 579    | 127   | 196   | 51    | 76    |
| 5     | 76    | 27    | 453    | 685    | 274    | 653    | 229    | 564    | 113   | 192   | 58    | 55    |
| 6     | 68    | 25    | 423    | 778    | 350    | 583    | 230    | 544    | 103   | 214   | 51    | 43    |
| 7     | 61    | 25    | 779    | 703    | 315    | 571    | 698    | 520    | 96    | 202   | 46    | 37    |
| 8     | 58    | 25    | 1,190  | 515    | 248    | 805    | 1,300  | 475    | 84    | 174   | 48    | 34    |
| 9     | 52    | 27    | 1,190  | 367    | 187    | 911    | 1,100  | 400    | 74    | 160   | 55    | 31    |
| 10    | 55    | 25    | 960    | 400    | 156    | 768    | 956    | 463    | 65    | 164   | 52    | 29    |
| 11    | 58    | 25    | 842    | 544    | 140    | 664    | 901    | 424    | 66    | 191   | 37    | 27    |
| 12    | 68    | 27    | 761    | 566    | 137    | 603    | 882    | 362    | 71    | 193   | 31    | 29    |
| 13    | 65    | 31    | 707    | 467    | 220    | 786    | 1,170  | 322    | 91    | 172   | 29    | 49    |
| 14    | 55    | 31    | 689    | 502    | 738    | 1,080  | 1,950  | 318    | 147   | 147   | 29    | 72    |
| 15    | 52    | 31    | 788    | 464    | 971    | 964    | 1,500  | 328    | 226   | 134   | 29    | 76    |
| 16    | 55    | 111   | 950    | 330    | 1,010  | 1,010  | 1,000  | 348    | 194   | 130   | 28    | 55    |
| 17    | 55    | 208   | 779    | 274    | 848    | 1,200  | 1,080  | 330    | 173   | 149   | 53    | 43    |
| 18    | 52    | 224   | 632    | 199    | 646    | 1,200  | 1,230  | 307    | 148   | 152   | 539   | 40    |
| 19    | 43    | 219   | 528    | 186    | 594    | 1,100  | 1,200  | 290    | 124   | 134   | 500   | 37    |
| 20    | 37    | 230   | 445    | 218    | 552    | 886    | 1,300  | 277    | 106   | 121   | 453   | 34    |
| 21    | 37    | 241   | 402    | 282    | 443    | 760    | 1,100  | 258    | 104   | 112   | 354   | 31    |
| 22    | 43    | 241   | 327    | 336    | 457    | 775    | 1,200  | 241    | 123   | 100   | 231   | 34    |
| 23    | 43    | 270   | 224    | 439    | 487    | 875    | 1,300  | 219    | 146   | 89    | 181   | 31    |
| 24    | 46    | 307   | 161    | 537    | 531    | 857    | 1,200  | 197    | 262   | 84    | 156   | 33    |
| 25    | 49    | 340   | 151    | 631    | 576    | 805    | 1,040  | 214    | 311   | 69    | 132   | 41    |
| 26    | 61    | 327   | 141    | 670    | 611    | 745    | 924    | 198    | 272   | 57    | 132   | 49    |
| 27    | 61    | 327   | 151    | 584    | 702    | 626    | 952    | 179    | 238   | 51    | 141   | 56    |
| 28    | 55    | 333   | 252    | 504    | 596    | 480    | 962    | 164    | 251   | 47    | 137   | 61    |
| 29    | 43    | 347   | 395    | 362    | 507    | 413    | 937    | 154    | 355   | 46    | 115   | 77    |
| 30    | 40    | 380   | 490    | 306    | -----  | 318    | 906    | 155    | 309   | 42    | 98    | 153   |
| 31    | 37    | ----- | 734    | 250    | -----  | 212    | -----  | 174    | ----- | 38    | 83    | ----- |
| TOTAL | 1,762 | 4,534 | 17,333 | 15,108 | 13,143 | 22,999 | 27,994 | 11,325 | 4,868 | 4,324 | 3,969 | 1,611 |
| MEAN  | 56.8  | 151   | 559    | 487    | 453    | 742    | 933    | 365    | 162   | 139   | 128   | 53.7  |
| MAX   | 87    | 380   | 1,190  | 810    | 1,010  | 1,200  | 1,950  | 884    | 355   | 295   | 539   | 153   |
| MIN   | 37    | 25    | 141    | 186    | 137    | 212    | 179    | 154    | 65    | 38    | 28    | 27    |
| (+)   | 1.47  | 1.42  | 1.41   | 1.51   | 1.65   | 1.51   | 1.47   | 1.61   | 1.68  | 1.65  | 1.77  | 1.80  |

CAL YR 1971 TOTAL 112,099 MEAN 307 MAX 2,740 MIN 16 (+) 1.49  
WTR YR 1972 TOTAL 128,970 MEAN 352 MAX 1,950 MIN 25 (+) 1.58

+ Diversion, in cubic feet per second, for municipal supply of cities of Dennison and Uhrichsville, furnished by Dennison Water Supply Company.



03128500 Little Stillwater Creek below Tappan Dam, at Tappan, Ohio

LOCATION.--Lat 40°21'25", long 81°13'49", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, on right bank 150 ft downstream from outlet of lake at Tappan Dam, 1 mile west of Tappan, and 2 miles upstream from Plum Run.

DRAINAGE AREA.--71.1 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Little Stillwater Creek at Tappan 1938-39.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 861.00 ft above mean sea level, adjustment of 1912. Prior to Jan. 30, 1939, water-stage recorder at gate house of Tappan Dam at datum 9 ft higher. Jan. 30 to Mar. 24, 1939, nonrecording gage and Mar. 25, 1939, to Aug. 6, 1944, water-stage recorder, at site 150 ft downstream at present datum.

AVERAGE DISCHARGE.--34 years, 73.1 cfs.

EXTREMES.--Current year: Maximum discharge, 500 cfs Apr. 10, 11 (gage height, 6.62 ft); minimum, 1.1 cfs Dec. 23 (gage height 4.26 ft).

Period of record: Maximum discharge, 1,050 cfs Mar. 13, 1939 (gage height, 10.00 ft); no flow Sept. 12-15, 18, 19, 21-29, Oct. 13-21, 1939.

REMARKS.--Records good. Flow completely regulated by Tappan Lake (see station 03128000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC     | JAN     | FEB   | MAR     | APR     | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|-----------|---------|---------|-------|---------|---------|-------|-------|-------|-------|-------|
| 1           | 5.5            | 2.5       | 145     | 2.4     | 60    | 2.1     | 2.6     | 48    | 29    | 30    | 6.6   | 9.0   |
| 2           | 5.0            | 2.6       | 145     | 2.4     | 61    | 2.1     | 2.8     | 55    | 26    | 27    | 7.5   | 14    |
| 3           | 4.8            | 2.6       | 145     | 176     | 61    | 2.1     | 2.5     | 57    | 21    | 23    | 7.9   | 41    |
| 4           | 4.2            | 2.4       | 145     | 290     | 61    | 40      | 2.8     | 58    | 17    | 21    | 7.1   | 33    |
| 5           | 3.6            | 2.4       | 145     | 304     | 61    | 63      | 3.8     | 58    | 16    | 22    | 6.4   | 27    |
| 6           | 3.2            | 2.0       | 145     | 228     | 61    | 63      | 5.1     | 57    | 18    | 22    | 6.1   | 22    |
| 7           | 2.9            | 2.0       | 145     | 88      | 61    | 62      | 51      | 55    | 18    | 19    | 6.0   | 18    |
| 8           | 2.9            | 2.0       | 145     | 61      | 61    | 62      | 108     | 56    | 17    | 18    | 5.9   | 15    |
| 9           | 2.9            | 2.0       | 165     | 61      | 61    | 62      | 116     | 64    | 15    | 18    | 5.9   | 13    |
| 10          | 3.3            | 2.0       | 195     | 61      | 22    | 62      | 320     | 68    | 12    | 21    | 5.8   | 12    |
| 11          | 3.1            | 1.8       | 203     | 61      | 2.3   | 62      | 489     | 66    | 10    | 22    | 5.5   | 12    |
| 12          | 2.9            | 1.8       | 203     | 61      | 2.3   | 63      | 450     | 65    | 9.3   | 20    | 5.6   | 12    |
| 13          | 2.8            | 1.8       | 203     | 61      | 2.3   | 81      | 460     | 63    | 9.9   | 17    | 5.8   | 12    |
| 14          | 2.8            | 1.8       | 203     | 61      | 2.1   | 134     | 367     | 62    | 11    | 15    | 5.3   | 18    |
| 15          | 2.8            | 107       | 203     | 61      | 2.2   | 152     | 162     | 64    | 13    | 14    | 5.2   | 18    |
| 16          | 2.7            | 184       | 200     | 61      | 2.3   | 166     | 170     | 66    | 14    | 16    | 5.0   | 16    |
| 17          | 2.7            | 184       | 200     | 61      | 2.3   | 184     | 269     | 65    | 13    | 18    | 6.3   | 16    |
| 18          | 2.6            | 163       | 200     | 60      | 2.3   | 186     | 397     | 65    | 13    | 18    | 8.0   | 15    |
| 19          | 2.5            | 150       | 198     | 60      | 2.3   | 186     | 411     | 68    | 12    | 16    | 9.6   | 14    |
| 20          | 2.5            | 150       | 198     | 61      | 2.2   | 186     | 303     | 69    | 12    | 14    | 14    | 13    |
| 21          | 2.3            | 150       | 198     | 61      | 2.3   | 248     | 214     | 67    | 13    | 13    | 13    | 12    |
| 22          | 2.4            | 150       | 61      | 60      | 2.2   | 354     | 226     | 65    | 12    | 12    | 12    | 11    |
| 23          | 2.4            | 150       | 1.1     | 61      | 2.2   | 408     | 235     | 62    | 24    | 11    | 13    | 10    |
| 24          | 2.7            | 148       | 1.2     | 60      | 2.2   | 403     | 235     | 58    | 42    | 10    | 13    | 11    |
| 25          | 2.8            | 148       | 1.2     | 60      | 2.1   | 366     | 330     | 55    | 44    | 9.6   | 12    | 12    |
| 26          | 2.9            | 148       | 1.6     | 60      | 2.1   | 319     | 419     | 52    | 44    | 8.9   | 14    | 12    |
| 27          | 2.8            | 148       | 2.3     | 61      | 2.1   | 318     | 370     | 46    | 41    | 8.8   | 14    | 13    |
| 28          | 2.7            | 148       | 2.4     | 60      | 2.1   | 309     | 135     | 30    | 38    | 8.3   | 12    | 13    |
| 29          | 2.5            | 148       | 2.4     | 60      | 2.1   | 189     | 32      | 27    | 34    | 7.3   | 11    | 12    |
| 30          | 2.5            | 148       | 2.4     | 61      | ----- | 123     | 39      | 31    | 32    | 6.9   | 11    | 14    |
| 31          | 2.5            | -----     | 2.4     | 61      | ----- | 46      | -----   | 35    | ----- | 6.4   | 9.9   | ----- |
| TOTAL       | 94.2           | 2,453.7   | 3,807.0 | 2,546.8 | 612.0 | 4,903.3 | 6,327.6 | 1,757 | 630.2 | 493.2 | 270.4 | 470.0 |
| MEAN        | 3.04           | 81.8      | 123     | 82.2    | 21.1  | 158     | 211     | 56.7  | 21.0  | 15.9  | 8.72  | 15.7  |
| MAX         | 5.5            | 184       | 203     | 304     | 61    | 408     | 489     | 69    | 44    | 30    | 14    | 41    |
| MIN         | 2.3            | 1.8       | 1.1     | 2.4     | 2.1   | 2.1     | 2.5     | 27    | 9.3   | 6.4   | 5.0   | 9.0   |
| CAL YR 1971 | TOTAL 21,756.1 | MEAN 59.6 | MAX 550 | MIN 1.1 |       |         |         |       |       |       |       |       |
| WTR YR 1972 | TOTAL 24,365.4 | MEAN 66.6 | MAX 489 | MIN 1.1 |       |         |         |       |       |       |       |       |

## MUSKINGUM RIVER BASIN

03129000 Tuscarawas River at Newcomerstown, Ohio

LOCATION.--Lat 40°15'41", long 81°36'33", in T.5 N., R.3 W., Tuscarawas County, on right bank 150 ft upstream from highway bridge 0.2 mile south of Newcomerstown, 2 miles upstream from Buckhorn Creek, and 4 miles downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 sq mi.

PERIOD OF RECORD.--September 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft above mean sea level, adjustment of 1912. Prior to Sept. 28, 1925, and July 18, 1935, to Feb. 13, 1939, nonrecording gage, Sept. 28, 1925, to July 17, 1935, water-stage recorder at site 1.5 miles upstream at datum 5.03 ft higher prior to Oct. 1, 1934, and 0.03 ft higher Oct. 1, 1934, to Feb. 13, 1939.

AVERAGE DISCHARGE.--51 years, 2,392 cfs.

EXTREMES.--Current year: Maximum discharge, 9,570 cfs Mar. 17 (gage height, 7.98 ft); minimum, 313 cfs Nov. 15, 16.

Period of record: Maximum discharge, 46,800 cfs Jan. 26, 1937 (gage height, 20.65 ft, site and datum then in use); minimum, 120 cfs Aug. 7, 1930; minimum daily, 170 cfs Aug. 6, 1930.

Flood in March 1913 reached a stage of about 21.5 ft, at site and datum used prior to Oct. 1, 1934 (discharge, 83,000 cfs computed by Corps of Engineers).

REMARKS.--Records good. Diversion from basin at Portage Lakes (see REMARKS for stations 03116000 and 03117000). Flow regulated by eight flood-control reservoirs at points 40 to 64 miles upstream (see pp. 78, 79). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1929(M). WSP 873: 1935. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR     | APR     | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|--------|
| 1     | 537    | 327    | 1,420  | 5,120  | 1,340  | 3,300   | 2,600   | 3,340  | 1,610  | 1,840  | 770    | 770    |
| 2     | 545    | 327    | 1,460  | 4,380  | 1,290  | 4,360   | 2,430   | 3,300  | 1,770  | 1,720  | 788    | 725    |
| 3     | 521    | 369    | 1,450  | 3,770  | 1,280  | 6,260   | 2,380   | 3,210  | 1,620  | 1,420  | 815    | 920    |
| 4     | 497    | 390    | 1,380  | 3,690  | 1,460  | 6,840   | 2,330   | 3,680  | 1,450  | 1,820  | 815    | 788    |
| 5     | 473    | 362    | 1,350  | 3,580  | 1,300  | 6,210   | 2,270   | 3,130  | 1,250  | 2,460  | 860    | 743    |
| 6     | 449    | 348    | 1,450  | 3,610  | 1,100  | 4,910   | 2,190   | 2,760  | 1,150  | 2,280  | 851    | 671    |
| 7     | 425    | 348    | 2,350  | 3,170  | 1,200  | 3,890   | 3,650   | 2,510  | 1,080  | 2,130  | 833    | 626    |
| 8     | 433    | 348    | 3,900  | 2,530  | 1,100  | 4,360   | 5,990   | 2,370  | 1,050  | 1,720  | 851    | 599    |
| 9     | 433    | 341    | 4,050  | 2,070  | 1,000  | 5,580   | 5,970   | 2,720  | 1,030  | 1,490  | 910    | 572    |
| 10    | 465    | 348    | 3,300  | 2,040  | 1,000  | 5,390   | 5,040   | 3,910  | 990    | 1,500  | 860    | 545    |
| 11    | 529    | 348    | 2,680  | 2,380  | 970    | 4,520   | 4,700   | 4,210  | 950    | 2,580  | 806    | 518    |
| 12    | 545    | 355    | 2,270  | 2,710  | 930    | 4,000   | 4,470   | 3,410  | 920    | 2,420  | 761    | 509    |
| 13    | 513    | 355    | 2,070  | 2,490  | 1,210  | 5,330   | 5,160   | 2,750  | 1,010  | 1,940  | 743    | 626    |
| 14    | 473    | 341    | 1,910  | 2,230  | 2,190  | 7,920   | 7,010   | 2,530  | 1,250  | 1,590  | 689    | 1,000  |
| 15    | 441    | 327    | 2,610  | 2,280  | 3,260  | 8,560   | 7,540   | 2,630  | 1,400  | 1,490  | 653    | 2,490  |
| 16    | 418    | 465    | 3,820  | 1,730  | 4,040  | 8,770   | 6,800   | 2,680  | 1,530  | 1,560  | 626    | 2,820  |
| 17    | 404    | 742    | 3,850  | 1,260  | 4,250  | 9,470   | 7,070   | 2,540  | 2,070  | 3,410  | 815    | 2,200  |
| 18    | 390    | 798    | 2,860  | 1,590  | 3,750  | 9,460   | 7,780   | 2,370  | 1,580  | 4,980  | 1,630  | 1,640  |
| 19    | 376    | 791    | 2,180  | 1,710  | 3,480  | 9,120   | 7,710   | 2,210  | 1,240  | 4,460  | 2,250  | 1,730  |
| 20    | 376    | 821    | 1,890  | 1,480  | 3,060  | 8,220   | 7,630   | 2,040  | 1,060  | 3,520  | 2,000  | 1,890  |
| 21    | 376    | 861    | 1,800  | 1,500  | 2,410  | 7,460   | 8,910   | 1,910  | 1,010  | 2,540  | 1,800  | 1,430  |
| 22    | 376    | 828    | 1,760  | 1,560  | 2,340  | 7,230   | 9,410   | 1,790  | 1,010  | 1,760  | 1,290  | 1,130  |
| 23    | 376    | 844    | 1,500  | 1,840  | 2,790  | 7,390   | 9,120   | 1,680  | 1,140  | 1,400  | 1,020  | 960    |
| 24    | 383    | 892    | 1,270  | 2,250  | 2,680  | 7,420   | 8,510   | 1,560  | 1,460  | 1,460  | 990    | 890    |
| 25    | 383    | 899    | 1,110  | 2,560  | 2,500  | 6,770   | 8,210   | 1,450  | 1,770  | 1,480  | 970    | 890    |
| 26    | 390    | 929    | 1,080  | 2,460  | 2,470  | 5,760   | 7,330   | 1,340  | 1,730  | 1,280  | 1,280  | 930    |
| 27    | 404    | 956    | 1,070  | 2,120  | 2,820  | 4,730   | 6,020   | 1,250  | 1,840  | 1,090  | 1,960  | 1,040  |
| 28    | 404    | 1,060  | 1,180  | 1,840  | 2,690  | 3,410   | 4,730   | 1,160  | 1,560  | 1,000  | 1,740  | 1,830  |
| 29    | 376    | 1,130  | 1,410  | 1,730  | 2,660  | 4,430   | 3,830   | 1,100  | 1,460  | 940    | 1,260  | 2,100  |
| 30    | 355    | 1,280  | 1,880  | 1,510  | -----  | 3,450   | 3,510   | 1,100  | 1,520  | 870    | 1,010  | 2,410  |
| 31    | 341    | -----  | 4,120  | 1,470  | -----  | 2,990   | -----   | 1,270  | -----  | 806    | 851    | -----  |
| TOTAL | 13,407 | 18,530 | 66,430 | 74,660 | 62,570 | 187,510 | 170,300 | 73,910 | 40,510 | 60,956 | 33,497 | 35,992 |
| MEAN  | 432    | 618    | 2,143  | 2,408  | 2,158  | 6,049   | 5,677   | 2,384  | 1,350  | 1,966  | 1,081  | 1,200  |
| MAX   | 545    | 1,280  | 4,120  | 5,120  | 4,250  | 9,470   | 9,410   | 4,210  | 2,070  | 4,980  | 2,250  | 2,820  |
| MIN   | 341    | 327    | 1,070  | 1,260  | 930    | 2,990   | 2,190   | 1,100  | 920    | 806    | 626    | 509    |

CAL YR 1971 TOTAL 722,546 MEAN 1,980 MAX 10,600 MIN 320  
WTR YR 1972 TOTAL 838,272 MEAN 2,290 MAX 9,470 MIN 327

03130000 Black Fork below Charles Mill Dam, near Mifflin, Ohio

LOCATION.--Lat 40°44'16", long 82°21'48", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, on left bank 700 ft downstream from Charles Mill Dam, 2.5 miles south of Mifflin, and 4 miles upstream from Rocky Fork.

DRAINAGE AREA.--217 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1940, published as Black Fork near Mifflin. Monthly discharge only for October 1938, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 981.56 ft above mean sea level, adjustment of 1912. Dec. 3, 1941, to Dec. 5, 1944, water-stage recorder at site 300 ft downstream at same datum.

AVERAGE DISCHARGE.--34 years, 186 cfs.

EXTREMES.--Current year: Maximum discharge, 1,240 cfs Apr. 27 (gage height, 5.57 ft); minimum, 12 cfs Oct. 8. Period of record: Maximum discharge, 2,800 cfs Mar. 13, 1964; maximum gage height, 8.45 ft Mar. 14, 1939; minimum discharge, 0.2 cfs May 21, 1940; minimum daily discharge, 0.9 cfs Apr. 21, 1940. Flood of March 1913 reached a discharge of 11,700 cfs (computed by Corps of Engineers).

REMARKS.--Records good. Flow regulated by Charles Mill Lake (see station 03129500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 21   | 20    | 141   | 134   | 139   | 141    | 220    | 1,110  | 79    | 128   | 37    | 70    |
| 2     | 21   | 22    | 186   | 147   | 133   | 257    | 193    | 1,080  | 82    | 150   | 34    | 63    |
| 3     | 20   | 22    | 179   | 154   | 132   | 360    | 167    | 1,040  | 81    | 203   | 34    | 58    |
| 4     | 19   | 20    | 172   | 157   | 128   | 468    | 156    | 985    | 97    | 190   | 32    | 55    |
| 5     | 17   | 17    | 163   | 159   | 123   | 538    | 136    | 742    | 122   | 192   | 31    | 48    |
| 6     | 17   | 18    | 162   | 158   | 121   | 528    | 127    | 485    | 144   | 180   | 30    | 44    |
| 7     | 16   | 19    | 162   | 159   | 117   | 461    | 176    | 342    | 134   | 149   | 31    | 39    |
| 8     | 14   | 18    | 160   | 157   | 88    | 415    | 223    | 276    | 111   | 134   | 30    | 38    |
| 9     | 17   | 18    | 161   | 158   | 70    | 378    | 261    | 347    | 94    | 120   | 30    | 37    |
| 10    | 21   | 19    | 160   | 162   | 48    | 354    | 288    | 421    | 82    | 122   | 30    | 33    |
| 11    | 21   | 20    | 158   | 169   | 33    | 314    | 284    | 463    | 64    | 121   | 27    | 32    |
| 12    | 21   | 20    | 153   | 177   | 33    | 283    | 257    | 548    | 58    | 124   | 28    | 33    |
| 13    | 21   | 21    | 149   | 182   | 35    | 319    | 214    | 567    | 45    | 129   | 28    | 32    |
| 14    | 22   | 20    | 145   | 183   | 36    | 485    | 420    | 497    | 123   | 124   | 27    | 92    |
| 15    | 21   | 21    | 147   | 183   | 36    | 729    | 546    | 429    | 235   | 109   | 27    | 262   |
| 16    | 21   | 20    | 145   | 182   | 37    | 748    | 525    | 404    | 310   | 69    | 26    | 444   |
| 17    | 21   | 20    | 146   | 178   | 37    | 910    | 725    | 420    | 322   | 132   | 90    | 467   |
| 18    | 21   | 20    | 143   | 177   | 38    | 910    | 835    | 443    | 286   | 194   | 287   | 473   |
| 19    | 20   | 23    | 140   | 177   | 40    | 904    | 845    | 430    | 226   | 190   | 384   | 470   |
| 20    | 19   | 23    | 140   | 174   | 40    | 895    | 273    | 372    | 173   | 167   | 412   | 461   |
| 21    | 19   | 27    | 137   | 171   | 42    | 832    | 228    | 300    | 140   | 134   | 360   | 388   |
| 22    | 20   | 23    | 132   | 169   | 53    | 552    | 295    | 241    | 118   | 113   | 208   | 277   |
| 23    | 22   | 20    | 128   | 169   | 55    | 753    | 741    | 194    | 103   | 101   | 263   | 202   |
| 24    | 23   | 21    | 124   | 170   | 61    | 705    | 914    | 161    | 87    | 84    | 275   | 165   |
| 25    | 23   | 21    | 119   | 168   | 71    | 676    | 1,120  | 133    | 83    | 74    | 220   | 139   |
| 26    | 22   | 20    | 117   | 165   | 82    | 626    | 1,110  | 106    | 97    | 63    | 195   | 143   |
| 27    | 21   | 23    | 112   | 161   | 84    | 536    | 1,180  | 92     | 98    | 58    | 170   | 216   |
| 28    | 22   | 23    | 109   | 158   | 90    | 441    | 1,210  | 80     | 96    | 52    | 143   | 324   |
| 29    | 21   | 25    | 103   | 153   | 107   | 362    | 1,180  | 72     | 99    | 48    | 117   | 431   |
| 30    | 20   | 32    | 117   | 149   | ----- | 305    | 1,140  | 69     | 107   | 42    | 97    | 259   |
| 31    | 20   | ----- | 121   | 144   | ----- | 256    | -----  | 74     | ----- | 38    | 81    | ----- |
| TOTAL | 624  | 636   | 4,431 | 5,104 | 2,109 | 16,441 | 15,989 | 12,923 | 3,896 | 3,734 | 3,784 | 5,795 |
| MEAN  | 20.1 | 21.2  | 143   | 165   | 72.7  | 530    | 533    | 417    | 130   | 120   | 122   | 193   |
| MAX   | 23   | 32    | 186   | 183   | 139   | 910    | 1,210  | 1,110  | 322   | 203   | 412   | 473   |
| MIN   | 14   | 17    | 103   | 134   | 33    | 141    | 127    | 69     | 45    | 38    | 26    | 32    |

CAL YR 1971 TOTAL 52,549.0 MEAN 144 MAX 1,160 MIN 9.5  
WTR YR 1972 TOTAL 75,466.0 MEAN 206 MAX 1,210 MIN 14

## MUSKINGUM RIVER BASIN

03130500 Touby Run at Mansfield, Ohio

LOCATION.--Lat 40°45'53", long 82°32'43", in NW 1/4 sec. 20, T.21 N., R.18 W., Richland County, on left bank 100 ft downstream from West 4th Street Bridge at west edge of Mansfield, and 2 miles upstream from mouth.

DRAINAGE AREA.--5.44 sq mi.

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

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 1,216.42 ft above mean sea level, adjustment of 1912 (levels by city of Mansfield).

AVERAGE DISCHARGE.--26 years, 4.94 cfs (12.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 655 cfs Apr. 20 (gage height, 3.05 ft); minimum daily, 0.28 cfs Aug. 16.

Period of record: Maximum discharge, 965 cfs June 6, 1947 (gage height, 4.17 ft), from rating curve extended above 160 cfs on the basis of slope-area measurements at gage heights 2.49 and 4.17 ft and computation of flow over dam at gage height 3.94 ft; no flow for part of Sept. 4, 1965, Nov. 10, 1967.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

| DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972 |   |       |        |        |        |       |       |        |        |       |       |        |
|--|---|-------|--------|--------|--------|-------|-------|--------|--------|-------|-------|--------|
| DAY  | OCT   | NOV   | DEC    | JAN    | FEB    | MAR   | APR   | MAY    | JUN    | JUL   | AUG   | SEP    |
| 1  | .87   | 1.4   | .93    | 4.4    | .95    | 26    | 2.2   | 3.9    | 1.2    | .76   | .43   | .93    |
| 2  | .86   | 3.1   | .93    | 5.5    | 1.5    | 29    | 2.3   | 3.9    | .93    | 1.2   | .62   | .93    |
| 3  | .72   | .84   | .76    | 2.5    | 18     | 13    | 2.0   | 3.9    | .93    | 22    | .50   | 2.1    |
| 4  | .80   | .77   | .76    | 6.1    | 8.3    | 7.4   | 3.7   | 3.4    | .93    | 2.5   | .50   | .93    |
| 5  | 1.3   | .82   | .76    | 4.4    | 5.5    | 4.4   | 2.2   | 3.4    | .76    | 1.5   | .43   | .80    |
| 6  | 1.4   | 2.0   | 14     | 3.4    | 3.0    | 3.4   | 3.9   | 3.4    | .76    | 1.5   | .37   | .66    |
| 7  | 1.5   | 1.1   | 18     | 3.9    | 2.0    | 13    | 47    | 3.4    | .62    | 2.1   | .37   | .58    |
| 8  | 1.6   | .75   | 3.9    | 2.5    | 1.3    | 13    | 18    | 20     | .62    | 5.0   | .50   | .54    |
| 9  | 9.5   | .93   | 1.8    | 19     | .90    | 5.7   | 12    | 49     | .76    | 2.1   | .62   | .50    |
| 10   | 1.3   | 1.1   | 2.5    | 14     | .70    | 5.1   | 9.4   | 8.4    | .62    | 6.1   | .62   | .43    |
| 11   | .86   | .89   | 6.1    | 6.6    | .80    | 4.8   | 6.0   | 3.4    | .62    | .76   | .38   | .45    |
| 12   | .99   | .89   | 1.5    | 3.4    | 1.0    | 7.5   | 4.0   | 3.2    | .62    | .93   | .32   | .50    |
| 13   | 1.2   | .86   | 1.2    | 5.0    | 22     | 27    | 48    | 3.0    | 74     | 4.4   | .35   | 3.0    |
| 14   | 2.2   | .76   | 14     | 2.9    | 11     | 19    | 9.6   | 10     | 5.0    | 1.5   | .32   | 31     |
| 15   | .93   | .80   | 22     | 2.3    | 21     | 12    | 7.4   | 7.0    | 2.5    | 4.4   | .29   | 1.5    |
| 16   | .95   | 1.0   | 4.4    | 1.7    | 8.0    | 29    | 42    | 5.0    | 1.2    | 12    | .28   | .93    |
| 17   | 1.0   | 1.0   | 2.5    | 1.3    | 11     | 16    | 17    | 4.2    | .93    | 1.8   | 20    | .93    |
| 18   | 1.2   | 1.1   | 1.5    | 1.1    | 7.1    | 8.7   | 7.6   | 3.5    | .76    | 3.4   | 1.5   | 1.2    |
| 19   | 1.5   | 4.1   | 1.5    | .93    | 3.4    | 5.5   | 16    | 3.0    | .76    | 6.6   | 1.5   | .93    |
| 20   | 1.2   | 1.9   | 5.5    | .85    | 4.6    | 4.4   | 184   | 2.7    | .76    | .76   | .62   | .93    |
| 21   | 1.2   | 1.7   | 2.9    | .81    | 8.0    | 8.2   | 23    | 2.4    | .76    | .76   | .62   | .76    |
| 22   | 2.2   | .79   | 1.5    | 4.8    | 6.8    | 55    | 50    | 2.1    | 1.2    | 5.5   | 28    | .76    |
| 23   | 2.3   | .84   | 1.5    | 5.7    | 3.8    | 20    | 16    | 1.9    | 2.5    | .93   | 5.0   | 2.9    |
| 24   | 2.4   | 1.0   | 1.2    | 4.0    | 2.4    | 15    | 9.0   | 1.7    | .93    | 1.5   | 1.5   | 1.2    |
| 25   | 1.5   | .92   | 1.2    | 3.0    | 3.3    | 12    | 6.6   | 1.5    | 3.9    | .62   | 1.2   | .93    |
| 26   | 1.5   | .76   | 2.1    | 2.2    | 3.0    | 8.1   | 5.2   | 1.3    | 2.1    | .62   | 9.6   | 22     |
| 27   | 1.6   | 3.6   | 2.1    | 1.8    | 3.4    | 6.2   | 4.6   | 1.1    | .93    | 1.2   | 2.5   | 13     |
| 28   | 1.6   | 1.1   | 2.9    | 1.6    | 6.9    | 3.6   | 4.4   | 1.0    | .76    | .62   | 1.5   | 3.4    |
| 29   | 1.7   | 8.2   | 1.5    | 1.4    | 11     | 4.7   | 4.0   | .95    | 9.0    | .58   | 1.2   | 11     |
| 30   | 1.5   | 5.0   | 43     | 1.2    | -----  | 4.0   | 3.9   | 10     | 1.5    | .53   | 1.2   | 65     |
| 31   | 1.5   | ----- | 9.0    | 1.0    | -----  | 2.2   | ----- | 2.5    | -----  | .48   | .76   | -----  |
| TOTAL  | 50.88   | 50.02 | 173.44 | 119.29 | 180.65 | 392.9 | 571.0 | 174.15 | 118.86 | 94.65 | 83.60 | 170.72 |
| MEAN   | 1.64  | 1.67  | 5.59   | 3.85   | 6.23   | 12.7  | 19.0  | 5.62   | 3.96   | 3.05  | 2.70  | 5.69   |
| MAX  | 9.5   | 8.2   | 43     | 19     | 22     | 55    | 184   | 49     | 74     | 22    | 28    | 65     |
| MIN  | .72   | .75   | .76    | .81    | .70    | 2.2   | 2.0   | .95    | .62    | .48   | .28   | .43    |
| CFSM   | .30   | .31   | 1.03   | .71    | 1.15   | 2.33  | 3.49  | 1.03   | .73    | .56   | .50   | 1.05   |
| IN.  | .35   | .34   | 1.19   | .82    | 1.24   | 2.69  | 3.90  | 1.19   | .81    | .65   | .57   | 1.17   |
| CAL YR 1971  | TOTAL 1,780.63 MEAN 4.88 MAX 199 MIN .41 CFSM .90 IN 12.18  |       |        |        |        |       |       |        |        |       |       |        |
| WTR YR 1972  | TOTAL 2,180.16 MEAN 5.96 MAX 184 MIN .28 CFSM 1.10 IN 14.91 |       |        |        |        |       |       |        |        |       |       |        |

## PEAK DISCHARGE (BASE, 200 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-20 | 0415 | 3.05  | 655       | 6-13 | 0545 | 2.19  | 336       |



## MUSKINGUM RIVER BASIN

55

03131500 Black Fork at Loudonville, Ohio

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec. 1, T.19 N., R.16 W., Ashland County, on right bank at upstream side of bridge on State Highway 3 at Loudonville, 1.5 miles downstream from Big Run.

DRAINAGE AREA.--349 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 929.16 ft above mean sea level. Prior to Oct. 23, 1941, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 328 cfs.

EXTREMES.--Current year: Maximum discharge, 3,680 cfs July 16 (gage height, 10.69 ft); minimum, 77 cfs Nov. 5, 6, 8, 9.

Period of record: Maximum discharge, 8,460 cfs July 5, 1969 (gage height, 14.11 ft); from rating curve extended above 4,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 24 cfs Jan. 12, 1964.

REMARKS.--Records good. Flow regulated since 1936 by Charles Mill Lake, 16 miles above station (see station 03129500). Records include diversion from Clear Fork Reservoir which enters the Black Fork drainage as sewage effluent from the city of Mansfield (see REMARKS for station 03132000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1935. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECCND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT   | NOV     | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP    |
|-------------|-------|---------|-------|-------|-------|--------|--------|--------|-------|--------|-------|--------|
| 1           | 94    | 81      | 151   | 291   | 219   | 354    | 388    | 1,320  | 231   | 264    | 158   | 207    |
| 2           | 90    | 88      | 248   | 285   | 216   | 841    | 357    | 1,300  | 216   | 273    | 152   | 195    |
| 3           | 88    | 100     | 233   | 291   | 282   | 686    | 330    | 1,260  | 207   | 884    | 149   | 186    |
| 4           | 84    | 86      | 228   | 288   | 297   | 661    | 321    | 1,180  | 243   | 558    | 144   | 195    |
| 5           | 88    | 83      | 219   | 318   | 222   | 704    | 297    | 986    | 231   | 403    | 136   | 166    |
| 6           | 86    | 83      | 257   | 282   | 210   | 682    | 279    | 701    | 261   | 363    | 131   | 158    |
| 7           | 84    | 88      | 379   | 273   | 204   | 645    | 704    | 531    | 261   | 321    | 131   | 152    |
| 8           | 83    | 83      | 352   | 264   | 186   | 772    | 521    | 506    | 237   | 348    | 139   | 147    |
| 9           | 90    | 83      | 245   | 306   | 155   | 580    | 462    | 1,290  | 216   | 303    | 134   | 147    |
| 10          | 134   | 86      | 233   | 450   | 142   | 534    | 487    | 887    | 207   | 339    | 129   | 134    |
| 11          | 86    | 86      | 256   | 345   | 104   | 496    | 475    | 738    | 177   | 297    | 126   | 126    |
| 12          | 86    | 84      | 225   | 309   | 102   | 481    | 438    | 723    | 163   | 330    | 124   | 131    |
| 13          | 84    | 86      | 213   | 303   | 163   | 710    | 974    | 769    | 990   | 369    | 121   | 131    |
| 14          | 90    | 83      | 228   | 306   | 177   | 906    | 763    | 862    | 521   | 431    | 116   | 543    |
| 15          | 90    | 81      | 494   | 282   | 291   | 955    | 779    | 757    | 413   | 382    | 121   | 481    |
| 16          | 86    | 86      | 302   | 264   | 315   | 1,160  | 949    | 670    | 493   | 2,190  | 116   | 552    |
| 17          | 83    | 86      | 236   | 282   | 198   | 1,200  | 1,230  | 624    | 453   | 614    | 918   | 574    |
| 18          | 81    | 86      | 222   | 267   | 225   | 1,170  | 1,090  | 620    | 413   | 518    | 630   | 586    |
| 19          | 84    | 93      | 208   | 279   | 186   | 1,100  | 1,050  | 605    | 354   | 710    | 558   | 583    |
| 20          | 84    | 110     | 217   | 267   | 147   | 1,070  | 2,270  | 546    | 309   | 453    | 568   | 562    |
| 21          | 84    | 107     | 227   | 267   | 147   | 1,020  | 1,810  | 465    | 273   | 366    | 506   | 512    |
| 22          | 86    | 96      | 206   | 261   | 228   | 1,160  | 1,420  | 397    | 252   | 318    | 562   | 403    |
| 23          | 96    | 89      | 196   | 315   | 180   | 1,170  | 1,130  | 348    | 249   | 312    | 940   | 330    |
| 24          | 98    | 88      | 190   | 294   | 169   | 955    | 1,130  | 309    | 231   | 261    | 605   | 348    |
| 25          | 94    | 90      | 183   | 285   | 174   | 884    | 1,420  | 276    | 210   | 255    | 431   | 273    |
| 26          | 92    | 85      | 180   | 258   | 213   | 819    | 1,370  | 246    | 267   | 219    | 441   | 394    |
| 27          | 90    | 87      | 182   | 249   | 192   | 738    | 1,370  | 222    | 243   | 222    | 428   | 580    |
| 28          | 88    | 104     | 186   | 246   | 216   | 642    | 1,430  | 204    | 225   | 204    | 336   | 577    |
| 29          | 88    | 94      | 175   | 240   | 285   | 555    | 1,390  | 192    | 261   | 186    | 291   | 627    |
| 30          | 88    | 154     | 611   | 225   | ----- | 509    | 1,350  | 198    | 309   | 172    | 252   | 1,320  |
| 31          | 84    | -----   | 475   | 222   | ----- | 434    | -----  | 279    | ----- | 160    | 225   | -----  |
| TOTAL       | 2,763 | 2,736   | 7,957 | 8,814 | 5,845 | 24,593 | 27,984 | 20,011 | 9,116 | 13,025 | 9,818 | 11,320 |
| MEAN        | 89.1  | 91.2    | 257   | 284   | 202   | 793    | 933    | 646    | 304   | 420    | 317   | 377    |
| MAX         | 134   | 154     | 611   | 450   | 315   | 1,200  | 2,270  | 1,320  | 990   | 2,190  | 940   | 1,320  |
| MIN         | 81    | 81      | 151   | 222   | 102   | 354    | 279    | 192    | 163   | 160    | 116   | 126    |
| CAL YR 1971 | TOTAL | 99,754  | MEAN  | 273   | MAX   | 1,840  | MIN    | 71     |       |        |       |        |
| WTR YR 1972 | TOTAL | 143,982 | MEAN  | 393   | MAX   | 2,270  | MIN    | 81     |       |        |       |        |

## MUSKINGUM RIVER BASIN

03132000 Clear Fork at Butler, Ohio

LOCATION.--Lat 40°35'37", long 82°25'20", in NE 1/4 sec.20, T.21 N., R.17 W., Richland County, on left bank at downstream side of bridge on State Highway 95, 0.3 mile northeast of Butler.

DRAINAGE AREA.--136 sq mi.

PERIOD OF RECORD.--October 1944 to current year. Prior to June 1945 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,057.20 ft above mean sea level.

AVERAGE DISCHARGE.--28 years, 139 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 6,240 cfs July 16 (gage height, 8.40 ft); minimum, 21 cfs Oct. 4-8.

Period of record: Maximum discharge, 14,300 cfs Jan. 21, 1959 (gage height, 9.43 ft), from rating curve extended above 3,000 cfs on basis of computed reservoir inflow; minimum, 12 cfs Sept. 12, 18, 1948.

REMARKS.--Records good. Flow regulated by Clear Fork Reservoir (capacity, 10,740 acre-ft) 16 miles upstream from station since 1949. Water diverted from Clear Fork Reservoir for municipal supply of city of Mansfield since 1953; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1385: 1951-54. WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1     | 23   | 25    | 50    | 152   | 62    | 538   | 133    | 170   | 95    | 230   | 77    | 52    |
| 2     | 23   | 26    | 80    | 133   | 62    | 258   | 135    | 160   | 85    | 190   | 74    | 50    |
| 3     | 22   | 27    | 75    | 117   | 90    | 193   | 131    | 150   | 80    | 450   | 72    | 50    |
| 4     | 21   | 25    | 75    | 125   | 93    | 148   | 129    | 140   | 74    | 300   | 70    | 49    |
| 5     | 21   | 25    | 70    | 133   | 123   | 130   | 131    | 130   | 70    | 230   | 66    | 49    |
| 6     | 21   | 24    | 85    | 104   | 98    | 110   | 125    | 123   | 70    | 200   | 64    | 48    |
| 7     | 21   | 26    | 120   | 93    | 80    | 160   | 402    | 119   | 65    | 180   | 64    | 47    |
| 8     | 21   | 28    | 110   | 83    | 76    | 140   | 315    | 193   | 64    | 190   | 64    | 46    |
| 9     | 25   | 26    | 80    | 185   | 68    | 110   | 239    | 1,020 | 62    | 170   | 62    | 46    |
| 10    | 29   | 26    | 80    | 234   | 64    | 95    | 217    | 632   | 60    | 180   | 60    | 45    |
| 11    | 28   | 28    | 85    | 152   | 62    | 110   | 196    | 390   | 60    | 170   | 57    | 44    |
| 12    | 25   | 30    | 75    | 117   | 77    | 130   | 170    | 258   | 80    | 180   | 56    | 45    |
| 13    | 24   | 28    | 70    | 107   | 83    | 160   | 747    | 210   | 501   | 200   | 55    | 44    |
| 14    | 24   | 26    | 75    | 95    | 173   | 240   | 534    | 492   | 360   | 212   | 54    | 207   |
| 15    | 24   | 26    | 200   | 90    | 166   | 270   | 372    | 459   | 210   | 212   | 52    | 111   |
| 16    | 24   | 26    | 150   | 85    | 146   | 300   | 452    | 370   | 135   | 2,670 | 50    | 68    |
| 17    | 24   | 26    | 95    | 90    | 159   | 330   | 590    | 270   | 100   | 739   | 89    | 57    |
| 18    | 24   | 26    | 75    | 85    | 119   | 290   | 414    | 210   | 85    | 360   | 100   | 56    |
| 19    | 24   | 27    | 70    | 90    | 95    | 240   | 300    | 180   | 77    | 273   | 77    | 54    |
| 20    | 24   | 28    | 70    | 85    | 109   | 217   | 2,550  | 150   | 80    | 224   | 64    | 51    |
| 21    | 23   | 28    | 88    | 85    | 170   | 198   | 1,650  | 135   | 77    | 175   | 56    | 49    |
| 22    | 23   | 28    | 74    | 90    | 106   | 699   | 1,460  | 123   | 85    | 146   | 62    | 47    |
| 23    | 24   | 26    | 65    | 100   | 97    | 615   | 842    | 111   | 93    | 142   | 115   | 48    |
| 24    | 25   | 26    | 63    | 90    | 102   | 405   | 528    | 104   | 77    | 164   | 97    | 56    |
| 25    | 25   | 26    | 59    | 85    | 152   | 273   | 369    | 97    | 70    | 131   | 68    | 54    |
| 26    | 25   | 26    | 59    | 80    | 111   | 222   | 279    | 93    | 72    | 113   | 65    | 99    |
| 27    | 25   | 28    | 65    | 72    | 154   | 200   | 250    | 88    | 65    | 102   | 71    | 146   |
| 28    | 25   | 28    | 70    | 70    | 222   | 175   | 220    | 85    | 62    | 98    | 66    | 133   |
| 29    | 24   | 30    | 65    | 66    | 363   | 161   | 200    | 85    | 142   | 90    | 62    | 113   |
| 30    | 24   | 41    | 694   | 62    | ----- | 168   | 180    | 102   | 300   | 85    | 57    | 633   |
| 31    | 25   | ----- | 263   | 64    | ----- | 146   | -----  | 100   | ----- | 80    | 54    | ----- |
| TOTAL | 740  | 816   | 3,355 | 3,219 | 3,482 | 7,431 | 14,260 | 6,949 | 3,456 | 8,886 | 2,100 | 2,597 |
| MEAN  | 23.9 | 27.2  | 108   | 104   | 120   | 240   | 475    | 224   | 115   | 287   | 67.7  | 86.6  |
| MAX   | 29   | 41    | 694   | 234   | 363   | 699   | 2,550  | 1,020 | 501   | 2,670 | 115   | 633   |
| MIN   | 21   | 24    | 50    | 62    | 62    | 95    | 125    | 85    | 60    | 80    | 50    | 44    |
| (+)   | 16.3 | 16.1  | 16.6  | 16.6  | 16.9  | 16.3  | 15.1   | 16.5  | 16.8  | 16.8  | 17.7  | 18.1  |

CAL YR 1971 TOTAL 40,256 MEAN 110 MAX 1,390 MIN 21 (+) 16.6  
WTR YR 1972 TOTAL 57,291 MEAN 157 MAX 2,670 MIN 21 (+) 16.7

+ Diversion, in cubic feet per second, from Clear Fork Reservoir for municipal supply; furnished by city of Mansfield.

## MUSKINGUM RIVER BASIN

57

03133500 Clear Fork below Pleasant Hill Dam, near Perrysville, Ohio

LOCATION.--Lat 40°37'13", long 82°19'28", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, on right bank 0.2 mile downstream from Pleasant Hill Dam, 2.8 miles south of Perrysville, and 4.7 miles upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Clear Fork near Perrysville prior to 1940. Monthly discharge only for October 1938, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 967.00 ft above mean sea level, adjustment of 1912. Prior to May 1, 1947, water-stage recorder at site 0.5 mile downstream at datum 4.88 ft lower.

AVERAGE DISCHARGE.--34 years, 189 cfs.

EXTREMES.--Current year: Maximum discharge, 1,400 cfs Apr. 22 (gage height, 3.85 ft); minimum daily, 29 cfs Oct. 19-21.

Period of record: Maximum discharge, 2,340 cfs Jan. 23, 1959 (gage height, 4.89 ft); minimum, 0.3 cfs Sept. 24, 1953, Jan. 25, 26, 1972; minimum daily, 0.6 cfs Nov. 2, 4, 1938.

REMARKS.--Records good. Flow regulated by Pleasant Hill Lake (see station 03133000). See REMARKS for station 03132000 for diversion by city of Mansfield. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|--------|-------|-------|
| 1     | 82    | 52    | 66    | 422   | 68    | 244    | 130    | 535    | 130   | 203    | 116   | 79    |
| 2     | 103   | 35    | 66    | 422   | 82    | 486    | 145    | 247    | 126   | 217    | 109   | 74    |
| 3     | 101   | 35    | 82    | 374   | 136   | 645    | 149    | 232    | 116   | 349    | 105   | 73    |
| 4     | 55    | 35    | 90    | 286   | 149   | 454    | 149    | 238    | 109   | 474    | 100   | 71    |
| 5     | 34    | 57    | 80    | 235   | 83    | 241    | 149    | 223    | 100   | 462    | 93    | 67    |
| 6     | 33    | 90    | 55    | 152   | 83    | 152    | 147    | 203    | 96    | 438    | 90    | 64    |
| 7     | 32    | 90    | 77    | 109   | 83    | 152    | 229    | 190    | 91    | 367    | 90    | 61    |
| 8     | 91    | 49    | 92    | 109   | 79    | 154    | 367    | 200    | 86    | 283    | 86    | 60    |
| 9     | 114   | 33    | 105   | 109   | 68    | 190    | 353    | 454    | 83    | 223    | 83    | 57    |
| 10    | 113   | 33    | 118   | 222   | 68    | 223    | 370    | 744    | 82    | 205    | 80    | 53    |
| 11    | 112   | 33    | 134   | 387   | 68    | 198    | 346    | 982    | 74    | 203    | 77    | 53    |
| 12    | 54    | 75    | 122   | 253   | 68    | 183    | 300    | 975    | 73    | 180    | 76    | 53    |
| 13    | 31    | 90    | 66    | 145   | 68    | 244    | 446    | 545    | 130   | 269    | 74    | 53    |
| 14    | 31    | 90    | 87    | 134   | 44    | 378    | 550    | 625    | 328   | 328    | 73    | 112   |
| 15    | 95    | 53    | 161   | 114   | 32    | 438    | 575    | 685    | 378   | 307    | 70    | 178   |
| 16    | 118   | 41    | 254   | 76    | 76    | 438    | 555    | 560    | 321   | 595    | 65    | 143   |
| 17    | 118   | 41    | 280   | 58    | 166   | 474    | 610    | 422    | 235   | 1,100  | 120   | 116   |
| 18    | 54    | 41    | 274   | 65    | 198   | 525    | 738    | 346    | 175   | 1,060  | 158   | 101   |
| 19    | 29    | 89    | 139   | 88    | 214   | 490    | 768    | 235    | 138   | 1,050  | 145   | 93    |
| 20    | 29    | 115   | 106   | 96    | 132   | 446    | 675    | 217    | 116   | 1,080  | 122   | 82    |
| 21    | 29    | 114   | 101   | 96    | 80    | 438    | 1,160  | 211    | 105   | 1,090  | 103   | 74    |
| 22    | 54    | 62    | 94    | 96    | 158   | 454    | 1,360  | 195    | 98    | 1,020  | 93    | 68    |
| 23    | 92    | 37    | 66    | 143   | 217   | 580    | 1,380  | 178    | 100   | 690    | 122   | 65    |
| 24    | 91    | 37    | 79    | 179   | 188   | 600    | 1,300  | 161    | 100   | 272    | 147   | 71    |
| 25    | 59    | 37    | 90    | 50    | 136   | 525    | 1,120  | 147    | 96    | 208    | 134   | 71    |
| 26    | 38    | 78    | 90    | 76    | 130   | 458    | 989    | 132    | 93    | 190    | 145   | 82    |
| 27    | 38    | 103   | 90    | 176   | 152   | 279    | 961    | 122    | 90    | 178    | 134   | 128   |
| 28    | 39    | 103   | 90    | 85    | 152   | 143    | 1,050  | 114    | 83    | 163    | 120   | 156   |
| 29    | 62    | 70    | 90    | 63    | 152   | 132    | 1,100  | 110    | 88    | 147    | 107   | 158   |
| 30    | 90    | 66    | 228   | 40    | ----- | 124    | 996    | 116    | 124   | 132    | 94    | 356   |
| 31    | 90    | ----- | 422   | 40    | ----- | 105    | -----  | 130    | ----- | 124    | 85    | ----- |
| TOTAL | 2,111 | 1,884 | 3,894 | 4,900 | 3,330 | 10,593 | 19,167 | 10,474 | 3,964 | 13,607 | 3,216 | 2,872 |
| MEAN  | 68.1  | 62.8  | 126   | 158   | 115   | 342    | 639    | 338    | 132   | 439    | 104   | 95.7  |
| MAX   | 118   | 115   | 422   | 422   | 217   | 645    | 1,380  | 982    | 378   | 1,100  | 158   | 356   |
| MIN   | 29    | 33    | 55    | 40    | 32    | 105    | 130    | 110    | 73    | 124    | 65    | 53    |

CAL YR 1971 TOTAL 55,560 MEAN 152 MAX 1,100 MIN 23  
WTR YR 1972 TOTAL 80,012 MEAN 219 MAX 1,380 MIN 29

## MUSKINGUM RIVER BASIN

03135000 Lake Fork below Mohicanville Dam, near Mohicanville, Ohio

LOCATION.--Lat 40°43'24", long 82°09'18", in sec. 3, T.20 N., R.15 W., Ashland County, on right bank 800 ft downstream from Mohicanville Dam, 2 miles east of Mohicanville, and 2.4 miles downstream from the confluence of Jerome and Muddy Forks.

DRAINAGE AREA.--271 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Lake Fork near Mohicanville prior to 1940.

GAGE.--Water-stage recorder. Datum of gage is 930.00 ft above mean sea level, adjustment of 1912. Prior to July 25, 1949, water-stage recorder at site 500 ft downstream at same datum.

AVERAGE DISCHARGE.--34 years, 223 cfs.

EXTREMES.--Current year: Maximum discharge, 1,960 cfs July 16 (gage height, 9.21 ft); minimum, 1.3 cfs July 31. Period of record: Maximum discharge, 5,490 cfs July 5, 1969 (gage height, 14.32 ft); minimum daily discharge, 1 cfs June 10, 1947, Jan. 25, 1959.

REMARKS.--Records good. Flow regulated by Mohicanville Reservoir (see station 03134500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1     | 23    | 12    | 32    | 334   | 58    | 430    | 189    | 355   | 90    | 214   | 54    | 50    |
| 2     | 13    | 14    | 21    | 244   | 62    | 1,020  | 176    | 315   | 77    | 113   | 57    | 44    |
| 3     | 9.8   | 19    | 16    | 196   | 81    | 1,030  | 168    | 279   | 67    | 178   | 50    | 43    |
| 4     | 7.8   | 14    | 15    | 214   | 102   | 608    | 162    | 225   | 59    | 247   | 46    | 48    |
| 5     | 7.8   | 13    | 14    | 218   | 72    | 404    | 146    | 181   | 54    | 136   | 43    | 42    |
| 6     | 7.8   | 15    | 36    | 168   | 63    | 272    | 136    | 152   | 51    | 103   | 39    | 39    |
| 7     | 7.8   | 17    | 150   | 162   | 61    | 244    | 481    | 132   | 50    | 84    | 43    | 35    |
| 8     | 8.2   | 16    | 159   | 123   | 53    | 551    | 378    | 162   | 46    | 87    | 46    | 33    |
| 9     | 10    | 16    | 83    | 178   | 50    | 327    | 264    | 839   | 43    | 94    | 45    | 32    |
| 10    | 28    | 17    | 61    | 500   | 43    | 233    | 247    | 966   | 42    | 203   | 43    | 30    |
| 11    | 18    | 18    | 60    | 339   | 45    | 203    | 218    | 517   | 41    | 144   | 39    | 29    |
| 12    | 14    | 18    | 52    | 218   | 48    | 334    | 187    | 344   | 38    | 113   | 36    | 35    |
| 13    | 11    | 17    | 44    | 181   | 116   | 970    | 767    | 251   | 102   | 140   | 36    | 51    |
| 14    | 10    | 17    | 70    | 166   | 240   | 1,420  | 879    | 303   | 118   | 162   | 34    | 686   |
| 15    | 10    | 16    | 349   | 99    | 433   | 1,390  | 605    | 315   | 71    | 121   | 34    | 969   |
| 16    | 9.6   | 17    | 259   | 99    | 634   | 1,270  | 711    | 247   | 106   | 973   | 40    | 868   |
| 17    | 8.8   | 17    | 125   | 82    | 350   | 1,230  | 1,160  | 211   | 72    | 596   | 60    | 460   |
| 18    | 8.3   | 18    | 79    | 84    | 417   | 882    | 1,060  | 181   | 54    | 344   | 250   | 327   |
| 19    | 8.9   | 19    | 62    | 105   | 317   | 627    | 608    | 144   | 50    | 461   | 168   | 391   |
| 20    | 8.9   | 25    | 63    | 99    | 244   | 467    | 1,160  | 129   | 44    | 701   | 116   | 225   |
| 21    | 9.3   | 20    | 65    | 99    | 181   | 396    | 1,430  | 116   | 44    | 417   | 77    | 152   |
| 22    | 9.7   | 18    | 58    | 97    | 296   | 828    | 1,130  | 108   | 44    | 227   | 61    | 120   |
| 23    | 13    | 16    | 47    | 148   | 207   | 1,080  | 875    | 97    | 53    | 162   | 108   | 103   |
| 24    | 14    | 16    | 45    | 172   | 164   | 647    | 1,160  | 90    | 66    | 138   | 148   | 154   |
| 25    | 14    | 17    | 43    | 158   | 116   | 475    | 1,390  | 81    | 63    | 255   | 97    | 150   |
| 26    | 14    | 16    | 44    | 93    | 152   | 360    | 1,400  | 74    | 106   | 213   | 207   | 316   |
| 27    | 14    | 17    | 47    | 80    | 114   | 303    | 1,410  | 68    | 103   | 130   | 251   | 947   |
| 28    | 13    | 21    | 56    | 70    | 160   | 253    | 1,290  | 65    | 71    | 94    | 168   | 1,020 |
| 29    | 13    | 21    | 65    | 65    | 300   | 222    | 732    | 61    | 78    | 85    | 100   | 970   |
| 30    | 12    | 41    | 554   | 60    | ----- | 242    | 461    | 63    | 381   | 70    | 71    | 1,020 |
| 31    | 12    | ----- | 701   | 57    | ----- | 207    | -----  | 103   | ----- | 57    | 58    | ----- |
| TOTAL | 368.7 | 538   | 3,475 | 4,908 | 5,179 | 18,925 | 20,980 | 7,174 | 2,284 | 7,062 | 2,625 | 9,389 |
| MEAN  | 11.9  | 17.9  | 112   | 158   | 179   | 610    | 699    | 231   | 76.1  | 228   | 84.7  | 313   |
| MAX   | 28    | 41    | 701   | 500   | 634   | 1,420  | 1,430  | 966   | 381   | 973   | 251   | 1,020 |
| MIN   | 7.8   | 12    | 14    | 57    | 43    | 203    | 136    | 61    | 38    | 57    | 34    | 29    |

CAL YR 1971 TOTAL 58,222.7 MEAN 160 MAX 1,650 MIN 7.1  
WTR YR 1972 TOTAL 82,907.7 MEAN 227 MAX 1,430 MIN 7.8



## MUSKINGUM RIVER BASIN

59

03136000 Mohican River at Greer, Ohio

LOCATION.--Lat 40°30'53", long 82°11'44", in NW 1/4 sec. 10, T.8 N., R.10 W., Knox County, on left bank 3,000 ft downstream from bridge on State Highway 514 at Greer, 5 miles upstream from Negro Run, and 7 miles downstream from Lake Fork.

DRAINAGE AREA.--948 sq mi.

PERIOD OF RECORD.--September 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 872.91 ft above mean sea level, adjustment of 1912. Prior to July 22, 1931, nonrecording gage at site 3,000 ft upstream at same datum.

AVERAGE DISCHARGE.--51 years, 872 cfs.

EXTREMES.--Current year: Maximum discharge, 7,330 cfs July 16 (gage height, 6.95 ft); minimum, 151 cfs Nov. 9. Period of record: Maximum discharge, 20,500 cfs July 5, 1969 (gage height, 14.59 ft); minimum, 50 cfs (estimated) Jan. 2, 1935.

Flood of March 1913 reached a stage of 27.0 ft (discharge, 55,000 cfs, estimated).

REMARKS.--Records good. Flow regulated by Charles Mill Lake on Black Fork (30 miles upstream), Pleasant Hill Lake on Clear Fork (17 miles upstream), and Mohicanville Reservoir on Lake Fork (19 miles upstream) beginning August 1936. (See stations 03129500, 03133000, and 03134500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 623: 1924(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1     | 248   | 211   | 270    | 1,320  | 320    | 1,150  | 819    | 2,460  | 547    | 968    | 408    | 404    |
| 2     | 275   | 163   | 380    | 1,100  | 310    | 2,580  | 774    | 2,090  | 507    | 811    | 389    | 384    |
| 3     | 264   | 180   | 364    | 1,010  | 310    | 2,830  | 721    | 1,980  | 466    | 1,830  | 385    | 354    |
| 4     | 237   | 171   | 372    | 897    | 320    | 2,170  | 704    | 1,860  | 467    | 1,870  | 361    | 373    |
| 5     | 171   | 163   | 364    | 919    | 330    | 1,660  | 646    | 1,620  | 450    | 1,400  | 340    | 327    |
| 6     | 167   | 216   | 348    | 765    | 350    | 1,300  | 614    | 1,270  | 450    | 1,230  | 320    | 304    |
| 7     | 163   | 226   | 610    | 721    | 350    | 1,220  | 1,430  | 1,030  | 456    | 1,040  | 315    | 291    |
| 8     | 189   | 211   | 831    | 600    | 330    | 1,610  | 1,700  | 1,000  | 428    | 898    | 324    | 286    |
| 9     | 264   | 155   | 630    | 620    | 310    | 1,380  | 1,390  | 2,940  | 398    | 829    | 320    | 286    |
| 10    | 348   | 155   | 560    | 1,110  | 300    | 1,200  | 1,340  | 3,120  | 383    | 807    | 314    | 271    |
| 11    | 301   | 159   | 560    | 1,210  | 300    | 1,080  | 1,310  | 2,580  | 347    | 883    | 297    | 256    |
| 12    | 253   | 171   | 560    | 985    | 310    | 1,090  | 1,170  | 2,290  | 320    | 720    | 291    | 259    |
| 13    | 180   | 226   | 429    | 787    | 350    | 1,880  | 2,350  | 1,900  | 1,000  | 948    | 289    | 271    |
| 14    | 171   | 220   | 474    | 721    | 500    | 2,950  | 2,680  | 2,010  | 1,330  | 1,160  | 280    | 1,330  |
| 15    | 207   | 202   | 1,020  | 650    | 700    | 3,080  | 2,230  | 2,050  | 1,050  | 1,020  | 280    | 2,000  |
| 16    | 264   | 159   | 1,140  | 600    | 1,210  | 3,150  | 2,360  | 1,790  | 1,120  | 5,090  | 274    | 1,920  |
| 17    | 259   | 159   | 908    | 550    | 852    | 3,340  | 3,260  | 1,540  | 950    | 3,670  | 1,340  | 1,570  |
| 18    | 237   | 159   | 776    | 550    | 948    | 2,970  | 3,240  | 1,380  | 792    | 2,570  | 1,770  | 1,260  |
| 19    | 159   | 189   | 610    | 550    | 875    | 2,520  | 2,760  | 1,200  | 642    | 2,520  | 1,170  | 1,340  |
| 20    | 163   | 275   | 540    | 500    | 574    | 2,200  | 5,540  | 1,070  | 569    | 2,550  | 1,070  | 1,130  |
| 21    | 159   | 264   | 530    | 483    | 437    | 2,050  | 5,740  | 964    | 514    | 2,240  | 879    | 959    |
| 22    | 159   | 242   | 510    | 464    | 668    | 2,440  | 4,900  | 860    | 482    | 1,940  | 776    | 743    |
| 23    | 231   | 159   | 420    | 553    | 694    | 3,110  | 3,920  | 773    | 488    | 1,590  | 1,380  | 589    |
| 24    | 248   | 155   | 412    | 662    | 590    | 2,520  | 3,810  | 663    | 486    | 928    | 1,210  | 636    |
| 25    | 242   | 159   | 420    | 560    | 489    | 2,120  | 4,260  | 606    | 447    | 872    | 845    | 590    |
| 26    | 180   | 171   | 412    | 382    | 518    | 1,840  | 4,030  | 558    | 572    | 916    | 956    | 626    |
| 27    | 175   | 226   | 420    | 370    | 517    | 1,570  | 3,930  | 510    | 581    | 707    | 1,000  | 1,830  |
| 28    | 175   | 242   | 429    | 360    | 559    | 1,230  | 4,000  | 473    | 492    | 622    | 843    | 2,020  |
| 29    | 171   | 231   | 429    | 350    | 766    | 1,050  | 3,570  | 443    | 612    | 564    | 617    | 2,020  |
| 30    | 226   | 282   | 1,060  | 340    | -----  | 1,030  | 3,060  | 444    | 1,210  | 480    | 520    | 4,330  |
| 31    | 226   | ----- | 1,870  | 330    | -----  | 861    | -----  | 590    | -----  | 427    | 447    | -----  |
| TOTAL | 6,712 | 5,901 | 18,658 | 21,019 | 15,087 | 61,181 | 78,258 | 44,064 | 18,556 | 44,100 | 20,010 | 28,959 |
| MEAN  | 217   | 197   | 602    | 678    | 520    | 1,974  | 2,609  | 1,421  | 619    | 1,423  | 645    | 965    |
| MAX   | 348   | 282   | 1,870  | 1,320  | 1,210  | 3,340  | 5,740  | 3,120  | 1,330  | 5,090  | 1,770  | 4,330  |
| MIN   | 159   | 155   | 270    | 330    | 300    | 861    | 614    | 443    | 320    | 427    | 274    | 256    |

CAL YR 1971 TOTAL 244,653 MEAN 670 MAX 4,020 MIN 121  
WTR YR 1972 TOTAL 362,505 MEAN 990 MAX 5,740 MIN 155

## MUSKINGUM RIVER BASIN

03136500 Kokosing River at Mount Vernon, Ohio

LOCATION.--Lat 40°24'20", long 82°30'00", in sec.2, T.6 N., R.13 W., Knox County, on right bank at downstream side of Tilden Avenue Bridge at Mount Vernon, 0.8 mile downstream from North Branch, and 2.7 miles upstream from Dry Creek.

DRAINAGE AREA.--202 sq mi.

PERIOD OF RECORD.--February 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 984.16 ft above mean sea level, (levels by Corps of Engineers). Prior to Apr. 3, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--19 years, 195 cfs (13.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,940 cfs July 16 (gage height, 6.58 ft); minimum, 18 cfs all or part of each day Oct. 3-8, 17-22, Oct. 30 to Nov. 2, Nov. 8, 9, 14-19, 22-24.  
Period of record: Maximum discharge, 38,000 cfs Jan. 21, 1959 (gage height, 18.19 ft), from rating curve extended above 6,400 cfs on basis of slope-area measurement of peak flow; minimum, 12 cfs Sept. 29, 30, 1954.

REMARKS.--Records good. Some regulation by Knox Lake (capacity, 3,750 acre-ft) 8.2 miles upstream on East Branch of North Branch Kokosing River beginning in 1954 and North Branch Kokosing River Lake (capacity, 14,886 acre-ft) 10.0 miles upstream on North Branch Kokosing River, beginning in June 1972. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio, 1966: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|--------|--------|--------|-------|--------|-------|-------|
| 1     | 21   | 18    | 43    | 407   | 69    | 357    | 198    | 233    | 164   | 86     | 86    | 82    |
| 2     | 20   | 20    | 36    | 292   | 65    | 856    | 192    | 239    | 150   | 72     | 83    | 77    |
| 3     | 19   | 20    | 31    | 258   | 81    | 780    | 189    | 293    | 133   | 280    | 81    | 77    |
| 4     | 18   | 19    | 29    | 246   | 102   | 488    | 189    | 254    | 122   | 951    | 79    | 79    |
| 5     | 18   | 19    | 28    | 341   | 126   | 340    | 179    | 225    | 111   | 437    | 72    | 72    |
| 6     | 19   | 20    | 39    | 249   | 92    | 246    | 171    | 205    | 89    | 258    | 69    | 66    |
| 7     | 18   | 19    | 80    | 205   | 80    | 237    | 891    | 152    | 84    | 181    | 67    | 61    |
| 8     | 18   | 19    | 132   | 176   | 72    | 533    | 717    | 281    | 79    | 148    | 65    | 58    |
| 9     | 22   | 19    | 100   | 200   | 66    | 375    | 425    | 1,830  | 75    | 132    | 63    | 56    |
| 10    | 23   | 20    | 79    | 364   | 62    | 271    | 360    | 1,540  | 72    | 124    | 61    | 53    |
| 11    | 22   | 19    | 63    | 313   | 60    | 228    | 313    | 665    | 68    | 161    | 59    | 51    |
| 12    | 22   | 20    | 54    | 240   | 58    | 226    | 273    | 423    | 68    | 205    | 57    | 51    |
| 13    | 22   | 19    | 47    | 208   | 80    | 360    | 1,790  | 339    | 101   | 728    | 56    | 51    |
| 14    | 21   | 18    | 70    | 170   | 117   | 575    | 1,190  | 727    | 164   | 406    | 54    | 773   |
| 15    | 20   | 18    | 349   | 140   | 226   | 525    | 596    | 717    | 139   | 385    | 55    | 1,020 |
| 16    | 19   | 18    | 325   | 130   | 384   | 703    | 570    | 603    | 126   | 2,270  | 51    | 391   |
| 17    | 19   | 18    | 203   | 120   | 317   | 996    | 818    | 429    | 102   | 3,350  | 293   | 230   |
| 18    | 19   | 18    | 145   | 121   | 341   | 614    | 544    | 332    | 88    | 1,670  | 734   | 168   |
| 19    | 18   | 20    | 116   | 123   | 305   | 411    | 400    | 274    | 81    | 1,040  | 538   | 142   |
| 20    | 18   | 19    | 115   | 119   | 217   | 321    | 2,610  | 241    | 77    | 614    | 315   | 121   |
| 21    | 18   | 19    | 126   | 117   | 180   | 283    | 2,560  | 222    | 75    | 324    | 184   | 103   |
| 22    | 19   | 19    | 120   | 116   | 170   | 745    | 2,030  | 205    | 74    | 238    | 214   | 90    |
| 23    | 20   | 18    | 101   | 146   | 160   | 926    | 1,580  | 189    | 65    | 202    | 519   | 82    |
| 24    | 20   | 19    | 90    | 181   | 150   | 518    | 1,010  | 175    | 66    | 194    | 398   | 84    |
| 25    | 20   | 19    | 84    | 166   | 150   | 377    | 575    | 165    | 65    | 203    | 235   | 96    |
| 26    | 20   | 19    | 81    | 113   | 150   | 304    | 408    | 154    | 68    | 162    | 180   | 116   |
| 27    | 19   | 22    | 85    | 100   | 190   | 268    | 336    | 144    | 67    | 141    | 225   | 264   |
| 28    | 20   | 24    | 98    | 92    | 200   | 246    | 288    | 139    | 64    | 128    | 170   | 253   |
| 29    | 19   | 30    | 100   | 84    | 261   | 231    | 257    | 134    | 71    | 114    | 132   | 236   |
| 30    | 19   | 42    | 454   | 78    | ----- | 224    | 239    | 145    | 101   | 102    | 108   | 1,570 |
| 31    | 19   | ----- | 821   | 70    | ----- | 210    | -----  | 169    | ----- | 93     | 92    | ----- |
| TOTAL | 609  | 611   | 4,244 | 5,685 | 4,571 | 13,774 | 21,898 | 11,883 | 2,813 | 15,399 | 5,395 | 6,573 |
| MEAN  | 19.6 | 20.4  | 137   | 183   | 158   | 444    | 730    | 383    | 93.8  | 497    | 174   | 219   |
| MAX   | 23   | 42    | 821   | 407   | 384   | 996    | 2,610  | 1,830  | 164   | 3,350  | 734   | 1,570 |
| MIN   | 18   | 18    | 28    | 70    | 58    | 210    | 171    | 134    | 64    | 72     | 51    | 51    |
| CFSM  | .10  | .10   | .68   | .91   | .78   | 2.20   | 3.61   | 1.90   | .46   | 2.46   | .86   | 1.08  |
| IN.   | .11  | .11   | .78   | 1.05  | .84   | 2.54   | 4.03   | 2.19   | .52   | 2.84   | .99   | 1.21  |

CAL YR 1971 TOTAL 53,961 MEAN 148 MAX 1,820 MIN 18 CFSM .73 IN 9.94  
WTR YR 1972 TOTAL 93,455 MEAN 255 MAX 3,350 MIN 18 CFSM 1.26 IN 17.21

## PEAK DISCHARGE (BASE, 2,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-13 | 0600 | 4.98  | 2,220     | 7-16 | 2230 | 6.58  | 3,940     |
| 4-20 | 1930 | 6.42  | 3,760     | 9-30 | 0830 | 4.81  | 2,050     |
| 5-9  | 1930 | 5.21  | 2,450     |      |      |       |           |

## 03137000 Kokosing River at Millwood, Ohio

LOCATION.--Lat 40°23'51", long 82°17'09", in SE 1/4 T.7 N., R.11 W., Knox County, on left bank 0.4 mile west of Millwood, 1.5 miles upstream from Honey Run, and 2.0 miles downstream from Jelloway Creek.

DRAINAGE AREA.--455 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Published as "near Millwood" October 1921 to July 1939. Records published for both sites October 1938 to July 1939.

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft above mean sea level. Prior to July 10, 1931, non-recording gage at site 3.8 miles downstream, and July 10, 1931, to July 31, 1939, water-stage recorder at site 3.5 miles downstream at datum 23.94 ft lower.

AVERAGE DISCHARGE.--51 years, 474 cfs (14.15 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,890 cfs Apr. 20 (gage height, 12.29 ft); minimum, 52 cfs Oct. 5, 6, 7, 8, 9.

Period of record: Maximum discharge, 75,900 cfs Jan. 21, 1959 (gage height, 34.00 ft, from high-water mark in well), from rating curve extended above 20,000 cfs on basis of slope-area measurement of peak flow; minimum, 33 cfs Aug. 17, 26, 1932, Sept. 27, 28, 1954.

Flood in March 1913 reached a stage corresponding to 22.0 ft at former site and datum (discharge, 40,000 cfs, estimated).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 803: 1933, 1935. WRD Ohio, 1966: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL    | AUG    | SEP    |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| 1     | 68    | 54    | 107    | 932    | 150    | 900    | 418    | 486    | 335   | 190    | 188    | 175    |
| 2     | 62    | 60    | 90     | 695    | 180    | 1,900  | 402    | 498    | 296   | 168    | 185    | 168    |
| 3     | 58    | 66    | 87     | 600    | 200    | 2,370  | 390    | 690    | 266   | 269    | 198    | 168    |
| 4     | 56    | 60    | 77     | 534    | 230    | 1,530  | 398    | 555    | 242   | 962    | 175    | 168    |
| 5     | 55    | 58    | 71     | 725    | 250    | 1,000  | 374    | 478    | 224   | 645    | 163    | 155    |
| 6     | 54    | 59    | 109    | 550    | 230    | 695    | 350    | 426    | 206   | 398    | 153    | 145    |
| 7     | 54    | 62    | 322    | 454    | 210    | 600    | 2,550  | 354    | 193   | 299    | 155    | 135    |
| 8     | 54    | 59    | 421    | 394    | 200    | 1,040  | 1,860  | 526    | 183   | 263    | 150    | 130    |
| 9     | 57    | 59    | 258    | 426    | 200    | 770    | 1,120  | 3,080  | 175   | 236    | 158    | 125    |
| 10    | 73    | 63    | 201    | 725    | 150    | 585    | 896    | 2,860  | 173   | 218    | 143    | 118    |
| 11    | 65    | 63    | 180    | 685    | 180    | 506    | 760    | 1,430  | 163   | 230    | 135    | 110    |
| 12    | 61    | 60    | 151    | 530    | 190    | 502    | 650    | 962    | 160   | 224    | 130    | 113    |
| 13    | 61    | 60    | 134    | 420    | 269    | 848    | 4,400  | 765    | 278   | 1,350  | 128    | 113    |
| 14    | 65    | 58    | 182    | 340    | 398    | 1,180  | 2,760  | 1,850  | 299   | 836    | 123    | 720    |
| 15    | 62    | 56    | 810    | 290    | 620    | 1,120  | 1,560  | 1,490  | 284   | 438    | 123    | 1,470  |
| 16    | 59    | 56    | 715    | 270    | 926    | 1,380  | 1,540  | 1,230  | 414   | 2,720  | 118    | 680    |
| 17    | 58    | 55    | 462    | 260    | 745    | 1,980  | 1,890  | 938    | 263   | 4,680  | 590    | 414    |
| 18    | 57    | 55    | 337    | 260    | 770    | 1,350  | 1,300  | 735    | 221   | 2,550  | 1,530  | 311    |
| 19    | 57    | 62    | 275    | 300    | 735    | 938    | 1,030  | 605    | 195   | 1,490  | 1,010  | 269    |
| 20    | 57    | 67    | 278    | 281    | 510    | 740    | 4,690  | 522    | 185   | 1,120  | 630    | 233    |
| 21    | 54    | 64    | 305    | 278    | 454    | 665    | 4,310  | 474    | 180   | 635    | 378    | 203    |
| 22    | 56    | 60    | 272    | 272    | 420    | 1,220  | 3,690  | 426    | 180   | 466    | 344    | 185    |
| 23    | 60    | 57    | 239    | 362    | 380    | 1,610  | 2,900  | 386    | 185   | 394    | 956    | 170    |
| 24    | 62    | 57    | 221    | 418    | 360    | 1,050  | 1,950  | 350    | 175   | 341    | 720    | 175    |
| 25    | 60    | 59    | 209    | 374    | 350    | 785    | 1,280  | 329    | 168   | 354    | 446    | 180    |
| 26    | 60    | 58    | 209    | 284    | 400    | 655    | 950    | 308    | 170   | 308    | 338    | 293    |
| 27    | 60    | 63    | 227    | 260    | 486    | 585    | 765    | 287    | 170   | 284    | 335    | 422    |
| 28    | 59    | 71    | 248    | 240    | 466    | 530    | 650    | 272    | 163   | 263    | 308    | 454    |
| 29    | 58    | 77    | 251    | 220    | 585    | 494    | 570    | 266    | 168   | 236    | 257    | 450    |
| 30    | 58    | 118   | 1,250  | 210    | -----  | 498    | 518    | 287    | 212   | 215    | 218    | 4,110  |
| 31    | 56    | ----- | 1,760  | 200    | -----  | 442    | -----  | 347    | ----- | 198    | 190    | -----  |
| TOTAL | 1,836 | 1,876 | 10,458 | 12,789 | 11,324 | 30,468 | 46,921 | 24,252 | 6,526 | 22,980 | 10,675 | 12,562 |
| MEAN  | 59.2  | 62.5  | 337    | 413    | 350    | 983    | 1,564  | 782    | 218   | 741    | 344    | 419    |
| MAX   | 73    | 118   | 1,760  | 932    | 926    | 2,370  | 4,690  | 3,080  | 414   | 4,680  | 1,530  | 4,110  |
| MIN   | 54    | 54    | 71     | 200    | 180    | 442    | 350    | 266    | 160   | 168    | 118    | 110    |
| CFSM  | .13   | .14   | .74    | .91    | .86    | 2.16   | 3.44   | 1.72   | .48   | 1.63   | .76    | .92    |
| IN.   | .15   | .15   | .86    | 1.05   | .93    | 2.49   | 3.84   | 1.98   | .53   | 1.88   | .87    | 1.03   |

CAL YR 1971 TOTAL 123,340 MEAN 338 MAX 3,880 MIN 52 CFSM .74 IN 10.08  
WTR YR 1972 TOTAL 192,667 MEAN 526 MAX 4,690 MIN 54 CFSM 1.16 IN 15.75

## PEAK DISCHARGE (BASE, 5,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-13 | 1300 | 12.07 | 6,620     | 7-17 | 0500 | 11.32 | 5,720     |
| 4-20 | 1500 | 12.29 | 6,890     | 9-30 | 1330 | 11.99 | 6,530     |

## MUSKINGUM RIVER BASIN

03138500 Walhonding River below Mohawk Dam, at Nellie, Ohio

LOCATION.--Lat 40°20'29", long 82°03'56", in T.6 N., R.8 W., Coshocton County, on right bank at upstream side of bridge on U.S. Highway 36 at Nellie, 0.5 mile upstream from Mohawk Creek, and 1.7 miles downstream from Mohawk Dam.

DRAINAGE AREA.--1,505 sq mi.

PERIOD OF RECORD.--December 1910 to March 1913 (gage heights and discharge measurements only), September 1921 to current year. Published as Mohican River at Pomerene 1910-13, as Walhonding River at Pomerene 1921-37, and as Walhonding River at Nellie 1938-39.

GAGE.--Water-stage recorder. Datum of gage is 790.00 ft above mean sea level, adjustment of 1912. Prior to Nov. 7, 1925, nonrecording gage and Nov. 7, 1925, to Sept. 30, 1937, water-stage recorder at site 3.8 miles upstream at datum 15.53 ft higher. Oct. 1, 1937, to Sept. 30, 1938, nonrecording gage at present site at datum 2.09 ft higher.

AVERAGE DISCHARGE.--51 years, 1,438 cfs.

EXTREMES.--Current year: Maximum discharge, 6,850 cfs Apr. 27 (gage height, 11.17 ft); minimum, 12 cfs Oct. 20. Period of record: Maximum discharge at site at Pomerene, 43,800 cfs Jan. 25, 1937; maximum discharge at present site since regulation began at Mohawk Dam, 24,000 cfs Jan. 25, 26, 1937 (gage height, 18.8 ft, present datum, from floodmarks); minimum, 3.3 cfs Oct. 20, 1939; minimum daily discharge, 19 cfs Feb. 27, 1954.

Flood of March 1913 reached a stage of 26.9 ft (discharge, 102,000 cfs) present site and datum, from information by Corps of Engineers.

REMARKS.--Records good. Flow regulated beginning 1936 by 4 flood-control reservoirs at points 1.7 to 54 miles upstream (see stations 03129500, 03133000, 03134500, and 03138000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV   | DEC        | JAN    | FEB       | MAR    | APR     | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------------|---------------|-------|------------|--------|-----------|--------|---------|--------|--------|--------|--------|--------|
| 1           | 297           | 294   | 484        | 2,810  | 650       | 1,730  | 1,370   | 6,230  | 1,080  | 1,250  | 735    | 686    |
| 2           | 324           | 266   | 472        | 1,990  | 650       | 3,780  | 1,320   | 5,770  | 981    | 1,050  | 693    | 644    |
| 3           | 329           | 240   | 560        | 1,800  | 650       | 5,010  | 1,270   | 3,650  | 893    | 1,290  | 707    | 644    |
| 4           | 313           | 255   | 630        | 1,490  | 650       | 4,260  | 1,240   | 3,410  | 822    | 2,960  | 651    | 623    |
| 5           | 258           | 240   | 518        | 1,700  | 650       | 2,940  | 1,190   | 2,410  | 822    | 2,210  | 609    | 588    |
| 6           | 221           | 240   | 532        | 1,540  | 672       | 2,200  | 1,130   | 2,010  | 792    | 1,700  | 574    | 532    |
| 7           | 216           | 310   | 853        | 1,260  | 728       | 1,970  | 2,690   | 1,720  | 785    | 1,420  | 567    | 504    |
| 8           | 212           | 310   | 1,350      | 1,130  | 650       | 2,460  | 4,800   | 1,570  | 749    | 1,240  | 560    | 478    |
| 9           | 272           | 272   | 1,050      | 1,080  | 600       | 2,510  | 3,040   | 3,080  | 707    | 1,160  | 581    | 466    |
| 10          | 362           | 230   | 845        | 1,600  | 600       | 1,980  | 2,450   | 5,990  | 672    | 1,050  | 546    | 442    |
| 11          | 407           | 235   | 778        | 1,970  | 609       | 1,760  | 2,300   | 5,640  | 644    | 1,160  | 518    | 418    |
| 12          | 345           | 240   | 770        | 1,860  | 595       | 1,650  | 2,000   | 3,360  | 595    | 1,040  | 504    | 412    |
| 13          | 282           | 277   | 665        | 1,400  | 679       | 2,440  | 4,030   | 4,780  | 735    | 1,880  | 525    | 424    |
| 14          | 248           | 310   | 616        | 1,250  | 1,070     | 4,020  | 5,450   | 3,550  | 1,990  | 2,070  | 511    | 1,130  |
| 15          | 243           | 305   | 1,520      | 1,010  | 1,360     | 4,330  | 5,860   | 4,130  | 1,360  | 1,480  | 504    | 3,500  |
| 16          | 297           | 266   | 2,050      | 574    | 2,420     | 4,560  | 4,530   | 3,830  | 1,700  | 3,550  | 490    | 2,640  |
| 17          | 329           | 235   | 1,560      | 981    | 2,290     | 5,120  | 5,000   | 2,980  | 1,380  | 5,450  | 853    | 2,080  |
| 18          | 319           | 230   | 1,220      | 997    | 2,120     | 5,280  | 5,690   | 2,410  | 1,150  | 5,990  | 3,580  | 1,560  |
| 19          | 258           | 240   | 1,020      | 1,120  | 1,840     | 4,150  | 4,400   | 2,100  | 1,000  | 5,820  | 2,340  | 1,470  |
| 20          | 96            | 322   | 877        | 1,010  | 1,420     | 3,290  | 4,740   | 1,800  | 885    | 5,390  | 1,850  | 1,350  |
| 21          | 324           | 382   | 877        | 957    | 1,100     | 2,980  | 4,460   | 1,660  | 815    | 4,170  | 1,400  | 1,170  |
| 22          | 225           | 370   | 853        | 845    | 1,250     | 3,280  | 4,020   | 1,490  | 770    | 2,620  | 1,150  | 1,010  |
| 23          | 250           | 294   | 756        | 941    | 1,410     | 4,610  | 5,160   | 1,360  | 756    | 2,220  | 2,010  | 853    |
| 24          | 328           | 245   | 686        | 1,170  | 1,250     | 4,220  | 6,210   | 1,240  | 756    | 1,600  | 2,080  | 823    |
| 25          | 334           | 245   | 679        | 1,130  | 1,090     | 3,280  | 6,740   | 1,130  | 728    | 1,330  | 1,500  | 845    |
| 26          | 294           | 245   | 672        | 830    | 1,130     | 2,770  | 6,700   | 1,040  | 728    | 1,340  | 1,260  | 893    |
| 27          | 250           | 294   | 686        | 800    | 1,190     | 2,410  | 6,760   | 949    | 885    | 1,120  | 1,340  | 1,730  |
| 28          | 245           | 346   | 714        | 750    | 1,130     | 1,970  | 6,720   | 885    | 770    | 1,080  | 1,280  | 2,350  |
| 29          | 240           | 376   | 728        | 700    | 1,320     | 1,720  | 6,480   | 845    | 714    | 941    | 1,050  | 2,330  |
| 30          | 250           | 394   | 1,160      | 700    | -----     | 1,680  | 6,060   | 853    | 1,230  | 845    | 877    | 4,520  |
| 31          | 299           | ----- | 4,200      | 630    | -----     | 1,480  | -----   | 1,030  | -----  | 778    | 763    | -----  |
| TOTAL       | 8,667         | 8,508 | 30,381     | 38,025 | 31,773    | 95,840 | 123,810 | 82,902 | 27,894 | 67,204 | 32,608 | 37,115 |
| MEAN        | 280           | 284   | 980        | 1,227  | 1,096     | 3,092  | 4,127   | 2,674  | 930    | 2,168  | 1,052  | 1,237  |
| MAX         | 407           | 394   | 4,200      | 2,810  | 2,420     | 5,280  | 6,760   | 6,230  | 1,990  | 5,990  | 3,580  | 4,520  |
| MIN         | 96            | 230   | 472        | 574    | 595       | 1,480  | 1,130   | 845    | 595    | 778    | 490    | 412    |
| CAL YR 1971 | TOTAL 410,912 |       | MEAN 1,126 |        | MAX 7,580 |        | MIN 96  |        |        |        |        |        |
| WTR YR 1972 | TOTAL 584,727 |       | MEAN 1,598 |        | MAX 6,760 |        | MIN 96  |        |        |        |        |        |



## 03139000 Killbuck Creek at Killbuck, Ohio

LOCATION.--Lat 40°29'41", long 81°59'12", Holmes County, on right bank at downstream side of highway bridge at Killbuck, 0.3 mile downstream from Black Creek, and 0.9 mile upstream from bridge on U.S. Highway 62.

DRAINAGE AREA.--462 sq mi.

PERIOD OF RECORD.--October 1930 to current year.

GAGE.--Water-stage recorder and nonrecording gage read once daily. Datum of gage is 788.05 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 384 cfs (11.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,530 cfs Apr. 20 (gage height, 14.90 ft); minimum, 43 cfs Oct. 7. Period of record: Maximum discharge, 47,500 cfs July 5, 1969 (gage height, 26.40 ft, from floodmarks), from rating curve extended above 11,000 cfs on basis of slope-area measurement of peak flow; minimum, 23 cfs Sept. 10-15, 28-30, 1954.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. WRD Ohio 1970: 1969.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV   | DEC      | JAN       | FEB    | MAR      | APR      | MAY    | JUN   | JUL    | AUG   | SEP   |
|-------------|---------------|-------|----------|-----------|--------|----------|----------|--------|-------|--------|-------|-------|
| 1           | 71            | 55    | 122      | 603       | 143    | 552      | 388      | 475    | 371   | 510    | 189   | 194   |
| 2           | 60            | 59    | 107      | 455       | 136    | 1,130    | 376      | 475    | 280   | 365    | 180   | 194   |
| 3           | 60            | 66    | 97       | 363       | 140    | 1,330    | 351      | 772    | 236   | 434    | 190   | 193   |
| 4           | 50            | 71    | 85       | 310       | 172    | 1,260    | 338      | 618    | 208   | 689    | 180   | 181   |
| 5           | 48            | 65    | 77       | 338       | 187    | 1,120    | 335      | 523    | 187   | 479    | 165   | 165   |
| 6           | 46            | 63    | 99       | 304       | 164    | 799      | 339      | 449    | 179   | 377    | 155   | 153   |
| 7           | 45            | 67    | 222      | 261       | 148    | 639      | 726      | 400    | 174   | 311    | 158   | 153   |
| 8           | 47            | 70    | 314      | 234       | 132    | 950      | 935      | 412    | 169   | 297    | 157   | 147   |
| 9           | 50            | 67    | 255      | 227       | 133    | 810      | 706      | 867    | 154   | 278    | 155   | 148   |
| 10          | 77            | 68    | 184      | 325       | 119    | 666      | 587      | 1,220  | 158   | 289    | 151   | 139   |
| 11          | 82            | 70    | 153      | 396       | 120    | 551      | 512      | 1,110  | 149   | 316    | 144   | 134   |
| 12          | 72            | 69    | 132      | 347       | 125    | 526      | 450      | 802    | 140   | 265    | 143   | 136   |
| 13          | 63            | 67    | 122      | 296       | 212    | 1,020    | 953      | 590    | 284   | 229    | 153   | 139   |
| 14          | 64            | 66    | 141      | 259       | 409    | 1,320    | 1,280    | 890    | 329   | 260    | 144   | 420   |
| 15          | 62            | 66    | 420      | 211       | 569    | 1,400    | 1,160    | 961    | 267   | 238    | 173   | 622   |
| 16          | 57            | 70    | 452      | 190       | 699    | 1,610    | 1,070    | 742    | 600   | 928    | 221   | 535   |
| 17          | 54            | 66    | 346      | 190       | 586    | 2,020    | 1,260    | 586    | 372   | 1,800  | 296   | 532   |
| 18          | 51            | 62    | 237      | 188       | 582    | 1,930    | 1,210    | 489    | 266   | 1,570  | 709   | 510   |
| 19          | 52            | 66    | 182      | 198       | 537    | 1,690    | 1,130    | 419    | 222   | 1,340  | 590   | 436   |
| 20          | 53            | 86    | 172      | 191       | 397    | 1,420    | 1,860    | 373    | 199   | 1,080  | 554   | 386   |
| 21          | 50            | 85    | 170      | 178       | 330    | 1,190    | 2,400    | 341    | 189   | 702    | 459   | 285   |
| 22          | 53            | 81    | 152      | 170       | 442    | 1,040    | 2,280    | 297    | 184   | 508    | 356   | 231   |
| 23          | 63            | 77    | 138      | 199       | 407    | 1,030    | 2,310    | 266    | 213   | 526    | 398   | 200   |
| 24          | 70            | 73    | 132      | 234       | 361    | 975      | 2,140    | 245    | 225   | 502    | 392   | 208   |
| 25          | 68            | 73    | 124      | 240       | 298    | 899      | 1,850    | 230    | 219   | 420    | 326   | 219   |
| 26          | 66            | 72    | 120      | 186       | 334    | 767      | 1,550    | 215    | 268   | 360    | 289   | 233   |
| 27          | 65            | 74    | 123      | 170       | 310    | 646      | 1,180    | 197    | 302   | 310    | 388   | 389   |
| 28          | 62            | 84    | 126      | 160       | 320    | 549      | 811      | 184    | 249   | 270    | 408   | 479   |
| 29          | 59            | 87    | 126      | 150       | 411    | 478      | 617      | 177    | 274   | 240    | 351   | 515   |
| 30          | 58            | 117   | 376      | 150       | -----  | 471      | 523      | 205    | 658   | 210    | 266   | 986   |
| 31          | 57            | ----- | 823      | 140       | -----  | 420      | -----    | 318    | ----- | 200    | 220   | ----- |
| TOTAL       | 1,835         | 2,162 | 6,329    | 7,863     | 8,923  | 31,208   | 31,627   | 15,848 | 7,725 | 16,303 | 8,660 | 9,262 |
| MEAN        | 59.2          | 72.1  | 204      | 254       | 308    | 1,007    | 1,054    | 511    | 258   | 526    | 279   | 309   |
| MAX         | 82            | 117   | 823      | 603       | 699    | 2,020    | 2,400    | 1,220  | 658   | 1,800  | 709   | 986   |
| MIN         | 45            | 55    | 77       | 140       | 119    | 420      | 335      | 177    | 140   | 200    | 143   | 134   |
| CFSM        | .13           | .16   | .44      | .55       | .67    | 2.18     | 2.28     | 1.11   | .56   | 1.14   | .60   | .67   |
| IN.         | .15           | .17   | .51      | .63       | .72    | 2.51     | 2.55     | 1.28   | .62   | 1.31   | .70   | .75   |
| CAL YR 1971 | TOTAL 115,457 |       | MEAN 316 | MAX 3,250 | MIN 37 | CFSM .68 | IN 9.30  |        |       |        |       |       |
| WTR YR 1972 | TOTAL 147,745 |       | MEAN 404 | MAX 2,400 | MIN 45 | CFSM .87 | IN 11.90 |        |       |        |       |       |

## PEAK DISCHARGE (BASE, 2,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-17 | 1500 | 14.24 | 2,070     | 4-20 | 2300 | 14.90 | 2,530     |

## MUSKINGUM RIVER BASIN

03140000 Mill Creek near Coshocton, Ohio

LOCATION.--Lat 40°21'46", long 81°51'45", Coshocton County, on left bank 0.5 mile downstream from Little Mill Creek and 6 miles north of Coshocton.

DRAINAGE AREA.--27.2 sq mi.

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for October 1936, published in WSP 1305.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 782.00 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--36 years, 26.8 cfs (13.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 713 cfs Apr. 7 (gage height, 8.35 ft); minimum, 0.34 cfs Oct. 21 (gage height, 0.64 ft).

Period of record: Maximum discharge, 8,720 cfs July 5, 1969 (gage height, 13.92 ft), from rating curve extended above 2,200 cfs on basis of slope-area measurement of peak flow; no flow Sept. 28, 29, 1954, Aug. 29-31, 1962, and part of each day Dec. 23, 31, 1963.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1143: 1946, 1947-48(P). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB     | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|--------|-------|
| 1     | 1.3   | .96   | 4.3   | 38    | 7.2     | 35    | 23    | 28    | 13    | 5.2   | 1.6    | 1.2   |
| 2     | 1.2   | 1.5   | 2.8   | 40    | 8.7     | 151   | 22    | 27    | 8.7   | 4.1   | 1.8    | 1.1   |
| 3     | 1.1   | 4.0   | 2.1   | 29    | 12      | 107   | 21    | 25    | 7.1   | 4.4   | 4.7    | 2.1   |
| 4     | .96   | 1.9   | 2.0   | 27    | 11      | 67    | 22    | 22    | 5.9   | 4.2   | 2.3    | 2.0   |
| 5     | .80   | 1.3   | 2.2   | 33    | 7.5     | 49    | 19    | 20    | 5.0   | 4.9   | 1.6    | 1.4   |
| 6     | .80   | 1.2   | 17    | 24    | 8.2     | 37    | 19    | 17    | 4.9   | 5.8   | 1.4    | 1.1   |
| 7     | .80   | 1.4   | 83    | 21    | 8.0     | 44    | 328   | 16    | 4.7   | 3.8   | 1.4    | .95   |
| 8     | .71   | 1.5   | 31    | 17    | 6.2     | 77    | 142   | 20    | 3.9   | 4.7   | 1.7    | .90   |
| 9     | .80   | 1.4   | 15    | 22    | 5.0     | 40    | 99    | 61    | 3.8   | 4.9   | 3.2    | .85   |
| 10    | 1.6   | 1.4   | 11    | 34    | 4.2     | 35    | 83    | 39    | 4.4   | 28    | 2.1    | .75   |
| 11    | 1.8   | 1.6   | 9.8   | 27    | 5.4     | 30    | 66    | 27    | 3.2   | 11    | 1.4    | .67   |
| 12    | 1.2   | 1.6   | 7.5   | 21    | 6.4     | 30    | 52    | 23    | 3.0   | 7.7   | 1.2    | .70   |
| 13    | 1.0   | 1.5   | 6.6   | 23    | 170     | 288   | 329   | 22    | 54    | 6.1   | 1.4    | .80   |
| 14    | 1.1   | 1.4   | 21    | 24    | 151     | 123   | 136   | 57    | 18    | 5.8   | 1.3    | 8.8   |
| 15    | 1.1   | 1.4   | 58    | 15    | 158     | 96    | 92    | 43    | 11    | 4.7   | 1.0    | 4.2   |
| 16    | 1.1   | 1.4   | 34    | 13    | 80      | 193   | 136   | 36    | 18    | 13    | .90    | 2.0   |
| 17    | .96   | 1.5   | 20    | 12    | 53      | 174   | 132   | 30    | 8.7   | 16    | 30     | 1.6   |
| 18    | .91   | 1.4   | 14    | 10    | 51      | 105   | 90    | 26    | 7.1   | 8.2   | 21     | 2.0   |
| 19    | .86   | 1.7   | 11    | 9.5   | 44      | 67    | 78    | 22    | 5.9   | 5.9   | 14     | 2.6   |
| 20    | .56   | 2.3   | 14    | 9.0   | 30      | 53    | 325   | 20    | 5.6   | 5.0   | 7.1    | 1.4   |
| 21    | .48   | 2.2   | 13    | 10    | 26      | 47    | 148   | 18    | 6.1   | 4.2   | 3.9    | 1.1   |
| 22    | .77   | 1.9   | 10    | 12    | 25      | 62    | 152   | 15    | 6.1   | 3.6   | 3.2    | 1.0   |
| 23    | 1.4   | 1.5   | 8.7   | 32    | 19      | 49    | 114   | 14    | 9.0   | 3.6   | 3.0    | .95   |
| 24    | 1.7   | 1.4   | 9.0   | 27    | 20      | 40    | 87    | 12    | 7.7   | 4.1   | 2.8    | 1.6   |
| 25    | 1.6   | 1.4   | 8.0   | 20    | 18      | 36    | 66    | 11    | 6.6   | 3.3   | 2.4    | 2.6   |
| 26    | 1.4   | 1.6   | 9.5   | 14    | 23      | 32    | 52    | 9.0   | 10    | 2.8   | 2.7    | 2.9   |
| 27    | 1.2   | 1.9   | 11    | 12    | 18      | 31    | 42    | 7.9   | 8.7   | 3.3   | 2.7    | 3.8   |
| 28    | 1.1   | 2.5   | 14    | 11    | 19      | 27    | 36    | 7.4   | 6.1   | 3.2   | 2.2    | 4.5   |
| 29    | 1.1   | 4.0   | 13    | 9.5   | 21      | 27    | 31    | 7.1   | 5.9   | 2.4   | 1.8    | 4.2   |
| 30    | 1.0   | 8.0   | 167   | 8.0   | -----   | 27    | 29    | 12    | 6.1   | 2.2   | 1.4    | 26    |
| 31    | 1.0   | ----- | 75    | 6.8   | -----   | 23    | ----- | 12    | ----- | 1.8   | 1.2    | ----- |
| TOTAL | 33.41 | 58.76 | 704.5 | 610.8 | 1,015.8 | 2,202 | 2,971 | 706.4 | 268.2 | 187.9 | 128.40 | 85.77 |
| MEAN  | 1.08  | 1.96  | 22.7  | 19.7  | 35.0    | 71.0  | 99.0  | 22.8  | 8.94  | 6.06  | 4.14   | 2.86  |
| MAX   | 1.8   | 8.0   | 167   | 40    | 170     | 288   | 329   | 61    | 54    | 28    | 30     | 26    |
| MIN   | .48   | .96   | 2.0   | 6.8   | 4.2     | 23    | 19    | 7.1   | 3.0   | 1.8   | .90    | .67   |
| CFSM  | .04   | .07   | .83   | .72   | 1.29    | 2.61  | 3.64  | .84   | .33   | .22   | .15    | .11   |
| IN.   | .05   | .08   | .96   | .84   | 1.39    | 3.01  | 4.06  | .97   | .37   | .26   | .18    | .12   |

CAL YR 1971 TOTAL 7,573.99 MEAN 20.8 MAX 687 MIN .06 CFSM .76 IN 10.36  
WTR YR 1972 TOTAL 8,972.94 MEAN 24.5 MAX 329 MIN .48 CFSM .90 IN 12.27

## PEAK DISCHARGE (BASE, 700 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 0900 | 8.35  | 713       | 4-13 | 0645 | 8.32  | 708       |

## 65

LOCATION.--Lat 40°14'54", long 81°52'23", in T.5 N., R.6 W., Coshocton County, on right bank at upstream side of highway bridge, 1 mile southwest of Coshocton, and 2 miles downstream from confluence of Tuscarawas and Walhonding Rivers.

PERIOD OF RECORD.--July 1936 to current year.

**AVERAGE DISCHARGE.--36 years, 4.706 cfs.**

Period of record: Maximum discharge, 78,700 cfs Jan. 26, 1937 (gage height, 21.98 ft); minimum, 342 cfs Nov. 4, 1944.

Flood of March 1913 reached a stage of about 28.8 ft (discharge, 202,000 cfs), computed by Corps of Engineers.

REMARKS.--Records good. Flow regulated by 12 flood-control reservoirs at points 19 to 88 miles upstream (see pp. 78, 79). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

| DAY   | OCT    | NOV    | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP   |
|-------|--------|--------|-------|-------|-------|--------|--------|--------|-------|--------|-------|-------|
| 1     | 961    | 781    | 2,040 | 9,220 | 2,450 | 5,240  | 5,370  | 10,300 | 3,340 | 3,930  | 1,900 | 1,810 |
| 2     | 980    | 781    | 2,110 | 7,820 | 2,400 | 7,560  | 4,970  | 10,400 | 3,460 | 3,610  | 1,840 | 1,660 |
| 3     | 980    | 745    | 2,170 | 6,700 | 2,400 | 11,700 | 4,800  | 8,400  | 3,180 | 3,150  | 1,860 | 1,750 |
| 4     | 943    | 790    | 2,100 | 5,980 | 2,400 | 12,900 | 4,650  | 8,760  | 2,880 | 5,260  | 1,750 | 1,690 |
| 5     | 889    | 781    | 2,110 | 6,000 | 2,300 | 11,700 | 4,510  | 7,070  | 2,600 | 5,570  | 1,640 | 1,610 |
| 6     | 799    | 745    | 2,210 | 6,180 | 2,000 | 9,810  | 4,340  | 6,100  | 2,350 | 4,750  | 1,550 | 1,450 |
| 7     | 763    | 790    | 3,160 | 5,420 | 2,300 | 7,990  | 6,900  | 5,470  | 2,240 | 4,300  | 1,480 | 1,360 |
| 8     | 754    | 808    | 5,190 | 4,700 | 2,200 | 7,680  | 12,000 | 5,050  | 2,110 | 3,710  | 1,430 | 1,280 |
| 9     | 790    | 808    | 5,910 | 4,060 | 2,000 | 9,090  | 11,200 | 6,500  | 1,990 | 3,390  | 1,500 | 1,210 |
| 10    | 916    | 745    | 5,140 | 4,190 | 1,900 | 9,230  | 9,370  | 10,500 | 1,900 | 3,440  | 1,480 | 1,160 |
| 11    | 1,050  | 745    | 4,350 | 5,040 | 1,900 | 8,290  | 8,490  | 11,400 | 1,810 | 4,140  | 1,400 | 1,110 |
| 12    | 1,070  | 754    | 3,770 | 5,460 | 2,000 | 7,260  | 7,900  | 8,580  | 1,720 | 4,190  | 1,340 | 1,070 |
| 13    | 1,020  | 754    | 3,400 | 5,040 | 2,500 | 7,810  | 10,600 | 8,980  | 2,020 | 4,220  | 1,300 | 1,070 |
| 14    | 916    | 799    | 3,160 | 4,410 | 3,700 | 11,300 | 13,500 | 7,830  | 3,820 | 4,380  | 1,290 | 1,450 |
| 15    | 862    | 790    | 4,160 | 4,030 | 6,000 | 13,600 | 15,300 | 8,510  | 3,260 | 3,630  | 1,230 | 5,460 |
| 16    | 826    | 772    | 6,400 | 3,180 | 6,850 | 14,600 | 13,700 | 8,380  | 3,920 | 4,960  | 1,250 | 5,960 |
| 17    | 871    | 952    | 6,670 | 2,400 | 7,880 | 15,900 | 13,800 | 7,280  | 4,220 | 8,860  | 1,500 | 5,080 |
| 18    | 853    | 1,110  | 5,370 | 2,700 | 7,260 | 16,800 | 14,900 | 6,330  | 3,530 | 11,500 | 5,320 | 4,090 |
| 19    | 808    | 1,150  | 4,250 | 3,500 | 6,880 | 16,400 | 14,400 | 5,710  | 2,910 | 11,700 | 5,370 | 3,690 |
| 20    | 709    | 1,180  | 3,560 | 3,150 | 6,130 | 14,800 | 14,400 | 5,120  | 2,520 | 10,400 | 4,830 | 3,770 |
| 21    | 652    | 1,360  | 3,440 | 3,080 | 5,020 | 13,000 | 16,000 | 4,750  | 2,310 | 8,540  | 4,010 | 3,290 |
| 22    | 790    | 1,340  | 3,290 | 3,000 | 4,430 | 12,000 | 17,200 | 4,330  | 2,200 | 5,780  | 3,290 | 2,670 |
| 23    | 718    | 1,310  | 3,040 | 3,250 | 4,940 | 12,600 | 17,200 | 4,080  | 2,310 | 4,780  | 3,560 | 2,210 |
| 24    | 799    | 1,260  | 2,650 | 3,880 | 5,140 | 13,100 | 17,700 | 3,830  | 2,580 | 4,140  | 3,680 | 2,020 |
| 25    | 844    | 1,280  | 2,370 | 4,350 | 4,730 | 11,900 | 17,800 | 3,480  | 2,930 | 3,760  | 3,190 | 2,030 |
| 26    | 853    | 1,290  | 2,270 | 4,160 | 4,480 | 10,600 | 16,700 | 3,200  | 2,950 | 3,520  | 2,760 | 2,080 |
| 27    | 799    | 1,360  | 2,250 | 3,560 | 4,700 | 9,160  | 15,300 | 2,950  | 3,300 | 3,050  | 3,500 | 2,730 |
| 28    | 799    | 1,470  | 2,340 | 3,300 | 4,830 | 7,480  | 13,500 | 2,730  | 3,020 | 2,760  | 3,790 | 4,160 |
| 29    | 781    | 1,660  | 2,590 | 2,900 | 4,750 | 6,810  | 11,900 | 2,560  | 2,730 | 2,550  | 3,080 | 4,840 |
| 30    | 754    | 1,810  | 3,420 | 2,740 | ----- | 6,920  | 10,800 | 2,520  | 3,390 | 2,300  | 2,510 | 6,610 |
| 31    | 772    | -----  | 8,460 | 2,550 | ----- | 5,960  | -----  | 2,820  | ----- | 2,020  | 2,060 | ----- |
| TOTAL | 26,321 | 30,920 |       |       |       |        |        |        |       |        |       |       |

## MUSKINGUM RIVER BASIN

03141500 Seneca Fork below Senecaville Dam, near Senecaville, Ohio

LOCATION.--Lat 39°55'28", long 81°26'17", Guernsey County, on left bank 650 ft downstream from Senecaville Dam, and 1.5 miles southeast of Senecaville.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--September 1938 to current year. Published as Seneca Fork near Senecaville prior to 1940.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.00 ft above mean sea level, adjustment of 1912. Prior to Jan. 24, 1942, at site 150 ft downstream at same datum.

AVERAGE DISCHARGE.--34 years, 125 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 725 cfs Apr. 28, 29 (gage height, 8.28 ft); minimum, 0.26 cfs Aug. 30 (gage height 3.91 ft).

Period of record: Maximum discharge, 914 cfs Apr. 7, 1964; maximum gage height, 10.35 ft Feb. 1, 1949; no flow May 3, 4, 1939, Jan. 28, 29, Feb. 4, 5, Apr. 25, 1952.

REMARKS.--Records good. Flow regulated by Senecaville Lake (see station 03141000). Water is diverted from Senecaville Lake for U. S. Fish Hatchery; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC     | JAN     | FEB      | MAR     | APR     | MAY     | JUN   | JUL     | AUG   | SEP   |
|-------------|----------------|-----------|---------|---------|----------|---------|---------|---------|-------|---------|-------|-------|
| 1           | 15             | 5.3       | 179     | 193     | 6.0      | 56      | 41      | 712     | 5.3   | 89      | 2.6   | 19    |
| 2           | 15             | 5.3       | 164     | 316     | 6.0      | 111     | 2.4     | 707     | 5.3   | 89      | 2.0   | 14    |
| 3           | 15             | 5.3       | 164     | 396     | 6.0      | 144     | 2.4     | 699     | 5.6   | 87      | 1.9   | 6.3   |
| 4           | 14             | 5.3       | 164     | 394     | 55       | 190     | 2.3     | 690     | 5.6   | 87      | 2.0   | 6.0   |
| 5           | 15             | 5.3       | 164     | 152     | 147      | 258     | 2.0     | 492     | 6.0   | 87      | 1.9   | 5.6   |
| 6           | 15             | 5.3       | 240     | 92      | 147      | 290     | 2.2     | 214     | 6.0   | 87      | 1.9   | 6.0   |
| 7           | 15             | 5.3       | 163     | 318     | 147      | 295     | 2.6     | 3.6     | 6.0   | 92      | 34    | 6.0   |
| 8           | 15             | 5.3       | 150     | 486     | 152      | 297     | 53      | 4.8     | 6.0   | 92      | 46    | 6.0   |
| 9           | 15             | 5.3       | 166     | 255     | 152      | 295     | 82      | 4.8     | 5.6   | 92      | 21    | 6.0   |
| 10          | 15             | 5.3       | 279     | 34      | 96       | 266     | 155     | 5.0     | 5.6   | 34      | 3.0   | 6.0   |
| 11          | 15             | 5.6       | 345     | 53      | 7.2      | 244     | 456     | 5.3     | 5.6   | 2.7     | 3.0   | 6.0   |
| 12          | 15             | 5.6       | 343     | 128     | 4.8      | 239     | 561     | 37      | 5.6   | 2.9     | 2.7   | 5.6   |
| 13          | 18             | 5.6       | 334     | 236     | 3.2      | 121     | 292     | 47      | 5.6   | 2.9     | 2.2   | 5.6   |
| 14          | 6.3            | 5.6       | 482     | 260     | 2.9      | 4.2     | 34      | 48      | 6.0   | 32      | 2.0   | 6.0   |
| 15          | 10             | 161       | 604     | 258     | 2.9      | 3.0     | 46      | 74      | 5.6   | 46      | 2.0   | 6.3   |
| 16          | 10             | 293       | 599     | 111     | 2.9      | 3.6     | 3.2     | 152     | 5.6   | 56      | 1.9   | 6.3   |
| 17          | 11             | 298       | 426     | 9.0     | 2.9      | 4.0     | 87      | 223     | 5.6   | 236     | 2.0   | 6.0   |
| 18          | 11             | 300       | 89      | 4.6     | 55       | 4.0     | 414     | 76      | 5.6   | 367     | 103   | 6.0   |
| 19          | 11             | 302       | 2.6     | 3.8     | 85       | 3.4     | 651     | 25      | 5.3   | 258     | 166   | 6.0   |
| 20          | 11             | 298       | 2.2     | 7.2     | 85       | 126     | 452     | 52      | 5.3   | 123     | 163   | 6.0   |
| 21          | 10             | 295       | 3.6     | 9.0     | 85       | 454     | 373     | 80      | 6.3   | 121     | 56    | 7.6   |
| 22          | 11             | 293       | 2.3     | 2.4     | 171      | 574     | 241     | 41      | 6.0   | 116     | 2.9   | 6.3   |
| 23          | 11             | 288       | 2.2     | 2.4     | 392      | 572     | 3.0     | 24      | 5.6   | 106     | 3.0   | 6.3   |
| 24          | 11             | 288       | 2.2     | 147     | 424      | 523     | 300     | 32      | 5.6   | 37      | 21    | 6.3   |
| 25          | 10             | 288       | 2.2     | 241     | 362      | 436     | 559     | 47      | 6.0   | 15      | 30    | 6.3   |
| 26          | 10             | 283       | 3.2     | 271     | 144      | 436     | 676     | 48      | 6.0   | 15      | 30    | 6.3   |
| 27          | 8.6            | 252       | 3.8     | 327     | 38       | 172     | 676     | 24      | 42    | 15      | 30    | 6.3   |
| 28          | 5.6            | 217       | 3.8     | 193     | 38       | 82      | 691     | 6.0     | 82    | 14      | 30    | 6.6   |
| 29          | 5.3            | 206       | 3.6     | 25      | 38       | 85      | 723     | 5.3     | 101   | 14      | 30    | 6.6   |
| 30          | 5.3            | 203       | 80      | 6.0     | -----    | 85      | 718     | 5.0     | 92    | 14      | 18    | 6.6   |
| 31          | 5.3            | -----     | 193     | 6.0     | -----    | 82      | -----   | 5.3     | ----- | 6.9     | 19    | ----- |
| TOTAL       | 360.4          | 4,340.4   | 5,359.7 | 4,936.4 | 2,857.8  | 6,455.2 | 8,301.1 | 4,589.1 | 465.3 | 2,436.4 | 834.0 | 205.9 |
| MEAN        | 11.6           | 145       | 173     | 159     | 98.5     | 208     | 277     | 148     | 15.5  | 78.6    | 26.9  | 6.86  |
| MAX         | 18             | 302       | 604     | 486     | 424      | 574     | 723     | 712     | 101   | 367     | 166   | 19    |
| MIN         | 5.3            | 5.3       | 2.2     | 2.4     | 2.9      | 3.0     | 2.0     | 3.6     | 5.3   | 2.7     | 1.9   | 5.6   |
| (+)         | 2.20           | 2.06      | 1.77    | 1.38    | 2.06     | 1.95    | 2.02    | 1.57    | 1.99  | 2.52    | 2.49  | 3.33  |
| CAL YR 1971 | TOTAL 32,253.7 | MEAN 88.4 | MAX 675 | MIN 1.1 | (+) 1.79 |         |         |         |       |         |       |       |
| WTR YR 1972 | TOTAL 41,141.7 | MEAN 112  | MAX 723 | MIN 1.9 | (+) 2.11 |         |         |         |       |         |       |       |

+ Diversion for water supply for U. S. Fish Hatchery; furnished by Senecaville National Fish Hatchery.



## MUSKINGUM RIVER BASIN

67

03142000 Wills Creek at Cambridge, Ohio

LOCATION.--Lat 40°00'52", long 81°35'14", Guernsey County, on left bank at upstream side of Fairground Bridge on South Ninth Street in Cambridge, 0.9 mile downstream from Leatherwood Creek.

DRAINAGE AREA.--406 sq mi.

PERIOD OF RECORD.--June 1926 to September 1928, May 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 772.34 ft above mean sea level, adjustment of 1912. Prior to Oct. 6, 1927, nonrecording gage at site 1.5 miles downstream at different datum. Oct. 6, 1927, to Sept. 30, 1928, and May 22, 1937, to Oct. 18, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years, 430 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 2,300 cfs Apr. 17 (gage height, 11.72 ft); minimum, 14 cfs Aug. 16, 17.

Period of record: Maximum discharge, about 8,500 cfs June 6 or 7, 1963; maximum gage height, 22.55 ft June 6, 1963 (backwater from tributaries); minimum discharge, 0.6 cfs Oct. 6, 1960.

Flood of Aug. 8, 1935, reached a stage of 25.4 ft.

REMARKS.--Records good. Flow regulated by Senecaville Lake on Seneca Fork (22 miles upstream) beginning in 1937 (see station 03141000). Water is diverted 2.7 miles upstream from station for municipal supply of city of Cambridge; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 853: 1928(M). WSP 893: 1928. WSP 973: 1942.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 36   | 18    | 379    | 736    | 119    | 324    | 277    | 849    | 84    | 212   | 34    | 38    |
| 2     | 41   | 22    | 268    | 513    | 110    | 414    | 230    | 852    | 73    | 159   | 34    | 40    |
| 3     | 33   | 21    | 210    | 772    | 129    | 1,050  | 200    | 846    | 60    | 141   | 38    | 94    |
| 4     | 30   | 34    | 202    | 707    | 200    | 1,110  | 262    | 812    | 55    | 166   | 48    | 113   |
| 5     | 27   | 33    | 196    | 966    | 306    | 850    | 300    | 776    | 50    | 175   | 64    | 70    |
| 6     | 26   | 26    | 298    | 1,000  | 346    | 731    | 245    | 496    | 49    | 198   | 46    | 40    |
| 7     | 24   | 21    | 1,310  | 531    | 302    | 727    | 948    | 279    | 49    | 184   | 34    | 31    |
| 8     | 24   | 20    | 1,900  | 602    | 273    | 1,080  | 1,400  | 146    | 53    | 150   | 47    | 27    |
| 9     | 24   | 19    | 1,860  | 647    | 250    | 1,010  | 935    | 309    | 50    | 154   | 71    | 26    |
| 10    | 28   | 20    | 918    | 538    | 180    | 738    | 656    | 689    | 47    | 156   | 48    | 24    |
| 11    | 33   | 20    | 568    | 476    | 135    | 621    | 760    | 359    | 56    | 146   | 23    | 24    |
| 12    | 41   | 20    | 508    | 409    | 94     | 573    | 879    | 237    | 51    | 90    | 19    | 25    |
| 13    | 35   | 21    | 453    | 420    | 304    | 635    | 1,450  | 230    | 49    | 58    | 18    | 26    |
| 14    | 38   | 21    | 444    | 499    | 1,410  | 510    | 1,750  | 234    | 48    | 45    | 16    | 29    |
| 15    | 30   | 21    | 728    | 464    | 1,720  | 373    | 1,590  | 253    | 54    | 60    | 15    | 23    |
| 16    | 20   | 183   | 976    | 455    | 1,540  | 721    | 1,960  | 296    | 54    | 92    | 15    | 24    |
| 17    | 26   | 289   | 853    | 326    | 962    | 1,790  | 2,270  | 406    | 59    | 204   | 47    | 24    |
| 18    | 24   | 287   | 524    | 143    | 653    | 1,910  | 1,980  | 470    | 54    | 330   | 288   | 30    |
| 19    | 20   | 289   | 234    | 148    | 806    | 985    | 1,390  | 275    | 42    | 387   | 389   | 26    |
| 20    | 20   | 287   | 146    | 169    | 626    | 528    | 1,380  | 194    | 39    | 262   | 285   | 26    |
| 21    | 20   | 287   | 204    | 174    | 451    | 579    | 1,120  | 214    | 40    | 172   | 210   | 23    |
| 22    | 23   | 291   | 166    | 186    | 449    | 867    | 1,640  | 220    | 53    | 162   | 96    | 21    |
| 23    | 26   | 292   | 125    | 262    | 503    | 1,150  | 2,060  | 149    | 67    | 156   | 89    | 20    |
| 24    | 28   | 291   | 110    | 437    | 623    | 1,070  | 1,540  | 115    | 157   | 137   | 67    | 22    |
| 25    | 35   | 289   | 110    | 666    | 670    | 885    | 1,150  | 113    | 103   | 70    | 55    | 27    |
| 26    | 46   | 289   | 103    | 668    | 642    | 755    | 995    | 125    | 73    | 42    | 58    | 37    |
| 27    | 38   | 294   | 113    | 510    | 492    | 701    | 949    | 116    | 72    | 40    | 73    | 80    |
| 28    | 30   | 281   | 130    | 513    | 352    | 432    | 887    | 84     | 106   | 40    | 64    | 396   |
| 29    | 26   | 304   | 178    | 314    | 332    | 347    | 872    | 64     | 157   | 42    | 59    | 213   |
| 30    | 21   | 375   | 230    | 174    | -----  | 344    | 862    | 69     | 264   | 37    | 54    | 131   |
| 31    | 19   | ----- | 949    | 142    | -----  | 310    | -----  | 78     | ----- | 33    | 44    | ----- |
| TOTAL | 892  | 4,665 | 15,393 | 14,567 | 14,979 | 24,120 | 32,937 | 10,355 | 2,168 | 4,300 | 2,448 | 1,730 |
| MEAN  | 28.8 | 156   | 497    | 470    | 517    | 778    | 1,098  | 334    | 72.3  | 139   | 79.0  | 57.7  |
| MAX   | 46   | 375   | 1,900  | 1,000  | 1,720  | 1,910  | 2,270  | 852    | 264   | 387   | 389   | 396   |
| MIN   | 19   | 18    | 103    | 142    | 94     | 310    | 200    | 64     | 39    | 33    | 15    | 20    |
| (+)   | 3.96 | 3.94  | 3.72   | 3.96   | 4.10   | 4.10   | 3.71   | 4.21   | 4.49  | 4.50  | 4.79  | 5.07  |

CAL YR 1971 TOTAL 111,807.6 MEAN 306 MAX 3,260 MIN 3.9 (+) 3.90

WTR YR 1972 TOTAL 128,554.0 MEAN 351 MAX 2,270 MIN 15 (+) 4.21

+ Diversion in cubic feet per second; furnished by city of Cambridge.

## MUSKINGUM RIVER BASIN

03142295 Salt Fork below Salt Fork Dam, near Cambridge, Ohio

LOCATION.--Lat 40°06'15", long 81°33'15", T.3 N., R.3 W., Guernsey County, at outlets works near left end of Salt Fork Dam, 0.8 mile upstream from the mouth and 5.0 miles north of Cambridge.

DRAINAGE AREA.--159 sq mi.

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

GAGE.--Water-stage recorder and morning-glory spillway control. Datum of gage is 700.00 ft above mean sea level; gage readings have been reduced to elevations above mean sea level. Same gage and elevations as Salt Fork Reservoir (station 03142290).

EXTREMES.--Current year: Maximum discharge, 840 cfs Apr. 23 (elevation, 803.45 ft); minimum daily, 0.29 cfs Nov. 9, 10.

Period of record: Maximum discharge, 840 cfs Apr. 23, 1972 (elevation 803.45 ft); no flow at times in 1970-71.

REMARKS.--Records good except those below 1 cfs, which are fair. Flow completely regulated by Salt Fork Reservoir (see station 03142290). Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL     | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|---------|-------|-------|
| 1     | 14    | 2.5   | 19    | 179   | 157   | 252    | 225    | 331   | 64    | 45      | 6.8   | 22    |
| 2     | 14    | 3.0   | 19    | 190   | 149   | 250    | 210    | 300   | 55    | 39      | 6.2   | 22    |
| 3     | 13    | 1.6   | 21    | 202   | 137   | 280    | 198    | 280   | 50    | 39      | 6.8   | 24    |
| 4     | 12    | 1.6   | 21    | 205   | 131   | 305    | 188    | 265   | 45    | 37      | 7.5   | 22    |
| 5     | 10    | 1.6   | 21    | 222   | 135   | 302    | 183    | 245   | 43    | 44      | 4.6   | 16    |
| 6     | 8.0   | .55   | 39    | 238   | 129   | 300    | 177    | 212   | 40    | 45      | 4.6   | 17    |
| 7     | 5.9   | .55   | 111   | 238   | 125   | 295    | 222    | 183   | 38    | 44      | 4.0   | 22    |
| 8     | 5.3   | .55   | 210   | 230   | 129   | 325    | 285    | 173   | 34    | 43      | 3.0   | 21    |
| 9     | 6.6   | .29   | 278   | 222   | 125   | 340    | 315    | 181   | 34    | 40      | 2.6   | 17    |
| 10    | 10    | .29   | 292   | 225   | 118   | 332    | 322    | 190   | 29    | 44      | 2.1   | 14    |
| 11    | 5.9   | .55   | 272   | 222   | 116   | 330    | 320    | 188   | 27    | 46      | 1.7   | 7.5   |
| 12    | 4.7   | .55   | 248   | 220   | 112   | 310    | 310    | 179   | 26    | 45      | 1.7   | 7.5   |
| 13    | 4.7   | .55   | 220   | 210   | 135   | 325    | 405    | 169   | 34    | 41      | 2.6   | 7.5   |
| 14    | 4.7   | .55   | 200   | 205   | 192   | 345    | 544    | 165   | 39    | 40      | 2.6   | 8.2   |
| 15    | 4.1   | .55   | 212   | 185   | 268   | 358    | 603    | 177   | 37    | 38      | 2.1   | 8.2   |
| 16    | 4.7   | .55   | 222   | 179   | 340   | 390    | 617    | 185   | 38    | 38      | 1.7   | 6.8   |
| 17    | 4.1   | .55   | 212   | 170   | 378   | 519    | 680    | 183   | 33    | 37      | 12    | 6.8   |
| 18    | 4.1   | .55   | 198   | 160   | 390   | 592    | 701    | 181   | 27    | 35      | 50    | 6.2   |
| 19    | 4.1   | .55   | 185   | 155   | 390   | 578    | 656    | 175   | 24    | 33      | 65    | 5.6   |
| 20    | 4.1   | .55   | 179   | 155   | 369   | 525    | 656    | 163   | 24    | 32      | 55    | 4.0   |
| 21    | 3.5   | .55   | 169   | 151   | 352   | 480    | 680    | 149   | 22    | 32      | 42    | 3.0   |
| 22    | 3.0   | .85   | 159   | 159   | 325   | 447    | 746    | 151   | 18    | 28      | 32    | 2.1   |
| 23    | 3.0   | .85   | 147   | 161   | 298   | 420    | 828    | 165   | 24    | 26      | 26    | 1.4   |
| 24    | 4.1   | 1.2   | 139   | 169   | 275   | 402    | 816    | 143   | 28    | 21      | 22    | 4.6   |
| 25    | 3.5   | 1.2   | 129   | 173   | 260   | 378    | 733    | 129   | 32    | 18      | 20    | 5.6   |
| 26    | 4.1   | 1.6   | 125   | 183   | 248   | 350    | 632    | 114   | 39    | 16      | 26    | 3.0   |
| 27    | 4.1   | 2.0   | 125   | 179   | 248   | 325    | 548    | 97    | 45    | 16      | 30    | 4.0   |
| 28    | 4.1   | 4.1   | 118   | 179   | 242   | 302    | 481    | 82    | 46    | 14      | 28    | 6.8   |
| 29    | 3.0   | 6.6   | 118   | 177   | 255   | 280    | 424    | 72    | 48    | 12      | 26    | 16    |
| 30    | 3.0   | 14    | 131   | 173   | ----- | 262    | 376    | 74    | 50    | 9.4     | 22    | 22    |
| 31    | 3.5   | ----- | 157   | 165   | ----- | 245    | -----  | 68    | ----- | 8.2     | 24    | ----- |
| TOTAL | 182.9 | 50.98 | 4,696 | 5,881 | 6,528 | 11,144 | 14,081 | 5,369 | 1,093 | 1,005.6 | 540.6 | 333.8 |
| MEAN  | 5.90  | 1.70  | 151   | 190   | 225   | 359    | 469    | 173   | 36.4  | 32.4    | 17.4  | 11.1  |
| MAX   | 14    | 14    | 292   | 238   | 390   | 592    | 828    | 331   | 64    | 46      | 65    | 24    |
| MIN   | 3.0   | .29   | 19    | 151   | 112   | 245    | 177    | 68    | 18    | 8.2     | 1.7   | 1.4   |

CAL YR 1971 TOTAL 40,575.95 MEAN 111 MAX 328 MIN 0  
WTR YR 1972 TOTAL 50,905.88 MEAN 139 MAX 828 MIN .29

## MUSKINGUM RIVER BASIN

69

03143500 Wills Creek below Wills Creek Dam, at Wills Creek, Ohio

LOCATION.--Lat 40°09'34", long 81°50'51", in sec. 22, T.4 N., R.6 W., Coshocton County, on left bank 1,200 ft downstream from Wills Creek Dam, 1.3 miles southeast of town of Wills Creek, 2.7 miles southeast of Conesville, and 6.2 miles upstream from mouth.

DRAINAGE AREA.--842 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939, published as Wills Creek at Wills Creek.

GAGE.--Water-stage recorder. Datum of gage is 717.00 ft above mean sea level, adjustment of 1912. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1939, to Sept. 30, 1949, water-stage recorder, at site 1,500 ft downstream at same datum.

AVERAGE DISCHARGE.--34 years, 876 cfs.

EXTREMES.--Current year: Maximum discharge, 4,740 cfs Apr. 26 (gage height, 14.54 ft); minimum daily, 37 cfs Nov. 6.

Period of record: Maximum discharge, 6,930 cfs Mar. 7, 1940; maximum gage height, 17.50 ft Mar. 22, 1964 (backwater from Muskingum River); minimum daily discharge, 1 cfs Aug. 10, Oct. 27-29, 1948, Jan. 28, 1952, July 6-9, 1969, Apr. 3, 1970.

Flood of March 1913 reached a discharge of 22,300 cfs, computed by Corps of Engineers.

REMARKS.--Records good. Flow regulated by Senecaville Lake on Seneca Fork (80 miles upstream), Salt Fork Reservoir (43 miles upstream), and Wills Creek Lake (0.2 mile upstream), see stations 03141000, 03142290, and 03143000. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 57    | 54    | 411    | 980    | 515    | 893    | 812    | 1,640  | 269   | 335   | 77    | 115   |
| 2     | 57    | 51    | 454    | 1,290  | 458    | 952    | 755    | 1,560  | 258   | 386   | 74    | 107   |
| 3     | 55    | 50    | 441    | 1,190  | 425    | 1,370  | 698    | 1,460  | 247   | 363   | 82    | 98    |
| 4     | 57    | 43    | 371    | 1,180  | 400    | 1,910  | 638    | 1,390  | 227   | 318   | 81    | 96    |
| 5     | 58    | 40    | 315    | 1,260  | 373    | 2,140  | 593    | 1,320  | 201   | 290   | 70    | 111   |
| 6     | 55    | 37    | 331    | 1,370  | 405    | 1,880  | 605    | 1,230  | 181   | 296   | 65    | 134   |
| 7     | 51    | 40    | 631    | 1,510  | 518    | 1,590  | 869    | 1,100  | 166   | 301   | 66    | 130   |
| 8     | 46    | 46    | 1,350  | 1,270  | 558    | 1,570  | 1,620  | 875    | 150   | 312   | 69    | 111   |
| 9     | 46    | 48    | 2,060  | 1,070  | 520    | 1,830  | 2,200  | 791    | 138   | 306   | 77    | 93    |
| 10    | 50    | 45    | 2,330  | 1,090  | 498    | 1,930  | 2,240  | 875    | 137   | 321   | 71    | 79    |
| 11    | 48    | 46    | 2,030  | 1,090  | 458    | 1,660  | 1,850  | 1,130  | 129   | 338   | 68    | 69    |
| 12    | 48    | 44    | 1,390  | 1,020  | 438    | 1,400  | 1,500  | 1,120  | 122   | 326   | 70    | 64    |
| 13    | 46    | 43    | 1,070  | 935    | 448    | 1,320  | 2,350  | 886    | 144   | 295   | 71    | 59    |
| 14    | 52    | 42    | 946    | 879    | 722    | 1,580  | 3,310  | 775    | 163   | 248   | 66    | 59    |
| 15    | 58    | 41    | 947    | 866    | 1,520  | 1,700  | 3,440  | 753    | 153   | 201   | 60    | 57    |
| 16    | 60    | 42    | 1,070  | 836    | 2,340  | 1,630  | 3,390  | 808    | 151   | 177   | 52    | 53    |
| 17    | 61    | 42    | 1,290  | 641    | 2,690  | 2,180  | 3,510  | 914    | 143   | 172   | 74    | 51    |
| 18    | 58    | 94    | 1,350  | 611    | 2,360  | 2,980  | 3,690  | 930    | 136   | 237   | 136   | 50    |
| 19    | 50    | 221   | 1,170  | 585    | 1,870  | 3,300  | 3,800  | 939    | 131   | 331   | 184   | 49    |
| 20    | 46    | 301   | 895    | 500    | 1,640  | 2,970  | 3,860  | 880    | 126   | 450   | 339   | 47    |
| 21    | 43    | 333   | 669    | 475    | 1,480  | 2,130  | 3,660  | 742    | 122   | 470   | 441   | 45    |
| 22    | 44    | 342   | 561    | 475    | 1,240  | 1,700  | 1,720  | 633    | 117   | 385   | 397   | 45    |
| 23    | 44    | 343   | 530    | 538    | 1,080  | 1,920  | 1,100  | 593    | 127   | 309   | 327   | 44    |
| 24    | 44    | 342   | 475    | 638    | 1,030  | 2,130  | 1,540  | 565    | 145   | 263   | 244   | 51    |
| 25    | 44    | 343   | 419    | 812    | 1,060  | 2,100  | 3,380  | 497    | 167   | 233   | 195   | 56    |
| 26    | 46    | 343   | 378    | 1,000  | 1,140  | 1,860  | 4,550  | 425    | 222   | 205   | 173   | 59    |
| 27    | 47    | 343   | 361    | 1,110  | 1,190  | 1,580  | 4,250  | 376    | 246   | 172   | 159   | 66    |
| 28    | 52    | 346   | 356    | 1,040  | 1,130  | 1,380  | 2,790  | 348    | 254   | 142   | 143   | 71    |
| 29    | 60    | 362   | 375    | 938    | 987    | 1,180  | 2,060  | 325    | 267   | 116   | 139   | 123   |
| 30    | 61    | 386   | 427    | 842    | -----  | 994    | 1,780  | 299    | 303   | 95    | 134   | 333   |
| 31    | 57    | ----- | 607    | 650    | -----  | 882    | -----  | 279    | ----- | 83    | 126   | ----- |
| TOTAL | 1,601 | 4,853 | 26,010 | 28,691 | 29,493 | 54,641 | 68,560 | 26,458 | 5,342 | 8,476 | 4,330 | 2,525 |
| MEAN  | 51.6  | 162   | 839    | 926    | 1,017  | 1,763  | 2,285  | 853    | 178   | 273   | 140   | 84.2  |
| MAX   | 61    | 386   | 2,330  | 1,510  | 2,690  | 3,300  | 4,550  | 1,640  | 303   | 470   | 441   | 333   |
| MIN   | 43    | 37    | 315    | 475    | 373    | 882    | 593    | 279    | 117   | 83    | 52    | 44    |

CAL YR 1971 TOTAL 241,007 MEAN 660 MAX 4,800 MIN 19  
WTR YR 1972 TOTAL 260,980 MEAN 713 MAX 4,550 MIN 37

## MUSKINGUM RIVER BASIN

03144000 Wakatomika Creek near Frazeyburg, Ohio

LOCATION.--Lat 40°07'57", long 82°08'53", in NW 1/4 sec.13, T.3 N., R.9 W., Muskingum County, on right bank 2.0 miles northwest of Frazeyburg, 2.0 miles downstream from Fivemile Run, and 2.5 miles upstream from Black Run.

DRAINAGE AREA.--140 sq mi.

PERIOD OF RECORD.--September 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 748.12 ft above mean sea level, adjustment of 1912. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 145 cfs (14.06 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,700 cfs Apr. 7 (gage height, 5.59 ft), minimum, 6.1 cfs Dec. 4. Period of record: Maximum discharge, 13,700 cfs Jan. 22, 1959 (gage height, 13.15 ft), from rating curve extended above 7,700 cfs on basis of contracted-opening measurement of peak flow; minimum, 2.0 cfs Oct. 3, 1963 (gage height, 0.94 ft).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1113: 1937(M). WSP 1555: 1952(M).

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC     | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|---------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1     | 10    | 9.5   | 14      | 150   | 36    | 106   | 106    | 127   | 82    | 38    | 18    | 21    |
| 2     | 9.1   | 9.4   | 9.8     | 119   | 35    | 327   | 108    | 121   | 65    | 29    | 18    | 20    |
| 3     | 8.1   | 10    | 7.3     | 106   | 40    | 545   | 101    | 127   | 54    | 28    | 18    | 21    |
| 4     | 7.6   | 10    | 6.8     | 88    | 50    | 394   | 99     | 121   | 46    | 30    | 21    | 23    |
| 5     | 7.1   | 11    | 6.7     | 108   | 48    | 295   | 93     | 101   | 40    | 31    | 18    | 20    |
| 6     | 7.1   | 10    | 16      | 95    | 44    | 198   | 86     | 86    | 36    | 32    | 16    | 18    |
| 7     | 6.8   | 11    | 59      | 83    | 42    | 190   | 815    | 78    | 35    | 25    | 19    | 17    |
| 8     | 6.7   | 11    | 47      | 72    | 40    | 251   | 945    | 83    | 33    | 25    | 19    | 16    |
| 9     | 7.2   | 10    | 22      | 74    | 38    | 188   | 469    | 358   | 30    | 26    | 23    | 16    |
| 10    | 8.2   | 9.6   | 16      | 119   | 38    | 165   | 342    | 563   | 29    | 136   | 21    | 15    |
| 11    | 9.8   | 9.0   | 13      | 132   | 39    | 145   | 278    | 302   | 27    | 95    | 17    | 14    |
| 12    | 9.8   | 8.8   | 11      | 106   | 40    | 141   | 224    | 221   | 25    | 57    | 17    | 14    |
| 13    | 8.8   | 8.6   | 10      | 70    | 77    | 203   | 1,180  | 180   | 27    | 43    | 18    | 23    |
| 14    | 9.0   | 8.4   | 12      | 46    | 252   | 254   | 784    | 523   | 66    | 75    | 16    | 18    |
| 15    | 11    | 8.4   | 47      | 34    | 327   | 218   | 460    | 599   | 43    | 55    | 15    | 23    |
| 16    | 9.3   | 8.2   | 59      | 35    | 460   | 267   | 455    | 406   | 88    | 69    | 14    | 21    |
| 17    | 8.3   | 8.4   | 32      | 36    | 327   | 550   | 694    | 255   | 61    | 78    | 33    | 18    |
| 18    | 8.1   | 8.4   | 20      | 36    | 267   | 406   | 451    | 221   | 39    | 61    | 97    | 17    |
| 19    | 8.0   | 9.1   | 16      | 44    | 239   | 281   | 346    | 178   | 32    | 47    | 71    | 16    |
| 20    | 7.6   | 11    | 17      | 50    | 178   | 221   | 856    | 148   | 28    | 39    | 47    | 15    |
| 21    | 7.5   | 11    | 19      | 56    | 150   | 190   | 739    | 134   | 30    | 33    | 31    | 14    |
| 22    | 8.2   | 11    | 17      | 57    | 130   | 221   | 890    | 112   | 29    | 30    | 69    | 16    |
| 23    | 9.2   | 9.8   | 14      | 66    | 114   | 267   | 752    | 97    | 33    | 53    | 155   | 15    |
| 24    | 11    | 9.2   | 14      | 80    | 100   | 221   | 527    | 85    | 35    | 36    | 75    | 19    |
| 25    | 11    | 9.2   | 13      | 83    | 92    | 193   | 378    | 75    | 32    | 28    | 49    | 29    |
| 26    | 11    | 9.2   | 13      | 58    | 100   | 173   | 295    | 65    | 29    | 24    | 41    | 26    |
| 27    | 11    | 9.8   | 15      | 52    | 108   | 155   | 245    | 57    | 28    | 26    | 57    | 71    |
| 28    | 10    | 12    | 17      | 46    | 104   | 143   | 198    | 53    | 38    | 29    | 45    | 88    |
| 29    | 10    | 14    | 18      | 43    | 104   | 125   | 168    | 50    | 36    | 23    | 33    | 74    |
| 30    | 9.6   | 19    | 163     | 40    | ----- | 132   | 141    | 58    | 45    | 21    | 27    | 206   |
| 31    | 9.2   | ----- | 354     | 38    | ----- | 117   | -----  | 102   | ----- | 20    | 23    | ----- |
| TOTAL | 275.3 | 304.0 | 1,098.6 | 2,222 | 3,659 | 7,282 | 13,225 | 5,726 | 1,221 | 1,342 | 1,141 | 924   |
| MEAN  | 8.88  | 10.1  | 35.4    | 71.7  | 126   | 235   | 441    | 185   | 40.7  | 43.3  | 36.8  | 30.8  |
| MAX   | 11    | 19    | 354     | 150   | 460   | 550   | 1,180  | 599   | 88    | 136   | 155   | 206   |
| MIN   | 6.7   | 8.2   | 6.7     | 34    | 35    | 106   | 86     | 50    | 25    | 20    | 14    | 14    |
| CFSM  | .06   | .07   | .25     | .51   | .50   | 1.68  | 3.15   | 1.32  | .29   | .31   | .26   | .22   |
| IN.   | .07   | .08   | .29     | .59   | .57   | 1.93  | 3.51   | 1.52  | .32   | .36   | .30   | .25   |

CAL YR 1971 TOTAL 38,930.2 MEAN 107 MAX 1,480 MIN 6.5 CFSM .76 IN 10.34  
WTR YR 1972 TOTAL 38,419.9 MEAN 105 MAX 1,180 MIN 6.7 CFSM .75 IN 10.21

## PEAK DISCHARGE (BASE, 1,600 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 2330 | 5.59  | 1,700     | 4-13 | 1815 | 5.47  | 1,630     |



## MUSKINGUM RIVER BASIN

71

03144500 Muskingum River at Dresden, Ohio

LOCATION.--Lat 40°07'13", long 81°59'59", Muskingum County, on left bank 70 ft downstream from bridge on State Highway 208, 0.5 mile east of Dresden, and 0.5 mile downstream from Wakatomika Creek.

DRAINAGE AREA.--5,993 sq mi.

PERIOD OF RECORD.--September 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 693.15 ft above mean sea level, adjustment of 1912. Prior to Aug. 24, 1925, nonrecording gage at about same site and datum.

AVERAGE DISCHARGE.--51 years, 6,029 cfs.

EXTREMES.--Current year: Maximum discharge, 24,200 cfs Apr. 25 (gage height, 16.00 ft); minimum, 664 cfs Oct. 21.

Period of record: Maximum discharge, 100,000 cfs Aug. 9, 1935 (gage height, 31.6 ft); minimum, 335 cfs June 25, 1925.

Flood of March 1913 reached a stage of 46.0 ft, present site and datum, from floodmark (discharge, 228,000 cfs, computed by Corps of Engineers).

REMARKS.--Records good. Flow regulated by 15 flood-control reservoirs at points 15 to 105 miles upstream (see pp. 78-82). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1927(M). WSP 803: 1935. WSP 1922-23, 1928(M), 1929, 1930(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT    | NOV       | DEC     | JAN     | FEB     | MAR     | APR     | MAY     | JUN    | JUL     | AUG    | SEP    |
|-------------|--------|-----------|---------|---------|---------|---------|---------|---------|--------|---------|--------|--------|
| 1           | 1,090  | 860       | 2,380   | 10,600  | 2,940   | 6,530   | 6,840   | 13,400  | 3,680  | 4,340   | 2,160  | 2,210  |
| 2           | 1,060  | 860       | 2,550   | 9,630   | 2,940   | 9,430   | 6,250   | 13,400  | 3,910  | 4,220   | 2,050  | 2,020  |
| 3           | 1,100  | 840       | 2,600   | 8,330   | 2,960   | 14,600  | 5,960   | 11,300  | 3,650  | 3,680   | 2,060  | 2,000  |
| 4           | 1,060  | 840       | 2,490   | 7,430   | 2,970   | 16,100  | 5,720   | 11,400  | 3,320  | 4,880   | 2,000  | 2,060  |
| 5           | 1,020  | 850       | 2,450   | 7,530   | 2,790   | 15,300  | 5,510   | 9,630   | 3,000  | 6,040   | 1,880  | 1,930  |
| 6           | 933    | 830       | 2,540   | 7,890   | 2,420   | 12,900  | 5,310   | 8,350   | 2,740  | 5,330   | 1,780  | 1,840  |
| 7           | 880    | 850       | 3,520   | 7,350   | 2,860   | 10,500  | 8,210   | 7,470   | 2,560  | 4,860   | 1,710  | 1,720  |
| 8           | 860    | 870       | 6,040   | 6,310   | 2,670   | 10,100  | 16,000  | 6,700   | 2,440  | 4,290   | 1,670  | 1,630  |
| 9           | 880    | 890       | 7,850   | 5,350   | 2,440   | 12,100  | 15,400  | 7,590   | 2,300  | 3,880   | 1,720  | 1,540  |
| 10          | 988    | 850       | 7,610   | 5,260   | 2,270   | 12,100  | 13,400  | 11,200  | 2,190  | 4,080   | 1,720  | 1,460  |
| 11          | 1,100  | 830       | 6,590   | 6,310   | 2,330   | 10,700  | 11,800  | 14,000  | 2,070  | 4,440   | 1,630  | 1,400  |
| 12          | 1,180  | 840       | 5,310   | 6,400   | 2,440   | 10,400  | 10,700  | 11,800  | 1,990  | 4,880   | 1,570  | 1,350  |
| 13          | 1,130  | 830       | 4,510   | 6,380   | 2,840   | 9,930   | 14,400  | 10,600  | 2,100  | 4,460   | 1,520  | 1,330  |
| 14          | 1,050  | 850       | 4,100   | 5,470   | 4,520   | 14,500  | 19,600  | 10,100  | 3,650  | 4,920   | 1,510  | 1,520  |
| 15          | 999    | 870       | 4,780   | 4,950   | 7,470   | 16,800  | 20,800  | 10,800  | 3,600  | 4,290   | 1,450  | 4,630  |
| 16          | 966    | 850       | 7,310   | 4,020   | 9,780   | 17,500  | 19,600  | 10,600  | 3,890  | 4,270   | 1,420  | 6,400  |
| 17          | 988    | 944       | 8,090   | 2,860   | 11,300  | 20,000  | 19,600  | 9,520   | 4,440  | 8,490   | 1,670  | 5,650  |
| 18          | 999    | 1,180     | 7,050   | 3,240   | 10,400  | 21,600  | 20,500  | 8,330   | 3,920  | 11,800  | 4,640  | 4,610  |
| 19          | 955    | 1,350     | 5,600   | 4,200   | 9,410   | 21,400  | 20,300  | 7,550   | 3,260  | 12,600  | 5,960  | 3,990  |
| 20          | 860    | 1,470     | 4,580   | 3,810   | 8,230   | 19,500  | 20,800  | 6,800   | 2,800  | 11,700  | 5,510  | 4,070  |
| 21          | 720    | 1,660     | 4,120   | 3,600   | 7,170   | 16,800  | 22,400  | 6,140   | 2,550  | 10,200  | 4,830  | 3,720  |
| 22          | 933    | 1,710     | 3,830   | 3,520   | 5,980   | 15,200  | 22,700  | 5,540   | 2,420  | 7,170   | 4,120  | 3,080  |
| 23          | 850    | 1,680     | 3,590   | 3,760   | 6,320   | 16,200  | 21,200  | 5,130   | 2,470  | 5,600   | 4,040  | 2,600  |
| 24          | 880    | 1,640     | 3,140   | 4,490   | 6,440   | 16,800  | 22,200  | 4,780   | 2,660  | 4,830   | 4,360  | 2,400  |
| 25          | 944    | 1,660     | 2,800   | 5,180   | 5,980   | 15,500  | 24,000  | 4,390   | 3,020  | 4,240   | 3,830  | 2,380  |
| 26          | 955    | 1,660     | 2,640   | 5,240   | 5,800   | 13,900  | 23,300  | 3,960   | 3,180  | 3,960   | 3,240  | 2,400  |
| 27          | 922    | 1,710     | 2,600   | 4,810   | 6,140   | 12,000  | 22,000  | 3,600   | 3,480  | 3,570   | 3,700  | 2,740  |
| 28          | 890    | 1,800     | 2,620   | 4,490   | 6,210   | 9,870   | 18,500  | 3,320   | 3,520  | 3,060   | 4,180  | 4,300  |
| 29          | 880    | 1,990     | 2,840   | 3,910   | 5,940   | 8,990   | 15,800  | 3,120   | 3,140  | 2,910   | 3,620  | 5,310  |
| 30          | 850    | 2,190     | 3,520   | 3,620   | -----   | 9,030   | 14,200  | 3,020   | 3,440  | 2,560   | 2,980  | 6,690  |
| 31          | 850    | -----     | 8,450   | 3,200   | -----   | 7,670   | -----   | 3,210   | -----  | 2,330   | 2,510  | -----  |
| TOTAL       | 29,772 | 36,254    | 138,100 | 169,140 | 151,960 | 423,950 | 473,000 | 246,750 | 91,390 | 167,880 | 87,040 | 88,980 |
| MEAN        | 960    | 1,208     | 4,455   | 5,456   | 5,240   | 13,680  | 15,770  | 7,960   | 3,046  | 5,415   | 2,808  | 2,966  |
| MAX         | 1,180  | 2,190     | 8,450   | 10,600  | 11,300  | 21,600  | 24,000  | 14,000  | 4,440  | 12,600  | 5,960  | 6,690  |
| MIN         | 720    | 830       | 2,380   | 2,860   | 2,270   | 6,530   | 5,310   | 3,020   | 1,990  | 2,330   | 1,420  | 1,330  |
| CAL YR 1971 | TOTAL  | 1,764,842 | MEAN    | 4,835   | MAX     | 26,000  | MIN     | 720     |        |         |        |        |
| WTR YR 1972 | TOTAL  | 2,104,216 | MEAN    | 5,749   | MAX     | 24,000  | MIN     | 720     |        |         |        |        |

LOCATION.--Lat 39°59'19", long 82°28'30", in NW 1/4 sec.3, T.1 N., R.12 W., Licking County, near center span on downstream side of bridge on county road, 800 ft downstream from Beaver Run, 2.3 miles north of Hebron, and 2.5 miles upstream from Ramp Creek.

PERIOD OF RECORD.--October 1939 to September 1948, July 1968 to current year.

**AVERAGE DISCHARGE.--13 years, 128 cfs.**

Period of record: Maximum discharge, 4,120 cfs Mar. 6, 1945 (gage height, 12.1 ft, from flood marks); no flow Aug. 22, 1942.

REVISIONS (WATER YEARS).--WSP 923: 1940. WSP 1033: Drainage area.

| DAY         | OCT            | NOV     | DEC       | JAN       | FEB   | MAR     | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|---------|-----------|-----------|-------|---------|--------|-------|-------|-------|-------|-------|
| 1           | 6.0            | 4.1     | 212       | 210       | 22    | 145     | 92     | 50    | 83    | 34    | 9.7   | 20    |
| 2           | 4.1            | 4.5     | 200       | 145       | 21    | 569     | 76     | 46    | 54    | 17    | 10    | 16    |
| 3           | 4.1            | 5.1     | 159       | 228       | 27    | 547     | 70     | 46    | 38    | 21    | 11    | 22    |
| 4           | 4.5            | 4.5     | 61        | 322       | 35    | 286     | 72     | 51    | 28    | 56    | 9.4   | 22    |
| 5           | 8.2            | 4.3     | 10        | 230       | 33    | 166     | 73     | 43    | 23    | 36    | 9.4   | 23    |
| 6           | 9.0            | 4.1     | 34        | 170       | 30    | 108     | 61     | 38    | 19    | 25    | 8.6   | 22    |
| 7           | 7.9            | 4.3     | 428       | 96        | 28    | 100     | 496    | 31    | 18    | 15    | 8.6   | 20    |
| 8           | 7.9            | 4.3     | 511       | 70        | 26    | 259     | 834    | 47    | 15    | 14    | 7.9   | 19    |
| 9           | 8.6            | 4.3     | 307       | 76        | 24    | 156     | 356    | 652   | 14    | 10    | 10    | 18    |
| 10          | 7.9            | 6.0     | 260       | 317       | 23    | 98      | 322    | 631   | 13    | 54    | 10    | 17    |
| 11          | 6.6            | 5.1     | 183       | 296       | 22    | 82      | 234    | 194   | 12    | 43    | 10    | 17    |
| 12          | 6.3            | 4.5     | 53        | 205       | 21    | 81      | 204    | 117   | 13    | 26    | 7.9   | 20    |
| 13          | 6.3            | 4.3     | 40        | 80        | 30    | 82      | 638    | 90    | 15    | 16    | 7.9   | 25    |
| 14          | 7.5            | 4.1     | 50        | 50        | 280   | 102     | 394    | 815   | 15    | 12    | 7.9   | 20    |
| 15          | 6.6            | 3.4     | 357       | 35        | 465   | 106     | 228    | 442   | 15    | 9.7   | 9.4   | 21    |
| 16          | 6.0            | 3.8     | 379       | 22        | 704   | 135     | 478    | 347   | 34    | 19    | 8.5   | 19    |
| 17          | 4.8            | 3.6     | 182       | 18        | 336   | 377     | 828    | 266   | 29    | 42    | 16    | 19    |
| 18          | 4.3            | 3.6     | 79        | 20        | 250   | 283     | 436    | 228   | 22    | 25    | 109   | 18    |
| 19          | 4.8            | 3.8     | 53        | 40        | 255   | 148     | 363    | 160   | 15    | 19    | 135   | 24    |
| 20          | 6.9            | 4.1     | 57        | 46        | 124   | 106     | 526    | 78    | 13    | 15    | 98    | 24    |
| 21          | 11             | 4.3     | 106       | 43        | 102   | 90      | 478    | 65    | 12    | 13    | 46    | 23    |
| 22          | 6.3            | 5.4     | 78        | 45        | 108   | 252     | 912    | 57    | 11    | 13    | 29    | 19    |
| 23          | 4.8            | 4.8     | 72        | 63        | 79    | 345     | 576    | 46    | 11    | 18    | 42    | 18    |
| 24          | 5.1            | 5.1     | 97        | 87        | 80    | 168     | 432    | 39    | 10    | 16    | 62    | 32    |
| 25          | 6.6            | 163     | 94        | 78        | 67    | 130     | 364    | 34    | 10    | 19    | 53    | 48    |
| 26          | 6.0            | 190     | 93        | 53        | 88    | 101     | 206    | 30    | 10    | 20    | 46    | 138   |
| 27          | 6.3            | 193     | 134       | 40        | 104   | 92      | 92     | 25    | 10    | 15    | 35    | 284   |
| 28          | 4.8            | 190     | 370       | 35        | 94    | 124     | 72     | 24    | 10    | 12    | 29    | 264   |
| 29          | 4.5            | 198     | 284       | 28        | 115   | 103     | 60     | 23    | 23    | 7.5   | 25    | 150   |
| 30          | 3.6            | 215     | 272       | 25        | ----- | 126     | 54     | 45    | 17    | 6.0   | 25    | 447   |
| 31          | 3.6            | -----   | 537       | 23        | ----- | 184     | -----  | 142   | ----- | 6.0   | 22    | ----- |
| TOTAL       | 190.9          | 1,254.4 | 5,752     | 3,196     | 3,593 | 5,651   | 10,027 | 4,902 | 612   | 654.2 | 918.2 | 1,829 |
| MEAN        | 6.16           | 41.8    | 186       | 103       | 124   | 182     | 334    | 158   | 20.4  | 21.1  | 29.6  | 61.0  |
| MAX         | 11             | 215     | 537       | 322       | 704   | 569     | 912    | 815   | 83    | 56    | 135   | 447   |
| MIN         | 3.6            | 3.4     | 10        | 18        | 21    | 81      | 54     | 23    | 10    | 6.0   | 7.9   | 16    |
| CAL YR 1971 | TOTAL 35,337.6 |         | MEAN 96.8 | MAX 1,420 |       | MIN 3.4 |        |       |       |       |       |       |
| WTR YR 1972 | TOTAL 38,579.7 |         | MEAN 105  | MAX 912   |       | MIN 3.4 |        |       |       |       |       |       |

## 03146000 North Fork Licking River at Utica, Ohio

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4 N., R.12 W., Licking County, on left bank at upstream side of bridge on State Highway 13 at south edge of Utica, 0.2 mile downstream from unnamed right bank tributary, and 2.0 miles upstream from Lake Fork.

DRAINAGE AREA.--116 sq mi.

PERIOD OF RECORD.--October 1939 to September 1948, October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 934 ft (from topographic map). Prior to September 30, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 120 cfs (14.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,240 cfs Apr. 7 (gage height, 8.49 ft); minimum, 2.2 cfs Oct. 5, 6. Period of record: Maximum discharge, 6,750 cfs Jan. 29, 1970 (gage height, 12.72 ft); minimum observed, 0.6 cfs Aug. 13, Oct. 2, 1944.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio 1970: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC     | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|------|-------|---------|-------|-------|-------|--------|-------|-------|-------|---------|-------|
| 1     | 2.6  | 3.4   | 7.0     | 242   | 24    | 302   | 80     | 62    | 40    | 17    | 10      | 18    |
| 2     | 2.4  | 3.8   | 6.4     | 197   | 23    | 1,370 | 75     | 64    | 32    | 14    | 9.8     | 16    |
| 3     | 2.4  | 4.3   | 5.8     | 211   | 25    | 568   | 71     | 182   | 25    | 15    | 9.8     | 15    |
| 4     | 2.6  | 4.0   | 5.0     | 166   | 30    | 309   | 74     | 108   | 21    | 15    | 11      | 15    |
| 5     | 2.2  | 3.8   | 4.5     | 284   | 36    | 160   | 72     | 79    | 17    | 15    | 10      | 14    |
| 6     | 2.2  | 4.3   | 7.1     | 140   | 35    | 100   | 68     | 64    | 16    | 13    | 9.0     | 13    |
| 7     | 2.4  | 4.5   | 75      | 90    | 32    | 110   | 1,840  | 56    | 16    | 12    | 9.0     | 12    |
| 8     | 2.4  | 4.3   | 200     | 70    | 30    | 430   | 670    | 147   | 14    | 11    | 8.2     | 11    |
| 9     | 2.8  | 4.3   | 89      | 90    | 28    | 184   | 306    | 1,600 | 14    | 11    | 9.8     | 11    |
| 10    | 4.0  | 4.5   | 58      | 330   | 27    | 122   | 232    | 692   | 12    | 25    | 9.4     | 10    |
| 11    | 3.6  | 4.5   | 46      | 250   | 26    | 101   | 181    | 267   | 11    | 15    | 9.0     | 10    |
| 12    | 2.8  | 4.3   | 39      | 148   | 27    | 105   | 142    | 169   | 11    | 14    | 8.2     | 10    |
| 13    | 3.2  | 4.0   | 32      | 100   | 45    | 200   | 1,730  | 125   | 17    | 90    | 7.0     | 11    |
| 14    | 3.6  | 4.0   | 37      | 70    | 181   | 302   | 496    | 774   | 27    | 111   | 6.7     | 18    |
| 15    | 3.0  | 3.6   | 267     | 56    | 466   | 239   | 253    | 316   | 47    | 86    | 6.4     | 106   |
| 16    | 2.8  | 3.6   | 222     | 46    | 540   | 399   | 535    | 184   | 82    | 266   | 6.1     | 54    |
| 17    | 2.8  | 3.4   | 106     | 38    | 300   | 555   | 542    | 128   | 56    | 285   | 299     | 34    |
| 18    | 2.8  | 3.4   | 66      | 43    | 250   | 312   | 246    | 93    | 36    | 107   | 2,090   | 24    |
| 19    | 2.8  | 3.8   | 45      | 54    | 230   | 194   | 197    | 74    | 27    | 62    | 747     | 19    |
| 20    | 3.0  | 4.0   | 51      | 51    | 120   | 148   | 1,620  | 64    | 21    | 42    | 342     | 16    |
| 21    | 3.0  | 4.0   | 87      | 56    | 50    | 133   | 531    | 56    | 20    | 33    | 166     | 14    |
| 22    | 3.4  | 3.8   | 71      | 59    | 70    | 464   | 850    | 48    | 19    | 26    | 142     | 13    |
| 23    | 3.8  | 3.6   | 51      | 107   | 55    | 418   | 390    | 41    | 19    | 45    | 194     | 12    |
| 24    | 4.0  | 3.8   | 43      | 154   | 65    | 214   | 242    | 35    | 19    | 35    | 101     | 14    |
| 25    | 3.8  | 3.8   | 38      | 112   | 74    | 160   | 166    | 32    | 18    | 19    | 68      | 16    |
| 26    | 4.0  | 3.6   | 37      | 56    | 118   | 122   | 122    | 28    | 15    | 18    | 51      | 80    |
| 27    | 3.8  | 4.0   | 54      | 45    | 103   | 115   | 99     | 24    | 15    | 17    | 41      | 154   |
| 28    | 3.6  | 4.3   | 85      | 35    | 101   | 112   | 83     | 22    | 15    | 18    | 36      | 122   |
| 29    | 3.6  | 5.3   | 91      | 30    | 151   | 99    | 72     | 21    | 22    | 18    | 29      | 105   |
| 30    | 3.6  | 6.7   | 671     | 27    | ----- | 108   | 66     | 30    | 23    | 14    | 24      | 1,800 |
| 31    | 3.4  | ----- | 697     | 25    | ----- | 89    | -----  | 45    | ----- | 12    | 20      | ----- |
| TOTAL | 96.4 | 122.7 | 3,293.8 | 3,382 | 3,302 | 8,244 | 12,051 | 5,630 | 727   | 1,481 | 4,489.4 | 2,767 |
| MEAN  | 3.11 | 4.09  | 106     | 109   | 114   | 266   | 402    | 182   | 24.2  | 47.8  | 145     | 92.2  |
| MAX   | 4.0  | 6.7   | 697     | 330   | 540   | 1,370 | 1,840  | 1,600 | 82    | 285   | 2,090   | 1,800 |
| MIN   | 2.2  | 3.4   | 4.5     | 25    | 23    | 89    | 66     | 21    | 11    | 11    | 6.1     | 10    |
| CFSM  | .03  | .04   | .91     | .94   | .58   | 2.29  | 3.47   | 1.57  | .21   | .41   | 1.25    | .79   |
| IN.   | .03  | .04   | 1.06    | 1.08  | 1.06  | 2.64  | 3.86   | 1.81  | .23   | .47   | 1.44    | .89   |

CAL YR 1971 TOTAL 30,331.4 MEAN 83.1 MAX 1,760 MIN 1.9 CFSM .72 IN 9.73  
WTR YR 1972 TOTAL 45,586.3 MEAN 125 MAX 2,090 MIN 2.2 CFSM 1.08 IN 14.62

## PEAK DISCHARGE (BASE, 2,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 1500 | 8.49  | 3,240     | 8-18 | 1000 | 7.60  | 2,540     |
| 4-13 | 1100 | 7.98  | 2,830     | 9-30 | 1500 | 8.32  | 3,110     |

## MUSKINGUM RIVER BASIN

03146500 Licking River near Newark, Ohio

LOCATION.--Lat 40°03'33", long 83°20'23", in SW 1/4 T.2 N., R.11 W., Licking County, on right bank at downstream side of Stadden Bridge, 1.0 mile downstream from Shawnee Run, 1.5 miles upstream from Equality Run, and 3.5 miles east of Newark.

DRAINAGE AREA.--537 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 779.02 ft above mean sea level. Prior to May 9, 1940, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 545 cfs.

EXTREMES.--Current year: Maximum discharge, 6,660 cfs Apr. 13 (gage height, 10.05 ft); minimum, 47 cfs Nov. 17. Period of record: Maximum discharge, 45,000 cfs Jan. 21, 1959 (gage height, 20.3 ft, from high-water mark), from rating curve extended above 24,000 cfs on basis of flood-routing studies from station at Toboso; minimum, 15 cfs Jan. 12, 1954, result of freezeup.

REMARKS.--Records good. Occasional regulation by Buckeye Lake (capacity, 27,300 acre-ft) on South Fork 15.2 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 973: 1940(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | CCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG    | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|
| 1     | 68    | 53    | 232    | 1,130  | 140    | 768    | 528    | 390    | 439   | 195   | 106    | 115   |
| 2     | 62    | 59    | 212    | 822    | 140    | 2,710  | 474    | 369    | 343   | 159   | 102    | 108   |
| 3     | 59    | 54    | 195    | 875    | 150    | 2,640  | 444    | 473    | 283   | 167   | 100    | 107   |
| 4     | 59    | 54    | 90     | 828    | 150    | 1,510  | 444    | 489    | 244   | 192   | 98     | 105   |
| 5     | 59    | 54    | 61     | 1,010  | 180    | 1,040  | 432    | 375    | 220   | 182   | 94     | 102   |
| 6     | 60    | 55    | 133    | 816    | 170    | 726    | 387    | 313    | 208   | 152   | 93     | 98    |
| 7     | 60    | 57    | 545    | 540    | 160    | 654    | 3,180  | 273    | 202   | 137   | 123    | 95    |
| 8     | 60    | 55    | 911    | 420    | 150    | 1,290  | 3,230  | 372    | 189   | 134   | 95     | 92    |
| 9     | 67    | 54    | 588    | 462    | 140    | 980    | 1,560  | 3,130  | 181   | 151   | 117    | 90    |
| 10    | 65    | 55    | 439    | 1,200  | 140    | 666    | 1,210  | 2,910  | 171   | 267   | 96     | 87    |
| 11    | 62    | 53    | 358    | 1,100  | 144    | 552    | 1,020  | 1,300  | 163   | 273   | 91     | 85    |
| 12    | 60    | 54    | 177    | 588    | 147    | 528    | 828    | 894    | 159   | 179   | 88     | 89    |
| 13    | 60    | 52    | 135    | 280    | 310    | 618    | 4,890  | 779    | 186   | 155   | 86     | 89    |
| 14    | 66    | 51    | 182    | 215    | 732    | 868    | 2,620  | 2,910  | 189   | 308   | 85     | 91    |
| 15    | 60    | 53    | 782    | 122    | 1,300  | 861    | 1,450  | 2,060  | 221   | 230   | 84     | 114   |
| 16    | 60    | 53    | 973    | 131    | 1,940  | 1,110  | 1,870  | 1,440  | 347   | 499   | 82     | 130   |
| 17    | 59    | 52    | 554    | 137    | 1,330  | 1,850  | 2,790  | 1,090  | 300   | 665   | 630    | 108   |
| 18    | 60    | 52    | 300    | 137    | 1,140  | 1,430  | 1,520  | 878    | 219   | 383   | 3,150  | 97    |
| 19    | 57    | 57    | 207    | 251    | 1,100  | 924    | 1,190  | 746    | 183   | 255   | 1,790  | 90    |
| 20    | 58    | 52    | 209    | 260    | 696    | 708    | 3,070  | 584    | 170   | 202   | 1,040  | 87    |
| 21    | 57    | 55    | 290    | 275    | 588    | 630    | 2,310  | 511    | 163   | 170   | 580    | 85    |
| 22    | 60    | 52    | 283    | 280    | 618    | 1,210  | 2,970  | 450    | 161   | 150   | 377    | 88    |
| 23    | 58    | 51    | 209    | 387    | 522    | 1,700  | 2,100  | 394    | 160   | 148   | 426    | 83    |
| 24    | 58    | 51    | 210    | 534    | 468    | 1,000  | 1,470  | 352    | 154   | 171   | 371    | 153   |
| 25    | 58    | 125   | 205    | 504    | 409    | 774    | 1,160  | 310    | 146   | 167   | 308    | 133   |
| 26    | 58    | 180   | 201    | 270    | 492    | 648    | 951    | 281    | 147   | 138   | 262    | 498   |
| 27    | 58    | 196   | 221    | 210    | 540    | 612    | 670    | 266    | 143   | 144   | 220    | 1,130 |
| 28    | 56    | 188   | 457    | 190    | 452    | 684    | 553    | 252    | 137   | 131   | 180    | 1,290 |
| 29    | 55    | 232   | 582    | 170    | 582    | 618    | 484    | 275    | 210   | 127   | 156    | 811   |
| 30    | 56    | 234   | 1,410  | 160    | -----  | 654    | 424    | 370    | 245   | 114   | 136    | 2,520 |
| 31    | 53    | ----- | 3,060  | 150    | -----  | 636    | -----  | 574    | ----- | 108   | 122    | ----- |
| TOTAL | 1,848 | 2,443 | 14,411 | 14,454 | 15,110 | 31,599 | 46,229 | 25,810 | 6,283 | 6,453 | 11,288 | 8,770 |
| MEAN  | 59.6  | 81.4  | 465    | 466    | 521    | 1,019  | 1,541  | 833    | 209   | 208   | 364    | 292   |
| MAX   | 68    | 234   | 3,060  | 1,200  | 1,940  | 2,710  | 4,890  | 3,130  | 439   | 665   | 3,150  | 2,520 |
| MIN   | 53    | 51    | 61     | 122    | 140    | 528    | 387    | 252    | 137   | 108   | 82     | 83    |

CAL YR 1971 TOTAL 145,910 MEAN 400 MAX 4,790 MIN 51  
WTR YR 1972 TOTAL 184,698 MEAN 505 MAX 4,890 MIN 51

PEAK DISCHARGE (BASE, 6,500 CFS).--Apr. 13 (1730) 6,660 cfs (10.05 ft).



## MUSKINGUM RIVER BASIN

75

03147500 Licking River below Dillon Dam, near Dillon Falls, Ohio

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., Muskingum County, on left bank 500 ft downstream from Dillon Dam, 2.0 miles northwest of Dillon Falls, and 5.8 miles upstream from mouth.

DRAINAGE AREA.--742 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1962, published as Licking River at Dillon.

GAGE.--Water-stage recorder. Datum of gage is 700.0 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 27, 1940, water-stage recorder at site 2.3 miles downstream at different datum. Oct. 27, 1940, to Sept. 30, 1962, water-stage recorder at site 2.6 miles downstream at datum 16.3 ft lower.

AVERAGE DISCHARGE.--33 years, 757 cfs.

EXTREMES.--Current year: Maximum discharge, 4,700 cfs Apr. 28 (gage height, 9.63 ft); minimum, 49 cfs Nov. 6. Period of record: Maximum discharge, 47,000 cfs Jan. 22, 1959 (gage height, 32.46 ft, datum then in use), from rating curve extended above 30,000 cfs on basis of slope-area measurement of peak flow; minimum daily, 19 cfs Dec. 22, 1960.

Flood of March 1913 reached a stage of 37.0 ft, site and datum in use 1940-62, from floodmark (backwater from Muskingum River).

REMARKS.--Records good. Flow regulated by Dillon Lake since December 1960 (see station 03147300). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio, 1966: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG    | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|
| 1     | 95    | 72    | 280    | 2,070  | 219    | 719    | 323    | 665    | 600   | 322   | 119    | 137   |
| 2     | 88    | 71    | 296    | 2,010  | 234    | 1,310  | 581    | 624    | 378   | 198   | 119    | 137   |
| 3     | 76    | 75    | 263    | 1,770  | 259    | 2,200  | 633    | 616    | 245   | 172   | 116    | 170   |
| 4     | 77    | 90    | 251    | 1,330  | 326    | 2,700  | 628    | 677    | 276   | 172   | 116    | 159   |
| 5     | 77    | 70    | 169    | 1,080  | 273    | 2,730  | 556    | 667    | 266   | 266   | 116    | 132   |
| 6     | 55    | 67    | 222    | 1,090  | 167    | 2,360  | 537    | 523    | 235   | 204   | 101    | 114   |
| 7     | 54    | 101   | 468    | 685    | 245    | 1,210  | 1,170  | 459    | 216   | 142   | 69     | 114   |
| 8     | 56    | 80    | 954    | 446    | 279    | 1,120  | 2,700  | 462    | 210   | 142   | 111    | 114   |
| 9     | 55    | 67    | 839    | 497    | 214    | 1,570  | 3,450  | 1,860  | 186   | 142   | 145    | 111   |
| 10    | 53    | 66    | 509    | 1,030  | 212    | 1,010  | 3,350  | 3,810  | 164   | 259   | 137    | 114   |
| 11    | 77    | 66    | 490    | 1,470  | 211    | 699    | 3,110  | 3,530  | 153   | 437   | 116    | 106   |
| 12    | 91    | 66    | 355    | 1,060  | 210    | 664    | 1,750  | 1,650  | 153   | 276   | 119    | 92    |
| 13    | 77    | 70    | 162    | 687    | 424    | 735    | 1,210  | 826    | 210   | 195   | 116    | 92    |
| 14    | 76    | 74    | 234    | 595    | 595    | 836    | 1,570  | 1,570  | 225   | 222   | 109    | 111   |
| 15    | 76    | 240   | 421    | 437    | 1,060  | 1,000  | 1,480  | 3,190  | 225   | 283   | 92     | 121   |
| 16    | 76    | 252   | 1,020  | 173    | 1,740  | 1,000  | 1,020  | 3,270  | 310   | 374   | 92     | 121   |
| 17    | 76    | 213   | 1,040  | 186    | 2,380  | 1,030  | 1,480  | 2,030  | 362   | 625   | 97     | 121   |
| 18    | 79    | 201   | 503    | 327    | 2,330  | 1,060  | 2,900  | 1,110  | 280   | 625   | 2,230  | 140   |
| 19    | 78    | 268   | 351    | 364    | 1,780  | 1,070  | 3,430  | 898    | 207   | 276   | 3,310  | 148   |
| 20    | 76    | 274   | 310    | 366    | 1,150  | 1,060  | 3,490  | 826    | 186   | 259   | 1,600  | 119   |
| 21    | 75    | 242   | 286    | 366    | 721    | 1,070  | 3,550  | 568    | 184   | 248   | 720    | 89    |
| 22    | 76    | 239   | 359    | 385    | 712    | 1,090  | 1,550  | 496    | 186   | 195   | 514    | 89    |
| 23    | 76    | 201   | 377    | 448    | 713    | 1,100  | 1,160  | 482    | 186   | 170   | 518    | 89    |
| 24    | 100   | 189   | 280    | 504    | 651    | 1,190  | 3,060  | 428    | 189   | 170   | 554    | 192   |
| 25    | 108   | 187   | 261    | 689    | 546    | 1,380  | 4,320  | 386    | 172   | 170   | 455    | 276   |
| 26    | 82    | 241   | 271    | 505    | 466    | 1,530  | 4,370  | 283    | 140   | 189   | 273    | 164   |
| 27    | 69    | 393   | 330    | 331    | 673    | 1,590  | 4,430  | 229    | 140   | 232   | 255    | 615   |
| 28    | 68    | 466   | 399    | 291    | 669    | 1,560  | 4,570  | 314    | 140   | 198   | 255    | 1,520 |
| 29    | 78    | 483   | 574    | 279    | 668    | 1,530  | 4,060  | 318    | 145   | 142   | 216    | 1,170 |
| 30    | 79    | 363   | 670    | 235    | -----  | 826    | 2,250  | 378    | 330   | 134   | 175    | 988   |
| 31    | 72    | ----- | 1,460  | 253    | -----  | 143    | -----  | 615    | ----- | 119   | 140    | ----- |
| TOTAL | 2,351 | 5,487 | 14,404 | 21,959 | 20,127 | 39,092 | 68,688 | 33,760 | 6,899 | 7,558 | 13,105 | 7,665 |
| MEAN  | 75.8  | 183   | 465    | 708    | 694    | 1,261  | 2,290  | 1,089  | 230   | 244   | 423    | 256   |
| MAX   | 108   | 483   | 1,460  | 2,070  | 2,380  | 2,730  | 4,570  | 3,810  | 600   | 625   | 3,310  | 1,520 |
| MIN   | 53    | 66    | 162    | 173    | 167    | 143    | 323    | 229    | 140   | 119   | 69     | 89    |

CAL YR 1971 TOTAL 217,603 MEAN 596 MAX 4,120 MIN 53  
WTR YR 1972 TOTAL 241,095 MEAN 659 MAX 4,570 MIN 53

## MUSKINGUM RIVER BASIN

03150000 Muskingum River at McConnelsville, Ohio

LOCATION.--Lat 39°38'42", long 81°51'00", in SE 1/4 sec.11, T.10 N., R.12 W., Morgan County, on left bank just upstream from Dam 7, at McConnelsville, and 3.5 miles downstream from Oilspring Run.

DRAINAGE AREA.--7,422 sq mi.

PERIOD OF RECORD.--October 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 650.31 ft above mean sea level, adjustment of 1912. Prior to July 27, 1922, nonrecording gage at site 0.5 mile upstream at same datum. July 27, 1922, to Aug. 10, 1926, nonrecording gage and Aug. 11, 1926, to Sept. 8, 1959, water-stage recorder at present site and datum. Sept. 9, 1959, to July 18, 1960, nonrecording gage at site 0.5 mile upstream at same datum.

AVERAGE DISCHARGE.--51 years, 7,132 cfs.

EXTREMES.--Current year: Maximum discharge, 33,100 cfs Apr. 22 (gage height 9.58 ft); minimum, 856 cfs Oct. 22 (gage height, 1.36 ft).

Period of record: Maximum discharge, 126,000 cfs Jan. 26, 1937 (gage height, 21.14 ft); minimum, 218 cfs Aug. 25, 1930 (gage height, -0.65 ft) from rating curve extended below 470 cfs.

Flood of Mar. 27, 1913 reached a stage of 33.5 ft (discharge, 270,000 cfs, computed by Corps of Engineers).

REMARKS.--Records good. Flow regulated by 16 flood-control reservoirs 36.6 to 148 miles upstream from station (see pp. 78-82). Some regulation at low flow by powerplant 19 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 783: 1913(M). WSP 853: 1933(M). WSP 1173: 1922-24, 1928(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC     | JAN     | FEB     | MAR     | APR     | MAY     | JUN     | JUL     | AUG     | SEP    |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 1     | 1,200  | 1,010  | 2,640   | 13,200  | 3,700   | 7,870   | 8,080   | 15,000  | 4,520   | 4,810   | 2,540   | 2,660  |
| 2     | 1,180  | 1,030  | 2,920   | 12,800  | 3,620   | 10,600  | 7,800   | 14,600  | 4,690   | 4,780   | 2,460   | 2,420  |
| 3     | 1,140  | 1,030  | 2,940   | 11,600  | 3,720   | 18,000  | 7,480   | 13,600  | 4,410   | 4,380   | 2,380   | 2,420  |
| 4     | 1,170  | 988    | 2,940   | 9,890   | 3,860   | 19,900  | 7,450   | 12,200  | 4,100   | 4,380   | 2,460   | 2,620  |
| 5     | 1,130  | 1,010  | 2,750   | 9,810   | 3,580   | 19,700  | 7,140   | 11,700  | 3,750   | 6,420   | 2,220   | 2,340  |
| 6     | 1,060  | 999    | 3,100   | 9,740   | 3,280   | 17,300  | 6,710   | 9,920   | 3,420   | 6,260   | 2,100   | 2,180  |
| 7     | 966    | 1,010  | 5,130   | 9,140   | 3,200   | 14,100  | 10,300  | 8,800   | 3,150   | 5,440   | 2,020   | 2,070  |
| 8     | 900    | 1,030  | 6,480   | 7,840   | 3,550   | 12,800  | 18,400  | 8,010   | 2,980   | 4,930   | 1,910   | 1,950  |
| 9     | 889    | 1,060  | 8,440   | 6,870   | 3,180   | 14,200  | 20,700  | 8,690   | 2,820   | 4,440   | 2,000   | 1,860  |
| 10    | 966    | 1,070  | 8,160   | 6,810   | 2,940   | 14,400  | 18,600  | 14,700  | 2,730   | 4,440   | 2,040   | 1,720  |
| 11    | 1,030  | 1,030  | 7,320   | 8,180   | 2,840   | 13,000  | 16,600  | 17,800  | 2,540   | 4,960   | 1,960   | 1,640  |
| 12    | 1,230  | 1,020  | 6,120   | 8,500   | 3,220   | 11,400  | 14,300  | 16,400  | 2,420   | 5,500   | 1,900   | 1,590  |
| 13    | 1,220  | 1,010  | 4,950   | 8,010   | 4,080   | 11,200  | 19,800  | 12,000  | 2,360   | 4,990   | 2,090   | 1,520  |
| 14    | 1,230  | 999    | 4,300   | 7,100   | 6,840   | 14,300  | 23,200  | 12,200  | 3,100   | 5,290   | 1,880   | 1,600  |
| 15    | 1,130  | 1,090  | 4,770   | 6,320   | 9,850   | 17,800  | 23,900  | 13,600  | 4,540   | 5,140   | 1,770   | 2,680  |
| 16    | 1,070  | 1,320  | 7,320   | 5,050   | 13,500  | 19,700  | 24,600  | 15,200  | 4,320   | 4,630   | 1,670   | 6,450  |
| 17    | 1,070  | 1,250  | 9,040   | 3,500   | 15,200  | 22,000  | 24,400  | 13,300  | 5,020   | 7,480   | 1,880   | 6,260  |
| 18    | 1,080  | 1,340  | 7,880   | 3,680   | 15,100  | 22,900  | 24,000  | 10,900  | 4,960   | 11,500  | 4,480   | 5,410  |
| 19    | 1,130  | 1,620  | 6,360   | 4,960   | 13,500  | 22,900  | 24,500  | 9,400   | 4,080   | 13,000  | 10,800  | 4,520  |
| 20    | 1,050  | 1,910  | 5,370   | 5,140   | 11,500  | 21,500  | 24,400  | 8,610   | 3,480   | 12,500  | 8,080   | 4,270  |
| 21    | 944    | 1,960  | 4,680   | 4,660   | 9,210   | 19,200  | 25,600  | 7,700   | 3,180   | 11,400  | 6,450   | 4,130  |
| 22    | 900    | 2,050  | 4,320   | 4,570   | 8,040   | 17,900  | 30,100  | 6,870   | 2,910   | 8,880   | 5,290   | 3,580  |
| 23    | 1,060  | 2,000  | 4,150   | 4,840   | 7,760   | 18,200  | 24,400  | 6,320   | 2,940   | 6,640   | 4,720   | 3,020  |
| 24    | 1,010  | 1,980  | 3,750   | 5,380   | 8,120   | 18,700  | 25,400  | 5,860   | 3,020   | 5,470   | 5,200   | 2,760  |
| 25    | 1,070  | 1,960  | 3,310   | 6,290   | 7,590   | 18,300  | 27,800  | 5,380   | 3,250   | 4,870   | 4,840   | 2,870  |
| 26    | 1,130  | 1,960  | 3,100   | 6,450   | 7,310   | 16,700  | 28,200  | 4,900   | 3,520   | 4,440   | 4,160   | 2,730  |
| 27    | 1,070  | 2,100  | 3,050   | 5,930   | 7,480   | 15,000  | 26,700  | 4,320   | 3,650   | 4,220   | 3,910   | 3,100  |
| 28    | 1,030  | 2,360  | 3,120   | 5,440   | 7,870   | 13,100  | 24,400  | 4,100   | 4,080   | 3,750   | 4,600   | 5,320  |
| 29    | 1,010  | 2,500  | 3,310   | 5,020   | 7,800   | 11,400  | 21,400  | 3,880   | 3,680   | 3,320   | 4,410   | 6,740  |
| 30    | 1,010  | 2,810  | 3,980   | 4,460   | -----   | 11,300  | 18,100  | 3,860   | 3,800   | 3,000   | 3,650   | 7,240  |
| 31    | 988    | -----  | 7,500   | 4,000   | -----   | 8,880   | -----   | 3,970   | -----   | 2,760   | 3,020   | -----  |
| TOTAL | 33,063 | 44,506 | 153,200 | 215,180 | 201,440 | 494,250 | 584,460 | 303,790 | 107,420 | 184,020 | 108,890 | 99,670 |
| MEAN  | 1,067  | 1,484  | 4,942   | 6,941   | 6,496   | 15,940  | 19,480  | 9,800   | 3,581   | 5,936   | 3,513   | 3,322  |
| MAX   | 1,230  | 2,810  | 9,040   | 13,200  | 15,200  | 22,900  | 30,100  | 17,800  | 5,020   | 13,000  | 10,800  | 7,240  |
| MIN   | 889    | 988    | 2,640   | 3,500   | 2,840   | 7,870   | 6,710   | 3,860   | 2,360   | 2,760   | 1,670   | 1,520  |

CAL YR 1971 TOTAL 2,080,491 MEAN 5,700 MAX 32,000 MIN 801  
WTR YR 1972 TOTAL 2,529,889 MEAN 6,912 MAX 30,100 MIN 889

## MUSKINGUM RIVER BASIN

77

03150250 Meigs Creek near Beverly, Ohio

LOCATION.--Lat 39°36'00", long 81°42'42", in SE 1/4 sec.25, T.10 N., R.11 W., Morgan County, on right bank 400 ft downstream from County Road bridge at Mill Grove, 0.4 mile downstream from Perry Run, 0.5 mile upstream from Onion Run, 2.2 miles upstream from mouth, and 5.3 miles northwest of Beverly.

DRAINAGE AREA.--136 sq mi.

PERIOD OF RECORD.--Mar. 1, 1972 to Sept. 30, 1972.

GAGE.--Water-stage recorder. Datum of gage is 614.19 ft above mean sea level.

EXTREMES.--Maximum discharge during period, 2,410 cfs Apr. 13 (gage height, 14.13 ft); maximum gage height, 14.85 ft Apr. 22 (backwater from Muskingum River); minimum discharge, 7.6 cfs Aug. 17.

REMARKS.--Records good except for periods of backwater from Muskingum River, which are poor.

Discharge measurements made prior to beginning of continuous discharge record

| Date                | Discharge<br>(cfs) |
|---------------------|--------------------|
| Sept. 21, 1971..... | 19.8               |
| Nov. 29, 1971.....  | 40.3               |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT | NOV   | DEC | JAN | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|-----|-------|-----|-----|-------|-------|--------|-------|-------|-------|---------|-------|
| 1     |     |       |     |     |       | 160   | 123    | 140   | 55    | 57    | 9.0     | 9.0   |
| 2     |     |       |     |     |       | 330   | 130    | 140   | 49    | 42    | 8.5     | 8.3   |
| 3     |     |       |     |     |       | 639   | 117    | 150   | 45    | 40    | 80      | 58    |
| 4     |     |       |     |     |       | 558   | 195    | 140   | 38    | 48    | 54      | 85    |
| 5     |     |       |     |     |       | 528   | 182    | 120   | 35    | 48    | 20      | 37    |
| 6     |     |       |     |     |       | 382   | 150    | 110   | 33    | 49    | 14      | 23    |
| 7     |     |       |     |     |       | 308   | 632    | 100   | 35    | 42    | 14      | 16    |
| 8     |     |       |     |     |       | 360   | 654    | 110   | 30    | 43    | 13      | 12    |
| 9     |     |       |     |     |       | 255   | 500    | 150   | 27    | 48    | 10      | 11    |
| 10    |     |       |     |     |       | 220   | 300    | 200   | 26    | 42    | 9.0     | 10    |
| 11    |     |       |     |     |       | 180   | 240    | 170   | 24    | 41    | 8.6     | 9.6   |
| 12    |     |       |     |     |       | 160   | 220    | 140   | 23    | 31    | 9.0     | 9.2   |
| 13    |     |       |     |     |       | 150   | 1,750  | 110   | 24    | 24    | 9.6     | 9.8   |
| 14    |     |       |     |     |       | 140   | 900    | 100   | 67    | 25    | 8.8     | 10    |
| 15    |     |       |     |     |       | 140   | 500    | 94    | 64    | 75    | 8.5     | 9.4   |
| 16    |     |       |     |     |       | 300   | 460    | 130   | 74    | 172   | 8.1     | 9.4   |
| 17    |     |       |     |     |       | 500   | 520    | 110   | 59    | 105   | 17      | 9.6   |
| 18    |     |       |     |     |       | 340   | 320    | 100   | 42    | 65    | 248     | 9.2   |
| 19    |     |       |     |     |       | 210   | 260    | 94    | 33    | 54    | 282     | 17    |
| 20    |     |       |     |     |       | 170   | 230    | 110   | 28    | 42    | 126     | 13    |
| 21    |     |       |     |     |       | 160   | 220    | 96    | 42    | 30    | 68      | 11    |
| 22    |     |       |     |     |       | 300   | 1,100  | 88    | 43    | 23    | 44      | 9.0   |
| 23    |     |       |     |     |       | 440   | 800    | 83    | 45    | 34    | 34      | 8.8   |
| 24    |     |       |     |     |       | 340   | 520    | 74    | 63    | 30    | 28      | 11    |
| 25    |     |       |     |     |       | 240   | 420    | 67    | 58    | 24    | 25      | 16    |
| 26    |     |       |     |     |       | 180   | 360    | 59    | 48    | 19    | 22      | 16    |
| 27    |     |       |     |     |       | 150   | 260    | 54    | 41    | 16    | 25      | 24    |
| 28    |     |       |     |     |       | 140   | 200    | 49    | 33    | 13    | 16      | 54    |
| 29    |     |       |     |     |       | 160   | 160    | 46    | 63    | 12    | 12      | 57    |
| 30    |     |       |     |     | ----- | 158   | 150    | 48    | 75    | 12    | 9.8     | 126   |
| 31    |     | ----- |     |     | ----- | 132   | -----  | 58    | ----- | 10    | 10      | ----- |
| TOTAL |     |       |     |     |       | 8,430 | 12,573 | 3,240 | 1,322 | 1,316 | 1,250.9 | 708.3 |
| MEAN  |     |       |     |     |       | 272   | 419    | 105   | 44.1  | 42.5  | 40.4    | 23.6  |
| MAX   |     |       |     |     |       | 639   | 1,750  | 200   | 75    | 172   | 282     | 126   |
| MIN   |     |       |     |     |       | 132   | 117    | 46    | 23    | 10    | 8.1     | 8.3   |

Note:--Stage discharge relation affected by backwater from Muskingum River Mar. 10-28, Apr. 9-12, Apr. 14 to May 22.

## MUSKINGUM RIVER BASIN

## Reservoirs in Muskingum River basin

- 03119500 BOLIVAR RESERVOIR.**--Lat 40°38'56", long 81°25'57", Tuscarawas County, in gate house of dam on Sandy Creek, 1.1 miles east of Bolivar. Drainage area, 504 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 895.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 12,770 acre-ft Mar. 18, 19 (elevation, 920.80 ft); minimum, 87 acre-ft several days in November (elevation, 896.70 ft). Extremes for period of record: Maximum contents, 63,320 acre-ft Jan. 26, 1959 (elevation, 944.01 ft); minimum, 62 acre-ft Oct. 9, 1933 (elevation, 896.30 ft).  
Reservoir is formed by earthfill dam completed Nov. 15, 1937. Usable capacity 149,500 acre-ft between elevations 895.0 ft (lowest outlet) and 982.0 ft (crest of spillway). Dead storage below elevation 895.0 ft, 113 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03120000 LEESVILLE LAKE** (formerly published as Leesville Reservoir).--Lat 40°28'15", long 81°11'40", in E 1/4 sec. 36, T.13 N., R.6 W., Carroll County, in gate house of dam on McGuire Creek, 1.4 miles northeast of Leesville. Drainage area, 48.3 sq mi. Period of record, April 1938 to current year. Month-end contents prior to September 1939, published in WSP 1305. Water-stage recorder. Datum of gage is 928.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 20,570 acre-ft Mar. 20 (elevation, 964.38 ft); minimum, 13,680 acre-ft Dec. 18 (elevation, 957.01 ft). Extremes for period of record: Maximum contents, 26,430 acre-ft Apr. 17, 1948 (elevation, 969.59 ft); minimum, 41 acre-ft Oct. 9-25, 1939 (elevation, 928.38 ft), but may have been less during period Sept. 18-24, 1940.  
Lake is formed by earthfill dam completed Oct. 22, 1937. Usable capacity 37,070 acre-ft between elevations 928.0 ft (lowest outlet) and 977.5 ft (crest of spillway), of which 19,170 acre-ft is in the conservation pool. Dead storage below elevation 928.0 ft, 329 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduit through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03121000 ATWOOD LAKE** (formerly published as Atwood Reservoir).--Lat 40°31'34", long 81°17'09", in SE 1/4 sec. 28, T.15 N., R.7 W., Tuscarawas County, in gate house of dam on Indian Fork, 1.5 miles southeast of New Cumberland. Drainage area, 59.9 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 890.0 ft above mean sea level; gage readings have been reduced to elevations above mean sea level. Prior to Oct. 11, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 26,850 acre-ft Mar. 20 (elevation, 930.03 ft); minimum, 15,690 acre-ft Jan. 17 (elevation, 922.25 ft). Extremes for period of record: Maximum contents, 35,210 acre-ft Feb. 8, 1952 (elevation, 934.51 ft); minimum, 2.2 acre-ft Jan. 8, 1940 (elevation, 890.36 ft).  
Lake is formed by earthfill dam completed Sept. 23, 1937. Usable capacity 49,690 acre-ft between elevations 890.0 ft (lowest outlet) and 941.0 ft (crest of spillway), of which 23,590 acre-ft is in the conservation pool. Dead storage below elevation 890.0 ft, 8 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03122000 DOVER LAKE** (formerly published as Dover Reservoir).--Lat 40°33'29", long 81°24'46", in SW 1/4 sec. 6, T.9 N., R.1 W., Tuscarawas County, in gate house of dam on Tuscarawas River, 4.2 miles northeast of Dover. Drainage area, 1,404 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 858.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Sept. 22, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 9,100 acre-ft Mar. 17 (elevation, 882.65 ft); no contents several days in Oct., Nov., July, Aug., and Sept. Extremes for period of record: Maximum contents, 109,000 acre-ft July 12, 1969 (elevation, 905.00 ft); no contents several days during most years.  
Lake is formed by concrete dam completed Nov. 29, 1937. Usable capacity 203,000 acre-ft between elevations 862.0 ft (lowest outlet) and 916.0 ft (crest of spillway), of which 1,000 acre-ft is in conservation pool. No dead storage. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03123500 BEACH CITY LAKE** (formerly published as Beach City Reservoir).--Lat 40°38'06", long 81°33'30", in T.10 N., R.3 W., Tuscarawas County, in gate house of dam on Sugar Creek, 1.6 miles southeast of Beach City. Drainage area, 300 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 931.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Feb. 4, 1939, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 6,500 acre-ft Apr. 22 (elevation, 954.74 ft); minimum, 1,830 acre-ft Oct. 7, 8 (elevation, 948.29 ft). Extremes for period of record: Maximum contents, 70,120 acre-ft July 6, 1969 (elevation, 976.25 ft); minimum, 1.1 acre-ft several days in September and October 1939 (elevation, 931.60 ft).  
Lake is formed by earthfill dam completed Aug. 13, 1937. Usable capacity 71,650 acre-ft between elevations 931.0 ft (lowest outlet) and 976.5 ft (crest of spillway), of which 1,700 acre-ft is in conservation pool. No dead storage. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03125500 PIEDMONT LAKE** (formerly published as Piedmont Reservoir).--Lat 40°11'31", long 81°12'57", in SE 1/4 sec. 35, T.10 N., R.6 W., Harrison County, in gate house of dam on Stillwater Creek, 0.4 mile west of Piedmont. Drainage area, 85.9 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 881.75 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 38,950 acre-ft Apr. 24 (elevation, 915.32 ft); minimum, 24,930 acre-ft Dec. 21 (elevation, 908.95 ft). Extremes for period of record: Maximum contents, 46,650 acre-ft June 11, 12, 1947 (elevation, 918.33 ft); minimum, 26 acre-ft Sept. 18-25, 1939 (elevation, 882.25 ft).  
Lake is formed by earthfill dam completed May 22, 1937. Usable capacity 64,990 acre-ft between elevations 881.75 (lowest outlet) and 924.6 ft (crest of spillway), of which 33,500 acre-ft is in the conservation pool. Dead storage below elevation 881.75 ft, 71 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03126500 CLENDENING LAKE** (formerly published as Clendening Reservoir).--Lat 40°16'10", long 81°16'43", in NW 1/4 sec. 16, T.12 N., R.7 W., Harrison County, in gate house of dam on Brushy Fork 0.6 mile east of Tippecanoe. Drainage area, 69.3 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 862.00 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to July 11, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 30,500 acre-ft Apr. 26 (elevation, 900.12 ft); minimum, 18,160 acre-ft Jan. 17 (elevation, 892.78 ft). Extremes for period of record: Maximum contents, 38,060 acre-ft Feb. 7, 1952 (elevation, 903.85 ft); minimum, 5.9 acre-ft Nov. 4, 1938 (elevation, 862.33 ft).  
Lake is formed by earthfill dam completed Nov. 1, 1937. Usable capacity 53,970 acre-ft between elevations 862.0 ft (lowest outlet) and 910.5 ft (crest of spillway), of which 26,470 acre-ft is in the conservation pool. Dead storage below elevation 862.0 ft, 27 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.



## Reservoirs in Muskingum River basin--Continued

- 03128000 TAPPAN LAKE (formerly published as Tappan Reservoir).--Lat 40°21'24", long 81°13'38", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, in gate house of dam on Little Stillwater Creek, 0.9 mile west of Tappan. Drainage area, 71.1 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 870.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 55,960 acre-ft Mar. 20 (elevation, 907.17 ft); minimum, 25,450 acre-ft Dec. 23 (elevation, 894.90 ft). Extremes for period of record: Maximum contents, 48,440 acre-ft Feb. 5, 6, 1952 (elevation, 904.53 ft); no contents Sept. 29, 1939.
- Lake is formed by earthfill dam completed Oct. 24, 1936. Usable capacity 61,500 acre-ft between elevations 870.0 ft (lowest outlet) and 909.0 ft (crest of spillway), of which 35,070 acre-ft is in conservation pool. Dead storage below elevation 870.0 ft, 46 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03129500 CHARLES MILL LAKE (formerly published as Charles Mill Reservoir).--Lat 40°44'26", long 82°21'47", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, in gate house of dam on Black Fork, 2.5 miles south of Mifflin. Drainage area, 215 sq mi. Period of record, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 987.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 28,180 acre-ft Apr. 24 (elevation, 1,006.90 ft); minimum, 2,540 acre-ft several days in February (elevation, 992.94 ft). Extremes for period of record: Maximum contents, 53,480 acre-ft Jan. 25, 1959 (elevation, 1,013.53 ft); minimum, 733 acre-ft Dec. 24, 1965 (elevation, 989.89 ft).
- Lake is formed by earthfill dam completed Aug. 17, 1936. Usable capacity 87,690 acre-ft between elevations 987.0 ft (lowest outlet) and 1,020.0 ft (crest of spillway), of which 7,090 acre-ft is in the conservation pool. Dead storage below elevation 987.0 ft, 310 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam or through bypass gate around conservation weir. Water stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03133000 PLEASANT HILL LAKE (formerly published as Pleasant Hill Reservoir).--Lat 40°37'26", long 82°19'33", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, in gate house of dam on Clear Fork, 2.5 miles south of Perryville. Drainage area, 197 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 971.75 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 23,790 acre-ft Apr. 23 (elevation, 1,030.17 ft); minimum, 7,920 acre-ft Jan. 6 (elevation, 1,012.32 ft). Extremes for period of record: Maximum contents, 43,530 acre-ft Jan. 23, 1959 (elevation, 1,044.01 ft); minimum, 74 acre-ft May 8, 1938 (elevation, 976.63 ft).
- Lake is formed by earthfill dam completed Feb. 1, 1938. Usable capacity 87,640 acre-ft between elevations 971.75 ft (lowest outlet) and 1,065.0 ft (crest of spillway), of which 13,510 acre-ft is in the conservation pool. Dead storage below elevation 971.75 ft, 12 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03134500 MOHICANVILLE RESERVOIR.--Lat 40°43'28", long 82°09'08", in SE 1/4 sec. 34, T.21 N., R.15 W., Ashland County, in gate house of dam on Lake Fork, 2 miles east of Mohicanville. Drainage area, 271 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 932.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 13,890 acre-ft Apr. 23 (elevation, 948.22 ft); minimum, 30 acre-ft several days in October (elevation, 933.10 ft). Extremes for period of record: Maximum contents, 96,330 acre-ft July 7, 1969 (elevation, 962.35 ft); minimum, 9.9 acre-ft several days in 1941, 1944, 1945; minimum elevation, 932.38 ft several days in August, September, October, 1941.
- Reservoir is formed by earthfill dam completed Dec. 24, 1936. Usable capacity 102,000 acre-ft between elevations 932.0 ft (lowest outlet) and 963.0 ft (crest of spillway). Dead storage below elevation 932.0 ft, 18 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03138000 MOHAWK RESERVOIR.--Lat 40°21'12", long 82°05'12", in SW 1/4 sec. 6, T.6 N., R.8 W., Coshocton County, in gate house of dam on Walhonding River, 1.5 miles northwest of Nellie. Drainage area, 1,504 sq mi. Period of record, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 799.2 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 40,710 acre-ft Apr. 24 (elevation, 842.44 ft); minimum, 65 acre-ft Nov. 18 (elevation, 800.81 ft). Extremes for period of record: Maximum contents, 176,000 acre-ft Jan. 25, 1959 (elevation, 873.94 ft); minimum, 44 acre-ft Sept. 21, Oct. 4, 1955; minimum elevation, 800.35 ft Oct. 4, 1955, from graph based on gage readings.
- Reservoir is formed by earthfill dam completed Sept. 22, 1937. Usable capacity 284,900 acre-ft between elevations 799.2 ft (lowest outlet) and 890.0 ft (crest of spillway). Dead storage below elevation 799.2 ft, 59 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in tunnels through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03141000 SENECAVILLE LAKE (formerly published as Senecaville Reservoir).--Lat 39°55'31", long 81°26'06", Guernsey County, in gate house of dam on Seneca Fork, 1.5 miles southeast of Senecaville. Drainage area, 118 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 812.05 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Sept. 21, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 51,110 acre-ft Apr. 25 (elevation, 834.79 ft); minimum, 28,080 acre-ft several days in December (elevation, 828.06 ft). Extremes for period of record: Maximum contents, 61,430 acre-ft Mar. 24, 1945 (elevation, 837.27 ft); minimum, 360 acre-ft Oct. 22, 23, 1939 (elevation, 812.53 ft).
- Lake is formed by earthfill dam completed May 14, 1937. Usable capacity 86,340 acre-ft between elevations 812.05 ft (lowest outlet) and 842.5 ft (top of Taintor gates), of which 41,300 acre-ft is in conservation pool. Usable capacity at elevation, 831.0 ft (crest of spillway), 37,180 acre-ft. Dead storage below elevation 812.05 ft 1,950 acre-ft. Figures given herein represent usable contents. Taintor gates normally remain closed to maintain conservation pool at elevation 832.2 ft and outflow is controlled by gates in conduits through dam. Lake is used for flood control and conservation. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03142290 SALT FORK RESERVOIR.--Lat 40°06'15", long 81°33'15", in T.3 N., R.3 W., Guernsey County, at outlet works near left end of dam on Salt Fork, 0.8 mile upstream from mouth, and 5.0 miles north of Cambridge. Drainage area, 159 sq mi. Period of record, September 1968 to current year. Water-stage recorder. Datum of gage is 700.00 ft above mean sea level; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 53,220 acre-ft Apr. 23 (elevation, 803.45 ft); minimum, 42,070 acre-ft Nov. 9, 10 (elevation, 800.04 ft). Extremes for period of record: Maximum contents, 55,470 acre-ft Apr. 25, 1970 (elevation, 804.09 ft); minimum, 12,200 acre-ft Oct. 17, 1968 (elevation, 786.53 ft).
- Reservoir is formed by earthfill dam with concrete morning-glory spillway and emergency spillway cut in natural rock; storage began Dec. 30, 1967. Usable capacity, 41,950 acre-ft between elevations 772.5 ft (invert of lowest outlet) and 800.0 ft (crest of morning-glory spillway). Dead storage below elevation 772.5 ft, 1,250 acre-ft. Additional flood-retention capacity, 28,600 acre-ft between elevations 800.0 ft and 808.0 ft (crest of emergency spillway). Figures given herein represent usable contents. There are no gates on spillway and all regulation is done by conduits through dam. Reservoir is used for recreation, flood control, and future municipal supply. Capacity curve furnished by State Department of Natural Resources.

## MUSKINGUM RIVER BASIN

## Reservoirs in Muskingum River basin--Continued

03143000 WILLS CREEK LAKE (formerly published as Wills Creek Reservoir).--Lat 40°09'25", long 81°51'00", in SE 1/4 sec. 23, T.4 N., R.6 W., Coshocton County, in gate house of dam on Wills Creek, 1.3 miles south of village of Wills Creek. Drainage area, 842 sq mi. Period of record, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 733.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 23,100 acre-ft Apr. 24 (elevation, 752.60 ft); minimum, 3,860 acre-ft Nov. 6 (elevation, 741.33 ft). Extremes for period of record: Maximum contents, 169,700 acre-ft Mar. 15, 1964 (elevation, 776.73 ft); minimum, 300 acre-ft Oct. 22, 23, 1939 (elevation, 734.10 ft).

Lake is formed by earthfill dam completed Oct. 13, 1937. Usable capacity, 194,400 acre-ft between elevations 733.0 ft (lowest outlet) and 779.0 ft (crest of spillway), of which 4,420 acre-ft is in conservation pool. Dead storage below elevation 733.0 ft, 1,580 acre-ft. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

03147300 DILLON LAKE (formerly published as Dillon Reservoir).--Lat 39°59'32", long 82°04'57", in T.1 N., R.8 W., Muskingum County, in outlet works of control tower at dam on Licking River, 2 miles northwest of Dillon Falls, and 5.8 miles upstream from mouth. Drainage area, 742 sq mi. Period of record, January 1961 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 52,420 acre-ft Apr. 24 (elevation 751.59 ft); minimum, 12,930 acre-ft Dec. 5, 6 (elevation 733.85 ft). Extremes for period of record: Maximum contents, 142,600 acre-ft Mar. 13, 1964 (elevation, 772.88 ft); minimum observed, 208 acre-ft Mar. 31, 1961 (elevation, 710.94 ft).

Lake formed by earth dam with concrete spillway; closure of dam made July 29, 1959; storage to maintain conservation pool began Dec. 17, 1960. Usable capacity 274,000 acre-ft between elevations 704.0 ft (lowest outlet) and 790.0 ft (crest of spillway) of which 13,170 acre-ft is in conservation pool. Dead storage below elevation 704.0 ft, 30 acre ft. Figures given herein represent usable contents. Lake is used primarily for flood control. There are no gates on spillway and all regulation is done by gates in conduits through abutment of dam. Gage-height chart and capacity curve furnished by Corps of Engineers.

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| Date                       | Elevation<br>(feet) | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) | Elevation<br>(feet)     | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) |
|----------------------------|---------------------|-----------------------------|--------------------------------------|-------------------------|-----------------------------|--------------------------------------|
| 03119500 Bolivar Reservoir |                     |                             |                                      | 03120000 Leesville Lake |                             |                                      |
| Sept. 30.....              | 896.90              | 99                          | -                                    | 962.45                  | 18,620                      | -                                    |
| Oct. 31.....               | 896.80              | 93                          | -6                                   | 962.36                  | 18,530                      | -90                                  |
| Nov. 30.....               | 897.20              | 121                         | +28                                  | 960.54                  | 16,810                      | -1,720                               |
| Dec. 31.....               | 904.20              | 1,300                       | +1,179                               | 957.52                  | 14,110                      | -2,700                               |
| CAL YR 1971.....           | -                   | -                           | +1,031                               | -                       | -                           | +280                                 |
| Jan. 31.....               | 898.00              | 186                         | -1,114                               | 957.23                  | 13,870                      | -240                                 |
| Feb. 29.....               | 901.86              | 741                         | +555                                 | 960.30                  | 16,590                      | +2,720                               |
| Mar. 31.....               | 899.35              | 336                         | -405                                 | 962.92                  | 19,090                      | +2,500                               |
| Apr. 30.....               | 899.15              | 310                         | -26                                  | 962.88                  | 19,050                      | -40                                  |
| May 31.....                | 899.36              | 327                         | +27                                  | 962.74                  | 18,810                      | -140                                 |
| June 30.....               | 898.60              | 249                         | -88                                  | 962.77                  | 18,940                      | +30                                  |
| July 31.....               | 897.80              | 170                         | -79                                  | 962.60                  | 18,770                      | -170                                 |
| Aug. 31.....               | 897.70              | 162                         | -8                                   | 962.60                  | 18,770                      | 0                                    |
| Sept. 30.....              | 898.70              | 260                         | +98                                  | 962.66                  | 18,830                      | +60                                  |
| WTR YR 1972.....           | -                   | -                           | +161                                 | -                       | -                           | +210                                 |

|                      |        |        |        |                     |     |        |
|----------------------|--------|--------|--------|---------------------|-----|--------|
| 03121000 Atwood Lake |        |        |        | 03122000 Dover Lake |     |        |
| Sept. 30.....        | 927.53 | 22,890 | -      | 864.91              | 0   | -      |
| Oct. 31.....         | 927.40 | 22,690 | -200   | 864.80              | 0   | 0      |
| Nov. 30.....         | 927.45 | 22,770 | +80    | 866.04              | 5.9 | +5.9   |
| Dec. 31.....         | 923.04 | 16,640 | -6,130 | 871.18              | 327 | +321.1 |
| CAL YR 1971.....     | -      | -      | +700   | -                   | -   | +262   |
| Jan. 31.....         | 922.45 | 15,930 | -710   | 866.41              | 14  | -313   |
| Feb. 29.....         | 925.36 | 19,700 | +3,770 | 869.11              | 118 | +104   |
| Mar. 31.....         | 928.17 | 23,860 | +4,160 | 868.30              | 78  | -40    |
| Apr. 30.....         | 928.09 | 23,740 | -120   | 868.30              | 78  | 0      |
| May 31.....          | 927.77 | 23,250 | -490   | 866.39              | 14  | -64    |
| June 30.....         | 927.79 | 23,280 | +30    | 867.80              | 57  | +43    |
| July 31.....         | 927.66 | 23,080 | -200   | 865.40              | 2.0 | -55    |
| Aug. 31.....         | 927.74 | 23,200 | +120   | 865.11              | 0.6 | -1.4   |
| Sept. 30.....        | 927.83 | 23,340 | +140   | 871.01              | 299 | +298.4 |
| WTR YR 1972.....     | -      | -      | +450   | -                   | -   | +299   |

## MUSKINGUM RIVER BASIN

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## Reservoirs in Muskingum River basin--Continued

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| Date             | Elevation<br>(feet)      | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) | Elevation<br>(feet)    | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) |
|------------------|--------------------------|-----------------------------|--------------------------------------|------------------------|-----------------------------|--------------------------------------|
|                  | 03123500 Beach City Lake |                             |                                      | 03125500 Piedmont Lake |                             |                                      |
| Sept. 30.....    | 948.38                   | 1,870                       | -                                    | 912.79                 | 33,040                      | -                                    |
| Oct. 31.....     | 948.31                   | 1,840                       | -30                                  | 912.60                 | 32,610                      | -430                                 |
| Nov. 30.....     | 948.65                   | 2,000                       | +160                                 | 910.83                 | 28,730                      | -3,880                               |
| Dec. 31.....     | 949.92                   | 2,660                       | +660                                 | 909.54                 | 26,110                      | -2,620                               |
| CAL YR 1971..... | -                        | -                           | +430                                 | -                      | -                           | +780                                 |
| Jan. 31.....     | 948.83                   | 2,080                       | -580                                 | 909.06                 | 25,150                      | -960                                 |
| Feb. 29.....     | 949.96                   | 2,680                       | +600                                 | 910.87                 | 28,810                      | +3,660                               |
| Mar. 31.....     | 949.48                   | 2,420                       | -260                                 | 912.47                 | 32,320                      | +3,510                               |
| Apr. 30.....     | 949.45                   | 2,400                       | -20                                  | 914.51                 | 37,000                      | +4,680                               |
| May 31.....      | 949.07                   | 2,200                       | -200                                 | 912.74                 | 32,930                      | -4,070                               |
| June 30.....     | 949.28                   | 2,310                       | +110                                 | 912.85                 | 33,170                      | +240                                 |
| July 31.....     | 949.78                   | 2,060                       | -250                                 | 912.56                 | 32,530                      | -640                                 |
| Aug. 31.....     | 948.88                   | 2,100                       | +40                                  | 912.65                 | 32,730                      | +200                                 |
| Sept. 30.....    | 950.18                   | 2,810                       | +710                                 | 912.85                 | 33,170                      | +440                                 |
| WTR YR 1972..... | -                        | -                           | +940                                 | -                      | -                           | +130                                 |

|                  |                          |        |        |                      |        |        |
|------------------|--------------------------|--------|--------|----------------------|--------|--------|
|                  | 03126500 Clendening Lake |        |        | 03128000 Tappan Lake |        |        |
| Sept. 30.....    | 897.67                   | 25,910 | -      | 898.88               | 34,080 | -      |
| Oct. 31.....     | 897.56                   | 25,720 | -190   | 898.80               | 33,890 | -190   |
| Nov. 30.....     | 895.00                   | 21,470 | -4,250 | 896.90               | 29,640 | -4,250 |
| Dec. 31.....     | 893.40                   | 19,030 | -2,440 | 895.49               | 26,680 | -2,960 |
| CAL YR 1971..... | -                        | -      | +730   | -                    | -      | +1,210 |
| Jan. 31.....     | 892.92                   | 18,360 | -670   | 895.11               | 25,880 | -800   |
| Feb. 29.....     | 895.00                   | 21,470 | +3,110 | 897.41               | 30,760 | +4,880 |
| Mar. 31.....     | 897.18                   | 25,080 | +3,610 | 898.59               | 33,410 | +2,650 |
| Apr. 30.....     | 898.46                   | 27,350 | +2,270 | 899.26               | 34,980 | +1,570 |
| May 31.....      | 897.76                   | 26,060 | -1,290 | 899.15               | 34,710 | -270   |
| June 30.....     | 898.00                   | 26,470 | +410   | 899.31               | 35,100 | +390   |
| July 31.....     | 897.62                   | 25,830 | -640   | 899.03               | 34,430 | -670   |
| Aug. 31.....     | 897.71                   | 25,980 | +150   | 899.12               | 34,640 | +210   |
| Sept. 30.....    | 897.65                   | 25,880 | -100   | 899.04               | 34,450 | -190   |
| WTR YR 1972..... | -                        | -      | -30    | -                    | -      | +370   |

|                  |                            |        |         |                             |        |        |
|------------------|----------------------------|--------|---------|-----------------------------|--------|--------|
|                  | 03129500 Charles Mill Lake |        |         | 03133000 Pleasant Hill Lake |        |        |
| Sept. 30.....    | 996.85                     | 6,890  | -       | 1,018.84                    | 12,560 | -      |
| Oct. 31.....     | 996.80                     | 6,830  | -60     | 1,015.72                    | 10,170 | -2,390 |
| Nov. 30.....     | 996.87                     | 6,920  | +90     | 1,013.05                    | 8,380  | -1,790 |
| Dec. 31.....     | 993.10                     | 2,670  | -4,250  | 1,014.48                    | 9,330  | +950   |
| CAL YR 1971..... | -                          | -      | -4,170  | -                           | -      | +1,310 |
| Jan. 31.....     | 993.88                     | 3,390  | +720    | 1,012.65                    | 8,130  | -1,200 |
| Feb. 29.....     | 997.26                     | 7,450  | +4,060  | 1,014.80                    | 9,540  | +1,410 |
| Mar. 31.....     | 997.48                     | 7,760  | +310    | 1,019.78                    | 13,330 | +3,790 |
| Apr. 30.....     | 1,003.14                   | 17,840 | +10,080 | 1,020.64                    | 14,090 | +760   |
| May 31.....      | 997.12                     | 7,260  | -10,580 | 1,019.82                    | 13,360 | -730   |
| June 30.....     | 997.52                     | 7,820  | +560    | 1,019.96                    | 13,480 | +120   |
| July 31.....     | 997.15                     | 7,300  | -520    | 1,019.67                    | 13,240 | -240   |
| Aug. 31.....     | 997.40                     | 7,650  | +350    | 1,019.64                    | 13,220 | -20    |
| Sept. 30.....    | 999.48                     | 10,760 | +3,110  | 1,021.23                    | 14,620 | +1,400 |
| WTR YR 1972..... | -                          | -      | +3,870  | -                           | -      | +2,060 |

## MUSKINGUM RIVER BASIN

## Reservoirs in Muskingum River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| Date                            | Elevation<br>(feet) | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) | Elevation<br>(feet)       | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) |
|---------------------------------|---------------------|-----------------------------|--------------------------------------|---------------------------|-----------------------------|--------------------------------------|
| 03134500 Mohicanville Reservoir |                     |                             |                                      | 03138000 Mohawk Reservoir |                             |                                      |
| Sept. 30.....                   | 933.50              | 46                          | -                                    | 801.86                    | 121                         | -                                    |
| Oct. 31.....                    | 933.20              | 34                          | -12                                  | 801.34                    | 92                          | -29                                  |
| Nov. 30.....                    | 933.51              | 46                          | +12                                  | 801.58                    | 105                         | +13                                  |
| Dec. 31.....                    | 937.72              | 331                         | +285                                 | 812.20                    | 1,550                       | +1,445                               |
| CAL YR 1971.....                | -                   | -                           | +266                                 | -                         | -                           | +1,290                               |
| Jan. 31.....                    | 933.49              | 45                          | -286                                 | 803.70                    | 254                         | -1,296                               |
| Feb. 29.....                    | 936.09              | 195                         | +150                                 | 805.88                    | 466                         | +212                                 |
| Mar. 31.....                    | 934.50              | 92                          | -103                                 | 805.61                    | 438                         | -28                                  |
| Apr. 30.....                    | 935.88              | 180                         | +88                                  | 831.66                    | 18,080                      | +17,642                              |
| May 31.....                     | 933.80              | 57                          | -123                                 | 803.78                    | 261                         | -17,819                              |
| June 30.....                    | 935.41              | 148                         | +91                                  | 804.53                    | 329                         | +68                                  |
| July 31.....                    | 935.15              | 130                         | -18                                  | 803.72                    | 256                         | -73                                  |
| Aug. 31.....                    | 933.48              | 45                          | -85                                  | 802.58                    | 168                         | -88                                  |
| Sept. 30.....                   | 944.80              | 5,320                       | +5,275                               | 821.60                    | 6,340                       | +6,172                               |
| WTR YR 1972.....                | -                   | -                           | +5,274                               | -                         | -                           | +6,219                               |

| 03141000 Senecaville Lake |        |        | 03142290 Salt Fork Reservoir |        |        |         |
|---------------------------|--------|--------|------------------------------|--------|--------|---------|
| Sept. 30.....             | 832.07 | 40,830 | -                            | 800.25 | 42,720 | -       |
| Oct. 31.....              | 831.93 | 40,340 | -490                         | 800.09 | 42,230 | -490    |
| Nov. 30.....              | 829.43 | 32,130 | -8,210                       | 800.30 | 42,880 | +650    |
| Dec. 31.....              | 828.45 | 29,210 | -2,920                       | 801.24 | 45,820 | +3,060  |
| CAL YR 1971.....          | -      | -      | +140                         | -      | -      | +11,570 |
| Jan. 31.....              | 828.18 | 28,430 | -780                         | 801.18 | 45,630 | -190    |
| Feb. 29.....              | 830.29 | 34,850 | +6,420                       | 801.57 | 46,870 | +1,240  |
| Mar. 31.....              | 831.95 | 40,410 | +5,560                       | 801.50 | 46,650 | -220    |
| Apr. 30.....              | 833.68 | 46,750 | +6,340                       | 802.08 | 48,520 | +1,870  |
| May 31.....               | 832.15 | 41,120 | -5,630                       | 800.75 | 44,280 | -4,240  |
| June 30.....              | 832.36 | 41,870 | +750                         | 800.65 | 43,960 | -320    |
| July 31.....              | 832.22 | 41,370 | -500                         | 800.22 | 42,630 | -1,330  |
| Aug. 31.....              | 832.16 | 41,150 | -220                         | 800.47 | 43,410 | +780    |
| Sept. 30.....             | 832.29 | 41,620 | +470                         | 800.45 | 43,340 | -70     |
| WTR YR 1972.....          | -      | -      | +790                         | -      | -      | +620    |

|                  | 03143000 | Wills Creek Lake |        | 03147300 | Dillon Lake |        |
|------------------|----------|------------------|--------|----------|-------------|--------|
| Sept. 30.....    | 741.48   | 3,980            | -      | 737.07   | 17,570      | -      |
| Oct. 31.....     | 741.42   | 3,930            | -50    | 737.03   | 17,510      | -60    |
| Nov. 30.....     | 742.69   | 5,100            | +1,170 | 734.03   | 13,160      | -4,350 |
| Dec. 31.....     | 743.29   | 5,740            | +640   | 737.71   | 18,600      | +5,440 |
| CAL YR 1971..... | -        | -                | -1,090 | -        | -           | +5,510 |
| Jan. 31.....     | 743.18   | 5,610            | -130   | 734.06   | 13,200      | -5,400 |
| Feb. 29.....     | 743.87   | 6,410            | +800   | 734.05   | 13,190      | -10    |
| Mar. 31.....     | 743.72   | 6,240            | -170   | 736.70   | 17,000      | +3,810 |
| Apr. 30.....     | 744.83   | 7,660            | +1,420 | 737.10   | 17,620      | +620   |
| May 31.....      | 742.37   | 4,780            | -2,880 | 737.17   | 17,730      | +110   |
| June 30.....     | 742.50   | 4,910            | +130   | 737.23   | 17,830      | +100   |
| July 31.....     | 741.60   | 4,080            | -830   | 737.06   | 17,560      | -270   |
| Aug. 31.....     | 741.74   | 4,200            | +120   | 737.11   | 17,640      | +80    |
| Sept. 30.....    | 742.74   | 5,150            | +950   | 738.58   | 20,040      | +2,400 |
| WTR YR 1972..... | -        | -                | +1,170 | -        | -           | +2,470 |



03156000 Hunters Run at Lancaster, Ohio

LOCATION.--Lat 39°41'57", long 82°37'18", in NE 1/4 sec.11, T.14 N., R.19 W., Fairfield County, on right bank at downstream side of bridge on U.S. Highway 22, 1.0 mile southwest of Lancaster, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--10.0 sq mi.

PERIOD OF RECORD.--January 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 823.6 ft above mean sea level.

AVERAGE DISCHARGE.--16 years, 9.25 cfs (12.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,390 cfs Apr. 13 (gage height, 7.15 ft); minimum, 0.76 cfs Oct. 2, 3.

Period of record: Maximum discharge, 1,820 cfs May 27, 1968 (gage height, 8.00 ft), from rating curve extended above 600 cfs on basis of slope-area measurement at gage height, 7.09 ft; minimum, 0.28 cfs Aug. 3, 4, 1969.

Flood of July 21 or 22, 1948 reached a stage of 15.4 ft (discharge, 11,200 cfs, on basis contracted-opening measurement of peak flow at Pennsylvania Railroad bridge, 0.8 mile upstream).

REMARKS.--Records fair. Flood affected by temporary retention in four retarding basins upstream from station (combined capacity, 2,820 acre-ft). Controlled drainage area is 8.49 sq mi. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1     | .82   | 1.2   | 1.8   | 6.0   | 1.5   | 5.1   | 5.5   | 5.5   | 7.0   | 3.5  | 1.6  | 1.4   |
| 2     | .76   | 1.3   | 1.2   | 5.6   | 1.6   | 19    | 5.5   | 5.7   | 5.4   | 2.6  | 2.1  | 2.1   |
| 3     | .82   | 1.4   | 1.0   | 5.8   | 1.6   | 24    | 4.7   | 6.5   | 4.6   | 2.8  | 2.6  | 1.8   |
| 4     | .89   | 1.2   | 1.0   | 5.6   | 2.0   | 17    | 12    | 5.0   | 4.0   | 2.6  | 2.4  | 1.2   |
| 5     | .89   | 1.1   | 1.1   | 8.9   | 2.8   | 12    | 8.8   | 4.5   | 3.8   | 2.1  | 2.0  | 1.0   |
| 6     | .96   | 1.2   | 5.1   | 8.9   | 2.1   | 9.4   | 5.5   | 4.1   | 3.4   | 1.7  | 1.7  | 1.0   |
| 7     | .88   | 1.3   | 10    | 6.8   | 2.9   | 7.0   | 31    | 3.9   | 2.8   | 1.8  | 1.2  | 1.0   |
| 8     | .89   | 1.3   | 8.9   | 5.6   | 2.5   | 11    | 21    | 8.3   | 3.6   | 2.0  | 1.1  | 1.1   |
| 9     | .98   | 1.2   | 6.7   | 5.4   | 2.2   | 7.0   | 17    | 168   | 3.0   | 5.0  | 1.0  | 1.0   |
| 10    | 1.2   | 1.4   | 4.3   | 6.3   | 1.9   | 5.1   | 13    | 30    | 2.7   | 2.6  | 1.0  | .93   |
| 11    | 1.1   | 1.3   | 3.3   | 6.5   | 2.8   | 4.3   | 10    | 20    | 2.5   | 1.7  | 1.0  | .93   |
| 12    | 1.0   | 1.3   | 2.8   | 6.1   | 4.7   | 4.3   | 52    | 16    | 2.5   | 1.8  | 1.5  | 3.9   |
| 13    | .96   | 1.2   | 2.6   | 5.5   | 15    | 6.0   | 278   | 15    | 5.4   | 1.7  | 1.8  | 2.7   |
| 14    | 1.2   | 1.2   | 2.4   | 5.0   | 19    | 6.0   | 30    | 25    | 5.0   | 2.0  | 1.4  | 1.4   |
| 15    | 1.0   | 1.2   | 2.8   | 4.0   | 29    | 5.1   | 24    | 33    | 6.0   | 2.4  | 1.1  | 1.3   |
| 16    | 1.0   | 1.2   | 5.0   | 3.2   | 21    | 19    | 64    | 24    | 4.2   | 2.2  | 1.0  | 1.1   |
| 17    | 1.1   | 1.2   | 4.1   | 2.8   | 14    | 44    | 34    | 18    | 3.4   | 1.9  | 1.2  | 1.1   |
| 18    | 1.0   | 1.2   | 3.0   | 3.4   | 12    | 23    | 17    | 15    | 2.8   | 1.6  | 4.5  | 1.1   |
| 19    | 1.0   | 1.4   | 2.9   | 2.9   | 10    | 15    | 12    | 13    | 2.3   | 2.0  | 5.5  | 1.3   |
| 20    | 1.0   | 1.4   | 3.1   | 2.1   | 8.8   | 11    | 12    | 12    | 2.2   | 2.9  | 2.8  | 1.1   |
| 21    | 1.1   | 1.3   | 3.3   | 2.0   | 4.7   | 9.4   | 15    | 11    | 2.1   | 2.6  | 2.0  | 1.1   |
| 22    | 1.2   | 1.2   | 3.0   | 2.1   | 5.1   | 15    | 38    | 9.7   | 2.0   | 4.7  | 1.6  | .99   |
| 23    | 1.3   | 1.1   | 2.7   | 2.6   | 4.3   | 14    | 19    | 9.2   | 2.0   | 3.8  | 1.4  | .99   |
| 24    | 1.6   | 1.2   | 2.7   | 2.4   | 4.3   | 11    | 13    | 8.6   | 1.9   | 3.0  | 1.7  | 2.9   |
| 25    | 1.6   | 1.2   | 2.7   | 2.3   | 3.6   | 10    | 9.7   | 7.5   | 1.8   | 2.4  | 1.5  | 2.7   |
| 26    | 1.5   | 1.2   | 2.7   | 1.9   | 6.5   | 8.2   | 8.3   | 7.0   | 1.7   | 2.1  | 1.4  | 2.9   |
| 27    | 1.4   | 1.4   | 2.7   | 1.8   | 5.5   | 7.6   | 7.8   | 7.0   | 1.6   | 2.1  | 1.4  | 8.0   |
| 28    | 1.3   | 1.4   | 2.9   | 1.7   | 5.1   | 6.5   | 6.7   | 6.7   | 2.0   | 2.1  | 1.3  | 5.2   |
| 29    | 1.2   | 1.7   | 3.2   | 1.6   | 5.1   | 7.0   | 6.0   | 6.7   | 7.5   | 2.0  | 1.3  | 4.7   |
| 30    | 1.2   | 2.2   | 5.2   | 1.6   | ----- | 6.5   | 5.7   | 8.0   | 6.2   | 1.9  | 1.3  | 7.2   |
| 31    | 1.2   | ----- | 7.6   | 1.5   | ----- | 5.1   | ----- | 7.8   | ----- | 1.8  | 1.2  | ----- |
| TOTAL | 34.05 | 39.1  | 111.8 | 127.9 | 201.6 | 354.6 | 786.2 | 521.7 | 105.4 | 75.4 | 54.6 | 65.14 |
| MEAN  | 1.10  | 1.30  | 3.61  | 4.13  | 6.95  | 11.4  | 26.2  | 16.8  | 3.51  | 2.43 | 1.76 | 2.17  |
| MAX   | 1.6   | 2.2   | 10    | 8.9   | 29    | 44    | 278   | 168   | 7.5   | 5.0  | 5.5  | 8.0   |
| MIN   | .76   | 1.1   | 1.0   | 1.5   | 1.5   | 4.3   | 4.7   | 3.9   | 1.6   | 1.6  | 1.0  | .93   |
| CFSM  | .11   | .13   | .36   | .41   | .70   | 1.14  | 2.62  | 1.68  | .35   | .24  | .18  | .22   |
| IN.   | .13   | .15   | .42   | .48   | .75   | 1.32  | 2.92  | 1.94  | .39   | .28  | .20  | .24   |

CAL YR 1971 TOTAL 2,679.65 MEAN 7.34 MAX 180 MIN .76 CFSM .73 IN 9.97  
WTR YR 1972 TOTAL 2,477.49 MEAN 6.77 MAX 278 MIN .76 CFSM .68 IN 9.22

## PEAK DISCHARGE (BASE, 250 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-13 | 0030 | 7.15  | 1,390     | 5-9  | 0230 | 5.30  | 635       |

## HOCKING RIVER BASIN

03156400 Hocking River at Lancaster, Ohio

LOCATION.--Lat 39°42'24", long 82°36'03", in NE 1/4 sec.12, T.14 N., R.19 W., Fairfield County, on right bank 25 ft upstream from Columbus Street Bridge in Lancaster, and 0.5 mile downstream from Hunters Run.

DRAINAGE AREA.--48.2 sq mi.

PERIOD OF RECORD.--June 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 797.9 ft above mean sea level.

AVERAGE DISCHARGE.--16 years, 38.9 cfs.

EXTREMES.--Current year: Maximum discharge, 2,020 cfs Apr. 13 (gage height, 12.72 ft); minimum daily, 2.0 cfs Nov. 23.

Period of record: Maximum discharge, 3,520 cfs May 27, 1968 (gage height, 15.75 ft); minimum, 0.80 cfs Sept. 17, 1964; minimum gage height, 1.63 ft Jan. 4, 5, 1959.

REMARKS.--Records fair. Some diurnal fluctuation caused by industrial plants upstream from station. Water supply for city of Lancaster is pumped from wells adjacent to the Hocking River 1.1 miles upstream from station. The pumpage averaged 7.2 cfs in 1972 and is returned as sewage 0.8 mile downstream from the station. Flood flow affected by temporary retention in eight retarding basins (combined capacity, 8,710 acre-ft) upstream from station. Controlled drainage area is 24.4 sq mi (data furnished by U.S. Department of Agriculture Soil Conservation Service). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 11    | 4.1   | 3.4   | 22    | 9.8   | 38    | 27    | 30    | 20    | 10    | 7.5   | 9.6   |
| 2     | 11    | 6.8   | 2.5   | 27    | 12    | 89    | 25    | 34    | 16    | 8.4   | 7.1   | 9.0   |
| 3     | 9.2   | 3.7   | 2.4   | 25    | 18    | 109   | 24    | 39    | 14    | 13    | 9.2   | 12    |
| 4     | 8.4   | 3.0   | 2.2   | 30    | 16    | 78    | 50    | 29    | 13    | 8.8   | 18    | 13    |
| 5     | 8.4   | 2.7   | 2.5   | 47    | 16    | 55    | 39    | 27    | 12    | 7.8   | 10    | 10    |
| 6     | 7.4   | 5.0   | 40    | 36    | 11    | 39    | 32    | 25    | 13    | 5.8   | 7.5   | 8.8   |
| 7     | 6.8   | 4.1   | 42    | 28    | 12    | 38    | 120   | 23    | 12    | 5.0   | 7.3   | 8.4   |
| 8     | 6.8   | 3.4   | 21    | 23    | 10    | 53    | 98    | 59    | 11    | 5.5   | 6.6   | 6.8   |
| 9     | 9.2   | 3.4   | 11    | 28    | 9.2   | 39    | 84    | 390   | 17    | 22    | 6.5   | 6.6   |
| 10    | 8.1   | 3.7   | 7.8   | 37    | 8.4   | 30    | 65    | 156   | 15    | 13    | 6.7   | 6.4   |
| 11    | 7.1   | 3.7   | 5.0   | 34    | 5.2   | 28    | 52    | 85    | 8.8   | 7.8   | 6.4   | 6.4   |
| 12    | 5.5   | 3.4   | 4.3   | 29    | 13    | 28    | 91    | 59    | 8.4   | 6.8   | 37    | 7.2   |
| 13    | 5.8   | 3.0   | 3.7   | 26    | 44    | 31    | 729   | 55    | 28    | 7.1   | 4.7   | 40    |
| 14    | 10    | 2.9   | 6.2   | 22    | 68    | 30    | 201   | 116   | 25    | 6.8   | 2.7   | 22    |
| 15    | 6.2   | 3.2   | 16    | 19    | 121   | 28    | 116   | 133   | 33    | 9.2   | 2.4   | 17    |
| 16    | 6.5   | 2.9   | 20    | 13    | 101   | 83    | 227   | 107   | 45    | 11    | 2.4   | 13    |
| 17    | 6.5   | 2.9   | 15    | 11    | 68    | 153   | 168   | 75    | 20    | 9.6   | 13    | 9.4   |
| 18    | 5.8   | 2.7   | 11    | 15    | 59    | 98    | 92    | 57    | 13    | 8.8   | 33    | 10    |
| 19    | 5.8   | 7.1   | 10    | 19    | 50    | 58    | 70    | 47    | 10    | 7.8   | 29    | 11    |
| 20    | 5.5   | 3.0   | 15    | 17    | 35    | 44    | 67    | 42    | 9.6   | 12    | 24    | 9.2   |
| 21    | 4.8   | 2.5   | 12    | 16    | 30    | 39    | 82    | 38    | 9.6   | 11    | 17    | 8.4   |
| 22    | 5.5   | 2.2   | 11    | 20    | 28    | 59    | 189   | 34    | 9.6   | 15    | 11    | 7.8   |
| 23    | 5.8   | 2.0   | 9.6   | 22    | 25    | 59    | 105   | 30    | 9.2   | 23    | 17    | 8.8   |
| 24    | 9.2   | 2.5   | 8.8   | 23    | 25    | 44    | 73    | 28    | 8.1   | 20    | 23    | 11    |
| 25    | 5.8   | 2.2   | 8.1   | 22    | 23    | 40    | 55    | 26    | 6.8   | 11    | 23    | 20    |
| 26    | 5.0   | 2.2   | 8.1   | 16    | 35    | 34    | 46    | 24    | 6.5   | 9.7   | 16    | 70    |
| 27    | 4.5   | 3.2   | 9.6   | 14    | 35    | 34    | 40    | 22    | 5.5   | 9.5   | 13    | 56    |
| 28    | 4.3   | 2.5   | 16    | 13    | 33    | 31    | 36    | 20    | 4.8   | 8.9   | 13    | 62    |
| 29    | 4.1   | 12    | 11    | 11    | 34    | 32    | 32    | 20    | 62    | 8.4   | 11    | 58    |
| 30    | 4.1   | 6.8   | 28    | 10    | ----- | 30    | 30    | 28    | 23    | 8.0   | 11    | 85    |
| 31    | 4.1   | ----- | 28    | 9.6   | ----- | 26    | ----- | 23    | ----- | 8.0   | 9.8   | ----- |
| TOTAL | 208.2 | 112.8 | 391.2 | 684.6 | 958.6 | 1,577 | 3,065 | 1,881 | 488.5 | 318.7 | 405.8 | 622.8 |
| MEAN  | 6.72  | 3.76  | 12.6  | 22.1  | 33.1  | 50.9  | 102   | 60.7  | 16.3  | 10.3  | 13.1  | 20.8  |
| MAX   | 11    | 12    | 42    | 47    | 121   | 153   | 729   | 390   | 62    | 23    | 37    | 85    |
| MIN   | 4.1   | 2.0   | 2.2   | 9.6   | 8.4   | 26    | 24    | 20    | 4.8   | 5.0   | 2.4   | 6.4   |

CAL YR 1971 TOTAL 11,449.6 MEAN 31.4 MAX 606 MIN 2.0  
WTR YR 1972 TOTAL 10,714.6 MEAN 29.3 MAX 729 MIN 2.0

Peak Discharge (Base, 700 cfs).--Apr. 13 (0100) 2,020 cfs (12.72 ft).

## HOCKING RIVER BASIN

85

03157000 Clear Creek near Rockbridge, Ohio

LOCATION.--Lat 39°35'18", long 82°34'43", in NE 1/4 sec.20, T.13 N., R.18 W., Hocking County, on left bank at upstream side of county road bridge, 400 ft downstream from unnamed right bank tributary, 2.0 miles upstream from mouth, and 3 miles west of Rockbridge.

DRAINAGE AREA.--89.0 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 760.13 ft above mean sea level, adjustment of 1912. Prior to May 2, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 83.5 cfs (12.74 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,840 cfs Apr. 13 (gage height, 7.84 ft); minimum, 10 cfs Sept. 1, 2, 3, 7.

Period of record: Maximum discharge, 16,000 cfs July 22, 1948 (gage height, 17.68 ft, from high-water mark in well), from rating curve extended above 4,300 cfs on basis of slope-area measurement of peak flow; minimum, 3.0 cfs Dec. 29, 1947, result of freezeup.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1305: 1940 (M), 1943(M), 1945(M). WSP 1907: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1     | 15   | 17    | 26    | 65    | 29    | 80    | 72    | 76    | 50    | 44   | 17   | 10    |
| 2     | 15   | 18    | 22    | 70    | 28    | 267   | 70    | 76    | 44    | 36   | 18   | 10    |
| 3     | 15   | 19    | 21    | 65    | 33    | 308   | 66    | 81    | 40    | 48   | 20   | 20    |
| 4     | 15   | 17    | 21    | 63    | 31    | 198   | 99    | 70    | 38    | 44   | 20   | 17    |
| 5     | 14   | 17    | 21    | 121   | 30    | 148   | 84    | 63    | 36    | 41   | 17   | 12    |
| 6     | 14   | 17    | 70    | 80    | 38    | 107   | 76    | 58    | 35    | 34   | 15   | 11    |
| 7     | 14   | 20    | 144   | 65    | 36    | 106   | 268   | 55    | 35    | 30   | 15   | 10    |
| 8     | 14   | 18    | 87    | 56    | 35    | 137   | 223   | 88    | 33    | 29   | 14   | 15    |
| 9     | 15   | 18    | 57    | 59    | 34    | 98    | 206   | 777   | 33    | 28   | 14   | 24    |
| 10    | 18   | 19    | 48    | 75    | 32    | 86    | 164   | 418   | 32    | 29   | 13   | 21    |
| 11    | 17   | 19    | 42    | 68    | 30    | 80    | 135   | 239   | 31    | 31   | 12   | 21    |
| 12    | 16   | 18    | 36    | 59    | 36    | 80    | 119   | 166   | 30    | 27   | 12   | 30    |
| 13    | 15   | 18    | 34    | 57    | 102   | 81    | 1,230 | 133   | 40    | 27   | 13   | 28    |
| 14    | 19   | 18    | 33    | 50    | 233   | 81    | 468   | 190   | 64    | 30   | 13   | 19    |
| 15    | 17   | 18    | 43    | 40    | 423   | 75    | 310   | 304   | 45    | 27   | 13   | 16    |
| 16    | 17   | 18    | 55    | 37    | 251   | 207   | 623   | 269   | 185   | 28   | 12   | 16    |
| 17    | 20   | 17    | 42    | 34    | 150   | 411   | 460   | 171   | 75    | 29   | 12   | 16    |
| 18    | 17   | 17    | 35    | 33    | 130   | 247   | 258   | 132   | 54    | 26   | 32   | 14    |
| 19    | 17   | 21    | 34    | 37    | 100   | 155   | 194   | 109   | 46    | 23   | 50   | 18    |
| 20    | 16   | 22    | 42    | 38    | 84    | 123   | 205   | 95    | 41    | 22   | 25   | 16    |
| 21    | 16   | 20    | 40    | 39    | 78    | 110   | 199   | 87    | 42    | 22   | 18   | 15    |
| 22    | 17   | 18    | 35    | 42    | 72    | 164   | 577   | 77    | 39    | 25   | 16   | 14    |
| 23    | 18   | 17    | 33    | 55    | 70    | 148   | 292   | 68    | 39    | 23   | 16   | 13    |
| 24    | 22   | 18    | 33    | 61    | 76    | 122   | 202   | 62    | 37    | 20   | 18   | 21    |
| 25    | 21   | 18    | 31    | 56    | 72    | 111   | 151   | 57    | 35    | 19   | 17   | 26    |
| 26    | 19   | 18    | 32    | 42    | 82    | 98    | 125   | 51    | 33    | 18   | 16   | 30    |
| 27    | 18   | 20    | 32    | 40    | 60    | 94    | 108   | 47    | 31    | 17   | 13   | 40    |
| 28    | 17   | 20    | 36    | 37    | 75    | 86    | 95    | 45    | 29    | 16   | 13   | 42    |
| 29    | 17   | 27    | 35    | 34    | 72    | 84    | 87    | 45    | 43    | 15   | 12   | 28    |
| 30    | 17   | 34    | 142   | 32    | ----- | 80    | 81    | 49    | 82    | 15   | 11   | 56    |
| 31    | 17   | ----- | 93    | 30    | ----- | 72    | ----- | 60    | ----- | 16   | 11   | ----- |
| TOTAL | 519  | 576   | 1,455 | 1,640 | 2,542 | 4,244 | 7,248 | 4,218 | 1,397 | 839  | 518  | 629   |
| MEAN  | 16.7 | 19.2  | 46.9  | 52.9  | 87.7  | 137   | 242   | 136   | 46.6  | 27.1 | 16.7 | 21.0  |
| MAX   | 22   | 34    | 144   | 121   | 423   | 411   | 1,230 | 777   | 185   | 48   | 50   | 56    |
| MIN   | 14   | 17    | 21    | 30    | 28    | 72    | 66    | 45    | 29    | 15   | 11   | 10    |
| CFSM  | .19  | .22   | .53   | .59   | .99   | 1.54  | 2.72  | 1.53  | .52   | .30  | .19  | .24   |
| IN.   | .22  | .24   | .61   | .69   | 1.06  | 1.77  | 3.03  | 1.76  | .58   | .35  | .22  | .26   |

CAL YR 1971 TOTAL 24,813 MEAN 68.0 MAX 1,450 MIN 14 CFSM .76 IN 10.37  
WTR YR 1972 TOTAL 25,825 MEAN 70.6 MAX 1,230 MIN 10 CFSM .79 IN 10.75

PEAK DISCHARGE (BASE, 1,900 CFS).--No peak above base.

## HOCKING RIVER BASIN

03157500 Hocking River at Enterprise, Ohio

LOCATION.--Lat 39°33'54", long 82°28'29", in NW 1/4 sec.5, T.14 N., R.17 W., Hocking County, on right bank at upstream side of abandoned bridge at Enterprise, 4.0 miles downstream from Buck Run, and 4.3 miles upstream from Scott Creek.

DRAINAGE AREA.--459 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Prior to May 1931 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 723.58 ft above mean sea level. Prior to Oct. 24, 1933, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 433 cfs (12.81 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,480 cfs Apr. 14 (gage height, 11.18 ft); minimum, 46 cfs Oct. 5, 6, 7, 8, 9.

Period of record: Maximum discharge, 26,000 cfs Mar. 10, 1964 (gage height, 21.31 ft), from rating curve extended above 17,000 cfs on basis of contracted-opening and slope-area measurement of peak flow; minimum, 12 cfs Aug. 19, 1932.

Flood of March 1907, reached a stage of 22.0 ft, from floodmark (discharge, 36,000 cfs), from reports of Corps of Engineers.

REMARKS.--Records good. Flood flow affected by temporary retention in eight retarding basins (combined capacity, 8,710 acre-ft) constructed between 1955 and 1961 upstream from Lancaster (see station 03156400). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1938. WSP 1907: Drainage area. WRD Ohio 1970: 1969.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 54    | 56    | 134   | 320   | 140    | 426    | 405    | 439    | 212   | 194   | 69    | 81    |
| 2     | 52    | 61    | 100   | 285   | 140    | 747    | 402    | 429    | 186   | 149   | 69    | 79    |
| 3     | 51    | 68    | 82    | 310   | 150    | 1,670  | 375    | 436    | 168   | 171   | 72    | 331   |
| 4     | 50    | 66    | 82    | 269   | 160    | 1,270  | 512    | 380    | 154   | 196   | 327   | 333   |
| 5     | 49    | 61    | 80    | 496   | 170    | 890    | 580    | 341    | 140   | 178   | 191   | 158   |
| 6     | 49    | 58    | 212   | 470   | 160    | 639    | 478    | 308    | 135   | 161   | 108   | 119   |
| 7     | 47    | 68    | 707   | 328   | 150    | 602    | 1,060  | 290    | 137   | 135   | 90    | 100   |
| 8     | 47    | 62    | 562   | 267   | 140    | 752    | 1,580  | 369    | 130   | 122   | 83    | 91    |
| 9     | 50    | 64    | 297   | 258   | 130    | 609    | 1,300  | 1,810  | 124   | 116   | 76    | 95    |
| 10    | 59    | 66    | 219   | 318   | 134    | 503    | 1,020  | 1,360  | 664   | 204   | 71    | 87    |
| 11    | 54    | 65    | 183   | 326   | 134    | 445    | 844    | 768    | 394   | 183   | 66    | 75    |
| 12    | 58    | 64    | 155   | 279   | 142    | 429    | 713    | 588    | 201   | 132   | 65    | 116   |
| 13    | 56    | 63    | 138   | 240   | 336    | 433    | 4,110  | 496    | 209   | 118   | 300   | 962   |
| 14    | 64    | 62    | 135   | 190   | 1,050  | 461    | 5,030  | 648    | 311   | 137   | 138   | 330   |
| 15    | 61    | 61    | 164   | 150   | 1,340  | 422    | 3,060  | 920    | 275   | 122   | 94    | 195   |
| 16    | 62    | 63    | 222   | 140   | 1,430  | 780    | 2,530  | 924    | 668   | 135   | 79    | 152   |
| 17    | 62    | 60    | 191   | 140   | 946    | 1,750  | 2,880  | 716    | 411   | 173   | 84    | 128   |
| 18    | 54    | 63    | 150   | 150   | 796    | 1,430  | 2,100  | 580    | 254   | 132   | 942   | 111   |
| 19    | 55    | 78    | 126   | 170   | 745    | 900    | 1,250  | 480    | 201   | 112   | 859   | 143   |
| 20    | 53    | 86    | 145   | 170   | 512    | 692    | 1,090  | 418    | 176   | 106   | 470   | 110   |
| 21    | 59    | 79    | 160   | 182   | 454    | 596    | 952    | 383    | 176   | 108   | 264   | 97    |
| 22    | 57    | 77    | 145   | 180   | 441    | 946    | 2,340  | 341    | 168   | 103   | 188   | 90    |
| 23    | 60    | 72    | 124   | 245   | 368    | 1,220  | 2,160  | 302    | 164   | 103   | 221   | 84    |
| 24    | 72    | 72    | 119   | 314   | 409    | 868    | 1,410  | 269    | 161   | 97    | 206   | 109   |
| 25    | 73    | 74    | 116   | 310   | 353    | 720    | 992    | 245    | 152   | 94    | 177   | 158   |
| 26    | 69    | 72    | 112   | 240   | 460    | 611    | 792    | 220    | 140   | 87    | 145   | 149   |
| 27    | 66    | 78    | 115   | 190   | 479    | 565    | 672    | 199    | 128   | 81    | 129   | 232   |
| 28    | 63    | 81    | 131   | 180   | 432    | 549    | 588    | 183    | 120   | 78    | 121   | 903   |
| 29    | 60    | 104   | 138   | 160   | 431    | 498    | 520    | 178    | 207   | 76    | 105   | 450   |
| 30    | 59    | 145   | 279   | 150   | -----  | 506    | 476    | 209    | 334   | 72    | 95    | 626   |
| 31    | 57    | ----- | 548   | 140   | -----  | 434    | -----  | 260    | ----- | 71    | 86    | ----- |
| TOTAL | 1,782 | 2,149 | 6,071 | 7,567 | 12,772 | 23,403 | 42,221 | 15,489 | 6,900 | 3,946 | 5,990 | 6,694 |
| MEAN  | 57.5  | 71.6  | 196   | 244   | 440    | 755    | 1,407  | 500    | 230   | 127   | 193   | 223   |
| MAX   | 73    | 145   | 707   | 496   | 1,430  | 1,790  | 5,030  | 1,810  | 668   | 204   | 942   | 962   |
| MIN   | 47    | 56    | 80    | 140   | 130    | 422    | 375    | 178    | 120   | 71    | 65    | 75    |
| CFSM  | .13   | .16   | .43   | .53   | .96    | 1.64   | 3.07   | 1.09   | .50   | .28   | .42   | .49   |
| IN.   | .14   | .17   | .49   | .61   | 1.04   | 1.90   | 3.42   | 1.26   | .56   | .32   | .49   | .54   |

CAL YR 1971 TOTAL 122,924 MEAN 337 MAX 6,020 MIN 47 CFSM .73 IN 9.96  
WTR YR 1972 TOTAL 134,984 MEAN 369 MAX 5,030 MIN 47 CFSM .80 IN 10.94

Peak Discharge (Base, 3,500 cfs).--Apr. 14 (1730) 5,480 cfs (11.18 ft).



## HOCKING RIVER BASIN

87

03158500 Burr Oak Reservoir at Burr Oak, Ohio

LOCATION.--Lat 39°32'30", long 82°03'27", near center of sec.6 T.11 N., R.14 W., Athens County, in control house at Tom Jenkins Dam on East Branch Sunday Creek, 0.2 mile upstream from mouth, 0.4 mile southeast of Burr Oak, and 3.0 miles northeast of Glouster.

DRAINAGE AREA.--33.1 sq mi.

PERIOD OF RECORD.--February 1952 to current year. Published as Tom Jenkins Reservoir at Burr Oak October 1952 to September 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 10,570 acre-ft Apr. 23 (elevation, 722.93 ft); minimum, 9,080 acre-ft Nov. 24 (elevation, 720.77 ft).

Period of record: Maximum contents, 17,820 acre-ft May 31, 1968 (elevation, 731.53 ft); minimum, 3,450 acre-ft Nov. 20, 1953 (elevation, 709.89 ft).

REMARKS.--Reservoir is formed by earth dam with emergency spillway; storage began Feb. 2, 1952. Capacity at spillway level (elevation, 740 ft), 26,900 acre-ft, of which 9,300 acre-ft is in conservation pool. Dead storage, 35 acre-ft. Figures given herein represent total contents. Reservoir is used for flood control, although conservation pool is operated for increased low flow for water supply and for recreation and conservation of fish and wildlife. Outflow is controlled by operation of gates in conduit through dam.

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

## MONTHEND GAGE HEIGHT AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| Date             | Gage height<br>(feet) | Contents<br>(acre-feet) | Change in contents<br>(acre-feet) |
|------------------|-----------------------|-------------------------|-----------------------------------|
| Sept. 30.....    | 721.06                | 9,270                   | -                                 |
| Oct. 31.....     | 720.91                | 9,170                   | -100                              |
| Nov. 30.....     | 720.84                | 9,120                   | -50                               |
| Dec. 31.....     | 721.45                | 9,530                   | + 410                             |
| CAL YR 1971..... | -                     | -                       | +3,800                            |
| Jan. 31.....     | 721.13                | 9,310                   | -220                              |
| Feb. 29.....     | 721.45                | 9,530                   | + 220                             |
| Mar. 31.....     | 721.07                | 9,270                   | -260                              |
| Apr. 30.....     | 721.09                | 9,290                   | + 20                              |
| May 31.....      | 721.29                | 9,420                   | + 130                             |
| June 30.....     | 721.48                | 9,550                   | + 130                             |
| July 31.....     | 721.15                | 9,330                   | -220                              |
| Aug. 31.....     | 721.58                | 9,620                   | + 290                             |
| Sept. 30.....    | 721.62                | 9,650                   | +30                               |
| WTR YR 1972..... | -                     | -                       | + 380                             |

## HOCKING RIVER BASIN

03159000 Sunday Creek at Glouster, Ohio

LOCATION.--Lat 39°30'03", long 82°05'07", Athens County, on left bank 150 ft downstream from West Branch Sunday Creek and 200 ft upstream from bridge on State Highway 78 at Glouster.

DRAINAGE AREA.--104 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 665.18 ft above mean sea level. Prior to Dec. 4, 1951, non-recording gage at site 300 ft downstream at same datum.

AVERAGE DISCHARGE.--21 years, 101 cfs.

EXTREMES.--Current year: Maximum discharge, 1,130 cfs Apr. 13 (gage height, 11.73 ft); minimum, 2.1 cfs Oct. 1, 2, 3.

Period of record: Maximum discharge, 7,020 cfs Mar. 5, 1963 (gage height, 17.81 ft), from rating curve extended above 3,600 cfs on basis of velocity-area study and flow over road estimate of peak discharge; minimum, 0.4 cfs Oct. 26, 27, 1953.

Flood of March 1907 reached a stage of 22.0 ft, from information by Corps of Engineers.

REMARKS.--Records good. Flow partially regulated by Burr Oak Reservoir 5.2 miles upstream (see station 03158500). Most of small diversion (average 0.53 cfs) downstream from Burr Oak Reservoir returned to stream upstream from station. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL     | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 1     | 2.1   | 5.0   | 11    | 15    | 22    | 119   | 90    | 98    | 18    | 17      | 5.6   | 8.6   |
| 2     | 2.3   | 5.6   | 8.3   | 19    | 22    | 206   | 71    | 88    | 17    | 14      | 5.6   | 8.2   |
| 3     | 2.3   | 5.3   | 7.0   | 59    | 33    | 498   | 69    | 81    | 16    | 17      | 6.5   | 15    |
| 4     | 2.5   | 4.9   | 6.4   | 100   | 51    | 434   | 137   | 71    | 15    | 18      | 14    | 27    |
| 5     | 2.5   | 4.2   | 6.8   | 200   | 47    | 245   | 140   | 67    | 16    | 17      | 9.1   | 14    |
| 6     | 2.5   | 4.4   | 32    | 166   | 34    | 166   | 114   | 62    | 15    | 15      | 6.5   | 11    |
| 7     | 2.7   | 4.7   | 208   | 124   | 29    | 158   | 465   | 58    | 15    | 14      | 6.5   | 9.5   |
| 8     | 3.1   | 4.6   | 94    | 81    | 24    | 226   | 573   | 61    | 14    | 13      | 6.9   | 9.5   |
| 9     | 3.8   | 4.8   | 32    | 65    | 21    | 156   | 474   | 88    | 15    | 13      | 6.5   | 10    |
| 10    | 3.1   | 4.9   | 80    | 106   | 38    | 124   | 334   | 89    | 16    | 11      | 5.6   | 9.1   |
| 11    | 3.1   | 5.2   | 130   | 95    | 87    | 107   | 230   | 74    | 13    | 11      | 5.6   | 7.7   |
| 12    | 3.1   | 5.3   | 58    | 81    | 82    | 100   | 158   | 67    | 12    | 11      | 5.6   | 27    |
| 13    | 3.4   | 5.3   | 23    | 72    | 467   | 103   | 692   | 62    | 15    | 11      | 6.5   | 192   |
| 14    | 3.4   | 5.1   | 10    | 67    | 725   | 98    | 615   | 68    | 25    | 11      | 6.9   | 84    |
| 15    | 4.6   | 5.2   | 14    | 44    | 753   | 90    | 404   | 93    | 19    | 36      | 6.5   | 19    |
| 16    | 3.1   | 6.7   | 18    | 21    | 454   | 138   | 498   | 119   | 32    | 198     | 6.5   | 16    |
| 17    | 3.1   | 6.3   | 16    | 14    | 208   | 368   | 540   | 101   | 21    | 304     | 10    | 14    |
| 18    | 2.7   | 5.0   | 13    | 17    | 186   | 377   | 277   | 82    | 16    | 123     | 53    | 13    |
| 19    | 2.6   | 5.0   | 12    | 21    | 186   | 199   | 191   | 77    | 14    | 50      | 61    | 11    |
| 20    | 2.6   | 6.1   | 15    | 21    | 126   | 134   | 182   | 72    | 15    | 17      | 33    | 9.5   |
| 21    | 2.9   | 8.1   | 17    | 22    | 95    | 120   | 171   | 68    | 18    | 15      | 16    | 9.1   |
| 22    | 3.9   | 5.1   | 15    | 22    | 92    | 191   | 814   | 59    | 16    | 13      | 14    | 8.6   |
| 23    | 4.8   | 4.7   | 13    | 41    | 72    | 224   | 450   | 53    | 16    | 12      | 90    | 8.6   |
| 24    | 6.5   | 5.1   | 12    | 124   | 83    | 174   | 540   | 46    | 15    | 11      | 29    | 17    |
| 25    | 6.7   | 5.7   | 12    | 166   | 102   | 150   | 415   | 42    | 14    | 12      | 16    | 20    |
| 26    | 6.2   | 5.9   | 12    | 164   | 135   | 129   | 184   | 39    | 13    | 10      | 13    | 15    |
| 27    | 5.5   | 7.3   | 12    | 138   | 112   | 122   | 125   | 35    | 12    | 9.1     | 12    | 18    |
| 28    | 5.0   | 7.9   | 12    | 121   | 117   | 114   | 97    | 34    | 12    | 6.9     | 11    | 38    |
| 29    | 4.9   | 12    | 11    | 74    | 124   | 107   | 88    | 33    | 23    | 6.9     | 9.5   | 49    |
| 30    | 5.2   | 13    | 12    | 53    | ----- | 102   | 81    | 30    | 27    | 6.5     | 8.6   | 82    |
| 31    | 4.9   | ----- | 15    | 23    | ----- | 95    | ----- | 21    | ----- | 6.0     | 8.2   | ----- |
| TOTAL | 115.1 | 178.4 | 937.5 | 2,336 | 4,527 | 5,574 | 9,219 | 2,038 | 505   | 1,029.4 | 494.7 | 780.4 |
| MEAN  | 3.71  | 5.95  | 30.2  | 75.4  | 156   | 180   | 307   | 65.7  | 16.8  | 33.2    | 16.0  | 26.0  |
| MAX   | 6.7   | 13    | 208   | 200   | 753   | 498   | 814   | 119   | 32    | 304     | 90    | 192   |
| MIN   | 2.1   | 4.2   | 6.4   | 14    | 21    | 90    | 69    | 21    | 12    | 6.0     | 5.6   | 7.7   |

CAL YR 1971 TOTAL 26,992.1 MEAN 74.0 MAX 1,280 MIN 2.1  
WTR YR 1972 TOTAL 27,734.5 MEAN 75.8 MAX 814 MIN 2.1

## HOCKING RIVER BASIN

89

03159500 Hocking River at Athens, Ohio

LOCATION.--Lat 39°19'44", long 82°05'16", in T.9 N., R.14 W., Athens County, on right bank 0.8 mile east of business section of Athens, 1.4 miles downstream from Coats Run, and 3.0 miles (revised) downstream from Margaret Creek.

DRAINAGE AREA.--943 sq mi.

PERIOD OF RECORD.--May 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 611.26 ft above mean sea level. Nonrecording gage prior to Aug. 17, 1931. Prior to June 19, 1970 at present site at datum 3.55 ft higher. June 19, 1970, to Sept. 30, 1971 water-stage recorder at temporary site 5.3 miles downstream at datum 11.26 ft lower.

AVERAGE DISCHARGE.--57 years, 965 cfs.

EXTREMES.--Current year: Maximum discharge, 7,110 cfs Apr. 14 (gage height, 15.37 ft); minimum, 50 cfs Oct. 9.

Period of record: Maximum discharge, 32,900 cfs Mar. 11, 1964 (gage height, 24.18 ft, datum then in use); minimum, 9 cfs Oct. 11, 1930.

Flood of March 1907 reached a stage of about 27 ft (datum then in use) from floodmarks (discharge, 50,000 cfs, estimated by Corps of Engineers).

REMARKS.--Records good. Some regulation by Burr Oak Reservoir (capacity 26,900 acre-ft) on East Branch Sunday Creek 29 miles upstream beginning 1952 (see station 03158500), by Hocking Lake (capacity 3,080 acre-ft) on Clear Fork 39.4 miles upstream beginning in 1949, and by temporary retention in eight retarding basins (combined capacity, 8,710 acre-ft) constructed between 1955 and 1961 upstream from Lancaster (see station 03156400). Diurnal fluctuation at low flow caused by mill 3.2 miles upstream from station. Channel work has destroyed stage-discharge relationship that existed prior to June 1970. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 523: 1918-19(M). WSP 743: 1922(M). WSP 873: 1920, 1922, 1924-28, 1937. WSP 1113: 1932.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL   | AUG    | SEP    |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 1     | 58    | 60    | 224    | 551    | 368    | 1,010  | 846    | 1,090  | 422    | 500   | 112    | 172    |
| 2     | 54    | 60    | 208    | 455    | 341    | 1,420  | 812    | 1,030  | 362    | 347   | 108    | 172    |
| 3     | 54    | 69    | 168    | 509    | 374    | 3,740  | 770    | 972    | 326    | 356   | 108    | 530    |
| 4     | 54    | 75    | 148    | 564    | 530    | 3,510  | 1,000  | 900    | 305    | 341   | 188    | 886    |
| 5     | 58    | 69    | 136    | 1,290  | 560    | 2,570  | 1,480  | 787    | 287    | 338   | 368    | 564    |
| 6     | 60    | 72    | 353    | 1,290  | 520    | 1,820  | 1,290  | 696    | 269    | 320   | 278    | 326    |
| 7     | 56    | 60    | 1,600  | 904    | 480    | 1,550  | 2,730  | 638    | 263    | 293   | 192    | 278    |
| 8     | 54    | 60    | 1,580  | 663    | 449    | 1,810  | 4,930  | 615    | 260    | 272   | 160    | 248    |
| 9     | 52    | 72    | 990    | 573    | 430    | 1,830  | 3,960  | 1,720  | 254    | 257   | 140    | 263    |
| 10    | 58    | 60    | 583    | 846    | 420    | 1,390  | 3,010  | 3,490  | 299    | 260   | 128    | 228    |
| 11    | 60    | 69    | 542    | 808    | 420    | 1,170  | 2,350  | 2,090  | 779    | 314   | 112    | 184    |
| 12    | 66    | 66    | 461    | 681    | 410    | 1,040  | 1,900  | 1,430  | 461    | 320   | 100    | 152    |
| 13    | 60    | 75    | 359    | 583    | 1,800  | 976    | 3,690  | 1,150  | 329    | 278   | 100    | 536    |
| 14    | 69    | 66    | 308    | 536    | 3,720  | 967    | 6,710  | 1,050  | 407    | 254   | 266    | 1,370  |
| 15    | 66    | 72    | 326    | 460    | 3,550  | 954    | 6,750  | 1,500  | 491    | 248   | 208    | 564    |
| 16    | 69    | 69    | 407    | 400    | 3,540  | 1,020  | 5,310  | 1,900  | 583    | 586   | 152    | 350    |
| 17    | 69    | 64    | 401    | 350    | 2,540  | 2,490  | 5,590  | 1,710  | 963    | 855   | 156    | 281    |
| 18    | 69    | 66    | 341    | 362    | 1,870  | 3,450  | 5,050  | 1,370  | 560    | 670   | 632    | 244    |
| 19    | 66    | 62    | 296    | 335    | 1,740  | 2,460  | 3,340  | 1,130  | 407    | 422   | 1,970  | 220    |
| 20    | 60    | 69    | 299    | 350    | 1,430  | 1,670  | 2,490  | 954    | 344    | 326   | 1,520  | 220    |
| 21    | 56    | 93    | 329    | 362    | 1,080  | 1,370  | 2,280  | 850    | 341    | 320   | 774    | 204    |
| 22    | 56    | 93    | 323    | 356    | 558    | 1,560  | 5,180  | 754    | 320    | 290   | 521    | 180    |
| 23    | 60    | 93    | 290    | 392    | 877    | 2,630  | 6,460  | 663    | 305    | 280   | 663    | 168    |
| 24    | 64    | 87    | 269    | 645    | 1,430  | 2,300  | 4,480  | 583    | 299    | 240   | 533    | 180    |
| 25    | 75    | 87    | 260    | 936    | 1,320  | 1,770  | 3,110  | 524    | 290    | 220   | 407    | 260    |
| 26    | 81    | 87    | 254    | 882    | 1,660  | 1,490  | 2,240  | 479    | 278    | 208   | 323    | 320    |
| 27    | 81    | 100   | 251    | 656    | 1,400  | 1,300  | 1,750  | 425    | 263    | 200   | 278    | 347    |
| 28    | 84    | 100   | 248    | 500    | 1,180  | 1,210  | 1,480  | 386    | 251    | 148   | 269    | 602    |
| 29    | 72    | 148   | 248    | 440    | 1,050  | 1,110  | 1,290  | 359    | 325    | 136   | 251    | 1,200  |
| 30    | 60    | 204   | 248    | 390    | -----  | 1,030  | 1,150  | 359    | 645    | 124   | 208    | 1,070  |
| 31    | 60    | ----- | 368    | 370    | -----  | 972    | -----  | 404    | -----  | 120   | 184    | -----  |
| TOTAL | 1,961 | 2,427 | 12,818 | 18,439 | 36,527 | 53,589 | 93,428 | 32,008 | 11,692 | 9,843 | 11,409 | 12,319 |
| MEAN  | 63.3  | 80.9  | 413    | 595    | 1,260  | 1,729  | 3,114  | 1,033  | 390    | 318   | 368    | 411    |
| MAX   | 84    | 204   | 1,600  | 1,290  | 3,720  | 3,740  | 6,750  | 3,490  | 963    | 855   | 1,970  | 1,370  |
| MIN   | 52    | 60    | 136    | 335    | 341    | 954    | 770    | 359    | 251    | 120   | 100    | 152    |

CAL YR 1971 TOTAL 278,979 MEAN 764 MAX 12,200 MIN 52  
WTR YR 1972 TOTAL 296,460 MEAN 810 MAX 6,750 MIN 52

Peak Discharge (Base, 7,500 cfs).--No peak above base.

## SHADE RIVER BASIN

03159540 Shade River near Chester, Ohio

LOCATION.--Lat 39°03'49", long 81°52'55", in NE 1/4 sec.10, T.3 N., R.12 W., Meigs County, on right bank at downstream side of bridge on Oak Hill Road, 200 ft upstream from Sugar Run, 2.8 miles southeast of Chester, and 8.5 miles northeast of Pomeroy.

DRAINAGE AREA.--156 sq mi, includes that of Sugar Run.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1956, 1962-65. June 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 576.91 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 154 cfs (13.41 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,590 cfs Apr. 14 (gage height, 19.27 ft); minimum, 1.4 cfs Aug. 1, 2, 3.

Period of record: Maximum discharge, 8,170 cfs May 25, 1968 (gage height, 27.39 ft); minimum, 0.30 cfs Sept. 7, 8, 9, 10, 1966.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB    | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1     | 30    | 8.9   | 94    | 68    | 80     | 191    | 109    | 124   | 29    | 29    | 1.5   | 4.0   |
| 2     | 25    | 13    | 62    | 270   | 87     | 546    | 117    | 149   | 25    | 23    | 1.4   | 3.3   |
| 3     | 22    | 22    | 45    | 356   | 193    | 2,590  | 109    | 210   | 21    | 18    | 1.5   | 4.0   |
| 4     | 19    | 21    | 41    | 241   | 389    | 794    | 342    | 207   | 19    | 41    | 14    | 11    |
| 5     | 17    | 14    | 39    | 1,090 | 179    | 519    | 354    | 134   | 24    | 31    | 61    | 24    |
| 6     | 15    | 12    | 174   | 537   | 130    | 355    | 199    | 108   | 21    | 26    | 26    | 12    |
| 7     | 13    | 12    | 1,340 | 255   | 110    | 326    | 878    | 94    | 18    | 22    | 13    | 7.5   |
| 8     | 11    | 12    | 869   | 176   | 94     | 333    | 2,460  | 87    | 17    | 17    | 8.0   | 5.8   |
| 9     | 10    | 11    | 270   | 233   | 82     | 248    | 543    | 650   | 16    | 14    | 6.1   | 4.7   |
| 10    | 11    | 11    | 159   | 744   | 76     | 192    | 318    | 976   | 16    | 13    | 4.4   | 3.8   |
| 11    | 12    | 11    | 123   | 452   | 74     | 160    | 235    | 273   | 24    | 13    | 3.5   | 3.0   |
| 12    | 13    | 11    | 96    | 253   | 84     | 148    | 223    | 158   | 18    | 12    | 4.4   | 4.4   |
| 13    | 10    | 11    | 81    | 179   | 1,570  | 140    | 2,090  | 121   | 17    | 9.8   | 13    | 7.5   |
| 14    | 9.2   | 10    | 69    | 140   | 2,020  | 140    | 2,850  | 114   | 35    | 8.9   | 6.1   | 11    |
| 15    | 8.8   | 9.3   | 78    | 103   | 659    | 150    | 550    | 123   | 26    | 8.9   | 3.8   | 8.9   |
| 16    | 11    | 8.9   | 101   | 65    | 437    | 230    | 544    | 109   | 44    | 11    | 2.8   | 6.8   |
| 17    | 9.8   | 8.9   | 93    | 56    | 294    | 450    | 681    | 90    | 49    | 24    | 7.5   | 5.8   |
| 18    | 9.3   | 8.4   | 73    | 62    | 280    | 469    | 347    | 91    | 26    | 18    | 112   | 5.1   |
| 19    | 8.9   | 8.9   | 59    | 89    | 260    | 255    | 244    | 71    | 18    | 14    | 268   | 4.7   |
| 20    | 7.2   | 11    | 76    | 101   | 170    | 180    | 248    | 60    | 21    | 9.8   | 189   | 3.8   |
| 21    | 5.8   | 14    | 114   | 117   | 150    | 151    | 342    | 56    | 61    | 7.5   | 60    | 3.5   |
| 22    | 5.8   | 14    | 89    | 100   | 140    | 325    | 2,440  | 51    | 39    | 6.5   | 28    | 3.3   |
| 23    | 7.2   | 12    | 70    | 133   | 130    | 425    | 1,320  | 45    | 31    | 5.4   | 19    | 3.5   |
| 24    | 17    | 11    | 65    | 357   | 1,380  | 295    | 431    | 38    | 33    | 4.4   | 15    | 14    |
| 25    | 25    | 12    | 62    | 434   | 733    | 230    | 291    | 33    | 30    | 3.5   | 13    | 45    |
| 26    | 21    | 13    | 58    | 252   | 1,330  | 183    | 210    | 30    | 25    | 3.0   | 10    | 27    |
| 27    | 16    | 37    | 57    | 145   | 555    | 162    | 163    | 26    | 22    | 2.3   | 16    | 21    |
| 28    | 14    | 82    | 62    | 110   | 341    | 144    | 135    | 23    | 20    | 2.1   | 11    | 22    |
| 29    | 12    | 122   | 65    | 76    | 245    | 132    | 121    | 22    | 30    | 1.8   | 7.5   | 17    |
| 30    | 10    | 158   | 66    | 70    | -----  | 151    | 111    | 22    | 38    | 1.6   | 6.1   | 41    |
| 31    | 9.3   | ----- | 85    | 74    | -----  | 118    | -----  | 27    | ----- | 1.6   | 5.1   | ----- |
| TOTAL | 415.3 | 710.3 | 4,735 | 7,338 | 12,272 | 10,732 | 19,005 | 4,322 | 813   | 403.1 | 937.7 | 338.4 |
| MEAN  | 13.4  | 23.7  | 153   | 237   | 423    | 346    | 634    | 139   | 27.1  | 13.0  | 30.2  | 11.3  |
| MAX   | 30    | 158   | 1,340 | 1,090 | 2,020  | 2,590  | 2,850  | 976   | 61    | 41    | 268   | 45    |
| MIN   | 5.8   | 8.4   | 39    | 56    | 74     | 118    | 109    | 22    | 16    | 1.6   | 1.4   | 3.0   |
| CFSM  | .09   | .15   | .98   | 1.52  | 2.71   | 2.22   | 4.06   | .89   | .17   | .08   | .19   | .07   |
| IN.   | .10   | .17   | 1.13  | 1.75  | 2.93   | 2.56   | 4.53   | 1.03  | .19   | .10   | .22   | .08   |

CAL YR 1971 TOTAL 49,637.7 MEAN 136 MAX 2,600 MIN 4.7 CFSM .87 IN 11.84  
WTR YR 1972 TOTAL 62,021.8 MEAN 169 MAX 2,850 MIN 1.4 CFSM 1.08 IN 14.79

## PEAK DISCHARGE (BASE, 2,400 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 2-14 | 0500 | 15.70 | 2,500     | 4-14 | 0730 | 19.27 | 3,590     |
| 3- 3 | 1530 | 16.38 | 2,700     | 4-22 | 1200 | 16.54 | 2,750     |
| 4- 8 | 1400 | 16.34 | 2,690     |      |      |       |           |



03201600 Sandy Run above Big Four Hollow Creek near Lake Hope, Ohio

LOCATION.--Lat 39°21'45", long 82°18'47", in NW 1/4 SW 1/4 sec.11, T.11 N., R.16 W., Vinton County, on right bank 250 ft upstream from Big Four Hollow Creek, 150 ft downstream from Morgan Hollow Creek, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.--0.98 sq mi.

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

GAGE.--Water-stage recorder, with concrete weir, and 6-inch Parshall flume. Altitude of gage is 770.0 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 280 cfs Aug. 17; minimum, 0.03 cfs many days in October, November, and August.

Period of record: Maximum discharge, 280 cfs Aug. 17, 1972; minimum, 0.02 cfs Sept. 24, 25, 1971 (gage height, 0.05 ft).

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1     | .03  | .05   | .09   | .12   | .25   | 1.2   | .58   | .74   | .24   | .25  | .06   | .05   |
| 2     | .04  | .11   | .06   | .54   | .33   | 4.6   | .46   | .60   | .18   | .15  | .07   | .07   |
| 3     | .03  | .05   | .05   | .39   | .58   | 4.2   | .54   | .53   | .13   | .62  | .10   | .80   |
| 4     | .03  | .04   | .04   | 1.4   | .78   | 2.9   | 2.4   | .42   | .13   | .33  | 1.2   | .26   |
| 5     | .04  | .03   | .05   | 3.1   | .50   | 2.0   | 1.6   | .28   | .10   | .28  | .16   | .12   |
| 6     | .04  | .05   | 7.4   | .88   | .38   | 1.6   | 1.4   | .33   | .12   | .18  | .12   | .07   |
| 7     | .04  | .05   | 7.8   | .56   | .25   | 2.7   | 11    | .28   | .10   | .14  | .11   | .10   |
| 8     | .04  | .03   | .88   | .39   | .26   | 2.8   | 7.0   | .38   | .10   | .13  | .06   | .50   |
| 9     | .05  | .04   | .48   | 1.7   | .23   | 1.8   | 3.8   | 2.4   | .19   | .18  | .05   | .25   |
| 10    | .05  | .03   | .38   | 1.9   | .22   | 1.3   | 2.3   | 1.8   | .11   | .20  | .04   | .17   |
| 11    | .05  | .03   | .25   | .88   | .20   | 1.2   | 1.6   | 1.4   | .08   | .14  | .05   | .17   |
| 12    | .05  | .03   | .17   | .52   | .28   | .96   | 1.4   | 1.1   | .05   | .12  | .04   | .96   |
| 13    | .05  | .04   | .13   | .40   | 9.4   | .88   | 7.6   | .94   | .18   | .12  | .04   | .52   |
| 14    | .05  | .03   | .20   | .25   | 4.0   | .64   | 3.6   | 1.1   | .12   | .10  | .04   | .30   |
| 15    | .04  | .03   | .50   | .14   | 4.6   | .58   | 2.6   | 4.0   | .47   | .67  | .03   | .20   |
| 16    | .04  | .03   | .70   | .08   | 2.7   | 1.7   | 4.6   | 2.6   | .41   | 1.1  | .03   | .18   |
| 17    | .04  | .03   | .50   | .10   | 1.9   | 2.5   | 4.0   | 1.7   | .13   | .39  | 5.0   | .17   |
| 18    | .03  | .03   | .31   | .16   | 1.5   | 1.9   | 2.7   | 1.3   | .12   | .22  | 6.0   | .17   |
| 19    | .03  | .05   | .22   | .26   | 1.0   | 1.3   | 2.1   | 1.1   | .10   | .14  | 3.0   | .22   |
| 20    | .03  | .05   | .34   | .30   | .78   | 1.1   | 2.1   | 1.2   | .30   | .10  | 1.3   | .20   |
| 21    | .03  | .05   | .36   | .25   | .68   | 1.1   | 5.0   | .98   | .21   | .09  | .50   | .21   |
| 22    | .05  | .04   | .22   | .28   | .58   | 3.3   | 12    | .74   | .13   | .09  | .22   | .20   |
| 23    | .04  | .04   | .20   | .60   | .60   | 2.7   | 3.2   | .56   | .16   | .08  | .14   | .22   |
| 24    | .05  | .06   | .20   | 1.1   | 3.0   | 2.1   | 2.6   | .46   | .12   | .07  | .12   | .54   |
| 25    | .07  | .06   | .18   | 2.0   | 2.0   | 1.8   | 2.2   | .38   | .12   | .07  | .11   | .40   |
| 26    | .08  | .05   | .18   | .86   | 2.2   | 1.4   | 1.7   | .28   | .10   | .06  | .10   | .34   |
| 27    | .07  | .13   | .14   | .62   | 1.6   | 1.3   | 1.3   | .25   | .08   | .07  | .09   | .30   |
| 28    | .05  | .07   | .16   | .50   | 1.5   | 1.0   | 1.1   | .25   | .09   | .05  | .07   | .28   |
| 29    | .05  | .28   | .13   | .39   | 1.2   | .93   | .96   | .27   | 9.2   | .06  | .06   | 1.3   |
| 30    | .04  | .17   | .27   | .30   | ----- | .58   | .88   | .50   | 1.3   | .05  | .06   | 1.4   |
| 31    | .04  | ----- | .13   | .24   | ----- | .56   | ----- | .30   | ----- | .05  | .05   | ----- |
| TOTAL | 1.37 | 1.78  | 22.72 | 21.21 | 44.24 | 54.63 | 94.32 | 29.17 | 14.91 | 6.30 | 19.02 | 10.67 |
| MEAN  | .044 | .059  | .73   | .68   | 1.53  | 1.76  | 3.14  | .94   | .50   | .20  | .61   | .36   |
| MAX   | .08  | .28   | 7.8   | 3.1   | 5.4   | 4.6   | 12    | 4.0   | 9.2   | 1.1  | 6.0   | 1.4   |
| MIN   | .03  | .03   | .04   | .08   | .20   | .56   | .46   | .25   | .08   | .05  | .03   | .05   |
| CFSM  | .04  | .06   | .74   | .69   | 1.56  | 1.80  | 3.20  | .96   | .51   | .20  | .62   | .37   |
| IN.   | .05  | .07   | .86   | .81   | 1.68  | 2.07  | 3.58  | 1.11  | .57   | .24  | .72   | .41   |

CAL YR 1971 TOTAL 308.60 MEAN .85 MAX 27 MIN .03 CFSM .87 IN 11.71  
WTR YR 1972 TCTAL 320.44 MEAN .88 MAX 12 MIN .03 CFSM .90 IN 12.16

## PEAK DISCHARGE (BASE, 50 CFS)

| DATE | TIME | G. H.   | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|---------|-----------|------|------|-------|-----------|
| 4-7  | 0600 | Unknown | About 60  | 8-17 | 2330 | 4.16  | 280       |
| 6-29 | 1700 | 3.30    | 132       |      |      |       |           |

## RACCOON CREEK BASIN

03201700 Big Four Hollow Creek near Lake Hope, Ohio

LOCATION.--Lat 39°21'48", long 82°18'51", in SE 1/4 NE 1/4 sec.11, T.11 N., R.16 W., Vinton County, on right bank 200 ft upstream from State Route 278 crossing, 300 ft upstream from Sandy Run, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.--1.01 sq mi.

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

GAGE.--Water-stage recorder with concrete weir and 6-inch Parshall flume. Altitude of gage is 770.0 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 200 cfs Aug. 17 (gage height, 3.76 ft); minimum, 0.02 cfs Oct. 18, 19, 20, 21, Nov. 16.

Period of record: Maximum discharge, 200 cfs Aug. 17, 1972 (gage height, 3.76 ft); minimum daily discharge, 0.01 cfs July 6, 7, 8, Sept. 25, 1971.

REMARKS.--Records fair. Water-quality for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECCND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL  | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|-------|--------|-------|-------|------|-------|-------|
| 1     | .05  | .03   | .11   | .16   | .22   | 1.2   | .60    | .70   | .16   | 1.1  | .03   | .05   |
| 2     | .04  | .10   | .07   | .52   | .30   | 7.8   | .56    | .60   | .13   | .58  | .03   | .05   |
| 3     | .03  | .05   | .05   | .52   | 1.0   | 5.1   | .52    | .50   | .11   | .60  | .06   | 1.4   |
| 4     | .03  | .04   | .06   | 1.4   | 1.0   | 2.5   | 2.4    | .40   | .10   | .40  | 1.8   | .34   |
| 5     | .03  | .04   | .07   | 4.0   | .64   | 1.9   | 1.5    | .32   | .08   | .36  | .23   | .18   |
| 6     | .03  | .04   | 3.5   | 1.3   | .46   | 1.5   | 1.1    | .34   | .08   | .27  | .12   | .12   |
| 7     | .05  | .05   | 6.7   | .70   | .38   | 2.2   | 15     | .32   | .07   | .20  | .08   | .10   |
| 8     | .03  | .03   | 1.5   | .50   | .31   | 2.2   | 8.0    | 1.3   | .05   | .17  | .06   | .42   |
| 9     | .04  | .03   | .66   | 2.0   | .27   | 1.5   | 3.6    | 5.0   | .06   | .31  | .05   | .28   |
| 10    | .05  | .03   | .44   | 2.4   | .24   | 1.2   | 2.3    | 2.6   | .11   | .22  | .03   | .14   |
| 11    | .03  | .03   | .34   | 1.2   | .22   | 1.0   | 1.6    | 1.6   | .05   | .16  | .03   | .10   |
| 12    | .03  | .03   | .27   | .72   | .24   | .88   | 1.4    | 1.2   | .04   | .12  | .03   | 1.0   |
| 13    | .03  | .03   | .21   | .50   | 15    | .78   | 9.6    | .93   | .09   | .10  | .04   | .60   |
| 14    | .04  | .03   | .30   | .28   | 6.9   | .74   | 5.0    | 1.1   | .08   | .08  | .03   | .34   |
| 15    | .03  | .03   | .78   | .19   | 5.0   | .66   | 3.5    | 6.8   | .29   | .93  | .03   | .24   |
| 16    | .03  | .02   | .72   | .10   | 2.9   | 1.7   | 6.7    | 5.3   | .40   | 1.2  | .03   | .18   |
| 17    | .03  | .03   | .44   | .11   | 2.1   | 2.7   | 4.6    | 2.5   | .16   | .48  | 5.9   | .14   |
| 18    | .02  | .03   | .31   | .28   | 1.7   | 1.9   | 3.4    | 1.8   | .11   | .30  | 7.5   | .12   |
| 19    | .02  | .04   | .25   | .38   | 1.3   | 1.3   | 2.6    | 1.2   | .09   | .21  | 3.0   | .25   |
| 20    | .02  | .04   | .60   | .34   | 1.0   | 1.0   | 2.5    | 1.1   | .19   | .16  | 1.2   | .11   |
| 21    | .02  | .05   | .42   | .33   | .86   | .96   | 7.4    | .88   | .18   | .11  | .52   | .09   |
| 22    | .03  | .05   | .31   | .34   | .60   | 3.8   | 17     | .68   | .14   | .10  | .36   | .08   |
| 23    | .03  | .03   | .25   | .50   | .82   | 2.6   | 7.0    | .60   | .13   | .08  | .27   | .08   |
| 24    | .06  | .04   | .25   | .81   | 5.9   | 2.0   | 3.4    | .39   | .11   | .07  | .18   | .62   |
| 25    | .04  | .05   | .21   | 2.4   | 3.6   | 1.6   | 2.3    | .30   | .09   | .06  | .13   | .54   |
| 26    | .04  | .04   | .20   | 1.0   | 4.7   | 1.3   | 1.2    | .22   | .07   | .05  | .12   | .45   |
| 27    | .03  | .07   | .18   | .70   | 2.5   | 1.1   | 1.4    | .17   | .05   | .05  | .11   | .42   |
| 28    | .03  | .05   | .18   | .50   | 1.8   | .93   | 1.2    | .13   | .05   | .05  | .09   | .36   |
| 29    | .03  | .18   | .17   | .38   | 1.3   | .83   | 1.1    | .13   | 11    | .05  | .07   | 2.0   |
| 30    | .03  | .18   | .20   | .30   | ----- | .70   | .94    | .31   | 3.4   | .04  | .06   | 1.9   |
| 31    | .03  | ----- | .18   | .25   | ----- | .60   | -----  | .22   | ----- | .04  | .05   | ----- |
| TOTAL | 1.03 | 1.49  | 19.93 | 25.11 | 63.26 | 56.18 | 119.42 | 39.64 | 17.67 | 8.65 | 22.24 | 12.70 |
| MEAN  | .033 | .050  | .64   | .81   | 2.18  | 1.81  | 3.98   | 1.28  | .59   | .28  | .72   | .42   |
| MAX   | .06  | .18   | 6.7   | 4.0   | 15    | 7.8   | 17     | 6.8   | 11    | 1.2  | 7.5   | 2.0   |
| MIN   | .02  | .02   | .05   | .10   | .22   | .60   | .52    | .13   | .04   | .04  | .03   | .05   |
| CFSM  | .03  | .05   | .63   | .80   | 2.16  | 1.79  | 3.94   | 1.27  | .58   | .28  | .71   | .42   |
| IN.   | .04  | .05   | .73   | .92   | 2.33  | 2.07  | 4.40   | 1.46  | .65   | .32  | .82   | .47   |

CAL YR 1971 TOTAL 283.30 MEAN .78 MAX 29 MIN .01 CFSM .77 IN 10.43  
WTR YR 1972 TOTAL 387.32 MEAN 1.06 MAX 17 MIN .02 CFSM 1.05 IN 14.27

## PEAK DISCHARGE (BASE, 50 CFS)

| DATE | TIME | G. H.   | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|---------|-----------|------|------|-------|-----------|
| 4-7  | 0700 | 2.60    | 56        | 8-17 | 2330 | 3.76  | 200       |
| 6-29 | 1700 | Unknown | About 80  |      |      |       |           |

03201800 Sandy Run near Lake Hope, Ohio

LOCATION.--Lat 39°20'01", long 82°19'56", in T.11 N., R.16 W., Vinton County, on right bank at upstream side of bridge on King Hollow Trail, 1,200 ft downstream from Harbargar Hollow, 2.6 miles upstream from spillway of Lake Hope, and 5.0 miles northeast of Zaleski.

DRAINAGE AREA.--4.99 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 715.51 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 5.59 cfs (15.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 360 cfs Apr. 7 (gage height, 5.42 ft); minimum daily, 0.02 cfs Aug. 2.

Period of record: Maximum discharge, 3,770 cfs Aug. 3, 1958 (gage height, 8.41 ft); no flow at times most years.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN    | FEB   | MAR   | APR   | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|-------|
| 1     | .11  | .08   | .88   | .42    | 1.6   | 7.3   | 3.8   | 4.2    | .88   | 4.7   | .03   | .25   |
| 2     | .10  | .35   | .53   | 1.9    | 2.1   | 43    | 3.8   | 3.4    | .88   | 2.7   | .02   | .32   |
| 3     | .08  | .30   | .32   | 3.4    | 6.3   | 27    | 3.6   | 3.0    | .64   | 2.7   | .07   | 5.0   |
| 4     | .08  | .32   | .42   | 5.7    | 8.1   | 16    | 13    | 2.8    | .64   | 2.1   | 5.0   | 1.9   |
| 5     | .08  | .25   | .32   | 23     | 5.7   | 12    | 13    | 2.6    | .53   | 1.7   | 1.1   | .76   |
| 6     | .08  | .19   | 16    | 7.6    | 4.5   | 11    | 8.6   | 2.4    | .64   | 1.2   | .42   | .42   |
| 7     | .08  | .32   | 35    | 5.0    | 3.6   | 20    | 82    | 2.3    | .53   | 1.0   | .32   | .25   |
| 8     | .10  | .25   | 8.3   | 3.4    | 2.7   | 16    | 41    | 4.2    | .42   | .76   | .19   | 1.0   |
| 9     | .11  | .19   | 4.1   | 9.1    | 2.5   | 10    | 24    | 6.6    | 1.0   | .88   | .11   | .76   |
| 10    | .11  | .25   | 2.1   | 15     | 2.3   | 7.1   | 15    | 12     | 1.1   | 1.1   | .07   | .32   |
| 11    | .11  | .19   | 1.4   | 7.1    | 2.3   | 6.3   | 10    | 8.6    | .53   | .64   | .03   | .25   |
| 12    | .10  | .19   | 1.0   | 5.0    | 2.7   | 5.7   | 8.3   | 6.3    | .42   | .53   | .05   | 2.7   |
| 13    | .08  | .19   | .64   | 4.1    | 82    | 5.2   | 50    | 5.4    | .88   | .32   | .07   | 2.1   |
| 14    | .14  | .19   | .64   | 2.7    | 41    | 4.5   | 26    | 6.3    | 1.0   | .32   | .03   | 1.1   |
| 15    | .09  | .19   | 3.0   | 1.9    | 30    | 4.3   | 16    | 26     | 1.2   | 1.5   | .03   | .76   |
| 16    | .08  | .19   | 4.3   | 1.0    | 19    | 8.8   | 33    | 22     | 3.7   | 4.7   | .03   | .64   |
| 17    | .08  | .15   | 2.3   | 1.5    | 12    | 17    | 24    | 12     | .76   | 2.1   | 4.0   | .64   |
| 18    | .08  | .15   | 1.4   | 2.3    | 11    | 12    | 14    | 9.1    | .42   | 1.1   | 14    | .53   |
| 19    | .08  | .19   | 1.0   | 2.1    | 9.7   | 7.8   | 10    | 6.8    | .25   | .76   | 30    | 1.5   |
| 20    | .08  | .32   | 2.7   | 1.9    | 7.6   | 6.3   | 10    | 6.1    | .76   | .53   | 4.7   | .88   |
| 21    | .08  | .25   | 3.0   | 1.7    | 6.6   | 5.9   | 22    | 5.0    | .88   | .32   | 1.7   | .88   |
| 22    | .08  | .19   | 1.9   | 1.7    | 5.4   | 21    | 88    | 3.6    | .53   | .25   | 1.1   | .76   |
| 23    | .08  | .15   | 1.2   | 4.5    | 6.1   | 21    | 65    | 2.5    | .53   | .19   | .88   | .76   |
| 24    | .11  | .19   | 1.0   | 9.3    | 36    | 13    | 35    | 1.9    | .42   | .15   | .53   | 3.0   |
| 25    | .16  | .25   | .76   | 15     | 19    | 10    | 13    | 1.4    | .42   | .15   | .42   | 2.7   |
| 26    | .19  | .25   | .64   | 7.6    | 32    | 8.6   | 8.0   | 1.1    | .25   | .15   | .42   | 2.1   |
| 27    | .13  | .64   | .53   | 5.7    | 16    | 7.3   | 4.8   | .88    | .19   | .15   | .42   | 2.1   |
| 28    | .09  | .64   | .53   | 4.3    | 11    | 6.3   | 5.4   | .76    | .19   | .15   | .32   | 1.7   |
| 29    | .09  | 1.4   | .42   | 3.6    | 8.3   | 5.4   | 7.0   | 1.4    | 41    | .07   | .32   | 6.1   |
| 30    | .08  | 1.5   | .53   | 3.0    | ----- | 4.7   | 5.0   | 2.3    | 15    | .05   | .25   | 7.1   |
| 31    | .08  | ----- | .64   | 2.1    | ----- | 4.1   | ----- | 1.2    | ----- | .05   | .25   | ----- |
| TOTAL | 3.02 | 9.91  | 97.50 | 162.62 | 397.1 | 354.6 | 662.3 | 174.14 | 76.59 | 33.02 | 66.88 | 49.28 |
| MEAN  | .097 | .33   | 3.15  | 5.25   | 13.7  | 11.4  | 22.1  | 5.62   | 2.55  | 1.07  | 2.16  | 1.64  |
| MAX   | .19  | 1.5   | 35    | 23     | 82    | 43    | 88    | 26     | 41    | 4.7   | 30    | 7.1   |
| MIN   | .08  | .08   | .32   | .42    | 1.6   | 4.1   | 3.6   | .76    | .19   | .05   | .02   | .25   |
| CFSM  | .02  | .07   | .63   | 1.05   | 2.75  | 2.28  | 4.43  | 1.13   | .51   | .21   | .43   | .33   |
| IN.   | .02  | .07   | .73   | 1.21   | 2.96  | 2.64  | 4.94  | 1.30   | .57   | .25   | .50   | .37   |

CAL YR 1971 TOTAL 1,504.08 MEAN 4.12 MAX 115 MIN .01 CFSM .83 IN 11.21  
WTR YR 1972 TOTAL 2,086.96 MEAN 5.70 MAX 88 MIN .02 CFSM 1.14 IN 15.56

## PEAK DISCHARGE (BASE, 220 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME    | G. H. | DISCHARGE |
|------|------|-------|-----------|------|---------|-------|-----------|
| 4-7  | 0915 | 5.42  | 360       | 8-18 | Unknown | 5.18  | 306       |

## 03202000 Raccoon Creek at Adamsville, Ohio

LOCATION.--Lat 38°52'25", long 82°21'22", in SE 1/4 sec.26, T.6 N., R.16 W., Gallia County, on left bank at downstream side of U.S. Highway 35 bridge at Adamsville, 1.3 miles upstream from Ryan Run, and 1.4 miles downstream from Indian Creek.

DRAINAGE AREA.--585 sq mi.

PERIOD OF RECORD.--June 1915 to December 1935, October 1938 to current year. Monthly discharge only for December 1935, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 570.04 ft above mean sea level. Prior to June 13, 1940, non-recording gage, June 13, 1940 to Oct. 27, 1970 water-stage recorder 480 ft upstream at same datum.

AVERAGE DISCHARGE.--54 years, 640 cfs (14.85 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,330 cfs Apr. 16 (gage height 16.19 ft); minimum, 27 cfs Aug. 17. Period of record: Maximum discharge, 20,000 cfs May 28, 1969 (gage height 28.69 ft), from rating extended above 13,000 cfs on basis of slope-conveyance estimate of peak flow; minimum, 1.1 cfs Oct. 17-19, 1964. Flood of January 1937 reached a stage of 25.2 ft, from floodmark (discharge 16,000 cfs).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1916-18, 1920, 1922, 1924, 1926-27, 1931, 1933, 1935(M). WSP 1908: Drainage area. WSP 2108: 1968-70(M).

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 157   | 68    | 274    | 306    | 411    | 1,170  | 535    | 632    | 217   | 127   | 40    | 56    |
| 2     | 131   | 70    | 239    | 481    | 423    | 1,320  | 507    | 608    | 217   | 364   | 37    | 53    |
| 3     | 113   | 75    | 208    | 641    | 459    | 2,760  | 486    | 676    | 200   | 278   | 35    | 52    |
| 4     | 99    | 75    | 179    | 688    | 619    | 2,910  | 630    | 658    | 181   | 245   | 39    | 51    |
| 5     | 86    | 74    | 154    | 1,480  | 590    | 2,800  | 830    | 552    | 163   | 199   | 44    | 48    |
| 6     | 78    | 70    | 307    | 1,540  | 621    | 2,230  | 938    | 482    | 149   | 184   | 49    | 127   |
| 7     | 71    | 70    | 1,510  | 1,440  | 636    | 1,550  | 1,360  | 426    | 142   | 163   | 60    | 149   |
| 8     | 61    | 68    | 2,130  | 1,120  | 566    | 1,310  | 2,680  | 388    | 134   | 140   | 70    | 99    |
| 9     | 57    | 67    | 2,260  | 901    | 525    | 1,340  | 2,730  | 705    | 126   | 124   | 65    | 77    |
| 10    | 57    | 67    | 2,160  | 1,230  | 464    | 1,290  | 2,750  | 1,500  | 119   | 112   | 51    | 64    |
| 11    | 57    | 67    | 1,360  | 1,300  | 409    | 1,060  | 2,490  | 1,900  | 114   | 105   | 43    | 57    |
| 12    | 57    | 67    | 831    | 1,190  | 359    | 883    | 2,100  | 1,710  | 113   | 99    | 39    | 58    |
| 13    | 57    | 68    | 639    | 974    | 1,410  | 772    | 2,560  | 1,130  | 117   | 91    | 33    | 110   |
| 14    | 56    | 65    | 504    | 768    | 2,320  | 705    | 3,680  | 792    | 179   | 95    | 32    | 128   |
| 15    | 52    | 72    | 440    | 612    | 2,510  | 653    | 4,070  | 766    | 236   | 84    | 30    | 109   |
| 16    | 54    | 70    | 460    | 434    | 2,650  | 643    | 4,280  | 831    | 203   | 82    | 29    | 145   |
| 17    | 57    | 57    | 549    | 408    | 2,600  | 862    | 3,700  | 938    | 331   | 283   | 31    | 112   |
| 18    | 60    | 53    | 539    | 392    | 2,270  | 1,090  | 2,690  | 940    | 284   | 187   | 376   | 91    |
| 19    | 63    | 52    | 460    | 374    | 1,650  | 1,210  | 2,010  | 801    | 218   | 185   | 1,130 | 77    |
| 20    | 61    | 53    | 436    | 396    | 1,150  | 1,080  | 1,500  | 663    | 187   | 157   | 787   | 68    |
| 21    | 57    | 61    | 482    | 469    | 926    | 860    | 1,400  | 570    | 218   | 120   | 665   | 61    |
| 22    | 52    | 63    | 489    | 458    | 835    | 895    | 3,250  | 494    | 184   | 105   | 372   | 57    |
| 23    | 52    | 63    | 450    | 495    | 765    | 1,130  | 3,500  | 430    | 170   | 92    | 229   | 54    |
| 24    | 70    | 63    | 399    | 744    | 1,940  | 1,450  | 3,770  | 366    | 163   | 78    | 172   | 65    |
| 25    | 82    | 63    | 353    | 843    | 2,230  | 1,440  | 3,800  | 314    | 155   | 68    | 149   | 78    |
| 26    | 91    | 65    | 329    | 893    | 2,950  | 1,170  | 2,880  | 275    | 142   | 60    | 123   | 84    |
| 27    | 82    | 85    | 315    | 893    | 2,850  | 966    | 1,740  | 245    | 134   | 53    | 98    | 81    |
| 28    | 79    | 109   | 305    | 788    | 2,400  | 839    | 970    | 218    | 121   | 51    | 84    | 85    |
| 29    | 77    | 172   | 300    | 646    | 1,640  | 736    | 785    | 199    | 131   | 49    | 72    | 96    |
| 30    | 74    | 263   | 304    | 547    | -----  | 662    | 678    | 185    | 128   | 44    | 65    | 178   |
| 31    | 71    | ----- | 324    | 426    | -----  | 588    | -----  | 191    | ----- | 42    | 60    | ----- |
| TOTAL | 2,271 | 2,335 | 19,689 | 23,877 | 39,178 | 38,374 | 65,299 | 20,585 | 5,176 | 4,066 | 5,109 | 2,570 |
| MEAN  | 73.3  | 77.8  | 635    | 770    | 1,351  | 1,238  | 2,177  | 664    | 173   | 131   | 165   | 85.7  |
| MAX   | 157   | 263   | 2,260  | 1,540  | 2,950  | 2,910  | 4,280  | 1,900  | 331   | 364   | 1,130 | 178   |
| MIN   | 52    | 52    | 154    | 306    | 359    | 588    | 486    | 185    | 113   | 42    | 29    | 48    |
| CFSM  | .13   | .13   | 1.09   | 1.32   | 2.31   | 2.12   | 3.72   | 1.14   | .30   | .22   | .28   | .15   |
| IN.   | .14   | .15   | 1.25   | 1.52   | 2.49   | 2.44   | 4.15   | 1.31   | .33   | .26   | .32   | .16   |

CAL YR 1971 TOTAL 177,247 MEAN 486 MAX 4,280 MIN 48 CFSM .83 IN 11.27  
WTR YR 1972 TOTAL 228,529 MEAN 624 MAX 4,280 MIN 29 CFSM 1.07 IN 14.53

## PEAK DISCHARGE (BASE, 3,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-16 | 1300 | 16.19 | 4,330     | 4-25 | 0100 | 15.54 | 3,920     |



03219500 Scioto River near Prospect, Ohio

LOCATION.--Lat 40°25'10", long 83°11'50", Delaware County, on downstream side of pier of Hoskins Bridge, 1.5 miles upstream from Ottawa Creek, 2.0 miles south of Prospect, and 2.5 miles downstream from Patton Run.

DRAINAGE AREA.--567 sq mi.

PERIOD OF RECORD.--July 1925 to October 1932, October 1939 to current year. Published as "at Prospect" 1925-32. Gage-height records collected in this vicinity since 1915 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 886.9 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers). July 24, 1925, to Oct. 31, 1932, nonrecording gage at site 2.5 miles upstream at datum 4.8 ft higher. Oct. 16 to Dec. 5, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--40 years, 444 cfs (10.63 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,370 cfs Apr. 22 (gage height, 13.14 ft); minimum, 17 cfs Oct. 4, 8, Sept. 11.

Period of record: Maximum discharge, 10,100 cfs Mar. 22, 1927 (gage height, 15.0 ft, from graph based on gage readings at site and datum then in use), and Jan. 21, 1959 (gage height, 15.30 ft); minimum, 3.5 cfs Sept. 13, 1953.

Flood of March 25, 1913 reached a stage of 21.1 ft (discharge, 27,000 cfs, computed by Franklin County Conservancy District), at site and datum used 1925-32.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV      | DEC       | JAN    | FEB       | MAR      | APR    | MAY    | JUN   | JUL    | AUG   | SEP   |
|-------------|---------------|----------|-----------|--------|-----------|----------|--------|--------|-------|--------|-------|-------|
| 1           | 23            | 22       | 58        | 1,900  | 170       | 224      | 372    | 420    | 426   | 212    | 50    | 30    |
| 2           | 22            | 20       | 62        | 2,070  | 162       | 1,130    | 324    | 381    | 486   | 214    | 46    | 29    |
| 3           | 19            | 24       | 68        | 1,330  | 170       | 2,060    | 279    | 342    | 378   | 1,560  | 65    | 28    |
| 4           | 19            | 21       | 58        | 840    | 224       | 3,020    | 252    | 294    | 279   | 1,950  | 123   | 32    |
| 5           | 19            | 21       | 45        | 708    | 240       | 2,540    | 238    | 249    | 220   | 1,760  | 230   | 26    |
| 6           | 20            | 25       | 50        | 633    | 200       | 1,270    | 252    | 220    | 188   | 1,290  | 160   | 24    |
| 7           | 19            | 25       | 119       | 510    | 170       | 630      | 1,040  | 204    | 168   | 642    | 101   | 24    |
| 8           | 18            | 21       | 363       | 435    | 150       | 525      | 2,110  | 220    | 150   | 432    | 74    | 24    |
| 9           | 24            | 22       | 591       | 408    | 130       | 465      | 3,410  | 1,600  | 134   | 324    | 62    | 22    |
| 10          | 48            | 24       | 453       | 828    | 120       | 381      | 3,030  | 3,320  | 127   | 306    | 54    | 20    |
| 11          | 29            | 24       | 315       | 1,420  | 100       | 318      | 1,880  | 4,670  | 110   | 270    | 48    | 18    |
| 12          | 31            | 23       | 230       | 1,450  | 100       | 300      | 1,210  | 3,640  | 99    | 230    | 43    | 20    |
| 13          | 29            | 24       | 190       | 975    | 120       | 381      | 1,890  | 2,350  | 399   | 190    | 36    | 21    |
| 14          | 37            | 21       | 198       | 609    | 200       | 1,070    | 2,980  | 1,600  | 975   | 164    | 32    | 294   |
| 15          | 33            | 21       | 784       | 400    | 411       | 1,580    | 4,240  | 2,300  | 995   | 148    | 50    | 597   |
| 16          | 29            | 23       | 1,370     | 360    | 633       | 1,830    | 3,440  | 3,600  | 828   | 621    | 41    | 420   |
| 17          | 26            | 22       | 1,520     | 320    | 618       | 1,810    | 2,730  | 3,400  | 630   | 582    | 35    | 249   |
| 18          | 23            | 21       | 1,370     | 300    | 450       | 1,460    | 3,310  | 1,800  | 447   | 408    | 72    | 160   |
| 19          | 25            | 25       | 752       | 276    | 372       | 915      | 2,830  | 1,360  | 303   | 279    | 99    | 125   |
| 20          | 23            | 30       | 456       | 261    | 315       | 624      | 4,300  | 820    | 230   | 238    | 112   | 101   |
| 21          | 22            | 24       | 375       | 249    | 255       | 534      | 5,690  | 573    | 196   | 194    | 83    | 96    |
| 22          | 23            | 21       | 339       | 243    | 210       | 1,320    | 7,220  | 465    | 174   | 208    | 99    | 83    |
| 23          | 29            | 23       | 300       | 312    | 196       | 1,630    | 7,080  | 381    | 162   | 166    | 162   | 65    |
| 24          | 27            | 23       | 252       | 561    | 160       | 1,240    | 6,120  | 321    | 150   | 152    | 148   | 101   |
| 25          | 22            | 22       | 224       | 609    | 154       | 768      | 4,740  | 273    | 138   | 138    | 99    | 134   |
| 26          | 21            | 21       | 212       | 474    | 154       | 579      | 2,710  | 232    | 129   | 108    | 69    | 238   |
| 27          | 21            | 25       | 202       | 285    | 129       | 501      | 1,300  | 204    | 116   | 94     | 61    | 543   |
| 28          | 23            | 34       | 204       | 260    | 129       | 468      | 752    | 182    | 105   | 83     | 54    | 708   |
| 29          | 29            | 31       | 198       | 230    | 140       | 504      | 582    | 168    | 108   | 69     | 45    | 570   |
| 30          | 37            | 53       | 450       | 210    | -----     | 477      | 483    | 184    | 190   | 62     | 38    | 1,220 |
| 31          | 27            | -----    | 1,350     | 190    | -----     | 423      | -----  | 249    | ----- | 55     | 32    | ----- |
| TOTAL       | 797           | 736      | 13,158    | 19,656 | 6,582     | 30,977   | 76,794 | 36,022 | 9,040 | 13,149 | 2,423 | 6,022 |
| MEAN        | 25.7          | 24.5     | 424       | 634    | 227       | 999      | 2,560  | 1,162  | 301   | 424    | 78.2  | 201   |
| MAX         | 48            | 53       | 1,520     | 2,070  | 633       | 3,020    | 7,220  | 4,670  | 995   | 1,950  | 230   | 1,220 |
| MIN         | 18            | 20       | 45        | 190    | 100       | 224      | 238    | 168    | 99    | 55     | 32    | 18    |
| CFSM        | .05           | .04      | .75       | 1.12   | .40       | 1.76     | 4.52   | 2.05   | .53   | .75    | .14   | .35   |
| IN.         | .05           | .05      | .86       | 1.29   | .43       | 2.03     | 5.04   | 2.36   | .59   | .86    | .16   | .40   |
| CAL YR 1971 | TOTAL 131,732 | MEAN 361 | MAX 4,430 | MIN 15 | CFSM .64  | IN 8.64  |        |        |       |        |       |       |
| WTR YR 1972 | TOTAL 215,356 | MEAN 588 | MAX 7,220 | MIN 18 | CFSM 1.04 | IN 14.13 |        |        |       |        |       |       |

## PEAK DISCHARGE (BASE, 3,600 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-9  | 2000 | 8.68  | 3,620     | 4-22 | 1400 | 13.14 | 7,370     |
| 4-15 | 0900 | 9.60  | 4,360     | 5-11 | 1100 | 10.14 | 4,790     |

## SCIOTO RIVER BASIN

03220000 Mill Creek near Bellepoint, Ohio

LOCATION.--Lat 40°14'54", long 83°10'26", Delaware County, on left bank at upstream side of county bridge, 1.2 miles west of Bellepoint, 1.5 miles upstream from mouth, and 2.3 miles downstream from Blues Creek.

DRAINAGE AREA.--178 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 865.14 ft above mean sea level, adjustment of 1912 (levels by students of Ohio State University, City of Columbus bench mark). Prior to Jan. 1, 1948, nonrecording gage, at same site and datum.

AVERAGE DISCHARGE.--30 years, 146 cfs (11.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,120 cfs Apr. 13 (gage height, 9.81 ft); minimum, 1.8 cfs Oct. 7, 8.

Period of record: Maximum discharge, 20,300 cfs Jan. 21, 1959 (gage height, 13.85 ft), from rating curve extended above 14,000 cfs; no flow Sept. 25, 26, 1944, Sept. 19, 1948.

A stage of 18.0 ft occurred in March 1913.

REMARKS.--Records good. Diurnal fluctuation caused by stone quarry upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC     | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL     | AUG   | SEP   |
|-------|-------|-------|---------|-------|-------|--------|--------|--------|-------|---------|-------|-------|
| 1     | 7.1   | 3.8   | 16      | 478   | 26    | 235    | 112    | 61     | 41    | 21      | 8.0   | 5.8   |
| 2     | 4.9   | 5.8   | 9.1     | 228   | 23    | 988    | 87     | 60     | 41    | 37      | 7.5   | 6.2   |
| 3     | 4.0   | 4.0   | 8.0     | 222   | 32    | 1,000  | 75     | 53     | 32    | 22      | 9.8   | 4.9   |
| 4     | 3.6   | 4.0   | 7.5     | 220   | 47    | 364    | 70     | 47     | 25    | 423     | 11    | 4.9   |
| 5     | 5.3   | 5.8   | 6.2     | 258   | 41    | 205    | 64     | 41     | 22    | 285     | 14    | 4.0   |
| 6     | 3.6   | 5.3   | 8.4     | 150   | 37    | 114    | 62     | 37     | 22    | 105     | 18    | 4.4   |
| 7     | 2.0   | 5.8   | 41      | 100   | 32    | 101    | 1,980  | 34     | 20    | 64      | 15    | 3.6   |
| 8     | 2.6   | 4.4   | 76      | 72    | 29    | 109    | 2,070  | 62     | 17    | 38      | 12    | 3.2   |
| 9     | 3.8   | 5.3   | 72      | 90    | 26    | 120    | 612    | 2,470  | 16    | 31      | 12    | 4.9   |
| 10    | 6.6   | 4.9   | 50      | 361   | 24    | 81     | 372    | 2,190  | 16    | 30      | 16    | 4.4   |
| 11    | 11    | 3.8   | 35      | 409   | 23    | 64     | 275    | 599    | 15    | 23      | 11    | 4.4   |
| 12    | 8.0   | 6.6   | 27      | 212   | 25    | 61     | 385    | 248    | 13    | 23      | 7.5   | 5.8   |
| 13    | 4.9   | 5.3   | 23      | 136   | 36    | 115    | 6,590  | 204    | 14    | 24      | 6.2   | 5.3   |
| 14    | 4.4   | 5.8   | 35      | 96    | 50    | 419    | 3,090  | 793    | 23    | 17      | 5.3   | 18    |
| 15    | 6.6   | 4.4   | 286     | 72    | 300   | 361    | 464    | 1,440  | 46    | 13      | 4.9   | 23    |
| 16    | 7.5   | 4.9   | 750     | 164   | 200   | 402    | 618    | 1,300  | 42    | 124     | 4.4   | 17    |
| 17    | 6.2   | 3.4   | 317     | 60    | 150   | 656    | 1,100  | 451    | 45    | 570     | 4.0   | 11    |
| 18    | 4.9   | 3.0   | 130     | 56    | 120   | 432    | 467    | 232    | 44    | 202     | 6.6   | 13    |
| 19    | 5.3   | 4.4   | 74      | 50    | 100   | 220    | 282    | 154    | 24    | 86      | 6.6   | 12    |
| 20    | 3.8   | 5.3   | 57      | 46    | 86    | 142    | 1,780  | 105    | 17    | 48      | 11    | 12    |
| 21    | 4.0   | 6.6   | 59      | 43    | 70    | 118    | 1,710  | 78     | 19    | 32      | 12    | 9.1   |
| 22    | 4.9   | 5.3   | 68      | 44    | 58    | 1,290  | 1,670  | 62     | 16    | 23      | 17    | 7.1   |
| 23    | 6.6   | 4.9   | 57      | 74    | 50    | 909    | 1,160  | 55     | 14    | 16      | 21    | 6.6   |
| 24    | 7.1   | 4.4   | 42      | 152   | 46    | 336    | 402    | 46     | 13    | 13      | 29    | 8.0   |
| 25    | 7.1   | 3.8   | 36      | 130   | 44    | 208    | 232    | 37     | 13    | 18      | 31    | 9.1   |
| 26    | 6.2   | 4.4   | 35      | 54    | 42    | 158    | 158    | 33     | 13    | 36      | 17    | 17    |
| 27    | 4.4   | 7.1   | 34      | 46    | 40    | 188    | 116    | 30     | 12    | 23      | 13    | 32    |
| 28    | 3.6   | 4.4   | 38      | 35    | 38    | 462    | 91     | 26     | 13    | 16      | 8.4   | 101   |
| 29    | 4.4   | 6.6   | 43      | 32    | 47    | 319    | 74     | 23     | 11    | 13      | 7.1   | 138   |
| 30    | 3.8   | 15    | 519     | 29    | ----- | 200    | 62     | 25     | 11    | 11      | 6.2   | 315   |
| 31    | 3.8   | ----- | 1,030   | 27    | ----- | 158    | -----  | 47     | ----- | 8.4     | 5.8   | ----- |
| TOTAL | 162.0 | 158.5 | 3,989.2 | 4,186 | 1,842 | 10,575 | 26,230 | 11,043 | 670   | 2,395.4 | 358.3 | 810.7 |
| MEAN  | 5.23  | 5.28  | 129     | 135   | 63.5  | 341    | 874    | 356    | 22.3  | 77.3    | 11.6  | 27.0  |
| MAX   | 11    | 15    | 1,030   | 478   | 300   | 1,290  | 6,590  | 2,470  | 46    | 570     | 31    | 315   |
| MIN   | 2.0   | 3.0   | 6.2     | 27    | 23    | 61     | 62     | 23     | 11    | 8.4     | 4.0   | 3.2   |
| CFSM  | .03   | .03   | .72     | .76   | .36   | 1.92   | 4.91   | 2.00   | .13   | .43     | .07   | .15   |
| IN.   | .03   | .03   | .83     | .87   | .38   | 2.21   | 5.48   | 2.31   | .14   | .50     | .07   | .17   |

CAL YR 1971 TOTAL 36,728.30 MEAN 101 MAX 2,750 MIN .95 CFSM .57 IN 7.68  
WTR YR 1972 TOTAL 62,420.10 MEAN 171 MAX 6,550 MIN 2.0 CFSM .96 IN 13.05

## PEAK DISCHARGE (BASE, 2,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 1000 | 6.84  | 3,090     | 5-9  | 1000 | 6.94  | 3,220     |
| 4-13 | 0200 | 9.81  | 8,120     |      |      |       |           |

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REVISIONS (WATER YEARS).--WSP 803: 1924-35. WSP 1725: 1924. WSP 1908: Drainage area.

| DAY         | OCT             | NOV     | DEC      | JAN        | FEB     | MAR    | APR     | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------------|-----------------|---------|----------|------------|---------|--------|---------|--------|--------|--------|-------|-------|
| 1           | 22              | 75      | 75       | 3,140      | 280     | 506    | 677     | 636    | 406    | 247    | 112   | 92    |
| 2           | 21              | 75      | 75       | 2,760      | 270     | 2,670  | 570     | 571    | 556    | 326    | 110   | 95    |
| 3           | 20              | 75      | 78       | 2,160      | 290     | 4,500  | 497     | 518    | 515    | 1,040  | 108   | 93    |
| 4           | 21              | 73      | 78       | 1,580      | 247     | 4,110  | 465     | 456    | 418    | 3,780  | 114   | 83    |
| 5           | 34              | 73      | 78       | 1,440      | 251     | 3,520  | 416     | 403    | 324    | 3,650  | 119   | 80    |
| 6           | 78              | 70      | 84       | 1,170      | 267     | 2,080  | 426     | 359    | 285    | 2,090  | 218   | 77    |
| 7           | 75              | 68      | 81       | 856        | 215     | 1,140  | 4,570   | 340    | 248    | 1,240  | 197   | 75    |
| 8           | 73              | 114     | 90       | 684        | 190     | 860    | 6,500   | 421    | 221    | 715    | 147   | 73    |
| 9           | 75              | 135     | 93       | 625        | 182     | 748    | 5,390   | 5,530  | 223    | 504    | 142   | 70    |
| 10          | 75              | 132     | 312      | 1,330      | 162     | 628    | 4,370   | 7,630  | 228    | 426    | 115   | 66    |
| 11          | 73              | 139     | 430      | 2,390      | 157     | 503    | 3,010   | 6,900  | 134    | 397    | 106   | 65    |
| 12          | 73              | 105     | 330      | 2,140      | 152     | 479    | 2,070   | 4,900  | 150    | 369    | 102   | 68    |
| 13          | 70              | 78      | 265      | 1,630      | 237     | 550    | 11,600  | 2,920  | 194    | 324    | 98    | 66    |
| 14          | 68              | 78      | 294      | 1,030      | 382     | 1,550  | 8,830   | 2,640  | 1,010  | 256    | 95    | 66    |
| 15          | 68              | 78      | 946      | 584        | 676     | 2,440  | 5,500   | 4,810  | 1,570  | 240    | 91    | 287   |
| 16          | 68              | 45      | 2,720    | 339        | 1,100   | 2,800  | 5,090   | 7,140  | 1,240  | 779    | 85    | 514   |
| 17          | 68              | 5.2     | 2,420    | 405        | 1,190   | 3,630  | 5,380   | 6,190  | 1,010  | 2,150  | 84    | 356   |
| 18          | 68              | 5.2     | 1,860    | 420        | 916     | 2,770  | 4,440   | 4,560  | 729    | 1,300  | 93    | 259   |
| 19          | 70              | 5.8     | 1,240    | 426        | 694     | 1,780  | 3,840   | 2,710  | 482    | 684    | 115   | 201   |
| 20          | 70              | 5.8     | 700      | 411        | 413     | 1,160  | 7,890   | 1,460  | 365    | 477    | 143   | 156   |
| 21          | 70              | 9.9     | 530      | 394        | 472     | 903    | 10,200  | 940    | 317    | 384    | 146   | 142   |
| 22          | 73              | 16      | 475      | 386        | 389     | 3,540  | 12,500  | 699    | 269    | 300    | 137   | 138   |
| 23          | 73              | 16      | 440      | 446        | 303     | 4,130  | 11,700  | 573    | 233    | 279    | 420   | 104   |
| 24          | 75              | 53      | 385      | 712        | 305     | 2,420  | 8,620   | 490    | 204    | 241    | 400   | 109   |
| 25          | 75              | 78      | 335      | 947        | 271     | 1,550  | 6,880   | 423    | 205    | 232    | 299   | 131   |
| 26          | 75              | 78      | 317      | 737        | 263     | 1,100  | 3,800   | 363    | 197    | 201    | 207   | 198   |
| 27          | 78              | 78      | 299      | 483        | 239     | 977    | 2,070   | 324    | 184    | 193    | 163   | 445   |
| 28          | 78              | 78      | 303      | 374        | 226     | 1,350  | 1,280   | 288    | 168    | 160    | 135   | 730   |
| 29          | 75              | 78      | 312      | 349        | 257     | 1,270  | 933     | 266    | 163    | 140    | 120   | 900   |
| 30          | 75              | 78      | 1,270    | 324        | -----   | 1,000  | 741     | 275    | 175    | 125    | 104   | 1,700 |
| 31          | 75              | -----   | 3,400    | 281        | -----   | 811    | -----   | 323    | -----  | 115    | 95    | ----- |
| TOTAL       | 2,012           | 1,997.9 | 20,315   | 30,953     | 10,996  | 57,475 | 140,255 | 66,058 | 12,423 | 23,364 | 4,620 | 7,439 |
| MEAN        | 64.9            | 66.6    | 655      | 998        | 379     | 1,854  | 4,675   | 2,131  | 414    | 754    | 149   | 248   |
| MAX         | 78              | 139     | 3,400    | 3,140      | 1,190   | 4,500  | 12,500  | 7,630  | 1,570  | 3,780  | 420   | 1,700 |
| MIN         | 20              | 5.2     | 75       | 281        | 152     | 479    | 416     | 266    | 134    | 115    | 84    | 65    |
| CAL YR 1971 | TOTAL 222,636.9 |         | MEAN 610 | MAX 10,800 | MIN 5.2 |        |         |        |        |        |       |       |

## SCIOTO RIVER BASIN

03223000 Olentangy River at Claridon, Ohio

LOCATION.--Lat 40°34'58", long 82°59'20", in NW 1/4 sec.26, T.5 S., R.16 E., Marion County, on left bank 900 ft downstream from bridge on State Highway 95, 0.5 mile east of Claridon, 0.8 mile downstream from Otter Creek, and 1.4 miles upstream from Beaver Run.

DRAINAGE AREA.--157 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 961.72 ft above mean sea level. (Levels by Corps of Engineers). Prior to Aug. 18, 1969 water-stage recorder at site 1,000 ft upstream at same datum.

AVERAGE DISCHARGE.--26 years, 145 cfs (12.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,100 cfs Apr. 20 (gage height, 11.81 ft); minimum, 2.5 cfs Oct. 6, 7, 8, 9.

Period of record: Maximum discharge, 14,900 cfs Jan. 22, 1959 (gage height, 16.77 ft), from rating curve extended above 4,700 cfs on basis of contracted-opening measurement of peak flow; no flow Oct. 2-26, 1953, Sept. 14-22, 1955.

REMARKS.--Records good except those for January and February, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1235: 1947, 1948(P). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|---------|
| 1     | 5.5   | 5.8   | 49    | 474   | 33    | 219    | 85     | 100   | 162   | 161   | 16    | 16      |
| 2     | 4.8   | 6.3   | 31    | 239   | 31    | 740    | 78     | 95    | 112   | 61    | 15    | 13      |
| 3     | 4.3   | 6.6   | 22    | 209   | 38    | 822    | 71     | 89    | 81    | 294   | 17    | 13      |
| 4     | 3.4   | 6.7   | 16    | 182   | 78    | 444    | 69     | 81    | 62    | 500   | 17    | 14      |
| 5     | 3.2   | 6.1   | 16    | 190   | 89    | 245    | 66     | 69    | 51    | 288   | 15    | 14      |
| 6     | 2.8   | 7.3   | 19    | 150   | 54    | 152    | 64     | 60    | 44    | 149   | 14    | 15      |
| 7     | 2.5   | 7.1   | 104   | 130   | 44    | 135    | 356    | 55    | 40    | 93    | 13    | 13      |
| 8     | 2.5   | 6.5   | 248   | 100   | 40    | 174    | 504    | 71    | 35    | 70    | 13    | 12      |
| 9     | 3.6   | 6.5   | 200   | 141   | 36    | 197    | 255    | 933   | 32    | 68    | 12    | 11      |
| 10    | 9.0   | 6.9   | 112   | 480   | 32    | 120    | 197    | 1,160 | 29    | 81    | 13    | 10      |
| 11    | 19    | 7.1   | 83    | 456   | 29    | 107    | 172    | 610   | 26    | 72    | 12    | 9.8     |
| 12    | 16    | 6.9   | 70    | 255   | 27    | 107    | 142    | 257   | 24    | 60    | 12    | 9.6     |
| 13    | 9.8   | 6.8   | 62    | 120   | 30    | 269    | 921    | 175   | 95    | 183   | 11    | 9.6     |
| 14    | 8.9   | 6.7   | 60    | 84    | 60    | 663    | 1,100  | 261   | 512   | 204   | 10    | 288     |
| 15    | 8.7   | 6.7   | 406   | 70    | 261   | 576    | 536    | 993   | 416   | 119   | 13    | 426     |
| 16    | 8.8   | 6.7   | 501   | 62    | 526   | 590    | 369    | 1,080 | 188   | 198   | 12    | 248     |
| 17    | 9.8   | 6.5   | 240   | 58    | 410   | 834    | 756    | 540   | 125   | 267   | 90    | 118     |
| 18    | 7.8   | 6.4   | 129   | 54    | 270   | 498    | 494    | 285   | 86    | 136   | 188   | 70      |
| 19    | 6.4   | 6.8   | 92    | 62    | 250   | 269    | 266    | 192   | 67    | 108   | 267   | 65      |
| 20    | 5.1   | 8.1   | 79    | 58    | 170   | 191    | 1,770  | 143   | 55    | 125   | 157   | 54      |
| 21    | 3.8   | 10    | 87    | 54    | 130   | 163    | 3,650  | 117   | 48    | 91    | 96    | 43      |
| 22    | 4.6   | 12    | 91    | 70    | 105   | 735    | 2,270  | 96    | 44    | 56    | 45    | 31      |
| 23    | 4.2   | 8.1   | 75    | 140   | 119   | 951    | 1,500  | 81    | 41    | 42    | 48    | 26      |
| 24    | 4.7   | 8.8   | 60    | 182   | 89    | 488    | 804    | 69    | 38    | 87    | 90    | 35      |
| 25    | 4.7   | 8.2   | 52    | 110   | 73    | 261    | 368    | 60    | 36    | 67    | 82    | 41      |
| 26    | 7.1   | 7.8   | 48    | 70    | 68    | 194    | 266    | 52    | 34    | 40    | 48    | 94      |
| 27    | 8.0   | 8.8   | 49    | 54    | 67    | 159    | 203    | 46    | 36    | 31    | 39    | 371     |
| 28    | 7.6   | 10    | 57    | 46    | 74    | 138    | 158    | 42    | 35    | 27    | 32    | 444     |
| 29    | 6.8   | 14    | 59    | 40    | 96    | 118    | 131    | 39    | 30    | 24    | 28    | 330     |
| 30    | 6.0   | 34    | 275   | 37    | ----- | 104    | 111    | 46    | 93    | 21    | 21    | 750     |
| 31    | 6.2   | ----- | 723   | 35    | ----- | 91     | -----  | 126   | ----- | 18    | 18    | -----   |
| TOTAL | 205.6 | 256.2 | 4,115 | 4,412 | 3,329 | 10,754 | 17,732 | 8,023 | 2,677 | 3,741 | 1,464 | 3,594.0 |
| MEAN  | 6.63  | 8.54  | 133   | 142   | 115   | 347    | 591    | 259   | 89.2  | 121   | 47.2  | 120     |
| MAX   | 19    | 34    | 723   | 480   | 526   | 951    | 3,650  | 1,160 | 512   | 500   | 267   | 750     |
| MIN   | 2.5   | 5.8   | 16    | 35    | 27    | 91     | 64     | 39    | 24    | 18    | 10    | 9.6     |
| CFSM  | .04   | .05   | .85   | .90   | .73   | 2.21   | 3.76   | 1.65  | .57   | .77   | .30   | .76     |
| IN.   | .05   | .06   | .98   | 1.05  | .79   | 2.55   | 4.20   | 1.90  | .63   | .89   | .35   | .85     |

CAL YR 1971 TOTAL 41,109.0 MEAN 113 MAX 1,820 MIN 2.5 CFSM .72 IN 9.74  
WTR YR 1972 TOTAL 60,302.8 MEAN 165 MAX 3,650 MIN 2.5 CFSM 1.05 IN 14.29

PEAK DISCHARGE (BASE, 1,500 CFS).--Apr. 20 (2130) 4,100 cfs (11.81 ft).



03224500 Whetstone Creek near Ashley, Ohio

LOCATION.--Lat 40°27'18", long 82°57'28", in NW 1/4 sec.19, T.7 N., R.18 W., Morrow County, on left bank 400 ft upstream from unnamed right bank tributary, 800 ft upstream from bridge on State Highway 746, 0.6 mile downstream from Shaw Creek, and 3.2 miles north of Ashley.

DRAINAGE AREA.--98.7 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 942.35 ft above mean sea level, (levels by Corps of Engineers).

AVERAGE DISCHARGE.--18 years, 93.4 cfs (12.85 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,920 cfs Apr. 20 (gage height, 8.85 ft); minimum, 2.3 cfs Oct. 7, 8.

Period of record: Maximum discharge, 19,100 cfs Jan. 21, 1959 (gage height, 14.34 ft), from rating curve extended above 3,900 cfs on basis of slope-area measurement of peak flow; no flow for many days in 1954-55, and part of day Oct. 3, 1963.

REMARKS.--Records good except those for January and February which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC       | JAN     | FEB       | MAR      | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|-----------|-----------|---------|-----------|----------|-------|-------|-------|-------|-------|-------|
| 1           | 4.5            | 4.4       | 22        | 145     | 18        | 221      | 56    | 57    | 48    | 63    | 25    | 25    |
| 2           | 3.8            | 4.7       | 11        | 105     | 17        | 666      | 53    | 68    | 40    | 35    | 23    | 22    |
| 3           | 3.4            | 6.7       | 7.6       | 98      | 31        | 384      | 49    | 55    | 30    | 758   | 34    | 25    |
| 4           | 3.1            | 5.7       | 6.6       | 100     | 58        | 187      | 50    | 50    | 25    | 691   | 26    | 29    |
| 5           | 2.8            | 4.9       | 6.2       | 130     | 76        | 128      | 45    | 45    | 21    | 205   | 21    | 23    |
| 6           | 2.5            | 4.9       | 8.7       | 84      | 28        | 90       | 43    | 38    | 19    | 118   | 18    | 20    |
| 7           | 2.4            | 5.4       | 41        | 70      | 24        | 72       | 438   | 32    | 19    | 78    | 18    | 17    |
| 8           | 2.4            | 5.5       | 82        | 56      | 22        | 229      | 319   | 53    | 17    | 60    | 18    | 16    |
| 9           | 3.3            | 5.4       | 42        | 56      | 20        | 139      | 141   | 1,040 | 15    | 50    | 17    | 15    |
| 10          | 6.9            | 5.4       | 25        | 287     | 19        | 102      | 114   | 637   | 14    | 118   | 16    | 13    |
| 11          | 7.0            | 5.4       | 20        | 165     | 18        | 78       | 97    | 204   | 12    | 118   | 15    | 13    |
| 12          | 6.5            | 5.4       | 18        | 99      | 17        | 83       | 79    | 131   | 12    | 99    | 13    | 13    |
| 13          | 5.7            | 5.5       | 14        | 64      | 19        | 135      | 792   | 104   | 84    | 256   | 13    | 13    |
| 14          | 5.1            | 5.5       | 37        | 50      | 28        | 305      | 500   | 242   | 189   | 110   | 12    | 809   |
| 15          | 4.7            | 6.2       | 349       | 40      | 188       | 230      | 167   | 473   | 98    | 68    | 22    | 604   |
| 16          | 4.8            | 5.3       | 181       | 34      | 250       | 477      | 193   | 307   | 59    | 1,600 | 19    | 184   |
| 17          | 4.4            | 4.9       | 71        | 30      | 147       | 624      | 466   | 168   | 41    | 1,230 | 430   | 102   |
| 18          | 4.1            | 5.0       | 42        | 28      | 159       | 243      | 179   | 119   | 30    | 331   | 618   | 82    |
| 19          | 3.3            | 5.7       | 28        | 36      | 128       | 153      | 113   | 91    | 24    | 250   | 843   | 101   |
| 20          | 3.4            | 7.9       | 28        | 35      | 85        | 119      | 2,160 | 72    | 21    | 324   | 272   | 66    |
| 21          | 3.2            | 6.8       | 34        | 33      | 62        | 105      | 1,070 | 62    | 19    | 136   | 111   | 47    |
| 22          | 2.8            | 6.7       | 34        | 35      | 50        | 676      | 1,020 | 53    | 19    | 101   | 75    | 37    |
| 23          | 3.6            | 5.5       | 24        | 61      | 44        | 528      | 530   | 44    | 19    | 84    | 148   | 35    |
| 24          | 5.0            | 5.4       | 21        | 79      | 42        | 195      | 207   | 39    | 19    | 161   | 213   | 92    |
| 25          | 5.5            | 5.7       | 19        | 62      | 40        | 141      | 142   | 34    | 18    | 133   | 118   | 69    |
| 26          | 5.7            | 5.4       | 18        | 46      | 72        | 111      | 107   | 29    | 22    | 76    | 83    | 190   |
| 27          | 6.4            | 6.4       | 22        | 36      | 71        | 98       | 85    | 25    | 22    | 57    | 88    | 386   |
| 28          | 5.1            | 8.6       | 30        | 30      | 65        | 87       | 72    | 23    | 20    | 48    | 67    | 253   |
| 29          | 4.8            | 9.5       | 29        | 25      | 105       | 73       | 64    | 22    | 17    | 39    | 49    | 200   |
| 30          | 4.8            | 20        | 343       | 21      | -----     | 67       | 54    | 25    | 109   | 33    | 37    | 1,080 |
| 31          | 4.8            | -----     | 541       | 19      | -----     | 60       | ----- | 39    | ----- | 28    | 30    | ----- |
| TOTAL       | 135.8          | 189.8     | 2,155.1   | 2,159   | 1,903     | 6,806    | 9,405 | 4,381 | 1,102 | 7,458 | 3,492 | 4,581 |
| MEAN        | 4.38           | 6.33      | 69.5      | 69.6    | 65.6      | 220      | 314   | 141   | 36.7  | 241   | 113   | 153   |
| MAX         | 7.0            | 20        | 541       | 287     | 250       | 676      | 2,160 | 1,040 | 189   | 1,600 | 843   | 1,080 |
| MIN         | 2.4            | 4.4       | 6.2       | 19      | 17        | 60       | 43    | 22    | 12    | 28    | 12    | 13    |
| CFSM        | .04            | .06       | .70       | .71     | .66       | 2.23     | 3.18  | 1.43  | .37   | 2.44  | 1.14  | 1.55  |
| IN.         | .05            | .07       | .81       | .81     | .72       | 2.57     | 3.54  | 1.65  | .42   | 2.81  | 1.32  | 1.73  |
| CAL YR 1971 | TOTAL 21,534.9 | MEAN 59.0 | MAX 1,340 | MIN 1.9 | CFSM .60  | IN 8.12  |       |       |       |       |       |       |
| WTR YR 1972 | TOTAL 43,767.7 | MEAN 120  | MAX 2,160 | MIN 2.4 | CFSM 1.22 | IN 16.50 |       |       |       |       |       |       |

## PEAK DISCHARGE (BASE, 1,800 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-20 | 2100 | 8.85  | 3,920     | 7-16 | 1700 | 7.40  | 2,420     |

## SCIOTO RIVER BASIN

03225500 Olentangy River near Delaware, Ohio

LOCATION.--Lat 40°21'18", long 83°04'02", NE 1/4 T.5 N., R.19 W., Delaware County, on left bank 1,000 ft downstream from Delaware Dam, 500 ft upstream from highway bridge, 1,300 ft upstream from Norfolk and Western Railway bridge, and 4.0 miles north of Delaware.

DRAINAGE AREA.--393 sq mi.

PERIOD OF RECORD.--October 1923 to September 1934, April 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.58 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1950, water-stage recorder at site 500 ft downstream at datum 76.7 ft higher.

AVERAGE DISCHARGE.--45 years, 339 cfs.

EXTREMES.--Current year: Maximum discharge, 4,110 cfs Apr. 29 (gage height, 86.54 ft); minimum, 8.8 cfs Apr. 1 (gage height, 79.63 ft).

Period of record: Maximum discharge, 14,100 cfs Mar. 21, 1927 (gage height, 16.9 ft, site and datum then in use); minimum, 0.1 cfs Aug. 20, 1930, Sept. 14-29, 1934.

REMARKS.--Records good. Flow completely regulated by Delaware Lake since 1951 (see station 03225000). Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT   | NOV     | DEC   | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP    |
|-------------|-------|---------|-------|--------|-------|--------|--------|--------|-------|--------|-------|--------|
| 1           | 20    | 20      | 122   | 1,640  | 100   | 438    | 96     | 806    | 237   | 387    | 43    | 69     |
| 2           | 20    | 20      | 89    | 770    | 85    | 1,420  | 12     | 259    | 264   | 220    | 43    | 69     |
| 3           | 20    | 20      | 78    | 445    | 87    | 2,080  | 12     | 259    | 206   | 1,620  | 43    | 50     |
| 4           | 20    | 21      | 76    | 452    | 85    | 1,650  | 11     | 259    | 177   | 1,850  | 43    | 39     |
| 5           | 20    | 21      | 76    | 589    | 85    | 858    | 13     | 177    | 122   | 1,860  | 43    | 39     |
| 6           | 20    | 21      | 74    | 468    | 82    | 575    | 13     | 148    | 98    | 1,230  | 43    | 39     |
| 7           | 20    | 21      | 73    | 355    | 164   | 329    | 317    | 148    | 64    | 329    | 43    | 39     |
| 8           | 20    | 21      | 118   | 287    | 152   | 287    | 1,290  | 168    | 49    | 259    | 43    | 39     |
| 9           | 20    | 21      | 434   | 242    | 80    | 460    | 851    | 168    | 49    | 259    | 43    | 39     |
| 10          | 20    | 21      | 374   | 886    | 59    | 520    | 565    | 41     | 49    | 196    | 43    | 39     |
| 11          | 20    | 21      | 174   | 1,310  | 57    | 329    | 493    | 511    | 49    | 231    | 43    | 39     |
| 12          | 20    | 20      | 102   | 758    | 57    | 168    | 493    | 3,160  | 49    | 259    | 43    | 39     |
| 13          | 20    | 20      | 67    | 415    | 60    | 215    | 1,300  | 3,910  | 50    | 468    | 43    | 39     |
| 14          | 20    | 20      | 67    | 299    | 156   | 1,010  | 2,600  | 2,860  | 669   | 438    | 43    | 509    |
| 15          | 20    | 182     | 261   | 177    | 453   | 1,440  | 2,060  | 556    | 1,170 | 259    | 43    | 1,930  |
| 16          | 20    | 156     | 1,090 | 136    | 790   | 1,450  | 1,540  | 21     | 565   | 1,450  | 43    | 1,540  |
| 17          | 20    | 73      | 740   | 136    | 837   | 2,100  | 1,450  | 914    | 270   | 1,910  | 45    | 531    |
| 18          | 20    | 73      | 215   | 136    | 774   | 1,900  | 1,640  | 2,880  | 206   | 2,220  | 790   | 275    |
| 19          | 20    | 156     | 113   | 136    | 632   | 1,050  | 1,310  | 2,860  | 140   | 1,990  | 1,430 | 275    |
| 20          | 20    | 311     | 113   | 136    | 368   | 547    | 430    | 1,420  | 65    | 1,020  | 1,490 | 275    |
| 21          | 20    | 160     | 113   | 136    | 248   | 475    | 57     | 259    | 110   | 430    | 394   | 197    |
| 22          | 20    | 129     | 113   | 136    | 342   | 1,360  | 93     | 259    | 132   | 374    | 422   | 96     |
| 23          | 20    | 86      | 122   | 226    | 287   | 2,500  | 156    | 259    | 132   | 348    | 609   | 64     |
| 24          | 20    | 76      | 132   | 415    | 177   | 2,060  | 2,470  | 177    | 85    | 242    | 858   | 64     |
| 25          | 20    | 80      | 132   | 342    | 144   | 928    | 3,880  | 100    | 44    | 248    | 487   | 126    |
| 26          | 20    | 80      | 132   | 281    | 144   | 520    | 3,880  | 85     | 35    | 270    | 206   | 206    |
| 27          | 20    | 78      | 122   | 186    | 144   | 453    | 3,920  | 85     | 35    | 270    | 206   | 936    |
| 28          | 20    | 78      | 113   | 140    | 186   | 453    | 3,960  | 82     | 35    | 191    | 201   | 1,390  |
| 29          | 20    | 78      | 113   | 140    | 210   | 329    | 3,970  | 82     | 35    | 98     | 111   | 1,190  |
| 30          | 20    | 110     | 272   | 140    | ----- | 275    | 2,900  | 82     | 275   | 45     | 69    | 1,310  |
| 31          | 20    | -----   | 1,490 | 140    | ----- | 270    | -----  | 148    | ----- | 45     | 69    | -----  |
| TOTAL       | 620   | 2,194   | 7,310 | 12,055 | 7,045 | 28,449 | 41,782 | 23,143 | 5,466 | 21,016 | 8,075 | 11,492 |
| MEAN        | 20.0  | 73.1    | 236   | 389    | 243   | 918    | 1,393  | 747    | 182   | 678    | 260   | 383    |
| MAX         | 20    | 311     | 1,490 | 1,640  | 837   | 2,500  | 3,970  | 3,910  | 1,170 | 2,220  | 1,490 | 1,930  |
| MIN         | 20    | 20      | 67    | 136    | 57    | 168    | 11     | 21     | 35    | 45     | 43    | 39     |
| CAL YR 1971 | TOTAL | 89,971  | MEAN  | 246    | MAX   | 3,900  | MIN    | 10     |       |        |       |        |
| WTR YR 1972 | TOTAL | 168,647 | MEAN  | 461    | MAX   | 3,970  | MIN    | 11     |       |        |       |        |

## SCIOTO RIVER BASIN

101

03226800 Olentangy River near Worthington, Ohio

LOCATION.--Lat 40°06'37", long 83°01'55", in NW 1/4 T.2 N., R.18 W., Franklin County, on left bank 350 ft downstream from Interstate Highway 270 bridge, 1.5 miles northwest of Worthington and 2.8 miles upstream from Rush Run.

DRAINAGE AREA.--497 sq mi.

RECORDS AVAILABLE.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 743.20 ft above mean sea level.

AVERAGE DISCHARGE.--17 years, 420 cfs.

EXTREMES.--Current year: Maximum discharge, 8,140 cfs Apr. 13 (gage height, 9.53 ft); minimum, 17 cfs Oct. 7. Period of record: Maximum discharge, 16,500 cfs Jan. 21, 1959 (gage height, 15.68 ft, from high-water mark in well); minimum, 7.6 cfs Oct. 8, 9, 1964.

REVISIONS.--The maximum discharge for the water year 1971 has been revised to 5,070 cfs Feb. 22; maximum gage height, 7.78 ft Feb. 6 (backwater from ice jam) superseding figures published in WRD Ohio 1971.

Flood in January 1952 reached a stage of 15.3 ft (discharge, 15,100 cfs), from information by Corps of Engineers.

REMARKS.--Records good. Flow regulated by Delaware Lake 21 miles upstream (see station 03225000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1625: 1952(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG    | SEP    |
|-------|------|-------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|
| 1     | 26   | 24    | 146    | 1,880  | 190   | 399    | 292    | 1,070  | 235   | 393    | 55     | 85     |
| 2     | 24   | 24    | 149    | 1,110  | 122   | 1,710  | 92     | 309    | 253   | 258    | 54     | 80     |
| 3     | 21   | 31    | 103    | 611    | 149   | 2,170  | 71     | 292    | 210   | 783    | 61     | 80     |
| 4     | 20   | 23    | 96     | 604    | 125   | 1,900  | 69     | 277    | 183   | 2,340  | 55     | 65     |
| 5     | 19   | 21    | 94     | 698    | 119   | 1,070  | 63     | 235    | 139   | 1,660  | 51     | 55     |
| 6     | 19   | 22    | 103    | 683    | 125   | 625    | 58     | 168    | 108   | 1,500  | 49     | 52     |
| 7     | 19   | 25    | 222    | 460    | 125   | 525    | 1,830  | 165    | 92    | 493    | 49     | 51     |
| 8     | 20   | 26    | 193    | 417    | 249   | 330    | 1,630  | 1,030  | 61    | 282    | 49     | 51     |
| 9     | 23   | 24    | 310    | 336    | 152   | 436    | 1,140  | 2,830  | 61    | 277    | 57     | 51     |
| 10    | 37   | 24    | 590    | 708    | 87    | 545    | 791    | 577    | 60    | 263    | 54     | 49     |
| 11    | 26   | 24    | 344    | 1,370  | 89    | 480    | 618    | 597    | 61    | 197    | 49     | 48     |
| 12    | 22   | 23    | 175    | 981    | 87    | 268    | 584    | 3,290  | 61    | 309    | 48     | 60     |
| 13    | 21   | 24    | 127    | 499    | 186   | 263    | 3,420  | 4,370  | 82    | 393    | 48     | 57     |
| 14    | 22   | 24    | 184    | 423    | 303   | 713    | 3,030  | 3,290  | 783   | 558    | 48     | 130    |
| 15    | 23   | 26    | 375    | 350    | 551   | 1,470  | 2,480  | 936    | 1,120 | 292    | 48     | 1,630  |
| 16    | 22   | 231   | 1,030  | 250    | 1,070 | 1,700  | 2,130  | 231    | 387   | 972    | 46     | 1,730  |
| 17    | 24   | 105   | 1,410  | 200    | 875   | 2,280  | 1,690  | 909    | 277   | 1,860  | 51     | 735    |
| 18    | 22   | 85    | 477    | 244    | 866   | 2,290  | 1,700  | 3,100  | 205   | 2,220  | 990    | 282    |
| 19    | 21   | 85    | 179    | 226    | 668   | 1,290  | 1,620  | 2,850  | 161   | 2,160  | 1,510  | 277    |
| 20    | 21   | 336   | 172    | 183    | 571   | 646    | 2,130  | 1,240  | 78    | 1,210  | 1,520  | 273    |
| 21    | 21   | 186   | 175    | 168    | 282   | 584    | 590    | 292    | 101   | 538    | 532    | 258    |
| 22    | 24   | 168   | 172    | 158    | 303   | 1,580  | 1,040  | 277    | 130   | 382    | 743    | 165    |
| 23    | 27   | 130   | 168    | 214    | 370   | 2,680  | 473    | 268    | 130   | 382    | 1,240  | 85     |
| 24    | 31   | 77    | 183    | 399    | 253   | 2,550  | 1,880  | 205    | 130   | 309    | 1,130  | 92     |
| 25    | 29   | 80    | 186    | 473    | 168   | 1,150  | 4,050  | 136    | 80    | 231    | 807    | 85     |
| 26    | 26   | 89    | 190    | 292    | 172   | 653    | 4,170  | 106    | 55    | 253    | 341    | 210    |
| 27    | 25   | 98    | 190    | 282    | 165   | 564    | 4,180  | 101    | 42    | 263    | 314    | 653    |
| 28    | 24   | 106   | 183    | 525    | 172   | 597    | 4,150  | 98     | 40    | 253    | 249    | 1,350  |
| 29    | 23   | 111   | 172    | 282    | 235   | 506    | 4,080  | 101    | 43    | 161    | 210    | 1,340  |
| 30    | 23   | 133   | 399    | 222    | ----- | 347    | 3,420  | 139    | 55    | 78     | 103    | 2,350  |
| 31    | 23   | ----- | 1,510  | 179    | ----- | 330    | -----  | 161    | ----- | 57     | 89     | -----  |
| TOTAL | 728  | 2,385 | 10,007 | 15,427 | 8,829 | 32,651 | 53,471 | 29,650 | 5,423 | 21,327 | 10,650 | 12,429 |
| MEAN  | 23.5 | 79.5  | 323    | 498    | 304   | 1,053  | 1,782  | 956    | 181   | 688    | 344    | 414    |
| MAX   | 37   | 336   | 1,510  | 1,880  | 1,070 | 2,680  | 4,180  | 4,370  | 1,120 | 2,340  | 1,520  | 2,350  |
| MIN   | 19   | 21    | 94     | 158    | 87    | 263    | 58     | 98     | 40    | 57     | 46     | 48     |

CAL YR 1971 TOTAL 102,539 MEAN 281 MAX 3,780 MIN 13  
WTR YR 1972 TOTAL 202,977 MEAN 555 MAX 4,370 MIN 19

## SCIOTO RIVER BASIN

03227500 Scioto River at Columbus, Ohio

LOCATION.--Lat 39°54'34", long 83°00'33", Franklin County, on right bank at sewage-treatment works of city of Columbus, 0.4 miles downstream from bridge on Frank Road, 2.8 miles upstream from Scioto Big Run, and 5 miles downstream from Olentangy River.

DRAINAGE AREA.--1,629 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft above mean sea level. Prior to Oct. 1, 1924, non-recording gage at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--52 years, 1,347 cfs.

EXTREMES.--Current year: Maximum discharge, 16,900 cfs Apr. 13 (gage height, 18.69 ft); minimum, 95 cfs Nov. 25. Period of record: Maximum discharge, 68,200 cfs Jan. 22, 1959 (gage height, 27.22 ft), from high-water mark in well, from rating curve extended above 46,000 cfs; minimum, 42 cfs Sept. 6, 1930.

Flood of Mar. 25, 1913 reached a stage of 25.9 ft (discharge, 138,000 cfs, estimated by Franklin County Conservancy District).

REMARKS.--Records good. Flow regulated by O'Shaughnessy Reservoir 20.4 miles upstream (see station 03220500), Griggs Reservoir 10.4 miles upstream (see station 03221500), and Delaware Lake 35 miles upstream from station (see station 03225000). Records include only part of sewage return flow for city of Columbus. Water supply for city of Columbus is obtained from Scioto River downstream from Griggs Dam, Big Walnut Creek below Central College, and from well field in Alum Creek basin. For statement on diversions from Alum Creek basin and Big Walnut Creek, see REMARKS for stations 03229000 and 03229500. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: 1927(M). WSP 803: 1922-24, 1926-30, 1932-33. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR     | MAY     | JUN    | JUL    | AUG    | SEP    |
|-------|-------|-------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|
| 1     | 180   | 155   | 252    | 5,540  | 562    | 864    | 1,290   | 2,970   | 704    | 574    | 257    | 268    |
| 2     | 170   | 225   | 274    | 4,420  | 550    | 3,630  | 998     | 1,350   | 906    | 878    | 241    | 252    |
| 3     | 150   | 185   | 252    | 3,390  | 724    | 6,380  | 815     | 1,240   | 983    | 913    | 285    | 323    |
| 4     | 165   | 170   | 210    | 2,740  | 645    | 6,290  | 766     | 990     | 829    | 5,420  | 279    | 285    |
| 5     | 165   | 160   | 190    | 2,640  | 472    | 5,150  | 671     | 885     | 684    | 5,280  | 195    | 252    |
| 6     | 155   | 180   | 671    | 2,390  | 544    | 3,370  | 645     | 745     | 568    | 4,510  | 241    | 241    |
| 7     | 140   | 195   | 948    | 1,750  | 508    | 2,370  | 5,950   | 678     | 508    | 2,500  | 600    | 235    |
| 8     | 145   | 165   | 710    | 1,420  | 484    | 1,620  | 8,150   | 1,700   | 442    | 1,410  | 362    | 252    |
| 9     | 195   | 180   | 478    | 1,330  | 478    | 1,400  | 7,040   | 9,770   | 430    | 1,180  | 514    | 246    |
| 10    | 215   | 185   | 871    | 1,740  | 395    | 1,500  | 5,500   | 9,000   | 600    | 1,220  | 307    | 230    |
| 11    | 170   | 170   | 948    | 3,730  | 351    | 1,330  | 4,210   | 7,840   | 351    | 836    | 268    | 252    |
| 12    | 140   | 170   | 684    | 3,730  | 362    | 998    | 3,220   | 7,110   | 312    | 801    | 257    | 526    |
| 13    | 175   | 150   | 532    | 2,650  | 878    | 962    | 11,600  | 8,150   | 526    | 983    | 257    | 384    |
| 14    | 252   | 145   | 899    | 1,970  | 1,030  | 1,670  | 11,700  | 7,760   | 724    | 1,020  | 257    | 329    |
| 15    | 165   | 155   | 1,490  | 1,220  | 1,350  | 3,910  | 8,620   | 6,570   | 2,660  | 864    | 241    | 1,310  |
| 16    | 160   | 246   | 3,150  | 759    | 2,030  | 4,430  | 8,010   | 6,850   | 2,800  | 1,010  | 246    | 2,710  |
| 17    | 135   | 334   | 4,520  | 652    | 2,400  | 5,980  | 7,660   | 6,800   | 1,580  | 4,000  | 246    | 1,750  |
| 18    | 160   | 215   | 2,840  | 808    | 2,270  | 5,780  | 6,550   | 6,850   | 1,290  | 3,930  | 2,170  | 913    |
| 19    | 165   | 257   | 1,990  | 801    | 1,810  | 3,880  | 5,940   | 6,830   | 962    | 3,990  | 2,250  | 717    |
| 20    | 165   | 301   | 1,410  | 773    | 1,400  | 2,450  | 8,610   | 4,530   | 724    | 2,520  | 1,900  | 639    |
| 21    | 165   | 424   | 1,010  | 745    | 976    | 1,930  | 10,200  | 2,070   | 562    | 1,400  | 1,170  | 600    |
| 22    | 190   | 279   | 857    | 731    | 885    | 4,090  | 12,500  | 1,340   | 526    | 899    | 843    | 556    |
| 23    | 220   | 263   | 794    | 808    | 892    | 7,080  | 11,800  | 1,140   | 532    | 794    | 2,180  | 430    |
| 24    | 230   | 235   | 766    | 1,090  | 766    | 5,800  | 9,950   | 1,010   | 484    | 724    | 2,160  | 773    |
| 25    | 185   | 160   | 697    | 1,630  | 639    | 3,620  | 10,200  | 822     | 454    | 745    | 1,620  | 600    |
| 26    | 180   | 175   | 678    | 1,340  | 600    | 2,320  | 8,580   | 665     | 418    | 587    | 878    | 1,210  |
| 27    | 170   | 268   | 671    | 1,050  | 550    | 1,960  | 6,760   | 580     | 362    | 580    | 652    | 1,190  |
| 28    | 165   | 200   | 678    | 780    | 544    | 2,170  | 5,660   | 526     | 334    | 562    | 544    | 2,410  |
| 29    | 175   | 389   | 600    | 665    | 600    | 2,260  | 5,290   | 514     | 466    | 448    | 472    | 2,840  |
| 30    | 155   | 329   | 2,630  | 632    | -----  | 1,750  | 4,840   | 927     | 418    | 351    | 378    | 4,780  |
| 31    | 140   | ----- | 4,590  | 587    | -----  | 1,460  | -----   | 691     | -----  | 268    | 263    | -----  |
| TOTAL | 5,342 | 6,665 | 37,290 | 54,511 | 25,695 | 98,404 | 193,725 | 108,903 | 23,139 | 50,797 | 22,533 | 27,503 |
| MEAN  | 172   | 222   | 1,203  | 1,758  | 886    | 3,174  | 6,458   | 3,513   | 771    | 1,639  | 727    | 917    |
| MAX   | 252   | 424   | 4,590  | 5,540  | 2,400  | 7,080  | 12,500  | 9,770   | 2,800  | 5,420  | 2,250  | 4,780  |
| MIN   | 135   | 145   | 190    | 587    | 351    | 864    | 645     | 514     | 312    | 268    | 195    | 230    |
| CFSM  | .11   | .14   | .74    | 1.08   | .54    | 1.95   | 3.96    | 2.16    | .47    | 1.01   | .45    | .56    |
| IN.   | .12   | .15   | .85    | 1.24   | .59    | 2.25   | 4.42    | 2.49    | .53    | 1.16   | .51    | .63    |

CAL YR 1971 TOTAL 389,468 MEAN 1,067 MAX 14,200 MIN 125 CFSM .66 IN 8.89  
WTR YR 1972 TOTAL 654,507 MEAN 1,788 MAX 12,500 MIN 135 CFSM 1.10 IN 14.95



## SCIOTO RIVER BASIN

103

03228500 Big Walnut Creek at Central College, Ohio

LOCATION.--Lat 40°06'13", long 82°53'03", T.2 N., R.17 W., Franklin County, on left bank at upstream side of county road bridge, 0.2 mile east of Central College, 0.4 mile downstream from Hoover Dam, and 3 miles southeast of Westerville.

DRAINAGE AREA.--190 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 815.16 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 176 cfs.

EXTREMES.--Current year: Maximum discharge, 8,200 cfs Apr. 13 (gage height, 13.42 ft); minimum daily discharge, 70 cfs Dec. 26.

Period of record: Maximum discharge, 23,800 cfs Jan. 21, 1959 (gage height, 19.75 ft), from rating curve extended above 7,200 cfs on basis of computation of peak flow over Hoover Dam; no flow for many days in 1944 and 1955.

REMARKS.--Records good. Flow completely regulated by Hoover Reservoir 0.4 mile upstream since September 1954 (see station 03228400). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1938. WSP 1435: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1     | 112   | 104   | 84    | 84    | 98    | 81    | 84     | 102    | 111   | 96    | 126   | 112   |
| 2     | 95    | 95    | 86    | 81    | 95    | 146   | 81     | 109    | 107   | 89    | 112   | 101   |
| 3     | 93    | 93    | 95    | 102   | 95    | 107   | 98     | 155    | 107   | 86    | 102   | 87    |
| 4     | 112   | 96    | 89    | 92    | 86    | 90    | 102    | 141    | 104   | 90    | 105   | 96    |
| 5     | 105   | 98    | 98    | 89    | 96    | 74    | 99     | 114    | 119   | 98    | 111   | 107   |
| 6     | 107   | 90    | 96    | 86    | 87    | 81    | 95     | 104    | 114   | 99    | 105   | 102   |
| 7     | 96    | 80    | 87    | 101   | 102   | 95    | 1,300  | 109    | 109   | 102   | 116   | 95    |
| 8     | 96    | 95    | 81    | 95    | 96    | 76    | 1,120  | 248    | 121   | 89    | 96    | 105   |
| 9     | 92    | 95    | 90    | 90    | 96    | 90    | 434    | 2,810  | 126   | 90    | 114   | 98    |
| 10    | 86    | 101   | 90    | 92    | 98    | 95    | 329    | 2,190  | 98    | 142   | 96    | 99    |
| 11    | 96    | 93    | 89    | 101   | 99    | 89    | 278    | 464    | 93    | 104   | 104   | 112   |
| 12    | 99    | 111   | 86    | 95    | 92    | 83    | 177    | 250    | 114   | 98    | 102   | 105   |
| 13    | 96    | 90    | 90    | 90    | 83    | 84    | 4,890  | 260    | 104   | 101   | 135   | 102   |
| 14    | 93    | 87    | 96    | 99    | 98    | 79    | 1,520  | 1,580  | 102   | 109   | 109   | 104   |
| 15    | 98    | 99    | 84    | 102   | 87    | 84    | 844    | 380    | 95    | 98    | 111   | 99    |
| 16    | 93    | 99    | 96    | 155   | 86    | 76    | 195    | 425    | 99    | 86    | 121   | 99    |
| 17    | 89    | 90    | 87    | 105   | 87    | 123   | 213    | 211    | 98    | 114   | 119   | 99    |
| 18    | 98    | 96    | 90    | 112   | 86    | 119   | 263    | 161    | 95    | 102   | 183   | 98    |
| 19    | 102   | 89    | 77    | 109   | 80    | 76    | 362    | 150    | 112   | 117   | 169   | 132   |
| 20    | 96    | 84    | 99    | 89    | 86    | 89    | 2,360  | 128    | 102   | 105   | 90    | 139   |
| 21    | 98    | 74    | 104   | 84    | 93    | 89    | 2,380  | 111    | 101   | 116   | 86    | 141   |
| 22    | 105   | 101   | 84    | 104   | 92    | 77    | 1,150  | 133    | 92    | 111   | 98    | 111   |
| 23    | 93    | 81    | 84    | 86    | 89    | 80    | 233    | 130    | 93    | 105   | 90    | 95    |
| 24    | 83    | 87    | 86    | 102   | 89    | 80    | 353    | 133    | 87    | 116   | 111   | 132   |
| 25    | 102   | 76    | 81    | 95    | 89    | 83    | 268    | 126    | 92    | 139   | 114   | 142   |
| 26    | 95    | 89    | 70    | 99    | 83    | 79    | 124    | 132    | 104   | 102   | 105   | 203   |
| 27    | 107   | 76    | 84    | 95    | 81    | 89    | 132    | 123    | 116   | 102   | 93    | 189   |
| 28    | 96    | 86    | 93    | 87    | 99    | 90    | 111    | 102    | 99    | 109   | 109   | 139   |
| 29    | 102   | 98    | 89    | 111   | 93    | 83    | 102    | 105    | 101   | 102   | 111   | 151   |
| 30    | 87    | 87    | 177   | 89    | ----- | 83    | 109    | 105    | 102   | 101   | 105   | 223   |
| 31    | 86    | ----- | 137   | 99    | ----- | 93    | -----  | 155    | ----- | 124   | 107   | ----- |
| TOTAL | 3,008 | 2,740 | 2,879 | 3,020 | 2,641 | 2,763 | 19,806 | 11,446 | 3,117 | 3,242 | 3,455 | 3,617 |
| MEAN  | 97.0  | 91.3  | 92.9  | 97.4  | 91.1  | 89.1  | 660    | 369    | 104   | 105   | 111   | 121   |
| MAX   | 112   | 111   | 177   | 155   | 102   | 146   | 4,890  | 2,810  | 126   | 142   | 183   | 223   |
| MIN   | 83    | 74    | 70    | 81    | 80    | 74    | 81     | 102    | 87    | 86    | 86    | 87    |

CAL YR 1971 TOTAL 42,744 MEAN 117 MAX 1,310 MIN 70  
WTR YR 1972 TOTAL 61,734 MEAN 169 MAX 4,890 MIN 70

## 03228805 Alum Creek at Africa, Ohio

LOCATION.--Lat 40°10'56", long 82°57'42", in SE 1/4 sec.1, T.3 N., R.18 W., Delaware County, on left bank at downstream side of bridge on Orange Township Road 109, 0.3 mile west of Africa, 0.3 mile downstream from outlet of Alum Creek dam, 1.4 miles downstream from Williams Lake outlet, 2.7 miles upstream from Westerville Reservoir outlet, and 4.2 miles northwest of Westerville.

DRAINAGE AREA.--122 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1962. June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 817.28 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 115 cfs (12.80 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,310 cfs Apr. 13 (gage height, 12.24 ft); minimum, 0.28 cfs Oct. 7.

Period of record: Maximum discharge, 6,160 cfs Mar. 10, 1964 (gage height, 13.95 ft, from graph based on gage readings); no flow at times 1963-65.

Flood of Mar. 5, 1963 reached a stage of 14.2 ft, from floodmarks (discharge, 6,460 cfs).

REMARKS.--Records good. Flow partially regulated by unfinished Alum Creek Dam, 1,360 ft upstream from gage. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC     | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL     | AUG     | SEP     |
|-------|-------|-------|---------|-------|-------|-------|--------|-------|-------|---------|---------|---------|
| 1     | 2.8   | 2.2   | 26      | 602   | 13    | 263   | 62     | 51    | 40    | 9.4     | 7.6     | 25      |
| 2     | 2.6   | 3.0   | 12      | 164   | 15    | 856   | 55     | 54    | 34    | 8.2     | 7.0     | 20      |
| 3     | 2.6   | 3.0   | 8.8     | 164   | 35    | 630   | 51     | 73    | 25    | 7.9     | 7.3     | 18      |
| 4     | 2.2   | 2.6   | 7.3     | 164   | 46    | 250   | 51     | 49    | 21    | 353     | 11      | 17      |
| 5     | 1.1   | 2.4   | 6.4     | 280   | 37    | 138   | 43     | 41    | 17    | 204     | 8.2     | 18      |
| 6     | .74   | 2.8   | 31      | 110   | 28    | 85    | 44     | 35    | 15    | 78      | 7.3     | 15      |
| 7     | .48   | 3.3   | 118     | 84    | 25    | 85    | 1,850  | 32    | 14    | 47      | 6.1     | 12      |
| 8     | .37   | 4.3   | 112     | 66    | 20    | 184   | 776    | 467   | 13    | 31      | 5.8     | 10      |
| 9     | 1.1   | 2.8   | 56      | 118   | 17    | 109   | 290    | 3,070 | 12    | 25      | 8.2     | 9.4     |
| 10    | 1.3   | 2.6   | 37      | 343   | 14    | 93    | 216    | 908   | 10    | 20      | 6.1     | 8.8     |
| 11    | 1.1   | 3.0   | 29      | 218   | 14    | 62    | 158    | 283   | 9.4   | 15      | 4.8     | 8.2     |
| 12    | 4.8   | 3.5   | 22      | 120   | 15    | 66    | 130    | 153   | 8.5   | 18      | 4.5     | 7.3     |
| 13    | 4.5   | 6.4   | 18      | 88    | 60    | 155   | 3,030  | 152   | 12    | 14      | 3.5     | 8.8     |
| 14    | 4.0   | 4.5   | 72      | 65    | 148   | 398   | 620    | 655   | 47    | 32      | 3.3     | 182     |
| 15    | 3.3   | 3.3   | 300     | 32    | 303   | 270   | 263    | 623   | 64    | 26      | 2.4     | 936     |
| 16    | 2.6   | 2.8   | 238     | 26    | 390   | 358   | 482    | 308   | 46    | 155     | 1.0     | 479     |
| 17    | 2.4   | 2.6   | 97      | 24    | 273   | 800   | 521    | 170   | 22    | 916     | 13      | 111     |
| 18    | 2.0   | 2.6   | 57      | 26    | 248   | 400   | 218    | 109   | 17    | 288     | 816     | 68      |
| 19    | 1.8   | 3.0   | 37      | 35    | 224   | 182   | 246    | 79    | 13    | 117     | 1,080   | 60      |
| 20    | 1.6   | 3.3   | 47      | 34    | 132   | 124   | 2,260  | 62    | 12    | 132     | 551     | 45      |
| 21    | 1.3   | 3.5   | 49      | 34    | 115   | 114   | 1,280  | 53    | 11    | 64      | 152     | 34      |
| 22    | 1.3   | 3.8   | 43      | 34    | 83    | 676   | 1,270  | 44    | 11    | 79      | 220     | 28      |
| 23    | 1.3   | 4.0   | 29      | 73    | 62    | 748   | 554    | 38    | 11    | 62      | 700     | 21      |
| 24    | 1.6   | 3.5   | 31      | 120   | 53    | 230   | 265    | 33    | 12    | 34      | 772     | 22      |
| 25    | 2.0   | 3.5   | 25      | 93    | 46    | 148   | 164    | 28    | 12    | 28      | 275     | 30      |
| 26    | 2.6   | 3.3   | 25      | 36    | 48    | 109   | 112    | 23    | 11    | 25      | 180     | 47      |
| 27    | 2.6   | 4.0   | 29      | 30    | 61    | 126   | 85     | 21    | 11    | 20      | 355     | 300     |
| 28    | 2.4   | 4.8   | 39      | 26    | 61    | 143   | 69     | 19    | 11    | 18      | 150     | 298     |
| 29    | 2.4   | 12    | 41      | 20    | 92    | 102   | 60     | 18    | 12    | 14      | 77      | 232     |
| 30    | 2.4   | 25    | 345     | 16    | ----- | 86    | 53     | 26    | 8.8   | 11      | 47      | 956     |
| 31    | 2.2   | ----- | 784     | 14    | ----- | 69    | -----  | 39    | ----- | 9.1     | 32      | -----   |
| TOTAL | 65.49 | 131.4 | 2,771.5 | 3,263 | 2,678 | 8,059 | 15,278 | 7,716 | 562.7 | 2,860.6 | 5,514.1 | 4,026.5 |
| MEAN  | 2.11  | 4.38  | 89.4    | 105   | 92.3  | 260   | 509    | 249   | 18.8  | 92.3    | 178     | 134     |
| MAX   | 4.8   | 25    | 784     | 602   | 390   | 856   | 3,030  | 3,070 | 64    | 916     | 1,080   | 956     |
| MIN   | .37   | 2.2   | 6.4     | 14    | 13    | 62    | 43     | 18    | 8.5   | 7.9     | 1.0     | 7.3     |
| CFSM  | .02   | .04   | .73     | .86   | .76   | 2.13  | 4.17   | 2.04  | .15   | .76     | 1.46    | 1.10    |
| IN.   | .02   | .04   | .85     | .99   | .82   | 2.46  | 4.66   | 2.35  | .17   | .87     | 1.68    | 1.23    |

CAL YR 1971 TOTAL 23,796.54 MEAN 65.2 MAX 1,970 MIN .37 CFSM .53 IN 7.26  
WTR YR 1972 TOTAL 52,926.29 MEAN 145 MAX 3,070 MIN .37 CFSM 1.19 IN 16.14

## PEAK DISCHARGE (BASE, 1,500 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-31 | 2400 | 9.31  | 2,090     | 4-20 | 1130 | 11.68 | 3,800     |
| 4-7   | 0900 | 10.71 | 3,000     | 5-8  | 2330 | 11.89 | 3,990     |
| 4-13  | 0230 | 12.24 | 4,310     |      |      |       |           |

03229000 Alum Creek at Columbus, Ohio

LOCATION.--Lat 39°56'42", long 82°56'28", in NW 1/4 sec.24, T.5 N., R.22 W., Franklin County, on left bank 0.2 mile downstream from Livingston Avenue Bridge in Columbus, and 6 miles upstream from mouth.

DRAINAGE AREA.--189 sq mi.

PERIOD OF RECORD.--July 1923 to December 1935, January 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 733.69 ft above mean sea level.

AVERAGE DISCHARGE.--46 years, 164 cfs (11.78 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,860 cfs May 9 (gage height, 10.80 ft); minimum, 7.5 cfs Oct. 8, 9.

Period of record: Maximum discharge, 26,400 cfs Jan. 22, 1959 (gage height, 19.59 ft, from high-water mark in well), from rating curve extended above 17,000 cfs on basis of contracted-opening measurement of peak flow; no flow Sept. 21-29, 1959.

REMARKS.--Records good. There was no pumpage from the Alum Creek well field this year. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 758: 1933. WSP 1305: 1928(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV      | DEC       | JAN     | FEB       | MAR      | APR    | MAY    | JUN   | JUL   | AUG     | SEP   |
|-------------|----------------|----------|-----------|---------|-----------|----------|--------|--------|-------|-------|---------|-------|
| 1           | 13             | 13       | 32        | 991     | 28        | 390      | 106    | 76     | 68    | 21    | 21      | 52    |
| 2           | 11             | 27       | 30        | 310     | 28        | 1,320    | 97     | 94     | 59    | 52    | 19      | 39    |
| 3           | 11             | 21       | 19        | 289     | 138       | 984      | 86     | 141    | 52    | 39    | 20      | 50    |
| 4           | 10             | 12       | 14        | 260     | 113       | 416      | 89     | 89     | 40    | 138   | 24      | 37    |
| 5           | 10             | 11       | 13        | 443     | 66        | 245      | 78     | 70     | 35    | 293   | 21      | 30    |
| 6           | 9.5            | 15       | 149       | 264     | 52        | 141      | 70     | 61     | 31    | 106   | 21      | 30    |
| 7           | 8.5            | 27       | 302       | 130     | 52        | 145      | 2,200  | 54     | 28    | 66    | 61      | 27    |
| 8           | 7.5            | 15       | 227       | 110     | 37        | 260      | 1,870  | 579    | 27    | 54    | 31      | 25    |
| 9           | 16             | 12       | 120       | 130     | 37        | 222      | 507    | 5,420  | 75    | 59    | 52      | 24    |
| 10          | 34             | 14       | 84        | 400     | 27        | 128      | 332    | 2,500  | 46    | 92    | 21      | 20    |
| 11          | 13             | 14       | 72        | 395     | 25        | 109      | 256    | 579    | 23    | 37    | 16      | 20    |
| 12          | 11             | 13       | 51        | 237     | 100       | 103      | 203    | 293    | 21    | 27    | 14      | 73    |
| 13          | 11             | 14       | 41        | 150     | 301       | 161      | 3,260  | 314    | 61    | 46    | 12      | 48    |
| 14          | 28             | 12       | 198       | 100     | 380       | 471      | 1,700  | 1,050  | 46    | 28    | 12      | 30    |
| 15          | 14             | 14       | 422       | 70      | 489       | 405      | 449    | 903    | 81    | 50    | 11      | 585   |
| 16          | 13             | 13       | 369       | 50      | 410       | 465      | 795    | 591    | 103   | 75    | 9.7     | 705   |
| 17          | 12             | 12       | 178       | 44      | 323       | 1,060    | 639    | 289    | 52    | 579   | 40      | 154   |
| 18          | 11             | 10       | 105       | 48      | 323       | 741      | 319    | 193    | 35    | 585   | 1,400   | 89    |
| 19          | 11             | 18       | 74        | 57      | 233       | 301      | 1,370  | 138    | 30    | 276   | 1,560   | 73    |
| 20          | 11             | 18       | 100       | 61      | 168       | 196      | 3,300  | 109    | 25    | 141   | 759     | 63    |
| 21          | 11             | 15       | 98        | 54      | 131       | 175      | 2,000  | 92     | 24    | 103   | 249     | 52    |
| 22          | 16             | 14       | 79        | 75      | 103       | 825      | 1,900  | 81     | 23    | 66    | 253     | 46    |
| 23          | 25             | 12       | 63        | 151     | 75        | 1,150    | 900    | 66     | 24    | 86    | 921     | 37    |
| 24          | 22             | 12       | 51        | 179     | 84        | 483      | 420    | 57     | 23    | 59    | 885     | 182   |
| 25          | 19             | 13       | 50        | 116     | 70        | 249      | 240    | 50     | 23    | 94    | 438     | 158   |
| 26          | 14             | 13       | 47        | 52      | 73        | 186      | 180    | 46     | 25    | 46    | 233     | 370   |
| 27          | 11             | 27       | 58        | 44      | 78        | 203      | 130    | 42     | 23    | 37    | 355     | 337   |
| 28          | 12             | 24       | 78        | 38      | 92        | 256      | 110    | 39     | 23    | 31    | 245     | 400   |
| 29          | 13             | 60       | 75        | 33      | 119       | 193      | 90     | 44     | 39    | 28    | 125     | 380   |
| 30          | 14             | 54       | 850       | 30      | -----     | 158      | 80     | 168    | 33    | 27    | 81      | 1,710 |
| 31          | 14             | -----    | 945       | 29      | -----     | 122      | -----  | 89     | ----- | 24    | 57      | ----- |
| TOTAL       | 436.5          | 549      | 4,994     | 5,340   | 4,155     | 12,263   | 23,776 | 14,317 | 1,198 | 3,365 | 7,966.7 | 5,846 |
| MEAN        | 14.1           | 18.3     | 161       | 172     | 143       | 396      | 793    | 462    | 39.9  | 109   | 257     | 195   |
| MAX         | 34             | 60       | 945       | 991     | 489       | 1,320    | 3,300  | 5,420  | 103   | 585   | 1,560   | 1,710 |
| MIN         | 7.5            | 10       | 13        | 29      | 25        | 103      | 70     | 39     | 21    | 21    | 9.7     | 20    |
| CFSM        | .07            | .10      | .85       | .91     | .76       | 2.10     | 4.20   | 2.44   | .21   | .58   | 1.36    | 1.03  |
| IN.         | .09            | .11      | .98       | 1.05    | .82       | 2.41     | 4.68   | 2.82   | .24   | .66   | 1.57    | 1.15  |
| CAL YR 1971 | TOTAL 41,310.5 | MEAN 113 | MAX 3,010 | MIN 7.0 | CFSM .60  | IN 8.13  |        |        |       |       |         |       |
| WTR YR 1972 | TOTAL 84,206.2 | MEAN 230 | MAX 5,420 | MIN 7.5 | CFSM 1.22 | IN 16.57 |        |        |       |       |         |       |

## PEAK DISCHARGE (BASE, 3,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 2045 | 7.61  | 3,730     | 5-9  | 1630 | 10.80 | 6,860     |
| 4-13 | 1815 | 9.42  | 5,320     | 8-18 | 0100 | 6.96  | 3,210     |
| 4-19 | 0715 | 7.55  | 3,680     |      |      |       |           |

## SCIOTO RIVER BASIN

03229500 Big Walnut Creek at Rees, Ohio

LOCATION.--Lat 39°51'24", long 82°57'26", in NE 1/4 sec.26, T.4 N., R.22 W., Franklin County, on right bank at downstream side of bridge on Reese Road, 0.5 mile southwest of Rees, 4.2 miles downstream from Alum Creek, and 10.5 miles upstream from mouth.

DRAINAGE AREA.--544 sq mi.

PERIOD OF RECORD.--August 1921 to December 1935. October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 698.20 ft above mean sea level. Aug. 18, 1921, to Oct. 23, 1927, nonrecording gage at site 0.3 mile upstream at datum 2.00 ft higher prior to Oct. 1, 1924, at present datum thereafter.

AVERAGE DISCHARGE.--48 years, 491 cfs (12.26 inches per year) (adjusted for diversion).

EXTREMES.--Current year: Maximum discharge, 11,100 cfs May 9 (gage height, 14.15 ft); minimum, 34 cfs Oct. 8. Period of record: Maximum discharge, 59,800 cfs Jan. 22, 1959 (gage height, 22.03 ft, from high-water mark in well), from rating curve extended above 13,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 5 cfs Sept. 4, 5, 10-12, 1925. Flood of Mar. 25, 1913 reached a stage of 20.5 ft, present datum, at site 0.3 mile upstream.

REMARKS.--Records good. Since September 1954, flow regulated by Hoover Reservoir 26 miles upstream (see station 03228400). Beginning June 15, 1956, diversion at Morse Road Treatment Plant, 21 miles upstream from station, for municipal water supply for the city of Columbus. For statement on pumpage from Alum Creek basin into municipal supply system of the city of Columbus, see REMARKS for station 03229000. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1053: 1929, 1933(M), 1943(M), 1945. WSP 1305: 1923(M), 1925-26(M).

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG    | SEP    |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|-------|-------|--------|--------|
| 1     | 58    | 37    | 111    | 1,260  | 100   | 408    | 254    | 218    | 297   | 110   | 55     | 130    |
| 2     | 53    | 36    | 87     | 640    | 95    | 1,500  | 230    | 223    | 198   | 94    | 55     | 128    |
| 3     | 45    | 63    | 70     | 620    | 162   | 1,620  | 208    | 325    | 160   | 632   | 62     | 152    |
| 4     | 41    | 44    | 56     | 516    | 236   | 860    | 215    | 297    | 134   | 230   | 71     | 140    |
| 5     | 40    | 41    | 50     | 800    | 168   | 564    | 198    | 220    | 114   | 516   | 52     | 101    |
| 6     | 38    | 42    | 380    | 548    | 168   | 350    | 176    | 170    | 104   | 248   | 48     | 92     |
| 7     | 36    | 70    | 930    | 346    | 134   | 304    | 2,360  | 156    | 100   | 156   | 180    | 85     |
| 8     | 35    | 61    | 696    | 294    | 109   | 568    | 4,590  | 672    | 94    | 120   | 109    | 81     |
| 9     | 37    | 48    | 355    | 329    | 100   | 488    | 1,360  | 7,410  | 91    | 146   | 195    | 86     |
| 10    | 96    | 48    | 248    | 750    | 86    | 301    | 855    | 7,600  | 464   | 284   | 103    | 74     |
| 11    | 67    | 45    | 206    | 676    | 83    | 248    | 680    | 2,160  | 120   | 223   | 67     | 67     |
| 12    | 49    | 40    | 159    | 456    | 86    | 230    | 548    | 785    | 91    | 158   | 51     | 178    |
| 13    | 43    | 41    | 131    | 336    | 460   | 275    | 4,010  | 680    | 126   | 124   | 46     | 242    |
| 14    | 74    | 42    | 369    | 287    | 700   | 580    | 6,150  | 2,920  | 205   | 103   | 42     | 109    |
| 15    | 68    | 38    | 955    | 193    | 970   | 624    | 2,400  | 2,190  | 172   | 98    | 52     | 476    |
| 16    | 50    | 40    | 763    | 140    | 1,010 | 628    | 1,380  | 1,580  | 424   | 239   | 48     | 925    |
| 17    | 56    | 38    | 425    | 142    | 684   | 1,570  | 1,860  | 810    | 193   | 512   | 41     | 301    |
| 18    | 46    | 36    | 275    | 144    | 596   | 1,240  | 875    | 536    | 124   | 885   | 1,940  | 170    |
| 19    | 43    | 41    | 195    | 160    | 568   | 600    | 700    | 400    | 100   | 357   | 2,800  | 142    |
| 20    | 39    | 65    | 260    | 170    | 357   | 408    | 2,730  | 329    | 89    | 412   | 1,470  | 117    |
| 21    | 36    | 48    | 299    | 176    | 304   | 339    | 5,280  | 275    | 82    | 228   | 608    | 109    |
| 22    | 38    | 40    | 236    | 174    | 266   | 1,020  | 4,540  | 230    | 76    | 193   | 432    | 136    |
| 23    | 63    | 37    | 183    | 230    | 205   | 1,580  | 1,790  | 200    | 74    | 239   | 1,970  | 107    |
| 24    | 70    | 36    | 151    | 332    | 200   | 805    | 965    | 178    | 75    | 150   | 1,620  | 322    |
| 25    | 67    | 37    | 139    | 325    | 185   | 488    | 795    | 158    | 72    | 180   | 1,380  | 424    |
| 26    | 53    | 38    | 131    | 220    | 190   | 376    | 508    | 138    | 72    | 134   | 584    | 1,880  |
| 27    | 44    | 46    | 151    | 144    | 200   | 388    | 368    | 124    | 70    | 122   | 564    | 1,160  |
| 28    | 41    | 72    | 212    | 142    | 205   | 500    | 315    | 110    | 65    | 88    | 508    | 1,070  |
| 29    | 43    | 129   | 236    | 122    | 233   | 416    | 260    | 109    | 203   | 72    | 294    | 990    |
| 30    | 42    | 212   | 1,010  | 122    | ----- | 384    | 228    | 388    | 263   | 66    | 203    | 3,090  |
| 31    | 41    | ----- | 1,840  | 98     | ----- | 297    | -----  | 496    | ----- | 58    | 156    | -----  |
| TOTAL | 1,552 | 1,611 | 11,309 | 10,892 | 8,860 | 19,959 | 46,828 | 32,087 | 4,452 | 7,177 | 15,806 | 13,084 |
| MEAN  | 50.1  | 53.7  | 365    | 351    | 306   | 644    | 1,561  | 1,035  | 148   | 232   | 510    | 436    |
| MAX   | 96    | 212   | 1,840  | 1,260  | 1,010 | 1,620  | 6,150  | 7,600  | 464   | 885   | 2,800  | 3,090  |
| MIN   | 35    | 36    | 50     | 98     | 83    | 230    | 176    | 109    | 65    | 58    | 41     | 67     |

CAL YR 1971 TOTAL 102,083 MEAN 280 MAX 4,250 MIN 33  
WTR YR 1972 TOTAL 173,617 MEAN 474 MAX 7,600 MIN 35



## 03230500 Big Darby Creek at Darbyville, Ohio

LOCATION.--Lat 39°42'03", long 83°06'35", Pickaway County, near right bank on downstream side of pier of bridge on State Highway 316, 0.4 mile northeast of Darbyville, 0.4 mile upstream from Lizzard Run, and 3 miles downstream from Greenbrier Creek.

DRAINAGE AREA.--534 sq mi.

PERIOD OF RECORD.--October 1921 to December 1935, January 1938 to current year. Prior to October 1959, published as Darby Creek at Darbyville.

GAGE.--Water-stage recorder. Datum of gage is 713.69 ft above mean sea level. Prior to Mar. 17, 1940, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--48 years, 430 cfs (10.93 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,330 cfs May 10 (gage height, 10.53 ft); minimum, 29 cfs Sept. 10, 11, 12.

Period of record: Maximum discharge, 49,000 cfs Jan. 22, 1959 (gage height, 17.94 ft), from rating curve extended above 22,000 cfs on basis of contracted-opening measurement of peak flow; minimum observed, 1.4 cfs Sept. 17, 1932.

REMARKS.--Records good except those for the period July 1 to Sept. 7, which are fair.

REVISIONS (WATER YEARS).--WSP 1083: 1922(M), 1924(M), 1927(M), 1933(M), 1938(M). WSP 1305: 1928-31(M), 1934(M), 1945(M). WSP 1505: 1932(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 64    | 51    | 280    | 2,880  | 210    | 306    | 459    | 417    | 279   | 124   | 63    | 38    |
| 2     | 62    | 47    | 280    | 1,410  | 210    | 1,060  | 414    | 407    | 258   | 109   | 60    | 37    |
| 3     | 54    | 48    | 220    | 1,150  | 238    | 2,130  | 368    | 395    | 227   | 100   | 58    | 37    |
| 4     | 54    | 49    | 170    | 968    | 249    | 1,230  | 350    | 350    | 202   | 95    | 58    | 37    |
| 5     | 47    | 47    | 250    | 1,080  | 251    | 848    | 325    | 312    | 182   | 97    | 55    | 36    |
| 6     | 40    | 45    | 700    | 1,010  | 261    | 599    | 306    | 284    | 169   | 87    | 52    | 34    |
| 7     | 39    | 51    | 2,200  | 746    | 225    | 515    | 750    | 267    | 167   | 86    | 53    | 31    |
| 8     | 38    | 48    | 1,700  | 603    | 206    | 515    | 4,180  | 428    | 158   | 84    | 62    | 32    |
| 9     | 39    | 47    | 1,200  | 568    | 196    | 470    | 3,700  | 2,870  | 149   | 81    | 55    | 33    |
| 10    | 41    | 46    | 860    | 796    | 169    | 417    | 1,650  | 5,790  | 147   | 101   | 53    | 30    |
| 11    | 42    | 45    | 720    | 1,070  | 173    | 356    | 1,250  | 3,370  | 163   | 100   | 52    | 29    |
| 12    | 41    | 46    | 600    | 840    | 160    | 344    | 988    | 1,500  | 139   | 95    | 51    | 47    |
| 13    | 40    | 47    | 600    | 680    | 274    | 342    | 2,000  | 1,060  | 147   | 129   | 50    | 88    |
| 14    | 41    | 47    | 1,000  | 571    | 571    | 404    | 3,450  | 1,660  | 178   | 154   | 47    | 69    |
| 15    | 43    | 46    | 1,900  | 428    | 872    | 631    | 1,650  | 2,190  | 247   | 104   | 47    | 66    |
| 16    | 44    | 45    | 1,200  | 380    | 1,040  | 561    | 1,510  | 2,470  | 267   | 104   | 46    | 64    |
| 17    | 58    | 44    | 1,000  | 340    | 900    | 1,140  | 2,510  | 1,410  | 223   | 134   | 44    | 52    |
| 18    | 61    | 42    | 780    | 380    | 662    | 1,420  | 2,060  | 952    | 173   | 463   | 40    | 51    |
| 19    | 54    | 44    | 600    | 365    | 603    | 900    | 1,110  | 750    | 147   | 256   | 52    | 49    |
| 20    | 47    | 47    | 460    | 325    | 459    | 655    | 1,060  | 624    | 135   | 188   | 69    | 46    |
| 21    | 46    | 46    | 500    | 306    | 386    | 557    | 2,510  | 540    | 129   | 144   | 47    | 43    |
| 22    | 46    | 46    | 435    | 294    | 380    | 932    | 2,420  | 498    | 126   | 113   | 40    | 38    |
| 23    | 47    | 44    | 389    | 317    | 299    | 2,720  | 3,360  | 452    | 122   | 91    | 64    | 35    |
| 24    | 55    | 44    | 362    | 368    | 282    | 1,650  | 2,010  | 353    | 119   | 81    | 118   | 40    |
| 25    | 66    | 45    | 328    | 452    | 274    | 976    | 1,210  | 317    | 115   | 77    | 93    | 47    |
| 26    | 71    | 45    | 306    | 371    | 258    | 772    | 868    | 284    | 110   | 75    | 51    | 79    |
| 27    | 66    | 45    | 299    | 270    | 236    | 655    | 697    | 256    | 104   | 79    | 53    | 151   |
| 28    | 64    | 47    | 291    | 250    | 227    | 669    | 585    | 234    | 103   | 79    | 47    | 147   |
| 29    | 59    | 120   | 277    | 240    | 242    | 816    | 512    | 221    | 116   | 75    | 41    | 212   |
| 30    | 58    | 220   | 617    | 230    | -----  | 638    | 459    | 249    | 132   | 71    | 40    | 575   |
| 31    | 53    | ----- | 2,820  | 220    | -----  | 522    | -----  | 304    | ----- | 66    | 39    | ----- |
| TOTAL | 1,580 | 1,634 | 23,344 | 19,908 | 10,513 | 25,750 | 44,721 | 31,214 | 4,933 | 3,642 | 1,700 | 2,273 |
| MEAN  | 51.0  | 54.5  | 753    | 642    | 363    | 831    | 1,491  | 1,007  | 164   | 117   | 54.8  | 75.8  |
| MAX   | 71    | 220   | 2,820  | 2,880  | 1,040  | 2,720  | 4,180  | 5,790  | 279   | 463   | 118   | 575   |
| MIN   | 38    | 42    | 170    | 220    | 160    | 306    | 306    | 221    | 103   | 66    | 39    | 29    |
| CFSM  | .10   | .10   | 1.41   | 1.20   | .68    | 1.56   | 2.79   | 1.89   | .31   | .22   | .10   | .14   |
| IN.   | .11   | .11   | 1.63   | 1.39   | .73    | 1.79   | 3.12   | 2.17   | .34   | .25   | .12   | .16   |

CAL YR 1971 TOTAL 138,339 MEAN 379 MAX 5,790 MIN 27 CFSM .71 IN 9.64  
WTR YR 1972 TOTAL 171,212 MEAN 468 MAX 5,790 MIN 29 CFSM .88 IN 11.93

## PEAK DISCHARGE (BASE, 4,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-9  | 0230 | 9.96  | 5,460     | 5-10 | 1300 | 10.53 | 6,330     |

03230800 Deer Creek at Mount Sterling, Ohio

LOCATION.--Lat 39°42'54", long 83°15'26", Madison County, on left bank at downstream side of bridge on State Highway 56, 0.2 mile downstream from unnamed right bank tributary, 0.6 mile southeast of Mount Sterling, and 4.9 miles upstream from Duffs Fork.

DRAINAGE AREA.--228 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 836.25 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 200 cfs (11.92 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,650 cfs May 9 (gage height, 8.73 ft); minimum, 11 cfs Sept. 12.  
Period of record: Maximum discharge, 15,200 cfs May 24, 1968 (gage height 11.87 ft); minimum, 5.1 cfs Nov. 24, 1970.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT          | NOV   | DEC      | JAN       | FEB    | MAR      | APR      | MAY    | JUN   | JUL   | AUG  | SEP   |
|-------------|--------------|-------|----------|-----------|--------|----------|----------|--------|-------|-------|------|-------|
| 1           | 41           | 43    | 129      | 549       | 76     | 189      | 181      | 163    | 141   | 90    | 21   | 15    |
| 2           | 37           | 42    | 93       | 491       | 96     | 703      | 167      | 163    | 116   | 65    | 21   | 15    |
| 3           | 34           | 43    | 79       | 457       | 126    | 671      | 153      | 153    | 100   | 56    | 23   | 21    |
| 4           | 33           | 39    | 70       | 407       | 100    | 445      | 160      | 135    | 89    | 52    | 25   | 23    |
| 5           | 31           | 37    | 63       | 494       | 94     | 346      | 141      | 120    | 81    | 48    | 26   | 20    |
| 6           | 30           | 35    | 260      | 381       | 88     | 253      | 131      | 110    | 76    | 45    | 22   | 16    |
| 7           | 28           | 77    | 991      | 308       | 82     | 237      | 372      | 104    | 76    | 43    | 22   | 15    |
| 8           | 26           | 82    | 1,000    | 265       | 76     | 264      | 599      | 317    | 70    | 41    | 53   | 14    |
| 9           | 27           | 81    | 597      | 304       | 70     | 223      | 438      | 2,740  | 67    | 40    | 36   | 14    |
| 10          | 33           | 81    | 458      | 528       | 64     | 192      | 401      | 2,000  | 66    | 46    | 30   | 14    |
| 11          | 34           | 75    | 403      | 457       | 66     | 175      | 338      | 867    | 61    | 71    | 25   | 12    |
| 12          | 31           | 70    | 331      | 355       | 78     | 173      | 327      | 569    | 52    | 68    | 22   | 21    |
| 13          | 28           | 50    | 279      | 315       | 161    | 168      | 1,960    | 486    | 73    | 210   | 21   | 59    |
| 14          | 32           | 43    | 384      | 258       | 356    | 183      | 804      | 1,140  | 124   | 100   | 19   | 45    |
| 15          | 33           | 41    | 1,100    | 150       | 671    | 174      | 659      | 831    | 125   | 72    | 17   | 36    |
| 16          | 37           | 39    | 791      | 140       | 558    | 194      | 1,220    | 551    | 160   | 75    | 17   | 28    |
| 17          | 98           | 38    | 519      | 130       | 368    | 436      | 1,270    | 421    | 115   | 75    | 17   | 23    |
| 18          | 81           | 35    | 374      | 160       | 333    | 448      | 685      | 335    | 88    | 57    | 17   | 20    |
| 19          | 63           | 33    | 301      | 188       | 310    | 310      | 461      | 274    | 76    | 58    | 21   | 19    |
| 20          | 53           | 33    | 308      | 159       | 197    | 253      | 438      | 235    | 70    | 95    | 28   | 20    |
| 21          | 46           | 32    | 312      | 156       | 218    | 232      | 393      | 206    | 69    | 57    | 22   | 18    |
| 22          | 43           | 28    | 262      | 151       | 176    | 662      | 1,020    | 178    | 67    | 46    | 19   | 17    |
| 23          | 47           | 25    | 236      | 178       | 142    | 710      | 847      | 155    | 62    | 40    | 22   | 17    |
| 24          | 57           | 35    | 225      | 197       | 150    | 455      | 560      | 138    | 60    | 35    | 35   | 22    |
| 25          | 89           | 42    | 199      | 186       | 132    | 372      | 403      | 125    | 56    | 34    | 31   | 35    |
| 26          | 82           | 41    | 195      | 120       | 130    | 313      | 308      | 112    | 52    | 36    | 28   | 54    |
| 27          | 72           | 43    | 182      | 110       | 117    | 283      | 256      | 108    | 48    | 31    | 23   | 93    |
| 28          | 62           | 53    | 175      | 94        | 119    | 257      | 217      | 95     | 46    | 28    | 19   | 92    |
| 29          | 53           | 70    | 159      | 84        | 133    | 236      | 193      | 92     | 54    | 26    | 17   | 93    |
| 30          | 49           | 166   | 552      | 80        | -----  | 216      | 174      | 133    | 88    | 25    | 17   | 308   |
| 31          | 46           | ----- | 1,150    | 74        | -----  | 188      | -----    | 199    | ----- | 23    | 15   | ----- |
| TOTAL       | 1,456        | 1,552 | 12,177   | 7,928     | 5,287  | 9,961    | 15,276   | 13,255 | 2,428 | 1,788 | 731  | 1,199 |
| MEAN        | 47.0         | 51.7  | 393      | 256       | 182    | 321      | 509      | 428    | 80.9  | 57.7  | 23.6 | 40.0  |
| MAX         | 98           | 166   | 1,150    | 549       | 671    | 710      | 1,960    | 2,740  | 160   | 210   | 53   | 308   |
| MIN         | 26           | 25    | 63       | 74        | 64     | 168      | 131      | 92     | 46    | 23    | 15   | 12    |
| CFSM        | .21          | .23   | 1.72     | 1.12      | .80    | 1.41     | 2.23     | 1.88   | .35   | .25   | .10  | .18   |
| IN.         | .24          | .25   | 1.99     | 1.29      | .86    | 1.63     | 2.49     | 2.16   | .40   | .29   | .12  | .20   |
| CAL YR 1971 | TOTAL 67,398 |       | MEAN 185 | MAX 3,160 | MIN 16 | CFSM .81 | IN 11.00 |        |       |       |      |       |
| WTR YR 1972 | TOTAL 73,038 |       | MEAN 200 | MAX 2,740 | MIN 12 | CFSM .88 | IN 11.92 |        |       |       |      |       |

## PEAK DISCHARGE (BASE, 1,900 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-13 | 0630 | 8.19  | 2,740     | 5-9  | 2000 | 8.73  | 3,650     |
| 4-16 | 1900 | 7.59  | 1,930     |      |      |       |           |

## 03230900 Deer Creek near Pancoastburg, Ohio

LOCATION.--Lat 39°37'14", long 83°12'47", Pickaway County, on left bank 200 ft downstream from bridge on Crownover Mill Road, 1,200 ft downstream from Deer Creek Dam, and 2.8 miles east of Pancoastburg.

DRAINAGE AREA.--277 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements and annual maximums, water years 1964-66, July 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above mean sea level (Corps of Engineers bench mark). Oct. 23, 1963, to June 30, 1966, crest-stage at site 200 ft upstream at datum 59.84 ft higher.

AVERAGE DISCHARGE.--6 years, 233 cfs.

EXTREMES.--Current year: Maximum discharge, 1,980 cfs Apr. 18 (gage height, 73.60 ft); minimum, 7.4 cfs Apr. 1. Period of record: Maximum discharge, 19,500 cfs (estimated) Mar. 10, 1964 (gage height, 80.93 ft, present datum). No flow May 25-27, 1968, result of dam closure.

REMARKS.--Records good. Flow regulated by Deer Creek Lake (see station 03230890). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1971, superseding those published in WRD Ohio 1971, are given herewith:

| Date     | Discharge | Date     | Discharge | Date     | Discharge |
|----------|-----------|----------|-----------|----------|-----------|
| Sept. 20 | 290       | Sept. 24 | 557       | Sept. 28 | 416       |
| 21       | 503       | 25       | 503       | 29       | 353       |
| 22       | 624       | 26       | 444       | 30       | 332       |
| 23       | 611       | 27       | 420       |          |           |

| Month       | Cfs-days | Maximum | Minimum | Mean |
|-------------|----------|---------|---------|------|
| Sept.       | 6,283    | 624     | 28      | 209  |
| WTR YR 1971 | 77,053.4 | 2,300   | 7.0     | 211  |

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | CCT   | NOV   | DEC    | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG  | SEP   |
|-------|-------|-------|--------|-------|-------|--------|--------|--------|-------|-------|------|-------|
| 1     | 328   | 52    | 199    | 683   | 150   | 228    | 70     | 182    | 284   | 101   | 20   | 18    |
| 2     | 346   | 41    | 150    | 521   | 150   | 657    | 14     | 182    | 168   | 101   | 20   | 18    |
| 3     | 356   | 43    | 103    | 476   | 150   | 844    | 15     | 182    | 135   | 101   | 20   | 19    |
| 4     | 364   | 44    | 85     | 400   | 150   | 534    | 14     | 182    | 133   | 68    | 19   | 19    |
| 5     | 360   | 45    | 85     | 485   | 121   | 408    | 14     | 185    | 133   | 55    | 19   | 19    |
| 6     | 356   | 44    | 179    | 503   | 108   | 325    | 14     | 161    | 106   | 54    | 19   | 19    |
| 7     | 353   | 45    | 894    | 380   | 110   | 290    | 14     | 150    | 97    | 52    | 19   | 18    |
| 8     | 350   | 54    | 1,400  | 287   | 110   | 287    | 14     | 208    | 83    | 28    | 19   | 18    |
| 9     | 342   | 75    | 785    | 287   | 110   | 290    | 14     | 894    | 77    | 18    | 19   | 19    |
| 10    | 339   | 87    | 494    | 467   | 110   | 258    | 15     | 1,380  | 75    | 20    | 19   | 19    |
| 11    | 149   | 87    | 432    | 526   | 110   | 246    | 16     | 1,750  | 75    | 48    | 19   | 19    |
| 12    | 34    | 87    | 360    | 436   | 110   | 225    | 17     | 1,720  | 46    | 83    | 20   | 20    |
| 13    | 22    | 87    | 322    | 400   | 150   | 196    | 17     | 1,250  | 100   | 155   | 20   | 25    |
| 14    | 32    | 87    | 322    | 311   | 370   | 219    | 17     | 1,360  | 166   | 182   | 19   | 28    |
| 15    | 39    | 81    | 1,050  | 187   | 649   | 231    | 17     | 1,320  | 138   | 185   | 19   | 28    |
| 16    | 43    | 54    | 1,030  | 145   | 737   | 216    | 17     | 971    | 280   | 123   | 19   | 28    |
| 17    | 54    | 43    | 548    | 200   | 501   | 388    | 738    | 570    | 216   | 99    | 19   | 28    |
| 18    | 70    | 43    | 404    | 290   | 376   | 539    | 1,730  | 372    | 99    | 97    | 19   | 28    |
| 19    | 99    | 52    | 280    | 243   | 353   | 424    | 1,770  | 318    | 97    | 74    | 19   | 28    |
| 20    | 108   | 56    | 350    | 211   | 215   | 308    | 1,110  | 274    | 99    | 57    | 19   | 28    |
| 21    | 101   | 48    | 350    | 179   | 244   | 290    | 624    | 274    | 99    | 55    | 19   | 28    |
| 22    | 101   | 31    | 350    | 179   | 274   | 554    | 333    | 225    | 99    | 55    | 19   | 28    |
| 23    | 81    | 26    | 300    | 214   | 214   | 826    | 15     | 182    | 99    | 52    | 19   | 28    |
| 24    | 72    | 26    | 261    | 228   | 159   | 498    | 637    | 148    | 99    | 50    | 19   | 29    |
| 25    | 70    | 27    | 225    | 240   | 182   | 408    | 1,370  | 89     | 85    | 33    | 19   | 29    |
| 26    | 79    | 34    | 225    | 214   | 150   | 368    | 1,140  | 117    | 58    | 25    | 19   | 44    |
| 27    | 85    | 50    | 225    | 145   | 150   | 328    | 473    | 131    | 52    | 23    | 19   | 61    |
| 28    | 83    | 58    | 199    | 158   | 150   | 287    | 280    | 133    | 54    | 23    | 19   | 61    |
| 29    | 83    | 99    | 145    | 168   | 150   | 287    | 211    | 106    | 55    | 23    | 18   | 75    |
| 30    | 77    | 188   | 330    | 150   | ----- | 258    | 182    | 128    | 87    | 23    | 18   | 121   |
| 31    | 72    | ----- | 1,230  | 150   | ----- | 228    | -----  | 284    | ----- | 21    | 18   | ----- |
| TOTAL | 5,048 | 1,794 | 13,312 | 9,463 | 6,553 | 11,445 | 10,912 | 15,428 | 3,394 | 2,084 | 591  | 950   |
| MEAN  | 163   | 59.8  | 429    | 305   | 226   | 369    | 364    | 498    | 113   | 67.2  | 19.1 | 31.7  |
| MAX   | 364   | 188   | 1,400  | 683   | 737   | 844    | 1,770  | 1,750  | 284   | 185   | 20   | 121   |
| MIN   | 22    | 26    | 85     | 145   | 108   | 196    | 14     | 89     | 46    | 18    | 18   | 18    |

CAL YR 1971 TOTAL 84,823.4 MEAN 232 MAX 2,300 MIN 7.0  
WTR YR 1972 TOTAL 80,974.0 MEAN 221 MAX 1,770 MIN 14

## SCIOTO RIVER BASIN

03231000 Deer Creek at Williamsport, Ohio

LOCATION.--Lat 39°35'09", long 83°07'22", Pickaway County, on left bank at downstream side of bridge on U.S. Highway 22 at west edge of Williamsport, 2.0 miles downstream from Dry Run, and 7.6 miles upstream from Hay Run.

DRAINAGE AREA.--333 sq mi.

PERIOD OF RECORD.--August 1926 to December 1935, January 1938 to September 1956. Annual maximum, 1959, 1961-62 water years, July 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 718.66 ft above mean sea level. Prior to Feb. 29, 1940, non-recording gage, and Feb. 29, 1940, to Aug. 24, 1954, water-stage recorder, at same site at datum 3.00 ft higher. Aug. 24, 1954 to Sept. 30, 1956, nonrecording gage at same site and datum. Oct. 1, 1958, to June 1962, crest-stage gage at site 120 ft downstream at same datum.

AVERAGE DISCHARGE.--37 years (1926-35, 1938-56, 1962-72), 280 cfs.

EXTREMES.--Current year: Maximum discharge, 2,300 cfs May 9 (gage height, 8.34 ft); minimum, 12 cfs Sept. 12. Period of record: Maximum discharge, 39,600 cfs Jan. 22, 1959 (gage height, 17.6 ft, from floodmarks), from rating curve extended above 25,000 cfs on basis of contracted-opening measurement of peak flow; minimum discharge, 0.10 cfs Sept. 19, 1964.

REMARKS.--Records good. Flow regulated by Deer Creek Reservoir 9.0 miles upstream beginning in 1968. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1083: 1929. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG  | SEP   |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|-------|-------|------|-------|
| 1     | 385   | 66    | 224    | 715    | 166   | 240    | 163    | 214    | 306   | 141   | 24   | 16    |
| 2     | 398   | 45    | 148    | 551    | 159   | 659    | 44     | 212    | 235   | 131   | 24   | 15    |
| 3     | 410   | 44    | 121    | 524    | 166   | 946    | 41     | 210    | 159   | 129   | 25   | 16    |
| 4     | 413   | 42    | 86     | 431    | 160   | 607    | 45     | 205    | 155   | 108   | 24   | 16    |
| 5     | 410   | 44    | 85     | 548    | 140   | 467    | 42     | 202    | 150   | 76    | 24   | 15    |
| 6     | 398   | 44    | 242    | 554    | 130   | 358    | 41     | 185    | 136   | 72    | 24   | 14    |
| 7     | 390   | 44    | 922    | 425    | 120   | 318    | 145    | 166    | 115   | 70    | 24   | 14    |
| 8     | 383   | 47    | 1,280  | 333    | 120   | 313    | 159    | 241    | 106   | 59    | 23   | 14    |
| 9     | 375   | 65    | 950    | 323    | 120   | 305    | 145    | 1,250  | 94    | 30    | 23   | 15    |
| 10    | 360   | 83    | 533    | 503    | 115   | 280    | 126    | 1,340  | 93    | 50    | 23   | 13    |
| 11    | 118   | 83    | 494    | 569    | 114   | 263    | 99     | 1,530  | 91    | 67    | 24   | 13    |
| 12    | 42    | 83    | 398    | 485    | 115   | 260    | 84     | 1,470  | 79    | 93    | 24   | 26    |
| 13    | 28    | 83    | 353    | 425    | 242   | 220    | 850    | 1,240  | 110   | 161   | 25   | 46    |
| 14    | 40    | 83    | 333    | 358    | 434   | 228    | 260    | 1,340  | 275   | 216   | 24   | 34    |
| 15    | 42    | 81    | 853    | 248    | 677   | 246    | 198    | 1,300  | 189   | 216   | 22   | 29    |
| 16    | 53    | 67    | 1,040  | 180    | 782   | 248    | 425    | 968    | 451   | 178   | 22   | 26    |
| 17    | 60    | 40    | 617    | 240    | 572   | 458    | 621    | 654    | 348   | 118   | 21   | 26    |
| 18    | 72    | 39    | 458    | 380    | 410   | 582    | 1,520  | 430    | 170   | 117   | 21   | 24    |
| 19    | 84    | 45    | 318    | 278    | 373   | 491    | 1,570  | 346    | 151   | 109   | 20   | 23    |
| 20    | 108   | 56    | 353    | 236    | 275   | 446    | 1,120  | 306    | 143   | 79    | 20   | 23    |
| 21    | 104   | 53    | 375    | 200    | 242   | 446    | 743    | 300    | 136   | 75    | 19   | 22    |
| 22    | 99    | 38    | 365    | 202    | 293   | 563    | 659    | 270    | 132   | 73    | 18   | 22    |
| 23    | 96    | 24    | 338    | 226    | 234   | 942    | 186    | 225    | 129   | 70    | 20   | 21    |
| 24    | 83    | 23    | 308    | 253    | 218   | 540    | 420    | 195    | 127   | 65    | 19   | 24    |
| 25    | 84    | 23    | 255    | 265    | 208   | 460    | 1,230  | 119    | 116   | 57    | 36   | 25    |
| 26    | 83    | 24    | 260    | 230    | 174   | 420    | 1,110  | 129    | 90    | 37    | 27   | 32    |
| 27    | 90    | 40    | 255    | 184    | 174   | 380    | 542    | 147    | 71    | 31    | 24   | 72    |
| 28    | 89    | 56    | 246    | 159    | 180   | 320    | 308    | 147    | 71    | 30    | 22   | 69    |
| 29    | 87    | 85    | 170    | 196    | 186   | 303    | 263    | 133    | 88    | 29    | 18   | 92    |
| 30    | 84    | 186   | 285    | 176    | ----- | 288    | 216    | 149    | 135   | 29    | 17   | 216   |
| 31    | 75    | ----- | 1,080  | 194    | ----- | 242    | -----  | 323    | ----- | 29    | 16   | ----- |
| TOTAL | 5,543 | 1,736 | 13,746 | 10,591 | 7,299 | 12,839 | 13,375 | 15,946 | 4,651 | 2,745 | 697  | 1,013 |
| MEAN  | 179   | 57.9  | 443    | 342    | 252   | 414    | 446    | 514    | 155   | 88.5  | 22.5 | 33.8  |
| MAX   | 413   | 186   | 1,280  | 715    | 782   | 946    | 1,570  | 1,530  | 451   | 216   | 36   | 216   |
| MIN   | 28    | 23    | 85     | 159    | 114   | 220    | 41     | 119    | 71    | 29    | 16   | 13    |

CAL YR 1971 TOTAL 99,090.7 MEAN 271 MAX 2,410 MIN 9.7  
WTR YR 1972 TOTAL 90,181.0 MEAN 246 MAX 1,570 MIN 13



## SCIOTO RIVER BASIN

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03231500 Scioto River at Chillicothe, Ohio

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, on right bank at north end of Chillicothe, 1,400 ft downstream from Bridge Street Bridge on U.S. Highway 23, 7.4 miles upstream from Paint Creek, and 15.4 miles downstream from Deer Creek.

DRAINAGE AREA.--3,849 sq mi.

PERIOD OF RECORD.--December 1913 to September 1914 (gage heights and discharge measurements only), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected in this vicinity since 1907 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft above mean sea level. Prior to Sept. 30, 1914, non-recording gage at site 1,300 ft upstream at different datum. Apr. 1, 1921, to Aug. 6, 1930, nonrecording gage, at site 1,400 ft upstream at present datum. Aug. 7, 1930, to Sept. 30, 1969, water stage recorder 900 ft upstream at same datum.

AVERAGE DISCHARGE.--52 years, 3,277 cfs.

EXTREMES.--Current year: Maximum discharge, 25,900 cfs May 11 (gage height, 13.09 ft); minimum, 519 cfs Nov. 26, 27.

Period of record: Maximum discharge, 144,000 cfs Jan. 23, 1959 (gage height, 32.50 ft, from high-water mark in well); minimum, 160 cfs Jan. 1, 1931; minimum gage height, 0.81 ft Sept. 27, 1944.

Flood of Mar. 26, 1913 reached a stage of 39.8 ft (discharge, 260,000 cfs, estimated by Franklin County Conservancy District).

REMARKS.--Records good. Flow regulated by 5 reservoirs 36 to 91 miles upstream from station (see p. 119, 120). Water-quality records for the current year are published in Part 2 of this report.

RESERVOIRS (WATER YEARS).--WSP 803: 1929(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC    | JAN     | FEB    | MAR     | APR     | MAY     | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|---------|--------|---------|---------|---------|--------|--------|--------|--------|
| 1     | 884    | 555    | 1,270  | 11,300  | 1,410  | 1,970   | 3,250   | 6,610   | 2,930  | 1,500  | 780    | 896    |
| 2     | 848    | 555    | 1,030  | 10,300  | 1,380  | 3,570   | 2,800   | 4,560   | 2,460  | 1,370  | 750    | 824    |
| 3     | 860    | 555    | 908    | 7,920   | 1,370  | 10,700  | 2,370   | 3,360   | 2,270  | 1,630  | 730    | 860    |
| 4     | 836    | 582    | 824    | 6,300   | 1,660  | 12,600  | 2,180   | 3,100   | 2,240  | 2,340  | 770    | 896    |
| 5     | 824    | 555    | 750    | 6,210   | 1,500  | 10,400  | 2,100   | 2,750   | 1,940  | 5,900  | 968    | 872    |
| 6     | 812    | 546    | 968    | 6,280   | 1,340  | 7,920   | 1,920   | 2,480   | 1,760  | 6,040  | 780    | 770    |
| 7     | 790    | 546    | 3,810  | 5,170   | 1,380  | 5,400   | 2,980   | 2,180   | 1,570  | 4,920  | 690    | 710    |
| 8     | 780    | 591    | 6,250  | 3,950   | 1,230  | 4,360   | 11,200  | 2,190   | 1,440  | 3,120  | 992    | 690    |
| 9     | 780    | 582    | 5,010  | 3,390   | 1,100  | 4,020   | 16,500  | 9,530   | 1,310  | 2,140  | 896    | 690    |
| 10    | 790    | 591    | 3,220  | 3,810   | 1,000  | 3,540   | 15,400  | 19,100  | 1,270  | 1,890  | 980    | 670    |
| 11    | 884    | 610    | 3,090  | 5,210   | 1,000  | 3,220   | 10,000  | 24,800  | 3,200  | 2,260  | 812    | 640    |
| 12    | 690    | 591    | 2,750  | 6,800   | 992    | 2,910   | 7,460   | 21,800  | 1,870  | 1,740  | 720    | 670    |
| 13    | 591    | 582    | 2,220  | 5,960   | 1,430  | 2,540   | 11,600  | 13,900  | 1,330  | 1,580  | 700    | 1,380  |
| 14    | 555    | 582    | 1,890  | 4,710   | 4,020  | 2,530   | 16,600  | 14,100  | 1,780  | 1,870  | 680    | 1,460  |
| 15    | 630    | 573    | 3,360  | 3,600   | 5,070  | 3,820   | 21,500  | 17,000  | 1,870  | 1,860  | 650    | 968    |
| 16    | 640    | 564    | 6,340  | 2,400   | 6,250  | 6,100   | 21,400  | 16,000  | 4,900  | 1,660  | 640    | 1,900  |
| 17    | 620    | 573    | 7,160  | 2,100   | 6,320  | 8,280   | 17,600  | 14,100  | 4,720  | 2,020  | 630    | 3,440  |
| 18    | 610    | 680    | 6,740  | 2,100   | 5,440  | 11,800  | 17,300  | 11,500  | 3,020  | 4,870  | 824    | 2,240  |
| 19    | 591    | 610    | 4,620  | 2,210   | 4,890  | 10,400  | 14,000  | 10,500  | 2,420  | 5,250  | 4,990  | 1,360  |
| 20    | 610    | 610    | 3,550  | 2,080   | 4,080  | 6,650   | 11,400  | 9,410   | 1,820  | 4,510  | 5,860  | 1,120  |
| 21    | 600    | 620    | 3,180  | 1,980   | 3,070  | 4,670   | 13,900  | 6,720   | 1,660  | 3,390  | 4,080  | 1,020  |
| 22    | 591    | 790    | 2,780  | 1,900   | 2,720  | 4,420   | 19,300  | 4,220   | 1,440  | 2,270  | 2,350  | 956    |
| 23    | 600    | 650    | 2,450  | 1,970   | 2,450  | 9,360   | 21,000  | 3,390   | 1,340  | 1,680  | 2,050  | 932    |
| 24    | 660    | 620    | 2,190  | 2,350   | 2,290  | 12,600  | 21,500  | 2,990   | 1,340  | 1,550  | 5,380  | 860    |
| 25    | 690    | 591    | 2,030  | 2,750   | 2,110  | 9,580   | 18,400  | 2,640   | 1,300  | 1,430  | 5,010  | 1,270  |
| 26    | 680    | 555    | 1,840  | 3,140   | 2,030  | 6,210   | 15,700  | 2,300   | 1,200  | 1,360  | 3,730  | 1,550  |
| 27    | 650    | 528    | 1,780  | 2,620   | 1,940  | 4,690   | 13,000  | 2,050   | 1,110  | 1,160  | 2,240  | 3,410  |
| 28    | 630    | 610    | 1,760  | 2,110   | 1,840  | 4,220   | 9,670   | 1,860   | 1,040  | 1,120  | 1,790  | 3,490  |
| 29    | 600    | 670    | 1,740  | 1,780   | 1,820  | 4,540   | 8,210   | 1,740   | 1,080  | 1,090  | 1,550  | 4,110  |
| 30    | 591    | 968    | 1,920  | 1,580   | -----  | 4,450   | 7,440   | 1,740   | 1,600  | 968    | 1,260  | 5,720  |
| 31    | 582    | -----  | 7,200  | 1,440   | -----  | 3,720   | -----   | 3,140   | -----  | 860    | 1,060  | -----  |
| TOTAL | 21,499 | 18,235 | 94,630 | 125,420 | 73,132 | 191,190 | 357,680 | 241,760 | 59,230 | 75,348 | 55,342 | 46,374 |
| MEAN  | 694    | 608    | 3,053  | 4,046   | 2,522  | 6,167   | 11,920  | 7,799   | 1,974  | 2,431  | 1,785  | 1,546  |
| MAX   | 884    | 968    | 7,200  | 11,300  | 6,320  | 12,600  | 21,500  | 24,800  | 4,900  | 6,040  | 5,860  | 5,720  |
| MIN   | 555    | 528    | 750    | 1,440   | 992    | 1,970   | 1,920   | 1,740   | 1,040  | 860    | 630    | 640    |

CAL YR 1971 TOTAL 996,510 MEAN 2,730 MAX 25,600 MIN 460  
WTR YR 1972 TOTAL 1,359,840 MEAN 3,715 MAX 24,800 MIN 528

03232000 Paint Creek near Greenfield, Ohio

LOCATION.--Lat 39°22'45", long 83°22'32", Fayette County, on right bank at upstream side of bridge on State Highway 753, 0.6 mile upstream from Stone Run, 2.0 miles north of Greenfield, and 3.0 miles downstream from Indian Creek.

DRAINAGE AREA.--249 sq mi.

PERIOD OF RECORD.--August 1926 to November 1935, October 1939 to September 1956; occasional low-flow measurements, water years 1962-66; annual maximums, water years 1963-66; October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 844.27 ft above mean sea level. Prior to Feb. 14, 1940 non-recording gage, Feb. 14, 1940 to June 3, 1955 water-stage recorder, June 4, 1955 to Sept. 30, 1956 non-recording gage, at same site at datum 1.00 ft higher.

AVERAGE DISCHARGE.--32 years (1926-35, 1939-56, 1966-72), 219 cfs (11.94 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,180 cfs Apr. 14 (gage height, 8.14 ft); minimum, 3.5 cfs Sept. 1. Period of record: Maximum discharge, 21,700 cfs May 24, 1969 (gage height, 14.28 ft); no flow Sept. 10, 18, 27, 29, 30, Oct. 1, 4, 1953.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: 1926(M). WSP 758: 1926-33. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV   | DEC      | JAN       | FEB     | MAR      | APR      | MAY    | JUN   | JUL   | AUG   | SEP     |
|-------------|----------------|-------|----------|-----------|---------|----------|----------|--------|-------|-------|-------|---------|
| 1           | 24             | 31    | 87       | 520       | 100     | 246      | 178      | 198    | 239   | 75    | 19    | 3.7     |
| 2           | 20             | 32    | 94       | 416       | 107     | 735      | 165      | 198    | 170   | 61    | 19    | 5.1     |
| 3           | 19             | 31    | 82       | 367       | 125     | 930      | 150      | 200    | 135   | 63    | 18    | 16      |
| 4           | 17             | 27    | 68       | 400       | 104     | 679      | 188      | 153    | 109   | 57    | 20    | 29      |
| 5           | 15             | 26    | 61       | 477       | 129     | 498      | 169      | 133    | 92    | 51    | 21    | 11      |
| 6           | 13             | 25    | 445      | 410       | 130     | 352      | 156      | 117    | 89    | 46    | 15    | 7.9     |
| 7           | 13             | 26    | 831      | 329       | 110     | 301      | 727      | 107    | 84    | 38    | 16    | 7.1     |
| 8           | 12             | 26    | 890      | 285       | 100     | 279      | 1,030    | 263    | 73    | 35    | 13    | 6.4     |
| 9           | 12             | 24    | 723      | 315       | 92      | 253      | 835      | 1,150  | 69    | 34    | 12    | 5.4     |
| 10          | 14             | 25    | 532      | 470       | 84      | 226      | 719      | 1,850  | 71    | 32    | 12    | 5.4     |
| 11          | 16             | 20    | 422      | 484       | 76      | 197      | 587      | 1,470  | 60    | 32    | 13    | 5.4     |
| 12          | 15             | 20    | 346      | 416       | 74      | 188      | 540      | 756    | 55    | 35    | 16    | 9.6     |
| 13          | 13             | 20    | 290      | 364       | 181     | 178      | 2,030    | 628    | 66    | 482   | 15    | 51      |
| 14          | 26             | 21    | 271      | 301       | 346     | 181      | 2,690    | 1,010  | 200   | 447   | 12    | 17      |
| 15          | 30             | 21    | 422      | 201       | 603     | 172      | 1,280    | 1,040  | 405   | 210   | 11    | 29      |
| 16          | 45             | 22    | 643      | 180       | 683     | 211      | 1,740    | 716    | 1,090 | 145   | 9.2   | 33      |
| 17          | 86             | 20    | 509      | 170       | 563     | 449      | 1,900    | 499    | 475   | 119   | 8.3   | 23      |
| 18          | 44             | 19    | 367      | 160       | 477     | 567      | 1,280    | 415    | 293   | 90    | 7.5   | 17      |
| 19          | 49             | 22    | 288      | 150       | 413     | 426      | 780      | 326    | 205   | 73    | 6.4   | 14      |
| 20          | 39             | 23    | 285      | 150       | 248     | 323      | 660      | 263    | 168   | 78    | 6.4   | 12      |
| 21          | 33             | 21    | 279      | 148       | 288     | 288      | 700      | 223    | 145   | 59    | 7.9   | 10      |
| 22          | 31             | 22    | 248      | 144       | 233     | 595      | 1,160    | 193    | 123   | 52    | 5.7   | 7.9     |
| 23          | 31             | 21    | 218      | 161       | 183     | 759      | 1,080    | 165    | 109   | 46    | 5.1   | 7.1     |
| 24          | 40             | 19    | 206      | 190       | 194     | 575      | 748      | 145    | 103   | 41    | 6.8   | 9.6     |
| 25          | 53             | 19    | 188      | 206       | 176     | 432      | 540      | 131    | 87    | 39    | 12    | 19      |
| 26          | 50             | 19    | 176      | 165       | 206     | 352      | 412      | 115    | 76    | 33    | 12    | 24      |
| 27          | 53             | 23    | 169      | 131       | 188     | 307      | 332      | 99     | 69    | 30    | 9.6   | 71      |
| 28          | 48             | 24    | 158      | 120       | 190     | 271      | 275      | 90     | 61    | 29    | 10    | 175     |
| 29          | 45             | 54    | 139      | 110       | 206     | 246      | 233      | 89     | 183   | 25    | 5.7   | 188     |
| 30          | 41             | 87    | 298      | 100       | -----   | 223      | 208      | 165    | 99    | 24    | 4.7   | 365     |
| 31          | 36             | ----- | 459      | 100       | -----   | 192      | -----    | 347    | ----- | 22    | 4.0   | -----   |
| TOTAL       | 983            | 790   | 10,194   | 8,140     | 6,609   | 11,631   | 23,492   | 13,254 | 5,203 | 2,603 | 353.3 | 1,184.6 |
| MEAN        | 31.7           | 26.3  | 329      | 263       | 228     | 375      | 783      | 428    | 173   | 84.0  | 11.4  | 39.5    |
| MAX         | 86             | 87    | 890      | 520       | 683     | 930      | 2,690    | 1,850  | 1,090 | 482   | 21    | 365     |
| MIN         | 12             | 19    | 61       | 100       | 74      | 172      | 150      | 89     | 55    | 22    | 4.0   | 3.7     |
| CFSM        | .13            | .11   | 1.32     | 1.06      | .92     | 1.51     | 3.14     | 1.72   | .69   | .34   | .05   | .16     |
| IN.         | .15            | .12   | 1.52     | 1.22      | .99     | 1.74     | 3.51     | 1.98   | .78   | .39   | .05   | .18     |
| CAL YR 1971 | TOTAL 75,629.8 |       | MEAN 207 | MAX 4,850 | MIN 7.6 | CFSM .83 | IN 11.30 |        |       |       |       |         |
| WTR YR 1972 | TOTAL 84,436.9 |       | MEAN 231 | MAX 2,690 | MIN 3.7 | CFSM .93 | IN 12.61 |        |       |       |       |         |

## PEAK DISCHARGE (BASE, 2,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-14 | 1000 | 8.14  | 3,180     | 5-10 | 1900 | 6.73  | 2,060     |
| 4-16 | 0930 | 7.08  | 2,310     |      |      |       |           |

03232300 Rattlesnake Creek near Centerfield, Ohio

LOCATION.--Lat 39°19'44", long 83°28'32", Highland County, on right bank 600 ft upstream from county road bridge at Centerfield, 0.6 mile upstream from Walnut Creek, 1.5 miles downstream from Lees Creek, and 2.4 miles southeast of East Monroe.

DRAINAGE AREA.--209 sq mi.

PERIOD OF RECORD.--October 1971 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 822.32 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,680 cfs June 15 (gage height, 11.85 ft); minimum, 1.8 cfs Aug. 22, 23, 24.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT             | NOV       | DEC       | JAN     | FEB       | MAR      | APR    | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------------|-----------------|-----------|-----------|---------|-----------|----------|--------|-------|-------|-------|-------|---------|
| 1           | 30              | 33        | 112       | 368     | 78        | 310      | 131    | 125   | 209   | 55    | 4.2   | 4.3     |
| 2           | 27              | 34        | 81        | 324     | 76        | 995      | 122    | 122   | 125   | 47    | 4.0   | 3.9     |
| 3           | 25              | 34        | 63        | 328     | 99        | 918      | 107    | 139   | 94    | 41    | 4.6   | 3.0     |
| 4           | 24              | 30        | 56        | 313     | 81        | 585      | 240    | 104   | 78    | 36    | 5.2   | 20      |
| 5           | 22              | 27        | 52        | 517     | 102       | 420      | 189    | 88    | 67    | 33    | 3.6   | 11      |
| 6           | 22              | 24        | 562       | 376     | 90        | 285      | 159    | 74    | 63    | 30    | 3.2   | 8.1     |
| 7           | 20              | 26        | 1,110     | 275     | 80        | 236      | 740    | 71    | 60    | 27    | 3.0   | 6.3     |
| 8           | 20              | 26        | 1,030     | 205     | 70        | 247      | 1,200  | 199   | 53    | 83    | 3.0   | 5.2     |
| 9           | 20              | 24        | 750       | 303     | 62        | 222      | 896    | 973   | 46    | 51    | 3.2   | 5.7     |
| 10          | 20              | 26        | 512       | 625     | 56        | 183      | 710    | 1,170 | 44    | 39    | 3.4   | 4.5     |
| 11          | 20              | 22        | 412       | 508     | 50        | 156      | 535    | 819   | 40    | 40    | 3.6   | 3.7     |
| 12          | 19              | 20        | 320       | 364     | 56        | 153      | 432    | 412   | 37    | 30    | 3.8   | 67      |
| 13          | 18              | 19        | 257       | 299     | 122       | 142      | 2,380  | 454   | 139   | 25    | 4.0   | 134     |
| 14          | 26              | 19        | 250       | 233     | 275       | 147      | 2,730  | 869   | 306   | 26    | 4.0   | 26      |
| 15          | 35              | 19        | 454       | 156     | 755       | 147      | 1,300  | 880   | 1,720 | 32    | 3.8   | 16      |
| 16          | 60              | 19        | 562       | 140     | 765       | 183      | 1,800  | 590   | 2,090 | 38    | 3.6   | 12      |
| 17          | 162             | 18        | 380       | 130     | 544       | 503      | 1,420  | 376   | 615   | 25    | 3.2   | 10      |
| 18          | 156             | 18        | 268       | 120     | 481       | 539      | 940    | 282   | 313   | 20    | 3.1   | 10      |
| 19          | 99              | 21        | 202       | 120     | 400       | 344      | 535    | 215   | 205   | 18    | 2.8   | 9.3     |
| 20          | 69              | 21        | 209       | 115     | 233       | 247      | 445    | 174   | 150   | 16    | 2.8   | 7.6     |
| 21          | 53              | 21        | 233       | 109     | 200       | 222      | 512    | 147   | 131   | 13    | 2.5   | 6.7     |
| 22          | 46              | 21        | 199       | 107     | 160       | 819      | 1,070  | 125   | 102   | 12    | 2.1   | 5.4     |
| 23          | 40              | 20        | 168       | 133     | 147       | 775      | 880    | 107   | 78    | 16    | 1.8   | 4.5     |
| 24          | 44              | 20        | 162       | 202     | 183       | 481      | 530    | 92    | 68    | 18    | 2.1   | 6.3     |
| 25          | 67              | 19        | 145       | 222     | 165       | 364      | 356    | 81    | 60    | 12    | 4.5   | 22      |
| 26          | 88              | 18        | 136       | 153     | 236       | 289      | 261    | 71    | 53    | 10    | 5.9   | 52      |
| 27          | 71              | 18        | 131       | 122     | 215       | 243      | 205    | 62    | 303   | 8.2   | 20    | 147     |
| 28          | 58              | 20        | 125       | 100     | 215       | 212      | 168    | 56    | 126   | 6.8   | 11    | 92      |
| 29          | 47              | 39        | 109       | 90      | 257       | 183      | 147    | 55    | 78    | 6.0   | 7.0   | 82      |
| 30          | 39              | 107       | 380       | 84      | -----     | 168      | 131    | 162   | 58    | 5.0   | 4.8   | 403     |
| 31          | 35              | -----     | 508       | 80      | -----     | 139      | -----  | 320   | ----- | 4.4   | 3.5   | -----   |
| TOTAL       | 1,482           | 783       | 9,938     | 7,221   | 6,253     | 10,857   | 21,271 | 9,414 | 7,511 | 823.4 | 137.3 | 1,188.5 |
| MEAN        | 47.8            | 26.1      | 321       | 233     | 216       | 350      | 709    | 304   | 250   | 26.6  | 4.43  | 39.6    |
| MAX         | 162             | 107       | 1,110     | 625     | 765       | 995      | 2,730  | 1,170 | 2,090 | 83    | 20    | 403     |
| MIN         | 18              | 18        | 52        | 80      | 50        | 139      | 107    | 55    | 37    | 4.4   | 1.8   | 3.0     |
| CFSM        | .23             | .12       | 1.54      | 1.11    | 1.03      | 1.67     | 3.39   | 1.45  | 1.20  | .13   | .02   | .19     |
| IN.         | .26             | .14       | 1.77      | 1.29    | 1.11      | 1.93     | 3.79   | 1.68  | 1.34  | .15   | .02   | .21     |
| CAL YR 1971 | TOTAL 12,203.00 | MEAN 33.4 | MAX 1,110 | MIN 0   | CFSM .16  | IN 2.17  |        |       |       |       |       |         |
| WTR YR 1972 | TOTAL 76,879.20 | MEAN 210  | MAX 2,730 | MIN 1.8 | CFSM 1.00 | IN 13.68 |        |       |       |       |       |         |

## PEAK DISCHARGE (BASE, 1,300 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE       | TIME    | G. H.   | DISCHARGE   |
|------|------|-------|-----------|------------|---------|---------|-------------|
| 3- 2 | 1845 | 5.63  | 1,340     | 4-16 or 17 | Unknown | Unknown | About 2,600 |
| 4- 7 | 2215 | 5.74  | 1,400     | 6-15       | 2215    | 11.85   | 5,680       |
| 4-13 | 1215 | 9.08  | 3,610     |            |         |         |             |

## SCIOTO RIVER BASIN

03232470 Paint Creek below Paint Creek Dam, near Bainbridge, Ohio

LOCATION.--Lat 39°15'08", long 83°20'58", Highland County, on right bank, 400 ft downstream from Paint Creek Dam site, 700 ft upstream from Cliff Creek, and 4.5 miles northwest of Bainbridge.

DRAINAGE AREA.--570 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1962-67, annual maximum, water years 1963-67 (published as "at damsite near Bainbridge"). October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.0 ft above mean sea level. (Levels by Corps of Engineers). Prior to May 3, 1968, water-stage recorder and crest-stage gage at partial-record site 1,000 ft downstream, at datum 42.96 ft higher.

AVERAGE DISCHARGE.--5 years, 499 cfs (11.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,950 cfs June 16 (gage height, 53.35 ft); minimum daily, 7.9 cfs Sept. 1.

Period of record: Maximum discharge, about 45,000 cfs Mar. 10, 1964 (gage height, 27.3 ft, site and datum then in use); minimum observed, 1.1 cfs Sept. 17, 1964.

REMARKS.--Records fair. Peak flow affected by temporary storage behind Paint Creek Dam (under construction), subsequent to January 1971. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL   | AUG     | SEP     |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------|---------|---------|
| 1     | 93    | 113   | 455    | 1,060  | 210    | 640    | 450    | 500    | 634    | 239   | 40      | 7.9     |
| 2     | 73    | 111   | 405    | 958    | 220    | 1,560  | 415    | 485    | 440    | 186   | 38      | 164     |
| 3     | 62    | 121   | 352    | 875    | 240    | 2,670  | 375    | 500    | 330    | 189   | 38      | 23      |
| 4     | 54    | 109   | 309    | 847    | 240    | 1,670  | 763    | 415    | 273    | 171   | 109     | 92      |
| 5     | 47    | 93    | 285    | 1,380  | 230    | 1,200  | 586    | 356    | 242    | 156   | 95      | 79      |
| 6     | 41    | 88    | 1,490  | 1,010  | 220    | 840    | 485    | 313    | 223    | 137   | 59      | 34      |
| 7     | 36    | 95    | 2,660  | 798    | 210    | 694    | 1,670  | 289    | 230    | 117   | 45      | 22      |
| 8     | 34    | 85    | 2,390  | 646    | 200    | 670    | 2,830  | 574    | 203    | 105   | 43      | 15      |
| 9     | 36    | 81    | 1,810  | 728    | 180    | 604    | 2,310  | 2,040  | 186    | 99    | 30      | 32      |
| 10    | 45    | 85    | 1,280  | 1,240  | 160    | 532    | 1,820  | 3,020  | 181    | 95    | 26      | 65      |
| 11    | 47    | 77    | 1,040  | 1,160  | 160    | 470    | 1,450  | 3,010  | 163    | 90    | 27      | 63      |
| 12    | 44    | 71    | 847    | 950    | 190    | 450    | 1,200  | 1,700  | 153    | 88    | 34      | 44      |
| 13    | 38    | 69    | 714    | 760    | 420    | 430    | 4,130  | 1,140  | 390    | 309   | 42      | 353     |
| 14    | 38    | 66    | 700    | 600    | 900    | 445    | 5,800  | 2,270  | 634    | 420   | 36      | 78      |
| 15    | 84    | 66    | 974    | 480    | 1,630  | 420    | 4,610  | 2,800  | 968    | 189   | 32      | 40      |
| 16    | 135   | 62    | 1,350  | 420    | 1,640  | 694    | 3,960  | 2,270  | 4,980  | 141   | 28      | 42      |
| 17    | 305   | 60    | 1,090  | 410    | 1,300  | 1,310  | 4,590  | 1,280  | 3,130  | 141   | 27      | 37      |
| 18    | 309   | 55    | 812    | 420    | 1,000  | 1,480  | 3,700  | 982    | 903    | 119   | 23      | 30      |
| 19    | 217   | 56    | 640    | 410    | 760    | 1,090  | 1,950  | 770    | 592    | 97    | 23      | 25      |
| 20    | 173   | 68    | 652    | 400    | 580    | 826    | 1,510  | 634    | 450    | 93    | 17      | 21      |
| 21    | 139   | 69    | 664    | 366    | 520    | 714    | 1,610  | 544    | 390    | 86    | 16      | 18      |
| 22    | 126   | 68    | 598    | 352    | 480    | 1,770  | 3,010  | 465    | 321    | 79    | 16      | 17      |
| 23    | 117   | 62    | 520    | 430    | 450    | 1,960  | 2,600  | 410    | 281    | 77    | 15      | 12      |
| 24    | 137   | 56    | 495    | 714    | 598    | 1,420  | 1,740  | 356    | 266    | 93    | 21      | 17      |
| 25    | 186   | 55    | 455    | 640    | 510    | 1,070  | 1,230  | 317    | 233    | 92    | 23      | 53      |
| 26    | 214   | 55    | 430    | 490    | 714    | 875    | 950    | 281    | 209    | 81    | 22      | 71      |
| 27    | 200   | 60    | 410    | 370    | 592    | 749    | 770    | 248    | 186    | 71    | 45      | 271     |
| 28    | 176   | 71    | 400    | 300    | 568    | 664    | 640    | 230    | 168    | 62    | 47      | 443     |
| 29    | 156   | 195   | 356    | 260    | 610    | 598    | 574    | 214    | 511    | 53    | 26      | 353     |
| 30    | 139   | 480   | 1,140  | 240    | -----  | 562    | 520    | 343    | 370    | 47    | 13      | 905     |
| 31    | 126   | ----- | 1,160  | 220    | -----  | 480    | -----  | 868    | -----  | 33    | 8.2     | -----   |
| TOTAL | 3,627 | 2,802 | 26,883 | 19,934 | 15,732 | 29,957 | 58,248 | 29,624 | 18,240 | 3,955 | 1,064.2 | 3,426.9 |
| MEAN  | 117   | 93.4  | 867    | 643    | 542    | 966    | 1,942  | 956    | 608    | 128   | 34.3    | 114     |
| MAX   | 309   | 480   | 2,660  | 1,380  | 1,640  | 2,670  | 5,800  | 3,020  | 4,980  | 420   | 109     | 905     |
| MIN   | 34    | 55    | 285    | 220    | 160    | 420    | 375    | 214    | 153    | 33    | 8.2     | 7.9     |
| CFSM  | .21   | .16   | 1.52   | 1.13   | .95    | 1.69   | 3.41   | 1.68   | 1.07   | .22   | .06     | .20     |
| IN.   | .24   | .18   | 1.75   | 1.30   | 1.03   | 1.96   | 3.80   | 1.93   | 1.19   | .26   | .07     | .22     |

CAL YR 1971 TOTAL 182,784.0 MEAN 501 MAX 7,770 MIN 34 CFSM .88 IN 11.93  
WTR YR 1972 TOTAL 213,493.1 MEAN 583 MAX 5,800 MIN 7.9 CFSM 1.02 IN 13.93



SCIOTO RIVER BASIN

115

03232500 Rocky Fork near Barretts Mills, Ohio

LOCATION.--Lat 39°13'06", long 83°23'08", Highland County, on left bank at downstream side of highway bridge, 1.1 miles north of Barretts Mills, 2 miles east of Rainsboro, 2.8 miles upstream from mouth, and 6 miles downstream from Rocky Fork Lake.

DRAINAGE AREA.--140 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 770.8 ft above mean sea level, (levels by Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 147 cfs.

EXTREMES.--Current year: Maximum discharge, 1,690 cfs June 16 (gage height, 7.10 ft); minimum, 4.0 cfs Nov. 26. Period of record: Maximum discharge, 13,400 cfs Mar. 10, 1964 from rating curve extended above 8,800 cfs on basis of velocity-area studies; maximum gage height, 15.56 ft Mar. 6, 1945; minimum discharge, 0.40 cfs Oct. 7, 11, 1964; minimum daily, 0.90 cfs Sept. 10, 1966.

REMARKS.--Records fair except those for period of no gage-height record, June 22 to Aug. 16, which are poor. Some diurnal fluctuation caused by mill 6 miles upstream from station. Flow regulated by Rocky Fork Lake 6 miles upstream, since 1952 (capacity, 34,100 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV     | DEC   | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG  | SEP   |
|-------|-------|---------|-------|-------|-------|-------|--------|-------|-------|-------|------|-------|
| 1     | 98    | 36      | 223   | 54    | 91    | 238   | 149    | 186   | 260   | 120   | 23   | 14    |
| 2     | 82    | 39      | 240   | 63    | 91    | 604   | 143    | 188   | 198   | 100   | 22   | 13    |
| 3     | 71    | 39      | 263   | 59    | 104   | 830   | 131    | 186   | 153   | 110   | 26   | 14    |
| 4     | 64    | 33      | 260   | 87    | 97    | 646   | 291    | 172   | 128   | 100   | 56   | 17    |
| 5     | 53    | 26      | 260   | 215   | 107   | 563   | 299    | 148   | 107   | 90    | 48   | 14    |
| 6     | 45    | 25      | 601   | 283   | 95    | 432   | 261    | 136   | 99    | 80    | 36   | 11    |
| 7     | 35    | 33      | 853   | 273   | 92    | 374   | 529    | 123   | 94    | 70    | 33   | 8.8   |
| 8     | 26    | 28      | 693   | 268   | 90    | 352   | 876    | 179   | 82    | 64    | 30   | 7.8   |
| 9     | 25    | 26      | 517   | 300   | 88    | 328   | 626    | 332   | 77    | 58    | 26   | 7.8   |
| 10    | 28    | 29      | 426   | 298   | 86    | 323   | 441    | 298   | 70    | 54    | 21   | 7.3   |
| 11    | 29    | 26      | 378   | 280   | 86    | 321   | 412    | 246   | 55    | 50    | 19   | 6.8   |
| 12    | 24    | 26      | 360   | 270   | 90    | 318   | 345    | 201   | 51    | 100   | 20   | 12    |
| 13    | 22    | 27      | 354   | 270   | 142   | 318   | 847    | 184   | 173   | 400   | 20   | 13    |
| 14    | 28    | 28      | 366   | 265   | 162   | 211   | 752    | 401   | 365   | 360   | 18   | 17    |
| 15    | 28    | 28      | 375   | 258   | 162   | 116   | 558    | 699   | 351   | 160   | 16   | 14    |
| 16    | 93    | 27      | 363   | 255   | 119   | 160   | 1,060  | 659   | 1,420 | 120   | 15   | 10    |
| 17    | 76    | 28      | 354   | 255   | 142   | 176   | 978    | 478   | 792   | 90    | 15   | 8.3   |
| 18    | 63    | 29      | 345   | 258   | 198   | 149   | 632    | 354   | 465   | 76    | 15   | 7.8   |
| 19    | 55    | 63      | 345   | 153   | 208   | 182   | 464    | 269   | 300   | 66    | 14   | 7.3   |
| 20    | 49    | 113     | 363   | 57    | 170   | 183   | 519    | 219   | 218   | 60    | 15   | 7.3   |
| 21    | 44    | 106     | 351   | 57    | 160   | 177   | 623    | 182   | 174   | 54    | 14   | 5.8   |
| 22    | 43    | 67      | 283   | 58    | 150   | 420   | 1,210  | 156   | 143   | 48    | 12   | 4.8   |
| 23    | 44    | 10      | 32    | 67    | 140   | 441   | 732    | 133   | 130   | 46    | 11   | 4.4   |
| 24    | 60    | 6.3     | 20    | 67    | 220   | 352   | 485    | 120   | 120   | 44    | 13   | 8.8   |
| 25    | 67    | 4.8     | 18    | 80    | 230   | 289   | 365    | 109   | 110   | 40    | 32   | 51    |
| 26    | 59    | 24      | 17    | 100   | 354   | 249   | 285    | 96    | 100   | 36    | 33   | 82    |
| 27    | 55    | 171     | 16    | 97    | 295   | 218   | 229    | 87    | 90    | 33    | 51   | 113   |
| 28    | 49    | 167     | 22    | 97    | 268   | 195   | 195    | 82    | 100   | 30    | 40   | 135   |
| 29    | 44    | 190     | 48    | 95    | 245   | 185   | 173    | 78    | 200   | 28    | 31   | 135   |
| 30    | 40    | 203     | 66    | 90    | ----- | 175   | 176    | 159   | 150   | 26    | 25   | 205   |
| 31    | 39    | -----   | 59    | 90    | ----- | 154   | -----  | 346   | ----- | 24    | 17   | ----- |
| TOTAL | 1,538 | 1,658.1 | 8,871 | 5,119 | 4,482 | 9,679 | 14,786 | 7,206 | 6,775 | 2,737 | 767  | 963.0 |
| MEAN  | 49.6  | 55.3    | 286   | 165   | 155   | 312   | 493    | 232   | 226   | 88.3  | 24.7 | 32.1  |
| MAX   | 98    | 203     | 853   | 300   | 354   | 830   | 1,210  | 699   | 1,420 | 400   | 56   | 205   |
| MIN   | 22    | 4.8     | 16    | 54    | 86    | 116   | 131    | 78    | 51    | 24    | 11   | 4.4   |

CAL YR 1971 TOTAL 60,557.1 MEAN 166 MAX 1,930 MIN 4.8  
WTR YR 1972 TOTAL 64,581.1 MEAN 176 MAX 1,420 MIN 4.4

Note.--No gage height record June 22 to Aug. 16.

03234000 Paint Creek near Bourneville, Ohio

LOCATION.--Lat 39°15'49", long 83°10'01", Ross County, on upstream side of left abutment of highway bridge, 0.2 mile downstream from Sulphur Lick, 1.2 miles southwest of Bourneville, and 1.2 miles upstream from Upper Twin Creek.

DRAINAGE AREA.--807 sq mi.

PERIOD OF RECORD.--October 1921 to January 1937, January 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Bainbridge" October 1921 to September 1923 and as "near Bainbridge" January 1938 to May 1939.

GAGE.--Water-stage recorder. Datum of gage is 665.56 ft above mean sea level. See WSP 1725 for history of changes prior to May 3, 1939.

AVERAGE DISCHARGE.--49 years (1921-36, 1938-72), 777 cfs (13.08 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,890 cfs Apr. 13 (gage height, 10.74 ft); minimum, 39 cfs Sept. 12. Period of record: Maximum discharge, 56,900 cfs Mar. 10, 1964 (gage height, 20.50 ft), from rating curve extended above 26,000 cfs on basis of contracted-opening measurement at gage height 20.08 ft; minimum, 4.8 cfs Sept. 16, 17, 1964.

REMARKS.--Records good. Flow slightly regulated by Rocky Fork Lake 23 miles upstream since 1952 (capacity, 34,100 acre-ft), and by temporary storage behind Paint Creek Dam (under construction), subsequent to January 1971. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the period June 27-30, 1971 superseding figures published in WRD Ohio 1971 are given below:

|              |       |              |       |
|--------------|-------|--------------|-------|
| June 27..... | 4,500 | June 29..... | 2,600 |
| 28.....      | 4,600 | 30.....      | 1,500 |

| Month            | Cfs-days | Mean | Maximum | Minimum | Per square mile | Runoff in inches |
|------------------|----------|------|---------|---------|-----------------|------------------|
| June 1971.....   | 20,877   | 696  | 4,600   | 151     | .86             | .96              |
| WTR YR 1971..... | 243,168  | 666  | 9,870   | 48      | .83             | 11.21            |

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL   | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 1     | 184   | 149   | 424    | 1,310  | 420    | 1,090  | 720    | 805    | 1,030  | 459   | 91    | 48    |
| 2     | 168   | 142   | 403    | 1,200  | 440    | 2,330  | 696    | 800    | 765    | 383   | 87    | 70    |
| 3     | 152   | 149   | 413    | 1,160  | 520    | 4,280  | 648    | 820    | 616    | 400   | 86    | 75    |
| 4     | 140   | 142   | 393    | 1,070  | 624    | 2,920  | 1,080  | 730    | 524    | 405   | 110   | 58    |
| 5     | 129   | 130   | 390    | 1,900  | 504    | 2,240  | 1,130  | 644    | 462    | 366   | 218   | 79    |
| 6     | 118   | 121   | 1,860  | 1,620  | 560    | 1,630  | 930    | 584    | 420    | 329   | 169   | 68    |
| 7     | 110   | 123   | 4,420  | 1,330  | 500    | 1,340  | 1,760  | 540    | 413    | 288   | 139   | 55    |
| 8     | 102   | 125   | 4,140  | 1,140  | 460    | 1,280  | 4,090  | 672    | 371    | 255   | 128   | 49    |
| 9     | 96    | 116   | 3,070  | 1,150  | 420    | 1,170  | 3,430  | 2,330  | 345    | 232   | 117   | 46    |
| 10    | 97    | 113   | 2,210  | 1,820  | 380    | 1,070  | 2,510  | 3,410  | 330    | 219   | 97    | 45    |
| 11    | 101   | 115   | 1,780  | 1,750  | 360    | 985    | 2,160  | 3,480  | 303    | 205   | 82    | 40    |
| 12    | 99    | 110   | 1,480  | 1,420  | 451    | 945    | 1,730  | 2,320  | 279    | 189   | 76    | 43    |
| 13    | 94    | 108   | 1,290  | 1,100  | 775    | 915    | 5,570  | 1,410  | 402    | 296   | 77    | 205   |
| 14    | 95    | 107   | 1,220  | 900    | 1,340  | 880    | 6,770  | 2,430  | 1,200  | 694   | 74    | 182   |
| 15    | 96    | 107   | 1,560  | 740    | 2,180  | 692    | 5,660  | 3,730  | 1,080  | 472   | 69    | 102   |
| 16    | 145   | 105   | 2,100  | 620    | 2,240  | 1,020  | 5,420  | 3,520  | 6,510  | 365   | 66    | 82    |
| 17    | 270   | 103   | 1,840  | 660    | 1,700  | 1,720  | 6,000  | 2,110  | 4,740  | 334   | 61    | 79    |
| 18    | 303   | 101   | 1,440  | 720    | 1,400  | 1,820  | 4,880  | 1,560  | 1,770  | 320   | 58    | 72    |
| 19    | 252   | 101   | 1,200  | 680    | 1,100  | 1,480  | 2,990  | 1,240  | 1,080  | 273   | 58    | 65    |
| 20    | 216   | 144   | 1,200  | 628    | 980    | 1,170  | 2,270  | 1,020  | 820    | 243   | 60    | 58    |
| 21    | 185   | 168   | 1,220  | 584    | 900    | 1,010  | 2,240  | 885    | 684    | 228   | 55    | 53    |
| 22    | 168   | 165   | 1,130  | 560    | 840    | 1,910  | 4,890  | 770    | 592    | 201   | 51    | 49    |
| 23    | 160   | 117   | 734    | 628    | 835    | 2,510  | 3,850  | 680    | 508    | 179   | 48    | 46    |
| 24    | 162   | 93    | 629    | 960    | 1,110  | 2,020  | 2,640  | 608    | 472    | 181   | 48    | 49    |
| 25    | 193   | 87    | 590    | 910    | 1,010  | 1,540  | 1,870  | 548    | 425    | 167   | 62    | 71    |
| 26    | 216   | 84    | 551    | 800    | 1,340  | 1,290  | 1,450  | 493    | 386    | 149   | 69    | 119   |
| 27    | 215   | 155   | 532    | 620    | 1,220  | 1,120  | 1,190  | 448    | 352    | 136   | 71    | 227   |
| 28    | 199   | 209   | 516    | 560    | 1,090  | 1,000  | 1,010  | 409    | 324    | 125   | 89    | 432   |
| 29    | 183   | 239   | 509    | 520    | 1,070  | 915    | 905    | 388    | 457    | 114   | 78    | 358   |
| 30    | 169   | 404   | 1,060  | 480    | -----  | 885    | 835    | 508    | 692    | 104   | 66    | 811   |
| 31    | 157   | ----- | 1,710  | 450    | -----  | 780    | -----  | 1,250  | -----  | 97    | 55    | ----- |
| TOTAL | 4,974 | 4,132 | 42,014 | 29,990 | 26,769 | 45,957 | 81,324 | 41,142 | 28,352 | 8,408 | 2,615 | 3,736 |
| MEAN  | 160   | 138   | 1,355  | 967    | 923    | 1,482  | 2,711  | 1,327  | 945    | 271   | 84.4  | 125   |
| MAX   | 303   | 404   | 4,420  | 1,900  | 2,240  | 4,280  | 6,770  | 3,730  | 6,510  | 694   | 218   | 811   |
| MIN   | 94    | 84    | 390    | 450    | 360    | 692    | 648    | 388    | 279    | 97    | 48    | 40    |
| CFSM  | .20   | .17   | 1.68   | 1.20   | 1.14   | 1.84   | 3.36   | 1.64   | 1.17   | .34   | .10   | .15   |
| IN.   | .23   | .19   | 1.94   | 1.38   | 1.23   | 2.12   | 3.75   | 1.90   | 1.31   | .39   | .12   | .17   |

CAL YR 1971 TOTAL 264,498 MEAN 725 MAX 9,870 MIN 73 CFSM .90 IN 12.19  
WTR YR 1972 TOTAL 319,413 MEAN 873 MAX 6,770 MIN 40 CFSM 1.08 IN 14.72

PEAK DISCHARGE (BASE, 9,000 CFS).--Apr. 13 (1530) 9,890 cfs (10.74 ft).

## 03234500 Scioto River at Higby, Ohio

LOCATION.--Lat 39°12'44", long 82°51'50", in sec. 6, T.7 N., R.20 W., Ross County, on left bank at downstream side of highway bridge, 0.8 mile downstream from Walnut Creek, 1.2 miles north of Higby, 3 miles west north-west of Richmondale, and 5.0 miles upstream from Salt Creek.

DRAINAGE AREA.--5,131 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 567.28 ft above mean sea level. Prior to Nov. 7, 1930, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 4,350 cfs.

EXTREMES.--Current year: Maximum discharge, 42,800 cfs Apr. 10 (gage height, 18.29 ft); minimum, 617 cfs Sept. 11, 12.

Period of record: Maximum discharge, 177,000 cfs Jan. 23, 1937, (from rating curve extended above 112,000 cfs); maximum gage height, 26.4 ft Jan. 23, 1937 (from floodmarks), and Jan. 23, 1959; minimum discharge, 244 cfs Oct. 23, 1930.

A stage of 31.6 ft occurred Mar. 26, 1913, and has not been exceeded since.

REMARKS.--Records good. Flow slightly regulated by 5 reservoirs 50 to 105 miles upstream from station (see p. 119) and since 1952 by Rocky Fork Lake 51 miles upstream (capacity 34,100 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 893: 1937(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC     | JAN     | FEB     | MAR     | APR     | MAY     | JUN     | JUL    | AUG    | SEP    |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 1     | 1,480  | 846    | 2,330   | 13,100  | 2,440   | 3,700   | 4,580   | 8,980   | 4,890   | 2,610  | 992    | 1,090  |
| 2     | 1,380  | 827    | 2,080   | 12,600  | 2,420   | 6,600   | 4,100   | 6,910   | 3,700   | 2,130  | 907    | 981    |
| 3     | 1,330  | 808    | 1,830   | 10,400  | 2,460   | 16,500  | 3,540   | 5,120   | 3,450   | 2,330  | 845    | 1,060  |
| 4     | 1,280  | 865    | 1,700   | 8,620   | 2,870   | 17,200  | 3,610   | 4,730   | 3,250   | 2,810  | 951    | 1,110  |
| 5     | 1,240  | 808    | 1,550   | 9,720   | 2,590   | 14,500  | 4,150   | 4,150   | 2,960   | 6,070  | 1,170  | 1,020  |
| 6     | 1,220  | 770    | 3,050   | 9,360   | 2,440   | 11,400  | 3,450   | 3,560   | 2,710   | 6,850  | 1,130  | 955    |
| 7     | 1,170  | 770    | 10,300  | 7,860   | 2,200   | 8,500   | 6,930   | 3,430   | 2,490   | 5,960  | 917    | 795    |
| 8     | 1,130  | 808    | 12,500  | 6,030   | 2,000   | 7,000   | 16,800  | 3,320   | 2,290   | 3,970  | 1,070  | 748    |
| 9     | 1,110  | 808    | 9,890   | 5,250   | 1,900   | 6,220   | 20,400  | 11,200  | 2,130   | 2,870  | 1,170  | 736    |
| 10    | 1,110  | 808    | 6,740   | 6,470   | 1,800   | 5,500   | 21,900  | 21,700  | 1,950   | 2,440  | 1,140  | 702    |
| 11    | 1,220  | 827    | 5,610   | 7,780   | 1,800   | 4,960   | 14,000  | 26,200  | 3,030   | 2,690  | 1,050  | 668    |
| 12    | 1,090  | 827    | 4,960   | 9,300   | 1,800   | 4,550   | 11,000  | 26,600  | 2,900   | 2,380  | 878    | 689    |
| 13    | 865    | 808    | 4,200   | 8,560   | 3,660   | 4,150   | 21,900  | 17,900  | 2,030   | 2,530  | 785    | 1,480  |
| 14    | 808    | 789    | 3,700   | 7,020   | 7,170   | 4,010   | 26,200  | 17,500  | 3,020   | 2,870  | 762    | 2,060  |
| 15    | 808    | 770    | 4,740   | 5,460   | 9,090   | 4,650   | 26,300  | 20,600  | 3,410   | 2,890  | 726    | 1,350  |
| 16    | 922    | 753    | 9,020   | 3,900   | 10,200  | 7,780   | 28,400  | 21,600  | 9,960   | 2,530  | 696    | 1,700  |
| 17    | 1,020  | 753    | 9,910   | 3,140   | 9,760   | 11,300  | 27,400  | 18,000  | 12,100  | 2,630  | 679    | 3,710  |
| 18    | 1,170  | 846    | 9,510   | 3,520   | 8,540   | 14,500  | 23,700  | 14,800  | 6,810   | 4,990  | 687    | 2,850  |
| 19    | 1,150  | 865    | 6,890   | 3,610   | 7,690   | 13,500  | 20,900  | 12,900  | 4,380   | 5,970  | 4,340  | 1,830  |
| 20    | 1,090  | 770    | 5,450   | 3,320   | 6,280   | 9,680   | 15,500  | 12,100  | 3,560   | 5,030  | 6,300  | 1,370  |
| 21    | 1,020  | 922    | 5,030   | 3,110   | 4,800   | 6,920   | 17,100  | 9,430   | 3,070   | 4,150  | 4,550  | 1,210  |
| 22    | 960    | 1,090  | 4,490   | 2,980   | 4,280   | 7,500   | 26,000  | 6,280   | 2,690   | 2,970  | 2,940  | 1,130  |
| 23    | 941    | 1,040  | 3,880   | 3,110   | 3,860   | 12,000  | 26,200  | 4,890   | 2,440   | 2,300  | 2,120  | 1,100  |
| 24    | 1,000  | 922    | 3,380   | 4,040   | 4,550   | 15,500  | 25,300  | 4,280   | 2,310   | 2,060  | 5,240  | 1,070  |
| 25    | 1,040  | 846    | 3,160   | 4,330   | 4,100   | 12,900  | 22,200  | 3,560   | 2,150   | 1,900  | 5,330  | 1,290  |
| 26    | 1,130  | 736    | 2,940   | 4,510   | 4,460   | 9,200   | 18,500  | 3,450   | 2,000   | 1,780  | 4,460  | 1,840  |
| 27    | 1,130  | 685    | 2,850   | 3,920   | 4,150   | 6,870   | 15,800  | 3,120   | 1,830   | 1,530  | 2,780  | 3,500  |
| 28    | 1,040  | 865    | 2,810   | 3,360   | 3,740   | 6,030   | 12,600  | 2,870   | 1,650   | 1,410  | 2,150  | 3,970  |
| 29    | 981    | 1,090  | 2,770   | 2,940   | 3,610   | 6,030   | 10,700  | 2,710   | 1,750   | 1,340  | 1,990  | 4,820  |
| 30    | 941    | 1,600  | 3,030   | 2,730   | -----   | 6,110   | 9,740   | 2,750   | 2,730   | 1,210  | 1,560  | 6,300  |
| 31    | 884    | -----  | 8,520   | 2,400   | -----   | 5,250   | -----   | 4,260   | -----   | 1,090  | 1,310  | -----  |
| TOTAL | 33,660 | 25,922 | 158,820 | 182,450 | 126,660 | 270,510 | 488,900 | 308,900 | 103,640 | 94,290 | 61,625 | 53,134 |
| MEAN  | 1,086  | 864    | 5,123   | 5,885   | 4,368   | 8,726   | 16,300  | 9,965   | 3,455   | 3,042  | 1,988  | 1,771  |
| MAX   | 1,480  | 1,600  | 12,500  | 13,100  | 10,200  | 17,200  | 28,400  | 26,600  | 12,100  | 6,850  | 6,300  | 6,300  |
| MIN   | 808    | 685    | 1,550   | 2,400   | 1,800   | 3,700   | 3,450   | 2,710   | 1,650   | 1,090  | 679    | 668    |

CAL YR 1971 TOTAL 1,469,315 MEAN 4,026 MAX 39,300 MIN 664  
WTR YR 1972 TOTAL 1,908,511 MEAN 5,215 MAX 28,400 MIN 668

## PEAK DISCHARGE (BASE, 24,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-8  | 1400 | 18.01 | 40,600    | 4-21 | 1700 | 18.01 | 40,600    |
| 4-10 | 2100 | 18.29 | 42,800    | 5-9  | 2000 | 18.03 | 40,700    |
| 4-16 | 2400 | 16.22 | 31,400    | 5-14 | 1700 | 18.04 | 40,800    |
| 4-19 | 2100 | 18.16 | 41,800    |      |      |       |           |

## SCIOTO RIVER BASIN

03235500 Tar Hollow Creek at Tar Hollow State Park, Ohio

LOCATION.--Lat 39°23'22", long 82°45'03", in NE 1/4 sec.36, T.10 N., R.20 W., Ross County, in Tar Hollow State Park, on left bank 2.0 miles upstream from mouth and 5.2 miles south of Adelphi.

DRAINAGE AREA.--1.35 sq mi.

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

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 793.63 ft above mean sea level.

AVERAGE DISCHARGE.--26 years, 1.21 cfs (12.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 70 cfs Apr. 7 (gage height, 3.04 ft); no flow many days.

Period of record: Maximum discharge, 957 cfs May 24, 1968 (gage height, 5.66 ft in gage well, 5.84 ft from floodmark) from rating curve extended above 92 cfs on basis of slope-area measurements at gage height 5.21 ft and at peak flow; no flow many days each year.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR  | APR   | MAY   | JUN   | JUL  | AUG  | SEP   |
|-------|------|-------|-------|-------|-------|------|-------|-------|-------|------|------|-------|
| 1     | .12  | .03   | .18   | .58   | .40   | 1.7  | 1.0   | 1.2   | .32   | .24  | 0    | .01   |
| 2     | .12  | .06   | .12   | .83   | .48   | 5.5  | 1.0   | 1.2   | .24   | .12  | 0    | 0     |
| 3     | .12  | .12   | .03   | .83   | .69   | 6.7  | 1.0   | 1.0   | .18   | .12  | 0    | .79   |
| 4     | .06  | .12   | .01   | 1.2   | .83   | 3.6  | 2.3   | .83   | .12   | .06  | 0    | .48   |
| 5     | .06  | .12   | .01   | 2.8   | .58   | 2.3  | 2.5   | .83   | .12   | .06  | .01  | .24   |
| 6     | .03  | .06   | 2.9   | 1.9   | .58   | 1.7  | 2.5   | .69   | .06   | .06  | 0    | .12   |
| 7     | .01  | .03   | 6.5   | 1.2   | .69   | 2.7  | 22    | .66   | .06   | .06  | 0    | .12   |
| 8     | 0    | .03   | 2.5   | .83   | .48   | 5.9  | 10    | .69   | .06   | .03  | 0    | .12   |
| 9     | 0    | .01   | 1.2   | 1.0   | .48   | 3.2  | 7.3   | 6.3   | .06   | .01  | 0    | .18   |
| 10    | 0    | .01   | 1.0   | 1.7   | .40   | 2.3  | 5.6   | 4.8   | .06   | .01  | 0    | .12   |
| 11    | 0    | .01   | 1.2   | 1.5   | .40   | 1.7  | 4.2   | 2.8   | .06   | .01  | 0    | .12   |
| 12    | 0    | .01   | 1.0   | 1.2   | .40   | 1.5  | 3.7   | 2.1   | .06   | 0    | 0    | 1.5   |
| 13    | 0    | .01   | .83   | 1.0   | 8.7   | 1.4  | 18    | 1.7   | .06   | 0    | 0    | 1.1   |
| 14    | 0    | 0     | 1.2   | .83   | 8.7   | 1.2  | 8.5   | 2.0   | .12   | 0    | 0    | .40   |
| 15    | 0    | 0     | 1.7   | .58   | 7.6   | 1.0  | 5.6   | 3.6   | .18   | 0    | 0    | .24   |
| 16    | 0    | 0     | 1.9   | .40   | 6.0   | 2.6  | 14    | 3.2   | 1.8   | 0    | 0    | .24   |
| 17    | 0    | 0     | 1.7   | .40   | 3.8   | 6.2  | 8.5   | 2.8   | .48   | .01  | 0    | .18   |
| 18    | 0    | 0     | 1.5   | .40   | 2.9   | 4.2  | 4.8   | 2.1   | .24   | 0    | .26  | .12   |
| 19    | 0    | 0     | 1.2   | .48   | 2.3   | 2.3  | 3.8   | 1.5   | .18   | 0    | .46  | .18   |
| 20    | 0    | 0     | 1.5   | .48   | 1.7   | 1.7  | 3.8   | 1.2   | .12   | 0    | .32  | .12   |
| 21    | 0    | 0     | 1.7   | .40   | 1.4   | 1.7  | 6.9   | 1.0   | .12   | 0    | .18  | .12   |
| 22    | 0    | 0     | 1.2   | .40   | 1.3   | 11   | 26    | .69   | .12   | .32  | .33  | .06   |
| 23    | 0    | 0     | 1.2   | .58   | 1.5   | 6.1  | 7.7   | .58   | .12   | .24  | .40  | .03   |
| 24    | 0    | 0     | 1.2   | 1.4   | 1.4   | 3.6  | 4.5   | .40   | .12   | .18  | .32  | .06   |
| 25    | .01  | 0     | 1.2   | 1.9   | 1.3   | 2.5  | 3.2   | .40   | .06   | .12  | .40  | .24   |
| 26    | .03  | 0     | 1.0   | 1.5   | 2.0   | 1.9  | 2.5   | .32   | .06   | .03  | .24  | .62   |
| 27    | .06  | 0     | .58   | 1.4   | 2.6   | 1.7  | 2.1   | .24   | .03   | .03  | .12  | 1.2   |
| 28    | .04  | 0     | .40   | 1.2   | 2.3   | 1.4  | 1.7   | .24   | .03   | .01  | .12  | 1.2   |
| 29    | .03  | .05   | .40   | .83   | 2.1   | 1.2  | 1.5   | .18   | .23   | .01  | .06  | 1.8   |
| 30    | .03  | .24   | .40   | .69   | ----- | 1.0  | 1.4   | .29   | .32   | 0    | .03  | 5.6   |
| 31    | .03  | ----- | .48   | .48   | ----- | 1.2  | ----- | .40   | ----- | 0    | .01  | ----- |
| TOTAL | .75  | .91   | 37.94 | 30.92 | 64.01 | 92.7 | 187.6 | 45.94 | 5.79  | 1.73 | 3.26 | 17.31 |
| MEAN  | .024 | .030  | 1.22  | 1.00  | 2.21  | 2.99 | 6.25  | 1.48  | .19   | .056 | .11  | .58   |
| MAX   | .12  | .24   | 6.5   | 2.8   | 8.7   | 11   | 26    | 6.3   | 1.8   | .32  | .46  | 5.6   |
| MIN   | 0    | 0     | .01   | .40   | .40   | 1.0  | 1.0   | .18   | .03   | 0    | 0    | 0     |
| CFSM  | .02  | .02   | .90   | .74   | 1.64  | 2.21 | 4.63  | 1.10  | .14   | .04  | .08  | .43   |
| IN.   | .02  | .03   | 1.05  | .85   | 1.76  | 2.55 | 5.17  | 1.27  | .16   | .05  | .09  | .48   |

CAL YR 1971 TOTAL 352.25 MEAN .97 MAX 18 MIN 0 CFSM .72 IN 9.71  
WTR YR 1972 TOTAL 488.86 MEAN 1.34 MAX 26 MIN 0 CFSM .99 IN 13.47

## PEAK DISCHARGE (BASE, 50 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 0700 | 3.04  | 70        | 4-22 | 0445 | 3.00  | 64        |



## SCIOTO RIVER BASIN

## Reservoirs in Scioto River basin

- 03220500 O'SHAUGHNESSY RESERVOIR.--Lat 40°09'14", long 83°07'33", Delaware County, in gate house of dam on Scioto River, 4.0 miles north of Dublin. Drainage area 979 sq mi. Period of record, October 1924 to current year. Water-stage recorder. Month-end contents only for some periods published in WSP 1305. Datum of gage is at mean sea level (levels by city of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 20,080 acre-ft Apr. 13 (elevation 850.90 ft); minimum, 14,650 acre-ft Nov. 16 (elevation 845.19 ft). Extremes for period of record: Maximum contents, 24,240 acre-ft Jan. 22, 1959 (elevation 854.40 ft); minimum, 43 acre-ft Feb. 11, 1945 (elevation 791.87 ft).
- Reservoir if formed by concrete dam; dam completed and storage began in 1924. Usable capacity, 14,500 acre-ft, between elevations 789.5 ft (sill of outlet gate) and 845 ft (crest of spillway), based on survey made in 1942. Flashboards installed May 8, 1945, additional capacity, 2,480 acre-ft, between elevations 845 ft (crest of spillway) and 847.9 ft (crest of flashboards). Dead storage below elevation 789.5 ft, 55 acre-ft. Figures given herein represent usable contents. Water used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.
- 03221500 GRIGGS RESERVOIR.--Lat 40°00'54", long 83°05'38", Franklin County, on left abutment of dam on Scioto River, 6.2 miles northwest of State Capitol building in Columbus, and 6.5 miles upstream from Olentangy River. Drainage area, 1,044 sq mi. Period of record, January 1921 to current year. Water-stage recorder. Month-end contents only for some periods, published in WSP 1305. Daily readings have been obtained by city of Columbus, Division of Water, since 1908. Datum of gage is 680.38 ft above mean sea level, adjustment of 1912 (levels by city of Columbus); gage readings have been reduced to elevations above mean sea level. Prior to Oct. 4, 1940 nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 5,700 acre-ft Apr. 13 (elevation 759.07 ft); minimum, 3,760 acre-ft Nov. 24, 25 (elevation 753.58 ft). Extremes for period of record: Maximum contents, 7,490 acre-ft Jan. 22, 1959 (elevation 763.91 ft); minimum, 38 acre-ft Jan. 24, 1945 (elevation 735.78 ft).
- Reservoir formed by concrete dam; dam completed and storage began in 1905. Usable capacity, 3,700 acre-ft between elevations 735.4 (lowest outlets) and 753.4 ft (crest of spillway), based on survey made in 1935. Flashboards installed July 28, 1945, additional capacity, 750 acre-ft, between elevations 753.4 ft (crest of spillway) and 755.6 ft (crest of flashboards). Dead storage below elevation, 735.4 ft, 239 acre-ft. Figures given herein represent usable contents. Water is used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.
- 03225000 DELAWARE LAKE (Formerly published as Delaware Reservoir).--Lat 40°21'31", long 83°04'10", in T.5 N., R.19 W., Delaware County, in gate house of dam on Olentangy River, 4.0 miles north of Delaware. Drainage area, 386 sq mi. Period of record, March 1951 to current year. Water-stage recorder. Datum of gage is at mean sea level, Sandy Hook datum (levels by Corps of Engineers). Extremes for current year: Maximum contents, 60,860 ft Apr. 24 (elevation 935.80 ft); minimum, 8,270 acre-ft Mar. 11 (elevation 909.86 ft). Extremes for period of record: Maximum contents, 113,000 acre-ft Jan. 25, 1959 (elevation 944.75 ft); minimum, 2,070 acre-ft Feb. 13, 1970 (elevation 899.43 ft).
- Lake is formed by earthfill dam with concrete spillway; storage began Mar. 20, 1951. Usable capacity, 24,500 acre-ft between elevations 884.0 ft (lowest outlet) and 922.0 ft (crest of spillway). Additional flood-control storage above elevation 922.0 ft by taintor gates on spillway, 107,500 acre-ft. Normal conservation pool storage, 8,400 acre-ft (elevation 910.0 ft) winter, and 14,000 acre-ft (elevation, 915.0 ft) summer. No dead storage. Figures given herein represent usable contents. Lake is used primarily for flood control although the conservation pool is operated to augment low flow for water supply and pollution abatement and for recreational and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03228400 HOOVER RESERVOIR.--Lat 40°06'30", long 82°52'59", in T.2 N., R.17 W., Franklin County, in gate house of dam on Big Walnut Creek, 0.5 mile northeast of Central College, and 12.0 miles northeast of Columbus. Drainage area, 190 sq mi. Period of record, March 1955 to current year. Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 10, 1956, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 71,990 acre-ft May 9 (elevation 894.03 ft); minimum, 27,700 acre-ft Dec. 5 (elevation 875.22 ft). Extremes for period of record: Maximum contents, 74,470 acre-ft Jan. 21, 1959 (elevation 894.76 ft); minimum, 19,010 acre-ft Mar. 1, 1964 (elevation 868.58 ft).
- Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began in March 1955. Usable capacity, 60,130 acre-ft between elevations 830.0 ft (lowest outlet) and 890.0 ft (crest of spillway). Additional flood-control storage above elevation 890.0 ft by bascule gates installed in May 1970, 25,750 acre-ft. Dead storage below elevation 830.0 ft, 214 acre-ft. Figures given herein represent usable contents. Reservoir is used for municipal supply of city of Columbus and for recreational purposes. Outflow is controlled mostly by operation of valves in tunnel through dam, but above spillway level bascule gates can be used. Capacity table computed from data furnished by city of Columbus.
- 03230890 DEER CREEK LAKE (Formerly published as Deer Creek Reservoir).--Lat 39°37'20", long 83°12'58", Pickaway County, in outlet tower of dam on Deer Creek, 1,000 ft upstream from Crownover Mill Road, and 2.8 miles east of Pancoastburg. Drainage area, 277 sq mi. Period of record, April 1968 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 27,870 acre-ft May 10 (elevation 814.98 ft); minimum, 5,740 acre-ft Feb. 5 (elevation 795.02 ft). Extremes for period of record: Maximum contents, 71,830 acre-ft May 31, 1968 (elevation 835.25 ft); minimum, 1,140 acre-ft Jan. 8, 1970 (elevation 784.75 ft).
- Lake formed by earthfill dam with concrete spillway; dam completed in 1968 and storage began April 1, 1968. Usable capacity 102,540 acre-ft between elevations 770.0 ft (lowest outlet) and 844.0 ft (crest of spillway). Additional flood-control storage above elevation 844.0 ft by taintor gates on spillway. Normal conservation pool storage 6,420 acre-ft (elevation 796.0 ft) winter, and 21,030 acre-ft (elevation 810.0 ft) summer. No dead storage. Figures given herein represent usable contents. Lake is used primarily for flood control although the conservation pool is operated to augment low flow for water supply and pollution abatement and for recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Gage-height chart and capacity table furnished by Corps of Engineers.

SCIOTO RIVER BASIN

120

Reservoirs in Scioto River basin

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| Date                             | Elevation<br>(feet) | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) | Elevation<br>(feet)       | Contents<br>(acre-<br>feet) | Change in<br>contents<br>(acre-feet) |
|----------------------------------|---------------------|-----------------------------|--------------------------------------|---------------------------|-----------------------------|--------------------------------------|
| 03220500 O'Shaughnessy Reservoir |                     |                             |                                      | 03221500 Griggs Reservoir |                             |                                      |
| Sept. 30.....                    | 847.53              | 16,630                      | -                                    | 755.08                    | 4,270                       | -                                    |
| Oct. 31.....                     | 846.49              | 15,710                      | -920                                 | 754.48                    | 4,060                       | -210                                 |
| Nov. 30.....                     | 845.40              | 14,810                      | -900                                 | 754.58                    | 4,100                       | +40                                  |
| Dec. 31.....                     | 849.34              | 18,410                      | +3,600                               | 757.14                    | 4,980                       | +880                                 |
| CAL YR 1971.....                 | -                   | -                           | + 990                                | -                         | -                           | +480                                 |
| Jan. 31.....                     | 848.40              | 17,460                      | -950                                 | 755.86                    | 4,530                       | -450                                 |
| Feb. 29.....                     | 848.38              | 17,440                      | -20                                  | 755.88                    | 4,540                       | +10                                  |
| Mar. 31.....                     | 848.65              | 17,710                      | +270                                 | 756.18                    | 4,640                       | +100                                 |
| Apr. 30.....                     | 848.60              | 17,660                      | -50                                  | 756.00                    | 4,580                       | -60                                  |
| May 31.....                      | 848.48              | 17,540                      | -120                                 | 755.85                    | 4,530                       | -50                                  |
| June 30.....                     | 848.32              | 17,380                      | -160                                 | 755.65                    | 4,460                       | -70                                  |
| July 31.....                     | 848.15              | 17,210                      | -170                                 | 755.54                    | 4,430                       | -30                                  |
| Aug. 31.....                     | 848.10              | 17,160                      | -50                                  | 755.48                    | 4,400                       | -30                                  |
| Sept. 30.....                    | 849.07              | 18,130                      | +970                                 | 756.78                    | 4,860                       | +460                                 |
| WTR YR 1972.....                 | -                   | -                           | +1,500                               | -                         | -                           | +590                                 |

|                        |        |        |        |                           |        |          |
|------------------------|--------|--------|--------|---------------------------|--------|----------|
| 03225000 Delaware Lake |        |        |        | 03228400 Hoover Reservoir |        |          |
| Sept. 30.....          | 914.46 | 13,300 | -      | 882.05                    | 40,290 | -        |
| Oct. 31.....           | 913.70 | 12,370 | -930   | 878.96                    | 34,210 | -6,080   |
| Nov. 30.....           | 910.60 | 9,000  | -3,370 | 875.79                    | 28,640 | -5,570   |
| Dec. 31.....           | 911.69 | 10,090 | +1,090 | 878.68                    | 33,700 | +5,060   |
| CAL YR 1971.....       | -      | -      | +1,350 | -                         | -      | -7,810   |
| Jan. 31.....           | 910.12 | 8,520  | -1,570 | 880.98                    | 38,080 | +4,380   |
| Feb. 29.....           | 910.58 | 8,980  | +460   | 883.17                    | 42,760 | +4,680   |
| Mar. 31.....           | 910.05 | 8,450  | -530   | 891.71                    | 64,850 | + 22,090 |
| Apr. 30.....           | 918.18 | 15,550 | +7,100 | 892.94                    | 68,480 | +3,630   |
| May 31.....            | 915.34 | 14,440 | -1,110 | 892.42                    | 66,920 | +1,560   |
| June 30.....           | 915.37 | 14,480 | +40    | 890.57                    | 61,690 | -5,230   |
| July 31.....           | 915.03 | 14,040 | -440   | 889.95                    | 59,990 | -1,700   |
| Aug. 31.....           | 915.22 | 14,280 | +250   | 890.31                    | 61,520 | +1,530   |
| Sept. 30.....          | 918.40 | 18,600 | +4,310 | 891.00                    | 62,860 | +1,340   |
| WTR YR 1972.....       | -      | -      | +5,300 | -                         | -      | +22,570  |

|                          |        |        |         |  |  |  |
|--------------------------|--------|--------|---------|--|--|--|
| 03230890 Deer Creek Lake |        |        |         |  |  |  |
| Sept. 30.....            | 802.43 | 12,260 | -       |  |  |  |
| Oct. 31.....             | 795.16 | 5,830  | -6,430  |  |  |  |
| Nov. 30.....             | 795.30 | 5,930  | +100    |  |  |  |
| Dec. 31.....             | 795.49 | 6,060  | +130    |  |  |  |
| CAL YR 1971.....         | -      | -      | -890    |  |  |  |
| Jan. 31.....             | 795.17 | 5,840  | -220    |  |  |  |
| Feb. 29.....             | 795.37 | 5,980  | +140    |  |  |  |
| Mar. 31.....             | 795.27 | 5,910  | -70     |  |  |  |
| Apr. 30.....             | 810.27 | 21,380 | +15,470 |  |  |  |
| May 31.....              | 810.48 | 21,650 | +270    |  |  |  |
| June 30.....             | 810.28 | 21,390 | -260    |  |  |  |
| July 31.....             | 810.16 | 21,240 | -150    |  |  |  |
| Aug. 31.....             | 810.26 | 21,370 | +130    |  |  |  |
| Sept. 30.....            | 811.04 | 22,380 | +1,010  |  |  |  |
| WTR YR 1972.....         | -      | -      | +10,120 |  |  |  |

03237280 Upper Twin Creek at McGaw, Ohio  
(Hydrologic bench-mark station)

LOCATION.--Lat 38°38'37", long 83°12'57", Scioto County, on right bank, 0.3 mile downstream from Brown Run, 0.3 mile upstream from Tucker Run, 0.7 mile upstream from bridge on U.S. Highway 52 at McGaw, 2.7 miles northeast of Buena Vista, and 3.2 miles upstream from mouth.

DRAINAGE AREA.--12.2 sq mi (prior to July 21, 1972 12.8 sq mi).

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 543.41 ft above mean sea level. (Ohio Department of Highways bench mark). Prior to July 21, 1972 water-stage recorder at site 0.7 mile downstream at datum 23.41 ft lower.

AVERAGE DISCHARGE.--9 years, 11.5 cfs (12.20 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,250 cfs Apr. 21, 22 (gage height, 5.80 ft); minimum, 0.03 cfs Aug. 31 to Sept. 3, 5-13.

Period of record: Maximum discharge, 3,500 cfs Mar. 4, 1964 (gage height, 9.7 ft, in gage well, 10.2 ft, from outside highwater mark); no flow for many days most years.

Flood of July 3, 1960 reached a stage of 11.62 ft (discharge, 7,230 cfs), on basis of contracted-opening and flow over road measurement of peak flow.

REMARKS.--Records fair prior to July 21, good thereafter. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | CCT            | NCV       | DEC     | JAN     | FEB       | MAR      | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|-----------|---------|---------|-----------|----------|-------|-------|-------|-------|-------|-------|
| 1           | 2.8            | .34       | 1.4     | 11      | 7.6       | 25       | 23    | 11    | 3.1   | 4.4   | .58   | .04   |
| 2           | 2.3            | .32       | .70     | 21      | 7.0       | 66       | 22    | 13    | 2.1   | 2.4   | .40   | .03   |
| 3           | 2.3            | .30       | .55     | 23      | 7.6       | 72       | 22    | 38    | 1.6   | 10    | .71   | .06   |
| 4           | 1.9            | .28       | .50     | 30      | 13        | 42       | 53    | 29    | 1.2   | 7.7   | 7.3   | .05   |
| 5           | 1.6            | .26       | .46     | 44      | 10        | 38       | 41    | 21    | 1.3   | 5.4   | 3.9   | .04   |
| 6           | 1.4            | .24       | .76     | 25      | 7.6       | 34       | 34    | 17    | 1.4   | 3.1   | 2.5   | .03   |
| 7           | 1.2            | .24       | 156     | 18      | 6.0       | 30       | 94    | 14    | 1.3   | 2.1   | 1.6   | .03   |
| 8           | 1.1            | .22       | 42      | 14      | 5.2       | 28       | 46    | 21    | 1.0   | 1.6   | .97   | .03   |
| 9           | 1.1            | .24       | 20      | 62      | 4.7       | 25       | 23    | 24    | .90   | 1.1   | 1.8   | .03   |
| 10          | .95            | .20       | 16      | 47      | 4.2       | 23       | 19    | 18    | .80   | .90   | 1.7   | .03   |
| 11          | .76            | .20       | 18      | 23      | 4.0       | 21       | 17    | 16    | .70   | .70   | 1.0   | .03   |
| 12          | .76            | .18       | 12      | 19      | 5.0       | 20       | 17    | 14    | .50   | .90   | 1.3   | .03   |
| 13          | .70            | .16       | 11      | 16      | 60        | 19       | 86    | 12    | 1.0   | .70   | 1.7   | .03   |
| 14          | .65            | .15       | 9.0     | 12      | 36        | 18       | 65    | 11    | .90   | .40   | 1.6   | .05   |
| 15          | .70            | .16       | 12      | 10      | 26        | 16       | 43    | 10    | 2.4   | .60   | 1.2   | .05   |
| 16          | .65            | .15       | 13      | 9.2     | 21        | 18       | 53    | 11    | 11    | .90   | .71   | .05   |
| 17          | .55            | .15       | 12      | 8.8     | 18        | 18       | 26    | 10    | 4.4   | 1.1   | .44   | .05   |
| 18          | .55            | .14       | 10      | 8.4     | 15        | 17       | 20    | 8.0   | 2.4   | 1.1   | .33   | .09   |
| 19          | .42            | .15       | 9.0     | 9.4     | 12        | 16       | 18    | 6.7   | 1.9   | .90   | .25   | .09   |
| 20          | .26            | .18       | 17      | 22      | 5.6       | 14       | 28    | 6.1   | 2.1   | .90   | .21   | .08   |
| 21          | .26            | .22       | 15      | 26      | 8.0       | 13       | 274   | 5.1   | 2.3   | .54   | .17   | .08   |
| 22          | .34            | .22       | 13      | 21      | 10        | 41       | 297   | 4.4   | 1.7   | .42   | .13   | .07   |
| 23          | .34            | .24       | 11      | 18      | 18        | 34       | 72    | 3.8   | 1.4   | .36   | .12   | .21   |
| 24          | .65            | .26       | 11      | 16      | 298       | 27       | 45    | 2.9   | 1.3   | .30   | .08   | 1.5   |
| 25          | .76            | .28       | 9.8     | 23      | 129       | 22       | 30    | 2.4   | 1.1   | .58   | .08   | 2.3   |
| 26          | .55            | .28       | 9.0     | 21      | 137       | 17       | 23    | 1.9   | .90   | .48   | .08   | 1.7   |
| 27          | .55            | .34       | 8.2     | 17      | 48        | 15       | 17    | 1.6   | .70   | .36   | .07   | 9.5   |
| 28          | .46            | .38       | 8.2     | 13      | 33        | 14       | 14    | 1.1   | .70   | 3.6   | .05   | 5.4   |
| 29          | .42            | 1.1       | 7.8     | 11      | 27        | 12       | 12    | 1.1   | .90   | 2.4   | .05   | 3.3   |
| 30          | .38            | 2.5       | 11      | 9.6     | -----     | 10       | 11    | 4.8   | 7.4   | 1.4   | .05   | 3.5   |
| 31          | .32            | -----     | 12      | 8.4     | -----     | 16       | ----- | 6.1   | ----- | .98   | .05   | ----- |
| TOTAL       | 27.68          | 10.08     | 552.61  | 616.8   | 987.5     | 781      | 1,545 | 346.0 | 60.40 | 58.32 | 31.13 | 28.48 |
| MEAN        | .89            | .34       | 17.8    | 19.9    | 34.1      | 25.2     | 51.5  | 11.2  | 2.01  | 1.88  | 1.00  | .95   |
| MAX         | 2.8            | 2.5       | 156     | 62      | 298       | 72       | 297   | 38    | 11    | 10    | 7.3   | 9.5   |
| MIN         | .26            | .14       | .46     | 8.4     | 4.0       | 10       | 11    | 1.1   | .50   | .30   | .05   | .03   |
| CFSM        | .07            | .03       | 1.39    | 1.55    | 2.66      | 1.97     | 4.02  | .88   | .16   | .15   | .08   | .08   |
| IN          | .08            | .03       | 1.61    | 1.79    | 2.87      | 2.27     | 4.49  | 1.01  | .18   | .17   | .09   | .09   |
| CAL YR 1971 | TOTAL 3,708.49 | MEAN 10.2 | MAX 156 | MIN .06 | CFSM .80  | IN 11.78 |       |       |       |       |       |       |
| WTR YR 1972 | TOTAL 5,045.00 | MEAN 13.8 | MAX 298 | MIN .03 | CFSM 1.09 | IN 14.78 |       |       |       |       |       |       |

## PEAK DISCHARGE (BASE, 450 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 2-24 | 0200 | 5.00  | 880       | 4-21 | 2000 | 5.80  | 1,250     |
| 2-25 | 2200 | 4.45  | 638       | 4-22 | 0300 | 5.80  | 1,250     |

## OHIO BRUSH CREEK BASIN

03237500 Ohio Brush Creek near West Union, Ohio

LOCATION.--Lat 38°48'13", long 83°25'16", Adams County, on right bank at downstream side of bridge on State Highway 348, 0.3 mile downstream from Cedar Run, 7.0 miles east of West Union, and 7.1 miles upstream from Beasley Fork.

DRAINAGE AREA.--387 sq mi.

PERIOD OF RECORD.--August 1926 to November 1935, September 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 510.6 ft above mean sea level, adjustment of 1912. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 434 cfs (15.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 14,900 cfs Apr. 8 (gage height, 16.40 ft); minimum, 2.6 cfs Aug. 23, 24.

Period of record: Maximum discharge, 59,200 cfs Mar. 10, 1964 (gage height, 27.91 ft), from rating curve extended above 22,000 cfs on basis of slope-area measurement of peak flow; no flow Sept. 13-23, 27, 28, 1955 and for part of each day Sept. 17, 18, 1964.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY   | JUN   | JUL     | AUG   | SEP     |
|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|---------|-------|---------|
| 1     | 148   | 37    | 234    | 300    | 160    | 485    | 216    | 228   | 332   | 78      | 7.6   | 11      |
| 2     | 120   | 37    | 138    | 455    | 170    | 2,780  | 225    | 225   | 186   | 84      | 7.2   | 8.3     |
| 3     | 103   | 40    | 98     | 632    | 344    | 2,870  | 213    | 222   | 130   | 493     | 7.4   | 6.9     |
| 4     | 88    | 37    | 82     | 584    | 638    | 1,420  | 1,730  | 195   | 100   | 405     | 11    | 6.3     |
| 5     | 78    | 37    | 80     | 2,500  | 352    | 1,530  | 764    | 171   | 84    | 176     | 13    | 5.5     |
| 6     | 69    | 35    | 6,500  | 914    | 290    | 764    | 455    | 148   | 75    | 112     | 65    | 4.9     |
| 7     | 60    | 36    | 6,240  | 550    | 230    | 614    | 3,250  | 135   | 76    | 82      | 35    | 4.6     |
| 8     | 54    | 36    | 1,940  | 435    | 200    | 926    | 4,650  | 198   | 76    | 62      | 21    | 4.1     |
| 9     | 51    | 40    | 914    | 1,220  | 170    | 590    | 980    | 848   | 67    | 50      | 17    | 4.4     |
| 10    | 50    | 41    | 608    | 1,870  | 150    | 440    | 656    | 450   | 59    | 42      | 12    | 4.4     |
| 11    | 50    | 39    | 650    | 716    | 140    | 370    | 520    | 256   | 54    | 37      | 9.1   | 4.0     |
| 12    | 51    | 36    | 440    | 550    | 140    | 340    | 470    | 195   | 45    | 40      | 7.7   | 3.8     |
| 13    | 48    | 36    | 340    | 440    | 1,830  | 312    | 1,630  | 171   | 53    | 148     | 7.3   | 3.2     |
| 14    | 44    | 34    | 280    | 320    | 1,980  | 420    | 1,160  | 308   | 78    | 140     | 6.2   | 3.0     |
| 15    | 41    | 32    | 360    | 220    | 2,230  | 356    | 716    | 752   | 180   | 67      | 5.5   | 3.4     |
| 16    | 43    | 30    | 638    | 160    | 1,210  | 510    | 3,670  | 782   | 1,110 | 82      | 4.9   | 3.2     |
| 17    | 67    | 29    | 370    | 150    | 746    | 1,390  | 1,820  | 405   | 410   | 53      | 4.3   | 3.3     |
| 18    | 94    | 28    | 280    | 190    | 692    | 872    | 818    | 385   | 182   | 40      | 4.5   | 3.5     |
| 19    | 64    | 30    | 225    | 244    | 555    | 515    | 572    | 248   | 119   | 34      | 5.0   | 4.5     |
| 20    | 53    | 34    | 632    | 288    | 332    | 385    | 1,990  | 195   | 92    | 34      | 4.7   | 6.3     |
| 21    | 44    | 36    | 614    | 348    | 300    | 336    | 2,340  | 171   | 83    | 34      | 4.5   | 7.9     |
| 22    | 39    | 41    | 360    | 284    | 375    | 2,050  | 6,160  | 150   | 78    | 24      | 3.9   | 8.8     |
| 23    | 37    | 39    | 276    | 460    | 400    | 1,180  | 1,440  | 130   | 68    | 18      | 3.1   | 9.8     |
| 24    | 71    | 35    | 248    | 788    | 3,330  | 662    | 800    | 113   | 64    | 15      | 3.0   | 45      |
| 25    | 108   | 31    | 228    | 836    | 1,600  | 485    | 555    | 98    | 60    | 13      | 3.8   | 167     |
| 26    | 110   | 29    | 213    | 470    | 2,090  | 390    | 420    | 86    | 57    | 11      | 21    | 194     |
| 27    | 76    | 32    | 207    | 328    | 1,030  | 340    | 340    | 76    | 53    | 11      | 305   | 259     |
| 28    | 59    | 36    | 222    | 260    | 716    | 308    | 300    | 67    | 47    | 9.5     | 130   | 289     |
| 29    | 51    | 64    | 272    | 210    | 572    | 272    | 256    | 64    | 45    | 9.8     | 53    | 227     |
| 30    | 45    | 638   | 231    | 180    | -----  | 272    | 244    | 159   | 53    | 8.9     | 29    | 752     |
| 31    | 41    | ----- | 620    | 160    | -----  | 231    | -----  | 1,230 | ----- | 7.9     | 17    | -----   |
| TOTAL | 2,057 | 1,685 | 24,540 | 17,062 | 22,972 | 24,415 | 39,360 | 8,861 | 4,116 | 2,421.1 | 828.7 | 2,058.1 |
| MEAN  | 66.4  | 56.2  | 792    | 550    | 792    | 788    | 1,312  | 286   | 137   | 78.1    | 26.7  | 68.6    |
| MAX   | 148   | 638   | 6,500  | 2,500  | 3,330  | 2,870  | 6,160  | 1,230 | 1,110 | 493     | 305   | 752     |
| MIN   | 37    | 28    | 80     | 150    | 140    | 231    | 213    | 64    | 45    | 7.9     | 3.0   | 3.0     |
| CFSM  | .17   | .15   | 2.05   | 1.42   | 2.05   | 2.04   | 3.39   | .74   | .35   | .20     | .07   | .18     |
| IN.   | .20   | .16   | 2.36   | 1.64   | 2.21   | 2.35   | 3.78   | .85   | .40   | .23     | .08   | .20     |

CAL YR 1971 TOTAL 162,214.0 MEAN 444 MAX 13,900 MIN 15 CFSM 1.15 IN 15.59  
WTR YR 1972 TOTAL 150,375.9 MEAN 411 MAX 6,500 MIN 3.0 CFSM 1.06 IN 14.45

## PEAK DISCHARGE (BASE, 11,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 12-6 | 2015 | 15.33 | 12,800    | 4-8  | 0145 | 16.40 | 14,900    |



03238500 Whiteoak Creek near Georgetown, Ohio

LOCATION.--Lat 38°50'42", long 83°55'16", Brown County, on left bank at upstream side of bridge on State Highway 221, 600 ft downstream from Opossum Run, 1.8 miles southwest of Georgetown, and 6.5 miles upstream from mouth.

DRAINAGE AREA.--222 sq mi.

PERIOD OF RECORD.--October 1923 to November 1935, October 1939 to current year.

GAGE.--Nonrecording gage read twice daily. Since Nov. 7, 1950 supplementary water-stage recorder for high-water periods when stage exceeds 6.85 ft. Datum of gage is 569.21 ft above mean sea level, adjustment of 1912. Prior to Feb. 8, 1940, and Dec. 9, 1948, to Sept. 30, 1949, nonrecording gage and Feb. 8, 1940, to Dec. 8, 1948, water-stage recorder at same site at datum 8.00 ft higher.

AVERAGE DISCHARGE.--45 years, 242 cfs (14.80 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,210 cfs Dec. 7 (gage height, 7.05 ft); minimum, 0.9 cfs Sept. 20. Period of record: Maximum discharge, 22,400 cfs Mar. 10, 1964; maximum gage height, 20.87 ft, present datum, May 14, 1933; no flow at times in 1930, 1940-41, 1943, 1948, 1951-53, 1959, 1969, 1970.

REMARKS.-- Records fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1924-31. WSP 758: 1933. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | CCT  | NOV   | DEC    | JAN   | FEB    | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP      |
|-------|------|-------|--------|-------|--------|--------|--------|-------|-------|-------|-------|----------|
| 1     | 69   | 16    | 200    | 218   | 50     | 220    | 86     | 74    | 320   | 123   | 3.4   | 1.5      |
| 2     | 54   | 16    | 104    | 264   | 50     | 2,240  | 85     | 81    | 133   | 55    | 3.7   | .63      |
| 3     | 43   | 15    | 73     | 445   | 81     | 1,850  | 85     | 86    | 84    | 85    | 3.7   | 1.7      |
| 4     | 37   | 17    | 58     | 632   | 188    | 805    | 1,690  | 88    | 60    | 178   | 27    | 1.5      |
| 5     | 32   | 17    | 96     | 2,090 | 101    | 1,020  | 558    | 66    | 46    | 81    | 7.9   | .89      |
| 6     | 26   | 17    | 3,090  | 460   | 101    | 302    | 192    | 55    | 48    | 49    | 46    | .23      |
| 7     | 21   | 19    | 5,050  | 180   | 82     | 190    | 2,230  | 48    | 41    | 41    | 20    | .28      |
| 8     | 20   | 18    | 1,480  | 140   | 66     | 260    | 2,940  | 130   | 39    | 26    | 11    | 1.6      |
| 9     | 20   | 21    | 470    | 721   | 52     | 208    | 412    | 906   | 32    | 18    | 7.9   | .75      |
| 10    | 21   | 21    | 278    | 1,460 | 40     | 130    | 230    | 293   | 26    | 16    | 4.7   | .40      |
| 11    | 21   | 21    | 314    | 450   | 38     | 112    | 172    | 130   | 21    | 13    | 3.5   | .51      |
| 12    | 21   | 20    | 202    | 230   | 36     | 104    | 164    | 86    | 20    | 47    | 3.0   | .25      |
| 13    | 21   | 20    | 130    | 160   | 155    | 107    | 1,510  | 81    | 21    | 16    | 2.6   | .28      |
| 14    | 18   | 19    | 112    | 120   | 730    | 174    | 711    | 608   | 23    | 52    | 2.4   | .21      |
| 15    | 17   | 18    | 356    | 84    | 1,940  | 172    | 334    | 1,410 | 22    | 20    | 2.2   | .35      |
| 16    | 18   | 17    | 700    | 50    | 962    | 1,180  | 3,760  | 953   | 889   | 13    | 2.2   | .25      |
| 17    | 27   | 16    | 205    | 44    | 588    | 1,950  | 1,410  | 278   | 286   | 12    | 1.8   | .17      |
| 18    | 25   | 15    | 126    | 50    | 748    | 737    | 305    | 150   | 92    | 9.6   | 1.8   | .19      |
| 19    | 24   | 16    | 89     | 66    | 485    | 263    | 176    | 109   | 55    | 8.6   | 1.7   | .21      |
| 20    | 17   | 15    | 185    | 89    | 156    | 164    | 1,750  | 84    | 41    | 9.2   | 2.0   | .13      |
| 21    | 16   | 20    | 402    | 98    | 132    | 130    | 1,020  | 70    | 32    | 7.3   | 1.7   | .21      |
| 22    | 14   | 34    | 200    | 113   | 233    | 2,480  | 2,450  | 59    | 26    | 5.8   | 2.0   | .17      |
| 23    | 14   | 28    | 125    | 210   | 202    | 976    | 540    | 49    | 23    | 5.3   | 1.7   | .19      |
| 24    | 23   | 23    | 98     | 588   | 2,240  | 311    | 239    | 41    | 21    | 3.9   | 2.0   | 12       |
| 25    | 65   | 18    | 91     | 384   | 954    | 190    | 156    | 32    | 20    | 18    | 1.7   | 45       |
| 26    | 63   | 16    | 81     | 176   | 1,910  | 152    | 121    | 30    | 19    | 5.8   | 1.6   | 101      |
| 27    | 42   | 18    | 81     | 106   | 568    | 123    | 102    | 21    | 18    | 3.7   | 1.4   | 173      |
| 28    | 30   | 20    | 110    | 84    | 314    | 110    | 89     | 21    | 16    | 2.6   | 8.6   | 710      |
| 29    | 25   | 472   | 172    | 72    | 281    | 104    | 81     | 321   | 15    | 2.6   | 6.8   | 137      |
| 30    | 20   | 915   | 775    | 60    | -----  | 104    | 75     | 679   | 16    | 3.4   | 2.8   | 1,090    |
| 31    | 18   | ----- | 994    | 52    | -----  | 95     | -----  | 2,500 | ----- | 3.7   | 1.6   | -----    |
| TOTAL | 882  | 1,918 | 16,447 | 9,896 | 13,543 | 16,963 | 23,673 | 9,539 | 2,505 | 934.5 | 190.4 | 2,280.60 |
| MEAN  | 28.5 | 63.9  | 531    | 319   | 467    | 547    | 789    | 308   | 83.5  | 30.1  | 6.14  | 76.0     |
| MAX   | 69   | 915   | 5,050  | 2,090 | 2,240  | 2,480  | 3,760  | 2,500 | 889   | 178   | 46    | 1,090    |
| MIN   | 14   | 15    | 58     | 44    | 36     | 95     | 75     | 21    | 15    | 2.6   | 1.4   | .13      |
| CFSM  | .13  | .29   | 2.39   | 1.44  | 2.10   | 2.46   | 3.55   | 1.39  | .38   | .14   | .03   | .34      |
| IN.   | .15  | .32   | 2.76   | 1.66  | 2.27   | 2.84   | 3.97   | 1.60  | .42   | .16   | .03   | .38      |

CAL YR 1971 TOTAL 99,688.30 MEAN 273 MAX 7,430 MIN 2.4 CFSM 1.23 IN 16.70  
WTR YR 1972 TOTAL 98,771.50 MEAN 270 MAX 5,050 MIN .13 CFSM 1.22 IN 16.55

## PEAK DISCHARGE (BASE, 5,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 12-7 | 0630 | 7.05  | 6,210     | 4-16 | 1300 | 6.86  | 5,940     |
| 4-7  | 2300 | 6.84  | 5,920     |      |      |       |           |

## LITTLE MIAMI RIVER BASIN

03240000 Little Miami River near Oldtown, Ohio

LOCATION.--Lat 39°44'54", long 83°55'53", in sec. 34, R.7, T.4, Greene County, on right bank at downstream side of bridge on U.S. Highway 68, 0.8 mile downstream from Conner Branch, 0.9 mile upstream from Massies Creek, and 1.3 miles northeast of Oldtown.

DRAINAGE AREA.--129 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft above mean sea level.

AVERAGE DISCHARGE.--20 years, 99.4 cfs (10.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,830 cfs May 9 (gage height, 6.66 ft); minimum, 12 cfs Nov. 19, 20. Period of record: Maximum discharge, 14,800 cfs Jan. 21, 1959 (gage height, 12.20 ft), from rating curve extended above 4,400 cfs on basis of slope-area measurement of peak flow; minimum, 5.4 cfs July 29, 1954 (result of temporary storage at rock dam upstream).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG  | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1     | 21   | 20    | 46    | 276   | 46    | 117   | 107   | 140   | 110   | 153   | 30   | 17    |
| 2     | 22   | 21    | 36    | 221   | 50    | 310   | 100   | 136   | 93    | 103   | 28   | 19    |
| 3     | 17   | 21    | 30    | 201   | 62    | 316   | 92    | 122   | 84    | 84    | 30   | 20    |
| 4     | 18   | 23    | 28    | 191   | 52    | 221   | 103   | 111   | 82    | 71    | 32   | 19    |
| 5     | 17   | 17    | 27    | 220   | 46    | 178   | 94    | 105   | 77    | 66    | 31   | 20    |
| 6     | 14   | 19    | 52    | 179   | 44    | 139   | 91    | 105   | 74    | 59    | 32   | 18    |
| 7     | 15   | 19    | 249   | 153   | 40    | 132   | 316   | 101   | 76    | 59    | 35   | 17    |
| 8     | 17   | 20    | 278   | 132   | 38    | 150   | 316   | 215   | 66    | 53    | 48   | 16    |
| 9     | 17   | 20    | 177   | 147   | 36    | 130   | 239   | 1,010 | 66    | 56    | 35   | 18    |
| 10    | 21   | 19    | 142   | 217   | 34    | 110   | 211   | 886   | 73    | 57    | 29   | 17    |
| 11    | 20   | 19    | 124   | 192   | 38    | 105   | 184   | 405   | 65    | 66    | 27   | 16    |
| 12    | 19   | 22    | 102   | 160   | 50    | 105   | 197   | 288   | 63    | 56    | 24   | 27    |
| 13    | 22   | 14    | 89    | 147   | 69    | 103   | 649   | 295   | 93    | 48    | 25   | 56    |
| 14    | 25   | 16    | 160   | 121   | 100   | 115   | 355   | 529   | 113   | 46    | 23   | 44    |
| 15    | 24   | 20    | 396   | 88    | 261   | 107   | 269   | 365   | 89    | 54    | 23   | 30    |
| 16    | 40   | 19    | 294   | 72    | 265   | 137   | 631   | 285   | 81    | 66    | 23   | 25    |
| 17    | 29   | 17    | 200   | 90    | 203   | 249   | 601   | 237   | 74    | 59    | 20   | 23    |
| 18    | 26   | 17    | 148   | 100   | 195   | 227   | 353   | 201   | 69    | 47    | 22   | 21    |
| 19    | 24   | 14    | 124   | 90    | 140   | 168   | 269   | 177   | 66    | 42    | 20   | 22    |
| 20    | 25   | 17    | 125   | 79    | 100   | 143   | 249   | 156   | 63    | 41    | 23   | 21    |
| 21    | 25   | 18    | 125   | 77    | 80    | 134   | 251   | 144   | 59    | 38    | 22   | 20    |
| 22    | 23   | 17    | 109   | 75    | 72    | 482   | 532   | 133   | 56    | 37    | 20   | 19    |
| 23    | 25   | 18    | 98    | 83    | 80    | 417   | 388   | 126   | 56    | 39    | 21   | 17    |
| 24    | 25   | 19    | 94    | 83    | 89    | 270   | 285   | 117   | 60    | 41    | 26   | 23    |
| 25    | 27   | 17    | 87    | 80    | 78    | 219   | 231   | 110   | 59    | 44    | 26   | 29    |
| 26    | 26   | 15    | 85    | 66    | 79    | 182   | 194   | 98    | 57    | 38    | 23   | 37    |
| 27    | 25   | 21    | 81    | 62    | 75    | 165   | 171   | 93    | 48    | 33    | 22   | 62    |
| 28    | 25   | 18    | 89    | 56    | 74    | 153   | 154   | 91    | 46    | 32    | 22   | 59    |
| 29    | 22   | 25    | 89    | 50    | 86    | 139   | 149   | 93    | 103   | 31    | 20   | 48    |
| 30    | 21   | 52    | 408   | 46    | ----- | 127   | 144   | 117   | 255   | 33    | 17   | 103   |
| 31    | 23   | ----- | 539   | 44    | ----- | 115   | ----- | 135   | ----- | 34    | 17   | ----- |
| TOTAL | 700  | 594   | 4,631 | 3,798 | 2,582 | 5,665 | 7,925 | 7,126 | 2,376 | 1,686 | 796  | 883   |
| MEAN  | 22.6 | 19.8  | 149   | 123   | 89.0  | 183   | 264   | 230   | 79.2  | 54.4  | 25.7 | 29.4  |
| MAX   | 40   | 52    | 539   | 276   | 265   | 482   | 649   | 1,010 | 255   | 153   | 48   | 103   |
| MIN   | 14   | 14    | 27    | 44    | 34    | 103   | 91    | 91    | 46    | 31    | 17   | 16    |
| CFSM  | .18  | .15   | 1.16  | .95   | .69   | 1.42  | 2.05  | 1.78  | .61   | .42   | .20  | .23   |
| IN.   | .20  | .17   | 1.34  | 1.10  | .74   | 1.63  | 2.29  | 2.05  | .69   | .49   | .23  | .25   |

CAL YR 1971 TOTAL 30,301 MEAN 83.0 MAX 1,550 MIN 12 CFSM .64 IN 8.74  
WTR YR 1972 TOTAL 38,762 MEAN 106 MAX 1,010 MIN 14 CFSM .82 IN 11.18

## PEAK DISCHARGE (BASE, 800 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-13 | 0115 | 4.81  | 904       | 5-9  | 2000 | 6.66  | 1,830     |
| 4-16 | 2130 | 4.69  | 862       |      |      |       |           |

## 03241500 Massies Creek at Wilberforce, Ohio

LOCATION.--Lat 39°43'22", long 83°52'58", Greene County, on right bank 200 ft downstream from bridge on Wilberforce-Clinton Road, 0.5 mile northwest of Wilberforce, 0.6 mile downstream from unnamed right bank tributary and 1.7 miles upstream from Clark Run.

DRAINAGE AREA.--63.2 sq mi.

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce.

GAGE.--Water-stage recorder. Datum of gage is 865.15 ft above mean sea level. Prior to Aug. 4, 1972 at site 150 ft upstream at same datum.

AVERAGE DISCHARGE.--20 years, 54.8 cfs (11.77 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,220 cfs Apr. 12 (gage height, 6.53 ft); minimum, 5.6 cfs Sept. 12. Period of record: Maximum discharge, 7,300 cfs Jan. 21, 1959, Mar. 4, 1963, (gage height, 11.25 ft), from rating curve extended above 2,100 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.3 cfs Sept. 3-7, 1954.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1     | 14   | 16    | 49    | 154   | 24    | 83    | 54    | 64    | 47    | 34   | 11    | 6.6   |
| 2     | 13   | 16    | 37    | 136   | 28    | 265   | 50    | 61    | 42    | 30   | 11    | 6.6   |
| 3     | 12   | 16    | 31    | 124   | 37    | 231   | 47    | 56    | 37    | 30   | 9.9   | 7.1   |
| 4     | 12   | 14    | 28    | 116   | 23    | 156   | 50    | 51    | 35    | 27   | 9.9   | 8.4   |
| 5     | 12   | 13    | 25    | 132   | 22    | 119   | 44    | 47    | 32    | 27   | 9.5   | 7.5   |
| 6     | 11   | 13    | 71    | 108   | 21    | 89    | 44    | 44    | 32    | 25   | 27    | 6.9   |
| 7     | 11   | 13    | 235   | 90    | 20    | 83    | 189   | 42    | 31    | 24   | 113   | 6.4   |
| 8     | 11   | 12    | 231   | 74    | 19    | 95    | 187   | 195   | 28    | 23   | 56    | 6.3   |
| 9     | 13   | 12    | 154   | 91    | 18    | 80    | 156   | 671   | 29    | 23   | 43    | 6.9   |
| 10    | 14   | 13    | 126   | 138   | 17    | 67    | 144   | 541   | 31    | 24   | 35    | 6.6   |
| 11    | 13   | 12    | 110   | 117   | 20    | 62    | 117   | 233   | 26    | 25   | 21    | 6.0   |
| 12    | 11   | 11    | 94    | 96    | 24    | 60    | 195   | 160   | 25    | 32   | 13    | 14    |
| 13    | 10   | 11    | 78    | 80    | 35    | 60    | 848   | 195   | 57    | 27   | 9.9   | 45    |
| 14    | 13   | 10    | 129   | 60    | 57    | 65    | 460   | 338   | 89    | 23   | 9.5   | 37    |
| 15    | 11   | 9.9   | 255   | 40    | 166   | 62    | 258   | 213   | 62    | 22   | 9.4   | 24    |
| 16    | 17   | 9.9   | 191   | 44    | 160   | 85    | 505   | 153   | 59    | 31   | 9.4   | 19    |
| 17    | 19   | 9.5   | 136   | 52    | 123   | 151   | 448   | 123   | 49    | 25   | 9.4   | 16    |
| 18    | 19   | 9.5   | 100   | 48    | 116   | 133   | 231   | 101   | 42    | 19   | 8.9   | 13    |
| 19    | 18   | 12    | 83    | 44    | 96    | 98    | 169   | 86    | 37    | 38   | 8.6   | 12    |
| 20    | 16   | 12    | 86    | 40    | 60    | 82    | 159   | 77    | 34    | 67   | 9.0   | 11    |
| 21    | 15   | 12    | 88    | 42    | 50    | 83    | 163   | 68    | 34    | 32   | 8.4   | 11    |
| 22    | 16   | 11    | 72    | 42    | 44    | 268   | 290   | 62    | 31    | 24   | 8.3   | 11    |
| 23    | 16   | 9.5   | 65    | 48    | 46    | 207   | 201   | 56    | 30    | 20   | 17    | 11    |
| 24    | 19   | 9.5   | 62    | 51    | 49    | 142   | 154   | 51    | 30    | 16   | 22    | 19    |
| 25    | 23   | 9.5   | 55    | 46    | 43    | 117   | 123   | 47    | 28    | 16   | 16    | 26    |
| 26    | 25   | 9.5   | 54    | 38    | 45    | 96    | 102   | 43    | 27    | 13   | 12    | 34    |
| 27    | 22   | 12    | 50    | 34    | 42    | 88    | 88    | 40    | 34    | 13   | 11    | 65    |
| 28    | 20   | 13    | 49    | 30    | 44    | 78    | 78    | 38    | 33    | 13   | 9.8   | 75    |
| 29    | 18   | 25    | 45    | 27    | 55    | 70    | 71    | 38    | 29    | 12   | 9.0   | 59    |
| 30    | 17   | 68    | 207   | 25    | ----- | 62    | 66    | 53    | 41    | 11   | 8.3   | 155   |
| 31    | 16   | ----- | 288   | 23    | ----- | 56    | ----- | 59    | ----- | 11   | 7.4   | ----- |
| TOTAL | 477  | 423.8 | 3,284 | 2,190 | 1,504 | 3,393 | 5,691 | 4,006 | 1,141 | 757  | 562.6 | 732.3 |
| MEAN  | 15.4 | 14.1  | 106   | 70.6  | 51.9  | 109   | 190   | 129   | 38.0  | 24.4 | 18.1  | 24.4  |
| MAX   | 25   | 68    | 288   | 154   | 166   | 268   | 848   | 671   | 89    | 67   | 113   | 155   |
| MIN   | 10   | 9.5   | 25    | 23    | 17    | 56    | 44    | 38    | 25    | 11   | 7.4   | 6.0   |
| CFSM  | .24  | .22   | 1.68  | 1.12  | .82   | 1.72  | 3.01  | 2.04  | .60   | .39  | .29   | .39   |
| IN.   | .28  | .25   | 1.93  | 1.29  | .89   | 2.00  | 3.35  | 2.36  | .67   | .45  | .33   | .43   |

CAL YR 1971 TOTAL 19,559.1 MEAN 53.6 MAX 1,340 MIN 3.6 CFSM .85 IN 11.51  
WTR YR 1972 TOTAL 24,161.7 MEAN 66.0 MAX 848 MIN 6.0 CFSM 1.04 IN 14.22

## PEAK DISCHARGE (BASE, 600 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-12 | 2330 | 6.53  | 1,220     | 4-16 | 2030 | 5.24  | 664       |
| 4-13 | 1730 | 6.20  | 1,050     | 5-10 | 0030 | 5.54  | 776       |

## LITTLE MIAMI RIVER BASIN

03242050 Little Miami River near Spring Valley, Ohio

LOCATION.--Lat 39°35'00", long 84°01'49", Greene County, on right bank at downstream side of bridge on New Burlington Road, 0.3 mile upstream from unnamed right bank tributary, 2.2 miles southwest of Spring Valley, and 2.8 miles downstream from Gladly Run.

DRAINAGE AREA.--366 sq mi.

PERIOD OF RECORD.--September 1925 to December 1935 and October 1939 to December 1951 (published as "at Spring Valley"), July 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 729.29 ft above mean sea level. Prior to Dec. 12, 1939 non-recording gage and Dec. 13, 1939 to Dec. 31, 1951 water-stage recorder at site 2.5 miles upstream at datum 8.6 ft higher.

AVERAGE DISCHARGE.--26 years (1925-35, 1939-51, 1969-72), 367 cfs (13.62 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,090 cfs Apr. 13 (gage height, 10.86 ft); minimum, 76 cfs Sept. 10, 11.

Period of record: Maximum discharge, 18,400 cfs Feb. 26, 1929 (gage height 16.8 ft site and datum then in use); minimum, 23 cfs July 27, 1934.

Flood of Jan. 21, 1959 reached a stage of 18.1 ft (revised) at present site and datum (discharge, 36,400 cfs).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 893: 1932(M). WSP 1053: 1929. WSP 2108: 1969.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 102   | 108   | 230    | 840    | 190   | 368    | 340    | 452    | 358   | 358   | 119   | 84    |
| 2     | 93    | 122   | 189    | 712    | 200   | 1,090  | 325    | 442    | 310   | 250   | 113   | 103   |
| 3     | 95    | 119   | 168    | 636    | 220   | 1,060  | 313    | 403    | 275   | 230   | 116   | 181   |
| 4     | 87    | 107   | 157    | 616    | 200   | 732    | 347    | 375    | 258   | 208   | 116   | 122   |
| 5     | 87    | 104   | 148    | 588    | 190   | 612    | 313    | 351    | 245   | 198   | 112   | 97    |
| 6     | 82    | 101   | 470    | 576    | 180   | 470    | 301    | 334    | 258   | 186   | 106   | 92    |
| 7     | 80    | 117   | 1,100  | 488    | 170   | 435    | 1,530  | 322    | 245   | 178   | 214   | 88    |
| 8     | 80    | 99    | 972    | 431    | 160   | 470    | 1,060  | 1,610  | 226   | 174   | 202   | 86    |
| 9     | 93    | 103   | 664    | 548    | 150   | 421    | 884    | 2,460  | 218   | 166   | 163   | 87    |
| 10    | 124   | 103   | 524    | 668    | 140   | 375    | 728    | 2,310  | 220   | 166   | 138   | 83    |
| 11    | 97    | 99    | 449    | 608    | 150   | 347    | 624    | 1,200  | 208   | 175   | 122   | 79    |
| 12    | 92    | 99    | 382    | 508    | 170   | 344    | 720    | 856    | 200   | 172   | 119   | 172   |
| 13    | 89    | 98    | 344    | 440    | 255   | 344    | 3,500  | 956    | 948   | 169   | 113   | 250   |
| 14    | 136   | 89    | 872    | 380    | 375   | 365    | 1,820  | 1,460  | 776   | 160   | 106   | 186   |
| 15    | 104   | 90    | 1,390  | 300    | 756   | 347    | 1,160  | 1,070  | 414   | 153   | 103   | 147   |
| 16    | 500   | 95    | 984    | 250    | 808   | 492    | 2,380  | 820    | 354   | 181   | 101   | 124   |
| 17    | 258   | 91    | 656    | 280    | 592   | 764    | 2,040  | 696    | 298   | 180   | 98    | 113   |
| 18    | 177   | 89    | 496    | 300    | 560   | 696    | 1,120  | 604    | 265   | 163   | 95    | 104   |
| 19    | 156   | 104   | 414    | 320    | 496   | 532    | 872    | 532    | 245   | 150   | 93    | 112   |
| 20    | 138   | 102   | 463    | 301    | 350   | 449    | 844    | 477    | 230   | 187   | 117   | 101   |
| 21    | 129   | 97    | 438    | 292    | 300   | 435    | 872    | 438    | 222   | 172   | 93    | 97    |
| 22    | 129   | 91    | 386    | 280    | 270   | 1,410  | 1,590  | 410    | 212   | 163   | 93    | 93    |
| 23    | 120   | 91    | 347    | 322    | 300   | 1,140  | 1,120  | 386    | 206   | 144   | 141   | 89    |
| 24    | 168   | 91    | 331    | 328    | 310   | 776    | 856    | 358    | 216   | 139   | 130   | 151   |
| 25    | 169   | 93    | 310    | 307    | 292   | 632    | 708    | 340    | 206   | 166   | 154   | 165   |
| 26    | 151   | 87    | 298    | 263    | 322   | 536    | 608    | 316    | 196   | 139   | 113   | 198   |
| 27    | 142   | 103   | 292    | 240    | 301   | 484    | 540    | 292    | 190   | 127   | 127   | 214   |
| 28    | 132   | 104   | 304    | 220    | 292   | 449    | 492    | 280    | 181   | 122   | 97    | 248   |
| 29    | 124   | 150   | 286    | 200    | 310   | 421    | 463    | 286    | 200   | 116   | 98    | 224   |
| 30    | 116   | 228   | 1,340  | 190    | ----- | 393    | 470    | 431    | 403   | 113   | 90    | 477   |
| 31    | 111   | ----- | 1,510  | 180    | ----- | 354    | -----  | 456    | ----- | 113   | 87    | ----- |
| TOTAL | 4,166 | 3,174 | 16,914 | 12,712 | 9,009 | 17,743 | 28,940 | 21,723 | 8,783 | 5,318 | 3,689 | 4,367 |
| MEAN  | 134   | 106   | 546    | 410    | 311   | 572    | 965    | 701    | 293   | 172   | 119   | 146   |
| MAX   | 500   | 228   | 1,510  | 840    | 808   | 1,410  | 3,500  | 2,460  | 948   | 358   | 214   | 477   |
| MIN   | 80    | 87    | 148    | 180    | 140   | 344    | 301    | 280    | 181   | 113   | 87    | 79    |
| CFSM  | .37   | .29   | 1.49   | 1.12   | .85   | 1.56   | 2.64   | 1.92   | .80   | .47   | .33   | .40   |
| IN.   | .42   | .32   | 1.72   | 1.29   | .92   | 1.80   | 2.94   | 2.21   | .89   | .54   | .37   | .44   |

CAL YR 1971 TOTAL 109,642 MEAN 300 MAX 3,090 MIN 40 CFSM .82 IN 11.14  
WTR YR 1972 TOTAL 136,538 MEAN 373 MAX 3,500 MIN 79 CFSM 1.02 IN 13.88

PEAK DISCHARGE (BASE, 3,600 CFS).--Apr. 13 (0930) 4,090 cfs (10.86 ft).



03242150 Caesar Creek near Xenia, Ohio

LOCATION.--Lat 39°37'25", long 83°54'09", Greene County, on left bank at downstream side of bridge on Winchester Road, 0.2 mile downstream from unnamed left bank tributary, 4.5 miles south of Xenia, and 7.4 miles upstream from Anderson Fork.

DRAINAGE AREA.--71.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 894.18 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,220 cfs Apr. 13 (gage height, 10.64 ft); minimum daily, 1.3 cfs Aug. 20, 21.

Period of record: Maximum discharge, 2,820 cfs Apr. 2, 1970 (gage height, 11.86 ft); minimum daily, 0.44 cfs Oct. 9, 1970.

REMARKS.--Records good except those for January and February, which are fair. Since 1964, some regulation by seasonal changes in storage in Lake Shawnee, 7.2 miles upstream, drainage area 10.9 sq mi. (Summer storage is about 1,100 acre-feet more than winter). Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC       | JAN     | FEB       | MAR      | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|-----------|-----------|---------|-----------|----------|-------|-------|-------|-------|-------|-------|
| 1           | 2.8            | 100       | 28        | 138     | 24        | 109      | 40    | 52    | 46    | 15    | 3.2   | 2.2   |
| 2           | 2.4            | 87        | 21        | 148     | 26        | 451      | 37    | 52    | 35    | 13    | 3.0   | 2.0   |
| 3           | 2.0            | 72        | 18        | 124     | 32        | 242      | 43    | 45    | 30    | 13    | 2.9   | 2.9   |
| 4           | 2.0            | 57        | 16        | 128     | 26        | 150      | 74    | 39    | 26    | 12    | 3.3   | 3.4   |
| 5           | 2.0            | 45        | 15        | 156     | 23        | 105      | 30    | 35    | 23    | 12    | 2.7   | 2.9   |
| 6           | 2.0            | 36        | 131       | 114     | 21        | 72       | 30    | 32    | 22    | 10    | 2.5   | 2.9   |
| 7           | 2.0            | 30        | 376       | 92      | 19        | 68       | 443   | 31    | 23    | 9.4   | 2.9   | 2.7   |
| 8           | 2.0            | 25        | 239       | 81      | 18        | 85       | 325   | 654   | 19    | 8.7   | 3.5   | 2.4   |
| 9           | 2.8            | 22        | 146       | 164     | 17        | 63       | 222   | 998   | 18    | 9.0   | 3.1   | 2.4   |
| 10          | 5.1            | 20        | 118       | 211     | 16        | 50       | 158   | 451   | 18    | 8.4   | 2.7   | 2.4   |
| 11          | 5.7            | 18        | 97        | 152     | 15        | 46       | 117   | 260   | 17    | 8.7   | 2.4   | 2.2   |
| 12          | 3.6            | 22        | 79        | 117     | 17        | 45       | 201   | 120   | 16    | 16    | 2.2   | 52    |
| 13          | 3.2            | 19        | 63        | 86      | 46        | 46       | 1,350 | 238   | 218   | 17    | 2.0   | 31    |
| 14          | 3.9            | 17        | 233       | 66      | 127       | 56       | 433   | 460   | 180   | 13    | 2.0   | 9.0   |
| 15          | 3.9            | 16        | 301       | 54      | 341       | 50       | 355   | 225   | 70    | 11    | 1.8   | 5.9   |
| 16          | 14             | 14        | 191       | 48      | 182       | 117      | 890   | 114   | 72    | 12    | 1.7   | 4.3   |
| 17          | 15             | 12        | 125       | 50      | 128       | 254      | 494   | 87    | 49    | 11    | 1.6   | 3.8   |
| 18          | 11             | 12        | 88        | 46      | 110       | 153      | 275   | 73    | 38    | 9.4   | 1.5   | 3.6   |
| 19          | 8.6            | 7.8       | 76        | 42      | 80        | 94       | 152   | 62    | 31    | 8.4   | 1.4   | 3.6   |
| 20          | 7.1            | 6.9       | 99        | 40      | 60        | 73       | 170   | 54    | 28    | 8.4   | 1.3   | 3.4   |
| 21          | 6.3            | 7.3       | 95        | 38      | 50        | 80       | 205   | 48    | 27    | 7.5   | 1.3   | 3.4   |
| 22          | 6.5            | 6.6       | 72        | 36      | 44        | 427      | 430   | 42    | 24    | 6.6   | 1.8   | 3.1   |
| 23          | 6.8            | 5.9       | 65        | 42      | 42        | 216      | 228   | 37    | 22    | 6.3   | 37    | 2.9   |
| 24          | 10             | 5.4       | 62        | 46      | 40        | 127      | 135   | 33    | 22    | 6.6   | 15    | 4.8   |
| 25          | 15             | 5.1       | 63        | 40      | 40        | 139      | 104   | 30    | 20    | 7.8   | 9.0   | 9.0   |
| 26          | 13             | 4.9       | 61        | 34      | 44        | 123      | 84    | 26    | 18    | 6.9   | 5.3   | 17    |
| 27          | 12             | 7.0       | 55        | 30      | 48        | 72       | 72    | 23    | 16    | 6.1   | 4.1   | 22    |
| 28          | 10             | 7.9       | 53        | 27      | 50        | 60       | 62    | 22    | 15    | 5.6   | 3.6   | 6.6   |
| 29          | 9.0            | 23        | 47        | 25      | 61        | 54       | 56    | 22    | 17    | 5.0   | 2.9   | 43    |
| 30          | 8.3            | 45        | 314       | 23      | -----     | 45       | 55    | 63    | 17    | 4.3   | 2.9   | 275   |
| 31          | 10             | -----     | 231       | 22      | -----     | 40       | ----- | 70    | ----- | 3.8   | 2.5   | ----- |
| TOTAL       | 208.0          | 756.8     | 3,578     | 2,420   | 1,747     | 3,712    | 7,270 | 4,498 | 1,177 | 291.9 | 133.1 | 531.8 |
| MEAN        | 6.71           | 25.2      | 115       | 78.1    | 60.2      | 120      | 242   | 145   | 39.2  | 9.42  | 4.29  | 17.7  |
| MAX         | 15             | 100       | 376       | 211     | 341       | 451      | 1,350 | 998   | 218   | 17    | 37    | 275   |
| MIN         | 2.0            | 4.9       | 15        | 22      | 15        | 40       | 30    | 22    | 15    | 3.8   | 1.3   | 2.0   |
| CFSM        | .09            | .35       | 1.61      | 1.09    | .84       | 1.68     | 3.39  | 2.03  | .55   | .13   | .06   | .25   |
| IN.         | .11            | .39       | 1.86      | 1.26    | .91       | 1.93     | 3.79  | 2.34  | .61   | .15   | .07   | .28   |
| CAL YR 1971 | TOTAL 20,635.8 | MEAN 56.5 | MAX 1,550 | MIN 1.5 | CFSM .79  | IN 10.75 |       |       |       |       |       |       |
| WTR YR 1972 | TOTAL 26,323.6 | MEAN 71.9 | MAX 1,350 | MIN 1.3 | CFSM 1.01 | IN 13.71 |       |       |       |       |       |       |

## PEAK DISCHARGE (BASE, 1,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-13 | 0400 | 10.64 | 2,220     | 5-8  | 1600 | 9.00  | 1,410     |
| 4-16 | 1200 | 8.65  | 1,270     |      |      |       |           |

## LITTLE MIAMI RIVER BASIN

03242200 Anderson Fork near New Burlington, Ohio

LOCATION.--Lat 39°33'59", long 83°54'10", Greene (corrected) County, on right bank at downstream side of bridge on Old Winchester Trail, 1.0 mile downstream from Painters Run, 3.4 miles east of New Burlington, and 5.0 miles upstream from mouth.

DRAINAGE AREA.--77.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 883.67 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,090 cfs Apr. 13 (gage height, 10.98 ft); minimum, 0.42 cfs Sept. 3.

Period of record: Maximum discharge, 2,610 cfs Apr. 2, 1970 (gage height, 12.22 ft); minimum, 0.08 cfs Sept. 24, 25, 1970.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT  | NOV   | DEC   | JAN   | FEB     | MAR   | APR   | MAY   | JUN     | JUL   | AUG   | SEP    |
|-------------|--|-------|-------|-------|---------|-------|-------|-------|---------|-------|-------|--------|
| 1           | 9.6  | 14    | 47    | 113   | 16      | 106   | 38    | 56    | 77      | 7.0   | 2.4   | .51    |
| 2           | 9.0  | 13    | 32    | 122   | 15      | 419   | 31    | 54    | 58      | 11    | 1.9   | .46    |
| 3           | 9.0  | 14    | 27    | 112   | 15      | 282   | 26    | 52    | 47      | 9.6   | 1.8   | .61    |
| 4           | 9.0  | 12    | 24    | 109   | 15      | 172   | 44    | 46    | 36      | 7.6   | 1.9   | 1.9    |
| 5           | 7.6  | 12    | 20    | 157   | 14      | 125   | 46    | 40    | 29      | 6.4   | 1.9   | 1.8    |
| 6           | 7.2  | 10    | 178   | 122   | 12      | 84    | 41    | 36    | 30      | 4.6   | 1.8   | 1.2    |
| 7           | 7.6  | 10    | 528   | 93    | 10      | 77    | 614   | 34    | 28      | 4.1   | 1.6   | .77    |
| 8           | 7.6  | 9.0   | 356   | 70    | 9.0     | 65    | 478   | 310   | 25      | 3.6   | 1.5   | .66    |
| 9           | 10   | 8.6   | 219   | 136   | 8.2     | 56    | 326   | 736   | 22      | 3.6   | 1.3   | .66    |
| 10          | 11   | 9.6   | 165   | 225   | 7.8     | 50    | 252   | 384   | 16      | 3.6   | 1.1   | .51    |
| 11          | 9.0  | 9.6   | 137   | 162   | 9.2     | 45    | 171   | 213   | 9.6     | 3.6   | .95   | .46    |
| 12          | 8.1  | 8.6   | 108   | 120   | 11      | 47    | 234   | 155   | 8.2     | 3.6   | .89   | 29     |
| 13          | 8.1  | 8.6   | 84    | 103   | 34      | 46    | 1,350 | 209   | 177     | 13    | .89   | 26     |
| 14          | 9.0  | 9.0   | 116   | 70    | 119     | 61    | 862   | 375   | 283     | 39    | .89   | 3.1    |
| 15          | 8.6  | 8.1   | 197   | 50    | 890     | 56    | 387   | 228   | 183     | 11    | .83   | 3.1    |
| 16          | 19   | 7.6   | 172   | 46    | 337     | 116   | 883   | 160   | 348     | 5.2   | .83   | 2.2    |
| 17          | 98   | 8.6   | 117   | 42    | 165     | 260   | 544   | 130   | 240     | 3.6   | .71   | 1.7    |
| 18          | 58   | 8.1   | 83    | 38    | 120     | 188   | 280   | 100   | 110     | 3.6   | .61   | 1.3    |
| 19          | 42   | 8.6   | 68    | 36    | 56      | 116   | 199   | 84    | 78      | 3.6   | .56   | 1.0    |
| 20          | 30   | 10    | 80    | 34    | 38      | 86    | 220   | 74    | 60      | 3.6   | .56   | .80    |
| 21          | 23   | 10    | 84    | 32    | 34      | 91    | 250   | 66    | 51      | 5.8   | .61   | .70    |
| 22          | 19   | 8.6   | 63    | 32    | 31      | 470   | 526   | 60    | 40      | 3.6   | .66   | .63    |
| 23          | 19   | 7.2   | 59    | 37    | 29      | 273   | 295   | 54    | 34      | 3.6   | .89   | .57    |
| 24          | 21   | 6.8   | 56    | 43    | 34      | 164   | 191   | 48    | 29      | 3.6   | .95   | 4.6    |
| 25          | 43   | 6.4   | 47    | 46    | 42      | 133   | 139   | 42    | 22      | 3.6   | 1.0   | 9.4    |
| 26          | 40   | 6.8   | 49    | 32    | 48      | 101   | 98    | 38    | 18      | 3.6   | 1.0   | 18     |
| 27          | 31   | 8.1   | 44    | 26    | 51      | 86    | 82    | 33    | 16      | 3.6   | .95   | 37     |
| 28          | 26   | 11    | 41    | 23    | 53      | 73    | 72    | 29    | 11      | 3.6   | .95   | 29     |
| 29          | 19   | 24    | 34    | 20    | 72      | 64    | 64    | 27    | 17      | 3.1   | .77   | 18     |
| 30          | 16   | 70    | 202   | 18    | -----   | 51    | 60    | 81    | 36      | 3.1   | .61   | 115    |
| 31          | 15   | ----- | 190   | 17    | -----   | 40    | ----- | 127   | -----   | 3.1   | .56   | -----  |
| TOTAL       | 649.4  | 357.9 | 3,627 | 2,286 | 2,295.2 | 4,003 | 8,803 | 4,081 | 2,138.8 | 191.2 | 33.87 | 310.64 |
| MEAN        | 20.9   | 11.9  | 117   | 73.7  | 79.1    | 129   | 293   | 132   | 71.3    | 6.17  | 1.09  | 10.4   |
| MAX         | 98   | 70    | 528   | 225   | 890     | 470   | 1,350 | 736   | 348     | 39    | 2.4   | 115    |
| MIN         | 7.2  | 6.4   | 20    | 17    | 7.8     | 40    | 26    | 27    | 8.2     | 3.1   | .56   | .46    |
| CFSM        | .27  | .15   | 1.50  | .95   | 1.02    | 1.66  | 3.77  | 1.70  | .92     | .08   | .01   | .13    |
| IN.         | .31  | .17   | 1.73  | 1.09  | 1.10    | 1.91  | 4.21  | 1.95  | 1.02    | .09   | .02   | .15    |
| CAL YR 1971 | TOTAL 25,136.90 MEAN 68.9 MAX 1,830 MIN 1.8 CFSM .89 IN 12.02  |       |       |       |         |       |       |       |         |       |       |        |
| WTR YR 1972 | TOTAL 28,777.01 MEAN 78.6 MAX 1,350 MIN .46 CFSM 1.01 IN 13.76 |       |       |       |         |       |       |       |         |       |       |        |

## PEAK DISCHARGE (BASE, 1,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 2-15 | 1530 | 9.70  | 1,380     | 4-13 | 1100 | 10.98 | 2,090     |
| 4-12 | 2230 | 9.42  | 1,240     | 4-16 | 0930 | 8.99  | 1,190     |

03242300 Caesar Creek at Harveysburg, Ohio

LOCATION.--Lat 39°30'27", long 84°00'42", Warren County, on right bank at downstream side of bridge on State Highway 73, 0.2 mile north of Harveysburg, 2.3 miles downstream from Turkey Run, and 3.1 miles upstream from Jonahs Run.

DRAINAGE AREA.--209 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 781.83 ft above mean sea level. June 19 to Oct. 10, 1962, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 190 cfs (12.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,250 cfs Apr. 13 (gage height, 10.15 ft); minimum, 2.2 cfs Sept. 12.

Period of record: Maximum discharge, 24,000 cfs May 24, 1968 (gage height 18.70 ft), from rating curve extended above 5,200 cfs on basis of drainage area ratio comparisons with three nearby stations; no flow all or part of each day Sept. 9-18, Oct. 17, 18, 1964.

Flood of Jan. 21, 1959 reached a stage of 20.5 ft, from floodmark (discharge, 26,000 cfs), from rating curve extended above 12,000 cfs.

REMARKS.--Records good. Since 1964, some regulation by seasonal changes in storage in Lake Shawnee 20.5 miles upstream, drainage area 10.9 sq mi. (Summer storage is about 1,100 acre-feet more than winter). Intermittent pumpage, upstream from gage, for local irrigation. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|--------|-------|-------|--------|--------|--------|-------|-------|-------|---------|
| 1     | 18    | 77    | 121    | 370   | 70    | 262    | 132    | 176    | 190   | 72    | 9.3   | 3.4     |
| 2     | 16    | 116   | 80     | 370   | 76    | 1,340  | 121    | 173    | 138   | 53    | 8.8   | 3.2     |
| 3     | 15    | 105   | 65     | 350   | 90    | 836    | 110    | 153    | 113   | 49    | 8.8   | 4.2     |
| 4     | 14    | 89    | 59     | 330   | 70    | 495    | 175    | 135    | 93    | 46    | 11    | 8.2     |
| 5     | 13    | 74    | 53     | 450   | 60    | 320    | 132    | 121    | 80    | 42    | 9.8   | 6.3     |
| 6     | 12    | 63    | 278    | 342   | 54    | 230    | 123    | 108    | 82    | 39    | 7.7   | 5.4     |
| 7     | 12    | 54    | 1,270  | 278   | 48    | 210    | 1,810  | 103    | 80    | 35    | 7.1   | 4.5     |
| 8     | 12    | 45    | 902    | 218   | 44    | 200    | 1,200  | 1,240  | 68    | 33    | 7.1   | 3.6     |
| 9     | 12    | 38    | 535    | 385   | 42    | 180    | 800    | 2,590  | 65    | 31    | 6.3   | 3.6     |
| 10    | 17    | 35    | 405    | 605   | 40    | 160    | 620    | 1,200  | 63    | 31    | 6.3   | 2.8     |
| 11    | 18    | 34    | 346    | 460   | 38    | 153    | 480    | 640    | 54    | 29    | 6.0   | 2.6     |
| 12    | 15    | 33    | 270    | 320   | 36    | 147    | 846    | 405    | 51    | 28    | 5.4   | 52      |
| 13    | 13    | 33    | 218    | 260   | 76    | 144    | 3,820  | 520    | 581   | 36    | 5.1   | 156     |
| 14    | 15    | 30    | 447    | 180   | 240   | 176    | 1,630  | 1,140  | 734   | 67    | 4.8   | 36      |
| 15    | 15    | 29    | 728    | 120   | 900   | 166    | 980    | 640    | 365   | 45    | 4.2   | 19      |
| 16    | 35    | 25    | 545    | 120   | 605   | 310    | 2,540  | 405    | 575   | 38    | 3.9   | 12      |
| 17    | 128   | 23    | 360    | 130   | 390   | 758    | 1,420  | 314    | 410   | 34    | 3.6   | 9.8     |
| 18    | 102   | 20    | 266    | 120   | 260   | 530    | 770    | 262    | 262   | 29    | 3.4   | 7.7     |
| 19    | 76    | 22    | 214    | 110   | 180   | 330    | 505    | 218    | 173   | 26    | 3.4   | 6.6     |
| 20    | 56    | 19    | 254    | 110   | 150   | 254    | 565    | 187    | 138   | 23    | 3.2   | 5.7     |
| 21    | 45    | 18    | 270    | 110   | 130   | 242    | 610    | 166    | 123   | 22    | 3.0   | 4.8     |
| 22    | 38    | 17    | 210    | 108   | 120   | 1,380  | 1,330  | 150    | 105   | 24    | 3.4   | 4.8     |
| 23    | 35    | 14    | 180    | 129   | 110   | 758    | 722    | 132    | 91    | 19    | 26    | 4.5     |
| 24    | 44    | 12    | 173    | 138   | 110   | 455    | 470    | 116    | 89    | 18    | 43    | 7.0     |
| 25    | 74    | 11    | 156    | 120   | 110   | 375    | 355    | 105    | 78    | 19    | 22    | 20      |
| 26    | 86    | 11    | 156    | 94    | 120   | 334    | 294    | 96     | 70    | 18    | 14    | 40      |
| 27    | 70    | 13    | 147    | 80    | 130   | 246    | 250    | 85     | 63    | 18    | 9.8   | 72      |
| 28    | 61    | 15    | 141    | 70    | 141   | 214    | 214    | 78     | 56    | 14    | 7.7   | 87      |
| 29    | 48    | 34    | 123    | 62    | 170   | 183    | 198    | 74     | 67    | 12    | 6.0   | 74      |
| 30    | 41    | 156   | 695    | 56    | ----- | 159    | 187    | 183    | 74    | 11    | 5.1   | 535     |
| 31    | 37    | ----- | 635    | 60    | ----- | 135    | -----  | 302    | ----- | 9.8   | 4.2   | -----   |
| TOTAL | 1,193 | 1,265 | 10,302 | 6,655 | 4,610 | 11,682 | 23,409 | 12,217 | 5,131 | 970.8 | 269.4 | 1,201.7 |
| MEAN  | 38.5  | 42.2  | 332    | 215   | 159   | 377    | 780    | 394    | 171   | 31.3  | 8.69  | 40.1    |
| MAX   | 128   | 156   | 1,270  | 605   | 900   | 1,380  | 3,820  | 2,590  | 734   | 72    | 43    | 535     |
| MIN   | 12    | 11    | 53     | 56    | 36    | 135    | 110    | 74     | 51    | 9.8   | 3.0   | 2.6     |
| CFSM  | .18   | .20   | 1.59   | 1.03  | .76   | 1.80   | 3.73   | 1.89   | .82   | .15   | .04   | .19     |
| IN.   | .21   | .23   | 1.83   | 1.18  | .82   | 2.08   | 4.17   | 2.17   | .91   | .17   | .05   | .21     |

CAL YR 1971 TOTAL 65,610.3 MEAN 180 MAX 4,450 MIN 7.0 CFSM .86 IN 11.68  
WTR YR 1972 TOTAL 78,905.9 MEAN 216 MAX 3,820 MIN 2.6 CFSM 1.03 IN 14.04

## PEAK DISCHARGE (BASE, 3,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-12 | 2230 | 9.35  | 4,540     | 4-16 | 1100 | 8.09  | 3,530     |
| 4-13 | 1100 | 10.15 | 5,250     | 5- 8 | 2000 | 7.41  | 3,030     |

03242350 Caesar Creek near Wellman, Ohio

LOCATION.--Lat 39°28'57", long 84°03'52", Warren County, on downstream side of bridge on O'Neill Road, 0.5 mile downstream from Flat Fork, 1.6 miles west of Wellman, 2.8 miles upstream from mouth, and 3.2 miles southwest of Harveysburg.

DRAINAGE AREA.--239 sq mi.

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

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 730.03 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 214 cfs (12.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,020 cfs Apr. 13 (gage height, 14.16 ft); minimum, 2.1 cfs Aug. 21, 22.

Period of record: Maximum discharge, 25,000 cfs May 24, 1968 (gage height, 21.7 ft), from rating curve extended above 4,700 cfs on the basis of slope-conveyance study; minimum, 0.50 cfs Aug. 24, 1965 (gage height, 3.88 ft).

Flood of Jan. 21, 1959 reached a stage of 24.03 ft, from information by Ohio Division of Water (discharge, about 29,000 cfs, from flood study).

REMARKS.--Records good except those for January and February, which are fair. Since 1964, some regulation by seasonal changes in storage in Lake Shawnee 26 miles upstream, drainage area 10.9 sq mi. (Summer storage is about 1,100 acre-feet more than winter). Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV   | DEC      | JAN       | FEB     | MAR      | APR      | MAY    | JUN   | JUL  | AUG   | SEP   |
|-------------|----------------|-------|----------|-----------|---------|----------|----------|--------|-------|------|-------|-------|
| 1           | 20             | 31    | 144      | 460       | 68      | 301      | 124      | 156    | 200   | 64   | 11    | 4.3   |
| 2           | 18             | 97    | 82       | 426       | 76      | 1,260    | 114      | 156    | 145   | 53   | 11    | 3.7   |
| 3           | 16             | 91    | 58       | 387       | 84      | 680      | 107      | 131    | 122   | 43   | 11    | 5.1   |
| 4           | 16             | 75    | 44       | 370       | 78      | 560      | 200      | 110    | 104   | 39   | 12    | 8.4   |
| 5           | 16             | 65    | 39       | 560       | 70      | 454      | 147      | 101    | 86    | 38   | 12    | 10    |
| 6           | 16             | 50    | 252      | 400       | 64      | 271      | 117      | 89     | 89    | 38   | 10    | 7.8   |
| 7           | 15             | 46    | 1,310    | 289       | 56      | 235      | 2,550    | 84     | 86    | 38   | 9.4   | 6.4   |
| 8           | 15             | 42    | 988      | 200       | 52      | 210      | 2,340    | 1,410  | 74    | 36   | 10    | 6.0   |
| 9           | 16             | 39    | 596      | 382       | 49      | 180      | 1,040    | 2,590  | 71    | 32   | 8.1   | 5.7   |
| 10          | 19             | 37    | 359      | 704       | 46      | 170      | 760      | 1,360  | 69    | 31   | 7.8   | 4.0   |
| 11          | 20             | 36    | 380      | 568       | 44      | 168      | 544      | 740    | 64    | 32   | 6.8   | 2.6   |
| 12          | 19             | 36    | 292      | 440       | 42      | 158      | 440      | 471    | 54    | 34   | 6.6   | 4.2   |
| 13          | 18             | 36    | 218      | 300       | 74      | 155      | 2,460    | 650    | 703   | 39   | 6.0   | 164   |
| 14          | 19             | 34    | 232      | 220       | 310     | 250      | 2,410    | 1,320  | 780   | 47   | 5.3   | 33    |
| 15          | 19             | 32    | 604      | 160       | 1,340   | 180      | 1,260    | 704    | 382   | 51   | 4.9   | 16    |
| 16          | 22             | 28    | 616      | 140       | 717     | 359      | 2,770    | 450    | 574   | 43   | 4.6   | 12    |
| 17          | 74             | 27    | 373      | 140       | 464     | 884      | 1,560    | 331    | 382   | 36   | 4.0   | 10    |
| 18          | 91             | 26    | 256      | 130       | 270     | 648      | 852      | 259    | 212   | 32   | 3.7   | 8.9   |
| 19          | 60             | 26    | 196      | 120       | 180     | 404      | 568      | 202    | 143   | 28   | 3.2   | 7.8   |
| 20          | 46             | 25    | 256      | 120       | 150     | 286      | 680      | 180    | 113   | 26   | 4.0   | 6.6   |
| 21          | 38             | 24    | 268      | 110       | 140     | 242      | 688      | 153    | 101   | 23   | 2.2   | 6.0   |
| 22          | 34             | 21    | 205      | 110       | 130     | 1,320    | 1,490    | 156    | 86    | 27   | 2.2   | 5.7   |
| 23          | 32             | 21    | 172      | 174       | 120     | 848      | 856      | 165    | 76    | 20   | 3.6   | 5.3   |
| 24          | 39             | 24    | 164      | 158       | 120     | 560      | 513      | 137    | 74    | 19   | 4.8   | 6.0   |
| 25          | 51             | 24    | 153      | 149       | 120     | 443      | 373      | 120    | 66    | 19   | 24    | 15    |
| 26          | 67             | 24    | 138      | 102       | 130     | 380      | 286      | 107    | 59    | 17   | 15    | 23    |
| 27          | 52             | 22    | 135      | 91        | 149     | 274      | 218      | 95     | 52    | 18   | 11    | 58    |
| 28          | 46             | 21    | 131      | 80        | 153     | 228      | 194      | 88     | 46    | 16   | 9.1   | 72    |
| 29          | 41             | 62    | 127      | 72        | 198     | 188      | 176      | 88     | 77    | 13   | 7.8   | 58    |
| 30          | 34             | 160   | 647      | 66        | -----   | 166      | 166      | 159    | 67    | 11   | 6.4   | 350   |
| 31          | 32             | ----- | 770      | 60        | -----   | 137      | -----    | 335    | ----- | 11   | 4.9   | ----- |
| TOTAL       | 1,021          | 1,282 | 10,205   | 7,688     | 5,494   | 12,599   | 26,003   | 13,097 | 5,157 | 974  | 285.6 | 963.3 |
| MEAN        | 32.9           | 42.7  | 329      | 248       | 189     | 406      | 867      | 422    | 172   | 31.4 | 9.21  | 32.1  |
| MAX         | 91             | 160   | 1,310    | 704       | 1,340   | 1,320    | 2,770    | 2,590  | 780   | 64   | 48    | 350   |
| MIN         | 15             | 21    | 39       | 60        | 42      | 137      | 107      | 84     | 46    | 11   | 2.2   | 2.6   |
| CFSM        | .14            | .18   | 1.38     | 1.04      | .79     | 1.70     | 3.63     | 1.77   | .72   | .13  | .04   | .13   |
| IN.         | .16            | .20   | 1.59     | 1.20      | .86     | 1.96     | 4.05     | 2.04   | .80   | .15  | .04   | .15   |
| CAL YR 1971 | TOTAL 71,750.0 |       | MEAN 197 | MAX 3,960 | MIN 6.2 | CFSM .82 | IN 11.17 |        |       |      |       |       |
| WTR YR 1972 | TOTAL 84,768.9 |       | MEAN 232 | MAX 2,770 | MIN 2.2 | CFSM .97 | IN 13.19 |        |       |      |       |       |

## PEAK DISCHARGE (BASE, 3,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 1300 | 12.65 | 4,090     | 4-16 | 1200 | 13.15 | 4,680     |
| 4-13 | 2000 | 14.16 | 6,020     | 5-8  | 2000 | 11.96 | 3,400     |



03244000 Todd Fork near Roachester, Ohio

LOCATION.--Lat 39°20'07", long 84°05'12", Warren County, on right bank at downstream side of bridge on State Highway 123, 0.3 mile downstream from Lick Run, 1.6 miles southeast of Roachester, and 4.0 miles upstream from mouth.

DRAINAGE AREA.--219 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 679.40 ft above mean sea level.

AVERAGE DISCHARGE.--20 years, 209 cfs.

EXTREMES.--Current year: Maximum discharge, about 7,600 cfs Apr. 13 (gage height, 14.3 ft from flood mark); minimum, 0.55 cfs Sept. 1, 2.

Period of record: Maximum discharge, 25,500 cfs Jan. 21, 1959 (gage height, 19.50 ft), from rating curve extended above 12,000 cfs on basis of contracted-opening measurement of peak flow; no flow for all or part of each day Sept. 1, 2, 1953, Sept. 6-17, 1964.

REMARKS.--Records poor. Some regulation by Cowan Lake on Cowan Creek, 17.2 miles upstream (capacity, 12,000 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1435: Drainage area.

## DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT             | NOV   | DEC      | JAN   | FEB       | MAR    | APR     | MAY    | JUN    | JUL     | AUG    | SEP    |
|-------------|-----------------|-------|----------|-------|-----------|--------|---------|--------|--------|---------|--------|--------|
| 1           | 38              | 22    | 400      | 420   | 70        | 1,200  | 140     | 160    | 240    | 151     | 8.2    | .60    |
| 2           | 32              | 26    | 360      | 360   | 80        | 1,600  | 120     | 141    | 158    | 101     | 7.8    | 1.1    |
| 3           | 28              | 38    | 320      | 320   | 74        | 1,100  | 110     | 124    | 118    | 77      | 8.2    | 10     |
| 4           | 25              | 34    | 280      | 290   | 68        | 460    | 180     | 104    | 94     | 66      | 9.7    | 23     |
| 5           | 22              | 30    | 240      | 460   | 62        | 300    | 140     | 91     | 78     | 56      | 12     | 12     |
| 6           | 20              | 36    | 350      | 320   | 58        | 220    | 120     | 81     | 66     | 48      | 17     | 7.8    |
| 7           | 18              | 30    | 1,500    | 200   | 54        | 180    | 1,900   | 74     | 78     | 39      | 16     | 5.1    |
| 8           | 17              | 24    | 800      | 150   | 52        | 170    | 1,500   | 2,010  | 58     | 35      | 10     | 4.1    |
| 9           | 20              | 20    | 360      | 180   | 50        | 160    | 1,100   | 1,910  | 48     | 32      | 6.9    | 3.3    |
| 10          | 26              | 18    | 280      | 460   | 48        | 150    | 850     | 830    | 45     | 29      | 6.0    | 2.3    |
| 11          | 24              | 17    | 240      | 400   | 46        | 140    | 660     | 425    | 40     | 28      | 4.6    | 2.3    |
| 12          | 22              | 16    | 200      | 300   | 44        | 130    | 500     | 288    | 31     | 27      | 4.1    | 2.3    |
| 13          | 24              | 15    | 170      | 200   | 42        | 120    | 3,400   | 624    | 940    | 26      | 3.6    | 95     |
| 14          | 36              | 14    | 220      | 160   | 110       | 130    | 1,500   | 935    | 1,120  | 24      | 3.1    | 47     |
| 15          | 54              | 14    | 600      | 120   | 850       | 150    | 900     | 488    | 1,170  | 25      | 2.8    | 31     |
| 16          | 110             | 13    | 420      | 100   | 600       | 200    | 2,500   | 428    | 4,090  | 25      | 2.3    | 18     |
| 17          | 76              | 13    | 330      | 110   | 400       | 500    | 1,500   | 303    | 845    | 24      | 2.0    | 16     |
| 18          | 52              | 13    | 240      | 100   | 300       | 420    | 700     | 238    | 392    | 24      | 1.8    | 11     |
| 19          | 40              | 16    | 170      | 96    | 220       | 320    | 404     | 181    | 260    | 21      | 1.6    | 8.4    |
| 20          | 34              | 14    | 130      | 92    | 180       | 240    | 564     | 149    | 195    | 19      | 1.6    | 7.0    |
| 21          | 30              | 13    | 180      | 90    | 160       | 340    | 556     | 129    | 160    | 43      | 1.3    | 6.0    |
| 22          | 30              | 13    | 230      | 90    | 140       | 1,500  | 1,500   | 112    | 132    | 44      | 1.3    | 5.1    |
| 23          | 36              | 13    | 180      | 96    | 120       | 1,000  | 660     | 97     | 106    | 31      | 1.5    | 4.1    |
| 24          | 42              | 12    | 160      | 100   | 110       | 540    | 404     | 83     | 94     | 24      | 1.6    | 5.7    |
| 25          | 36              | 12    | 140      | 140   | 110       | 400    | 285     | 67     | 90     | 22      | 4.8    | 11     |
| 26          | 32              | 12    | 130      | 120   | 140       | 320    | 215     | 61     | 79     | 18      | 4.6    | 26     |
| 27          | 30              | 13    | 120      | 110   | 240       | 280    | 176     | 57     | 68     | 16      | 4.1    | 33     |
| 28          | 28              | 18    | 110      | 100   | 350       | 240    | 151     | 49     | 57     | 14      | 2.6    | 48     |
| 29          | 26              | 50    | 100      | 90    | 900       | 200    | 135     | 46     | 66     | 12      | 2.0    | 56     |
| 30          | 24              | 200   | 320      | 76    | -----     | 180    | 141     | 504    | 187    | 11      | 1.6    | 221    |
| 31          | 23              | ----- | 660      | 60    | -----     | 160    | -----   | 520    | -----  | 9.3     | .94    | -----  |
| TOTAL       | 1,055           | 779   | 9,940    | 5,910 | 5,678     | 13,050 | 23,011  | 11,309 | 11,105 | 1,121.3 | 155.64 | 723.20 |
| MEAN        | 34.0            | 26.0  | 321      | 191   | 196       | 421    | 767     | 365    | 370    | 36.2    | 5.02   | 24.1   |
| MAX         | 110             | 200   | 1,500    | 460   | 900       | 1,600  | 3,400   | 2,010  | 4,090  | 151     | 17     | 221    |
| MIN         | 17              | 12    | 100      | 60    | 42        | 120    | 110     | 46     | 31     | 9.3     | .94    | .60    |
| CAL YR 1971 | TOTAL 65,279.10 |       | MEAN 179 |       | MAX 7,360 |        | MIN 4.0 |        |        |         |        |        |
| WTR YR 1972 | TOTAL 83,837.14 |       | MEAN 229 |       | MAX 4,090 |        | MIN .60 |        |        |         |        |        |

## PEAK DISCHARGE (BASE, 4,300 CFS)

| DATE | TIME    | G. H. | DISCHARGE   | DATE | TIME | G. H. | DISCHARGE |
|------|---------|-------|-------------|------|------|-------|-----------|
| 4-13 | unknown | 14.3  | about 7,600 | 6-16 | 0230 | 13.50 | 6,440     |
| 6-13 | 2200    | 12.07 | 4,540       |      |      |       |           |

## LITTLE MIAMI RIVER BASIN

03245500 Little Miami River at Milford, Ohio

LOCATION.--Lat 39°10'17", long 84°17'53", Clermont County, on right bank 500 ft downstream from Wooster Pike Bridge on U.S. Highway 50 in Milford, 1.2 miles upstream from East Fork, and 6.4 miles downstream from North Branch Creek.

DRAINAGE AREA.--1,203 sq mi.

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), March 1925 to September 1936, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Miamiville" 1915-20.

GAGE.--Water-stage recorder. Datum of gage is 499.35 ft above mean sea level, adjustment of 1912. June 22, 1915, to May 14, 1920, nonrecording gage at site 4 miles upstream at different datum. Mar. 11, 1925, to Aug. 16, 1928, nonrecording gage at bridge 500 ft upstream at datum 0.72 ft higher.

AVERAGE DISCHARGE.--47 years, (1915-17, 1925-36, 1938-72), 1,187 cfs (13.40 inches per year).

EXTREMES.--Current year: Maximum discharge, 22,000 cfs Apr. 13 (gage height, 9.13 ft); minimum, 114 cfs Sept. 2.

Period of record: Maximum discharge, 84,100 cfs Jan. 22, 1959 (gage height, 22.30 ft), from rating curve extended above 60,000 cfs on basis of slope-area measurement of peak flow; minimum observed, 27 cfs Sept. 18, 1954.

Flood in March 1913 reached a stage of 25.5 ft, present datum, from information by Corps of Engineers.

REMARKS.--Records good. Some regulation since 1948 by Cowan Lake (capacity, 12,000 acre-ft) 45 miles upstream on Cowan Creek, tributary to Todd Fork. Annual figures of runoff are considered to be within 10 percent of natural yield. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1931. WSP 743: 1932. WSP 873: 1925-36. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR     | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|---------|--------|--------|--------|-------|-------|
| 1     | 265   | 244   | 988    | 2,580  | 380    | 1,610  | 916     | 1,350  | 1,410  | 543    | 168   | 123   |
| 2     | 225   | 261   | 872    | 2,100  | 460    | 6,780  | 858     | 1,200  | 988    | 711    | 184   | 120   |
| 3     | 203   | 329   | 809    | 2,160  | 634    | 5,120  | 809     | 1,080  | 802    | 549    | 291   | 239   |
| 4     | 187   | 324   | 767    | 2,000  | 781    | 2,820  | 1,560   | 940    | 690    | 495    | 483   | 187   |
| 5     | 174   | 291   | 683    | 3,240  | 525    | 2,350  | 1,390   | 858    | 614    | 483    | 349   | 221   |
| 6     | 168   | 278   | 2,570  | 2,080  | 450    | 1,670  | 1,020   | 788    | 575    | 424    | 203   | 152   |
| 7     | 160   | 278   | 6,020  | 1,550  | 380    | 1,380  | 5,800   | 739    | 581    | 370    | 181   | 139   |
| 8     | 149   | 265   | 4,910  | 1,290  | 340    | 1,520  | 9,140   | 9,500  | 562    | 375    | 222   | 135   |
| 9     | 160   | 233   | 2,680  | 2,400  | 300    | 1,410  | 4,800   | 10,900 | 513    | 339    | 261   | 136   |
| 10    | 184   | 229   | 2,000  | 3,180  | 280    | 1,150  | 3,210   | 6,220  | 441    | 329    | 214   | 129   |
| 11    | 203   | 229   | 1,910  | 2,390  | 340    | 1,010  | 2,520   | 4,100  | 424    | 329    | 184   | 126   |
| 12    | 203   | 218   | 1,430  | 1,780  | 420    | 948    | 2,060   | 2,610  | 397    | 310    | 168   | 119   |
| 13    | 187   | 210   | 1,190  | 1,470  | 627    | 924    | 12,700  | 3,420  | 549    | 287    | 158   | 269   |
| 14    | 197   | 214   | 1,560  | 1,310  | 1,450  | 1,200  | 10,500  | 5,760  | 5,260  | 282    | 152   | 548   |
| 15    | 214   | 210   | 4,000  | 980    | 3,900  | 1,140  | 4,460   | 3,810  | 2,080  | 282    | 149   | 309   |
| 16    | 310   | 203   | 3,730  | 562    | 3,620  | 2,270  | 11,800  | 2,850  | 11,400 | 282    | 144   | 230   |
| 17    | 1,230 | 200   | 2,140  | 697    | 2,330  | 4,150  | 8,570   | 2,180  | 3,210  | 282    | 140   | 188   |
| 18    | 739   | 197   | 1,560  | 932    | 2,330  | 3,080  | 4,370   | 1,830  | 1,500  | 282    | 140   | 163   |
| 19    | 531   | 210   | 1,240  | 964    | 1,960  | 2,060  | 3,070   | 1,520  | 1,080  | 282    | 135   | 154   |
| 20    | 424   | 210   | 1,320  | 900    | 1,100  | 1,560  | 4,280   | 1,300  | 830    | 282    | 133   | 145   |
| 21    | 349   | 229   | 1,560  | 851    | 880    | 1,510  | 3,330   | 1,150  | 1,010  | 282    | 135   | 138   |
| 22    | 310   | 207   | 1,380  | 809    | 920    | 7,430  | 6,540   | 1,030  | 662    | 282    | 131   | 131   |
| 23    | 291   | 203   | 1,180  | 964    | 900    | 4,820  | 4,480   | 916    | 568    | 282    | 122   | 127   |
| 24    | 306   | 193   | 1,010  | 1,300  | 1,560  | 2,920  | 3,070   | 837    | 555    | 261    | 129   | 176   |
| 25    | 408   | 193   | 924    | 1,210  | 1,380  | 2,170  | 2,280   | 760    | 549    | 244    | 182   | 243   |
| 26    | 459   | 210   | 865    | 872    | 1,650  | 1,840  | 1,820   | 704    | 483    | 225    | 231   | 363   |
| 27    | 413   | 261   | 886    | 669    | 1,420  | 1,560  | 1,540   | 648    | 435    | 207    | 173   | 355   |
| 28    | 360   | 329   | 816    | 580    | 1,240  | 1,380  | 1,340   | 601    | 435    | 203    | 160   | 400   |
| 29    | 320   | 501   | 767    | 480    | 1,270  | 1,240  | 1,210   | 581    | 391    | 197    | 145   | 516   |
| 30    | 291   | 1,110 | 3,060  | 400    | -----  | 1,160  | 1,200   | 1,110  | 1,090  | 171    | 131   | 799   |
| 31    | 265   | ----- | 4,670  | 340    | -----  | 1,010  | -----   | 2,620  | -----  | 171    | 127   | ----- |
| TOTAL | 9,885 | 8,269 | 59,497 | 43,040 | 33,867 | 71,192 | 120,643 | 73,912 | 40,084 | 10,043 | 5,725 | 7,080 |
| MEAN  | 319   | 276   | 1,919  | 1,388  | 1,168  | 2,297  | 4,021   | 2,384  | 1,336  | 324    | 185   | 236   |
| MAX   | 1,230 | 1,110 | 6,020  | 3,240  | 3,900  | 7,430  | 12,700  | 10,900 | 11,400 | 711    | 483   | 799   |
| MIN   | 149   | 193   | 683    | 340    | 280    | 924    | 809     | 581    | 391    | 171    | 122   | 119   |
| CFSM  | .27   | .23   | 1.60   | 1.15   | .57    | 1.91   | 3.34    | 1.98   | 1.11   | .27    | .15   | .20   |
| IN.   | .31   | .26   | 1.84   | 1.33   | 1.05   | 2.20   | 3.73    | 2.29   | 1.24   | .31    | .18   | .22   |

CAL YR 1971 TOTAL 390,305 MEAN 1,069 MAX 27,400 MIN 105 CFSM .89 IN 12.07  
WTR YR 1972 TOTAL 483,237 MEAN 1,320 MAX 12,700 MIN 119 CFSM 1.10 IN 14.94

## PEAK DISCHARGE (BASE, 15,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME    | G. H. | DISCHARGE    |
|------|------|-------|-----------|------|---------|-------|--------------|
| 4-7  | 2300 | 7.92  | 17,000    | 5-8  | 1800    | 8.13  | 18,000       |
| 4-13 | 1600 | 9.13  | 22,000    | 6-16 | Unknown | -     | About 17,000 |
| 4-16 | 1600 | 8.18  | 18,200    |      |         |       |              |

03246200 East Fork Little Miami River near Marathon, Ohio

LOCATION.--Lat 39°06'52", long 84°01'29", Clermont County, on right bank at downstream side of bridge on Blue Sky Park Road, 500 ft upstream from Fivemile Creek, 1.0 mile downstream from Sixmile Creek, and 2.3 miles southwest of Marathon.

DRAINAGE AREA.--195 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 842.32 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 8,290 cfs June 16 (gage height, 16.35 ft); minimum, 2.2 cfs Sept. 9, 10.

Period of record: Maximum discharge, 11,400 cfs Apr. 2, 1970 (gage height, 18.57 ft in gage well, about 19.8 ft outside); minimum, 0.50 cfs Oct. 15, 16, 17, 1969.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV   | DEC      | JAN       | FEB     | MAR       | APR      | MAY   | JUN    | JUL     | AUG   | SEP   |
|-------------|----------------|-------|----------|-----------|---------|-----------|----------|-------|--------|---------|-------|-------|
| 1           | 58             | 20    | 178      | 290       | 50      | 371       | 81       | 72    | 240    | 156     | 7.8   | 5.9   |
| 2           | 47             | 18    | 90       | 335       | 46      | 2,460     | 78       | 73    | 129    | 81      | 6.9   | 4.6   |
| 3           | 40             | 20    | 62       | 398       | 60      | 1,270     | 73       | 75    | 84     | 79      | 9.8   | 3.9   |
| 4           | 35             | 20    | 49       | 365       | 110     | 383       | 1,060    | 70    | 60     | 144     | 190   | 4.0   |
| 5           | 31             | 26    | 45       | 1,130     | 90      | 371       | 395      | 53    | 47     | 87      | 253   | 3.7   |
| 6           | 27             | 26    | 1,950    | 333       | 80      | 208       | 194      | 43    | 38     | 54      | 90    | 3.1   |
| 7           | 24             | 24    | 3,240    | 194       | 70      | 155       | 1,630    | 38    | 34     | 39      | 39    | 2.8   |
| 8           | 21             | 23    | 1,110    | 158       | 60      | 234       | 1,740    | 550   | 32     | 31      | 23    | 2.4   |
| 9           | 22             | 23    | 401      | 410       | 52      | 200       | 546      | 1,230 | 29     | 26      | 17    | 2.2   |
| 10          | 23             | 25    | 290      | 800       | 48      | 129       | 280      | 419   | 24     | 22      | 12    | 2.3   |
| 11          | 22             | 24    | 341      | 400       | 44      | 106       | 208      | 194   | 22     | 20      | 9.3   | 2.6   |
| 12          | 27             | 24    | 216      | 240       | 42      | 100       | 173      | 124   | 20     | 19      | 8.3   | 2.6   |
| 13          | 26             | 24    | 162      | 180       | 75      | 106       | 1,860    | 236   | 18     | 18      | 7.3   | 2.5   |
| 14          | 24             | 24    | 240      | 130       | 328     | 216       | 1,130    | 1,130 | 965    | 16      | 6.5   | 2.5   |
| 15          | 23             | 22    | 865      | 100       | 1,550   | 165       | 359      | 1,540 | 612    | 15      | 6.1   | 30    |
| 16          | 38             | 21    | 696      | 74        | 1,230   | 365       | 2,670    | 776   | 6,200  | 15      | 5.7   | 19    |
| 17          | 172            | 21    | 258      | 64        | 550     | 1,100     | 1,140    | 278   | 760    | 19      | 5.0   | 11    |
| 18          | 79             | 19    | 174      | 58        | 648     | 469       | 275      | 178   | 200    | 18      | 4.7   | 7.3   |
| 19          | 45             | 21    | 128      | 64        | 401     | 222       | 198      | 131   | 135    | 20      | 4.4   | 5.5   |
| 20          | 35             | 24    | 212      | 72        | 178     | 153       | 1,030    | 97    | 102    | 19      | 3.2   | 4.5   |
| 21          | 28             | 36    | 320      | 79        | 144     | 268       | 760      | 76    | 82     | 20      | 3.8   | 3.5   |
| 22          | 24             | 37    | 198      | 89        | 194     | 2,680     | 1,800    | 64    | 69     | 30      | 4.7   | 2.9   |
| 23          | 23             | 30    | 140      | 160       | 167     | 720       | 422      | 53    | 60     | 19      | 4.1   | 2.7   |
| 24          | 27             | 26    | 121      | 532       | 895     | 288       | 251      | 44    | 53     | 14      | 5.6   | 3.6   |
| 25          | 82             | 22    | 113      | 431       | 473     | 214       | 169      | 38    | 50     | 13      | 6.9   | 7.0   |
| 26          | 76             | 27    | 105      | 194       | 940     | 165       | 122      | 33    | 46     | 9.8     | 6.1   | 12    |
| 27          | 48             | 31    | 105      | 113       | 401     | 135       | 95       | 29    | 41     | 9.8     | 6.5   | 23    |
| 28          | 37             | 41    | 129      | 90        | 310     | 121       | 78       | 26    | 36     | 9.8     | 12    | 122   |
| 29          | 30             | 134   | 171      | 74        | 338     | 105       | 66       | 24    | 32     | 14      | 12    | 101   |
| 30          | 25             | 423   | 1,930    | 64        | -----   | 113       | 66       | 341   | 202    | 11      | 12    | 181   |
| 31          | 21             | ----- | 1,670    | 56        | -----   | 98        | -----    | 1,130 | -----  | 9.3     | 8.2   | ----- |
| TOTAL       | 1,240          | 1,256 | 15,709   | 7,677     | 9,574   | 13,690    | 18,949   | 9,165 | 10,422 | 1,057.7 | 790.9 | 581.1 |
| MEAN        | 40.0           | 41.9  | 507      | 248       | 330     | 442       | 632      | 296   | 347    | 34.1    | 25.5  | 19.4  |
| MAX         | 172            | 423   | 3,240    | 1,130     | 1,550   | 2,680     | 2,670    | 1,540 | 6,200  | 156     | 253   | 181   |
| MIN         | 21             | 18    | 45       | 56        | 42      | 98        | 66       | 24    | 18     | 9.3     | 3.2   | 2.2   |
| CFSM        | .21            | .21   | 2.60     | 1.27      | 1.69    | 2.27      | 3.24     | 1.52  | 1.78   | .17     | .13   | .10   |
| IN.         | .24            | .24   | 3.00     | 1.46      | 1.83    | 2.61      | 3.61     | 1.75  | 1.99   | .20     | .15   | .11   |
| CAL YR 1971 | TOTAL 87,672.6 |       | MEAN 240 | MAX 7,740 | MIN 9.6 | CFSM 1.23 | IN 16.73 |       |        |         |       |       |
| WTR YR 1972 | TOTAL 90,111.7 |       | MEAN 246 | MAX 6,200 | MIN 2.2 | CFSM 1.26 | IN 17.19 |       |        |         |       |       |

## PEAK DISCHARGE (BASE, 3,000 CFS REVISED)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12- 6 | 2230 | 12.58 | 4,140     | 4- 7 | 2030 | 12.17 | 3,820     |
| 12-30 | 2200 | 12.27 | 3,900     | 4-13 | 2230 | 12.04 | 3,710     |
| 3- 2  | 2030 | 11.30 | 3,120     | 4-16 | 2100 | 12.46 | 4,050     |
| 3-22  | 1130 | 11.95 | 3,640     | 6-16 | 1800 | 16.35 | 8,290     |

## LITTLE MIAMI RIVER BASIN

03246500 East Fork Little Miami River at Williamsburg, Ohio

LOCATION.--Lat 39°03'09", long 84°03'02", Clermont County, on right bank at downstream side of Main Street Bridge in Williamsburg, 1.1 miles upstream from Todd Run, and 2.4 miles downstream from Crane Run.

DRAINAGE AREA.--237 sq mi.

PERIOD OF RECORD.--March 1949 to September 1953, July 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 784.09 ft above mean sea level.

AVERAGE DISCHARGE.--16 years, 258 cfs (14.78 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,200 cfs June 16 (gage height, 11.16 ft); minimum, 1.0 cfs Aug. 22.

Period of record: Maximum discharge, 19,800 cfs Mar. 10, 1964 (gage height, 15.23 ft), from rating curve extended above 14,000 cfs on basis of contracted-opening measurement of peak flow; no flow for many days in 1951, 1953, 1963-65.

Flood in January 1959 reached a stage of 12.2 ft, from information by local resident (discharge, 14,000 cfs).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT             | NOV      | DEC       | JAN     | FEB       | MAR      | APR    | MAY    | JUN    | JUL     | AUG   | SEP   |
|-------------|-----------------|----------|-----------|---------|-----------|----------|--------|--------|--------|---------|-------|-------|
| 1           | 62              | 21       | 247       | 402     | 64        | 420      | 98     | 87     | 298    | 187     | 5.4   | 7.9   |
| 2           | 49              | 22       | 122       | 398     | 60        | 3,320    | 93     | 89     | 129    | 87      | 4.4   | 6.1   |
| 3           | 42              | 20       | 87        | 555     | 72        | 2,020    | 91     | 91     | 93     | 66      | 4.1   | 8.1   |
| 4           | 37              | 20       | 73        | 475     | 145       | 545      | 1,260  | 87     | 73     | 117     | 70    | 5.9   |
| 5           | 33              | 21       | 69        | 1,560   | 162       | 500      | 615    | 73     | 61     | 91      | 348   | 3.5   |
| 6           | 30              | 28       | 2,710     | 495     | 111       | 270      | 233    | 64     | 57     | 54      | 89    | 3.1   |
| 7           | 27              | 28       | 4,860     | 236     | 88        | 174      | 1,990  | 59     | 49     | 41      | 41    | 2.6   |
| 8           | 24              | 26       | 1,680     | 184     | 74        | 243      | 2,640  | 438    | 47     | 33      | 23    | 2.3   |
| 9           | 24              | 25       | 575       | 485     | 64        | 250      | 742    | 1,800  | 45     | 28      | 15    | 2.1   |
| 10          | 24              | 26       | 371       | 1,240   | 58        | 147      | 348    | 632    | 38     | 23      | 9.9   | 1.7   |
| 11          | 23              | 28       | 434       | 575     | 56        | 120      | 243    | 243    | 35     | 23      | 6.7   | 1.5   |
| 12          | 22              | 28       | 278       | 314     | 54        | 113      | 208    | 142    | 33     | 22      | 4.7   | 1.7   |
| 13          | 26              | 28       | 187       | 220     | 90        | 117      | 1,860  | 233    | 109    | 17      | 4.1   | 1.7   |
| 14          | 26              | 28       | 229       | 190     | 407       | 258      | 1,900  | 1,640  | 1,170  | 15      | 3.7   | 1.9   |
| 15          | 23              | 27       | 1,080     | 120     | 1,830     | 205      | 490    | 2,040  | 2,280  | 14      | 3.0   | 1.9   |
| 16          | 24              | 25       | 954       | 90      | 1,790     | 605      | 3,300  | 1,180  | 7,320  | 15      | 2.8   | 27    |
| 17          | 122             | 24       | 344       | 78      | 775       | 1,560    | 1,960  | 398    | 461    | 15      | 2.4   | 22    |
| 18          | 93              | 23       | 208       | 70      | 870       | 725      | 375    | 212    | 191    | 17      | 2.2   | 15    |
| 19          | 51              | 25       | 147       | 80      | 555       | 278      | 222    | 153    | 122    | 17      | 2.0   | 9.3   |
| 20          | 38              | 28       | 254       | 91      | 236       | 174      | 1,310  | 113    | 93     | 17      | 2.4   | 6.8   |
| 21          | 31              | 34       | 411       | 94      | 162       | 366      | 1,080  | 94     | 76     | 15      | 2.2   | 4.4   |
| 22          | 27              | 41       | 247       | 102     | 229       | 3,680    | 2,470  | 81     | 62     | 20      | 1.3   | 3.5   |
| 23          | 24              | 36       | 159       | 162     | 212       | 1,080    | 643    | 72     | 52     | 20      | 1.6   | 3.9   |
| 24          | 27              | 32       | 132       | 621     | 1,240     | 384      | 326    | 63     | 46     | 16      | 2.7   | 38    |
| 25          | 47              | 28       | 124       | 555     | 720       | 250      | 198    | 56     | 40     | 16      | 4.3   | 66    |
| 26          | 80              | 27       | 115       | 270     | 1,310     | 191      | 142    | 51     | 36     | 8.8     | 6.7   | 21    |
| 27          | 52              | 34       | 113       | 120     | 585       | 150      | 113    | 46     | 34     | 7.2     | 5.8   | 124   |
| 28          | 38              | 43       | 137       | 100     | 375       | 134      | 96     | 41     | 32     | 6.3     | 5.1   | 100   |
| 29          | 32              | 147      | 194       | 86      | 398       | 120      | 85     | 43     | 36     | 5.4     | 11    | 140   |
| 30          | 28              | 540      | 2,240     | 76      | -----     | 120      | 85     | 429    | 100    | 8.2     | 11    | 286   |
| 31          | 24              | -----    | 2,410     | 70      | -----     | 115      | -----  | 1,700  | -----  | 6.7     | 11    | ----- |
| TOTAL       | 1,210           | 1,463    | 21,191    | 10,114  | 12,792    | 18,634   | 25,216 | 12,450 | 13,218 | 1,028.6 | 706.5 | 918.9 |
| MEAN        | 39.0            | 48.8     | 684       | 326     | 441       | 601      | 841    | 402    | 441    | 33.2    | 22.8  | 30.6  |
| MAX         | 122             | 540      | 4,860     | 1,560   | 1,830     | 3,680    | 3,300  | 2,040  | 7,320  | 187     | 348   | 286   |
| MIN         | 22              | 20       | 69        | 70      | 54        | 113      | 85     | 41     | 32     | 5.4     | 1.3   | 1.5   |
| CFSM        | .16             | .21      | 2.89      | 1.38    | 1.86      | 2.54     | 3.55   | 1.70   | 1.86   | .14     | .10   | .13   |
| IN.         | .19             | .23      | 3.33      | 1.59    | 2.01      | 2.92     | 3.96   | 1.95   | 2.07   | .16     | .11   | .14   |
| CAL YR 1971 | TOTAL 107,763.5 | MEAN 295 | MAX 9,170 | MIN 2.4 | CFSM 1.24 | IN 16.91 |        |        |        |         |       |       |
| WTR YR 1972 | TOTAL 118,942.0 | MEAN 325 | MAX 7,320 | MIN 1.3 | CFSM 1.37 | IN 18.67 |        |        |        |         |       |       |

## PEAK DISCHARGE (BASE, 4,500 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-6  | 2300 | 8.30  | 5,850     | 4-14 | 0100 | 7.38  | 4,610     |
| 12-31 | 0300 | 7.55  | 4,830     | 4-16 | 1800 | 7.82  | 5,210     |
| 3-22  | 1200 | 7.57  | 4,860     | 6-16 | 1230 | 11.16 | 11,200    |
| 4-7   | 2130 | 8.20  | 5,740     |      |      |       |           |



03247050 East Fork Little Miami River near Batavia, Ohio

LOCATION.--Lat 39°03'36", long 84°10'32", Clermont County, on right bank on Elk Lick Road, 230 ft upstream from unnamed right bank tributary, 1,400 ft upstream from Lucy Run, and 1.3 miles south of Batavia.

DRAINAGE AREA.--352 sq mi, includes that of unnamed tributary.

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

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft above mean sea level. Prior to July 17, 1968, non-recording gage 1,100 ft downstream at same datum.

AVERAGE DISCHARGE.--7 years, 345 cfs (13.31 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,700 cfs Apr. 7 (gage height, 15.29 ft); minimum, 1.3 cfs Sept. 17, 18.

Period of record: Maximum discharge, 28,700 cfs Apr. 2, 1970 (gage height 20.31 ft); minimum, 0.14 cfs Sept. 23, 27, 1967.

Flood of March 1964 reached a stage of 21.46 ft, from information by local resident (discharge, about 32,000 cfs, from flood study).

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL     | AUG     | SEP     |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 1     | 90    | 29    | 358    | 634    | 94     | 532    | 151    | 131    | 571    | 275     | 8.1     | 8.7     |
| 2     | 69    | 26    | 158    | 508    | 100    | 4,220  | 137    | 131    | 256    | 203     | 8.1     | 8.7     |
| 3     | 58    | 25    | 100    | 725    | 110    | 2,810  | 134    | 128    | 161    | 131     | 7.5     | 6.6     |
| 4     | 49    | 22    | 77     | 627    | 200    | 872    | 1,270  | 122    | 119    | 122     | 49      | 5.7     |
| 5     | 43    | 21    | 69     | 2,030  | 170    | 753    | 1,020  | 113    | 95     | 199     | 322     | 6.1     |
| 6     | 37    | 23    | 3,670  | 824    | 140    | 484    | 388    | 98     | 85     | 119     | 300     | 5.7     |
| 7     | 34    | 37    | 6,860  | 406    | 120    | 305    | 3,400  | 85     | 83     | 79      | 137     | 4.1     |
| 8     | 28    | 37    | 2,410  | 290    | 100    | 328    | 3,940  | 290    | 67     | 60      | 73      | 3.2     |
| 9     | 26    | 32    | 824    | 599    | 90     | 388    | 920    | 1,860  | 60     | 48      | 48      | 2.8     |
| 10    | 31    | 31    | 526    | 1,470  | 84     | 247    | 526    | 808    | 60     | 41      | 29      | 2.5     |
| 11    | 32    | 32    | 532    | 808    | 78     | 191    | 382    | 388    | 51     | 35      | 19      | 2.3     |
| 12    | 28    | 34    | 436    | 496    | 72     | 172    | 358    | 229    | 43     | 31      | 14      | 2.2     |
| 13    | 25    | 34    | 285    | 346    | 140    | 187    | 1,760  | 364    | 41     | 32      | 10      | 2.0     |
| 14    | 29    | 32    | 242    | 280    | 700    | 412    | 2,390  | 1,600  | 550    | 25      | 7.0     | 1.8     |
| 15    | 32    | 34    | 864    | 170    | 2,110  | 358    | 760    | 2,170  | 538    | 22      | 5.7     | 1.8     |
| 16    | 31    | 32    | 1,130  | 130    | 2,070  | 1,240  | 4,580  | 1,590  | 4,800  | 26      | 4.8     | 1.6     |
| 17    | 28    | 29    | 538    | 110    | 904    | 2,030  | 2,600  | 557    | 3,210  | 38      | 4.1     | 1.3     |
| 18    | 168   | 28    | 316    | 110    | 1,000  | 1,100  | 599    | 316    | 418    | 34      | 3.5     | 2.9     |
| 19    | 88    | 31    | 224    | 120    | 753    | 484    | 364    | 211    | 247    | 29      | 3.4     | 19      |
| 20    | 60    | 37    | 370    | 130    | 360    | 300    | 1,390  | 158    | 172    | 25      | 3.1     | 11      |
| 21    | 46    | 40    | 571    | 158    | 230    | 418    | 1,400  | 128    | 134    | 21      | 2.6     | 7.5     |
| 22    | 40    | 46    | 412    | 165    | 260    | 4,850  | 3,180  | 110    | 110    | 21      | 2.5     | 5.1     |
| 23    | 34    | 56    | 265    | 242    | 300    | 1,610  | 952    | 98     | 93     | 18      | 2.6     | 3.9     |
| 24    | 35    | 49    | 203    | 676    | 1,920  | 599    | 490    | 85     | 85     | 32      | 3.2     | 18      |
| 25    | 38    | 44    | 179    | 725    | 1,160  | 388    | 322    | 79     | 73     | 25      | 4.1     | 502     |
| 26    | 85    | 38    | 168    | 466    | 1,910  | 300    | 233    | 71     | 67     | 25      | 5.7     | 179     |
| 27    | 90    | 38    | 161    | 224    | 904    | 238    | 179    | 63     | 63     | 20      | 17      | 310     |
| 28    | 63    | 53    | 191    | 165    | 508    | 203    | 151    | 58     | 58     | 12      | 14      | 436     |
| 29    | 49    | 100   | 285    | 130    | 484    | 187    | 134    | 58     | 53     | 9.3     | 7.0     | 247     |
| 30    | 41    | 532   | 1,730  | 110    | -----  | 175    | 131    | 224    | 58     | 7.0     | 4.8     | 1,020   |
| 31    | 34    | ----- | 3,160  | 94     | -----  | 172    | -----  | 2,100  | -----  | 6.1     | 5.7     | -----   |
| TOTAL | 1,541 | 1,602 | 27,314 | 13,968 | 17,071 | 26,553 | 34,241 | 14,423 | 12,421 | 1,770.4 | 1,125.5 | 2,828.5 |
| MEAN  | 49.7  | 53.4  | 881    | 451    | 589    | 857    | 1,141  | 465    | 414    | 57.1    | 36.3    | 94.3    |
| MAX   | 168   | 532   | 6,860  | 2,030  | 2,110  | 4,850  | 4,580  | 2,170  | 4,800  | 275     | 322     | 1,020   |
| MIN   | 25    | 21    | 69     | 94     | 72     | 172    | 131    | 58     | 41     | 6.1     | 2.5     | 1.3     |
| CFSM  | .14   | .15   | 2.50   | 1.28   | 1.67   | 2.43   | 3.24   | 1.32   | 1.18   | .16     | .10     | .27     |
| IN.   | .16   | .17   | 2.89   | 1.48   | 1.80   | 2.81   | 3.62   | 1.52   | 1.31   | .19     | .12     | .30     |

CAL YR 1971 TOTAL 143,630.1 MEAN 394 MAX 13,600 MIN 1.6 CFSM 1.12 IN 15.18  
WTR YR 1972 TOTAL 154,858.4 MEAN 423 MAX 6,860 MIN 1.3 CFSM 1.20 IN 16.37

## PEAK DISCHARGE (BASE, 7,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 12-7 | 1030 | 14.13 | 8,680     | 4-16 | 1130 | 13.68 | 7,760     |
| 4-7  | 2100 | 15.29 | 11,700    | 6-17 | 0131 | 14.35 | 9,220     |

## LITTLE MIAMI RIVER BASIN

03247400 Shaylor Run near Perintown, Ohio

LOCATION.--Lat 39°06'46", long 84°13'24", Clermont County, on left bank 0.7 mile upstream from Norfolk and Western railroad bridge, 1.9 miles southeast of Perintown, and 2.2 miles upstream from mouth.

DRAINAGE AREA.--11.8 sq mi.

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

GAGE.--Water-stage recorder and V-notch weir. Altitude of gage is 575 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 678 cfs Dec. 30, Apr. 7 (gage height, 4.67 ft); from rating curve extended above 240 cfs on basis of slope-area measurement at gage height 6.6 ft; minimum, 0.42 cfs Aug. 23, Sept. 2, 18, 21, 22.

Period of record: Maximum discharge, 2,400 cfs Apr. 2, 1970 (gage height, 7.40 ft), from rating curve extended above 240 cfs on basis of slope-area measurement at gage height 6.6 ft; minimum daily discharge, 0.36 cfs Sept. 22, 1969.

REMARKS.--Records good. Records include discharge from sewage treatment plant 2.8 miles upstream from station. Plant discharge includes about 0.4 mgd of water imported into basin from wells near the Ohio River. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 2108: 1968, 1969.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR     | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------|------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|--------|
| 1     | 3.8  | 1.7   | 8.8   | 17    | 3.2   | 47    | 6.3     | 5.5   | 5.8   | 1.6   | .75   | .72    |
| 2     | 3.0  | 1.8   | 5.8   | 35    | 4.2   | 138   | 5.8     | 5.5   | 4.3   | 4.0   | .72   | .69    |
| 3     | 2.5  | 1.8   | 4.1   | 19    | 13    | 54    | 5.8     | 5.1   | 3.4   | 4.0   | 1.1   | .94    |
| 4     | 2.5  | 1.6   | 3.8   | 54    | 7.5   | 28    | 57      | 4.4   | 2.6   | 2.4   | 6.7   | .75    |
| 5     | 2.3  | 1.6   | 3.6   | 57    | 5.6   | 25    | 18      | 3.9   | 2.3   | 1.9   | 2.2   | .78    |
| 6     | 2.1  | 1.7   | 121   | 20    | 4.4   | 14    | 12      | 3.6   | 2.6   | 1.6   | 1.4   | .72    |
| 7     | 1.9  | 2.5   | 121   | 11    | 3.8   | 13    | 173     | 3.2   | 2.2   | 1.4   | 1.2   | .72    |
| 8     | 1.9  | 2.3   | 45    | 8.5   | 3.2   | 16    | 67      | 97    | 1.5   | 1.2   | 1.0   | .78    |
| 9     | 3.2  | 2.2   | 24    | 53    | 2.8   | 10    | 23      | 74    | 1.4   | 1.1   | .92   | .75    |
| 10    | 3.0  | 3.0   | 20    | 34    | 2.6   | 9.0   | 15      | 21    | 1.4   | 1.1   | .84   | .72    |
| 11    | 2.5  | 2.9   | 22    | 18    | 2.4   | 7.9   | 12      | 12    | 1.1   | 1.3   | .81   | .72    |
| 12    | 2.1  | 2.8   | 12    | 11    | 3.8   | 7.9   | 17      | 7.9   | 1.0   | 1.2   | .84   | .75    |
| 13    | 2.0  | 2.8   | 11    | 7.5   | 20    | 18    | 84      | 82    | 1.0   | 1.0   | .78   | .69    |
| 14    | 2.3  | 2.7   | 20    | 5.2   | 74    | 32    | 26      | 73    | 1.0   | 1.0   | .75   | .75    |
| 15    | 2.0  | 2.7   | 48    | 4.3   | 78    | 16    | 47      | 118   | 72    | 1.0   | .78   | .69    |
| 16    | 2.3  | 2.5   | 30    | 3.7   | 28    | 61    | 182     | 57    | 45    | 1.3   | .72   | .69    |
| 17    | 2.5  | 2.3   | 16    | 4.2   | 21    | 87    | 40      | 28    | 8.9   | 1.9   | .72   | .66    |
| 18    | 2.1  | 1.9   | 10    | 4.8   | 24    | 32    | 18      | 47    | 5.5   | 1.4   | .72   | .66    |
| 19    | 2.0  | 2.7   | 9.2   | 5.4   | 14    | 18    | 20      | 16    | 4.3   | 1.1   | .72   | .69    |
| 20    | 1.7  | 2.8   | 35    | 6.7   | 9.6   | 14    | 74      | 10    | 3.0   | 1.0   | .72   | .60    |
| 21    | 1.7  | 2.5   | 20    | 9.0   | 10    | 43    | 59      | 7.0   | 2.6   | 1.0   | .63   | .54    |
| 22    | 1.8  | 2.2   | 12    | 7.9   | 16    | 115   | 83      | 6.0   | 2.3   | .88   | .69   | .63    |
| 23    | 1.8  | 1.9   | 10    | 9.0   | 20    | 37    | 24      | 4.9   | 2.0   | .78   | .66   | .63    |
| 24    | 3.6  | 1.9   | 9.8   | 13    | 80    | 20    | 15      | 4.2   | 2.1   | 1.8   | 1.0   | 24     |
| 25    | 4.0  | 1.9   | 8.6   | 13    | 37    | 14    | 11      | 3.5   | 1.8   | 2.0   | .81   | 14     |
| 26    | 2.7  | 1.8   | 8.1   | 6.1   | 73    | 10    | 8.4     | 3.0   | 1.8   | 1.2   | 1.0   | 12     |
| 27    | 2.5  | 3.4   | 8.1   | 5.2   | 23    | 9.0   | 7.0     | 2.4   | 1.6   | 1.2   | .84   | 7.0    |
| 28    | 2.2  | 3.8   | 8.6   | 4.4   | 17    | 7.9   | 6.3     | 2.0   | 1.6   | 1.0   | .81   | 4.9    |
| 29    | 2.1  | 25    | 8.6   | 3.8   | 14    | 8.4   | 5.8     | 2.8   | 2.4   | .88   | .78   | 11     |
| 30    | 2.0  | 16    | 172   | 3.2   | ----- | 7.9   | 6.0     | 29    | 2.5   | .81   | .69   | 42     |
| 31    | 1.9  | ----- | 39    | 2.8   | ----- | 7.0   | -----   | 12    | ----- | .78   | .63   | -----  |
| TOTAL | 74.0 | 106.7 | 875.1 | 456.7 | 615.1 | 927.0 | 1,128.4 | 750.9 | 191.0 | 44.83 | 32.93 | 131.17 |
| MEAN  | 2.39 | 3.56  | 28.2  | 14.7  | 21.2  | 29.9  | 37.6    | 24.2  | 6.37  | 1.45  | 1.06  | 4.37   |
| MAX   | 4.0  | 25    | 172   | 57    | 80    | 138   | 182     | 118   | 72    | 4.0   | 6.7   | 42     |
| MIN   | 1.7  | 1.6   | 3.6   | 2.8   | 2.4   | 7.0   | 5.8     | 2.0   | 1.0   | .78   | .63   | .54    |
| CFSM  | .20  | .30   | 2.39  | 1.25  | 1.80  | 2.53  | 3.19    | 2.05  | .54   | .12   | .09   | .37    |
| IN.   | .23  | .34   | 2.76  | 1.44  | 1.94  | 2.92  | 3.56    | 2.37  | .60   | .14   | .10   | .41    |

CAL YR 1971 TOTAL 4,756.93 MEAN 13.0 MAX 239 MIN .71 CFSM 1.10 IN 15.00  
WTR YR 1972 TOTAL 5,333.83 MEAN 14.6 MAX 182 MIN .54 CFSM 1.24 IN 16.82

## PEAK DISCHARGE (BASE, 250 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 1200 | 4.67  | 678       | 5-13 | 1500 | 3.10  | 278       |
| 4-7   | 1700 | 4.67  | 678       | 5-14 | 2330 | 3.20  | 292       |
| 4-16  | 0745 | 4.63  | 662       | 6-15 | 1900 | 3.85  | 412       |

03247500 East Fork Little Miami River at Perintown, Ohio

LOCATION.--Lat 39°08'13", long 84°14'17", Clermont County, on left bank at downstream side of highway bridge at Perintown, 0.2 miles downstream from Sugarcamp Run, and 5 miles upstream from mouth.

DRAINAGE AREA.--476 sq mi.

PERIOD OF RECORD.--May 1915 to September 1917, October 1917 to May 1920 (gage heights only), January 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.03 ft above mean sea level. Prior to Feb. 6, 1940, non-recording gage, at same site and datum.

AVERAGE DISCHARGE.--49 years (1915-17, 1925-72), 531 cfs (15.15 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,300 cfs Apr. 7 (gage height, 14.99 ft); minimum, 5.9 cfs Sept. 19.

Period of record: Maximum discharge, 42,400 cfs Mar. 10, 1964 (gage height, 23.84 ft); minimum, 0.3 cfs July 24, 1930; minimum gage height, -0.18 ft Oct. 3-7, 1917.

REMARKS.--Records good. Occasional regulation by Stonelick Lake on Stonelick Creek 14 miles upstream. Surface area at spillway level, 171 acres. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1938. WSP 973: 1933(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT             | NOV      | DEC        | JAN     | FEB       | MAR      | APR    | MAY    | JUN    | JUL   | AUG   | SEP     |
|-------------|-----------------|----------|------------|---------|-----------|----------|--------|--------|--------|-------|-------|---------|
| 1           | 140             | 46       | 565        | 915     | 110       | 868      | 201    | 183    | 849    | 230   | 14    | 11      |
| 2           | 107             | 44       | 254        | 700     | 120       | 5,590    | 182    | 181    | 328    | 224   | 15    | 14      |
| 3           | 87              | 43       | 158        | 980     | 183       | 3,970    | 176    | 172    | 200    | 156   | 17    | 16      |
| 4           | 74              | 42       | 124        | 945     | 273       | 1,330    | 1,800  | 162    | 144    | 126   | 403   | 15      |
| 5           | 65              | 41       | 109        | 2,860   | 220       | 1,100    | 1,530  | 147    | 113    | 155   | 277   | 13      |
| 6           | 57              | 42       | 4,250      | 1,240   | 170       | 682      | 537    | 129    | 101    | 123   | 297   | 12      |
| 7           | 51              | 46       | 8,550      | 547     | 150       | 421      | 3,960  | 113    | 100    | 76    | 133   | 12      |
| 8           | 47              | 50       | 3,450      | 379     | 130       | 454      | 5,710  | 1,310  | 79     | 55    | 71    | 11      |
| 9           | 51              | 48       | 1,210      | 962     | 120       | 504      | 1,450  | 2,770  | 69     | 45    | 44    | 9.8     |
| 10          | 54              | 47       | 725        | 2,140   | 110       | 336      | 778    | 1,170  | 66     | 40    | 32    | 8.7     |
| 11          | 50              | 46       | 745        | 1,170   | 100       | 256      | 529    | 530    | 59     | 38    | 25    | 8.1     |
| 12          | 46              | 46       | 579        | 664     | 96        | 228      | 461    | 298    | 52     | 35    | 22    | 8.0     |
| 13          | 43              | 47       | 358        | 440     | 285       | 254      | 2,420  | 866    | 48     | 30    | 19    | 7.5     |
| 14          | 45              | 46       | 386        | 320     | 1,150     | 696      | 3,250  | 2,370  | 400    | 28    | 17    | 7.3     |
| 15          | 47              | 46       | 1,270      | 220     | 3,150     | 521      | 1,160  | 3,210  | 1,190  | 26    | 16    | 7.1     |
| 16          | 53              | 45       | 1,630      | 160     | 2,650     | 1,720    | 6,310  | 2,480  | 4,710  | 25    | 13    | 6.7     |
| 17          | 69              | 43       | 745        | 120     | 1,320     | 3,110    | 3,640  | 926    | 4,070  | 35    | 13    | 6.3     |
| 18          | 150             | 41       | 397        | 130     | 1,470     | 1,710    | 893    | 700    | 477    | 32    | 12    | 6.2     |
| 19          | 123             | 45       | 279        | 140     | 1,090     | 699      | 571    | 352    | 255    | 30    | 10    | 6.2     |
| 20          | 81              | 51       | 444        | 160     | 500       | 417      | 2,440  | 256    | 173    | 25    | 10    | 13      |
| 21          | 63              | 57       | 740        | 204     | 300       | 512      | 2,220  | 202    | 140    | 23    | 11    | 13      |
| 22          | 55              | 58       | 520        | 211     | 350       | 6,340    | 4,340  | 167    | 113    | 23    | 12    | 11      |
| 23          | 49              | 62       | 321        | 297     | 400       | 2,470    | 1,490  | 142    | 89     | 21    | 10    | 10      |
| 24          | 52              | 62       | 248        | 840     | 2,630     | 890      | 687    | 123    | 81     | 27    | 17    | 79      |
| 25          | 73              | 57       | 216        | 1,070   | 1,740     | 533      | 439    | 105    | 71     | 40    | 16    | 469     |
| 26          | 85              | 52       | 202        | 615     | 2,710     | 401      | 318    | 91     | 62     | 26    | 17    | 214     |
| 27          | 121             | 56       | 190        | 291     | 1,370     | 316      | 256    | 79     | 56     | 24    | 25    | 125     |
| 28          | 88              | 72       | 209        | 216     | 715       | 270      | 216    | 71     | 52     | 21    | 20    | 491     |
| 29          | 69              | 226      | 312        | 150     | 642       | 251      | 191    | 67     | 55     | 18    | 19    | 218     |
| 30          | 58              | 774      | 2,900      | 120     | -----     | 235      | 185    | 276    | 142    | 16    | 14    | 1,170   |
| 31          | 51              | -----    | 4,250      | 110     | -----     | 223      | -----  | 2,560  | -----  | 15    | 12    | -----   |
| TOTAL       | 2,204           | 2,381    | 36,336     | 19,316  | 24,254    | 37,307   | 48,340 | 22,208 | 14,344 | 1,788 | 1,633 | 2,598.6 |
| MEAN        | 71.1            | 79.4     | 1,172      | 623     | 836       | 1,203    | 1,611  | 716    | 478    | 57.7  | 52.7  | 100     |
| MAX         | 150             | 774      | 8,550      | 2,860   | 3,150     | 6,340    | 6,310  | 3,210  | 4,710  | 230   | 403   | 1,170   |
| MIN         | 43              | 41       | 109        | 110     | 96        | 223      | 176    | 67     | 48     | 15    | 10    | 6.2     |
| CFSM        | .15             | .17      | 2.46       | 1.31    | 1.76      | 2.53     | 3.38   | 1.50   | 1.00   | .12   | .11   | .21     |
| IN.         | .17             | .19      | 2.84       | 1.51    | 1.90      | 2.92     | 3.78   | 1.74   | 1.12   | .14   | .13   | .23     |
| CAL YR 1971 | TOTAL 196,842.0 | MEAN 539 | MAX 18,700 | MIN 14  | CFSM 1.13 | IN 15.38 |        |        |        |       |       |         |
| WTR YR 1972 | TOTAL 213,109.9 | MEAN 582 | MAX 8,550  | MIN 6.2 | CFSM 1.22 | IN 16.65 |        |        |        |       |       |         |

## PEAK DISCHARGE (BASE, 10,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 12-7 | 1300 | 13.45 | 10,200    | 4-16 | 1400 | 13.29 | 10,000    |
| 4-7  | 2330 | 14.99 | 12,300    |      |      |       |           |

## MILL CREEK BASIN

03255500 Mill Creek at Reading, Ohio

LOCATION.--Lat 39°13'14", long 84°26'49", in sec.32, R.1, T.4, Hamilton County, on right bank at upstream side of Koehler Street Bridge at Reading, 1.0 mile upstream from West Fork Mill Creek, and 13.0 miles upstream from mouth.

DRAINAGE AREA.--73.0 sq mi.

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft above mean sea level, Ohio River datum. Prior to Oct. 1, 1951, water-stage recorder or nonrecording gage at same site at datum 4.00 ft higher. Oct. 1, 1951, to Apr. 25, 1954, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum discharge, 2,460 cfs May 8 (gage height, 11.87 ft); minimum, 7.4 cfs Nov. 26. Period of record: Maximum discharge, 5,780 cfs Mar. 6, 1945 (gage height, 20.00 ft present datum); no flow for days in 1940-41, 1944, 1951.

REMARKS.--Records fair. Some diversion and ground water pumpage from Mill Creek and Great Miami River basin by industrial plants of the greater Cincinnati area upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 23    | 11    | 22    | 45    | 15    | 87    | 35    | 68    | 32    | 19    | 11    | 23    |
| 2     | 16    | 26    | 18    | 81    | 19    | 526   | 32    | 65    | 24    | 13    | 36    | 11    |
| 3     | 13    | 18    | 16    | 53    | 54    | 163   | 37    | 45    | 21    | 24    | 32    | 15    |
| 4     | 15    | 15    | 14    | 126   | 62    | 92    | 132   | 39    | 19    | 15    | 121   | 11    |
| 5     | 15    | 14    | 12    | 139   | 24    | 68    | 56    | 35    | 16    | 15    | 18    | 11    |
| 6     | 15    | 18    | 309   | 71    | 17    | 58    | 45    | 31    | 32    | 13    | 11    | 11    |
| 7     | 13    | 18    | 354   | 56    | 15    | 50    | 611   | 28    | 22    | 11    | 13    | 12    |
| 8     | 13    | 14    | 134   | 49    | 13    | 75    | 440   | 1,190 | 16    | 9.6   | 13    | 28    |
| 9     | 27    | 16    | 71    | 219   | 12    | 51    | 177   | 411   | 15    | 9.2   | 12    | 15    |
| 10    | 16    | 14    | 68    | 121   | 11    | 46    | 119   | 133   | 15    | 11    | 12    | 11    |
| 11    | 14    | 12    | 58    | 82    | 13    | 41    | 91    | 77    | 11    | 13    | 13    | 11    |
| 12    | 13    | 13    | 40    | 58    | 20    | 38    | 87    | 58    | 11    | 13    | 11    | 21    |
| 13    | 15    | 9.6   | 37    | 40    | 62    | 39    | 697   | 411   | 26    | 13    | 9.6   | 15    |
| 14    | 43    | 8.2   | 155   | 26    | 122   | 46    | 203   | 286   | 26    | 13    | 11    | 13    |
| 15    | 17    | 11    | 231   | 20    | 149   | 38    | 160   | 107   | 488   | 11    | 11    | 12    |
| 16    | 71    | 13    | 107   | 17    | 89    | 231   | 1,080 | 93    | 133   | 15    | 11    | 11    |
| 17    | 28    | 12    | 64    | 20    | 72    | 223   | 347   | 64    | 30    | 14    | 11    | 11    |
| 18    | 20    | 13    | 43    | 24    | 54    | 93    | 151   | 49    | 19    | 12    | 12    | 12    |
| 19    | 17    | 28    | 39    | 43    | 36    | 61    | 172   | 42    | 17    | 22    | 12    | 14    |
| 20    | 15    | 14    | 75    | 34    | 28    | 53    | 288   | 35    | 17    | 19    | 9.2   | 12    |
| 21    | 16    | 11    | 51    | 38    | 25    | 146   | 279   | 31    | 302   | 14    | 11    | 12    |
| 22    | 16    | 11    | 49    | 33    | 23    | 578   | 366   | 30    | 43    | 12    | 13    | 13    |
| 23    | 15    | 11    | 53    | 52    | 32    | 136   | 164   | 28    | 28    | 9.6   | 14    | 13    |
| 24    | 41    | 12    | 29    | 48    | 64    | 89    | 103   | 24    | 26    | 13    | 13    | 105   |
| 25    | 27    | 9.6   | 25    | 38    | 51    | 65    | 76    | 22    | 21    | 25    | 13    | 62    |
| 26    | 22    | 8.2   | 25    | 28    | 77    | 53    | 60    | 21    | 19    | 13    | 22    | 89    |
| 27    | 19    | 49    | 26    | 22    | 51    | 51    | 51    | 15    | 18    | 49    | 11    | 46    |
| 28    | 16    | 11    | 42    | 19    | 49    | 47    | 46    | 13    | 17    | 21    | 11    | 27    |
| 29    | 14    | 83    | 26    | 17    | 47    | 62    | 46    | 26    | 46    | 13    | 11    | 59    |
| 30    | 11    | 47    | 243   | 15    | ----- | 51    | 65    | 234   | 53    | 9.2   | 11    | 174   |
| 31    | 9.2   | ----- | 65    | 13    | ----- | 40    | ----- | 83    | ----- | 11    | 11    | ----- |
| TOTAL | 625.2 | 550.6 | 2,501 | 1,647 | 1,306 | 3,397 | 6,216 | 3,794 | 1,563 | 474.6 | 530.8 | 880   |
| MEAN  | 20.2  | 18.4  | 80.7  | 53.1  | 45.0  | 110   | 207   | 122   | 52.1  | 15.3  | 17.1  | 29.3  |
| MAX   | 71    | 83    | 354   | 219   | 149   | 578   | 1,080 | 1,190 | 488   | 49    | 121   | 174   |
| MIN   | 9.2   | 8.2   | 12    | 13    | 11    | 38    | 32    | 13    | 11    | 9.2   | 9.2   | 11    |

CAL YR 1971 TOTAL 22,043.1 MEAN 60.4 MAX 2,140 MIN 5.6  
WTR YR 1972 TOTAL 23,485.2 MEAN 64.2 MAX 1,190 MIN 8.2

## PEAK DISCHARGE (BASE, 1,700 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-13 | 1200 | 10.16 | 1,740     | 5- 8 | 1330 | 11.87 | 2,460     |
| 4-16 | 1000 | 11.11 | 2,160     | 6-15 | 1930 | 11.06 | 2,110     |



## MILL CREEK BASIN

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03256500 West Fork Mill Creek Lake near Greenhills, Ohio  
(Formerly published as West Fork Mill Creek Reservoir near Greenhills, Ohio)

LOCATION.--Lat 39°15'34", long 84°29'41", in SE 1/4 sec.17, T.3, T.1, Hamilton County, in gate house of dam on West Fork Mill Creek, 1.2 miles east of Greenhills.

DRAINAGE AREA.--29.9 sq mi.

PERIOD OF RECORD.--April 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers); gage readings have been adjusted to elevations above mean sea level.

EXTREMES.--Current year: Maximum contents, 3,040 acre-ft May 9 (elevation, 681.79 ft); minimum, 980 acre-ft Dec. 22, Jan. 11 (elevation, 671.98 ft).

Period of record: Maximum contents, 9,680 acre-ft Jan. 22, 1959 (elevation, 698.95 ft); minimum, 729 acre-ft Feb. 26, 1964 (elevation, 670.00 ft).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway; operation for flood control began Dec. 20, 1952; storage to maintain conservation pool began Apr. 19, 1953. Usable capacity 11,310 acre-ft between elevations 655.0 ft (lowest outlet) and 702.0 ft (crest of spillway) of which 1,470 acre-ft is in conservation pool. Dead storage below elevation 655.0 ft, 65 acre-ft. Figures given herein represent useable contents. Reservoir is used for flood control and recreation. There are no gates on spillway and all regulation is done by gates in conduit through dam.

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

REVISIONS.--WSP 1908: Drainage area.

## MONTHEND GAGE HEIGHT AND CONTENTS AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| Date             | Gage height<br>(feet) | Contents<br>(acre-feet) | Change in contents<br>(acre-feet) |
|------------------|-----------------------|-------------------------|-----------------------------------|
| Sept. 30.....    | 675.10                | 1,490                   | -                                 |
| Oct. 31.....     | 675.11                | 1,490                   | 0                                 |
| Nov. 30.....     | 675.16                | 1,500                   | + 10                              |
| Dec. 31.....     | 672.19                | 1,010                   | -490                              |
| CAL YR 1971..... | -                     | -                       | + 20                              |
| Jan. 31.....     | 672.05                | 990                     | -20                               |
| Feb. 29.....     | 675.05                | 1,480                   | + 490                             |
| Mar. 31.....     | 675.09                | 1,480                   | 0                                 |
| Apr. 30.....     | 675.26                | 1,520                   | + 40                              |
| May 31.....      | 675.40                | 1,540                   | + 20                              |
| June 30.....     | 675.23                | 1,510                   | -30                               |
| July 31.....     | 675.06                | 1,480                   | -30                               |
| Aug. 31.....     | 674.96                | 1,460                   | -20                               |
| Sept. 30.....    | 675.51                | 1,560                   | + 100                             |
| WTR YR 1972..... | -                     | -                       | + 70                              |

## MILL CREEK BASIN

03257500 West Fork Mill Creek at Woodlawn, Ohio

LOCATION.--Lat 39°15'14", long 84°28'13", in NE 1/4 sec.10, R.1, T.3, Hamilton County, on left bank at upstream side of Riddle Road Bridge in Woodlawn, 0.5 mile upstream from small left bank tributary, 1.9 miles downstream from West Fork Mill Creek Dam, and 4.0 miles upstream from mouth.

DRAINAGE AREA.--32.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 570.00 ft above mean sea level, adjustment of 1912 (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--19 years (1953-72), 29.4 cfs.

EXTREMES.--Current year: Maximum discharge, 890 cfs May 9 (gage height, 4.61 ft); no flow many days June, July, August, September.

Period of record: Maximum discharge, 2,000 cfs Apr. 4, 1956 (gage height, 6.82 ft); no flow for many days in most years.

REMARKS.--Records good. Flow regulated by West Fork Mill Creek Reservoir 1.9 miles upstream beginning 1953 (see station 03256500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC     | JAN   | FEB   | MAR   | APR     | MAY      | JUN    | JUL    | AUG   | SEP    |
|-------|--------|--------|---------|-------|-------|-------|---------|----------|--------|--------|-------|--------|
| 1     | 6.2    | .63    | 113     | 15    | 3.3   | 21    | 7.6     | 23       | 24     | 14     | 0     | 0      |
| 2     | 6.2    | 14     | 119     | 31    | 6.1   | 259   | 10      | 22       | 7.2    | .20    | 1.9   | 0      |
| 3     | 4.3    | 22     | 3.5     | 34    | 18    | 85    | 13      | 17       | 2.8    | 2.8    | 15    | 0      |
| 4     | 5.0    | 16     | 2.3     | 38    | 24    | 37    | 76      | 13       | 2.8    | 9.9    | 89    | 0      |
| 5     | 2.5    | 18     | 3.7     | 92    | 18    | 35    | 19      | 12       | 2.6    | 8.4    | 10    | 0      |
| 6     | .71    | 21     | 39      | 31    | 5.6   | 33    | 19      | 8.1      | 5.4    | 3.2    | 0     | 0      |
| 7     | 4.3    | 21     | 159     | 27    | 5.0   | 17    | 204     | 5.9      | 8.7    | 3.2    | 0     | 0      |
| 8     | .80    | 21     | 174     | 16    | 5.4   | 17    | 303     | 47       | 7.8    | .30    | 0     | 0      |
| 9     | 5.6    | 20     | 105     | 144   | 5.6   | 16    | 87      | 359      | 5.2    | 0      | 0     | 8.4    |
| 10    | 2.1    | 20     | 19      | 64    | 5.6   | 14    | 27      | 353      | 3.4    | 0      | 0     | 10     |
| 11    | .90    | 8.6    | 21      | 19    | 4.8   | 13    | 24      | 26       | .65    | .10    | 0     | .10    |
| 12    | 3.8    | 2.3    | 19      | 13    | 7.1   | 13    | 26      | 16       | .20    | 0      | 0     | 0      |
| 13    | 11     | 1.8    | 12      | 18    | 31    | 13    | 313     | 49       | 1.6    | 0      | 0     | 1.1    |
| 14    | 40     | 3.3    | 48      | 16    | 20    | 13    | 170     | 317      | 3.6    | 0      | 0     | .40    |
| 15    | 25     | 3.5    | 102     | 10    | 3.9   | 13    | 69      | 102      | 23     | 0      | 0     | 0      |
| 16    | 49     | 3.5    | 109     | 5.0   | 2.2   | 53    | 246     | 18       | 143    | 0      | 0     | .50    |
| 17    | 42     | 3.6    | 24      | 5.4   | 1.8   | 158   | 544     | 20       | 1.7    | 4.4    | 0     | 1.9    |
| 18    | 17     | 3.0    | 18      | 6.3   | 9.1   | 38    | 109     | 18       | .40    | 8.1    | 0     | 2.0    |
| 19    | 17     | 7.6    | 18      | 16    | 17    | 34    | 41      | 13       | .30    | 4.6    | 0     | 1.7    |
| 20    | 17     | 9.1    | 30      | 15    | 17    | 24    | 168     | 9.9      | .20    | .65    | 0     | 1.7    |
| 21    | 8.6    | 6.5    | 36      | 13    | 12    | 28    | 125     | 5.7      | 6.9    | 0      | 0     | 1.4    |
| 22    | 1.5    | 5.2    | 25      | 13    | 3.3   | 326   | 216     | 5.7      | 8.7    | 0      | 0     | 0      |
| 23    | 1.8    | 4.5    | 6.2     | 19    | 9.1   | 39    | 35      | 5.4      | 8.7    | 0      | 0     | 0      |
| 24    | 38     | 3.2    | 16      | 21    | 27    | 34    | 27      | 5.2      | 5.9    | 0      | 0     | 16     |
| 25    | 48     | 2.4    | 15      | 11    | 35    | 25    | 22      | 5.0      | 3.0    | 25     | 0     | 104    |
| 26    | 18     | 2.4    | 5.7     | 2.3   | 35    | 17    | 19      | 4.8      | .40    | 35     | 0     | 96     |
| 27    | .50    | 3.4    | 13      | 4.7   | 28    | 16    | 18      | 3.0      | .10    | 14     | 0     | 18     |
| 28    | .45    | 4.5    | 10      | 7.3   | 20    | 13    | 13      | .95      | 0      | 7.2    | 0     | 12     |
| 29    | .45    | 20     | 6.0     | 9.1   | 20    | 20    | 16      | .80      | 4.6    | 3.0    | 0     | 24     |
| 30    | 1.1    | 52     | 135     | 8.2   | ----- | 27    | 29      | 21       | 24     | .65    | 0     | 102    |
| 31    | .45    | -----  | 78      | 12    | ----- | 12    | -----   | 86       | -----  | 0      | 0     | -----  |
| TOTAL | 379.26 | 324.03 | 1,484.4 | 736.3 | 399.9 | 1,463 | 2,995.6 | 1,592.45 | 306.85 | 144.70 | 115.9 | 401.20 |
| MEAN  | 12.2   | 10.8   | 47.9    | 23.8  | 13.8  | 47.2  | 99.9    | 51.4     | 10.2   | 4.67   | 3.74  | 13.4   |
| MAX   | 49     | 52     | 174     | 144   | 35    | 326   | 544     | 359      | 143    | 35     | 89    | 104    |
| MIN   | .45    | .63    | 2.3     | 2.3   | 1.8   | 12    | 7.6     | .80      | 0      | 0      | 0     | 0      |

CAL YR 1971 TOTAL 12,618.99 MEAN 34.6 MAX 921 MIN .01  
WTR YR 1972 TOTAL 10,343.59 MEAN 28.3 MAX 544 MIN 0

## MILL CREEK BASIN

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03259000 Mill Creek at Carthage, Ohio

LOCATION.--Lat 39°12'07", long 84°28'16", in SW 1/4 sec.1 R.1, T.3, Hamilton County, on right bank 100 ft downstream from Anthony Wayne Avenue Bridge in Carthage, 1.0 mile downstream from West Fork Mill Creek, and 11.0 miles upstream from mouth.

DRAINAGE AREA.--115 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 512.00 ft above mean sea level, Ohio River datum. Prior to Oct. 1, 1954 at site 100 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 3,410 cfs May 8 (gage height, 9.51 ft); minimum, 9.6 cfs Nov. 1, 14, 15.

Period of record: Maximum discharge, 8,900 cfs Jan. 21, 1959 (gage height, 16.17 ft), from rating curve extended above 2,800 cfs on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

REMARKS.--Records good except those for the winter period, which are fair. Some inter-basin transfers of water between Mill Creek and Great Miami River basins by industrial and municipal operations. Flow regulated by West Fork Mill Reservoir, 6.9 miles upstream, beginning 1953 (see station 03256500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1     | 31    | 11    | 129   | 59    | 18    | 133   | 36    | 105   | 68    | 43   | 13   | 21    |
| 2     | 22    | 37    | 161   | 120   | 22    | 887   | 34    | 98    | 39    | 15   | 49   | 13    |
| 3     | 17    | 40    | 20    | 90    | 92    | 255   | 51    | 74    | 26    | 36   | 43   | 19    |
| 4     | 19    | 29    | 16    | 175   | 72    | 140   | 187   | 59    | 23    | 24   | 239  | 12    |
| 5     | 17    | 29    | 14    | 257   | 34    | 125   | 63    | 52    | 20    | 26   | 40   | 11    |
| 6     | 15    | 37    | 437   | 104   | 24    | 94    | 56    | 43    | 46    | 17   | 15   | 11    |
| 7     | 15    | 40    | 593   | 88    | 20    | 80    | 1,020 | 36    | 32    | 14   | 15   | 11    |
| 8     | 14    | 33    | 327   | 67    | 17    | 86    | 733   | 1,460 | 25    | 13   | 14   | 31    |
| 9     | 34    | 34    | 175   | 418   | 15    | 61    | 243   | 856   | 23    | 13   | 14   | 18    |
| 10    | 21    | 31    | 90    | 191   | 14    | 56    | 129   | 542   | 19    | 13   | 14   | 20    |
| 11    | 14    | 25    | 76    | 104   | 18    | 50    | 105   | 129   | 15    | 14   | 14   | 12    |
| 12    | 13    | 13    | 57    | 74    | 26    | 47    | 110   | 95    | 15    | 15   | 14   | 23    |
| 13    | 27    | 11    | 47    | 50    | 100   | 51    | 1,200 | 539   | 30    | 14   | 14   | 16    |
| 14    | 83    | 9.8   | 217   | 34    | 155   | 54    | 421   | 612   | 31    | 14   | 13   | 11    |
| 15    | 46    | 12    | 374   | 26    | 172   | 47    | 224   | 263   | 542   | 14   | 13   | 11    |
| 16    | 132   | 14    | 230   | 22    | 92    | 299   | 1,560 | 129   | 328   | 19   | 13   | 11    |
| 17    | 74    | 14    | 82    | 26    | 80    | 390   | 996   | 103   | 51    | 15   | 13   | 11    |
| 18    | 36    | 13    | 54    | 36    | 60    | 123   | 267   | 86    | 22    | 22   | 13   | 11    |
| 19    | 34    | 39    | 52    | 57    | 50    | 91    | 217   | 69    | 20    | 32   | 14   | 13    |
| 20    | 31    | 21    | 98    | 51    | 42    | 75    | 443   | 57    | 20    | 22   | 14   | 11    |
| 21    | 28    | 15    | 80    | 50    | 36    | 222   | 378   | 43    | 313   | 15   | 13   | 11    |
| 22    | 17    | 14    | 71    | 47    | 34    | 946   | 616   | 42    | 62    | 14   | 13   | 11    |
| 23    | 16    | 14    | 56    | 72    | 44    | 191   | 191   | 38    | 42    | 13   | 13   | 10    |
| 24    | 76    | 14    | 39    | 69    | 51    | 118   | 141   | 35    | 38    | 25   | 13   | 157   |
| 25    | 76    | 11    | 38    | 49    | 89    | 87    | 115   | 31    | 25    | 42   | 13   | 193   |
| 26    | 45    | 10    | 26    | 40    | 116   | 64    | 95    | 27    | 22    | 56   | 41   | 216   |
| 27    | 21    | 24    | 34    | 30    | 81    | 63    | 86    | 19    | 21    | 74   | 13   | 78    |
| 28    | 16    | 14    | 49    | 24    | 67    | 55    | 70    | 15    | 21    | 31   | 11   | 40    |
| 29    | 14    | 118   | 29    | 20    | 65    | 77    | 73    | 36    | 55    | 15   | 11   | 97    |
| 30    | 11    | 110   | 493   | 17    | ----- | 72    | 107   | 313   | 83    | 14   | 11   | 299   |
| 31    | 10    | ----- | 155   | 15    | ----- | 47    | ----- | 187   | ----- | 14   | 11   | ----- |
| TOTAL | 1,025 | 836.8 | 4,319 | 2,482 | 1,746 | 5,086 | 9,967 | 6,193 | 2,077 | 708  | 754  | 1,409 |
| MEAN  | 33.1  | 27.9  | 139   | 80.1  | 60.2  | 164   | 332   | 200   | 69.2  | 22.8 | 24.3 | 47.0  |
| MAX   | 132   | 118   | 593   | 418   | 172   | 946   | 1,560 | 1,460 | 542   | 74   | 239  | 299   |
| MIN   | 10    | 9.8   | 14    | 15    | 14    | 47    | 34    | 15    | 15    | 13   | 11   | 10    |

CAL YR 1971 TOTAL 39,515.0 MEAN 108 MAX 3,320 MIN 7.9  
WTR YR 1972 TOTAL 36,602.8 MEAN 100 MAX 1,560 MIN 9.8

## 03260700 Bokengehelas Creek near De Graff, Ohio

LOCATION.--Lat 40°20'50", long 83°53'28", in E. 1/2 sec. 3, R.14, T.2, Logan County, on right bank at downstream side of county road bridge, 2 miles downstream from Bluejacket Creek, 2.8 miles northeast of De Graff, and 4 miles upstream from mouth.

DRAINAGE AREA.--36.3 sq mi.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962, published as Buckongahelas Creek near Degraff.

GAGE.--Water-stage recorder. Datum of gage is 1,008.76 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 30.6 cfs (11.45 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,230 cfs Apr. 13 (gage height, 6.13 ft); minimum, 4.6 cfs Oct. 3. Period of record: Maximum discharge, 1,780 cfs Jan. 21, 1959 (gage height, 6.83 ft); minimum, 2.0 cfs Sept. 29, 30, Oct. 1, 8, 1963.

REMARKS.--Records good. Diurnal fluctuation caused by municipal plant operation in Bellefontaine, 9.8 miles upstream; since storage capacity is small, daily flows are not affected appreciably. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC     | JAN  | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG  | SEP   |
|-------|-------|-------|---------|------|-------|-------|-------|-------|-------|-------|------|-------|
| 1     | 6.5   | 5.5   | 8.1     | 55   | 17    | 55    | 37    | 59    | 80    | 30    | 16   | 10    |
| 2     | 5.8   | 6.5   | 7.4     | 49   | 16    | 265   | 35    | 56    | 57    | 27    | 19   | 9.8   |
| 3     | 5.2   | 6.2   | 7.1     | 41   | 16    | 123   | 35    | 52    | 48    | 165   | 35   | 12    |
| 4     | 5.5   | 5.8   | 6.5     | 45   | 16    | 79    | 40    | 50    | 42    | 73    | 21   | 9.8   |
| 5     | 5.8   | 6.2   | 6.2     | 44   | 15    | 58    | 35    | 47    | 39    | 55    | 20   | 10    |
| 6     | 5.8   | 6.2   | 13      | 35   | 15    | 48    | 34    | 45    | 39    | 39    | 19   | 9.8   |
| 7     | 5.5   | 5.8   | 30      | 31   | 14    | 44    | 315   | 42    | 38    | 35    | 18   | 9.8   |
| 8     | 5.8   | 5.5   | 30      | 26   | 14    | 45    | 141   | 83    | 35    | 32    | 17   | 9.8   |
| 9     | 11    | 6.5   | 18      | 43   | 13    | 35    | 98    | 414   | 35    | 28    | 17   | 9.4   |
| 10    | 6.5   | 6.8   | 14      | 71   | 13    | 31    | 87    | 199   | 35    | 78    | 17   | 8.6   |
| 11    | 5.5   | 6.8   | 12      | 50   | 13    | 30    | 71    | 123   | 32    | 45    | 16   | 9.0   |
| 12    | 5.5   | 6.5   | 10      | 38   | 13    | 32    | 71    | 93    | 32    | 34    | 14   | 18    |
| 13    | 5.5   | 6.2   | 9.4     | 31   | 13    | 45    | 903   | 83    | 79    | 30    | 12   | 12    |
| 14    | 13    | 5.5   | 77      | 26   | 15    | 88    | 289   | 147   | 61    | 28    | 12   | 30    |
| 15    | 7.1   | 5.8   | 246     | 24   | 48    | 58    | 165   | 570   | 66    | 26    | 12   | 17    |
| 16    | 6.8   | 6.2   | 110     | 23   | 42    | 62    | 206   | 256   | 73    | 96    | 12   | 12    |
| 17    | 6.2   | 6.2   | 67      | 22   | 35    | 62    | 176   | 170   | 46    | 47    | 12   | 11    |
| 18    | 6.2   | 6.2   | 46      | 24   | 32    | 50    | 122   | 131   | 39    | 36    | 15   | 12    |
| 19    | 6.8   | 8.5   | 37      | 23   | 28    | 42    | 103   | 103   | 37    | 32    | 14   | 12    |
| 20    | 6.5   | 6.5   | 39      | 22   | 25    | 37    | 505   | 86    | 35    | 28    | 13   | 11    |
| 21    | 6.8   | 6.2   | 37      | 22   | 21    | 35    | 245   | 74    | 43    | 24    | 12   | 11    |
| 22    | 7.8   | 5.8   | 30      | 25   | 21    | 50    | 349   | 66    | 38    | 22    | 12   | 10    |
| 23    | 8.1   | 5.8   | 26      | 32   | 20    | 49    | 188   | 60    | 37    | 21    | 12   | 27    |
| 24    | 7.1   | 5.5   | 24      | 27   | 20    | 40    | 139   | 55    | 34    | 20    | 12   | 26    |
| 25    | 7.1   | 5.5   | 20      | 25   | 18    | 37    | 111   | 50    | 31    | 23    | 12   | 18    |
| 26    | 7.1   | 5.2   | 20      | 23   | 26    | 34    | 92    | 46    | 30    | 20    | 12   | 34    |
| 27    | 7.1   | 6.8   | 22      | 20   | 18    | 46    | 80    | 43    | 30    | 21    | 11   | 141   |
| 28    | 6.5   | 6.5   | 20      | 19   | 24    | 62    | 72    | 41    | 28    | 20    | 11   | 55    |
| 29    | 6.2   | 8.1   | 18      | 18   | 32    | 54    | 66    | 42    | 45    | 19    | 11   | 39    |
| 30    | 5.8   | 11    | 154     | 17   | ----- | 50    | 61    | 66    | 41    | 18    | 10   | 127   |
| 31    | 5.5   | ----- | 95      | 17   | ----- | 40    | ----- | 83    | ----- | 17    | 10   | ----- |
| TOTAL | 207.6 | 191.8 | 1,259.7 | 968  | 613   | 1,786 | 4,871 | 3,435 | 1,305 | 1,189 | 456  | 731.0 |
| MEAN  | 6.70  | 6.39  | 40.6    | 31.2 | 21.1  | 57.6  | 162   | 111   | 43.5  | 38.4  | 14.7 | 24.4  |
| MAX   | 13    | 11    | 246     | 71   | 48    | 265   | 903   | 570   | 80    | 165   | 35   | 141   |
| MIN   | 5.2   | 5.2   | 6.2     | 17   | 13    | 30    | 34    | 41    | 28    | 17    | 10   | 8.6   |
| CFSM  | .18   | .18   | 1.12    | .86  | .58   | 1.59  | 4.46  | 3.06  | 1.20  | 1.06  | .41  | .67   |
| IN.   | .21   | .20   | 1.29    | .99  | .63   | 1.83  | 4.99  | 3.52  | 1.34  | 1.22  | .47  | .75   |

CAL YR 1971 TOTAL 8,467.8 MEAN 23.2 MAX 302 MIN 4.4 CFSM .64 IN 8.68  
WTR YR 1972 TOTAL 17,013.1 MEAN 46.5 MAX 903 MIN 5.2 CFSM 1.28 IN 17.43

## PEAK DISCHARGE (BASE, 300 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-15 | 0100 | 4.37  | 374       | 4-22 | 0830 | 4.78  | 460       |
| 12-30 | 1630 | 4.13  | 326       | 5-9  | 1400 | 4.94  | 502       |
| 3-2   | 1400 | 4.33  | 366       | 5-15 | 0500 | 5.50  | 750       |
| 4-7   | 1230 | 5.05  | 538       | 7-3  | 1400 | 4.06  | 312       |
| 4-13  | 0630 | 6.13  | 1,230     | 9-27 | 1030 | 4.05  | 310       |
| 4-20  | 1000 | 5.36  | 670       |      |      |       |           |



03260800 Stony Creek near De Graff, Ohio

LOCATION.--Lat 40°17'27", long 83°54'36", in NW 1/4 sec. 5, R.13, T.3, Logan County, on right bank at downstream side of county road bridge, 0.6 mile downstream from Lee Creek, 1.5 miles south of De Graff, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--59.1 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 967.54 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 47.3 cfs (10.87 inches per year).

EXTREMES.--Current year: Maximum discharge, 798 cfs Apr. 7 (gage height, 7.85 ft); minimum, 10 cfs Oct. 3, 4. Period of record: Maximum discharge, 2,770 cfs Jan. 22, 1959 (gage height, 9.39 ft); maximum gage height, 11.48 ft Jan. 22, 1959 (backwater from Great Miami River); minimum, 4.0 cfs Sept. 27, 1963.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG  | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1     | 13   | 13    | 19    | 89    | 28    | 77    | 50    | 72    | 84    | 33    | 20   | 15    |
| 2     | 12   | 13    | 17    | 72    | 29    | 328   | 47    | 68    | 65    | 30    | 22   | 15    |
| 3     | 11   | 13    | 16    | 60    | 25    | 215   | 44    | 64    | 56    | 67    | 47   | 17    |
| 4     | 11   | 13    | 15    | 68    | 20    | 130   | 48    | 60    | 50    | 56    | 31   | 16    |
| 5     | 11   | 13    | 15    | 72    | 16    | 80    | 45    | 57    | 46    | 45    | 26   | 15    |
| 6     | 11   | 13    | 26    | 50    | 16    | 58    | 43    | 55    | 45    | 38    | 24   | 14    |
| 7     | 11   | 13    | 57    | 44    | 17    | 54    | 585   | 55    | 44    | 34    | 24   | 14    |
| 8     | 11   | 13    | 60    | 40    | 16    | 50    | 347   | 91    | 40    | 33    | 22   | 14    |
| 9     | 16   | 13    | 44    | 68    | 16    | 46    | 206   | 479   | 41    | 31    | 21   | 14    |
| 10    | 15   | 13    | 38    | 104   | 15    | 43    | 152   | 311   | 41    | 94    | 20   | 13    |
| 11    | 13   | 13    | 34    | 74    | 15    | 40    | 117   | 174   | 37    | 59    | 19   | 13    |
| 12    | 12   | 12    | 30    | 58    | 16    | 42    | 108   | 119   | 36    | 43    | 19   | 47    |
| 13    | 12   | 13    | 27    | 45    | 16    | 54    | 403   | 105   | 53    | 37    | 18   | 36    |
| 14    | 23   | 12    | 102   | 40    | 22    | 116   | 229   | 172   | 53    | 32    | 17   | 47    |
| 15    | 17   | 12    | 266   | 35    | 105   | 85    | 146   | 535   | 51    | 31    | 19   | 39    |
| 16    | 18   | 12    | 164   | 32    | 78    | 84    | 220   | 368   | 56    | 96    | 17   | 29    |
| 17    | 19   | 12    | 94    | 31    | 50    | 92    | 214   | 224   | 45    | 66    | 17   | 26    |
| 18    | 16   | 11    | 64    | 34    | 44    | 72    | 137   | 149   | 40    | 47    | 31   | 25    |
| 19    | 15   | 16    | 52    | 32    | 40    | 58    | 108   | 116   | 37    | 45    | 26   | 24    |
| 20    | 13   | 15    | 51    | 32    | 36    | 52    | 369   | 100   | 35    | 37    | 24   | 21    |
| 21    | 13   | 14    | 49    | 32    | 33    | 49    | 263   | 90    | 55    | 32    | 20   | 20    |
| 22    | 15   | 13    | 42    | 36    | 30    | 72    | 405   | 80    | 44    | 29    | 21   | 19    |
| 23    | 16   | 18    | 39    | 45    | 28    | 82    | 264   | 72    | 41    | 27    | 21   | 42    |
| 24    | 16   | 13    | 37    | 43    | 27    | 63    | 174   | 65    | 39    | 27    | 19   | 55    |
| 25    | 15   | 12    | 34    | 40    | 27    | 56    | 130   | 60    | 37    | 30    | 19   | 43    |
| 26    | 15   | 12    | 34    | 36    | 28    | 51    | 106   | 55    | 34    | 27    | 19   | 73    |
| 27    | 14   | 15    | 34    | 33    | 27    | 61    | 92    | 52    | 31    | 26    | 19   | 121   |
| 28    | 14   | 14    | 33    | 30    | 30    | 84    | 84    | 51    | 30    | 25    | 18   | 91    |
| 29    | 13   | 18    | 32    | 28    | 42    | 69    | 78    | 51    | 36    | 24    | 17   | 64    |
| 30    | 13   | 22    | 174   | 27    | ----- | 60    | 74    | 75    | 38    | 22    | 16   | 158   |
| 31    | 13   | ----- | 155   | 27    | ----- | 53    | ----- | 96    | ----- | 21    | 15   | ----- |
| TOTAL | 437  | 409   | 1,854 | 1,457 | 892   | 2,476 | 5,288 | 4,121 | 1,340 | 1,244 | 668  | 1,140 |
| MEAN  | 14.1 | 13.6  | 59.8  | 47.0  | 30.8  | 79.9  | 176   | 133   | 44.7  | 40.1  | 21.5 | 38.0  |
| MAX   | 23   | 22    | 266   | 104   | 105   | 328   | 585   | 535   | 84    | 96    | 47   | 158   |
| MIN   | 11   | 11    | 15    | 27    | 15    | 40    | 43    | 51    | 30    | 21    | 15   | 13    |
| CFSM  | .24  | .23   | 1.01  | .80   | .52   | 1.35  | 2.98  | 2.25  | .76   | .68   | .36  | .64   |
| IN.   | .28  | .26   | 1.17  | .92   | .56   | 1.56  | 3.33  | 2.59  | .84   | .78   | .42  | .72   |

CAL YR 1971 TOTAL 14,010.9 MEAN 38.4 MAX 521 MIN 8.7 CFSM .65 IN 8.82  
WTR YR 1972 TOTAL 21,326.0 MEAN 58.3 MAX 585 MIN 11 CFSM .99 IN 13.42

## PEAK DISCHARGE (BASE, 350 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-2  | 1130 | 6.53  | 384       | 4-22 | 0800 | 6.89  | 467       |
| 4-7  | 1330 | 7.85  | 798       | 5-9  | 1300 | 7.20  | 570       |
| 4-13 | 1030 | 7.07  | 524       | 5-15 | 0600 | 7.37  | 630       |
| 4-20 | 0830 | 6.80  | 440       |      |      |       |           |

## 03261500 Great Miami River at Sidney, Ohio

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, on right bank 50 ft upstream from North Street Bridge in Sidney, and 0.5 mile downstream from Tawawa Creek.

DRAINAGE AREA.--541 sq mi.

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft above mean sea level, adjustment of 1912. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft downstream at datum 1.76 ft higher. Sept. 18, 1919, to Aug. 1925, nonrecording gage at site 50 ft downstream at present datum.

AVERAGE DISCHARGE.--47 years (1925-72), 464 cfs.

EXTREMES.--Current year: Maximum discharge, 5,390 cfs Apr. 22 (gage height 8.48 ft); minimum, 34 cfs Oct. 7, 8. Period of record: Maximum discharge, 20,700 cfs Mar. 20, 1927 (gage height, 14.4 ft), from rating curve extended above 6,900 cfs on basis of velocity-area studies; maximum gage height, 15.91 ft Jan. 21, 1959; minimum discharge, 1.5 cfs Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 cfs Sept. 23, 1935.

Flood of Mar. 25, 1913 reached a stage of 19.6 ft, present datum (discharge, 44,000 cfs, computed by Miami Conservancy District).

REMARKS.--Records good except those for January and February, which are fair. Water supply for city of Sidney is pumped from the Great Miami River 1,200 feet upstream and from wells adjacent to Great Miami River upstream from station. The pumpage averaged 3.9 cfs in 1972 and is returned as sewage 1.2 miles downstream from the station. Some regulation by Indian Lake 28 miles upstream, (capacity, 45,900 acre-ft). Water diverted into Miami and Erie Canal at Port Jefferson (2.8 miles upstream) prior to 1926 bypassed station; amount of diversion not published. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 12 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|--------|--------|-------|-------|
| 1     | 48    | 47    | 301    | 1,910  | 150   | 845    | 419    | 478    | 706    | 246    | 87    | 54    |
| 2     | 43    | 57    | 276    | 1,340  | 150   | 3,210  | 375    | 422    | 470    | 202    | 85    | 49    |
| 3     | 40    | 56    | 266    | 990    | 160   | 2,880  | 331    | 393    | 354    | 803    | 134   | 57    |
| 4     | 40    | 55    | 223    | 890    | 140   | 2,120  | 363    | 369    | 290    | 1,580  | 156   | 66    |
| 5     | 38    | 56    | 128    | 965    | 120   | 1,390  | 378    | 346    | 276    | 1,240  | 137   | 63    |
| 6     | 37    | 59    | 131    | 760    | 120   | 850    | 340    | 282    | 238    | 805    | 106   | 57    |
| 7     | 36    | 59    | 304    | 642    | 130   | 638    | 3,810  | 274    | 233    | 492    | 98    | 51    |
| 8     | 37    | 57    | 611    | 535    | 120   | 638    | 3,870  | 439    | 202    | 348    | 94    | 48    |
| 9     | 54    | 58    | 446    | 750    | 110   | 580    | 2,850  | 2,800  | 184    | 292    | 93    | 49    |
| 10    | 65    | 67    | 312    | 1,660  | 110   | 460    | 2,250  | 3,190  | 200    | 540    | 87    | 50    |
| 11    | 60    | 70    | 317    | 1,330  | 121   | 357    | 1,700  | 2,170  | 233    | 410    | 80    | 49    |
| 12    | 54    | 70    | 406    | 875    | 122   | 279    | 1,280  | 1,540  | 162    | 282    | 76    | 125   |
| 13    | 55    | 70    | 384    | 674    | 133   | 427    | 3,240  | 1,170  | 195    | 228    | 74    | 182   |
| 14    | 62    | 71    | 839    | 531    | 166   | 1,550  | 3,940  | 1,240  | 635    | 200    | 76    | 138   |
| 15    | 76    | 69    | 2,580  | 320    | 550   | 1,310  | 2,990  | 3,720  | 611    | 176    | 76    | 221   |
| 16    | 76    | 67    | 2,340  | 230    | 760   | 980    | 2,880  | 3,490  | 755    | 550    | 76    | 150   |
| 17    | 74    | 69    | 1,530  | 230    | 430   | 985    | 2,970  | 2,410  | 527    | 495    | 74    | 105   |
| 18    | 67    | 75    | 950    | 350    | 330   | 706    | 2,440  | 1,750  | 372    | 314    | 71    | 93    |
| 19    | 60    | 83    | 652    | 310    | 250   | 464    | 1,850  | 1,230  | 295    | 266    | 104   | 105   |
| 20    | 56    | 92    | 551    | 270    | 180   | 366    | 4,230  | 905    | 238    | 228    | 92    | 96    |
| 21    | 54    | 92    | 575    | 270    | 200   | 340    | 4,280  | 656    | 484    | 184    | 79    | 83    |
| 22    | 54    | 99    | 531    | 290    | 190   | 488    | 5,160  | 515    | 825    | 164    | 72    | 71    |
| 23    | 55    | 106   | 478    | 450    | 170   | 820    | 4,490  | 439    | 559    | 154    | 75    | 189   |
| 24    | 60    | 89    | 453    | 700    | 166   | 616    | 3,530  | 360    | 396    | 142    | 74    | 527   |
| 25    | 60    | 83    | 425    | 500    | 160   | 450    | 2,540  | 323    | 279    | 129    | 72    | 474   |
| 26    | 58    | 82    | 419    | 340    | 168   | 369    | 1,870  | 301    | 230    | 135    | 67    | 680   |
| 27    | 56    | 128   | 422    | 250    | 166   | 396    | 1,310  | 258    | 195    | 126    | 66    | 1,590 |
| 28    | 54    | 250   | 422    | 210    | 166   | 895    | 895    | 236    | 176    | 122    | 64    | 1,390 |
| 29    | 51    | 263   | 425    | 180    | 295   | 825    | 660    | 230    | 258    | 121    | 63    | 930   |
| 30    | 50    | 287   | 1,830  | 160    | ----- | 634    | 527    | 276    | 357    | 108    | 59    | 1,840 |
| 31    | 49    | ----- | 2,630  | 140    | ----- | 499    | -----  | 622    | -----  | 96     | 55    | ----- |
| TOTAL | 1,679 | 2,786 | 22,157 | 19,052 | 6,033 | 27,367 | 67,768 | 32,834 | 10,935 | 11,178 | 2,622 | 9,582 |
| MEAN  | 54.2  | 92.9  | 715    | 615    | 208   | 883    | 2,259  | 1,059  | 365    | 361    | 84.6  | 319   |
| MAX   | 76    | 287   | 2,630  | 1,910  | 760   | 3,210  | 5,160  | 3,720  | 825    | 1,580  | 156   | 1,840 |
| MIN   | 36    | 47    | 128    | 140    | 110   | 279    | 331    | 230    | 162    | 96     | 55    | 48    |

CAL YR 1971 TOTAL 119,430 MEAN 327 MAX 3,760 MIN 33  
WTR YR 1972 TOTAL 213,993 MEAN 585 MAX 5,160 MIN 36

## PEAK DISCHARGE (BASE, 4,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 1430 | 8.27  | 5,160     | 4-22 | 0730 | 8.48  | 5,390     |
| 4-14 | 0230 | 7.43  | 4,230     | 5-15 | 2230 | 7.31  | 4,100     |

03261950 Loramie Creek near Newport, Ohio

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec. 24, T.11N., R.4E., Shelby County, on right bank at downstream side of bridge on Cardo Roman Road, 1.1 miles northwest of Newport, 3 miles south of Fort Loramie, and 3 miles downstream from Mile Creek.

DRAINAGE AREA.--152 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 927.00 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--8 year, 112 cfs.

EXTREMES.--Current year: Maximum discharge, 2,160 cfs Apr. 21 (gage height, 11.81 ft); minimum, 0.66 cfs Sept. 8, 11.

Period of record: Maximum discharge, 2,350 cfs May 8, 1967 (gage height, 12.50 ft); minimum, 0.10 cfs several days in August 1965 and September 1966.

Flood of Mar. 25, 1913 reached a stage of 17.0 ft and flood of Jan. 21, 1959 a stage of 14.2 ft (from flood profile furnished by Miami Conservancy District).

REMARKS.--Records good. Some regulation by Lake Loramie 5 miles upstream (capacity, 13,000 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 12 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WRD Ohio 1971: 1966(M).

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT             | NOV   | DEC   | JAN       | FEB       | MAR   | APR    | MAY     | JUN     | JUL     | AUG   | SEP      |
|-------------|-----------------|-------|-------|-----------|-----------|-------|--------|---------|---------|---------|-------|----------|
| 1           | 13              | 7.1   | 38    | 1,090     | 25        | 169   | 122    | 30      | 134     | 31      | 2.2   | .94      |
| 2           | 10              | 6.5   | 28    | 516       | 25        | 1,340 | 88     | 35      | 83      | 17      | 2.2   | 1.7      |
| 3           | 7.7             | 7.7   | 21    | 428       | 27        | 1,630 | 71     | 34      | 55      | 304     | 7.4   | 2.2      |
| 4           | 5.7             | 5.7   | 16    | 383       | 22        | 803   | 79     | 32      | 41      | 592     | 4.7   | 3.2      |
| 5           | 4.8             | 3.7   | 14    | 240       | 20        | 303   | 74     | 27      | 28      | 287     | 3.0   | 2.2      |
| 6           | 3.9             | 3.1   | 34    | 186       | 19        | 170   | 72     | 21      | 23      | 140     | 2.4   | 1.7      |
| 7           | 3.3             | 3.5   | 214   | 144       | 20        | 100   | 1,220  | 24      | 21      | 76      | 2.2   | 1.1      |
| 8           | 2.8             | 3.0   | 363   | 105       | 16        | 74    | 1,800  | 79      | 14      | 51      | 2.1   | .71      |
| 9           | 3.9             | 11    | 217   | 192       | 14        | 54    | 1,080  | 346     | 12      | 34      | 2.1   | .71      |
| 10          | 5.2             | 11    | 133   | 580       | 12        | 44    | 543    | 370     | 18      | 46      | 1.8   | .71      |
| 11          | 3.7             | 3.5   | 109   | 495       | 12        | 44    | 317    | 188     | 10      | 41      | 1.7   | .66      |
| 12          | 3.0             | 2.5   | 85    | 333       | 13        | 48    | 216    | 112     | 6.7     | 22      | 1.7   | 34       |
| 13          | 2.7             | 2.4   | 59    | 300       | 18        | 100   | 1,100  | 92      | 19      | 16      | 2.0   | 115      |
| 14          | 14              | 2.2   | 229   | 190       | 39        | 279   | 1,460  | 287     | 72      | 16      | 1.6   | 104      |
| 15          | 21              | 2.1   | 1,200 | 33        | 212       | 226   | 797    | 928     | 67      | 12      | 1.8   | 132      |
| 16          | 20              | 1.8   | 1,260 | 25        | 174       | 195   | 705    | 722     | 87      | 46      | 2.1   | 33       |
| 17          | 27              | 1.8   | 716   | 26        | 84        | 176   | 1,220  | 354     | 58      | 36      | 2.1   | 13       |
| 18          | 19              | 1.5   | 271   | 29        | 48        | 126   | 654    | 196     | 31      | 20      | 2.1   | 13       |
| 19          | 14              | 2.6   | 147   | 35        | 38        | 88    | 311    | 126     | 22      | 100     | 2.1   | 80       |
| 20          | 11              | 3.3   | 144   | 41        | 32        | 69    | 1,560  | 86      | 17      | 92      | 2.7   | 20       |
| 21          | 5.8             | 3.1   | 171   | 54        | 28        | 60    | 1,940  | 60      | 88      | 31      | 2.0   | 6.0      |
| 22          | 17              | 3.0   | 133   | 102       | 25        | 82    | 1,950  | 48      | 180     | 17      | 2.0   | 4.4      |
| 23          | 28              | 2.5   | 116   | 177       | 23        | 115   | 1,700  | 36      | 105     | 12      | 3.6   | 165      |
| 24          | 27              | 2.4   | 112   | 110       | 22        | 96    | 942    | 30      | 64      | 8.5     | 3.4   | 662      |
| 25          | 22              | 2.4   | 102   | 92        | 21        | 78    | 400    | 25      | 43      | 7.4     | 2.4   | 357      |
| 26          | 20              | 2.2   | 103   | 74        | 22        | 61    | 220    | 19      | 31      | 5.6     | 1.7   | 582      |
| 27          | 20              | 6.6   | 100   | 60        | 18        | 109   | 152    | 14      | 24      | 4.4     | 1.5   | 1,100    |
| 28          | 18              | 9.8   | 98    | 45        | 20        | 303   | 116    | 12      | 18      | 3.9     | 1.1   | 823      |
| 29          | 12              | 14    | 93    | 37        | 40        | 234   | 75     | 10      | 18      | 3.2     | 1.0   | 419      |
| 30          | 9.5             | 33    | 758   | 32        | -----     | 219   | 30     | 44      | 48      | 2.7     | 1.0   | 916      |
| 31          | 9.1             | ----- | 1,680 | 28        | -----     | 172   | -----  | 148     | -----   | 2.4     | .94   | -----    |
| TOTAL       | 388.1           | 165.0 | 8,764 | 6,182     | 1,089     | 7,567 | 21,014 | 4,535   | 1,437.7 | 2,077.1 | 70.64 | 5,594.23 |
| MEAN        | 12.5            | 5.50  | 283   | 199       | 37.6      | 244   | 700    | 146     | 47.9    | 67.0    | 2.28  | 186      |
| MAX         | 28              | 33    | 1,680 | 1,090     | 212       | 1,630 | 1,950  | 928     | 180     | 592     | 7.4   | 1,100    |
| MIN         | 2.7             | 1.5   | 14    | 25        | 12        | 44    | 30     | 10      | 6.7     | 2.4     | .94   | .66      |
| CAL YR 1971 | TOTAL 33,199.80 |       |       | MEAN 91.0 | MAX 1,680 |       |        | MIN .88 |         |         |       |          |
| WTR YR 1972 | TOTAL 58,883.77 |       |       | MEAN 161  | MAX 1,950 |       |        | MIN .66 |         |         |       |          |

## PEAK DISCHARGE (BASE, 1,500 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-31 | 0900 | 11.01 | 1,760     | 4-14 | 0430 | 10.59 | 1,540     |
| 3-3   | 0100 | 11.28 | 1,890     | 4-21 | 0200 | 11.81 | 2,160     |
| 4-8   | 0230 | 11.49 | 1,990     |      |      |       |           |

## GREAT MIAMI RIVER BASIN

03262000 Loramie Creek at Lockington, Ohio

LOCATION.--Lat 40°12'35", long 84°14'32", in NE 1/4 sec. 30, T.7N., R.6E., Shelby County, on left bank at downstream side of county road bridge, 1,300 ft downstream from Lockington Dam, 0.5 mile northwest of Lockington, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--257 sq mi.

PERIOD OF RECORD.--October 1915 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 800.03 ft above mean sea level, adjustment of 1912. Prior to July 3, 1924 nonrecording gage at same site at datum 75.96 ft higher. July 3, 1924, to Aug. 17, 1926, nonrecording gage, and Aug. 18 to Sept. 30, 1926, water-stage recorder, at same site at datum 74.96 ft higher.

AVERAGE DISCHARGE.--57 years, 202 cfs.

EXTREMES.--Current year: Maximum discharge, 4,080 cfs Apr. 7 (gage height, 83.18 ft); minimum discharge, 7.2 cfs Nov. 21; minimum gage height, 77.30 ft Sept. 10, 11.

Period of record: Maximum discharge, 10,400 cfs May 7, 1916 (gage height, 86.4 ft, present datum), from rating curve extended above 5,400 cfs; minimum, 2.0 cfs Aug. 19, 1931.

Flood of March 25, 1913 reached a stage of 91.6 ft, present datum (discharge, 25,600 cfs, at site upstream from Turtle Creek, drainage area, 211 sq mi, computed by Miami Conservancy District).

REMARKS.--Records good. Slight regulation by Lake Loramie (capacity, 13,000 acre-ft) 18 miles upstream. Flood flow regulated by Lockington retarding basin beginning in 1921. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 923: 1916. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|--------|-------|-------|--------|--------|-------|-------|-------|-------|---------|
| 1     | 27    | 13    | 39     | 1,350 | 54    | 478    | 196    | 90    | 216   | 77    | 16    | 8.0     |
| 2     | 21    | 12    | 36     | 768   | 50    | 2,190  | 148    | 88    | 146   | 52    | 16    | 8.0     |
| 3     | 17    | 11    | 29     | 584   | 48    | 1,850  | 120    | 82    | 97    | 347   | 17    | 8.8     |
| 4     | 14    | 10    | 24     | 600   | 46    | 1,100  | 130    | 76    | 72    | 688   | 18    | 9.1     |
| 5     | 11    | 11    | 22     | 456   | 43    | 488    | 127    | 69    | 62    | 424   | 18    | 9.4     |
| 6     | 9.9   | 11    | 25     | 290   | 40    | 244    | 120    | 61    | 52    | 196   | 17    | 9.6     |
| 7     | 8.5   | 9.6   | 227    | 228   | 37    | 196    | 2,950  | 56    | 50    | 114   | 16    | 8.8     |
| 8     | 7.7   | 8.8   | 472    | 168   | 34    | 173    | 2,300  | 234   | 46    | 80    | 15    | 8.5     |
| 9     | 8.5   | 8.5   | 319    | 370   | 32    | 130    | 1,450  | 1,040 | 38    | 65    | 15    | 8.2     |
| 10    | 9.1   | 9.1   | 194    | 800   | 31    | 103    | 808    | 696   | 35    | 92    | 14    | 8.0     |
| 11    | 9.6   | 14    | 141    | 680   | 30    | 90     | 512    | 362   | 38    | 86    | 13    | 7.7     |
| 12    | 9.6   | 12    | 120    | 464   | 30    | 88     | 355    | 217   | 33    | 60    | 13    | 26      |
| 13    | 8.8   | 9.9   | 92     | 392   | 34    | 167    | 882    | 168   | 32    | 48    | 13    | 100     |
| 14    | 10    | 8.8   | 685    | 312   | 64    | 552    | 1,260  | 429   | 57    | 38    | 13    | 98      |
| 15    | 17    | 8.5   | 2,170  | 76    | 332   | 400    | 984    | 1,050 | 88    | 36    | 13    | 164     |
| 16    | 27    | 8.2   | 1,680  | 68    | 290   | 318    | 1,250  | 1,140 | 110   | 212   | 12    | 92      |
| 17    | 27    | 8.2   | 1,020  | 64    | 160   | 297    | 1,340  | 640   | 96    | 112   | 11    | 46      |
| 18    | 29    | 8.0   | 488    | 64    | 98    | 222    | 904    | 355   | 66    | 67    | 11    | 32      |
| 19    | 24    | 8.5   | 262    | 71    | 76    | 155    | 496    | 222   | 52    | 82    | 11    | 33      |
| 20    | 20    | 8.0   | 200    | 76    | 80    | 127    | 2,740  | 160   | 43    | 149   | 11    | 87      |
| 21    | 18    | 7.4   | 238    | 103   | 70    | 112    | 2,340  | 124   | 40    | 80    | 11    | 33      |
| 22    | 16    | 8.4   | 200    | 190   | 62    | 165    | 3,230  | 98    | 158   | 50    | 12    | 21      |
| 23    | 17    | 8.2   | 164    | 378   | 55    | 244    | 2,180  | 82    | 134   | 38    | 11    | 282     |
| 24    | 24    | 8.2   | 155    | 262   | 50    | 182    | 1,220  | 68    | 88    | 31    | 11    | 880     |
| 25    | 26    | 8.2   | 141    | 150   | 49    | 144    | 656    | 61    | 66    | 27    | 11    | 568     |
| 26    | 24    | 8.0   | 138    | 110   | 57    | 124    | 379    | 56    | 56    | 24    | 11    | 712     |
| 27    | 22    | 8.8   | 144    | 92    | 52    | 153    | 254    | 49    | 47    | 22    | 11    | 1,170   |
| 28    | 20    | 9.9   | 144    | 76    | 49    | 448    | 196    | 44    | 40    | 20    | 9.9   | 992     |
| 29    | 19    | 13    | 134    | 62    | 79    | 362    | 168    | 40    | 102   | 18    | 9.4   | 552     |
| 30    | 17    | 26    | 1,580  | 54    | ----- | 318    | 100    | 48    | 147   | 17    | 8.8   | 1,140   |
| 31    | 14    | ----- | 1,710  | 50    | ----- | 255    | -----  | 224   | ----- | 16    | 8.2   | -----   |
| TOTAL | 532.7 | 304.2 | 12,993 | 9,408 | 2,132 | 11,875 | 29,795 | 8,129 | 2,307 | 3,368 | 397.3 | 7,122.1 |
| MEAN  | 17.2  | 10.1  | 419    | 303   | 73.5  | 383    | 993    | 262   | 76.9  | 109   | 12.8  | 237     |
| MAX   | 29    | 26    | 2,170  | 1,350 | 332   | 2,190  | 3,230  | 1,140 | 216   | 688   | 18    | 1,170   |
| MIN   | 7.7   | 7.4   | 22     | 50    | 30    | 88     | 100    | 40    | 32    | 16    | 8.2   | 7.7     |

CAL YR 1971 TOTAL 49,934.0 MEAN 137 MAX 2,170 MIN 5.7  
WTR YR 1972 TOTAL 88,363.3 MEAN 241 MAX 3,230 MIN 7.4



## GREAT MIAMI RIVER BASIN

147

03262700 Great Miami River at Troy, Ohio

LOCATION.--Lat 40°02'25", long 84°11'52", Miami County, 400 ft downstream from B and O Railroad bridge, 1,300 ft downstream from bridge on State Highway 55 at Troy, 1.2 miles upstream from small left bank tributary, and 2.3 miles downstream from Spring Creek.

DRAINAGE AREA.--926 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961, 1962 (published as Miami River at Troy). October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.67 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 680 cfs.

EXTREMES.--Current year: Maximum discharge, 10,000 cfs Apr. 7 (gage height, 10.77 ft); minimum, 13 cfs Aug. 19 (gage height, 2.69 ft), result of temporary storage due to dam closure upstream; minimum daily discharge, 52 cfs Oct. 8.

Period of record: Maximum discharge, 17,300 cfs Mar. 6, 1963 (gage height, 14.66 ft); minimum, 0.50 cfs July 12, 13, 1963 (gage height, 2.37 ft), result of temporary storage during repair of dam upstream; minimum daily discharge, 16 cfs July 13, Oct. 7, 1963.

Flood of June 11, 1958 reached a stage of 16.4 ft (discharge 21,000 cfs).

REMARKS.--Records good. Flood flow regulated by retarding basin on Loramie Creek, 18 miles upstream. Low and medium flow slightly regulated by Indian Lake (capacity, 45,900 acre-ft) 54 miles upstream. Water supply for city of Troy is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 3.5 cfs in 1972 and is returned as sewage 1 mile downstream from the station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 13 discharge measurements furnished by Miami Conservancy District.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR     | MAY    | JUN    | JUL    | AUG   | SEP    |
|-------|-------|-------|--------|--------|-------|--------|---------|--------|--------|--------|-------|--------|
| 1     | 122   | 76    | 341    | 3,720  | 240   | 878    | 690     | 779    | 1,090  | 409    | 120   | 67     |
| 2     | 107   | 74    | 375    | 2,480  | 275   | 5,300  | 586     | 722    | 779    | 311    | 108   | 72     |
| 3     | 96    | 77    | 360    | 1,860  | 260   | 5,450  | 502     | 658    | 594    | 760    | 163   | 77     |
| 4     | 86    | 74    | 259    | 1,610  | 230   | 4,200  | 474     | 610    | 488    | 2,530  | 187   | 82     |
| 5     | 81    | 72    | 194    | 1,720  | 160   | 2,690  | 554     | 586    | 418    | 2,040  | 173   | 91     |
| 6     | 72    | 75    | 194    | 1,200  | 150   | 1,560  | 474     | 502    | 411    | 1,220  | 150   | 75     |
| 7     | 91    | 81    | 338    | 900    | 180   | 1,150  | 6,260   | 460    | 348    | 764    | 138   | 68     |
| 8     | 52    | 77    | 990    | 800    | 160   | 1,020  | 7,280   | 658    | 330    | 549    | 133   | 65     |
| 9     | 78    | 76    | 864    | 840    | 160   | 968    | 5,000   | 4,340  | 300    | 405    | 132   | 70     |
| 10    | 97    | 79    | 539    | 2,480  | 150   | 788    | 4,100   | 5,060  | 300    | 527    | 111   | 71     |
| 11    | 100   | 85    | 375    | 2,100  | 150   | 722    | 3,010   | 3,400  | 324    | 658    | 102   | 71     |
| 12    | 88    | 90    | 430    | 1,600  | 160   | 570    | 2,110   | 2,200  | 300    | 440    | 110   | 224    |
| 13    | 84    | 81    | 420    | 1,100  | 180   | 650    | 4,130   | 1,570  | 276    | 330    | 113   | 303    |
| 14    | 122   | 76    | 604    | 750    | 210   | 2,270  | 5,600   | 1,830  | 516    | 297    | 108   | 375    |
| 15    | 91    | 75    | 4,660  | 500    | 666   | 2,250  | 5,140   | 5,090  | 806    | 263    | 112   | 402    |
| 16    | 149   | 82    | 4,660  | 350    | 1,200 | 1,540  | 4,630   | 5,620  | 977    | 618    | 110   | 377    |
| 17    | 133   | 82    | 3,050  | 420    | 913   | 1,460  | 5,410   | 4,100  | 806    | 798    | 107   | 225    |
| 18    | 129   | 81    | 1,600  | 553    | 620   | 1,220  | 4,390   | 2,690  | 578    | 498    | 98    | 173    |
| 19    | 116   | 102   | 1,000  | 424    | 480   | 860    | 2,980   | 1,800  | 439    | 462    | 86    | 150    |
| 20    | 107   | 86    | 890    | 424    | 350   | 666    | 6,310   | 1,340  | 384    | 444    | 130   | 197    |
| 21    | 103   | 84    | 800    | 426    | 370   | 602    | 6,730   | 1,040  | 384    | 349    | 109   | 161    |
| 22    | 98    | 84    | 740    | 485    | 370   | 682    | 9,230   | 815    | 995    | 282    | 96    | 112    |
| 23    | 94    | 107   | 700    | 939    | 345   | 1,160  | 7,630   | 706    | 824    | 233    | 96    | 275    |
| 24    | 95    | 112   | 660    | 938    | 338   | 1,000  | 5,710   | 618    | 618    | 210    | 110   | 1,840  |
| 25    | 104   | 99    | 633    | 795    | 318   | 762    | 4,160   | 546    | 453    | 186    | 107   | 1,330  |
| 26    | 105   | 90    | 626    | 550    | 315   | 634    | 2,840   | 502    | 467    | 166    | 103   | 1,370  |
| 27    | 97    | 91    | 626    | 410    | 326   | 602    | 1,960   | 460    | 321    | 173    | 96    | 3,400  |
| 28    | 93    | 168   | 618    | 350    | 303   | 1,190  | 1,420   | 390    | 278    | 168    | 83    | 3,320  |
| 29    | 88    | 281   | 596    | 300    | 366   | 1,330  | 1,120   | 366    | 264    | 164    | 75    | 1,920  |
| 30    | 83    | 294   | 2,550  | 250    | ----- | 1,020  | 987     | 432    | 704    | 158    | 76    | 3,170  |
| 31    | 80    | ----- | 4,930  | 200    | ----- | 842    | -----   | 722    | -----  | 142    | 71    | -----  |
| TOTAL | 3,031 | 3,011 | 35,612 | 31,474 | 9,945 | 46,036 | 111,317 | 50,612 | 15,772 | 16,554 | 3,513 | 20,133 |
| MEAN  | 97.8  | 100   | 1,149  | 1,015  | 343   | 1,485  | 3,711   | 1,633  | 526    | 534    | 113   | 671    |
| MAX   | 149   | 294   | 4,930  | 3,720  | 1,200 | 5,450  | 9,230   | 5,620  | 1,090  | 2,530  | 187   | 3,400  |
| MIN   | 52    | 72    | 194    | 200    | 150   | 570    | 474     | 366    | 264    | 142    | 71    | 65     |

CAL YR 1971 TOTAL 203,581 MEAN 558 MAX 6,960 MIN 45  
WTR YR 1972 TOTAL 347,010 MEAN 948 MAX 9,230 MIN 52

## GREAT MIAMI RIVER BASIN

03263000 Great Miami River at Taylorsville, Ohio

LOCATION.--Lat 39°52'22", long 84°09'51", in SW 1/4 sec. 36, R.8, T.2, Montgomery County, on left bank 600 ft downstream from Taylorsville Dam, 0.8 mile north of Taylorsville, and 9.5 miles upstream from Stillwater River.

DRAINAGE AREA.--1,149 sq mi.

PERIOD OF RECORD.--January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year (published as Miami River at Taylorsville 1921-62). Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site at Tadmor, January 1914 to July 1920, are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 700.08 ft above mean sea level, adjustment of 1912. Prior to October 1921, nonrecording gage at site 1.8 miles upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 600 ft upstream at outlet works of Taylorsville Dam at present datum.

AVERAGE DISCHARGE.--54 years, 969 cfs (11.45 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,600 cfs Apr. 8 (gage height, 70.50 ft); minimum, 60 cfs Oct. 9. Period of record: Maximum discharge, 31,400 cfs Jan. 22, 1959 (gage height, 75.44 ft); minimum, 30 cfs Jan. 2, 1945.

Flood in March 1913 reached a stage of 25.4 ft at site at Tadmor (discharge, 127,000 cfs, computed by Miami Conservancy District).

REMARKS.--Records good. Flood flow regulated by retarding basins on Great Miami River, just upstream from station and on Loramie Creek 28 miles upstream from station beginning in 1921. Low and medium flow slightly regulated by Indian Lake 64 miles upstream from station, and by Lake Loramie 47 miles upstream from station on Loramie Creek (combined capacity, 58,900 acre-ft). Water-quality records for the current year are published for station 03263110 in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 743: 1924(M). WSP 853: 1930, 1937. WSP 923: 1922-24. WSP 1385: 1916. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR     | MAY    | JUN    | JUL    | AUG   | SEP    |
|-------|-------|-------|--------|--------|--------|--------|---------|--------|--------|--------|-------|--------|
| 1     | 141   | 114   | 391    | 4,190  | 320    | 786    | 934     | 1,010  | 1,320  | 600    | 176   | 96     |
| 2     | 125   | 118   | 404    | 2,980  | 300    | 5,170  | 812     | 934    | 1,110  | 431    | 155   | 96     |
| 3     | 110   | 116   | 383    | 2,230  | 320    | 6,860  | 712     | 854    | 854    | 500    | 206   | 125    |
| 4     | 100   | 121   | 363    | 1,880  | 280    | 4,710  | 712     | 788    | 702    | 2,250  | 200   | 114    |
| 5     | 94    | 114   | 308    | 2,120  | 260    | 2,830  | 746     | 746    | 600    | 2,170  | 230   | 114    |
| 6     | 87    | 114   | 319    | 1,630  | 290    | 1,800  | 712     | 674    | 595    | 1,490  | 206   | 110    |
| 7     | 83    | 123   | 585    | 1,290  | 280    | 1,330  | 4,920   | 610    | 535    | 983    | 181   | 98     |
| 8     | 85    | 118   | 1,230  | 1,100  | 270    | 1,180  | 10,500  | 746    | 485    | 702    | 178   | 92     |
| 9     | 89    | 116   | 1,200  | 1,000  | 260    | 1,100  | 6,710   | 3,520  | 444    | 535    | 197   | 90     |
| 10    | 125   | 121   | 824    | 2,440  | 260    | 914    | 4,460   | 5,650  | 485    | 516    | 168   | 92     |
| 11    | 125   | 121   | 620    | 2,690  | 266    | 818    | 3,100   | 3,530  | 440    | 800    | 148   | 92     |
| 12    | 121   | 129   | 575    | 1,990  | 270    | 690    | 2,370   | 2,490  | 458    | 590    | 148   | 210    |
| 13    | 108   | 127   | 610    | 1,400  | 298    | 685    | 3,480   | 1,980  | 633    | 431    | 153   | 304    |
| 14    | 134   | 118   | 807    | 1,000  | 371    | 2,020  | 5,860   | 2,170  | 764    | 371    | 146   | 413    |
| 15    | 141   | 116   | 4,670  | 760    | 838    | 2,450  | 5,250   | 6,630  | 1,120  | 359    | 146   | 375    |
| 16    | 181   | 121   | 5,560  | 640    | 1,470  | 1,940  | 4,460   | 7,760  | 1,240  | 520    | 146   | 431    |
| 17    | 226   | 125   | 3,600  | 680    | 1,150  | 1,890  | 6,240   | 4,710  | 1,130  | 1,000  | 141   | 294    |
| 18    | 186   | 125   | 2,160  | 1,300  | 934    | 1,650  | 4,460   | 3,070  | 818    | 668    | 134   | 233    |
| 19    | 170   | 150   | 1,380  | 884    | 830    | 1,180  | 3,100   | 2,300  | 630    | 545    | 125   | 230    |
| 20    | 153   | 160   | 1,140  | 615    | 540    | 920    | 5,240   | 1,760  | 555    | 498    | 170   | 194    |
| 21    | 141   | 146   | 1,050  | 570    | 550    | 818    | 8,150   | 1,420  | 498    | 454    | 146   | 230    |
| 22    | 138   | 143   | 1,030  | 585    | 526    | 1,000  | 9,450   | 1,160  | 1,010  | 359    | 155   | 170    |
| 23    | 136   | 148   | 896    | 983    | 426    | 1,430  | 9,860   | 997    | 1,100  | 301    | 146   | 146    |
| 24    | 138   | 173   | 836    | 1,190  | 413    | 1,350  | 6,980   | 878    | 836    | 276    | 138   | 1,540  |
| 25    | 150   | 160   | 782    | 1,010  | 387    | 1,050  | 4,250   | 776    | 646    | 262    | 146   | 1,590  |
| 26    | 153   | 146   | 746    | 758    | 379    | 884    | 2,930   | 702    | 516    | 223    | 143   | 1,260  |
| 27    | 150   | 153   | 746    | 575    | 375    | 800    | 2,240   | 646    | 444    | 220    | 143   | 2,880  |
| 28    | 141   | 176   | 752    | 480    | 367    | 1,150  | 1,700   | 575    | 400    | 223    | 125   | 3,270  |
| 29    | 136   | 327   | 729    | 420    | 387    | 1,560  | 1,370   | 535    | 383    | 208    | 112   | 2,230  |
| 30    | 129   | 375   | 1,930  | 380    | -----  | 1,290  | 1,140   | 641    | 724    | 208    | 106   | 2,270  |
| 31    | 118   | ----- | 6,070  | 360    | -----  | 1,100  | -----   | 941    | -----  | 192    | 104   | -----  |
| TOTAL | 4,114 | 4,414 | 42,696 | 40,130 | 13,617 | 53,355 | 122,848 | 61,203 | 21,475 | 18,885 | 4,818 | 19,389 |
| MEAN  | 133   | 147   | 1,377  | 1,295  | 470    | 1,721  | 4,095   | 1,974  | 716    | 609    | 155   | 646    |
| MAX   | 226   | 375   | 6,070  | 4,190  | 1,470  | 6,860  | 10,500  | 7,760  | 1,320  | 2,250  | 230   | 3,270  |
| MIN   | 83    | 114   | 308    | 360    | 260    | 685    | 712     | 535    | 383    | 192    | 104   | 90     |
| CFSM  | .12   | .13   | 1.20   | 1.13   | .41    | 1.50   | 3.56    | 1.72   | .62    | .53    | .13   | .56    |
| IN.   | .13   | .14   | 1.38   | 1.30   | .44    | 1.73   | 3.98    | 1.98   | .70    | .61    | .16   | .63    |

CAL YR 1971 TOTAL 254,908 MEAN 698 MAX 10,000 MIN 60 CFSM .61 IN 8.25  
WTR YR 1972 TOTAL 406,944 MEAN 1,112 MAX 10,500 MIN 83 CFSM .97 IN 13.18

## 03264000 Greenville Creek near Bradford, Ohio

LOCATION.--Lat 40°06'08", long 84°25'48", between secs. 33 and 34, T.9N., R.4E., on boundary line of Darke and Miami Counties, on left bank at downstream side of bridge on State Highway 721, 0.8 mile downstream from small left bank tributary, 1.8 miles south of Bradford, and 6 miles upstream from mouth.

DRAINAGE AREA.--193 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Prior to April 1931, monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 948.9 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1942, nonrecording gage at same site and datum. Apr. 6, 1962 to Nov. 13, 1963, water-stage recorder at site 200 ft downstream at same datum.

AVERAGE DISCHARGE.--42 years, 166 cfs (11.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,830 cfs Apr. 22 (gage height 5.53 ft); minimum, 13 cfs Oct. 3. Period of record: Maximum discharge, 9,320 cfs May 14, 1933 (gage height, 9.2 ft); maximum gage height, 10.31 ft Mar. 5, 1963, from high-water mark in well (ice jam); minimum discharge, 4.8 cfs Sept. 17, 1963. Flood in March 1913 reached a stage of 12.1 ft (discharge, 18,200 cfs, at site with drainage area of 213 sq mi, computed by Miami Conservancy District).

REMARKS.--Records good. Some diurnal fluctuation caused by mill 8 miles upstream from station; daily flows are not affected appreciably. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 11 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 803: 1933(M). WSP 1235: 1936, 1937(M). WRD 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1     | 18   | 23    | 35    | 412   | 62    | 226   | 99     | 203   | 246   | 90    | 32    | 21    |
| 2     | 16   | 27    | 30    | 299   | 70    | 957   | 94     | 184   | 179   | 74    | 28    | 19    |
| 3     | 14   | 26    | 27    | 266   | 62    | 809   | 91     | 161   | 148   | 93    | 40    | 22    |
| 4     | 17   | 24    | 27    | 241   | 55    | 386   | 104    | 148   | 128   | 87    | 49    | 26    |
| 5     | 16   | 23    | 26    | 287   | 50    | 255   | 100    | 135   | 115   | 78    | 38    | 29    |
| 6     | 16   | 24    | 34    | 214   | 50    | 182   | 95     | 124   | 115   | 66    | 32    | 21    |
| 7     | 16   | 24    | 78    | 170   | 50    | 150   | 992    | 122   | 112   | 59    | 32    | 18    |
| 8     | 16   | 26    | 124   | 140   | 49    | 130   | 1,140  | 159   | 99    | 61    | 35    | 20    |
| 9     | 24   | 24    | 104   | 150   | 47    | 120   | 643    | 337   | 98    | 64    | 39    | 20    |
| 10    | 27   | 26    | 80    | 391   | 45    | 120   | 478    | 290   | 97    | 58    | 42    | 18    |
| 11    | 22   | 29    | 70    | 306   | 46    | 110   | 357    | 203   | 82    | 57    | 34    | 16    |
| 12    | 21   | 25    | 61    | 210   | 50    | 110   | 306    | 172   | 80    | 54    | 40    | 42    |
| 13    | 20   | 25    | 54    | 160   | 62    | 120   | 1,020  | 172   | 393   | 66    | 36    | 42    |
| 14    | 39   | 26    | 120   | 110   | 76    | 237   | 607    | 226   | 1,460 | 51    | 33    | 46    |
| 15    | 34   | 23    | 754   | 80    | 176   | 203   | 358    | 344   | 736   | 52    | 47    | 42    |
| 16    | 35   | 25    | 673   | 90    | 206   | 182   | 768    | 371   | 901   | 66    | 40    | 26    |
| 17    | 32   | 26    | 351   | 100   | 130   | 215   | 1,170  | 277   | 476   | 63    | 31    | 22    |
| 18    | 27   | 23    | 227   | 110   | 110   | 202   | 544    | 218   | 297   | 54    | 30    | 20    |
| 19    | 25   | 26    | 161   | 129   | 95    | 168   | 354    | 181   | 232   | 53    | 27    | 24    |
| 20    | 22   | 29    | 142   | 112   | 85    | 146   | 560    | 160   | 193   | 51    | 34    | 23    |
| 21    | 22   | 22    | 128   | 110   | 85    | 142   | 618    | 152   | 171   | 53    | 32    | 19    |
| 22    | 23   | 21    | 115   | 134   | 80    | 163   | 1,540  | 144   | 150   | 45    | 27    | 18    |
| 23    | 29   | 24    | 108   | 189   | 74    | 146   | 1,290  | 137   | 133   | 37    | 27    | 108   |
| 24    | 34   | 19    | 103   | 174   | 70    | 131   | 662    | 129   | 132   | 37    | 31    | 286   |
| 25    | 34   | 24    | 91    | 150   | 68    | 120   | 420    | 122   | 118   | 41    | 31    | 143   |
| 26    | 41   | 24    | 89    | 100   | 66    | 115   | 311    | 115   | 112   | 40    | 27    | 159   |
| 27    | 33   | 31    | 87    | 92    | 66    | 118   | 254    | 106   | 102   | 33    | 22    | 349   |
| 28    | 29   | 30    | 83    | 86    | 72    | 115   | 216    | 104   | 91    | 34    | 23    | 190   |
| 29    | 29   | 31    | 75    | 80    | 76    | 120   | 198    | 95    | 94    | 33    | 24    | 132   |
| 30    | 28   | 37    | 478   | 74    | ----- | 112   | 185    | 152   | 94    | 27    | 23    | 352   |
| 31    | 26   | ----- | 940   | 68    | ----- | 99    | -----  | 367   | ----- | 28    | 20    | ----- |
| TOTAL | 785  | 767   | 5,475 | 5,234 | 2,233 | 6,409 | 15,574 | 5,810 | 7,384 | 1,705 | 1,006 | 2,273 |
| MEAN  | 25.3 | 25.6  | 177   | 169   | 77.0  | 207   | 519    | 187   | 246   | 55.0  | 32.5  | 75.8  |
| MAX   | 41   | 37    | 940   | 412   | 206   | 957   | 1,540  | 371   | 1,460 | 93    | 49    | 352   |
| MIN   | 14   | 19    | 26    | 68    | 45    | 99    | 91     | 95    | 80    | 27    | 20    | 16    |
| CFSM  | .13  | .13   | .92   | .88   | .40   | 1.07  | 2.69   | .97   | 1.27  | .29   | .17   | .39   |
| IN.   | .15  | .15   | 1.06  | 1.01  | .43   | 1.24  | 3.00   | 1.12  | 1.42  | .33   | .19   | .44   |

CAL YR 1971 TOTAL 44,154.9 MEAN 121 MAX 1,990 MIN 5.6 CFSM .63 IN 8.51  
WTR YR 1972 TOTAL 54,655.0 MEAN 149 MAX 1,540 MIN 14 CFSM .77 IN 10.53

## PEAK DISCHARGE (BASE, 1,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-22 | 2300 | 5.53  | 1,830     | 6-14 | 1300 | 5.31  | 1,680     |

## GREAT MIAMI RIVER BASIN

03265000 Stillwater River at Pleasant Hill, Ohio

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec. 18, T.7N., R.5E., Miami County, on left bank at downstream side of bridge on Laurer Road, 0.8 mile northwest of Pleasant Hill, 2 miles downstream from Painter Creek, and 2 miles upstream from Canyon Run.

DRAINAGE AREA.--503 sq mi.

PERIOD OF RECORD.--October 1916 to September 1928, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at same site March 1922 to December 1963 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 846.73 ft above mean sea level, adjustment of 1912. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--50 years, 432 cfs (11.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,730 cfs Apr. 8 (gage height, 10.18 ft); minimum, 25 cfs Sept. 8, 10.

Period of record: Maximum discharge, 26,400 cfs Jan. 14, 1937, from rating curve extended above 14,000 cfs on basis of velocity-area study; maximum gage height, 17.98 ft Jan. 21, 1959; minimum discharge observed, 4 cfs Oct. 17, 1920, July 12, 22, Aug. 30, 1921.

Flood of January 25, 1913 reached a discharge of 51,400 cfs (gage height, 17.5 ft) at site about 3 miles upstream, computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 13 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 523: 1917. WSP 1305: 1920(M), 1922-25(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN    | JUL   | AUG   | SEP    |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|--------|-------|-------|--------|
| 1     | 54    | 42    | 62     | 1,130  | 140   | 606    | 228    | 436    | 470    | 149   | 51    | 28     |
| 2     | 48    | 38    | 55     | 787    | 150   | 3,900  | 208    | 405    | 331    | 131   | 49    | 29     |
| 3     | 41    | 42    | 50     | 787    | 130   | 2,910  | 190    | 345    | 263    | 144   | 59    | 32     |
| 4     | 37    | 41    | 46     | 690    | 120   | 1,170  | 208    | 308    | 217    | 409   | 74    | 39     |
| 5     | 34    | 40    | 45     | 878    | 113   | 756    | 216    | 272    | 175    | 223   | 66    | 41     |
| 6     | 31    | 41    | 56     | 550    | 110   | 507    | 208    | 240    | 174    | 158   | 57    | 37     |
| 7     | 30    | 43    | 120    | 430    | 110   | 436    | 4,170  | 228    | 175    | 130   | 53    | 31     |
| 8     | 31    | 44    | 348    | 330    | 100   | 400    | 5,030  | 441    | 166    | 117   | 52    | 27     |
| 9     | 40    | 45    | 258    | 430    | 95    | 340    | 2,010  | 1,680  | 160    | 113   | 56    | 27     |
| 10    | 49    | 45    | 177    | 1,210  | 90    | 290    | 1,370  | 1,190  | 184    | 107   | 55    | 28     |
| 11    | 45    | 45    | 145    | 871    | 95    | 267    | 990    | 666    | 187    | 101   | 49    | 33     |
| 12    | 38    | 46    | 133    | 600    | 100   | 272    | 780    | 485    | 145    | 95    | 48    | 111    |
| 13    | 38    | 42    | 115    | 400    | 123   | 375    | 1,850  | 452    | 410    | 94    | 55    | 506    |
| 14    | 53    | 42    | 246    | 260    | 156   | 920    | 1,220  | 758    | 2,250  | 92    | 46    | 411    |
| 15    | 58    | 42    | 2,990  | 150    | 405   | 666    | 768    | 1,710  | 1,110  | 87    | 49    | 442    |
| 16    | 59    | 41    | 2,320  | 160    | 513   | 546    | 1,930  | 1,870  | 1,370  | 122   | 58    | 201    |
| 17    | 61    | 42    | 1,020  | 180    | 300   | 612    | 3,030  | 1,020  | 776    | 143   | 51    | 118    |
| 18    | 51    | 42    | 618    | 240    | 220   | 552    | 1,260  | 684    | 495    | 118   | 42    | 90     |
| 19    | 45    | 50    | 415    | 260    | 180   | 425    | 829    | 508    | 376    | 112   | 47    | 88     |
| 20    | 42    | 48    | 340    | 250    | 160   | 355    | 2,330  | 405    | 314    | 125   | 52    | 78     |
| 21    | 40    | 49    | 299    | 272    | 170   | 330    | 2,290  | 355    | 277    | 117   | 47    | 75     |
| 22    | 46    | 41    | 272    | 375    | 150   | 400    | 4,960  | 303    | 243    | 131   | 43    | 64     |
| 23    | 47    | 40    | 236    | 726    | 140   | 380    | 3,470  | 267    | 217    | 84    | 39    | 353    |
| 24    | 63    | 42    | 224    | 552    | 140   | 312    | 1,530  | 236    | 207    | 82    | 38    | 2,620  |
| 25    | 77    | 40    | 197    | 360    | 140   | 276    | 976    | 208    | 190    | 99    | 41    | 1,030  |
| 26    | 71    | 43    | 186    | 260    | 141   | 258    | 720    | 182    | 172    | 77    | 37    | 1,070  |
| 27    | 71    | 52    | 186    | 220    | 141   | 258    | 582    | 176    | 158    | 74    | 35    | 2,050  |
| 28    | 60    | 56    | 179    | 190    | 138   | 294    | 485    | 174    | 143    | 65    | 32    | 806    |
| 29    | 54    | 56    | 165    | 170    | 197   | 294    | 425    | 171    | 154    | 61    | 31    | 509    |
| 30    | 52    | 60    | 1,480  | 160    | ----- | 290    | 395    | 201    | 156    | 57    | 30    | 1,430  |
| 31    | 47    | ----- | 3,180  | 150    | ----- | 249    | -----  | 576    | -----  | 50    | 30    | -----  |
| TOTAL | 1,513 | 1,340 | 16,163 | 14,028 | 4,767 | 19,646 | 44,658 | 16,952 | 11,665 | 3,667 | 1,472 | 12,404 |
| MEAN  | 48.8  | 44.7  | 521    | 453    | 164   | 634    | 1,489  | 547    | 389    | 118   | 47.5  | 413    |
| MAX   | 77    | 60    | 3,180  | 1,210  | 513   | 3,900  | 5,030  | 1,870  | 2,250  | 409   | 74    | 2,620  |
| MIN   | 30    | 38    | 45     | 150    | 90    | 249    | 190    | 171    | 143    | 50    | 30    | 27     |
| CFSM  | .10   | .09   | 1.04   | .90    | .33   | 1.26   | 2.96   | 1.09   | .77    | .23   | .09   | .82    |
| IN.   | .11   | .10   | 1.20   | 1.04   | .35   | 1.45   | 3.30   | 1.25   | .86    | .27   | .11   | .92    |

CAL YR 1971 TOTAL 107,937 MEAN 296 MAX 4,920 MIN 10 CFSM .59 IN 7.93  
WTR YR 1972 TOTAL 148,275 MEAN 405 MAX 5,030 MIN 27 CFSM .81 IN 10.97

## PEAK DISCHARGE (BASE, 5,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-8  | 0330 | 10.18 | 6,730     | 4-22 | 1600 | 9.05  | 5,500     |



## GREAT MIAMI RIVER BASIN

151

03266000 Stillwater River at Englewood, Ohio

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec. 23, T.5N., R.5E., Montgomery County, on right bank 1,000 ft downstream from Englewood Dam, 1 mile southeast of Englewood, and 8.5 miles upstream from mouth.

DRAINAGE AREA.--650 sq mi.

PERIOD OF RECORD.--October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 699.97 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--47 years, 561 cfs (11.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,280 cfs Apr. 8 (gage height, 77.49 ft); minimum, 32 cfs Oct. 8 (gage height 71.85 ft).

Period of record: Maximum discharge, 9,980 cfs June 15, 1958 (gage height, 80.88 ft); minimum, 3.7 cfs Sept. 30, Oct. 1, 1944 (gage height, 71.36 ft).

Flood of March 1913 reached a discharge of 85,400 cfs at site one mile downstream, computed by Miami Conservancy District.

REMARKS.--Records good. Flood flow regulated by Englewood retarding basin. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV   | DEC      | JAN       | FEB    | MAR      | APR      | MAY    | JUN    | JUL   | AUG   | SEP    |
|-------------|---------------|-------|----------|-----------|--------|----------|----------|--------|--------|-------|-------|--------|
| 1           | 72            | 57    | 67       | 2,260     | 170    | 372      | 326      | 662    | 774    | 205   | 69    | 39     |
| 2           | 59            | 57    | 69       | 1,020     | 160    | 2,850    | 308      | 601    | 525    | 190   | 69    | 40     |
| 3           | 51            | 52    | 68       | 977       | 170    | 4,370    | 279      | 521    | 406    | 198   | 81    | 52     |
| 4           | 45            | 48    | 63       | 826       | 160    | 2,650    | 282      | 446    | 337    | 363   | 83    | 46     |
| 5           | 39            | 48    | 61       | 1,060     | 150    | 1,220    | 287      | 395    | 286    | 391   | 89    | 47     |
| 6           | 38            | 50    | 84       | 839       | 160    | 786      | 286      | 354    | 270    | 245   | 81    | 48     |
| 7           | 36            | 52    | 123      | 605       | 150    | 630      | 2,260    | 330    | 264    | 195   | 76    | 47     |
| 8           | 34            | 52    | 268      | 504       | 150    | 567      | 5,070    | 385    | 244    | 171   | 69    | 42     |
| 9           | 47            | 51    | 381      | 440       | 150    | 495      | 4,620    | 1,960  | 225    | 160   | 79    | 39     |
| 10          | 50            | 51    | 253      | 1,130     | 143    | 419      | 2,670    | 2,120  | 239    | 156   | 74    | 36     |
| 11          | 51            | 52    | 197      | 1,320     | 145    | 378      | 1,490    | 1,100  | 238    | 148   | 71    | 36     |
| 12          | 50            | 52    | 170      | 862       | 145    | 371      | 1,110    | 754    | 227    | 140   | 69    | 59     |
| 13          | 48            | 53    | 155      | 664       | 165    | 384      | 2,250    | 666    | 454    | 138   | 64    | 235    |
| 14          | 51            | 51    | 210      | 538       | 199    | 987      | 2,160    | 998    | 2,480  | 130   | 66    | 508    |
| 15          | 56            | 52    | 1,910    | 290       | 356    | 1,010    | 1,220    | 2,860  | 2,080  | 129   | 60    | 465    |
| 16          | 75            | 51    | 3,240    | 200       | 608    | 779      | 1,590    | 3,020  | 1,710  | 139   | 61    | 348    |
| 17          | 73            | 48    | 1,570    | 230       | 490    | 823      | 3,810    | 2,070  | 1,340  | 165   | 69    | 183    |
| 18          | 72            | 48    | 830      | 339       | 419    | 847      | 2,700    | 1,190  | 780    | 170   | 63    | 125    |
| 19          | 64            | 57    | 542      | 349       | 340    | 650      | 1,290    | 847    | 562    | 160   | 59    | 102    |
| 20          | 58            | 56    | 442      | 325       | 220    | 536      | 1,640    | 662    | 461    | 145   | 62    | 93     |
| 21          | 53            | 56    | 368      | 307       | 250    | 487      | 3,260    | 561    | 399    | 157   | 62    | 84     |
| 22          | 54            | 53    | 327      | 356       | 240    | 564      | 3,620    | 491    | 349    | 149   | 59    | 78     |
| 23          | 53            | 50    | 286      | 720       | 218    | 609      | 4,740    | 427    | 308    | 143   | 61    | 72     |
| 24          | 57            | 48    | 265      | 729       | 220    | 510      | 3,530    | 376    | 285    | 112   | 52    | 1,950  |
| 25          | 62            | 49    | 251      | 580       | 212    | 437      | 1,510    | 341    | 265    | 109   | 50    | 1,850  |
| 26          | 74            | 47    | 228      | 408       | 204    | 399      | 1,040    | 304    | 243    | 118   | 53    | 924    |
| 27          | 74            | 56    | 223      | 295       | 194    | 380      | 817      | 276    | 223    | 100   | 52    | 2,290  |
| 28          | 76            | 58    | 220      | 250       | 197    | 383      | 679      | 253    | 206    | 95    | 50    | 1,330  |
| 29          | 68            | 68    | 207      | 230       | 210    | 411      | 592      | 242    | 207    | 85    | 44    | 670    |
| 30          | 63            | 71    | 635      | 210       | -----  | 396      | 546      | 297    | 218    | 68    | 41    | 1,090  |
| 31          | 61            | ----- | 3,410    | 190       | -----  | 361      | -----    | 632    | -----  | 75    | 40    | -----  |
| TOTAL       | 1,764         | 1,594 | 17,123   | 19,053    | 6,595  | 26,061   | 55,982   | 26,141 | 16,605 | 4,949 | 1,978 | 12,928 |
| MEAN        | 56.9          | 53.1  | 552      | 615       | 227    | 841      | 1,866    | 843    | 554    | 160   | 63.8  | 431    |
| MAX         | 76            | 71    | 3,410    | 2,260     | 608    | 4,370    | 5,070    | 3,020  | 2,480  | 391   | 89    | 2,290  |
| MIN         | 34            | 47    | 61       | 190       | 143    | 361      | 279      | 242    | 206    | 68    | 40    | 36     |
| CFSM        | .09           | .08   | .85      | .95       | .35    | 1.29     | 2.87     | 1.30   | .85    | .25   | .10   | .66    |
| IN.         | .10           | .00   | .98      | 1.09      | .38    | 1.49     | 3.20     | 1.50   | .95    | .28   | .11   | .74    |
| CAL YR 1971 | TOTAL 130,872 |       | MEAN 359 | MAX 5,260 | MIN 23 | CFSM .55 | IN 7.49  |        |        |       |       |        |
| WTR YR 1972 | TOTAL 190,773 |       | MEAN 521 | MAX 5,070 | MIN 34 | CFSM .80 | IN 10.92 |        |        |       |       |        |

## GREAT MIAMI RIVER BASIN

03266500 Mad River at Zanesfield, Ohio

LOCATION.--Lat 40°21'01", long 83°40'28", Logan County, on left bank at upstream side of bridge on County Road No. 5 (adjacent to former U.S. Highway 33), 0.8 mile upstream from Sugar Creek, and 1 mile north of Zanesfield.

DRAINAGE AREA.--7.31 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,208.28 ft above mean sea level.

AVERAGE DISCHARGE.--26 year, 7.66 cfs (14.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,100 cfs Apr. 13 (gage height, 9.54 ft in gage house), from rating curve extended above 220 cfs on basis of critical-depth measurement of peak flow; minimum, 0.75 cfs Oct. 31.

Period of record: Maximum discharge, 2,100 cfs Apr. 13, 1972 (gage height, 9.54 ft in gage house), from rating curve extended above 220 cfs on basis of critical-depth measurement of peak flow; minimum, 0.30 cfs Jan. 16, 1966 (gage height, 0.58 ft), result of freezeup.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC     | JAN     | FEB       | MAR      | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|-----------|---------|---------|-----------|----------|-------|-------|-------|-------|-------|-------|
| 1           | 1.2            | 1.5       | 2.5     | 9.2     | 2.7       | 35       | 12    | 11    | 9.6   | 6.3   | 3.3   | 1.9   |
| 2           | 1.2            | 1.7       | 1.7     | 7.8     | 2.7       | 69       | 12    | 11    | 7.8   | 7.7   | 6.8   | 1.9   |
| 3           | 1.1            | 1.8       | 1.5     | 6.0     | 2.6       | 26       | 11    | 9.8   | 7.0   | 75    | 8.6   | 2.4   |
| 4           | 1.0            | 1.8       | 1.4     | 7.9     | 2.5       | 16       | 13    | 9.5   | 6.4   | 25    | 5.1   | 2.1   |
| 5           | 1.0            | 1.6       | 1.5     | 7.1     | 2.6       | 10       | 11    | 9.0   | 5.9   | 16    | 4.0   | 1.8   |
| 6           | 1.1            | 1.8       | 4.1     | 6.9     | 2.6       | 8.0      | 11    | 8.5   | 6.2   | 9.9   | 3.9   | 1.7   |
| 7           | 1.1            | 1.9       | 9.0     | 4.9     | 2.6       | 7.2      | 82    | 8.7   | 5.7   | 7.9   | 3.9   | 1.7   |
| 8           | 1.1            | 1.7       | 5.6     | 4.5     | 2.5       | 9.0      | 29    | 31    | 5.3   | 7.2   | 3.6   | 1.7   |
| 9           | 2.2            | 1.9       | 3.7     | 11      | 2.5       | 7.2      | 23    | 108   | 5.6   | 6.2   | 3.4   | 1.6   |
| 10          | 1.8            | 2.0       | 3.1     | 14      | 2.4       | 6.2      | 21    | 37    | 5.5   | 18    | 3.1   | 1.5   |
| 11          | 1.4            | 2.0       | 2.8     | 8.7     | 2.5       | 5.8      | 16    | 23    | 5.0   | 8.8   | 3.0   | 1.5   |
| 12          | 1.2            | 2.0       | 2.5     | 6.7     | 2.9       | 6.8      | 74    | 17    | 4.7   | 6.9   | 3.0   | 2.4   |
| 13          | 1.4            | 1.8       | 2.2     | 6.0     | 3.3       | 15       | 300   | 19    | 12    | 6.0   | 2.8   | 1.9   |
| 14          | 2.5            | 1.6       | 43      | 5.2     | 3.4       | 27       | 100   | 107   | 8.0   | 5.1   | 2.6   | 6.6   |
| 15          | 1.7            | 1.7       | 45      | 4.7     | 9.3       | 15       | 50    | 90    | 12    | 5.7   | 2.6   | 4.4   |
| 16          | 1.7            | 1.6       | 16      | 4.8     | 7.4       | 19       | 40    | 51    | 9.8   | 55    | 2.4   | 3.4   |
| 17          | 1.5            | 1.5       | 8.6     | 4.6     | 6.8       | 17       | 70    | 37    | 6.7   | 12    | 2.4   | 3.0   |
| 18          | 1.4            | 1.5       | 5.8     | 4.5     | 6.0       | 12       | 24    | 25    | 5.8   | 8.1   | 16    | 3.4   |
| 19          | 1.3            | 2.3       | 4.9     | 4.9     | 5.2       | 11       | 28    | 18    | 5.3   | 6.5   | 8.6   | 3.2   |
| 20          | 1.1            | 2.2       | 5.8     | 4.8     | 5.0       | 13       | 121   | 15    | 4.9   | 5.7   | 5.0   | 2.9   |
| 21          | 1.1            | 1.5       | 5.8     | 4.5     | 5.6       | 14       | 60    | 13    | 5.2   | 5.2   | 3.7   | 2.8   |
| 22          | 1.4            | 1.4       | 4.6     | 4.7     | 6.4       | 31       | 84    | 12    | 5.2   | 4.8   | 3.4   | 2.7   |
| 23          | 1.3            | 1.4       | 4.0     | 5.0     | 5.0       | 21       | 45    | 10    | 5.1   | 4.5   | 3.1   | 7.1   |
| 24          | 1.6            | 1.4       | 3.9     | 4.6     | 4.6       | 16       | 32    | 9.6   | 4.9   | 7.2   | 2.8   | 6.4   |
| 25          | 1.3            | 1.4       | 3.5     | 4.2     | 5.1       | 14       | 22    | 8.9   | 5.4   | 5.7   | 2.6   | 4.9   |
| 26          | 1.2            | 1.4       | 3.9     | 3.7     | 6.3       | 12       | 19    | 8.3   | 4.9   | 4.7   | 2.7   | 19    |
| 27          | 1.0            | 2.0       | 4.3     | 3.3     | 6.7       | 16       | 16    | 7.9   | 4.0   | 5.1   | 2.6   | 56    |
| 28          | .85            | 2.1       | 4.3     | 3.0     | 10        | 21       | 14    | 7.6   | 3.6   | 4.6   | 2.6   | 17    |
| 29          | .85            | 2.7       | 4.1     | 2.9     | 13        | 20       | 13    | 7.5   | 21    | 4.5   | 2.2   | 13    |
| 30          | .85            | 3.3       | 47      | 2.8     | -----     | 17       | 12    | 12    | 9.4   | 4.0   | 2.1   | 59    |
| 31          | .88            | -----     | 17      | 2.7     | -----     | 13       | ----- | 11    | ----- | 3.5   | 1.9   | ----- |
| TOTAL       | 40.33          | 54.5      | 273.1   | 175.6   | 140.2     | 530.2    | 1,365 | 753.3 | 207.9 | 352.8 | 123.8 | 238.9 |
| MEAN        | 1.30           | 1.82      | 8.81    | 5.66    | 4.83      | 17.1     | 45.5  | 24.3  | 6.93  | 11.4  | 3.99  | 7.96  |
| MAX         | 2.5            | 3.3       | 47      | 14      | 13        | 69       | 300   | 108   | 21    | 75    | 16    | 59    |
| MIN         | .85            | 1.4       | 1.4     | 2.7     | 2.4       | 5.8      | 11    | 7.5   | 3.6   | 3.5   | 1.9   | 1.5   |
| CFSM        | .18            | .25       | 1.21    | .77     | .66       | 2.34     | 6.22  | 3.32  | .95   | 1.56  | .55   | 1.09  |
| IN.         | .21            | .28       | 1.39    | .89     | .71       | 2.70     | 6.95  | 3.83  | 1.06  | 1.80  | .63   | 1.22  |
| CAL YR 1971 | TOTAL 1,976.83 | MEAN 5.42 | MAX 100 | MIN .85 | CFSM .74  | IN 10.06 |       |       |       |       |       |       |
| WTR YR 1972 | TOTAL 4,255.63 | MEAN 11.6 | MAX 300 | MIN .85 | CFSM 1.59 | IN 21.66 |       |       |       |       |       |       |

## PEAK DISCHARGE (BASE, 200 CFS)

NOTE.--No gage height record Apr. 13-17.

| DATE | TIME    | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|---------|-------|-----------|------|------|-------|-----------|
| 4-13 | Unknown | 9.54  | 2,100     | 7-16 | 0145 | 2.57  | 280       |
| 4-20 | 0300    | 2.79  | 329       | 9-27 | 0615 | 2.31  | 223       |
| 5-14 | 2115    | 3.74  | 538       |      |      |       |           |

03267000 Mad River near Urbana, Ohio

LOCATION.--Lat 40°06'27", long 83°47'57", on west line of sec. 35, T.5E., R.11N., Champaign County, on left bank at downstream side of bridge on U.S. Highway 36, 1.8 miles upstream from Dugan Run, 1.8 miles downstream from Muddy Creek, and 2.5 miles west of Urbana.

DRAINAGE AREA.--162 sq mi.

PERIOD OF RECORD.--September 1925 to September 1931, August 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft above mean sea level. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930, to Sept. 30, 1931, nonrecording gage at site 600 ft downstream at datum 0.36 ft lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--39 years, 137 cfs (11.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,830 cfs Apr. 7 (gage height, 6.09 ft); minimum, 44 cfs Nov. 22, 23.

Period of record: Maximum discharge, 8,000 cfs Jan. 22, 1959 (gage height, 12.05 ft), from rating curve extended above 4,000 cfs on basis of estimate of peak flow based on contracted-opening measurement at site 3 miles downstream with drainage area of 235 sq mi adjusted to gage site by 0.8 power of the drainage-area ratio; minimum, 2.1 cfs Jan. 21, 1963 (gage height, 2.33 ft), result of freezeup; minimum daily, 24 cfs Feb. 2, 3, 1945, Jan. 13, 1964.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 11 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 1305: 1930(M). WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT          | NOV      | DEC       | JAN    | FEB      | MAR      | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|--------------|----------|-----------|--------|----------|----------|--------|-------|-------|-------|-------|-------|
| 1           | 51           | 49       | 62        | 196    | 78       | 130      | 136    | 190   | 180   | 123   | 101   | 75    |
| 2           | 49           | 53       | 57        | 171    | 78       | 417      | 131    | 180   | 170   | 117   | 104   | 75    |
| 3           | 51           | 49       | 55        | 157    | 72       | 237      | 127    | 180   | 160   | 234   | 166   | 78    |
| 4           | 49           | 49       | 53        | 164    | 64       | 169      | 129    | 170   | 150   | 189   | 121   | 77    |
| 5           | 48           | 49       | 53        | 175    | 70       | 139      | 124    | 160   | 150   | 150   | 109   | 74    |
| 6           | 48           | 49       | 66        | 145    | 72       | 122      | 122    | 150   | 140   | 134   | 106   | 75    |
| 7           | 48           | 48       | 131       | 136    | 68       | 126      | 921    | 150   | 140   | 124   | 106   | 75    |
| 8           | 48           | 48       | 152       | 127    | 66       | 135      | 505    | 170   | 130   | 124   | 106   | 74    |
| 9           | 55           | 49       | 111       | 147    | 64       | 116      | 343    | 688   | 130   | 120   | 105   | 73    |
| 10          | 57           | 48       | 100       | 214    | 62       | 111      | 320    | 396   | 120   | 148   | 100   | 73    |
| 11          | 53           | 49       | 90        | 164    | 66       | 109      | 287    | 299   | 120   | 141   | 97    | 72    |
| 12          | 49           | 49       | 87        | 142    | 70       | 111      | 264    | 254   | 130   | 127   | 97    | 105   |
| 13          | 49           | 49       | 82        | 120    | 77       | 115      | 916    | 244   | 140   | 122   | 93    | 104   |
| 14          | 57           | 48       | 146       | 100    | 83       | 172      | 409    | 319   | 150   | 118   | 91    | 103   |
| 15          | 57           | 48       | 426       | 88     | 218      | 139      | 323    | 951   | 140   | 118   | 92    | 103   |
| 16          | 57           | 48       | 264       | 100    | 171      | 152      | 475    | 516   | 140   | 281   | 89    | 89    |
| 17          | 59           | 48       | 162       | 105    | 129      | 192      | 458    | 387   | 130   | 182   | 90    | 85    |
| 18          | 55           | 48       | 128       | 107    | 110      | 152      | 337    | 300   | 130   | 145   | 96    | 82    |
| 19          | 53           | 51       | 117       | 113    | 92       | 132      | 306    | 260   | 120   | 129   | 148   | 82    |
| 20          | 51           | 49       | 117       | 108    | 80       | 122      | 598    | 230   | 120   | 123   | 100   | 81    |
| 21          | 51           | 49       | 114       | 108    | 88       | 122      | 396    | 210   | 120   | 119   | 89    | 77    |
| 22          | 53           | 48       | 105       | 107    | 100      | 283      | 665    | 200   | 120   | 115   | 88    | 77    |
| 23          | 51           | 46       | 100       | 119    | 86       | 237      | 444    | 190   | 120   | 114   | 88    | 81    |
| 24          | 51           | 49       | 97        | 112    | 82       | 172      | 320    | 180   | 120   | 114   | 85    | 106   |
| 25          | 51           | 49       | 95        | 104    | 86       | 157      | 270    | 170   | 120   | 120   | 84    | 91    |
| 26          | 53           | 48       | 95        | 94     | 91       | 145      | 240    | 160   | 110   | 111   | 82    | 129   |
| 27          | 53           | 51       | 95        | 90     | 84       | 148      | 220    | 150   | 110   | 111   | 82    | 276   |
| 28          | 51           | 51       | 92        | 84     | 91       | 187      | 210    | 140   | 110   | 108   | 81    | 189   |
| 29          | 49           | 55       | 90        | 80     | 106      | 167      | 200    | 140   | 180   | 105   | 77    | 141   |
| 30          | 49           | 62       | 445       | 78     | -----    | 157      | 190    | 160   | 160   | 104   | 75    | 346   |
| 31          | 49           | -----    | 317       | 76     | -----    | 141      | -----  | 190   | ----- | 102   | 74    | ----- |
| TOTAL       | 1,605        | 1,486    | 4,104     | 3,831  | 2,604    | 5,014    | 10,386 | 8,084 | 4,060 | 4,172 | 3,022 | 3,168 |
| MEAN        | 51.8         | 49.5     | 132       | 124    | 89.8     | 162      | 346    | 261   | 135   | 135   | 97.5  | 106   |
| MAX         | 59           | 62       | 445       | 214    | 218      | 417      | 921    | 951   | 180   | 281   | 166   | 346   |
| MIN         | 48           | 46       | 53        | 76     | 62       | 109      | 122    | 140   | 110   | 102   | 74    | 72    |
| CFSM        | .32          | .31      | .81       | .77    | .55      | 1.00     | 2.14   | 1.61  | .83   | .83   | .60   | .65   |
| IN.         | .37          | .34      | .94       | .88    | .60      | 1.15     | 2.38   | 1.86  | .93   | .96   | .69   | .73   |
| CAL YR 1971 | TOTAL 37,816 | MEAN 104 | MAX 1,480 | MIN 39 | CFSM .64 | IN 8.68  |        |       |       |       |       |       |
| WTR YR 1972 | TOTAL 51,536 | MEAN 141 | MAX 951   | MIN 46 | CFSM .87 | IN 11.83 |        |       |       |       |       |       |

## PEAK DISCHARGE (BASE, 1,400 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 1230 | 6.09  | 1,830     | 5-15 | 0430 | 5.88  | 1,690     |
| 4-13 | 1400 | 5.51  | 1,430     |      |      |       |           |

## GREAT MIAMI RIVER BASIN

03267500 Mad River at Tremont City, Ohio

LOCATION.--Lat 40°00'25", long 83°49'24", in NW 1/4 sec. 4, R.10, T.4, Clark County, on right bank at downstream side of bridge on Tremont City Road, 500 ft upstream from Chapman Creek, 0.8 mile southeast of Tremont City, and 1.3 miles downstream from Storms Creek.

DRAINAGE AREA.--264 sq mi.

PERIOD OF RECORD.--July 1931 to March 1933, October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 926.40 ft above mean sea level. July 23, 1931, to Mar. 31, 1933, nonrecording gage at same site at datum 2.92 ft higher.

AVERAGE DISCHARGE.--8 years (1932, 1966-72) 231 cfs.

EXTREMES.--Current year: Maximum discharge, 4,470 cfs May 15 (gage height, 11.64); minimum, 94 cfs Oct. 8, 9. Period of record: Maximum discharge, 11,900 cfs, June 26, 1971 (gage height 16.12 ft), from rating curve extended above 2,200 cfs; minimum, 69 cfs Jan. 27, Feb. 1, 1971, result of freezeup. Flood in March 1913 reached a stage of 19.2 ft, present datum, from data furnished by Miami Conservancy District.

REMARKS.--Records good. Water supply for the city of Springfield is pumped from wells adjacent to Mad River downstream from the station. Recharge to the well field is largely by induced infiltration from the river. At times the cone of depression of the well field extends upstream from the station. See REMARKS for station No. 03267900. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Ohio 1969: 1966(M) 1967(P) 1968.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|
| 1     | 132   | 106   | 142   | 372   | 150   | 241   | 218    | 330    | 322   | 208   | 157   | 112   |
| 2     | 117   | 114   | 129   | 330   | 150   | 671   | 211    | 317    | 300   | 200   | 157   | 112   |
| 3     | 112   | 112   | 123   | 304   | 160   | 410   | 204    | 304    | 284   | 292   | 200   | 112   |
| 4     | 109   | 109   | 117   | 335   | 140   | 317   | 208    | 292    | 275   | 271   | 174   | 112   |
| 5     | 103   | 106   | 114   | 339   | 140   | 240   | 200    | 288    | 267   | 225   | 164   | 109   |
| 6     | 100   | 103   | 222   | 275   | 140   | 210   | 197    | 275    | 267   | 208   | 164   | 106   |
| 7     | 97    | 103   | 490   | 255   | 130   | 220   | 2,030  | 271    | 263   | 200   | 160   | 103   |
| 8     | 97    | 114   | 353   | 236   | 130   | 220   | 764    | 296    | 255   | 200   | 160   | 106   |
| 9     | 114   | 123   | 255   | 284   | 140   | 200   | 550    | 1,020  | 252   | 197   | 167   | 103   |
| 10    | 126   | 117   | 218   | 390   | 142   | 190   | 490    | 616    | 248   | 214   | 154   | 103   |
| 11    | 114   | 117   | 197   | 304   | 148   | 190   | 430    | 440    | 236   | 214   | 151   | 97    |
| 12    | 106   | 117   | 187   | 263   | 148   | 204   | 395    | 376    | 233   | 200   | 148   | 138   |
| 13    | 103   | 112   | 170   | 259   | 157   | 214   | 1,090  | 386    | 252   | 194   | 145   | 138   |
| 14    | 142   | 106   | 465   | 220   | 177   | 296   | 534    | 620    | 259   | 187   | 142   | 142   |
| 15    | 129   | 103   | 742   | 170   | 450   | 259   | 430    | 2,290  | 240   | 190   | 142   | 145   |
| 16    | 164   | 106   | 420   | 180   | 326   | 308   | 849    | 896    | 244   | 328   | 138   | 126   |
| 17    | 170   | 109   | 279   | 200   | 240   | 362   | 528    | 644    | 233   | 255   | 132   | 123   |
| 18    | 145   | 109   | 214   | 204   | 210   | 284   | 475    | 534    | 225   | 214   | 138   | 123   |
| 19    | 132   | 114   | 194   | 214   | 180   | 240   | 430    | 470    | 222   | 200   | 180   | 126   |
| 20    | 120   | 114   | 197   | 208   | 170   | 229   | 818    | 430    | 218   | 190   | 142   | 129   |
| 21    | 114   | 112   | 200   | 208   | 180   | 229   | 610    | 405    | 218   | 183   | 135   | 123   |
| 22    | 117   | 106   | 177   | 211   | 170   | 528   | 1,130  | 381    | 218   | 177   | 132   | 126   |
| 23    | 117   | 106   | 164   | 233   | 174   | 405   | 732    | 357    | 214   | 174   | 138   | 129   |
| 24    | 126   | 114   | 157   | 225   | 174   | 308   | 566    | 339    | 214   | 177   | 132   | 160   |
| 25    | 129   | 109   | 148   | 190   | 164   | 279   | 475    | 322    | 211   | 183   | 129   | 148   |
| 26    | 123   | 106   | 148   | 170   | 167   | 259   | 430    | 308    | 208   | 170   | 129   | 174   |
| 27    | 120   | 112   | 151   | 160   | 157   | 255   | 395    | 300    | 204   | 167   | 123   | 332   |
| 28    | 114   | 112   | 154   | 150   | 160   | 279   | 372    | 292    | 200   | 167   | 120   | 236   |
| 29    | 112   | 126   | 151   | 150   | 180   | 263   | 348    | 292    | 218   | 160   | 117   | 187   |
| 30    | 109   | 157   | 981   | 140   | ----- | 255   | 339    | 322    | 229   | 157   | 114   | 446   |
| 31    | 109   | ----- | 588   | 140   | ----- | 229   | -----  | 357    | ----- | 157   | 112   | ----- |
| TOTAL | 3,722 | 3,374 | 8,247 | 7,319 | 5,154 | 8,794 | 16,448 | 14,770 | 7,229 | 6,259 | 4,496 | 4,426 |
| MEAN  | 120   | 112   | 266   | 236   | 178   | 284   | 548    | 476    | 241   | 202   | 145   | 148   |
| MAX   | 170   | 157   | 981   | 390   | 450   | 671   | 2,030  | 2,290  | 322   | 328   | 200   | 446   |
| MIN   | 97    | 103   | 114   | 140   | 130   | 190   | 197    | 271    | 200   | 157   | 112   | 97    |

CAL YR 1971 TOTAL 73,404 MEAN 201 MAX 3,440 MIN 81  
WTR YR 1972 TOTAL 90,238 MEAN 247 MAX 2,290 MIN 97

## PEAK DISCHARGE (BASE, 2,100 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 1030 | 10.80 | 3,500     | 5-15 | 0200 | 11.64 | 4,470     |



03267700 Moore Run near Eagle City, Ohio

LOCATION.--Lat 39°59'24", long 83°49'03", in SE 1/4 sec. 3, R.10, T.4, Clark County, on right bank at downstream side of bridge on River Road, 0.8 mile upstream from mouth, 1.3 miles northeast of Eagle City, and 1.8 miles southeast of Tremont City.

DRAINAGE AREA.--18.2 sq mi.

PERIOD OF RECORD.--October 1965 to September 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 926.03 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 19.4 cfs.

EXTREMES.--Current year: Maximum discharge, 961 cfs Dec. 30 (gage height, 8.61 ft) from rating curve extended above 55 cfs; minimum daily, 12 cfs Nov. 14, 15.

Period of record: Maximum discharge, 1,370 cfs May 12, 1970 (gage height, 9.81 ft) from rating curve extended above 55 cfs; minimum, 1.2 cfs Aug. 10, 1970.

REMARKS.--Records fair. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, beginning about 0.9 mile downstream from station. Recharge to the well field is largely by induced infiltration from Mad River and Moore Run. See REMARKS for station 03267900. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC  | JAN  | FEB   | MAR  | APR   | MAY  | JUN   | JUL  | AUG  | SEP   |
|-------|------|-------|------|------|-------|------|-------|------|-------|------|------|-------|
| 1     | 18   | 16    | 15   | 23   | 17    | 21   | 18    | 25   | 22    | 16   | 17   | 17    |
| 2     | 17   | 18    | 14   | 23   | 17    | 24   | 18    | 25   | 20    | 15   | 17   | 17    |
| 3     | 16   | 16    | 14   | 22   | 18    | 20   | 19    | 25   | 20    | 17   | 19   | 17    |
| 4     | 16   | 16    | 14   | 24   | 16    | 18   | 19    | 25   | 19    | 15   | 15   | 17    |
| 5     | 17   | 16    | 14   | 22   | 17    | 18   | 19    | 24   | 18    | 15   | 15   | 17    |
| 6     | 17   | 15    | 26   | 20   | 16    | 17   | 19    | 22   | 20    | 15   | 14   | 17    |
| 7     | 16   | 14    | 34   | 20   | 15    | 18   | 151   | 22   | 20    | 15   | 14   | 17    |
| 8     | 16   | 14    | 22   | 20   | 15    | 18   | 33    | 34   | 20    | 15   | 15   | 16    |
| 9     | 22   | 15    | 20   | 22   | 16    | 17   | 28    | 66   | 20    | 16   | 17   | 15    |
| 10    | 17   | 15    | 19   | 20   | 15    | 17   | 26    | 32   | 20    | 20   | 15   | 15    |
| 11    | 16   | 14    | 19   | 20   | 15    | 17   | 25    | 29   | 19    | 16   | 15   | 16    |
| 12    | 16   | 14    | 17   | 20   | 15    | 16   | 25    | 27   | 19    | 16   | 15   | 25    |
| 13    | 16   | 13    | 17   | 20   | 17    | 17   | 26    | 43   | 25    | 15   | 14   | 18    |
| 14    | 17   | 12    | 37   | 19   | 19    | 17   | 24    | 36   | 18    | 15   | 14   | 22    |
| 15    | 16   | 12    | 34   | 18   | 30    | 16   | 23    | 52   | 19    | 30   | 14   | 17    |
| 16    | 33   | 13    | 24   | 19   | 21    | 22   | 46    | 41   | 18    | 20   | 14   | 17    |
| 17    | 19   | 14    | 21   | 18   | 20    | 20   | 30    | 35   | 17    | 16   | 14   | 16    |
| 18    | 18   | 14    | 20   | 19   | 19    | 18   | 28    | 32   | 16    | 15   | 14   | 18    |
| 19    | 16   | 15    | 19   | 18   | 18    | 17   | 33    | 30   | 16    | 15   | 14   | 15    |
| 20    | 16   | 14    | 20   | 19   | 17    | 18   | 40    | 28   | 16    | 15   | 14   | 14    |
| 21    | 17   | 14    | 19   | 18   | 18    | 22   | 38    | 26   | 16    | 14   | 14   | 14    |
| 22    | 18   | 14    | 19   | 18   | 17    | 35   | 49    | 26   | 16    | 14   | 14   | 14    |
| 23    | 17   | 14    | 19   | 18   | 18    | 24   | 35    | 26   | 16    | 14   | 32   | 14    |
| 24    | 19   | 14    | 18   | 18   | 18    | 21   | 31    | 25   | 16    | 22   | 52   | 14    |
| 25    | 16   | 13    | 17   | 18   | 17    | 20   | 30    | 25   | 15    | 16   | 20   | 14    |
| 26    | 17   | 13    | 18   | 18   | 17    | 19   | 28    | 24   | 16    | 15   | 42   | 20    |
| 27    | 16   | 14    | 17   | 17   | 17    | 19   | 26    | 23   | 16    | 14   | 21   | 17    |
| 28    | 16   | 13    | 18   | 17   | 17    | 19   | 26    | 22   | 16    | 14   | 18   | 15    |
| 29    | 16   | 18    | 19   | 17   | 18    | 19   | 25    | 24   | 18    | 15   | 17   | 16    |
| 30    | 16   | 15    | 157  | 17   | ----- | 19   | 25    | 31   | 17    | 16   | 17   | 36    |
| 31    | 14   | ----- | 27   | 17   | ----- | 18   | ----- | 25   | ----- | 17   | 17   | ----- |
| TOTAL | 537  | 432   | 768  | 599  | 510   | 601  | 963   | 930  | 544   | 503  | 564  | 517   |
| MEAN  | 17.3 | 14.4  | 24.8 | 19.3 | 17.6  | 19.4 | 32.1  | 30.0 | 18.1  | 16.2 | 18.2 | 17.2  |
| MAX   | 33   | 18    | 157  | 24   | 30    | 35   | 151   | 66   | 25    | 30   | 52   | 36    |
| MIN   | 14   | 12    | 14   | 17   | 15    | 16   | 18    | 22   | 15    | 14   | 14   | 14    |

CAL YR 1971 TOTAL 7,624.0 MEAN 20.9 MAX 358 MIN 9.0  
WTR YR 1972 TOTAL 7,468.0 MEAN 20.4 MAX 157 MIN 12

## PEAK DISCHARGE (BASE, 250 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 1100 | 8.61  | 961       | 8-26 | 1700 | 6.07  | 295       |
| 4-7   | 0500 | 7.82  | 706       |      |      |       |           |

03267900 Mad River at St. Paris Pike at Eagle City, Ohio

LOCATION.--Lat 39°57'51", long 83°49'54", in W 1/2 sec. 1, R.10, T.4, Clark County, on left bank at downstream side of bridge on St. Paris Pike, 0.8 mile southeast of Eagle City, 1.1 miles downstream from Moore Run, 3.1 miles upstream from Buck Creek, and 3.3 miles south of Tremont City.

DRAINAGE AREA.--310 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 266 cfs.

EXTREMES.--Current year: Maximum discharge, 4,840 cfs May 15 (gage height, 12.06 ft); minimum, 97 cfs Oct. 7, 8. Period of record: Maximum discharge, 9,700 cfs June 26, 1971 (gage height 16.00 ft), from rating curve extended above 2,200 cfs; minimum, 91 cfs Sept. 19, 1966. Flood of March 1913 reached a stage of 19.8 ft, from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959 reached a stage of 15.7 ft.

REMARKS.--Records good. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, just upstream from station. Recharge to the well field is largely by induced filtration from Mad River and Moore Run. The pumpage averaged 23.3 cfs in 1972 and is returned as sewage 1.4 miles upstream from the station near Springfield. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV      | DEC       | JAN     | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------------|---------------|----------|-----------|---------|-------|--------|--------|--------|-------|-------|-------|-------|
| 1           | 132           | 114      | 152       | 448     | 160   | 304    | 260    | 398    | 362   | 218   | 166   | 124   |
| 2           | 117           | 123      | 141       | 397     | 170   | 820    | 251    | 392    | 329   | 208   | 164   | 123   |
| 3           | 110           | 121      | 133       | 365     | 170   | 494    | 248    | 371    | 311   | 292   | 215   | 124   |
| 4           | 105           | 115      | 123       | 404     | 170   | 373    | 253    | 356    | 299   | 278   | 188   | 126   |
| 5           | 102           | 114      | 119       | 410     | 160   | 280    | 242    | 347    | 285   | 240   | 170   | 121   |
| 6           | 102           | 115      | 231       | 331     | 170   | 250    | 239    | 332    | 285   | 222   | 166   | 121   |
| 7           | 100           | 115      | 556       | 303     | 160   | 240    | 2,550  | 323    | 278   | 210   | 166   | 117   |
| 8           | 100           | 121      | 430       | 278     | 150   | 250    | 1,060  | 368    | 268   | 210   | 168   | 115   |
| 9           | 121           | 137      | 298       | 337     | 160   | 240    | 685    | 1,360  | 260   | 205   | 172   | 115   |
| 10          | 137           | 128      | 258       | 462     | 150   | 220    | 600    | 795    | 260   | 228   | 158   | 112   |
| 11          | 124           | 128      | 230       | 359     | 160   | 220    | 508    | 548    | 250   | 230   | 152   | 112   |
| 12          | 115           | 128      | 214       | 311     | 160   | 235    | 448    | 464    | 250   | 210   | 152   | 166   |
| 13          | 110           | 126      | 199       | 296     | 180   | 246    | 1,320  | 504    | 290   | 202   | 148   | 156   |
| 14          | 156           | 117      | 584       | 250     | 203   | 339    | 668    | 858    | 280   | 195   | 144   | 162   |
| 15          | 142           | 114      | 1,030     | 210     | 542   | 296    | 524    | 2,780  | 255   | 212   | 146   | 158   |
| 16          | 192           | 112      | 644       | 230     | 407   | 365    | 1,090  | 1,180  | 258   | 345   | 138   | 142   |
| 17          | 192           | 110      | 413       | 248     | 300   | 444    | 905    | 820    | 245   | 272   | 136   | 136   |
| 18          | 162           | 108      | 325       | 235     | 260   | 348    | 600    | 648    | 238   | 232   | 140   | 136   |
| 19          | 150           | 119      | 290       | 242     | 220   | 296    | 544    | 556    | 232   | 212   | 177   | 136   |
| 20          | 141           | 121      | 298       | 235     | 200   | 273    | 1,070  | 492    | 230   | 202   | 154   | 130   |
| 21          | 133           | 115      | 296       | 237     | 200   | 278    | 790    | 460    | 232   | 195   | 144   | 126   |
| 22          | 135           | 110      | 268       | 237     | 200   | 676    | 1,530  | 431    | 232   | 186   | 148   | 124   |
| 23          | 133           | 110      | 251       | 273     | 200   | 525    | 995    | 401    | 230   | 183   | 164   | 126   |
| 24          | 142           | 117      | 242       | 250     | 190   | 387    | 705    | 383    | 228   | 198   | 162   | 160   |
| 25          | 144           | 114      | 228       | 220     | 190   | 348    | 592    | 365    | 222   | 208   | 148   | 150   |
| 26          | 137           | 110      | 230       | 200     | 180   | 320    | 528    | 347    | 220   | 186   | 160   | 181   |
| 27          | 133           | 117      | 232       | 200     | 180   | 311    | 476    | 329    | 212   | 181   | 144   | 360   |
| 28          | 126           | 115      | 237       | 190     | 190   | 328    | 444    | 323    | 208   | 179   | 138   | 296   |
| 29          | 121           | 137      | 230       | 180     | 210   | 314    | 422    | 320    | 228   | 175   | 132   | 242   |
| 30          | 117           | 168      | 1,370     | 170     | ----- | 300    | 410    | 359    | 248   | 172   | 128   | 542   |
| 31          | 115           | -----    | 720       | 160     | ----- | 276    | -----  | 401    | ----- | 168   | 126   | ----- |
| TOTAL       | 4,046         | 3,599    | 10,972    | 8,668   | 5,992 | 10,596 | 20,957 | 18,011 | 7,725 | 6,654 | 4,814 | 4,939 |
| MEAN        | 131           | 120      | 354       | 280     | 207   | 342    | 699    | 581    | 258   | 215   | 155   | 165   |
| MAX         | 192           | 168      | 1,370     | 462     | 542   | 820    | 2,550  | 2,780  | 362   | 345   | 215   | 542   |
| MIN         | 100           | 108      | 119       | 160     | 150   | 220    | 239    | 320    | 208   | 168   | 126   | 112   |
| CAL YR 1971 | TOTAL 87,161  | MEAN 239 | MAX 3,300 | MIN 96  |       |        |        |        |       |       |       |       |
| WTR YR 1972 | TOTAL 106,973 | MEAN 292 | MAX 2,780 | MIN 100 |       |        |        |        |       |       |       |       |

## PEAK DISCHARGE (BASE, 2,500 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 1230 | 9.75  | 2,700     | 5-15 | 0130 | 12.06 | 4,840     |
| 4-7   | 0700 | 11.44 | 4,220     |      |      |       |           |

03267950 Buck Creek near New Moorefield, Ohio

LOCATION.--Lat 40°00'38", long 83°41'56", in SE 1/4 sec. 5, R.10, T.5, Clark County, on right bank at downstream side of bridge on State Highway 4, 2,000 ft upstream from East Fork Buck Creek, 1.7 miles northeast of New Moorefield, and 2.6 miles downstream from Dugan Ditch.

DRAINAGE AREA.--30.5 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage 1,025.10 ft above mean sea level. Prior to May 23, 1967 non-recording gage at same site and datum.

AVERAGE DISCHARGE.--5 years, 24.2 cfs (10.77 inches per year).

EXTREMES.--Current year: Maximum discharge, 720 cfs Apr. 7 (gage height, 7.74 ft); minimum, 7.9 cfs Oct. 6.  
Period of record: Maximum discharge, 1,190 cfs May 25, 1970 (gage height, 9.09 ft) from rating extended above 140 cfs; minimum, 6.2 cfs Feb. 17, 1968, result of freezeup.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN  | FEB   | MAR  | APR   | MAY   | JUN   | JUL  | AUG  | SEP   |
|-------|-------|-------|-------|------|-------|------|-------|-------|-------|------|------|-------|
| 1     | 9.9   | 10    | 11    | 31   | 15    | 19   | 20    | 42    | 32    | 16   | 17   | 14    |
| 2     | 9.8   | 11    | 9.9   | 29   | 16    | 45   | 20    | 41    | 31    | 16   | 17   | 14    |
| 3     | 9.6   | 10    | 9.4   | 27   | 16    | 27   | 19    | 40    | 30    | 17   | 20   | 14    |
| 4     | 9.2   | 9.8   | 9.2   | 30   | 15    | 22   | 20    | 39    | 29    | 17   | 17   | 14    |
| 5     | 8.9   | 10    | 9.0   | 31   | 15    | 20   | 18    | 39    | 28    | 15   | 17   | 14    |
| 6     | 8.7   | 9.8   | 13    | 26   | 15    | 18   | 18    | 38    | 28    | 15   | 17   | 14    |
| 7     | 8.4   | 9.6   | 26    | 25   | 16    | 19   | 242   | 38    | 26    | 15   | 16   | 14    |
| 8     | 8.8   | 9.5   | 24    | 24   | 15    | 18   | 55    | 44    | 26    | 15   | 16   | 14    |
| 9     | 11    | 10    | 18    | 27   | 15    | 17   | 46    | 131   | 26    | 14   | 17   | 14    |
| 10    | 11    | 9.8   | 17    | 34   | 14    | 16   | 43    | 54    | 25    | 16   | 16   | 14    |
| 11    | 11    | 9.8   | 15    | 26   | 14    | 16   | 40    | 46    | 23    | 15   | 15   | 14    |
| 12    | 11    | 9.9   | 14    | 23   | 14    | 16   | 39    | 42    | 23    | 15   | 15   | 26    |
| 13    | 11    | 9.9   | 13    | 22   | 16    | 17   | 57    | 44    | 25    | 15   | 15   | 22    |
| 14    | 11    | 9.5   | 34    | 21   | 19    | 18   | 40    | 55    | 23    | 14   | 15   | 22    |
| 15    | 11    | 9.4   | 49    | 18   | 67    | 17   | 38    | 121   | 22    | 17   | 15   | 20    |
| 16    | 13    | 9.0   | 30    | 19   | 35    | 28   | 65    | 59    | 21    | 20   | 14   | 19    |
| 17    | 12    | 9.1   | 22    | 20   | 28    | 32   | 51    | 50    | 21    | 16   | 14   | 19    |
| 18    | 12    | 9.3   | 19    | 21   | 24    | 23   | 41    | 47    | 21    | 16   | 14   | 19    |
| 19    | 11    | 10    | 17    | 22   | 21    | 20   | 52    | 43    | 21    | 16   | 14   | 19    |
| 20    | 11    | 9.9   | 18    | 21   | 20    | 19   | 96    | 42    | 20    | 15   | 14   | 18    |
| 21    | 10    | 9.5   | 17    | 20   | 19    | 20   | 62    | 41    | 20    | 16   | 13   | 18    |
| 22    | 10    | 9.3   | 16    | 22   | 18    | 77   | 107   | 38    | 20    | 16   | 14   | 18    |
| 23    | 10    | 9.3   | 16    | 24   | 17    | 37   | 60    | 38    | 20    | 17   | 17   | 18    |
| 24    | 10    | 9.5   | 16    | 21   | 17    | 27   | 50    | 37    | 20    | 20   | 17   | 21    |
| 25    | 10    | 9.4   | 15    | 20   | 16    | 24   | 46    | 36    | 19    | 21   | 16   | 21    |
| 26    | 10    | 9.1   | 15    | 18   | 16    | 22   | 44    | 36    | 17    | 20   | 16   | 23    |
| 27    | 9.9   | 9.8   | 15    | 17   | 16    | 22   | 43    | 34    | 17    | 19   | 15   | 25    |
| 28    | 10    | 9.6   | 15    | 17   | 16    | 21   | 42    | 33    | 17    | 19   | 15   | 23    |
| 29    | 10    | 11    | 15    | 17   | 16    | 21   | 42    | 33    | 18    | 18   | 14   | 24    |
| 30    | 10    | 12    | 148   | 16   | ----- | 20   | 42    | 36    | 17    | 17   | 14   | 51    |
| 31    | 10    | ----- | 45    | 15   | ----- | 20   | ----- | 34    | ----- | 17   | 13   | ----- |
| TOTAL | 319.2 | 293.8 | 710.5 | 704  | 561   | 738  | 1,558 | 1,451 | 686   | 515  | 479  | 580   |
| MEAN  | 10.3  | 9.79  | 22.9  | 22.7 | 19.3  | 23.8 | 51.9  | 46.8  | 22.9  | 16.6 | 15.5 | 19.3  |
| MAX   | 13    | 12    | 148   | 34   | 67    | 77   | 242   | 131   | 32    | 21   | 20   | 51    |
| MIN   | 8.4   | 9.0   | 9.0   | 15   | 14    | 16   | 18    | 33    | 17    | 14   | 13   | 14    |
| CFSM  | .34   | .32   | .75   | .74  | .63   | .78  | 1.70  | 1.53  | .75   | .54  | .51  | .63   |
| IN.   | .39   | .36   | .87   | .86  | .68   | .90  | 1.90  | 1.77  | .84   | .63  | .58  | .71   |

CAL YR 1971 TOTAL 7,027.1 MEAN 19.3 MAX 398 MIN 8.2 CFSM .63 IN 8.57  
WTP YR 1972 TOTAL 8,595.5 MEAN 23.5 MAX 242 MIN 8.4 CFSM .77 IN 10.48

## PEAK DISCHARGE (BASE, 150 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 1400 | 6.66  | 410       | 4-22 | 0545 | 5.33  | 195       |
| 4-7   | 0745 | 7.74  | 720       | 5-9  | 0500 | 5.49  | 220       |
| 4-20  | 0530 | 5.74  | 261       | 5-15 | 0330 | 5.68  | 249       |

03267960 East Fork Buck Creek near New Moorefield, Ohio

LOCATION.--Lat 40°00'22", long 83°41'37", in SE 1/4 sec. 5, R.10, T.5, Clark County, on right bank at downstream side of bridge on Baldwin Lane, 1,500 ft upstream from mouth, 0.6 mile downstream from unnamed left bank tributary, and 1.6 miles northeast of New Moorefield.

DRAINAGE AREA.--28.7 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage 1,022.71 ft above mean sea level. Prior to May 23, 1967, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--5 years, 31.9 cfs (15.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,010 cfs Dec. 30 (gage height, 9.60 ft); minimum, 10 cfs Oct. 3, 4, 5, 6, 7, 8.

Period of record: Maximum discharge, 1,180 cfs Aug. 9, 1969 (gage height, 9.98 ft), from rating curve extended above 290 cfs; minimum, 6.2 cfs June 13, 14, 15, 21, July 19, 20, 21, 22, 24, Aug. 1, 2, 3, 5, 6, 7, 11, 1971.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN  | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP   |
|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|------|-------|
| 1     | 12   | 11    | 15    | 52   | 16    | 41    | 28    | 39    | 33    | 21   | 15   | 13    |
| 2     | 12   | 13    | 14    | 49   | 17    | 82    | 27    | 39    | 32    | 21   | 15   | 13    |
| 3     | 11   | 13    | 13    | 42   | 18    | 42    | 26    | 38    | 31    | 22   | 17   | 13    |
| 4     | 11   | 13    | 13    | 51   | 18    | 35    | 27    | 38    | 30    | 21   | 15   | 13    |
| 5     | 11   | 13    | 13    | 46   | 17    | 29    | 25    | 37    | 29    | 21   | 14   | 13    |
| 6     | 11   | 13    | 25    | 35   | 17    | 26    | 25    | 36    | 28    | 19   | 15   | 12    |
| 7     | 11   | 13    | 84    | 31   | 17    | 27    | 290   | 36    | 27    | 19   | 14   | 12    |
| 8     | 11   | 13    | 43    | 29   | 17    | 32    | 81    | 61    | 27    | 19   | 15   | 12    |
| 9     | 12   | 13    | 31    | 48   | 16    | 25    | 61    | 378   | 26    | 18   | 15   | 12    |
| 10    | 12   | 13    | 27    | 50   | 14    | 23    | 53    | 94    | 26    | 20   | 14   | 12    |
| 11    | 12   | 12    | 24    | 38   | 15    | 23    | 46    | 67    | 25    | 19   | 13   | 12    |
| 12    | 12   | 12    | 22    | 33   | 17    | 23    | 42    | 55    | 25    | 18   | 13   | 25    |
| 13    | 12   | 12    | 20    | 32   | 20    | 31    | 48    | 91    | 28    | 18   | 13   | 19    |
| 14    | 12   | 12    | 88    | 29   | 34    | 39    | 39    | 100   | 26    | 17   | 13   | 18    |
| 15    | 11   | 11    | 67    | 25   | 108   | 29    | 37    | 89    | 25    | 23   | 13   | 16    |
| 16    | 14   | 11    | 42    | 19   | 40    | 66    | 135   | 79    | 25    | 27   | 12   | 15    |
| 17    | 14   | 11    | 32    | 21   | 33    | 61    | 76    | 65    | 24    | 21   | 12   | 15    |
| 18    | 14   | 11    | 27    | 22   | 28    | 41    | 52    | 59    | 23    | 19   | 12   | 15    |
| 19    | 12   | 12    | 25    | 23   | 25    | 33    | 59    | 50    | 23    | 22   | 12   | 15    |
| 20    | 12   | 12    | 28    | 23   | 23    | 31    | 105   | 46    | 23    | 20   | 12   | 14    |
| 21    | 12   | 12    | 26    | 22   | 23    | 35    | 96    | 44    | 23    | 18   | 11   | 14    |
| 22    | 13   | 12    | 23    | 23   | 23    | 174   | 168   | 42    | 23    | 17   | 12   | 14    |
| 23    | 13   | 12    | 22    | 25   | 22    | 66    | 84    | 40    | 23    | 17   | 15   | 15    |
| 24    | 14   | 11    | 22    | 25   | 22    | 48    | 63    | 39    | 22    | 18   | 16   | 17    |
| 25    | 13   | 11    | 21    | 22   | 21    | 41    | 53    | 38    | 22    | 18   | 16   | 18    |
| 26    | 13   | 11    | 21    | 20   | 22    | 36    | 48    | 37    | 22    | 17   | 19   | 20    |
| 27    | 12   | 12    | 21    | 19   | 23    | 36    | 44    | 36    | 21    | 17   | 20   | 22    |
| 28    | 12   | 12    | 22    | 18   | 24    | 33    | 42    | 35    | 21    | 16   | 15   | 21    |
| 29    | 12   | 15    | 20    | 17   | 25    | 32    | 41    | 36    | 25    | 15   | 14   | 22    |
| 30    | 12   | 16    | 296   | 17   | ----- | 31    | 40    | 35    | 25    | 15   | 14   | 71    |
| 31    | 11   | ----- | 82    | 16   | ----- | 28    | ----- | 34    | ----- | 15   | 13   | ----- |
| TOTAL | 376  | 368   | 1,229 | 922  | 715   | 1,299 | 1,961 | 1,913 | 763   | 588  | 439  | 523   |
| MEAN  | 12.1 | 12.3  | 39.6  | 29.7 | 24.7  | 41.9  | 65.4  | 61.7  | 25.4  | 19.0 | 14.2 | 17.4  |
| MAX   | 14   | 16    | 296   | 52   | 108   | 174   | 290   | 378   | 33    | 27   | 20   | 71    |
| MIN   | 11   | 11    | 13    | 16   | 14    | 23    | 25    | 34    | 21    | 15   | 11   | 12    |
| CFSM  | .42  | .43   | 1.38  | 1.03 | .86   | 1.46  | 2.28  | 2.15  | .89   | .66  | .49  | .61   |
| IN.   | .49  | .48   | 1.59  | 1.20 | .93   | 1.68  | 2.54  | 2.48  | .99   | .76  | .57  | .68   |

CAL YR 1971 TOTAL 8,566.5 MEAN 23.5 MAX 342 MIN 8.5 CFSM .82 IN 11.10  
WTR YR 1972 TOTAL 11,096.0 MEAN 30.3 MAX 378 MIN 11 CFSM 1.06 IN 14.38

## PEAK DISCHARGE (BASE, 350 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 1300 | 9.60  | 1,010     | 4-7  | 0830 | 8.85  | 822       |
| 3-22  | 0300 | 6.64  | 358       | 5-9  | 0230 | 8.68  | 780       |



## 03269500 Mad River near Springfield, Ohio

LOCATION.--Lat 39°55'23", long 83°52'13", in NW 1/4 sec. 16, R.9, T.4, Clark County, on right bank 150 ft downstream from Rock Run, 300 ft downstream from bridge on Lower Valley Pike, 2 miles downstream from Buck Creek, and 3 miles west of Springfield.

DRAINAGE AREA.--490 sq mi.

PERIOD OF RECORD.--January 1904 to March 1906 (fragmentary), February 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft above mean sea level, adjustment of 1912. Jan. 1, 1904, to Mar. 31, 1906, nonrecording gage at site 0.3 mile downstream at different datum. Feb. 1, 1914, to Feb. 29, 1924, nonrecording gage at site 1.8 miles upstream at datum 6.39 ft higher. Mar. 1, 1924, to July 31, 1925, nonrecording gage at site 300 ft upstream at same datum.

AVERAGE DISCHARGE.--59 years (1904-05, 1914-72), 475 cfs (13.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,740 cfs Apr. 7 (gage height, 7.48 ft); minimum daily, 182 cfs Nov. 22.

Period of record: Maximum discharge, 30,500 cfs Jan. 21, 1959 (gage height, 15.76 ft), from rating curve extended above 14,000 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 30 cfs Sept. 15, 1904.

Flood of March 25, 1913 reached a stage of 16.9 ft, present datum (discharge, 55,400 cfs, computed by Miami Conservancy District).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage height graph and 8 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 603: 1924. WSP 823: 1929(M). WSP 1305: 1914(M), 1916-17(M), 1922-23(M), 1925(M). WSP 1625: 1924(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1     | 220   | 206   | 265    | 794    | 281    | 424    | 407    | 586    | 514    | 375    | 261   | 228   |
| 2     | 200   | 249   | 231    | 682    | 281    | 1,230  | 390    | 563    | 470    | 345    | 265   | 214   |
| 3     | 189   | 220   | 234    | 594    | 330    | 802    | 390    | 528    | 446    | 402    | 374   | 224   |
| 4     | 186   | 206   | 220    | 666    | 269    | 586    | 418    | 507    | 424    | 424    | 295   | 214   |
| 5     | 186   | 206   | 210    | 674    | 261    | 470    | 380    | 488    | 412    | 365    | 265   | 210   |
| 6     | 186   | 210   | 539    | 521    | 285    | 402    | 380    | 470    | 418    | 345    | 261   | 206   |
| 7     | 186   | 203   | 1,240  | 458    | 269    | 412    | 3,330  | 458    | 407    | 325    | 265   | 206   |
| 8     | 186   | 206   | 837    | 412    | 257    | 458    | 1,650  | 706    | 396    | 325    | 281   | 206   |
| 9     | 238   | 228   | 500    | 523    | 261    | 385    | 1,070  | 2,840  | 407    | 320    | 290   | 203   |
| 10    | 231   | 228   | 446    | 698    | 249    | 350    | 936    | 1,500  | 402    | 355    | 261   | 200   |
| 11    | 224   | 224   | 390    | 556    | 257    | 335    | 786    | 972    | 375    | 360    | 249   | 203   |
| 12    | 210   | 224   | 350    | 482    | 261    | 340    | 738    | 786    | 375    | 325    | 245   | 624   |
| 13    | 210   | 217   | 335    | 464    | 320    | 375    | 1,610  | 900    | 539    | 310    | 238   | 335   |
| 14    | 245   | 210   | 594    | 412    | 370    | 470    | 972    | 1,330  | 464    | 305    | 234   | 345   |
| 15    | 234   | 210   | 1,700  | 285    | 963    | 440    | 762    | 3,110  | 424    | 407    | 238   | 300   |
| 16    | 417   | 210   | 1,040  | 325    | 770    | 650    | 1,720  | 1,640  | 407    | 500    | 231   | 261   |
| 17    | 305   | 206   | 634    | 365    | 542    | 846    | 1,500  | 1,180  | 380    | 424    | 231   | 245   |
| 18    | 261   | 189   | 482    | 375    | 549    | 626    | 972    | 990    | 370    | 360    | 231   | 281   |
| 19    | 238   | 269   | 434    | 370    | 440    | 494    | 846    | 828    | 365    | 345    | 265   | 257   |
| 20    | 228   | 257   | 464    | 360    | 335    | 452    | 1,510  | 730    | 360    | 325    | 242   | 242   |
| 21    | 220   | 214   | 452    | 355    | 355    | 494    | 1,240  | 682    | 360    | 315    | 234   | 242   |
| 22    | 220   | 182   | 402    | 402    | 355    | 1,440  | 2,240  | 634    | 355    | 300    | 238   | 242   |
| 23    | 217   | 200   | 380    | 412    | 325    | 1,030  | 1,480  | 586    | 370    | 285    | 373   | 242   |
| 24    | 242   | 203   | 365    | 380    | 320    | 698    | 1,100  | 556    | 350    | 330    | 388   | 315   |
| 25    | 238   | 189   | 340    | 380    | 310    | 602    | 900    | 521    | 345    | 335    | 285   | 305   |
| 26    | 231   | 190   | 340    | 315    | 305    | 532    | 794    | 488    | 340    | 300    | 364   | 424   |
| 27    | 228   | 200   | 345    | 295    | 290    | 514    | 706    | 470    | 325    | 295    | 315   | 507   |
| 28    | 220   | 190   | 355    | 320    | 300    | 528    | 658    | 458    | 320    | 285    | 261   | 440   |
| 29    | 214   | 269   | 335    | 277    | 325    | 494    | 618    | 464    | 739    | 277    | 242   | 385   |
| 30    | 210   | 295   | 2,610  | 281    | -----  | 470    | 602    | 586    | 534    | 269    | 238   | 1,020 |
| 31    | 206   | ----- | 1,510  | 269    | -----  | 434    | -----  | 594    | -----  | 269    | 228   | ----- |
| TOTAL | 7,026 | 6,510 | 18,579 | 13,702 | 10,435 | 17,783 | 31,105 | 27,151 | 12,393 | 10,502 | 8,388 | 9,326 |
| MEAN  | 227   | 217   | 599    | 442    | 360    | 574    | 1,037  | 876    | 413    | 339    | 271   | 311   |
| MAX   | 417   | 295   | 2,610  | 794    | 963    | 1,440  | 3,330  | 3,110  | 739    | 500    | 388   | 1,020 |
| MIN   | 186   | 182   | 210    | 269    | 249    | 335    | 380    | 458    | 320    | 269    | 228   | 200   |
| CFSM  | .46   | .44   | 1.22   | .90    | .73    | 1.17   | 2.12   | 1.79   | .84    | .69    | .55   | .63   |
| IN.   | .53   | .49   | 1.41   | 1.04   | .79    | 1.35   | 2.36   | 2.06   | .94    | .80    | .64   | .71   |

CAL YR 1971 TOTAL 143,405 MEAN 393 MAX 5,910 MIN 160 CFSM .80 IN 10.89  
WTR YR 1972 TOTAL 172,900 MEAN 472 MAX 3,330 MIN 182 CFSM .96 IN 13.13

## PEAK DISCHARGE (BASE, 4,000 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 1030 | 6.66  | 4,090     | 5-15 | 0730 | 7.05  | 4,400     |
| 4-7   | 1430 | 7.48  | 4,740     |      |      |       |           |

## GREAT MIAMI RIVER BASIN

03270000 Mad River near Dayton, Ohio

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec. 7, R.8, T.2, Greene County, on left bank in retarding basin 300 ft upstream from Huffman Dam, 2.3 miles downstream from Mud Run, and 6.2 miles northeast of Dayton.

DRAINAGE AREA.--635 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 776.96 ft (corrected) above mean sea level, adjustment of 1912. Jan. 21, 1959 to Dec. 14, 1967, at site 900 ft downstream, at datum 77.01 ft lower. See WSP 1725 for history of changes prior to Jan. 21, 1959.

AVERAGE DISCHARGE.--58 years, 608 cfs (13.01 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,720 cfs Dec. 30 (gage height, 10.57 ft); minimum, 214 cfs Sept. 10, 11.

Period of record: Maximum discharge, 21,200 cfs Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft Feb. 26, 1929 at site and datum then in use; minimum discharge, 91 cfs Aug. 6, 9, 1934, but may have been less during period 1921-24.

Flood of Mar. 25, 1913 reached a stage of 14.0 ft, original site and datum (discharge, 75,700 cfs, computed by Miami Conservancy District).

REMARKS.--Records good. Flood flows affected by backwater from Huffman retarding dam beginning in 1921. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 8 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M), 1930-32(M). WSP 1908: 1922(M), drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG   | SEP    |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| 1     | 247   | 247   | 316    | 1,270  | 330    | 493    | 535    | 742    | 684    | 495    | 280   | 258    |
| 2     | 244   | 249   | 283    | 984    | 340    | 1,310  | 515    | 730    | 624    | 409    | 279   | 252    |
| 3     | 232   | 289   | 274    | 871    | 350    | 1,250  | 499    | 692    | 584    | 428    | 382   | 267    |
| 4     | 223   | 255   | 268    | 850    | 340    | 840    | 536    | 661    | 556    | 526    | 385   | 253    |
| 5     | 223   | 241   | 260    | 1,020  | 320    | 711    | 494    | 637    | 540    | 432    | 309   | 243    |
| 6     | 220   | 241   | 441    | 790    | 320    | 578    | 478    | 611    | 544    | 396    | 289   | 237    |
| 7     | 220   | 250   | 1,190  | 695    | 330    | 574    | 2,800  | 593    | 540    | 374    | 286   | 233    |
| 8     | 220   | 245   | 1,220  | 628    | 330    | 618    | 2,770  | 797    | 516    | 357    | 287   | 227    |
| 9     | 241   | 239   | 728    | 661    | 320    | 562    | 1,490  | 2,830  | 504    | 358    | 342   | 226    |
| 10    | 289   | 254   | 617    | 921    | 325    | 510    | 1,220  | 2,390  | 560    | 373    | 292   | 220    |
| 11    | 261   | 256   | 549    | 818    | 332    | 484    | 1,030  | 1,360  | 484    | 417    | 277   | 214    |
| 12    | 250   | 257   | 485    | 697    | 334    | 474    | 981    | 1,060  | 476    | 367    | 270   | 594    |
| 13    | 238   | 251   | 448    | 600    | 401    | 500    | 1,810  | 1,050  | 680    | 341    | 262   | 464    |
| 14    | 250   | 249   | 892    | 520    | 505    | 606    | 1,400  | 1,690  | 688    | 326    | 256   | 361    |
| 15    | 285   | 240   | 2,150  | 440    | 1,040  | 622    | 1,020  | 3,320  | 552    | 365    | 268   | 350    |
| 16    | 368   | 237   | 1,730  | 420    | 1,170  | 767    | 1,890  | 2,410  | 544    | 590    | 263   | 296    |
| 17    | 500   | 233   | 971    | 420    | 759    | 1,110  | 2,270  | 1,620  | 496    | 563    | 259   | 274    |
| 18    | 372   | 232   | 719    | 470    | 727    | 875    | 1,360  | 1,290  | 464    | 436    | 258   | 285    |
| 19    | 332   | 254   | 613    | 496    | 638    | 694    | 1,090  | 1,060  | 448    | 397    | 285   | 322    |
| 20    | 299   | 253   | 615    | 466    | 471    | 619    | 1,620  | 916    | 440    | 394    | 296   | 274    |
| 21    | 282   | 244   | 617    | 465    | 504    | 597    | 1,560  | 844    | 432    | 364    | 266   | 268    |
| 22    | 271   | 238   | 559    | 455    | 475    | 1,580  | 2,940  | 788    | 432    | 339    | 256   | 271    |
| 23    | 264   | 229   | 513    | 493    | 440    | 1,460  | 2,070  | 736    | 428    | 320    | 395   | 262    |
| 24    | 275   | 232   | 491    | 528    | 435    | 959    | 1,510  | 700    | 444    | 324    | 388   | 335    |
| 25    | 299   | 235   | 457    | 440    | 414    | 815    | 1,190  | 668    | 412    | 446    | 446   | 401    |
| 26    | 292   | 227   | 448    | 400    | 408    | 724    | 1,010  | 636    | 400    | 345    | 414   | 486    |
| 27    | 282   | 233   | 444    | 380    | 392    | 663    | 899    | 608    | 388    | 318    | 577   | 588    |
| 28    | 268   | 237   | 471    | 370    | 389    | 668    | 829    | 580    | 382    | 309    | 339   | 613    |
| 29    | 264   | 267   | 448    | 360    | 414    | 644    | 796    | 580    | 541    | 304    | 302   | 480    |
| 30    | 256   | 336   | 2,430  | 350    | -----  | 620    | 770    | 720    | 884    | 293    | 279   | 994    |
| 31    | 249   | ----- | 2,840  | 340    | -----  | 574    | -----  | 788    | -----  | 283    | 264   | -----  |
| TOTAL | 8,516 | 7,450 | 24,487 | 18,618 | 13,553 | 23,501 | 39,382 | 34,107 | 15,667 | 11,989 | 9,751 | 10,548 |
| MEAN  | 275   | 248   | 790    | 601    | 467    | 758    | 1,313  | 1,100  | 522    | 387    | 315   | 352    |
| MAX   | 500   | 336   | 2,840  | 1,270  | 1,170  | 1,580  | 2,940  | 3,320  | 884    | 590    | 577   | 994    |
| MIN   | 220   | 227   | 260    | 340    | 320    | 474    | 478    | 580    | 382    | 283    | 256   | 214    |
| CFSM  | .43   | .39   | 1.24   | .95    | .74    | 1.19   | 2.07   | 1.73   | .82    | .61    | .50   | .55    |
| IN.   | .50   | .44   | 1.43   | 1.09   | .79    | 1.38   | 2.31   | 2.00   | .92    | .70    | .57   | .62    |

CAL YR 1971 TOTAL 182,477 MEAN 500 MAX 4,940 MIN 187 CFSM .79 IN 10.69  
WTR YR 1972 TOTAL 217,569 MEAN 594 MAX 3,320 MIN 214 CFSM .94 IN 12.75

## GREAT MIAMI RIVER BASIN

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03270500 Great Miami River at Dayton, Ohio

LOCATION.--Lat 39°45'55", long 84°11'51", in sec. 10, R.7, T.1, Montgomery County, on left bank 1,000 ft downstream from Main Street Bridge in Dayton, 0.7 mile upstream from Wolf Creek, and 0.8 mile downstream from Mad River.

DRAINAGE AREA.--2,511 sq mi.

PERIOD OF RECORD.--April to September 1905, January to September 1906, January 1907 to December 1909 (gage heights only), April 1913 to current year. Monthly discharge only for October 1919 to September 1921, published in WSP 1305. Gage-height records collected at Main Street Bridge since January 1892 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Dayton.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1921 nonrecording gage at Main Street Bridge at datum 23.73 ft higher. Oct. 1, 1921, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft higher.

AVERAGE DISCHARGE.--43 years (1929-72), 2,039 cfs.

EXTREMES.--Current year: Maximum discharge, 19,000 cfs Apr. 8 (gage height, 28.81 ft); minimum, 266 cfs Oct. 9. Period of record: Maximum discharge, 60,900 cfs Jan. 22, 1959 (gage height, 35.45 ft in gage well, from graph based on gage readings; 36.0 ft, from outside floodmarks); minimum, 78 cfs Sept. 26, 1941. Flood of Mar. 26, 1913 reached a stage of 29.0 ft, site and datum then in use (discharge, 250,000 cfs, computed by Miami Conservancy District).

REMARKS.--Records good. Flood flow regulated by four retarding basins upstream from station beginning in 1920 on Mad River 6.5 miles upstream, on Stillwater River 10.5 miles upstream, on Great Miami River 11.5 miles upstream, and on Loramie Creek 40 miles upstream. Also see REMARKS for station No. 03261500 and 03261950. Water is diverted 6 miles upstream from station for use in Dayton; most of return flow from diversions bypasses station in Dayton sewer systems. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 1385: 1917. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR     | APR     | MAY     | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 1     | 467    | 347    | 767    | 8,390  | 960    | 1,500   | 1,850   | 2,500   | 2,770  | 1,370  | 503    | 323    |
| 2     | 400    | 415    | 727    | 5,550  | 940    | 8,210   | 1,670   | 2,280   | 2,280  | 1,090  | 486    | 348    |
| 3     | 351    | 372    | 658    | 4,420  | 1,000  | 12,400  | 1,530   | 2,140   | 1,820  | 1,080  | 682    | 507    |
| 4     | 330    | 345    | 636    | 3,880  | 940    | 8,960   | 1,560   | 1,930   | 1,540  | 2,720  | 703    | 478    |
| 5     | 308    | 334    | 583    | 4,460  | 860    | 5,510   | 1,540   | 1,790   | 1,350  | 3,150  | 568    | 393    |
| 6     | 295    | 348    | 847    | 3,560  | 900    | 3,550   | 1,530   | 1,650   | 1,350  | 2,240  | 531    | 334    |
| 7     | 277    | 361    | 1,780  | 2,780  | 900    | 2,760   | 8,630   | 1,500   | 1,270  | 1,560  | 529    | 321    |
| 8     | 286    | 360    | 2,650  | 2,370  | 840    | 2,490   | 18,200  | 2,090   | 1,170  | 1,170  | 512    | 337    |
| 9     | 347    | 376    | 2,430  | 2,300  | 800    | 2,270   | 13,600  | 7,410   | 1,140  | 1,010  | 571    | 332    |
| 10    | 401    | 390    | 1,770  | 4,390  | 780    | 1,960   | 9,300   | 11,100  | 1,230  | 998    | 510    | 314    |
| 11    | 372    | 390    | 1,360  | 5,130  | 750    | 1,710   | 6,350   | 6,740   | 1,100  | 1,340  | 471    | 320    |
| 12    | 365    | 390    | 1,170  | 3,810  | 720    | 1,560   | 5,100   | 4,750   | 1,110  | 1,110  | 462    | 887    |
| 13    | 349    | 386    | 1,160  | 2,990  | 894    | 1,580   | 7,330   | 4,110   | 2,190  | 852    | 451    | 1,020  |
| 14    | 401    | 362    | 1,950  | 2,530  | 1,090  | 3,270   | 9,690   | 5,130   | 3,900  | 780    | 444    | 1,270  |
| 15    | 426    | 362    | 7,660  | 1,870  | 2,110  | 4,460   | 8,200   | 12,300  | 3,960  | 919    | 445    | 1,220  |
| 16    | 646    | 355    | 10,600 | 1,670  | 3,370  | 3,870   | 8,280   | 13,700  | 3,370  | 1,130  | 436    | 1,160  |
| 17    | 721    | 353    | 6,740  | 2,590  | 2,620  | 4,080   | 12,600  | 9,420   | 3,020  | 1,660  | 434    | 767    |
| 18    | 551    | 360    | 4,120  | 1,930  | 2,200  | 3,730   | 9,540   | 6,280   | 2,070  | 1,320  | 420    | 668    |
| 19    | 482    | 433    | 2,730  | 1,640  | 1,900  | 2,760   | 6,270   | 4,720   | 1,630  | 1,050  | 426    | 743    |
| 20    | 440    | 427    | 2,270  | 1,440  | 1,330  | 2,160   | 7,380   | 3,660   | 1,420  | 946    | 472    | 555    |
| 21    | 411    | 389    | 2,010  | 1,360  | 1,340  | 1,950   | 13,000  | 2,960   | 1,280  | 923    | 441    | 574    |
| 22    | 413    | 380    | 1,880  | 1,360  | 1,270  | 3,140   | 15,400  | 2,530   | 1,540  | 789    | 487    | 502    |
| 23    | 386    | 372    | 1,680  | 1,990  | 1,110  | 3,700   | 17,300  | 2,210   | 1,790  | 721    | 584    | 452    |
| 24    | 444    | 401    | 1,530  | 2,580  | 1,070  | 3,120   | 13,100  | 1,980   | 1,520  | 722    | 623    | 2,640  |
| 25    | 435    | 390    | 1,430  | 2,180  | 1,040  | 2,490   | 8,060   | 1,780   | 1,280  | 845    | 726    | 4,220  |
| 26    | 436    | 368    | 1,350  | 1,680  | 1,010  | 2,110   | 5,670   | 1,610   | 1,130  | 699    | 692    | 2,760  |
| 27    | 427    | 403    | 1,350  | 1,310  | 976    | 1,890   | 4,410   | 1,480   | 1,010  | 561    | 866    | 5,170  |
| 28    | 408    | 411    | 1,390  | 1,220  | 963    | 2,140   | 3,500   | 1,350   | 914    | 580    | 573    | 5,590  |
| 29    | 388    | 632    | 1,320  | 1,100  | 990    | 2,700   | 2,960   | 1,290   | 1,080  | 545    | 445    | 3,760  |
| 30    | 363    | 777    | 5,040  | 1,100  | -----  | 2,430   | 2,630   | 1,820   | 1,740  | 531    | 332    | 4,060  |
| 31    | 350    | -----  | 12,100 | 1,000  | -----  | 2,100   | -----   | 2,290   | -----  | 515    | 320    | -----  |
| TOTAL | 12,676 | 11,989 | 83,688 | 84,580 | 35,673 | 106,560 | 226,180 | 126,620 | 52,974 | 34,926 | 16,145 | 42,025 |
| MEAN  | 409    | 400    | 2,700  | 2,728  | 1,230  | 3,437   | 7,539   | 4,085   | 1,766  | 1,127  | 521    | 1,401  |
| MAX   | 721    | 777    | 12,100 | 8,390  | 3,370  | 12,400  | 18,200  | 13,700  | 3,960  | 3,150  | 866    | 5,590  |
| MIN   | 277    | 334    | 583    | 1,000  | 720    | 1,500   | 1,530   | 1,290   | 914    | 515    | 320    | 314    |

CAL YR 1971 TOTAL 562,097 MEAN 1,542 MAX 20,100 MIN 213  
WTR YR 1972 TOTAL 934,036 MEAN 2,279 MAX 18,200 MIN 277

## 03270800 Wolf Creek at Trotwood, Ohio

LOCATION.--Lat 39°47'39", long 84°18'36", Montgomery County, on right bank 350 ft downstream from Union Road Bridge, 700 ft downstream from unnamed right bank tributary, 0.2 mile south of Trotwood, and 0.3 mile upstream from confluence with North Branch.

DRAINAGE AREA.--22.7 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 826.28 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 18.1 cfs (10.83 inches per year).

EXTREMES.--Current year: Maximum discharge, 888 cfs Dec. 30 (gage height, 3.53 ft); minimum, 0.04 cfs Aug. 31, Sept. 1.

Period of record: Maximum discharge, 2,970 cfs May 24, 1968 (gage height, 6.47 ft); no flow all or part of each day Sept. 8-17, Oct. 3, 1964, Sept. 16-19, 1967.

Maximum discharge during flood in January 1959, about 3,900 cfs (gage height, 8.0 ft), computed by Miami Conservancy District on basis of estimate of peak flow based on contracted-opening measurement at site 1.1 miles downstream with drainage area of 48.2 sq mi, adjusted to gage site by 0.8 power of the drainage-area ratio. Flood of March 1913 reached a stage of 9.4 ft (computed by Miami Conservancy District).

REMARKS.--Records good except those for January and February, which are fair. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 12 discharge measurements furnished by Miami Conservancy District.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB   | MAR   | APR     | MAY     | JUN   | JUL   | AUG   | SEP    |
|-------|-------|-------|--------|-------|-------|-------|---------|---------|-------|-------|-------|--------|
| 1     | .36   | 1.2   | 1.4    | 31    | 5.2   | 65    | 7.0     | 14      | 14    | 4.0   | 1.3   | 5.3    |
| 2     | .47   | 1.2   | 1.0    | 34    | 6.0   | 186   | 6.0     | 12      | 11    | 4.0   | .90   | 6.2    |
| 3     | .47   | .72   | .86    | 26    | 8.0   | 67    | 5.5     | 10      | 10    | 6.2   | 1.7   | 10     |
| 4     | .47   | .57   | .86    | 37    | 7.2   | 47    | 7.0     | 9.0     | 9.6   | 4.4   | .74   | 4.1    |
| 5     | .36   | .57   | 1.0    | 37    | 6.2   | 30    | 5.0     | 8.5     | 8.5   | 4.4   | .18   | 1.8    |
| 6     | .36   | 1.0   | 10     | 23    | 5.8   | 21    | 5.5     | 8.0     | 11    | 3.6   | .18   | 1.3    |
| 7     | .47   | 1.8   | 22     | 16    | 5.4   | 17    | 229     | 8.0     | 8.5   | 3.2   | .36   | 1.1    |
| 8     | .47   | 2.1   | 10     | 13    | 5.0   | 14    | 84      | 52      | 7.5   | 3.6   | .12   | .90    |
| 9     | 3.6   | 1.8   | 5.4    | 35    | 4.8   | 12    | 60      | 183     | 7.0   | 3.6   | .26   | .74    |
| 10    | 2.1   | 1.8   | 4.1    | 43    | 4.6   | 11    | 43      | 55      | 7.0   | 2.8   | .26   | .60    |
| 11    | .47   | 2.1   | 3.7    | 28    | 4.5   | 9.6   | 29      | 32      | 6.0   | 2.0   | .26   | .48    |
| 12    | .26   | 1.8   | 3.0    | 19    | 4.5   | 9.0   | 47      | 24      | 5.0   | 1.3   | .48   | 7.1    |
| 13    | 4.3   | 2.1   | 2.4    | 14    | 14    | 12    | 120     | 91      | 177   | .74   | 1.3   | 2.4    |
| 14    | 1.7   | 1.8   | 65     | 10    | 42    | 32    | 39      | 134     | 74    | .36   | .48   | 1.3    |
| 15    | .57   | 1.4   | 64     | 9.0   | 35    | 20    | 28      | 244     | 48    | 2.3   | .48   | 1.3    |
| 16    | 1.6   | 1.0   | 34     | 8.4   | 26    | 35    | 182     | 88      | 60    | 2.2   | .90   | .90    |
| 17    | .86   | 1.2   | 20     | 8.0   | 20    | 54    | 72      | 49      | 26    | 1.5   | .60   | .90    |
| 18    | .18   | 1.4   | 13     | 7.8   | 17    | 30    | 37      | 34      | 17    | .60   | .60   | 1.7    |
| 19    | .12   | 4.6   | 11     | 7.6   | 14    | 21    | 28      | 24      | 12    | 2.0   | 1.1   | 2.8    |
| 20    | .12   | 3.0   | 16     | 7.6   | 12    | 16    | 34      | 21      | 11    | .90   | 1.5   | 1.1    |
| 21    | .36   | 1.6   | 14     | 8.0   | 11    | 15    | 65      | 18      | 11    | .60   | .90   | .91    |
| 22    | .72   | 1.2   | 11     | 9.4   | 10    | 41    | 124     | 15      | 8.5   | 1.3   | 2.8   | 1.3    |
| 23    | 1.0   | 1.0   | 9.5    | 15    | 10    | 28    | 51      | 13      | 8.5   | .90   | 1.0   | 1.3    |
| 24    | 1.8   | 1.0   | 9.5    | 19    | 10    | 21    | 35      | 11      | 9.0   | 1.1   | .74   | 14     |
| 25    | 1.6   | .86   | 7.8    | 13    | 8.0   | 18    | 25      | 10      | 7.5   | 1.1   | .07   | 7.2    |
| 26    | .72   | .86   | 7.8    | 9.4   | 8.0   | 14    | 20      | 9.0     | 6.0   | 1.1   | .47   | 14     |
| 27    | .72   | 1.8   | 7.8    | 8.2   | 7.5   | 13    | 16      | 8.5     | 5.0   | 1.3   | 1.0   | 7.5    |
| 28    | .72   | 1.6   | 7.8    | 7.0   | 8.0   | 11    | 14      | 8.0     | 4.8   | 1.1   | .12   | 4.8    |
| 29    | .72   | 2.5   | 6.8    | 6.0   | 10    | 10    | 13      | 8.0     | 4.4   | 1.1   | .07   | 4.4    |
| 30    | .86   | 3.4   | 202    | 5.2   | ----- | 8.5   | 14      | 25      | 4.4   | 1.1   | .05   | 13     |
| 31    | 1.0   | ----- | 57     | 5.6   | ----- | 7.5   | -----   | 23      | ----- | 1.3   | .04   | -----  |
| TOTAL | 29.53 | 48.98 | 629.72 | 520.2 | 329.7 | 895.6 | 1,445.0 | 1,249.0 | 599.2 | 65.70 | 20.96 | 120.43 |
| MEAN  | .95   | 1.63  | 20.3   | 16.8  | 11.4  | 28.9  | 48.2    | 40.3    | 20.0  | 2.12  | .68   | 4.01   |
| MAX   | 4.3   | 4.6   | 202    | 43    | 42    | 186   | 229     | 244     | 177   | 6.2   | 2.8   | 14     |
| MIN   | .12   | .57   | .86    | 5.2   | 4.5   | 7.5   | 5.0     | 8.0     | 4.4   | .36   | .04   | .48    |
| CFSM  | .04   | .07   | .89    | .74   | .50   | 1.27  | 2.12    | 1.78    | .88   | .09   | .03   | .18    |
| IN.   | .05   | .08   | 1.03   | .85   | .54   | 1.47  | 2.37    | 2.05    | .98   | .11   | .03   | .20    |

CAL YR 1971 TOTAL 5,320.07 MEAN 14.6 MAX 474 MIN .04 CFSM .64 IN 8.72  
WTR YR 1972 TOTAL 5,954.02 MEAN 16.3 MAX 244 MIN .04 CFSM .72 IN 9.76

## PEAK DISCHARGE (BASE, 700 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 1030 | 3.53  | 888       | 6-13 | 1500 | 3.36  | 786       |



## GREAT MIAMI RIVER BASIN

163

03271500 Great Miami River at Miamisburg, Ohio

LOCATION.--Lat 39°38'40", long 84°17'23", in sec. 31, R.6,T.1, Montgomery County, on left bank 600 ft downstream from bridge on State Highway 725 at Miamisburg, 0.3 mile downstream from Bear Creek, and 3.2 miles upstream from Crains Run.

DRAINAGE AREA.--2,711 sq mi.

PERIOD OF RECORD.--March 1916 to September 1920 (published as Miami River at Franklin 1916-17), August 1924 to September 1935 (published as Miami River near Miamisburg), October 1952 to current year (published as Miami River at Miamisburg 1952-62). Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 678.60 ft above mean sea level, adjustment of 1912. Mar. 16, 1916 to Sept. 30, 1920, nonrecording gage at site 6.7 miles downstream at different datum. Aug. 29 to Sept. 16, 1924, nonrecording gage, and Sept. 17, 1924, to Sept. 30, 1935, water-stage recorder, at site 2.2 miles downstream at datum 677.06 ft above mean sea level.

AVERAGE DISCHARGE.--35 years, 2,283 cfs (11.44 inches per year).

EXTREMES.--Current year: Maximum discharge, 18,500 cfs Apr. 8 (gage height, 11.39 ft); minimum, 440 cfs Nov. 26. Period of record: Maximum discharge, 61,800 cfs Jan. 21, 22, 1959 (gage height, 20.65 ft, in gage well, from graph based on gage readings; 21.3 ft, from outside floodmarks); minimum daily, 148 cfs Sept. 7, 1925. Flood of March 26, 1913 reached a discharge of 257,000 cfs, computed by Miami Conservancy District.

REMARKS.--Records fair. Diurnal fluctuation caused by powerplant 0.4 mile upstream from station. Flood flow regulated by retarding dams beginning in 1920 on Mad River 19 miles upstream, on Stillwater River 23 miles upstream, on Great Miami River 23 miles upstream and on Loramie Creek 52 miles upstream. Also see REMARKS for station No. 03261500. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 743: 1929(M). WSP 1385: 1926. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR     | APR     | MAY     | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 1     | 639    | 535    | 804    | 8,920  | 1,230  | 1,540   | 1,980   | 2,620   | 2,790  | 1,710  | 667    | 510    |
| 2     | 570    | 641    | 776    | 5,840  | 1,190  | 7,240   | 1,800   | 2,530   | 2,450  | 1,360  | 664    | 530    |
| 3     | 511    | 587    | 703    | 4,570  | 1,310  | 12,500  | 1,680   | 2,280   | 2,010  | 1,310  | 771    | 771    |
| 4     | 514    | 543    | 665    | 4,110  | 1,200  | 9,470   | 1,750   | 2,080   | 1,730  | 2,370  | 893    | 650    |
| 5     | 501    | 533    | 605    | 4,560  | 900    | 5,640   | 1,650   | 1,940   | 1,560  | 3,250  | 691    | 584    |
| 6     | 495    | 539    | 1,060  | 3,870  | 1,000  | 3,690   | 1,690   | 1,830   | 1,570  | 2,500  | 656    | 551    |
| 7     | 474    | 541    | 1,840  | 3,070  | 960    | 2,920   | 7,780   | 1,670   | 1,510  | 1,900  | 744    | 540    |
| 8     | 475    | 527    | 2,390  | 2,640  | 920    | 2,640   | 17,900  | 3,080   | 1,390  | 1,450  | 645    | 562    |
| 9     | 549    | 569    | 2,240  | 2,610  | 860    | 2,410   | 14,100  | 7,480   | 1,350  | 1,270  | 676    | 551    |
| 10    | 576    | 558    | 1,760  | 4,080  | 820    | 2,150   | 9,640   | 11,000  | 1,420  | 1,200  | 652    | 530    |
| 11    | 558    | 568    | 1,320  | 5,280  | 820    | 1,880   | 6,400   | 6,920   | 1,320  | 1,510  | 605    | 551    |
| 12    | 553    | 555    | 1,080  | 4,040  | 880    | 1,740   | 5,940   | 4,810   | 1,350  | 1,430  | 604    | 1,000  |
| 13    | 543    | 538    | 1,080  | 3,200  | 1,000  | 1,750   | 8,640   | 4,390   | 3,430  | 1,100  | 576    | 1,220  |
| 14    | 625    | 492    | 2,060  | 2,750  | 1,360  | 2,970   | 9,830   | 5,300   | 3,980  | 1,010  | 579    | 1,270  |
| 15    | 614    | 503    | 6,310  | 2,020  | 2,200  | 4,380   | 8,570   | 10,900  | 4,100  | 1,160  | 608    | 1,300  |
| 16    | 914    | 504    | 10,100 | 1,220  | 3,420  | 4,150   | 9,630   | 13,500  | 3,440  | 1,360  | 598    | 1,240  |
| 17    | 896    | 500    | 6,990  | 1,470  | 2,880  | 4,350   | 12,700  | 9,700   | 3,240  | 1,740  | 608    | 914    |
| 18    | 767    | 506    | 4,230  | 2,000  | 2,380  | 3,850   | 9,930   | 6,270   | 2,330  | 1,550  | 586    | 815    |
| 19    | 668    | 577    | 2,840  | 1,940  | 2,090  | 2,940   | 6,450   | 4,740   | 1,910  | 1,230  | 599    | 881    |
| 20    | 645    | 552    | 2,460  | 1,700  | 1,520  | 2,360   | 6,610   | 3,710   | 1,690  | 1,100  | 631    | 727    |
| 21    | 606    | 492    | 2,170  | 1,610  | 1,510  | 2,190   | 12,900  | 3,040   | 1,550  | 1,060  | 636    | 727    |
| 22    | 626    | 494    | 2,040  | 1,580  | 1,460  | 3,370   | 15,200  | 2,650   | 1,640  | 930    | 641    | 694    |
| 23    | 570    | 497    | 1,860  | 1,990  | 1,310  | 3,740   | 17,000  | 2,340   | 2,040  | 825    | 827    | 639    |
| 24    | 665    | 507    | 1,700  | 2,760  | 1,230  | 3,230   | 13,500  | 2,130   | 1,800  | 886    | 813    | 2,120  |
| 25    | 638    | 489    | 1,580  | 2,390  | 1,230  | 2,630   | 8,370   | 1,940   | 1,560  | 999    | 930    | 4,140  |
| 26    | 640    | 466    | 1,500  | 1,970  | 1,200  | 2,250   | 5,720   | 1,780   | 1,410  | 863    | 896    | 2,970  |
| 27    | 631    | 497    | 1,510  | 1,580  | 1,130  | 2,050   | 4,460   | 1,620   | 1,300  | 721    | 1,000  | 4,570  |
| 28    | 614    | 483    | 1,550  | 1,400  | 1,140  | 2,120   | 3,570   | 1,480   | 1,200  | 714    | 719    | 5,350  |
| 29    | 583    | 679    | 1,460  | 1,320  | 1,150  | 2,730   | 3,060   | 1,440   | 1,350  | 686    | 646    | 3,840  |
| 30    | 550    | 826    | 5,720  | 1,250  | -----  | 2,530   | 2,780   | 2,190   | 1,860  | 663    | 523    | 3,840  |
| 31    | 523    | -----  | 11,900 | 1,170  | -----  | 2,220   | -----   | 2,360   | -----  | 666    | 506    | -----  |
| TOTAL | 18,733 | 16,298 | 84,303 | 88,910 | 40,300 | 109,630 | 231,230 | 129,720 | 60,280 | 40,523 | 21,190 | 44,587 |
| MEAN  | 604    | 543    | 2,719  | 2,868  | 1,390  | 3,536   | 7,708   | 4,185   | 2,009  | 1,307  | 684    | 1,486  |
| MAX   | 914    | 826    | 11,900 | 8,920  | 3,420  | 12,500  | 17,900  | 13,500  | 4,100  | 3,250  | 1,000  | 5,350  |
| MIN   | 474    | 466    | 605    | 1,170  | 820    | 1,540   | 1,650   | 1,440   | 1,200  | 663    | 506    | 510    |
| CFSM  | .22    | .20    | 1.00   | 1.06   | .51    | 1.30    | 2.84    | 1.54    | .74    | .48    | .25    | .55    |
| IN.   | .26    | .22    | 1.16   | 1.22   | .55    | 1.50    | 3.17    | 1.78    | .83    | .56    | .29    | .61    |

CAL YR 1971 TOTAL 627,094 MEAN 1,718 MAX 20,200 MIN 360 CFSM .63 IN 8.60  
WTR YR 1972 TOTAL 885,704 MEAN 2,420 MAX 17,900 MIN 466 CFSM .89 IN 12.15

03271800 Twin Creek near Ingomar, Ohio

LOCATION.--Lat 39°42'28", long 84°31'30", in sec. 15, T.5N., R.3E., Preble County, on left bank at downstream side of bridge on Halderman Road, 0.5 mile downstream from Bantas Fork, 1.4 miles west of Ingomar, and 4.8 miles upstream from Aukerman Creek.

DRAINAGE AREA.--197 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959, 1961-62. October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 815.42 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 170 cfs (11.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,580 cfs Apr. 12 (gage height, 7.55 ft); minimum, 4.8 cfs Oct. 6, 7, 8, 9.

Period of record: Maximum discharge, 19,300 cfs Mar. 4, 1963 (gage height, 14.40 ft), from rating curve extended above 4,000 cfs on basis of contracted-opening measurement at gage height 18.8 ft; minimum daily, 2.5 cfs Sept. 12-14, 1964.

Flood of Jan. 21, 1959 reached a stage of 18.8 ft (discharge, 30,300 cfs, computed by Miami Conservancy District). Flood of Mar. 25, 1913 reached a stage of 28.0 ft.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY    | JUN   | JUL  | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|------|-------|-------|
| 1     | 6.7   | 8.8   | 16    | 242   | 56    | 360   | 95     | 155    | 194   | 55   | 13    | 5.9   |
| 2     | 5.9   | 9.8   | 14    | 224   | 54    | 2,300 | 90     | 160    | 135   | 46   | 12    | 6.6   |
| 3     | 5.4   | 8.8   | 13    | 206   | 50    | 760   | 85     | 133    | 107   | 46   | 13    | 19    |
| 4     | 5.4   | 8.8   | 13    | 213   | 50    | 390   | 92     | 113    | 93    | 49   | 16    | 12    |
| 5     | 5.0   | 8.8   | 12    | 276   | 48    | 280   | 85     | 99     | 80    | 47   | 14    | 9.8   |
| 6     | 5.2   | 9.3   | 22    | 150   | 44    | 230   | 85     | 90     | 78    | 40   | 14    | 7.8   |
| 7     | 4.8   | 9.8   | 65    | 120   | 44    | 210   | 1,890  | 88     | 75    | 35   | 14    | 7.0   |
| 8     | 4.8   | 9.3   | 67    | 100   | 42    | 210   | 1,100  | 368    | 65    | 33   | 13    | 6.6   |
| 9     | 5.9   | 9.8   | 44    | 186   | 41    | 186   | 798    | 1,690  | 64    | 32   | 12    | 6.6   |
| 10    | 7.4   | 9.8   | 36    | 419   | 40    | 150   | 560    | 641    | 59    | 30   | 12    | 6.6   |
| 11    | 8.3   | 9.8   | 31    | 273   | 50    | 130   | 379    | 339    | 52    | 29   | 12    | 6.6   |
| 12    | 7.0   | 10    | 28    | 191   | 62    | 130   | 1,040  | 239    | 48    | 27   | 13    | 6.2   |
| 13    | 7.0   | 9.8   | 24    | 162   | 80    | 130   | 2,410  | 313    | 651   | 25   | 12    | 7.0   |
| 14    | 7.8   | 9.8   | 235   | 117   | 250   | 260   | 871    | 2,330  | 1,100 | 23   | 12    | 8.8   |
| 15    | 6.6   | 10    | 643   | 80    | 170   | 220   | 495    | 2,110  | 481   | 25   | 11    | 8.3   |
| 16    | 8.8   | 9.8   | 419   | 100   | 120   | 366   | 1,850  | 1,180  | 497   | 28   | 10    | 7.4   |
| 17    | 13    | 9.8   | 185   | 120   | 100   | 530   | 1,350  | 575    | 248   | 30   | 10    | 7.0   |
| 18    | 12    | 9.8   | 117   | 120   | 85    | 350   | 575    | 363    | 168   | 28   | 9.8   | 7.0   |
| 19    | 9.8   | 12    | 90    | 85    | 72    | 260   | 379    | 259    | 133   | 28   | 9.8   | 7.4   |
| 20    | 8.8   | 12    | 93    | 75    | 76    | 190   | 411    | 206    | 113   | 24   | 9.8   | 7.4   |
| 21    | 8.3   | 12    | 95    | 72    | 72    | 170   | 541    | 172    | 101   | 22   | 9.8   | 7.0   |
| 22    | 8.8   | 11    | 78    | 70    | 72    | 280   | 1,590  | 148    | 86    | 20   | 10    | 6.6   |
| 23    | 8.8   | 10    | 67    | 158   | 76    | 280   | 749    | 125    | 78    | 18   | 9.3   | 7.0   |
| 24    | 12    | 11    | 64    | 178   | 72    | 220   | 427    | 111    | 75    | 17   | 8.8   | 13    |
| 25    | 12    | 11    | 56    | 130   | 74    | 180   | 290    | 101    | 68    | 17   | 8.3   | 17    |
| 26    | 12    | 10    | 55    | 74    | 70    | 160   | 221    | 90     | 62    | 16   | 7.8   | 23    |
| 27    | 11    | 12    | 55    | 68    | 72    | 140   | 182    | 81     | 56    | 15   | 8.3   | 24    |
| 28    | 9.8   | 13    | 51    | 62    | 82    | 130   | 160    | 75     | 52    | 14   | 7.8   | 24    |
| 29    | 9.3   | 15    | 46    | 60    | 180   | 121   | 148    | 73     | 56    | 14   | 7.4   | 25    |
| 30    | 8.8   | 17    | 934   | 60    | ----- | 117   | 142    | 141    | 59    | 13   | 6.6   | 28    |
| 31    | 8.8   | ----- | 555   | 58    | ----- | 97    | -----  | 331    | ----- | 13   | 6.2   | ----- |
| TOTAL | 255.2 | 317.8 | 4,223 | 4,449 | 2,304 | 9,537 | 19,090 | 12,899 | 5,134 | 859  | 332.7 | 335.6 |
| MEAN  | 8.23  | 10.6  | 136   | 144   | 79.4  | 308   | 636    | 416    | 171   | 27.7 | 10.7  | 11.2  |
| MAX   | 13    | 17    | 934   | 419   | 250   | 2,300 | 2,410  | 2,330  | 1,100 | 55   | 16    | 28    |
| MIN   | 4.8   | 8.8   | 12    | 58    | 40    | 97    | 85     | 73     | 48    | 13   | 6.2   | 5.9   |
| CFSM  | .04   | .05   | .69   | .73   | .40   | 1.56  | 3.23   | 2.11   | .87   | .14  | .05   | .06   |
| IN.   | .05   | .06   | .80   | .84   | .44   | 1.80  | 3.60   | 2.44   | .97   | .16  | .06   | .06   |

CAL YR 1971 TOTAL 45,413.5 MEAN 124 MAX 4,230 MIN 4.8 CFSM .63 IN 8.58  
WTR YR 1972 TOTAL 59,736.3 MEAN 163 MAX 2,410 MIN 4.8 CFSM .83 IN 11.28

## PEAK DISCHARGE (BASE, 4,700 CFS)

| DATE | TIME    | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|---------|-------|-----------|------|------|-------|-----------|
| 3-2  | Unknown | 7.32  | 5,280     | 4-12 | 2030 | 7.55  | 5,580     |

NOTE.--No gage-height record Feb. 10 to Mar. 28.

## GREAT MIAMI RIVER BASIN

165

03272000 Twin Creek near Germantown, Ohio

LOCATION.--Lat 39°38'10", long 84°23'48", in NW 1/4 sec. 11, T.3N., R.4E., Montgomery County, on right bank 0.3 mile downstream from Germantown Dam, 1.5 miles northwest of Germantown, and 3 miles upstream from Little Twin Creek.

DRAINAGE AREA.--275 sq mi.

PERIOD OF RECORD.--April 1914 to December 1923, December 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.24 ft above mean sea level, adjustment of 1912. Prior to Dec. 18, 1926 nonrecording gage at site 1 mile downstream at datum 12.49 ft higher.

AVERAGE DISCHARGE.--54 years (1914-23, 1927-72), 257 cfs (12.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,210 cfs Apr. 13 (gage height, 25.06 ft); minimum, 8.0 cfs Oct. 7, 8, 9.

Period of record: Maximum discharge, 9,390 cfs July 8, 1915 (gage height, 11.7 ft, from graph based on gage readings, site and datum then in use); maximum gage height, 29.19 ft Jan. 22, 1959; minimum discharge, 1.5 cfs Sept. 25, 1941.

Flood of Mar. 25, 1913 reached a stage of 18.3 ft, original site and datum (discharge, 66,000 cfs, computed by Miami Conservancy District).

REMARKS.--Records good except those for January and February, which are fair. Flood flow regulated by Germantown retarding basin, 0.3 miles upstream beginning in 1920. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 12 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 403: 1914(M). WSP 1385: 1915(M).

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG  | SEP   |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|------|-------|
| 1     | 12    | 15    | 23    | 408   | 110   | 302    | 138    | 210    | 267   | 69    | 20   | 10    |
| 2     | 10    | 16    | 21    | 355   | 90    | 2,580  | 131    | 222    | 185   | 61    | 20   | 9.5   |
| 3     | 10    | 17    | 19    | 334   | 80    | 1,320  | 123    | 190    | 148   | 59    | 28   | 19    |
| 4     | 9.0   | 17    | 18    | 324   | 70    | 730    | 129    | 165    | 129   | 59    | 24   | 28    |
| 5     | 8.5   | 15    | 18    | 437   | 80    | 501    | 121    | 146    | 112   | 62    | 22   | 17    |
| 6     | 8.5   | 16    | 28    | 280   | 72    | 334    | 117    | 131    | 106   | 55    | 22   | 14    |
| 7     | 8.5   | 16    | 110   | 200   | 68    | 285    | 2,000  | 125    | 104   | 50    | 22   | 12    |
| 8     | 8.5   | 16    | 122   | 180   | 64    | 282    | 1,430  | 314    | 91    | 47    | 21   | 11    |
| 9     | 10    | 16    | 77    | 240   | 60    | 240    | 985    | 1,900  | 88    | 45    | 20   | 10    |
| 10    | 12    | 16    | 61    | 533   | 58    | 201    | 735    | 796    | 83    | 44    | 18   | 10    |
| 11    | 13    | 16    | 53    | 408   | 58    | 178    | 529    | 465    | 76    | 42    | 17   | 9.0   |
| 12    | 15    | 16    | 46    | 288   | 70    | 175    | 746    | 334    | 69    | 40    | 17   | 11    |
| 13    | 14    | 16    | 41    | 246   | 100   | 178    | 3,340  | 438    | 286   | 38    | 18   | 10    |
| 14    | 16    | 16    | 262   | 185   | 160   | 404    | 1,110  | 812    | 1,180 | 36    | 16   | 10    |
| 15    | 16    | 14    | 720   | 110   | 380   | 344    | 760    | 2,210  | 469   | 35    | 16   | 13    |
| 16    | 16    | 15    | 590   | 120   | 300   | 429    | 2,280  | 1,170  | 561   | 42    | 16   | 13    |
| 17    | 19    | 16    | 288   | 150   | 180   | 670    | 1,720  | 670    | 320   | 41    | 14   | 12    |
| 18    | 21    | 15    | 185   | 170   | 150   | 517    | 780    | 457    | 219   | 41    | 13   | 12    |
| 19    | 20    | 16    | 142   | 165   | 130   | 348    | 541    | 341    | 156   | 39    | 13   | 12    |
| 20    | 18    | 17    | 142   | 119   | 110   | 270    | 557    | 273    | 142   | 37    | 13   | 12    |
| 21    | 16    | 16    | 140   | 114   | 120   | 243    | 680    | 234    | 125   | 34    | 12   | 11    |
| 22    | 17    | 16    | 123   | 110   | 110   | 376    | 1,830  | 198    | 112   | 30    | 13   | 10    |
| 23    | 16    | 15    | 108   | 163   | 108   | 372    | 930    | 170    | 99    | 26    | 20   | 10    |
| 24    | 19    | 15    | 101   | 234   | 112   | 285    | 594    | 153    | 96    | 26    | 16   | 13    |
| 25    | 22    | 15    | 92    | 198   | 106   | 246    | 437    | 138    | 89    | 26    | 15   | 21    |
| 26    | 22    | 15    | 88    | 136   | 108   | 219    | 341    | 123    | 82    | 24    | 13   | 25    |
| 27    | 20    | 16    | 86    | 110   | 99    | 204    | 279    | 112    | 74    | 24    | 13   | 31    |
| 28    | 20    | 17    | 82    | 100   | 101   | 188    | 240    | 103    | 69    | 24    | 13   | 29    |
| 29    | 20    | 20    | 76    | 100   | 101   | 172    | 222    | 101    | 68    | 23    | 12   | 30    |
| 30    | 18    | 24    | 1,430 | 100   | ----- | 165    | 219    | 174    | 74    | 21    | 12   | 33    |
| 31    | 16    | ----- | 825   | 100   | ----- | 144    | -----  | 376    | ----- | 20    | 10   | ----- |
| TOTAL | 471.0 | 486   | 6,117 | 6,717 | 3,355 | 12,902 | 24,044 | 13,251 | 5,679 | 1,220 | 519  | 467.5 |
| MEAN  | 15.2  | 16.2  | 197   | 217   | 116   | 416    | 801    | 427    | 189   | 39.4  | 16.7 | 15.6  |
| MAX   | 22    | 24    | 1,430 | 533   | 380   | 2,580  | 3,340  | 2,210  | 1,180 | 69    | 28   | 33    |
| MIN   | 8.5   | 14    | 18    | 100   | 58    | 144    | 117    | 101    | 68    | 20    | 10   | 9.0   |
| CFSM  | .06   | .06   | .72   | .79   | .42   | 1.51   | 2.91   | 1.55   | .69   | .14   | .06  | .06   |
| IN.   | .06   | .07   | .83   | .91   | .45   | 1.75   | 3.25   | 1.79   | .77   | .17   | .07  | .06   |

CAL YR 1971 TOTAL 63,147.5 MEAN 173 MAX 3,870 MIN 7.0 CFSM .63 IN 8.54  
WTR YR 1972 TOTAL 75,228.5 MEAN 206 MAX 3,340 MIN 8.5 CFSM .75 IN 10.18

## GREAT MIAMI RIVER BASIN

03272800 Sevenmile Creek at Collinsville, Ohio

LOCATION.--Lat 39°31'23", long 84°36'39", in SE 1/4 sec. 14, T.5N., R.2E., Butler County, on left bank at downstream, side of bridge, 0.3 mile north of Collinsville, 1.0 mile downstream from Ninemile Creek, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--120 sq mi.

PERIOD OF RECORD.--July 1960 to September 1972 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 691.96 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 103 cfs (11.66 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,970 cfs Dec. 30 (gage height, 5.34 ft); minimum, 4.9 cfs Oct. 5, 6.

Period of record: Maximum discharge, 16,800 cfs May 24, 1968, (gage height 11.12 ft); minimum, 0.8 cfs Sept. 5, 1960.

Flood of March 1913 reached a stage of 14.6 ft, from information by local resident. Flood of Jan. 21, 1959 reached a stage of 11.08 ft, from floodmarks (discharge, 16,600 cfs, result of contracted-opening measurement of peak flow).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1     | 5.8   | 11    | 12    | 205   | 40    | 303   | 66     | 135   | 93    | 26    | 6.6   | 6.6   |
| 2     | 5.8   | 11    | 11    | 188   | 39    | 992   | 64     | 130   | 70    | 24    | 6.6   | 7.0   |
| 3     | 5.2   | 11    | 10    | 158   | 42    | 437   | 59     | 128   | 58    | 22    | 7.0   | 13    |
| 4     | 5.2   | 10    | 10    | 180   | 42    | 305   | 70     | 125   | 52    | 21    | 7.5   | 16    |
| 5     | 4.9   | 10    | 10    | 205   | 40    | 229   | 59     | 108   | 47    | 21    | 8.5   | 9.5   |
| 6     | 5.2   | 10    | 21    | 149   | 38    | 167   | 58     | 64    | 46    | 19    | 7.5   | 8.5   |
| 7     | 5.2   | 10    | 61    | 122   | 45    | 170   | 1,000  | 59    | 47    | 17    | 7.5   | 7.5   |
| 8     | 5.2   | 9.5   | 56    | 103   | 38    | 184   | 514    | 132   | 39    | 16    | 7.0   | 7.5   |
| 9     | 6.2   | 9.5   | 34    | 152   | 36    | 161   | 378    | 868   | 37    | 16    | 6.6   | 7.0   |
| 10    | 7.4   | 9.5   | 28    | 209   | 34    | 146   | 295    | 315   | 36    | 15    | 6.3   | 7.0   |
| 11    | 7.4   | 9.5   | 27    | 170   | 32    | 135   | 233    | 217   | 34    | 14    | 6.3   | 6.6   |
| 12    | 6.8   | 9.5   | 24    | 135   | 30    | 115   | 221    | 161   | 31    | 13    | 6.3   | 7.0   |
| 13    | 6.5   | 9.1   | 23    | 110   | 30    | 103   | 1,050  | 218   | 108   | 12    | 6.3   | 6.6   |
| 14    | 8.2   | 8.6   | 198   | 80    | 35    | 152   | 373    | 320   | 236   | 11    | 6.3   | 7.0   |
| 15    | 7.1   | 8.6   | 310   | 70    | 200   | 132   | 373    | 536   | 107   | 12    | 5.9   | 7.0   |
| 16    | 11    | 8.6   | 237   | 64    | 160   | 210   | 1,210  | 300   | 217   | 14    | 5.9   | 7.0   |
| 17    | 10    | 18    | 149   | 60    | 120   | 258   | 556    | 225   | 110   | 13    | 5.5   | 7.0   |
| 18    | 8.6   | 28    | 112   | 56    | 94    | 202   | 310    | 198   | 72    | 12    | 5.5   | 6.6   |
| 19    | 7.8   | 32    | 94    | 54    | 74    | 158   | 241    | 170   | 59    | 11    | 5.2   | 6.3   |
| 20    | 7.4   | 19    | 100   | 56    | 60    | 132   | 263    | 143   | 50    | 11    | 5.5   | 6.3   |
| 21    | 7.4   | 12    | 94    | 59    | 58    | 122   | 393    | 120   | 47    | 9.5   | 5.5   | 6.3   |
| 22    | 8.2   | 10    | 78    | 58    | 58    | 228   | 702    | 107   | 42    | 9.0   | 5.2   | 5.9   |
| 23    | 8.2   | 9.5   | 72    | 68    | 53    | 174   | 351    | 91    | 37    | 9.0   | 6.3   | 5.9   |
| 24    | 10    | 9.5   | 68    | 91    | 59    | 135   | 254    | 65    | 36    | 8.5   | 5.9   | 7.5   |
| 25    | 12    | 9.1   | 62    | 77    | 54    | 115   | 225    | 59    | 33    | 9.0   | 5.9   | 14    |
| 26    | 57    | 9.1   | 60    | 56    | 66    | 105   | 217    | 56    | 32    | 8.5   | 5.5   | 12    |
| 27    | 57    | 10    | 58    | 53    | 56    | 99    | 194    | 49    | 28    | 9.0   | 6.6   | 12    |
| 28    | 57    | 10    | 57    | 49    | 58    | 91    | 170    | 47    | 26    | 8.0   | 7.5   | 12    |
| 29    | 56    | 11    | 50    | 46    | 68    | 84    | 155    | 45    | 34    | 8.0   | 7.0   | 12    |
| 30    | 26    | 13    | 866   | 44    | ----- | 81    | 143    | 94    | 34    | 8.0   | 7.0   | 13    |
| 31    | 13    | ----- | 340   | 42    | ----- | 70    | -----  | 143   | ----- | 7.0   | 7.0   | ----- |
| TOTAL | 448.7 | 355.6 | 3,332 | 3,169 | 1,759 | 5,995 | 10,197 | 5,428 | 1,898 | 413.5 | 199.2 | 257.6 |
| MEAN  | 14.5  | 11.9  | 107   | 102   | 60.7  | 193   | 340    | 175   | 63.3  | 13.3  | 6.43  | 8.59  |
| MAX   | 57    | 32    | 866   | 209   | 200   | 992   | 1,210  | 868   | 236   | 26    | 8.5   | 16    |
| MIN   | 4.9   | 8.6   | 10    | 42    | 30    | 70    | 58     | 45    | 26    | 7.0   | 5.2   | 5.9   |
| CFSM  | .12   | .10   | .89   | .85   | .51   | 1.61  | 2.83   | 1.46  | .53   | .11   | .05   | .07   |
| IN.   | .14   | .11   | 1.03  | .98   | .55   | 1.86  | 3.16   | 1.68  | .59   | .13   | .06   | .08   |

CAL YR 1971 TOTAL 29,130.9 MEAN 79.8 MAX 2,140 MIN 4.9 CFSM .67 IN 9.03  
WTR YR 1972 TOTAL 33,452.6 MEAN 91.4 MAX 1,210 MIN 4.9 CFSM .76 IN 10.37

PEAK DISCHARGE (BASE, 2,500 CFS).--Dec. 30 (1100) 2,970 cfs (5.34 ft).



## GREAT MIAMI RIVER BASIN

167

03274000 Great Miami River at Hamilton, Ohio

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1N., R.3E., Butler County, on right bank 1,000 ft downstream from Columbia Bridge at Hamilton, 3 miles downstream from Four Mile Creek, and 4.3 miles upstream from Pleasant Run.

DRAINAGE AREA.--3,630 sq mi.

PERIOD OF RECORD.--January 1907 to June 1909 (fragmentary), January 1910 to September 1918, April 1927 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 0.7 mile upstream since 1911 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Hamilton.

GAGE.--Water-stage recorder. Datum of gage is 499.98 ft above mean sea level, adjustment of 1912. Prior to Apr. 12, 1927, nonrecording gages at site 0.7 mile upstream at datum 64.65 ft higher.

AVERAGE DISCHARGE.--41 years (1931-72), 3,128 cfs (11.70 inches per year).

EXTREMES.--Current year: Maximum discharge, 26,000 cfs Apr. 16 (gage height, 66.75 ft); minimum, 396 cfs Oct. 4. Period of record: Maximum discharge, 352,000 cfs Mar. 26, 1913 (gage height, 38.5 ft, site and datum then in use, computed by Miami Conservancy District); minimum, 100 cfs Sept. 26, 27, 1941; minimum gage height, 55.73 ft Oct. 18, 1960.

REMARKS.--Records good. Some regulation at low flow by industrial plants upstream from station. Flood flow regulated by five retarding basins upstream from station beginning in 1920 (see REMARKS for station numbers 03271500 and 03272000). Small diversion about 6 miles upstream from gage for municipal supply of Hamilton. Diversion averaged 1.5 cfs in 1972 and is returned as sewage 1.4 miles downstream from the station. The Miami and Erie Canal diverted water from the basin 1.7 miles upstream from station until Nov. 1, 1930, when canal was abandoned; amount of diversion not known. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 12 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 803: 1936. WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT    | NOV       | DEC     | JAN     | FEB    | MAR     | APR     | MAY     | JUN    | JUL    | AUG    | SEP    |       |
|-------------|--------|-----------|---------|---------|--------|---------|---------|---------|--------|--------|--------|--------|-------|
| 1           | 705    | 566       | 1,140   | 11,300  | 1,530  | 2,140   | 2,520   | 3,660   | 3,540  | 2,040  | 726    | 519    |       |
| 2           | 654    | 578       | 1,060   | 7,880   | 1,500  | 10,200  | 2,300   | 3,530   | 3,290  | 1,650  | 717    | 538    |       |
| 3           | 572    | 668       | 967     | 6,070   | 1,610  | 15,600  | 2,150   | 3,180   | 2,640  | 1,470  | 749    | 566    |       |
| 4           | 505    | 595       | 883     | 5,550   | 1,660  | 12,700  | 2,270   | 2,820   | 2,250  | 1,800  | 970    | 818    |       |
| 5           | 521    | 572       | 829     | 6,110   | 1,300  | 8,540   | 2,170   | 2,580   | 1,990  | 3,410  | 821    | 617    |       |
| 6           | 500    | 572       | 1,480   | 5,370   | 1,330  | 5,550   | 2,140   | 2,390   | 1,930  | 2,910  | 724    | 573    |       |
| 7           | 489    | 602       | 3,170   | 4,190   | 1,350  | 4,150   | 11,900  | 2,200   | 1,890  | 2,190  | 770    | 531    |       |
| 8           | 484    | 572       | 3,390   | 3,400   | 1,230  | 3,890   | 21,900  | 4,470   | 1,730  | 1,700  | 755    | 541    |       |
| 9           | 500    | 583       | 3,010   | 3,600   | 1,190  | 3,410   | 18,400  | 11,200  | 1,660  | 1,450  | 696    | 535    |       |
| 10          | 602    | 615       | 2,490   | 4,640   | 1,140  | 3,040   | 13,200  | 13,900  | 1,640  | 1,310  | 734    | 503    |       |
| 11          | 566    | 615       | 2,010   | 6,630   | 1,130  | 2,630   | 9,350   | 9,760   | 1,600  | 1,450  | 684    | 468    |       |
| 12          | 560    | 640       | 1,630   | 5,370   | 1,160  | 2,450   | 7,170   | 6,780   | 1,500  | 1,650  | 645    | 501    |       |
| 13          | 566    | 647       | 1,530   | 4,250   | 1,410  | 2,330   | 17,400  | 6,460   | 2,620  | 1,340  | 638    | 1,370  |       |
| 14          | 634    | 628       | 3,310   | 3,570   | 1,980  | 2,990   | 13,400  | 8,730   | 6,620  | 1,150  | 604    | 1,140  |       |
| 15          | 628    | 589       | 7,920   | 2,760   | 3,290  | 5,540   | 11,800  | 12,300  | 5,660  | 1,070  | 622    | 1,380  |       |
| 16          | 1,380  | 628       | 12,400  | 1,740   | 4,240  | 6,200   | 19,100  | 16,400  | 4,780  | 1,490  | 615    | 1,280  |       |
| 17          | 1,280  | 628       | 9,670   | 1,590   | 4,030  | 7,080   | 17,400  | 13,000  | 4,420  | 1,580  | 596    | 1,130  |       |
| 18          | 967    | 660       | 6,070   | 2,210   | 3,350  | 5,960   | 13,600  | 8,840   | 3,190  | 1,810  | 592    | 831    |       |
| 19          | 812    | 712       | 4,010   | 2,400   | 2,890  | 4,490   | 9,620   | 6,590   | 2,440  | 1,510  | 586    | 891    |       |
| 20          | 735    | 829       | 3,450   | 2,140   | 2,210  | 3,460   | 8,260   | 5,140   | 2,120  | 1,330  | 599    | 838    |       |
| 21          | 675    | 752       | 2,900   | 2,000   | 1,920  | 3,040   | 14,000  | 4,140   | 2,800  | 1,230  | 571    | 697    |       |
| 22          | 660    | 690       | 2,580   | 1,910   | 1,960  | 5,600   | 19,500  | 3,550   | 1,870  | 1,160  | 602    | 721    |       |
| 23          | 660    | 712       | 2,340   | 2,120   | 1,830  | 5,390   | 19,800  | 3,120   | 2,190  | 1,020  | 831    | 646    |       |
| 24          | 683    | 712       | 2,150   | 3,110   | 1,740  | 4,620   | 16,600  | 2,770   | 2,150  | 998    | 788    | 757    |       |
| 25          | 812    | 728       | 1,970   | 2,960   | 1,730  | 3,750   | 11,500  | 2,530   | 1,860  | 1,140  | 863    | 4,330  |       |
| 26          | 744    | 675       | 1,860   | 2,450   | 1,810  | 3,150   | 8,030   | 2,340   | 1,670  | 1,060  | 858    | 3,210  |       |
| 27          | 744    | 712       | 1,840   | 2,010   | 1,680  | 2,800   | 6,310   | 2,140   | 1,570  | 960    | 1,090  | 3,620  |       |
| 28          | 720    | 752       | 1,880   | 1,780   | 1,630  | 2,660   | 5,080   | 1,970   | 1,430  | 797    | 880    | 5,760  |       |
| 29          | 690    | 803       | 1,820   | 1,690   | 1,670  | 3,220   | 4,230   | 1,850   | 1,620  | 756    | 729    | 4,450  |       |
| 30          | 647    | 1,220     | 8,770   | 1,560   | -----  | 3,280   | 3,970   | 2,770   | 2,050  | 735    | 631    | 3,720  |       |
| 31          | 583    | -----     | 13,300  | 1,450   | -----  | 2,820   | -----   | 3,640   | -----  | 709    | 542    | -----  |       |
| TOTAL       | 21,278 | 20,255    | 111,829 | 113,810 | 55,500 | 152,680 | 315,070 | 174,750 | 76,720 | 44,875 | 22,228 | 43,481 |       |
| MEAN        | 686    | 675       | 3,607   | 3,671   | 1,914  | 4,925   | 10,500  | 5,637   | 2,557  | 1,448  | 717    | 1,449  |       |
| MAX         | 1,380  | 1,220     | 13,300  | 11,300  | 4,240  | 15,600  | 21,900  | 16,400  | 6,620  | 3,410  | 1,090  | 5,760  |       |
| MIN         | 484    | 566       | 829     | 1,450   | 1,130  | 2,140   | 2,140   | 1,850   | 1,430  | 709    | 542    | 468    |       |
| CFSM        | .19    | .19       | .99     | 1.01    | .53    | 1.36    | 2.89    | 1.55    | .70    | .40    | .20    | .40    |       |
| IN.         | .22    | .21       | 1.15    | 1.17    | .57    | 1.56    | 3.23    | 1.79    | .79    | .46    | .23    | .45    |       |
| CAL YR 1971 | TOTAL  | 872,574   |         | MEAN    | 2,391  | MAX     | 29,800  | MIN     | 405    | CFSM   | .66    | IN     | 8.94  |
| WTR YR 1972 | TOTAL  | 1,152,476 |         | MEAN    | 3,149  | MAX     | 21,900  | MIN     | 468    | CFSM   | .87    | IN     | 11.81 |

PEAK DISCHARGE (BASE, 24,000 CFS).--Apr. 16 (1400) 26,000 cfs (66.75 ft).

## 03276500 Whitewater River at Brookville, Ind.

LOCATION.--Lat 39°24'24", long 85°00'46", in NE 1/4 NW 1/4 sec.32, T.9 N., R.2 W., Franklin County, on right bank at downstream side of highway bridge, 0.3 mile downstream from East Fork Whitewater River, and 1.1 miles south of Brookville.

DRAINAGE AREA.--1,224 sq mi.

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.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft above mean sea level. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--51 years (1915-17, 1923-72), 1,247 cfs (13.84 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,600 cfs Apr. 16 (gage height, 12.92 ft); minimum daily, 140 cfs Sept. 22.

Period of record: Maximum discharge, 81,800 cfs Jan. 21, 1959 (gage height, 27.78 ft), from rating curve extended above 45,000 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 60 cfs July 27, 1934.

Flood of Mar. 25, 1913, reached a stage of 39.0 ft, present datum, from floodmarks (discharge not determined).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1335: 1915-17, 1929, 1930(M), 1933(M), 1934, 1935(m), 1936. WSP 1505: 1916(M). WSP 1908: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR     | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------|-------|-------|--------|--------|--------|--------|---------|--------|--------|--------|-------|-------|
| 1     | 218   | 256   | 320    | 2,150  | 470    | 2,450  | 686     | 1,850  | 1,790  | 649    | 205   | 145   |
| 2     | 205   | 250   | 286    | 1,790  | 460    | 7,390  | 668     | 1,560  | 1,290  | 509    | 200   | 155   |
| 3     | 195   | 250   | 268    | 1,590  | 450    | 5,310  | 660     | 1,340  | 1,040  | 465    | 205   | 170   |
| 4     | 188   | 235   | 265    | 1,560  | 440    | 2,930  | 769     | 1,210  | 895    | 448    | 229   | 241   |
| 5     | 178   | 232   | 256    | 1,870  | 430    | 2,170  | 720     | 1,100  | 798    | 423    | 223   | 182   |
| 6     | 178   | 232   | 510    | 1,460  | 420    | 1,620  | 673     | 1,010  | 765    | 393    | 218   | 162   |
| 7     | 172   | 235   | 1,190  | 1,340  | 400    | 1,480  | 7,150   | 958    | 789    | 373    | 215   | 155   |
| 8     | 172   | 229   | 1,050  | 1,170  | 390    | 1,450  | 6,880   | 1,240  | 688    | 362    | 212   | 158   |
| 9     | 180   | 223   | 793    | 1,450  | 370    | 1,230  | 3,970   | 3,290  | 648    | 348    | 205   | 152   |
| 10    | 210   | 220   | 683    | 1,800  | 370    | 1,110  | 2,920   | 1,910  | 644    | 349    | 198   | 150   |
| 11    | 198   | 218   | 737    | 1,720  | 380    | 1,030  | 2,340   | 1,440  | 602    | 339    | 195   | 148   |
| 12    | 188   | 215   | 611    | 1,420  | 400    | 991    | 2,110   | 1,230  | 556    | 330    | 195   | 142   |
| 13    | 195   | 210   | 550    | 1,260  | 460    | 995    | 7,850   | 1,590  | 573    | 323    | 198   | 145   |
| 14    | 262   | 208   | 2,840  | 900    | 702    | 1,280  | 4,320   | 2,410  | 1,260  | 317    | 192   | 158   |
| 15    | 271   | 202   | 4,540  | 700    | 1,950  | 1,190  | 3,660   | 3,360  | 1,060  | 313    | 185   | 160   |
| 16    | 265   | 202   | 3,450  | 580    | 1,660  | 1,520  | 13,100  | 3,590  | 1,870  | 347    | 185   | 155   |
| 17    | 301   | 202   | 2,010  | 670    | 1,190  | 1,810  | 7,480   | 2,260  | 1,340  | 352    | 182   | 152   |
| 18    | 259   | 200   | 1,430  | 770    | 1,140  | 1,510  | 3,930   | 1,790  | 958    | 330    | 178   | 148   |
| 19    | 241   | 215   | 1,160  | 888    | 800    | 1,270  | 2,860   | 1,490  | 793    | 312    | 180   | 148   |
| 20    | 238   | 256   | 1,140  | 841    | 700    | 1,120  | 3,350   | 1,280  | 702    | 299    | 213   | 150   |
| 21    | 232   | 235   | 1,070  | 838    | 750    | 1,040  | 4,310   | 1,140  | 653    | 293    | 192   | 145   |
| 22    | 320   | 223   | 926    | 822    | 798    | 1,180  | 7,990   | 1,040  | 623    | 289    | 180   | 140   |
| 23    | 462   | 215   | 835    | 949    | 694    | 1,120  | 5,580   | 934    | 565    | 286    | 178   | 142   |
| 24    | 457   | 218   | 786    | 995    | 734    | 982    | 3,540   | 853    | 530    | 286    | 172   | 215   |
| 25    | 611   | 218   | 730    | 913    | 693    | 910    | 2,620   | 795    | 510    | 285    | 170   | 328   |
| 26    | 439   | 215   | 695    | 660    | 898    | 860    | 2,140   | 736    | 495    | 281    | 165   | 342   |
| 27    | 373   | 235   | 677    | 580    | 818    | 830    | 1,850   | 690    | 470    | 353    | 162   | 398   |
| 28    | 328   | 289   | 665    | 520    | 811    | 813    | 1,640   | 647    | 448    | 279    | 158   | 442   |
| 29    | 295   | 289   | 623    | 490    | 857    | 784    | 1,500   | 632    | 470    | 232    | 155   | 382   |
| 30    | 280   | 345   | 5,210  | 470    | -----  | 779    | 1,520   | 1,180  | 606    | 218    | 152   | 460   |
| 31    | 271   | ----- | 4,060  | 460    | -----  | 715    | -----   | 2,630  | -----  | 212    | 150   | ----- |
| TOTAL | 8,382 | 6,972 | 40,366 | 33,626 | 20,635 | 49,869 | 108,786 | 47,185 | 24,431 | 10,595 | 5,847 | 6,170 |
| MEAN  | 270   | 232   | 1,302  | 1,085  | 712    | 1,609  | 3,626   | 1,522  | 814    | 342    | 189   | 206   |
| MAX   | 611   | 345   | 5,210  | 2,150  | 1,950  | 7,390  | 13,100  | 3,590  | 1,870  | 649    | 229   | 460   |
| MIN   | 172   | 200   | 256    | 460    | 370    | 715    | 660     | 632    | 448    | 212    | 150   | 140   |
| CFSM  | .22   | .19   | 1.06   | .89    | .58    | 1.31   | 2.96    | 1.24   | .67    | .28    | .15   | .17   |
| IN.   | .25   | .21   | 1.23   | 1.02   | .63    | 1.52   | 3.31    | 1.43   | .74    | .32    | .18   | .19   |

CAL YR 1971 TOTAL 375,349 MEAN 1,028 MAX 20,900 MIN 148 CFSM .84 IN 11.41  
WTR YR 1972 TOTAL 362,864 MEAN 991 MAX 13,100 MIN 140 CFSM .81 IN 11.03

## PEAK DISCHARGE (BASE, 12,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 2200 | 10.74 | 14,100    | 4-16 | 1500 | 12.92 | 17,600    |
| 4-13 | 1800 | 10.21 | 13,400    |      |      |       |           |

03322500 Wabash River near New Corydon, Ind.

LOCATION.--Lat 40°33'50", long 84°48'10", in NE 1/4 SE 1/4 sec.3, T.24 N., R.15 E., Jay County, on left bank, 10 ft downstream from county bridge on Indiana-Ohio State line road, 2 miles east of New Corydon, 2.8 miles downstream from Beaver Creek, and at mile 465.6.

DRAINAGE AREA.--262 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 830.10 ft above mean sea level. Prior to June 24, 1953, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 181 cfs (9.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,010 cfs Apr. 20 (gage height, 18.45 ft); minimum daily, 6.0 cfs Nov. 16.

Period of record: Maximum discharge, 8,720 cfs Jan. 22, 1959 (gage height, 20.47 ft, from floodmarks); minimum daily, 0.8 cfs Dec. 22, 23, 1963.

REMARKS.--Records poor. Occasional regulation by Grand Lake, diversion from or into St. Mary River basin, and into Miami and Erie Canal. Water-quality records for the current year are published in WRD Indiana, 1972, Part 2.

REVISIONS (WATER YEARS).--WSP 1555: 1957(P). WSP 1909: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV      | DEC       | JAN     | FEB      | MAR      | APR    | MAY    | JUN   | JUL   | AUG   | SEP    |
|-------------|----------------|----------|-----------|---------|----------|----------|--------|--------|-------|-------|-------|--------|
| 1           | 20             | 11       | 23        | 573     | 251      | 138      | 96     | 366    | 248   | 35    | 19    | 12     |
| 2           | 15             | 11       | 63        | 345     | 251      | 1,400    | 82     | 356    | 200   | 122   | 17    | 12     |
| 3           | 12             | 10       | 110       | 283     | 241      | 941      | 72     | 330    | 150   | 409   | 16    | 16     |
| 4           | 10             | 9.9      | 113       | 260     | 226      | 336      | 78     | 280    | 140   | 430   | 32    | 19     |
| 5           | 9.7            | 8.8      | 110       | 240     | 180      | 163      | 84     | 260    | 130   | 233   | 15    | 14     |
| 6           | 9.3            | 8.0      | 138       | 220     | 130      | 106      | 78     | 250    | 120   | 187   | 14    | 13     |
| 7           | 9.3            | 8.0      | 416       | 200     | 100      | 98       | 1,660  | 250    | 120   | 162   | 13    | 13     |
| 8           | 8.8            | 8.0      | 618       | 248     | 90       | 88       | 1,580  | 324    | 110   | 120   | 12    | 14     |
| 9           | 9.7            | 7.3      | 360       | 378     | 80       | 74       | 623    | 420    | 100   | 80    | 11    | 14     |
| 10          | 13             | 7.5      | 267       | 773     | 70       | 63       | 355    | 492    | 85    | 65    | 11    | 12     |
| 11          | 12             | 8.0      | 470       | 510     | 70       | 62       | 242    | 404    | 70    | 50    | 9.7   | 12     |
| 12          | 9.5            | 7.5      | 344       | 366     | 70       | 62       | 185    | 350    | 60    | 45    | 10    | 272    |
| 13          | 8.2            | 7.1      | 238       | 323     | 70       | 358      | 2,140  | 300    | 143   | 45    | 11    | 260    |
| 14          | 10             | 6.9      | 428       | 283     | 179      | 375      | 1,270  | 418    | 173   | 127   | 9.3   | 742    |
| 15          | 14             | 6.4      | 2,050     | 220     | 225      | 190      | 466    | 953    | 157   | 141   | 17    | 550    |
| 16          | 12             | 6.0      | 1,380     | 170     | 216      | 146      | 582    | 828    | 162   | 262   | 13    | 157    |
| 17          | 9.9            | 6.2      | 590       | 140     | 185      | 126      | 1,030  | 583    | 130   | 175   | 9.7   | 109    |
| 18          | 8.6            | 7.5      | 376       | 130     | 177      | 105      | 438    | 478    | 110   | 144   | 8.8   | 104    |
| 19          | 7.5            | 9.7      | 266       | 130     | 140      | 89       | 293    | 422    | 85    | 287   | 10    | 123    |
| 20          | 7.7            | 11       | 242       | 170     | 110      | 79       | 2,800  | 330    | 65    | 272   | 28    | 103    |
| 21          | 8.8            | 11       | 248       | 220     | 80       | 72       | 2,610  | 280    | 147   | 181   | 18    | 90     |
| 22          | 18             | 9.7      | 242       | 324     | 60       | 70       | 2,770  | 250    | 157   | 149   | 16    | 82     |
| 23          | 86             | 8.8      | 219       | 398     | 50       | 71       | 2,090  | 230    | 145   | 110   | 16    | 629    |
| 24          | 79             | 8.8      | 164       | 270     | 45       | 65       | 1,160  | 210    | 110   | 80    | 15    | 1,760  |
| 25          | 69             | 9.7      | 180       | 180     | 40       | 59       | 649    | 200    | 90    | 60    | 14    | 570    |
| 26          | 50             | 10       | 193       | 150     | 37       | 54       | 519    | 190    | 65    | 45    | 14    | 1,870  |
| 27          | 37             | 11       | 207       | 144     | 37       | 59       | 450    | 180    | 45    | 35    | 14    | 3,020  |
| 28          | 29             | 14       | 214       | 185     | 37       | 158      | 397    | 180    | 40    | 30    | 12    | 974    |
| 29          | 21             | 14       | 216       | 249     | 46       | 156      | 366    | 170    | 50    | 26    | 12    | 714    |
| 30          | 16             | 18       | 1,580     | 258     | -----    | 177      | 350    | 258    | 70    | 23    | 13    | 1,510  |
| 31          | 14             | -----    | 1,830     | 250     | -----    | 120      | -----  | 295    | ----- | 21    | 13    | -----  |
| TOTAL       | 644.0          | 280.8    | 13,895    | 8,590   | 3,493    | 6,060    | 25,515 | 10,837 | 3,477 | 4,151 | 443.5 | 13,790 |
| MEAN        | 20.8           | 9.36     | 448       | 277     | 120      | 195      | 851    | 350    | 116   | 134   | 14.3  | 460    |
| MAX         | 86             | 18       | 2,050     | 773     | 251      | 1,400    | 2,800  | 953    | 248   | 430   | 32    | 3,020  |
| MIN         | 7.5            | 6.0      | 23        | 130     | 37       | 54       | 72     | 170    | 40    | 21    | 8.8   | 12     |
| CFSM        | .08            | .04      | 1.71      | 1.06    | .46      | .74      | 3.25   | 1.34   | .44   | .51   | .05   | 1.76   |
| IN.         | .09            | .04      | 1.97      | 1.22    | .50      | .86      | 3.62   | 1.54   | .49   | .59   | .06   | 1.96   |
| CAL YR 1971 | TOTAL 56,100.7 | MEAN 154 | MAX 2,390 | MIN 5.0 | CFSM .59 | IN 7.97  |        |        |       |       |       |        |
| WTR YR 1972 | TOTAL 91,176.3 | MEAN 249 | MAX 3,020 | MIN 6.0 | CFSM .95 | IN 12.95 |        |        |       |       |       |        |

## PEAK DISCHARGE (BASE, 2,500 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-30 | 2100 | 16.88 | 2,760     | 4-20 | 2100 | 18.45 | 4,010     |
| 4-7   | 2100 | 17.67 | 2,680     | 9-26 | 2400 | 16.50 | 3,840     |
| 4-13  | 1000 | 17.42 | 2,600     |      |      |       |           |

## ST. LAWRENCE RIVER BASIN

## STREAMS TRIBUTARY TO LAKE ERIE

04178000 St. Joseph River near Newville, Ind.

LOCATION.--Lat 41°23'08", long 84°48'06", in SW 1/4 SW 1/4 sec.18, T.5 N., R.1 E., Defiance County, Ohio, on left bank at bridge on Ohio State Highway 249, 3.5 miles northeast of Newville and 6.5 miles northwest of Hicksville, Ohio.

DRAINAGE AREA.--610 sq mi.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft above mean sea level. Prior to Oct. 22, 1947, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--26 years, 489 cfs (10.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,340 cfs Mar. 18 (gage height, 11.37 ft); maximum gage height, 12.11 ft Sept. 14; minimum daily discharge, 37 cfs Oct. 5, 6.  
Period of record: Maximum discharge, 9,710 cfs Apr. 6, 1950 (gage height, 17.05 ft); minimum daily, 14 cfs Sept. 10, 16, 1964.

REMARKS.--Records good. Water-quality records for the current year at site 0.5 mile downstream (04178100 St. Joseph River at Indiana-Ohio State line) are published in WRD Indiana, 1972, Part 2.

REVISIONS.--WSP 2112: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV      | DEC       | JAN    | FEB      | MAR     | APR    | MAY    | JUN   | JUL   | AUG   | SEP    |
|-------------|---------------|----------|-----------|--------|----------|---------|--------|--------|-------|-------|-------|--------|
| 1           | 59            | 59       | 71        | 1,120  | 200      | 250     | 683    | 512    | 193   | 101   | 74    | 62     |
| 2           | 48            | 55       | 66        | 1,040  | 180      | 550     | 617    | 665    | 188   | 125   | 69    | 58     |
| 3           | 44            | 53       | 61        | 888    | 165      | 900     | 560    | 938    | 178   | 120   | 69    | 55     |
| 4           | 40            | 52       | 60        | 660    | 155      | 750     | 564    | 1,070  | 171   | 106   | 76    | 55     |
| 5           | 37            | 52       | 69        | 535    | 145      | 650     | 625    | 1,050  | 191   | 96    | 68    | 64     |
| 6           | 37            | 51       | 83        | 300    | 135      | 550     | 641    | 877    | 174   | 87    | 63    | 62     |
| 7           | 39            | 49       | 107       | 350    | 130      | 420     | 621    | 674    | 151   | 82    | 71    | 57     |
| 8           | 42            | 47       | 206       | 357    | 125      | 300     | 570    | 581    | 133   | 82    | 63    | 53     |
| 9           | 48            | 46       | 223       | 339    | 120      | 290     | 536    | 630    | 120   | 77    | 64    | 49     |
| 10          | 49            | 48       | 203       | 323    | 115      | 260     | 517    | 741    | 109   | 83    | 78    | 47     |
| 11          | 52            | 49       | 197       | 340    | 110      | 232     | 500    | 790    | 100   | 79    | 87    | 46     |
| 12          | 56            | 50       | 216       | 318    | 110      | 218     | 467    | 701    | 91    | 75    | 80    | 54     |
| 13          | 55            | 50       | 400       | 290    | 115      | 572     | 484    | 582    | 88    | 70    | 73    | 72     |
| 14          | 52            | 50       | 321       | 252    | 135      | 1,490   | 757    | 554    | 91    | 74    | 67    | 1,680  |
| 15          | 48            | 50       | 455       | 150    | 160      | 1,710   | 1,000  | 911    | 131   | 92    | 63    | 1,830  |
| 16          | 47            | 51       | 885       | 120    | 200      | 2,010   | 1,390  | 1,030  | 157   | 126   | 60    | 1,300  |
| 17          | 59            | 52       | 770       | 170    | 250      | 2,270   | 1,990  | 980    | 145   | 176   | 61    | 956    |
| 18          | 59            | 54       | 549       | 207    | 220      | 2,330   | 1,980  | 833    | 133   | 199   | 64    | 777    |
| 19          | 88            | 56       | 378       | 198    | 205      | 2,220   | 1,800  | 663    | 114   | 191   | 246   | 684    |
| 20          | 89            | 57       | 284       | 211    | 200      | 2,060   | 1,780  | 535    | 103   | 222   | 183   | 606    |
| 21          | 78            | 52       | 242       | 270    | 195      | 1,830   | 1,770  | 437    | 95    | 178   | 122   | 596    |
| 22          | 70            | 50       | 230       | 342    | 185      | 1,850   | 1,880  | 359    | 95    | 149   | 113   | 506    |
| 23          | 63            | 49       | 209       | 652    | 170      | 1,880   | 1,870  | 303    | 115   | 126   | 156   | 366    |
| 24          | 59            | 49       | 179       | 731    | 150      | 1,740   | 1,750  | 267    | 117   | 123   | 172   | 275    |
| 25          | 55            | 49       | 179       | 760    | 140      | 1,550   | 1,530  | 242    | 106   | 113   | 120   | 227    |
| 26          | 60            | 50       | 179       | 663    | 130      | 1,350   | 1,270  | 216    | 97    | 109   | 106   | 338    |
| 27          | 88            | 52       | 186       | 521    | 120      | 1,030   | 951    | 191    | 93    | 110   | 103   | 556    |
| 28          | 100           | 60       | 213       | 400    | 125      | 791     | 725    | 168    | 88    | 95    | 91    | 585    |
| 29          | 125           | 70       | 212       | 350    | 130      | 663     | 588    | 153    | 87    | 97    | 84    | 558    |
| 30          | 100           | 80       | 412       | 290    | -----    | 723     | 509    | 154    | 86    | 94    | 76    | 645    |
| 31          | 70            | -----    | 1,070     | 240    | -----    | 741     | -----  | 165    | ----- | 83    | 68    | -----  |
| TOTAL       | 1,916         | 1,592    | 8,915     | 13,387 | 4,520    | 34,180  | 30,925 | 17,972 | 3,740 | 3,540 | 2,890 | 13,219 |
| MEAN        | 61.8          | 53.1     | 288       | 432    | 156      | 1,103   | 1,031  | 580    | 125   | 114   | 93.2  | 441    |
| MAX         | 125           | 80       | 1,070     | 1,120  | 250      | 2,330   | 1,990  | 1,070  | 193   | 222   | 246   | 1,830  |
| MIN         | 37            | 46       | 60        | 120    | 110      | 218     | 467    | 153    | 86    | 70    | 60    | 46     |
| CFSM        | .10           | .09      | .47       | .71    | .26      | 1.81    | 1.69   | .95    | .20   | .19   | .15   | .72    |
| IN.         | .12           | .10      | .54       | .82    | .28      | 2.08    | 1.89   | 1.10   | .23   | .22   | .18   | .81    |
| CAL YR 1971 | TOTAL 128,645 | MEAN 352 | MAX 4,130 | MIN 20 | CFSM .58 | IN 7.85 |        |        |       |       |       |        |
| WTR YR 1972 | TOTAL 136,796 | MEAN 374 | MAX 2,330 | MIN 37 | CFSM .61 | IN 8.34 |        |        |       |       |       |        |



04181500 St. Marys River at Decatur, Ind.

LOCATION.--Lat 40°50'55", long 84°56'16", in SW 1/4 SW 1/4 sec.27, T.28 N., R.14 E., Adams County, on right bank 10 ft downstream from bridge on U.S. Highway 27, 0.5 mile upstream from Holthouse ditch, and 1.3 miles north of Decatur.

DRAINAGE AREA.--621 sq mi.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mile upstream January 1932 to November 1954, and at present site thereafter are contained in reports of U.S. Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft above mean sea level. Prior to July 27, 1948, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--26 years, 478 cfs (10.45 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,470 cfs Apr. 23 (gage height, 22.42 ft); minimum daily, 18 cfs Sept. 1.

Period of record: Maximum discharge, 11,300 cfs Feb. 10, 11, 1959; maximum gage height, 24.22 ft Feb. 10, 1959 (ice jam); minimum daily discharge, 5.4 cfs Oct. 18, 1960.

REMARKS.--Records good. Flow regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

REVISIONS (WATER YEARS).--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP    |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|-------|--------|-------|--------|
| 1     | 403   | 84    | 86     | 1,400  | 170   | 238    | 596    | 412    | 641   | 128    | 37    | 18     |
| 2     | 284   | 82    | 73     | 1,140  | 150   | 2,140  | 562    | 336    | 434   | 67     | 39    | 26     |
| 3     | 170   | 78    | 89     | 1,460  | 130   | 2,250  | 502    | 273    | 366   | 179    | 57    | 31     |
| 4     | 134   | 67    | 120    | 1,510  | 120   | 1,560  | 548    | 230    | 302   | 731    | 41    | 36     |
| 5     | 136   | 59    | 119    | 1,280  | 110   | 1,540  | 464    | 199    | 217   | 596    | 35    | 29     |
| 6     | 86    | 54    | 229    | 933    | 95    | 1,580  | 372    | 170    | 165   | 629    | 40    | 25     |
| 7     | 63    | 50    | 1,430  | 797    | 90    | 1,550  | 2,250  | 151    | 135   | 618    | 47    | 24     |
| 8     | 51    | 46    | 2,370  | 651    | 82    | 1,120  | 3,220  | 142    | 105   | 466    | 47    | 26     |
| 9     | 50    | 45    | 2,030  | 744    | 80    | 656    | 3,220  | 308    | 264   | 291    | 43    | 24     |
| 10    | 52    | 45    | 1,650  | 1,400  | 77    | 440    | 3,330  | 513    | 363   | 166    | 37    | 23     |
| 11    | 51    | 43    | 1,690  | 1,080  | 74    | 323    | 3,280  | 384    | 116   | 108    | 32    | 27     |
| 12    | 46    | 42    | 1,460  | 847    | 73    | 257    | 2,710  | 450    | 80    | 80     | 30    | 37     |
| 13    | 43    | 41    | 1,170  | 863    | 80    | 913    | 3,690  | 547    | 87    | 80     | 27    | 61     |
| 14    | 42    | 39    | 1,320  | 700    | 88    | 1,640  | 3,820  | 595    | 79    | 411    | 27    | 197    |
| 15    | 40    | 38    | 2,790  | 500    | 100   | 1,270  | 3,600  | 815    | 76    | 990    | 31    | 253    |
| 16    | 38    | 37    | 3,010  | 420    | 150   | 1,350  | 3,710  | 758    | 65    | 2,260  | 74    | 158    |
| 17    | 36    | 37    | 2,400  | 500    | 140   | 1,360  | 4,040  | 610    | 59    | 1,900  | 66    | 99     |
| 18    | 37    | 35    | 1,800  | 643    | 180   | 1,100  | 3,340  | 691    | 66    | 1,180  | 51    | 440    |
| 19    | 48    | 38    | 1,630  | 600    | 220   | 825    | 2,340  | 869    | 78    | 1,980  | 45    | 397    |
| 20    | 56    | 38    | 1,460  | 598    | 246   | 616    | 3,690  | 811    | 82    | 2,050  | 48    | 206    |
| 21    | 52    | 39    | 1,120  | 556    | 189   | 485    | 5,170  | 601    | 128   | 1,110  | 55    | 118    |
| 22    | 253   | 38    | 794    | 602    | 150   | 414    | 6,720  | 434    | 114   | 521    | 47    | 78     |
| 23    | 975   | 36    | 562    | 876    | 118   | 334    | 7,280  | 283    | 79    | 310    | 47    | 99     |
| 24    | 640   | 34    | 459    | 722    | 56    | 262    | 5,820  | 196    | 79    | 203    | 49    | 274    |
| 25    | 435   | 32    | 384    | 540    | 93    | 243    | 4,460  | 156    | 151   | 145    | 45    | 276    |
| 26    | 313   | 33    | 345    | 470    | 78    | 231    | 3,280  | 127    | 150   | 104    | 39    | 1,240  |
| 27    | 241   | 38    | 329    | 400    | 70    | 235    | 2,050  | 107    | 115   | 81     | 32    | 2,240  |
| 28    | 187   | 41    | 352    | 340    | 75    | 406    | 1,110  | 92     | 87    | 66     | 28    | 1,940  |
| 29    | 143   | 49    | 296    | 270    | 87    | 507    | 737    | 84     | 73    | 55     | 24    | 1,310  |
| 30    | 114   | 70    | 977    | 230    | ----- | 995    | 538    | 497    | 112   | 46     | 21    | 1,570  |
| 31    | 100   | ----- | 2,110  | 200    | ----- | 702    | -----  | 1,300  | ----- | 40     | 19    | -----  |
| TOTAL | 5,319 | 1,408 | 34,654 | 23,272 | 3,411 | 27,542 | 86,449 | 13,181 | 4,872 | 17,591 | 1,260 | 11,282 |
| MEAN  | 172   | 46.9  | 1,118  | 751    | 118   | 888    | 2,882  | 425    | 162   | 567    | 40.6  | 376    |
| MAX   | 975   | 84    | 3,010  | 1,510  | 246   | 2,250  | 7,280  | 1,300  | 641   | 2,260  | 74    | 2,240  |
| MIN   | 36    | 32    | 73     | 200    | 70    | 231    | 372    | 84     | 59    | 40     | 19    | 18     |
| CFSM  | .28   | .08   | 1.80   | 1.21   | .19   | 1.43   | 4.64   | .68    | .26   | .91    | .07   | .61    |
| IN.   | .32   | .08   | 2.08   | 1.39   | .20   | 1.65   | 5.18   | .79    | .29   | 1.05   | .08   | .68    |

CAL YR 1971 TOTAL 146,580 MEAN 402 MAX 3,540 MIN 19 CFSM .65 IN 8.78  
WTR YR 1972 TOTAL 230,241 MEAN 629 MAX 7,280 MIN 18 CFSM 1.01 IN 13.79

## PEAK DISCHARGE (BASE, 2,900 CFS)

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-16 | 0100 | 16.43 | 3,100     | 4-17 | 0700 | 18.83 | 4,120     |
| 4-11  | 0030 | 17.21 | 3,380     | 4-23 | 0400 | 22.42 | 7,470     |
| 4-13  | 2000 | 18.41 | 3,900     |      |      |       |           |

## STREAMS TRIBUTARY TO LAKE ERIE

04183000 Maumee River at New Haven, Ind.

LOCATION (REVISED).--Lat 41°05'06", long 85°01'20", in SE 1/4 NE 1/4 sec.2, T.30 N., R.13 E., Allen County, on left bank 600 ft upstream from bridge on Landin Road, 1,400 ft upstream from the Wabash Railroad bridge, 1.1 miles northwest of New Haven, 2.8 miles upstream from Sixmile Creek.

DRAINAGE AREA.--1,967 sq mi.

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft above mean sea level. Prior to Sept. 7, 1956, non-recording gage and Sept. 7, 1956, to Sept. 14, 1965, water-stage recorder at site 500 ft downstream at same datum.

AVERAGE DISCHARGE.--16 years (1956-72), 1,478 cfs (10.20 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,500 cfs Apr. 23 (gage height, 17.14 ft); minimum daily, 129 cfs Oct. 17, 18.

Period of record: Maximum discharge, 19,100 cfs Feb. 16, 1950 (gage height, 21.4 ft at site then in use); minimum daily, 48 cfs Oct. 6, 13, 1963.

REMARKS.--Records good. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 miles upstream from station. Flow slightly regulated by upstream reservoirs.

REVISIONS.--WSP 2112: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV   | DEC    | JAN    | FEB    | MAR    | APR     | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|-------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| 1     | 528    | 224   | 204    | 4,240  | 690    | 558    | 2,130   | 2,430  | 1,640  | 296    | 235    | 161    |
| 2     | 448    | 247   | 222    | 3,100  | 646    | 2,400  | 1,860   | 1,830  | 977    | 250    | 169    | 147    |
| 3     | 621    | 205   | 215    | 2,840  | 555    | 4,220  | 1,730   | 1,570  | 852    | 316    | 261    | 188    |
| 4     | 656    | 190   | 213    | 2,950  | 486    | 3,540  | 2,100   | 1,720  | 821    | 417    | 269    | 146    |
| 5     | 223    | 180   | 238    | 2,610  | 440    | 2,690  | 2,030   | 1,730  | 656    | 808    | 222    | 146    |
| 6     | 232    | 175   | 405    | 1,870  | 380    | 2,110  | 1,750   | 1,630  | 582    | 715    | 190    | 154    |
| 7     | 184    | 184   | 1,300  | 1,240  | 340    | 2,560  | 4,470   | 1,430  | 482    | 745    | 908    | 164    |
| 8     | 179    | 374   | 3,360  | 1,230  | 310    | 2,190  | 5,640   | 1,200  | 488    | 720    | 866    | 209    |
| 9     | 262    | 144   | 3,430  | 1,420  | 280    | 1,480  | 5,500   | 1,270  | 451    | 555    | 403    | 180    |
| 10    | 168    | 147   | 3,600  | 2,140  | 260    | 855    | 5,520   | 1,630  | 901    | 402    | 331    | 140    |
| 11    | 155    | 157   | 3,680  | 2,300  | 240    | 877    | 5,280   | 1,650  | 465    | 349    | 247    | 143    |
| 12    | 156    | 148   | 3,110  | 1,820  | 255    | 741    | 5,000   | 1,550  | 328    | 258    | 265    | 422    |
| 13    | 151    | 147   | 2,460  | 1,580  | 275    | 2,840  | 7,610   | 1,520  | 427    | 307    | 238    | 908    |
| 14    | 145    | 157   | 2,220  | 1,400  | 300    | 5,360  | 7,310   | 2,210  | 452    | 979    | 209    | 6,270  |
| 15    | 139    | 150   | 5,610  | 1,000  | 472    | 5,290  | 6,310   | 3,540  | 2,010  | 1,810  | 247    | 7,780  |
| 16    | 134    | 150   | 6,230  | 800    | 514    | 5,280  | 7,050   | 3,300  | 1,000  | 3,810  | 160    | 6,680  |
| 17    | 129    | 156   | 5,280  | 1,050  | 613    | 5,620  | 9,580   | 2,630  | 547    | 3,760  | 184    | 4,430  |
| 18    | 129    | 154   | 3,910  | 1,150  | 607    | 5,140  | 9,450   | 2,230  | 444    | 2,830  | 210    | 3,360  |
| 19    | 132    | 166   | 2,920  | 981    | 585    | 4,310  | 7,820   | 2,080  | 409    | 3,670  | 505    | 3,530  |
| 20    | 136    | 170   | 2,480  | 874    | 664    | 3,900  | 7,810   | 1,910  | 352    | 3,640  | 680    | 2,500  |
| 21    | 154    | 165   | 2,060  | 941    | 558    | 3,490  | 8,500   | 1,660  | 327    | 2,810  | 409    | 1,910  |
| 22    | 546    | 158   | 1,540  | 1,140  | 576    | 3,780  | 10,200  | 1,250  | 359    | 1,460  | 260    | 1,600  |
| 23    | 703    | 150   | 1,170  | 2,000  | 381    | 3,560  | 11,300  | 1,070  | 329    | 834    | 825    | 1,330  |
| 24    | 1,200  | 172   | 947    | 2,360  | 437    | 3,020  | 11,300  | 752    | 350    | 651    | 527    | 1,120  |
| 25    | 763    | 161   | 835    | 2,120  | 357    | 2,640  | 10,400  | 688    | 313    | 574    | 406    | 1,100  |
| 26    | 553    | 157   | 743    | 1,730  | 353    | 2,250  | 8,370   | 600    | 366    | 516    | 348    | 2,410  |
| 27    | 415    | 201   | 769    | 1,230  | 329    | 2,230  | 5,800   | 468    | 365    | 594    | 265    | 4,110  |
| 28    | 333    | 178   | 742    | 1,020  | 310    | 1,860  | 3,490   | 474    | 281    | 211    | 252    | 4,020  |
| 29    | 359    | 214   | 753    | 950    | 377    | 2,230  | 2,330   | 543    | 344    | 285    | 229    | 3,710  |
| 30    | 317    | 228   | 2,060  | 860    | -----  | 3,070  | 1,850   | 1,020  | 206    | 274    | 174    | 3,830  |
| 31    | 247    | ----- | 4,320  | 780    | -----  | 2,690  | -----   | 1,630  | -----  | 252    | 180    | -----  |
| TOTAL | 10,497 | 5,409 | 67,026 | 51,726 | 12,590 | 92,781 | 179,490 | 49,215 | 17,528 | 35,098 | 10,674 | 62,798 |
| MEAN  | 339    | 180   | 2,162  | 1,669  | 434    | 2,993  | 5,983   | 1,588  | 584    | 1,132  | 344    | 2,093  |
| MAX   | 1,200  | 374   | 6,230  | 4,240  | 650    | 5,620  | 11,300  | 3,540  | 2,010  | 3,810  | 908    | 7,780  |
| MIN   | 129    | 144   | 204    | 780    | 240    | 558    | 1,730   | 468    | 206    | 211    | 160    | 140    |
| CFSM  | .17    | .09   | 1.10   | .85    | .22    | 1.52   | 3.04    | .81    | .30    | .58    | .17    | 1.06   |
| IN.   | .20    | .10   | 1.27   | .98    | .24    | 1.75   | 3.39    | .93    | .33    | .66    | .20    | 1.19   |

CAL YR 1971 TOTAL 425,867 MEAN 1,167 MAX 10,200 MIN 105 CFSM .59 IN 8.05  
WTR YR 1972 TOTAL 594,832 MEAN 1,625 MAX 11,300 MIN 129 CFSM .83 IN 11.25

## PEAK DISCHARGE (BASE, 9,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-17 | 1945 | 15.71 | 9,780     | 4-23 | 1930 | 17.14 | 11,500    |

## 04183500 Maumee River at Antwerp, Ohio

LOCATION.--Lat 41°11'56", long 84°44'40", in sec. 22, T.3N., R.1E., Paulding County, on left bank 425 ft downstream from bridge on State Highway 49, 1 mile north of Antwerp, 7 miles downstream from Indiana State line, and 10 miles upstream from Marie DeLarme Creek.

DRAINAGE AREA.--2,129 sq mi.

PERIOD OF RECORD.--September 1921 to December 1935, April 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 694.90 ft above mean sea level. Prior to Sept. 13, 1925, non-recording gage at site 400 ft upstream at same datum.

AVERAGE DISCHARGE.--47 years, 1,642 cfs (10.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 12,100 cfs Apr. 24 (gage height, 14.52 ft); minimum, 133 cfs Oct. 19.

Period of record: Maximum discharge, 26,200 cfs May 20, 1943 (gage height, 20.29 ft); minimum, 24 cfs Oct. 17, 1930, June 21, 22, 1933 (gage height, 0.32 ft).

Flood of Mar. 27, 1913, estimated as 40,000 cfs.

REMARKS.--Records good except those for January and February, which are fair. Low flow slightly regulated by powerplant at Fort Wayne, Indiana, 32 miles upstream. Flow slightly regulated by upstream reservoirs. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1174: 1927, 1933, 1940. WSP 1387: 1922-23, 1925-27, 1934. WRD Ohio 1970: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV   | DEC    | JAN    | FEB    | MAR    | APR     | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|-------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| 1     | 606    | 270   | 245    | 4,570  | 750    | 460    | 2,330   | 2,300  | 1,830  | 245    | 278    | 199    |
| 2     | 525    | 248   | 203    | 3,540  | 660    | 990    | 1,900   | 2,230  | 1,330  | 301    | 259    | 179    |
| 3     | 455    | 264   | 219    | 2,760  | 600    | 3,510  | 1,730   | 1,740  | 960    | 281    | 193    | 163    |
| 4     | 674    | 229   | 216    | 2,750  | 550    | 3,870  | 1,860   | 1,620  | 915    | 325    | 276    | 198    |
| 5     | 586    | 213   | 211    | 2,630  | 500    | 2,830  | 2,130   | 1,650  | 785    | 504    | 284    | 167    |
| 6     | 256    | 200   | 242    | 2,210  | 440    | 2,210  | 1,870   | 1,630  | 658    | 770    | 248    | 158    |
| 7     | 253    | 193   | 472    | 1,640  | 400    | 2,080  | 3,260   | 1,510  | 610    | 710    | 298    | 162    |
| 8     | 208    | 208   | 2,220  | 1,330  | 360    | 2,260  | 6,010   | 1,370  | 486    | 750    | 1,080  | 177    |
| 9     | 219    | 374   | 3,230  | 1,260  | 320    | 1,780  | 5,820   | 1,210  | 483    | 706    | 758    | 218    |
| 10    | 284    | 173   | 3,230  | 1,710  | 290    | 1,210  | 5,790   | 1,380  | 865    | 535    | 420    | 191    |
| 11    | 198    | 161   | 3,780  | 2,280  | 260    | 875    | 5,540   | 1,600  | 955    | 409    | 338    | 167    |
| 12    | 173    | 168   | 3,190  | 1,970  | 250    | 845    | 5,230   | 1,510  | 497    | 357    | 273    | 172    |
| 13    | 173    | 164   | 2,590  | 1,640  | 250    | 1,510  | 6,640   | 1,450  | 392    | 292    | 281    | 482    |
| 14    | 168    | 161   | 2,030  | 1,480  | 300    | 4,920  | 8,230   | 1,520  | 500    | 642    | 264    | 5,940  |
| 15    | 164    | 168   | 4,290  | 1,010  | 400    | 6,010  | 6,910   | 2,990  | 1,110  | 950    | 248    | 10,100 |
| 16    | 154    | 164   | 6,730  | 835    | 520    | 5,630  | 6,750   | 3,230  | 2,420  | 2,830  | 278    | 8,470  |
| 17    | 147    | 159   | 5,960  | 1,100  | 600    | 5,920  | 9,780   | 2,750  | 1,020  | 3,940  | 190    | 6,070  |
| 18    | 140    | 166   | 4,510  | 1,160  | 660    | 5,620  | 10,400  | 2,260  | 622    | 3,270  | 198    | 3,810  |
| 19    | 135    | 166   | 3,130  | 1,210  | 590    | 4,820  | 9,250   | 1,960  | 504    | 2,990  | 267    | 4,040  |
| 20    | 138    | 168   | 2,490  | 1,220  | 540    | 3,970  | 8,290   | 1,870  | 448    | 3,800  | 890    | 3,150  |
| 21    | 140    | 173   | 2,130  | 1,200  | 640    | 3,510  | 8,880   | 1,710  | 406    | 3,300  | 690    | 2,210  |
| 22    | 216    | 171   | 1,710  | 1,240  | 600    | 3,640  | 10,200  | 1,410  | 360    | 2,120  | 437    | 1,770  |
| 23    | 567    | 164   | 1,320  | 1,950  | 560    | 3,690  | 11,600  | 1,200  | 385    | 1,220  | 378    | 1,510  |
| 24    | 885    | 154   | 1,080  | 2,350  | 500    | 3,150  | 12,100  | 960    | 374    | 815    | 936    | 1,290  |
| 25    | 1,080  | 168   | 920    | 2,270  | 420    | 2,600  | 11,800  | 746    | 371    | 654    | 550    | 1,150  |
| 26    | 718    | 168   | 810    | 2,000  | 380    | 2,300  | 10,200  | 670    | 341    | 606    | 432    | 1,720  |
| 27    | 539    | 166   | 762    | 1,700  | 360    | 2,120  | 7,640   | 567    | 392    | 518    | 364    | 4,240  |
| 28    | 420    | 195   | 770    | 1,400  | 350    | 1,920  | 4,490   | 483    | 378    | 602    | 289    | 4,400  |
| 29    | 350    | 195   | 746    | 1,100  | 380    | 1,780  | 2,750   | 490    | 304    | 253    | 270    | 4,260  |
| 30    | 371    | 211   | 1,170  | 980    | -----  | 3,020  | 2,050   | 718    | 347    | 304    | 248    | 4,230  |
| 31    | 331    | ----- | 3,740  | 860    | -----  | 2,870  | -----   | 1,210  | -----  | 301    | 197    | -----  |
| TOTAL | 11,273 | 5,782 | 64,346 | 55,355 | 13,430 | 91,920 | 191,430 | 47,944 | 21,048 | 35,300 | 12,112 | 70,993 |
| MEAN  | 364    | 193   | 2,076  | 1,786  | 463    | 2,965  | 6,381   | 1,547  | 702    | 1,139  | 391    | 2,366  |
| MAX   | 1,080  | 374   | 6,730  | 4,570  | 750    | 6,010  | 12,100  | 3,230  | 2,420  | 3,940  | 1,080  | 10,100 |
| MIN   | 135    | 154   | 203    | 835    | 250    | 460    | 1,730   | 483    | 304    | 245    | 190    | 158    |
| CFSM  | .17    | .09   | .98    | .84    | .22    | 1.39   | 3.00    | .73    | .33    | .54    | .18    | 1.11   |
| IN.   | .20    | .10   | 1.12   | .97    | .23    | 1.61   | 3.34    | .84    | .37    | .62    | .21    | 1.24   |

CAL YR 1971 TOTAL 471,729 MEAN 1,292 MAX 12,000 MIN 113 CFSM .61 IN 8.24  
WTR YR 1972 TOTAL 620,933 MEAN 1,697 MAX 12,100 MIN 135 CFSM .80 IN 10.85

## PEAK DISCHARGE (BASE, 8,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-14 | 0500 | 11.89 | 8,570     | 4-24 | 1200 | 14.52 | 12,100    |
| 4-18 | 0300 | 13.35 | 10,500    | 9-15 | 0600 | 13.32 | 10,400    |

## STREAMS TRIBUTARY TO LAKE ERIE

04184500 Bean Creek at Powers, Ohio

LOCATION.--Lat 41°40'39", long 84°13'56", in NE 1/4 sec. 24, T.9 S., R.1 E., Fulton County, on right bank at downstream side of bridge on U.S. Highway 20, 1 mile east of Powers, 2.2 miles upstream from Iron Creek, 3 miles downstream from Silver Creek, and 5.2 miles east of Fayette.

DRAINAGE AREA.--206 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 722.57 ft above mean sea level. Prior to Jan. 18, 1941, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 157 cfs (10.35 inches per year).

EXTREMES.--Current year: Maximum discharge, 972 cfs Apr. 17 (gage height 7.01 ft); minimum daily, 12 cfs Oct. 4.

Period of record: Maximum discharge, 4,250 cfs Apr. 29, 1956 (gage height, 13.82 ft); minimum, 5.0 cfs Aug. 9, 1964.

REMARKS.--Records poor prior to March, good thereafter. Water-quality records for current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1307: 1948(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG  | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1     | 15   | 23    | 25    | 290   | 80    | 70    | 188   | 276   | 76    | 52    | 21   | 20    |
| 2     | 14   | 25    | 23    | 234   | 72    | 220   | 176   | 653   | 67    | 44    | 20   | 22    |
| 3     | 13   | 26    | 23    | 187   | 66    | 190   | 164   | 489   | 93    | 40    | 20   | 25    |
| 4     | 12   | 27    | 23    | 130   | 62    | 170   | 182   | 351   | 89    | 37    | 21   | 25    |
| 5     | 13   | 25    | 23    | 110   | 58    | 150   | 213   | 278   | 71    | 35    | 20   | 21    |
| 6     | 14   | 23    | 26    | 96    | 56    | 140   | 195   | 231   | 61    | 33    | 21   | 21    |
| 7     | 15   | 21    | 43    | 90    | 54    | 120   | 180   | 212   | 53    | 31    | 28   | 20    |
| 8     | 15   | 20    | 49    | 86    | 52    | 100   | 158   | 248   | 46    | 32    | 32   | 20    |
| 9     | 16   | 20    | 52    | 84    | 50    | 90    | 148   | 339   | 42    | 32    | 32   | 19    |
| 10    | 15   | 20    | 60    | 90    | 49    | 78    | 149   | 319   | 38    | 31    | 31   | 19    |
| 11    | 14   | 21    | 86    | 96    | 48    | 66    | 146   | 259   | 36    | 29    | 29   | 20    |
| 12    | 14   | 22    | 95    | 94    | 47    | 72    | 138   | 216   | 34    | 27    | 28   | 24    |
| 13    | 14   | 21    | 80    | 90    | 48    | 70    | 140   | 184   | 36    | 28    | 27   | 21    |
| 14    | 15   | 20    | 74    | 84    | 50    | 811   | 139   | 175   | 40    | 34    | 26   | 55    |
| 15    | 14   | 19    | 79    | 76    | 60    | 680   | 195   | 225   | 51    | 45    | 28   | 133   |
| 16    | 14   | 19    | 102   | 68    | 74    | 752   | 429   | 255   | 52    | 58    | 23   | 115   |
| 17    | 13   | 19    | 110   | 64    | 90    | 704   | 901   | 238   | 43    | 49    | 24   | 85    |
| 18    | 13   | 19    | 94    | 60    | 100   | 526   | 750   | 198   | 38    | 42    | 27   | 142   |
| 19    | 13   | 21    | 74    | 94    | 92    | 384   | 640   | 164   | 36    | 45    | 32   | 276   |
| 20    | 15   | 23    | 66    | 120   | 84    | 309   | 792   | 140   | 34    | 48    | 33   | 230   |
| 21    | 20   | 24    | 60    | 150   | 76    | 282   | 678   | 122   | 39    | 39    | 31   | 181   |
| 22    | 32   | 23    | 56    | 184   | 70    | 582   | 620   | 107   | 49    | 35    | 30   | 135   |
| 23    | 44   | 22    | 52    | 284   | 66    | 627   | 583   | 93    | 52    | 32    | 26   | 101   |
| 24    | 48   | 20    | 54    | 302   | 62    | 421   | 449   | 84    | 46    | 29    | 27   | 83    |
| 25    | 49   | 18    | 52    | 291   | 58    | 314   | 348   | 76    | 44    | 27    | 27   | 72    |
| 26    | 46   | 18    | 50    | 226   | 54    | 261   | 290   | 68    | 56    | 26    | 25   | 118   |
| 27    | 40   | 20    | 48    | 190   | 52    | 232   | 247   | 61    | 63    | 29    | 25   | 205   |
| 28    | 36   | 26    | 48    | 160   | 50    | 213   | 212   | 56    | 50    | 29    | 23   | 135   |
| 29    | 32   | 34    | 55    | 130   | 48    | 192   | 187   | 53    | 47    | 28    | 22   | 112   |
| 30    | 28   | 38    | 90    | 110   | ----- | 194   | 166   | 61    | 64    | 25    | 21   | 155   |
| 31    | 25   | ----- | 361   | 92    | ----- | 193   | ----- | 86    | ----- | 23    | 24   | ----- |
| TOTAL | 681  | 677   | 2,133 | 4,362 | 1,828 | 9,213 | 9,803 | 6,317 | 1,546 | 1,094 | 804  | 2,610 |
| MEAN  | 22.0 | 22.6  | 68.8  | 141   | 63.0  | 297   | 327   | 204   | 51.5  | 35.3  | 25.9 | 87.0  |
| MAX   | 49   | 38    | 361   | 302   | 100   | 811   | 901   | 653   | 93    | 58    | 33   | 276   |
| MIN   | 12   | 18    | 23    | 60    | 47    | 66    | 138   | 53    | 34    | 23    | 20   | 19    |
| CFSM  | .11  | .11   | .33   | .68   | .31   | 1.44  | 1.59  | .99   | .25   | .17   | .13  | .42   |
| IN.   | .12  | .12   | .39   | .79   | .33   | 1.66  | 1.77  | 1.14  | .28   | .20   | .15  | .47   |

CAL YR 1971 TOTAL 46,071.4 MEAN 126 MAX 2,700 MIN 6.0 CFSM .61 IN 8.32  
WTR YR 1972 TOTAL 41,068.0 MEAN 112 MAX 901 MIN 12 CFSM .54 IN 7.42

PEAK DISCHARGE (BASE 1,200 CFS).--No peak above base.



## STREAMS TRIBUTARY TO LAKE ERIE

175

04185000 Tiffin River at Stryker, Ohio

LOCATION.--Lat 41°30'17", long 84°25'49", in SW 1/4 sec. 5, T.6 N., R.4 E., Williams County, on right bank 0.5 mile downstream from bridge on State Highway 191 at west edge of Stryker, 0.6 mile upstream from Penn Central bridge, and 1.6 miles downstream from Leatherwood Creek.

DRAINAGE AREA.--410 sq mi.

PERIOD OF RECORD.--September 1921 to September 1928 (published as "near Stryker"), October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 685.1 above mean sea level. Prior to Sept. 30, 1928, nonrecording gage at site 3.5 miles downstream at different datum. Oct. 13, 1940, to Jan. 17, 1941, nonrecording gage and Jan. 18, 1941, to Sept. 30, 1953, water-stage recorder, at site 0.5 mile downstream at same datum.

AVERAGE DISCHARGE.--39 years, 303 cfs (10.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,770 cfs Mar. 17 (gage height, 11.64 ft); minimum daily, 16 cfs Oct. 2, 3, 5.

Period of record: Maximum discharge, 6,640 cfs Apr. 25, 1950; maximum gage height, 16.16 ft May 1, 1956; minimum discharge, 3.6 cfs Aug. 30, 31, 1953.

Flood in March 1913 reached a stage of 16.0 ft, from floodmarks (discharge, 7,600 cfs). Flood in 1937 reached a stage of 15.0 ft, from information by local resident (discharge, 6,000 cfs).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1144: 1922-28. WSP 1387: 1925. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1     | 19   | 28    | 42    | 594   | 120   | 155    | 358    | 304   | 265   | 129   | 38    | 33    |
| 2     | 16   | 29    | 33    | 601   | 110   | 305    | 332    | 406   | 209   | 103   | 38    | 32    |
| 3     | 16   | 30    | 32    | 490   | 100   | 439    | 303    | 582   | 180   | 82    | 37    | 32    |
| 4     | 17   | 31    | 33    | 369   | 96    | 428    | 310    | 670   | 275   | 70    | 38    | 32    |
| 5     | 16   | 29    | 35    | 275   | 92    | 348    | 364    | 609   | 257   | 62    | 37    | 33    |
| 6     | 19   | 28    | 39    | 227   | 86    | 269    | 381    | 452   | 182   | 56    | 36    | 34    |
| 7     | 19   | 27    | 58    | 194   | 82    | 214    | 356    | 353   | 140   | 52    | 38    | 33    |
| 8     | 23   | 28    | 84    | 195   | 78    | 211    | 318    | 318   | 113   | 54    | 40    | 33    |
| 9     | 24   | 28    | 88    | 198   | 74    | 181    | 301    | 334   | 97    | 56    | 45    | 33    |
| 10    | 24   | 29    | 96    | 217   | 72    | 152    | 301    | 379   | 87    | 52    | 47    | 32    |
| 11    | 25   | 31    | 132   | 244   | 70    | 147    | 295    | 395   | 76    | 48    | 43    | 32    |
| 12    | 23   | 30    | 163   | 238   | 72    | 157    | 274    | 349   | 68    | 45    | 41    | 32    |
| 13    | 23   | 29    | 143   | 222   | 76    | 338    | 288    | 295   | 71    | 43    | 39    | 33    |
| 14    | 24   | 25    | 112   | 202   | 84    | 800    | 354    | 269   | 73    | 45    | 41    | 181   |
| 15    | 23   | 24    | 143   | 150   | 96    | 1,090  | 426    | 279   | 155   | 54    | 55    | 473   |
| 16    | 22   | 23    | 205   | 110   | 120   | 1,540  | 693    | 328   | 332   | 65    | 56    | 432   |
| 17    | 21   | 23    | 222   | 94    | 171   | 1,760  | 1,160  | 361   | 244   | 77    | 40    | 248   |
| 18    | 20   | 24    | 181   | 86    | 181   | 1,730  | 1,360  | 341   | 151   | 71    | 38    | 140   |
| 19    | 20   | 29    | 133   | 92    | 150   | 1,500  | 1,570  | 290   | 109   | 62    | 41    | 139   |
| 20    | 21   | 30    | 107   | 130   | 130   | 1,190  | 1,470  | 240   | 90    | 65    | 46    | 215   |
| 21    | 22   | 33    | 97    | 194   | 120   | 890    | 1,320  | 205   | 89    | 72    | 51    | 259   |
| 22    | 28   | 31    | 87    | 252   | 110   | 842    | 1,510  | 180   | 122   | 60    | 45    | 215   |
| 23    | 37   | 29    | 74    | 410   | 110   | 887    | 1,590  | 160   | 111   | 50    | 43    | 159   |
| 24    | 45   | 26    | 79    | 469   | 100   | 989    | 1,470  | 142   | 102   | 46    | 45    | 115   |
| 25    | 51   | 28    | 74    | 475   | 94    | 1,000  | 1,240  | 127   | 87    | 44    | 44    | 92    |
| 26    | 53   | 29    | 71    | 402   | 90    | 792    | 941    | 113   | 80    | 41    | 42    | 90    |
| 27    | 47   | 31    | 70    | 318   | 86    | 567    | 646    | 102   | 99    | 43    | 40    | 166   |
| 28    | 37   | 33    | 76    | 250   | 88    | 425    | 439    | 92    | 106   | 48    | 39    | 310   |
| 29    | 34   | 38    | 79    | 206   | 98    | 372    | 349    | 86    | 102   | 45    | 38    | 261   |
| 30    | 31   | 41    | 176   | 171   | ----- | 371    | 302    | 93    | 104   | 42    | 36    | 261   |
| 31    | 29   | ----- | 435   | 140   | ----- | 376    | -----  | 196   | ----- | 40    | 35    | ----- |
| TOTAL | 829  | 874   | 3,399 | 8,215 | 2,556 | 20,465 | 21,021 | 9,050 | 4,176 | 1,822 | 1,292 | 4,180 |
| MEAN  | 26.7 | 29.1  | 110   | 265   | 102   | 660    | 701    | 292   | 139   | 58.8  | 41.7  | 139   |
| MAX   | 53   | 41    | 435   | 601   | 181   | 1,760  | 1,590  | 670   | 332   | 129   | 56    | 473   |
| MIN   | 16   | 23    | 32    | 86    | 70    | 147    | 274    | 86    | 68    | 40    | 35    | 32    |
| CFSM  | .07  | .07   | .27   | .65   | .25   | 1.61   | 1.71   | .71   | .34   | .14   | .10   | .34   |
| IN.   | .08  | .08   | .31   | .75   | .27   | 1.86   | 1.91   | .82   | .38   | .17   | .12   | .38   |

CAL YR 1971 TOTAL 78,736.7 MEAN 216 MAX 2,910 MIN 7.0 CFSM .53 IN 7.14  
WTR YR 1972 TOTAL 78,279.0 MEAN 214 MAX 1,760 MIN 16 CFSM .52 IN 7.10

PEAK DISCHARGE (BASE, 1,850 CFS).--No peak above base.

## STREAMS TRIBUTARY TO LAKE ERIE

04186500 Auglaize River near Fort Jennings, Ohio

LOCATION.--Lat 40°56'55", long 84°15'58", in SE 1/4 sec. 15, T.1 S., R.5 E., Putnam County, on left bank 200 ft upstream from bridge on U.S. Highway 224, 3.5 miles northeast of Fort Jennings, 6 miles upstream from Ottawa River, and 7.3 miles downstream from Jennings Creek.

DRAINAGE AREA.--332 sq mi.

PERIOD OF RECORD.--August 1921 to December 1935, October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 713.6 ft above mean sea level. Prior to Oct. 6, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 278 cfs.

EXTREMES.--Current year: Maximum discharge, 5,910 cfs Apr. 22 (gage height, 15.00 ft); minimum, 19 cfs Nov. 5, 6, 8.

Period of record: Maximum discharge, about 12,000 cfs Jan. 23, 1959; maximum gage height, 20.30 ft Jan. 23, 1959, from floodmark (ice jam); minimum discharge, 4.5 cfs Oct. 7, 1956, minimum gage height, 0.75 ft Aug. 28, 1932.

REMARKS.--Records good except those for January and February, which are fair. Beginning Jan. 4, 1971, water was diverted at a point 24.3 miles upstream from station into Lake Bresler. Storage in Lake Bresler is available for low-flow augmentation and water supply of city of Lima, in Ottawa River basin. Net withdrawal totaled 142 million gallons, equivalent to a mean withdrawal of 0.6 cfs. No releases have been made for low-flow augmentation. Some diversion from Grand Lake to Auglaize River basin through Miami and Erie Canal into Jennings Creek at a point 9.2 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 744: 1932. WSP 974: 1930(M). WSP 1307: 1922-24(M), 1926-27(M), 1929(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|-------|-------|-------|-------|
| 1     | 51    | 27    | 70     | 1,320  | 130   | 97     | 228    | 193    | 432   | 231   | 25    | 21    |
| 2     | 51    | 27    | 61     | 578    | 120   | 1,330  | 188    | 181    | 306   | 119   | 25    | 22    |
| 3     | 42    | 27    | 45     | 482    | 110   | 2,780  | 163    | 169    | 200   | 113   | 36    | 24    |
| 4     | 38    | 24    | 46     | 350    | 100   | 2,190  | 168    | 150    | 155   | 496   | 62    | 27    |
| 5     | 35    | 21    | 43     | 300    | 92    | 668    | 198    | 132    | 121   | 373   | 142   | 23    |
| 6     | 34    | 20    | 48     | 260    | 84    | 380    | 197    | 119    | 102   | 217   | 128   | 22    |
| 7     | 34    | 21    | 493    | 230    | 80    | 279    | 1,100  | 107    | 94    | 146   | 85    | 22    |
| 8     | 31    | 20    | 1,610  | 210    | 74    | 224    | 3,370  | 91     | 80    | 104   | 56    | 24    |
| 9     | 36    | 22    | 1,030  | 220    | 70    | 185    | 3,540  | 248    | 76    | 82    | 44    | 29    |
| 10    | 43    | 24    | 491    | 854    | 68    | 167    | 1,410  | 1,280  | 77    | 65    | 37    | 31    |
| 11    | 38    | 23    | 463    | 1,020  | 66    | 145    | 830    | 1,270  | 63    | 58    | 33    | 26    |
| 12    | 37    | 22    | 493    | 543    | 64    | 136    | 534    | 454    | 57    | 51    | 31    | 30    |
| 13    | 35    | 24    | 265    | 366    | 62    | 450    | 1,770  | 292    | 108   | 48    | 30    | 31    |
| 14    | 39    | 24    | 244    | 272    | 66    | 1,290  | 4,270  | 271    | 95    | 121   | 28    | 161   |
| 15    | 39    | 24    | 1,550  | 210    | 84    | 1,290  | 3,860  | 685    | 110   | 221   | 28    | 169   |
| 16    | 45    | 25    | 2,080  | 190    | 120   | 752    | 1,120  | 1,290  | 143   | 815   | 27    | 72    |
| 17    | 49    | 25    | 1,200  | 170    | 170   | 518    | 1,840  | 740    | 102   | 565   | 26    | 57    |
| 18    | 41    | 25    | 508    | 160    | 180   | 382    | 2,180  | 400    | 80    | 245   | 26    | 97    |
| 19    | 38    | 25    | 311    | 170    | 140   | 274    | 881    | 277    | 64    | 375   | 26    | 80    |
| 20    | 35    | 27    | 238    | 200    | 110   | 217    | 2,220  | 213    | 58    | 341   | 25    | 56    |
| 21    | 32    | 25    | 218    | 220    | 94    | 199    | 5,350  | 178    | 285   | 175   | 24    | 57    |
| 22    | 35    | 24    | 235    | 231    | 82    | 196    | 5,810  | 158    | 534   | 96    | 25    | 94    |
| 23    | 45    | 22    | 216    | 325    | 70    | 204    | 5,000  | 137    | 344   | 63    | 26    | 60    |
| 24    | 58    | 24    | 206    | 384    | 62    | 194    | 3,110  | 120    | 204   | 54    | 26    | 51    |
| 25    | 67    | 24    | 194    | 361    | 58    | 166    | 962    | 106    | 154   | 45    | 23    | 45    |
| 26    | 70    | 24    | 168    | 325    | 54    | 148    | 522    | 94     | 122   | 37    | 24    | 171   |
| 27    | 56    | 27    | 138    | 260    | 52    | 142    | 377    | 78     | 100   | 33    | 21    | 564   |
| 28    | 47    | 32    | 144    | 230    | 50    | 162    | 290    | 72     | 82    | 31    | 21    | 470   |
| 29    | 41    | 37    | 137    | 200    | 52    | 276    | 238    | 68     | 79    | 30    | 22    | 460   |
| 30    | 34    | 51    | 303    | 170    | ----- | 304    | 209    | 114    | 334   | 27    | 21    | 808   |
| 31    | 27    | ----- | 1,660  | 150    | ----- | 295    | -----  | 370    | ----- | 26    | 21    | ----- |
| TOTAL | 1,303 | 767   | 14,908 | 10,961 | 2,564 | 16,040 | 51,935 | 10,057 | 4,761 | 5,403 | 1,174 | 3,804 |
| MEAN  | 42.0  | 25.6  | 481    | 354    | 88.4  | 517    | 1,731  | 324    | 159   | 174   | 37.9  | 127   |
| MAX   | 70    | 51    | 2,080  | 1,320  | 180   | 2,780  | 5,810  | 1,290  | 534   | 815   | 142   | 808   |
| MIN   | 27    | 20    | 43     | 150    | 50    | 97     | 163    | 68     | 57    | 26    | 21    | 21    |

CAL YR 1971 TOTAL 86,723 MEAN 238 MAX 3,280 MIN 15  
WTR YR 1972 TOTAL 123,677 MEAN 338 MAX 5,810 MIN 20

## PEAK DISCHARGE (BASE, 2,700 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-3  | 2000 | 11.51 | 3,030     | 4-14 | 1800 | 13.72 | 4,760     |
| 4-9  | 0100 | 13.03 | 4,180     | 4-22 | 1700 | 15.00 | 5,910     |

## STREAMS TRIBUTARY TO LAKE ERIE

177

04187500 Ottawa River at Allentown, Ohio

LOCATION.--Lat 40°45'18", long 84°11'41", in NW 1/4 sec. 29, T.3 S., R.6 E., Allen County, on left bank at upstream side of bridge on State Highway 81 at Allentown, 0.3 mile downstream from Kessler Run, and 1.5 miles upstream from McBride Ditch.

DRAINAGE AREA.--160 sq mi.

PERIOD OF RECORD.--October 1923 to December 1935, August 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 789.14 ft above mean sea level. Prior to Oct. 1, 1925, nonrecording gage and Oct. 1, 1925, to Dec. 30, 1935, water-stage recorder, at site 35 ft downstream at same datum.

AVERAGE DISCHARGE.--41 years, 121 cfs (10.27 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,150 cfs Apr. 20 (gage height, 8.92 ft); minimum, 13 cfs Nov. 25 (gage height 2.46 ft).

Period of record: Maximum discharge, 7,740 cfs Jan. 22, 1959 (gage height, 10.88 ft), from rating curve extended above 4,800 cfs; minimum, 1.4 cfs June 28, 29, 1933.

Flood of Mar. 15, 1939, reached a stage of 10.1 ft (discharge, 6,160 cfs) and flood of May 1943 a stage of about 10 ft (discharge about 6,000 cfs).

REMARKS.--Records good except those for the winter period, which are fair. Diurnal fluctuation and some regulation caused by operation of water-supply and sewage-treatment plants of city of Lima upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1004: 1924. WSP 1144: 1944(M). WSP 1207: 1927. WSP 1387: 1924(M), 1927-28 (M), 1929, 1930(M), 1935(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT          | NOV      | DEC       | JAN    | FEB      | MAR      | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|--------------|----------|-----------|--------|----------|----------|--------|-------|-------|-------|-------|-------|
| 1           | 29           | 22       | 28        | 99     | 32       | 83       | 70     | 85    | 195   | 39    | 33    | 25    |
| 2           | 28           | 25       | 26        | 64     | 31       | 1,240    | 72     | 72    | 106   | 35    | 33    | 25    |
| 3           | 26           | 24       | 24        | 54     | 30       | 1,020    | 70     | 61    | 84    | 208   | 77    | 35    |
| 4           | 25           | 24       | 22        | 48     | 29       | 527      | 87     | 52    | 60    | 158   | 44    | 26    |
| 5           | 25           | 24       | 21        | 42     | 28       | 326      | 75     | 44    | 54    | 66    | 32    | 27    |
| 6           | 25           | 24       | 61        | 38     | 26       | 119      | 58     | 42    | 50    | 39    | 30    | 29    |
| 7           | 25           | 26       | 147       | 36     | 25       | 110      | 1,750  | 37    | 38    | 38    | 38    | 29    |
| 8           | 25           | 23       | 74        | 36     | 24       | 95       | 1,270  | 95    | 31    | 36    | 36    | 29    |
| 9           | 43           | 23       | 44        | 121    | 23       | 79       | 579    | 962   | 32    | 33    | 38    | 25    |
| 10          | 30           | 25       | 44        | 430    | 22       | 65       | 423    | 1,180 | 41    | 34    | 35    | 23    |
| 11          | 26           | 23       | 127       | 244    | 23       | 57       | 262    | 443   | 31    | 34    | 33    | 23    |
| 12          | 27           | 22       | 48        | 103    | 28       | 64       | 175    | 166   | 31    | 33    | 33    | 36    |
| 13          | 27           | 22       | 37        | 50     | 41       | 226      | 2,030  | 124   | 71    | 33    | 31    | 36    |
| 14          | 49           | 22       | 143       | 40     | 60       | 842      | 1,020  | 195   | 43    | 44    | 30    | 133   |
| 15          | 33           | 22       | 378       | 34     | 82       | 644      | 371    | 884   | 55    | 52    | 40    | 76    |
| 16          | 31           | 24       | 238       | 32     | 77       | 339      | 709    | 745   | 44    | 52    | 32    | 49    |
| 17          | 29           | 23       | 74        | 31     | 42       | 293      | 1,170  | 370   | 34    | 39    | 31    | 30    |
| 18          | 28           | 23       | 54        | 30     | 36       | 195      | 475    | 185   | 30    | 40    | 31    | 143   |
| 19          | 28           | 30       | 37        | 35     | 32       | 151      | 313    | 112   | 30    | 79    | 31    | 897   |
| 20          | 25           | 21       | 44        | 42     | 30       | 113      | 3,160  | 84    | 33    | 43    | 28    | 438   |
| 21          | 26           | 20       | 39        | 50     | 28       | 82       | 2,640  | 72    | 183   | 46    | 29    | 91    |
| 22          | 48           | 20       | 44        | 57     | 26       | 124      | 2,760  | 44    | 60    | 36    | 34    | 34    |
| 23          | 28           | 21       | 46        | 93     | 25       | 136      | 2,150  | 41    | 45    | 40    | 34    | 55    |
| 24          | 29           | 18       | 44        | 105    | 24       | 116      | 774    | 38    | 41    | 39    | 34    | 52    |
| 25          | 28           | 17       | 42        | 110    | 23       | 77       | 430    | 34    | 35    | 35    | 34    | 46    |
| 26          | 28           | 16       | 44        | 56     | 22       | 82       | 250    | 36    | 32    | 36    | 33    | 228   |
| 27          | 25           | 42       | 48        | 44     | 22       | 124      | 166    | 29    | 35    | 35    | 31    | 509   |
| 28          | 27           | 27       | 44        | 40     | 21       | 100      | 119    | 29    | 36    | 33    | 29    | 325   |
| 29          | 26           | 35       | 41        | 38     | 23       | 110      | 99     | 30    | 49    | 34    | 30    | 353   |
| 30          | 26           | 44       | 326       | 36     | -----    | 136      | 83     | 282   | 44    | 32    | 29    | 693   |
| 31          | 23           | -----    | 384       | 34     | -----    | 90       | -----  | 442   | ----- | 32    | 27    | ----- |
| TOTAL       | 898          | 732      | 2,773     | 2,272  | 935      | 7,765    | 23,610 | 7,015 | 1,653 | 1,533 | 1,060 | 4,520 |
| MEAN        | 29.0         | 24.4     | 89.5      | 73.3   | 32.2     | 250      | 787    | 226   | 55.1  | 49.5  | 34.2  | 151   |
| MAX         | 49           | 44       | 384       | 430    | 82       | 1,240    | 3,160  | 1,180 | 195   | 208   | 77    | 897   |
| MIN         | 23           | 16       | 21        | 30     | 21       | 57       | 58     | 29    | 30    | 32    | 27    | 23    |
| CFSM        | .18          | .15      | .56       | .46    | .20      | 1.56     | 4.92   | 1.41  | .34   | .31   | .21   | .94   |
| IN.         | .21          | .17      | .64       | .53    | .22      | 1.81     | 5.49   | 1.63  | .38   | .36   | .25   | 1.05  |
| CAL YR 1971 | TOTAL 36,955 | MEAN 101 | MAX 1,880 | MIN 16 | CFSM .63 | IN 8.59  |        |       |       |       |       |       |
| WTR YR 1972 | TOTAL 54,766 | MEAN 150 | MAX 3,160 | MIN 16 | CFSM .94 | IN 12.73 |        |       |       |       |       |       |

## PEAK DISCHARGE (BASE, 1,600 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-7  | 1615 | 7.32  | 2,380     | 4-20 | 1645 | 8.92  | 4,150     |
| 4-13 | 1300 | 7.61  | 2,630     | 4-22 | 1330 | 7.96  | 2,980     |

04189000 Blanchard River near Findlay, Ohio

LOCATION.--Lat 41°03'21", long 83°41'17", on east line of sec. 10, T.1 N., R.10 E., Hancock County, on left bank at upstream side of county road bridge, 2 miles west of Findlay, 3 miles downstream from Eagle Creek, and 3 miles upstream from Aurand Run.

DRAINAGE AREA.--346 sq mi.

PERIOD OF RECORD.--October 1923 to December 1935, October 1940 to current year. Monthly discharge only for October 1923, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 754.55 ft above mean sea level. Prior to July 24, 1930, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 235 cfs (9.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,850 cfs Apr. 23 (gage height, 12.04 ft); minimum daily discharge, 9.0 cfs Nov. 21, 25, 26, Dec. 5.

Period of record: Maximum discharge, 15,000 cfs Feb. 11, 1959 (gage height, 16.76 ft); minimum, 0.4 cfs Aug. 26, 27, Sept. 3, 1934.

Flood in March 1913 reached a stage of 18.5 ft (discharge, 22,000 cfs, from rating curve extended above 10,000 cfs).

REMARKS.--Records good. Water is diverted upstream from station into Findlay Reservoir. Storage in Findlay Reservoir used for water supply of city of Findlay, and is available for low-flow augmentation. All water returns to stream upstream from station. No releases have been made for low-flow augmentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 974: 1942. WSP 1054: 1927-30, 1933(M), 1945. WSP 1387: 1926, 1928(M), 1930(M), 1952. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC     | JAN   | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP    |
|-------|------|-------|---------|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| 1     | 12   | 16    | 14      | 195   | 27    | 76     | 80     | 179    | 232   | 169   | 20    | 21     |
| 2     | 11   | 18    | 12      | 152   | 33    | 1,060  | 95     | 172    | 177   | 108   | 25    | 19     |
| 3     | 10   | 17    | 11      | 97    | 64    | 1,500  | 95     | 157    | 143   | 86    | 62    | 28     |
| 4     | 12   | 17    | 10      | 56    | 52    | 1,170  | 115    | 136    | 124   | 197   | 40    | 21     |
| 5     | 14   | 16    | 9.0     | 42    | 48    | 415    | 93     | 117    | 110   | 279   | 22    | 21     |
| 6     | 14   | 16    | 46      | 36    | 34    | 226    | 106    | 111    | 90    | 124   | 21    | 20     |
| 7     | 13   | 15    | 76      | 31    | 33    | 190    | 648    | 111    | 80    | 56    | 28    | 19     |
| 8     | 14   | 15    | 50      | 28    | 28    | 90     | 1,350  | 140    | 68    | 108   | 30    | 18     |
| 9     | 27   | 16    | 34      | 45    | 25    | 70     | 1,190  | 1,500  | 60    | 124   | 28    | 16     |
| 10    | 13   | 16    | 48      | 174   | 23    | 54     | 739    | 2,640  | 54    | 108   | 22    | 14     |
| 11    | 12   | 16    | 40      | 285   | 23    | 44     | 451    | 2,100  | 50    | 78    | 20    | 15     |
| 12    | 13   | 15    | 24      | 203   | 25    | 36     | 322    | 784    | 46    | 56    | 19    | 18     |
| 13    | 13   | 14    | 20      | 70    | 50    | 334    | 1,190  | 361    | 110   | 58    | 17    | 128    |
| 14    | 16   | 13    | 70      | 54    | 68    | 2,010  | 1,540  | 319    | 177   | 117   | 36    | 2,130  |
| 15    | 12   | 15    | 95      | 44    | 119   | 1,760  | 1,230  | 1,360  | 187   | 195   | 80    | 2,510  |
| 16    | 11   | 15    | 84      | 38    | 164   | 1,060  | 735    | 1,320  | 285   | 240   | 28    | 1,030  |
| 17    | 10   | 13    | 111     | 32    | 150   | 641    | 1,620  | 774    | 174   | 160   | 104   | 409    |
| 18    | 12   | 13    | 91      | 29    | 100   | 382    | 1,340  | 415    | 110   | 122   | 229   | 655    |
| 19    | 14   | 17    | 56      | 27    | 60    | 216    | 693    | 254    | 100   | 169   | 251   | 1,060  |
| 20    | 15   | 11    | 44      | 25    | 36    | 157    | 2,090  | 184    | 90    | 91    | 108   | 448    |
| 21    | 15   | 9.0   | 33      | 32    | 56    | 136    | 3,680  | 174    | 80    | 66    | 70    | 221    |
| 22    | 20   | 10    | 28      | 48    | 54    | 160    | 5,230  | 157    | 72    | 46    | 133   | 122    |
| 23    | 16   | 11    | 23      | 117   | 42    | 174    | 4,610  | 133    | 64    | 34    | 205   | 122    |
| 24    | 15   | 10    | 22      | 182   | 36    | 136    | 2,440  | 117    | 58    | 86    | 128   | 115    |
| 25    | 16   | 9.0   | 21      | 150   | 32    | 108    | 826    | 100    | 54    | 62    | 80    | 155    |
| 26    | 17   | 9.0   | 21      | 120   | 28    | 86     | 451    | 88     | 50    | 37    | 56    | 932    |
| 27    | 18   | 17    | 20      | 119   | 26    | 102    | 325    | 78     | 46    | 36    | 42    | 2,640  |
| 28    | 18   | 13    | 20      | 74    | 24    | 93     | 246    | 72     | 40    | 31    | 40    | 2,150  |
| 29    | 17   | 17    | 20      | 46    | 22    | 70     | 218    | 64     | 80    | 24    | 36    | 1,410  |
| 30    | 16   | 20    | 84      | 34    | ----- | 100    | 190    | 130    | 148   | 20    | 30    | 2,340  |
| 31    | 14   | ----- | 119     | 25    | ----- | 86     | -----  | 208    | ----- | 20    | 24    | -----  |
| TOTAL | 450  | 429.0 | 1,356.0 | 2,610 | 1,482 | 12,742 | 33,938 | 14,455 | 3,159 | 3,107 | 2,034 | 18,807 |
| MEAN  | 14.5 | 14.3  | 43.7    | 84.2  | 51.1  | 411    | 1,131  | 466    | 105   | 100   | 65.6  | 627    |
| MAX   | 27   | 20    | 119     | 285   | 164   | 2,010  | 5,230  | 2,640  | 285   | 279   | 251   | 2,640  |
| MIN   | 10   | 9.0   | 9.0     | 25    | 22    | 36     | 80     | 64     | 40    | 20    | 17    | 14     |
| CFSM  | .04  | .04   | .13     | .24   | .15   | 1.19   | 3.27   | 1.35   | .30   | .29   | .19   | 1.81   |
| IN.   | .05  | .05   | .15     | .28   | .16   | 1.37   | 3.65   | 1.55   | .34   | .33   | .22   | 2.02   |

CAL YR 1971 TOTAL 55,164.5 MEAN 151 MAX 3,210 MIN 8.7 CFSM .44 IN 5.93  
WTR YR 1972 TOTAL 94,569.0 MEAN 258 MAX 5,230 MIN 9.0 CFSM .75 IN 10.17

## PEAK DISCHARGE (BASE, 2,400 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-23 | 0030 | 12.04 | 5,850     | 9-27 | 1530 | 8.24  | 2,920     |
| 5-10 | 0330 | 8.24  | 2,920     | 9-30 | 2000 | 7.34  | 2,470     |
| 9-15 | 0230 | 8.47  | 3,040     |      |      |       |           |



## 04191500 Auglaize River near Defiance, Ohio

LOCATION.--Lat 41°14'15", long 84°23'57", in NE 1/4 sec. 9, T.3 N., R.4 E., Defiance County, on right bank 125 ft downstream from dam of Toledo Edison Co., 0.2 mile upstream from Jackson ditch, and 3 miles south of Defiance.

DRAINAGE AREA.--2,318 sq mi.

PERIOD OF RECORD.--May to August 1903 (gage heights only), April 1915 to current year. Monthly discharge only for some periods, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 659.70 ft above mean sea level. May 20 to Aug. 8, 1903, nonrecording gage at site 1.8 miles downstream at different datum. Apr. 13, 1915, to Dec. 6, 1933, nonrecording gage near right bank on upstream side of dam at datum 6.00 ft higher. Auxiliary tailwater staff gage near right bank on downstream side of dam at present datum.

AVERAGE DISCHARGE.--57 years, 1,662 cfs.

EXTREMES.--Current year: Maximum discharge, 26,500 cfs Apr. 23 (gage height, 18.86 ft); minimum, 20 cfs Oct. 5 result of gate operation.

Period of record: Maximum discharge, 52,500 cfs Feb. 16, 1950, Feb. 12, 1959 (gage height, 26.4 ft, from graph based on hourly powerplant tailwater-gage readings and gage readings, respectively); maximum gage height, 27.65 ft Feb. 13, 1959, from floodmark (ice jam); minimum daily discharge, 0.5 cfs Oct. 13, 14, 1952 (during repairs to powerplant dam).

Flood in March 1913 reached a stage of 38.8 ft, from reading on powerplant tailwater gage at present datum (discharge, 120,000 cfs, from rating curve extended above 51,000 cfs).

REVISIONS.--The maximum discharge for the water year 1966 has been revised to 9,560 cfs May 13, 1966 (gage height, 11.43 ft) superseding figure published in WRD Ohio 1966.

REMARKS.--Records good. Flow regulated by dam at former powerplant 125 ft upstream from station (reservoir capacity, 9,800 acre-ft), operation of plant discontinued Jan. 10, 1963; occasional gate operation subsequently. Some diversion by Miami and Erie Canal from Grand Lake into Jennings Creek, tributary to Auglaize River 70 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 954: 1941. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR     | APR     | MAY    | JUN    | JUL    | AUG   | SEP     |
|-------|-------|-------|--------|--------|--------|---------|---------|--------|--------|--------|-------|---------|
| 1     | 300   | 31    | 161    | 6,200  | 478    | 384     | 1,190   | 1,240  | 3,790  | 2,320  | 182   | 140     |
| 2     | 225   | 42    | 201    | 3,650  | 412    | 5,280   | 1,010   | 1,150  | 2,370  | 1,330  | 178   | 134     |
| 3     | 195   | 45    | 208    | 2,340  | 385    | 11,100  | 813     | 1,050  | 1,430  | 819    | 154   | 140     |
| 4     | 2,000 | 52    | 186    | 1,790  | 358    | 11,500  | 804     | 932    | 1,150  | 767    | 169   | 137     |
| 5     | 184   | 74    | 180    | 1,370  | 323    | 6,310   | 1,040   | 804    | 1,210  | 1,090  | 270   | 134     |
| 6     | 21    | 78    | 188    | 935    | 312    | 2,600   | 1,300   | 704    | 951    | 857    | 349   | 132     |
| 7     | 22    | 77    | 330    | 925    | 276    | 2,090   | 2,780   | 576    | 746    | 692    | 398   | 124     |
| 8     | 24    | 70    | 2,700  | 795    | 247    | 1,560   | 11,000  | 551    | 614    | 654    | 367   | 102     |
| 9     | 24    | 80    | 5,170  | 792    | 223    | 1,090   | 12,000  | 738    | 505    | 629    | 322   | 96      |
| 10    | 24    | 92    | 3,390  | 2,000  | 199    | 760     | 9,670   | 4,370  | 660    | 521    | 268   | 100     |
| 11    | 98    | 74    | 2,320  | 4,570  | 185    | 696     | 4,740   | 5,840  | 790    | 437    | 241   | 111     |
| 12    | 176   | 85    | 1,880  | 3,740  | 177    | 641     | 4,610   | 3,700  | 668    | 367    | 218   | 117     |
| 13    | 161   | 78    | 618    | 2,450  | 186    | 4,470   | 7,400   | 3,690  | 517    | 318    | 189   | 222     |
| 14    | 144   | 88    | 284    | 1,610  | 224    | 10,500  | 11,400  | 2,460  | 565    | 491    | 175   | 9,300   |
| 15    | 137   | 85    | 3,650  | 828    | 373    | 11,400  | 12,700  | 3,090  | 648    | 1,260  | 132   | 9,520   |
| 16    | 134   | 82    | 7,150  | 597    | 597    | 11,100  | 8,260   | 3,270  | 689    | 7,210  | 143   | 8,460   |
| 17    | 133   | 84    | 6,570  | 528    | 813    | 8,120   | 7,420   | 5,080  | 820    | 5,600  | 196   | 6,150   |
| 18    | 130   | 95    | 3,340  | 530    | 853    | 5,350   | 10,300  | 3,740  | 841    | 2,570  | 254   | 5,710   |
| 19    | 128   | 101   | 2,200  | 601    | 713    | 3,420   | 7,090   | 2,360  | 673    | 3,760  | 242   | 5,320   |
| 20    | 127   | 95    | 1,590  | 823    | 520    | 1,250   | 6,980   | 1,560  | 520    | 2,360  | 441   | 5,480   |
| 21    | 123   | 58    | 1,190  | 992    | 413    | 1,340   | 14,600  | 1,130  | 464    | 2,210  | 865   | 4,460   |
| 22    | 81    | 72    | 350    | 1,050  | 381    | 1,310   | 23,500  | 994    | 1,030  | 1,430  | 892   | 2,310   |
| 23    | 27    | 78    | 29     | 1,360  | 342    | 1,280   | 25,800  | 834    | 1,150  | 842    | 645   | 887     |
| 24    | 27    | 82    | 275    | 1,780  | 290    | 1,210   | 23,500  | 682    | 786    | 649    | 447   | 865     |
| 25    | 28    | 86    | 492    | 2,130  | 267    | 1,040   | 14,000  | 585    | 577    | 593    | 410   | 748     |
| 26    | 30    | 79    | 497    | 1,400  | 267    | 838     | 6,240   | 524    | 471    | 426    | 393   | 2,810   |
| 27    | 30    | 93    | 497    | 1,150  | 244    | 722     | 3,750   | 467    | 398    | 390    | 311   | 6,810   |
| 28    | 30    | 83    | 453    | 995    | 240    | 686     | 2,410   | 411    | 345    | 345    | 239   | 10,100  |
| 29    | 30    | 109   | 456    | 869    | 256    | 790     | 1,700   | 374    | 325    | 281    | 192   | 10,300  |
| 30    | 31    | 137   | 898    | 699    | -----  | 949     | 1,370   | 474    | 1,250  | 235    | 163   | 11,700  |
| 31    | 31    | ----- | 4,370  | 555    | -----  | 1,150   | -----   | 2,080  | -----  | 206    | 148   | -----   |
| TOTAL | 4,855 | 2,385 | 51,823 | 49,954 | 10,559 | 110,926 | 239,377 | 55,460 | 26,953 | 41,659 | 9,593 | 102,619 |
| MEAN  | 157   | 79.5  | 1,672  | 1,611  | 364    | 3,578   | 7,979   | 1,789  | 898    | 1,344  | 309   | 3,421   |
| MAX   | 2,000 | 137   | 7,150  | 6,200  | 853    | 11,500  | 25,800  | 5,840  | 3,790  | 7,210  | 892   | 11,700  |
| MIN   | 21    | 31    | 29     | 528    | 177    | 384     | 804     | 374    | 325    | 206    | 132   | 96      |

CAL YR 1971 TOTAL 462,730 MEAN 1,268 MAX 13,500 MIN 21  
WTR YR 1972 TOTAL 706,163 MEAN 1,929 MAX 25,800 MIN 21

## PEAK DISCHARGE (BASE, 13,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-8  | 1330 | 14.36 | 14,600    | 4-23 | 2000 | 18.86 | 26,500    |
| 4-15 | 0700 | 13.68 | 13,100    | 9-14 | 1200 | 13.98 | 13,800    |

## STREAMS TRIBUTARY TO LAKE ERIE

04192500 Maumee River near Defiance, Ohio

LOCATION.--Lat 41°17'31", long 84°16'52", in NW 1/4 sec. 22, T.4 N., R.5 E., Defiance County, on left bank 40 ft upstream from Independence Dam, 4 miles downstream from Auglaize River, and 4.5 miles east of Defiance.

DRAINAGE AREA.--5,545 sq mi.

PERIOD OF RECORD.--October 1924 to December 1935, March 1939 to current year.

GAGE.--Water-stage recorder upstream from concrete dam. Datum of gage is 658.56 ft (revised) above mean sea level. Prior to Nov. 13, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 3,963 cfs.

EXTREMES.--Current year: Maximum discharge, 41,100 cfs Apr. 23 (gage height, 7.74 ft); minimum, 223 cfs Nov. 21 (gage height, 1.57 ft).

Period of record: Maximum discharge, 87,100 cfs Feb. 16, 1950 (gage height, 13.70 ft); maximum gage height, 13.77 ft Feb. 11, 1959 (ice jam); minimum discharge, 2 cfs Sept. 3, 1925; minimum gage height, 1.09 ft Sept. 26, 1928.

REMARKS.--Records good. Flow affected by occasional regulation of Auglaize River at hydroelectric plant of Toledo Edison Company, (operation of plant discontinued Jan. 10, 1963) 7 miles upstream. Low flow slightly regulated by powerplant at Fort Wayne, Ind. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 974: 1926-27, 1930. WSP 1387: 1925-28, 1946. WRD Ohio, 1970: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV   | DEC     | JAN     | FEB    | MAR     | APR     | MAY     | JUN    | JUL    | AUG    | SEP     |
|-------|--------|-------|---------|---------|--------|---------|---------|---------|--------|--------|--------|---------|
| 1     | 1,080  | 415   | 388     | 12,800  | 1,400  | 1,060   | 5,090   | 5,050   | 6,540  | 2,880  | 520    | 396     |
| 2     | 865    | 385   | 476     | 10,100  | 1,300  | 7,020   | 4,200   | 5,530   | 5,890  | 2,030  | 479    | 390     |
| 3     | 750    | 330   | 449     | 7,160   | 1,200  | 13,800  | 3,480   | 4,300   | 4,040  | 1,520  | 439    | 367     |
| 4     | 2,380  | 323   | 421     | 5,920   | 1,100  | 16,900  | 3,460   | 3,660   | 2,810  | 1,190  | 398    | 325     |
| 5     | 1,430  | 338   | 437     | 5,270   | 950    | 11,800  | 4,240   | 3,550   | 2,830  | 1,550  | 494    | 302     |
| 6     | 629    | 339   | 454     | 4,060   | 820    | 7,020   | 4,560   | 3,370   | 2,350  | 1,520  | 641    | 311     |
| 7     | 326    | 322   | 705     | 3,400   | 740    | 4,980   | 5,600   | 2,980   | 1,860  | 1,640  | 1,320  | 294     |
| 8     | 293    | 296   | 3,220   | 2,610   | 680    | 4,580   | 16,600  | 2,640   | 1,570  | 1,620  | 1,200  | 286     |
| 9     | 314    | 311   | 8,850   | 2,870   | 620    | 3,750   | 20,000  | 2,710   | 1,260  | 1,580  | 1,620  | 281     |
| 10    | 291    | 458   | 8,380   | 4,250   | 580    | 2,730   | 17,900  | 6,420   | 1,350  | 1,390  | 1,200  | 309     |
| 11    | 378    | 332   | 7,730   | 7,790   | 540    | 2,120   | 13,800  | 9,560   | 2,040  | 1,110  | 808    | 326     |
| 12    | 440    | 285   | 6,940   | 7,320   | 520    | 1,830   | 11,400  | 6,990   | 1,900  | 887    | 703    | 342     |
| 13    | 401    | 283   | 4,740   | 5,400   | 500    | 7,380   | 14,100  | 6,190   | 1,290  | 831    | 614    | 547     |
| 14    | 397    | 306   | 3,130   | 3,910   | 520    | 17,600  | 20,800  | 4,940   | 1,110  | 978    | 556    | 17,200  |
| 15    | 392    | 286   | 8,540   | 2,400   | 890    | 21,500  | 23,000  | 6,320   | 1,570  | 2,190  | 520    | 27,100  |
| 16    | 391    | 275   | 15,500  | 1,500   | 1,230  | 21,200  | 20,100  | 8,070   | 3,780  | 8,950  | 549    | 24,800  |
| 17    | 388    | 283   | 15,100  | 1,260   | 1,560  | 19,000  | 22,400  | 9,480   | 3,780  | 11,800 | 618    | 16,700  |
| 18    | 374    | 284   | 11,200  | 1,470   | 1,800  | 16,000  | 24,400  | 7,580   | 2,500  | 8,100  | 780    | 12,900  |
| 19    | 360    | 304   | 7,680   | 1,810   | 1,710  | 10,000  | 21,000  | 5,600   | 1,740  | 7,960  | 1,140  | 12,000  |
| 20    | 347    | 303   | 5,450   | 2,260   | 1,420  | 8,200   | 18,900  | 4,400   | 1,320  | 7,350  | 1,010  | 11,400  |
| 21    | 333    | 255   | 4,360   | 2,600   | 1,160  | 7,000   | 25,300  | 3,640   | 1,100  | 6,410  | 2,010  | 9,560   |
| 22    | 369    | 248   | 3,000   | 3,000   | 1,180  | 7,000   | 36,400  | 3,160   | 1,490  | 4,920  | 1,900  | 6,260   |
| 23    | 318    | 259   | 1,860   | 4,320   | 1,110  | 7,200   | 40,700  | 2,600   | 1,830  | 2,960  | 1,370  | 3,010   |
| 24    | 624    | 277   | 1,700   | 5,400   | 1,010  | 6,600   | 39,400  | 2,200   | 1,450  | 1,940  | 1,110  | 2,800   |
| 25    | 988    | 273   | 1,750   | 6,400   | 775    | 5,920   | 31,000  | 1,790   | 1,160  | 1,680  | 1,460  | 2,290   |
| 26    | 1,090  | 255   | 1,660   | 5,200   | 798    | 5,120   | 22,000  | 1,530   | 986    | 1,220  | 1,110  | 4,900   |
| 27    | 782    | 308   | 1,570   | 3,800   | 735    | 4,380   | 15,200  | 1,400   | 848    | 1,070  | 850    | 12,000  |
| 28    | 607    | 283   | 1,470   | 3,000   | 695    | 3,970   | 10,600  | 1,250   | 822    | 944    | 668    | 16,300  |
| 29    | 504    | 313   | 1,460   | 2,400   | 735    | 3,590   | 6,820   | 1,100   | 834    | 932    | 544    | 16,200  |
| 30    | 437    | 382   | 3,040   | 1,990   | -----  | 4,240   | 4,810   | 1,230   | 1,360  | 607    | 478    | 18,600  |
| 31    | 444    | ----- | 9,190   | 1,600   | -----  | 5,540   | -----   | 3,160   | -----  | 514    | 444    | -----   |
| TOTAL | 18,722 | 9,311 | 140,850 | 133,270 | 28,278 | 259,030 | 507,260 | 132,400 | 63,410 | 90,273 | 27,553 | 218,496 |
| MEAN  | 604    | 310   | 4,544   | 4,299   | 975    | 8,356   | 16,910  | 4,271   | 2,114  | 2,912  | 889    | 7,283   |
| MAX   | 2,380  | 458   | 15,500  | 12,800  | 1,800  | 21,500  | 40,700  | 9,560   | 6,540  | 11,800 | 2,010  | 27,100  |
| MIN   | 291    | 248   | 388     | 1,260   | 500    | 1,060   | 3,460   | 1,100   | 822    | 514    | 398    | 281     |

CAL YR 1971 TOTAL 1,142,259 MEAN 3,129 MAX 31,400 MIN 165  
WTR YR 1972 TOTAL 1,628,853 MEAN 4,450 MAX 40,700 MIN 248

## PEAK DISCHARGE (BASE, 23,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-15 | 0500 | 5.77  | 23,500    | 4-23 | 1900 | 7.74  | 41,100    |
| 4-18 | 0700 | 5.95  | 24,900    | 9-15 | 1400 | 6.41  | 28,800    |

## STREAMS TRIBUTARY TO LAKE ERIE

181

04193500 Maumee River at Waterville, Ohio

LOCATION.--Lat 41°30'00", long 83°42'46", Lucas County, on downstream side of second pier from left end of bridge on State Highway 64 at Waterville, 3 miles downstream from Tontogany Creek, and 21.1 miles upstream from mouth.

DRAINAGE AREA.--6,330 sq mi.

PERIOD OF RECORD.--November 1898 to December 1901, August 1921 to December 1935, March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft above mean sea level. Nov. 19, 1898, to Dec. 31, 1901, Aug. 26, 1921 to July 31, 1930, nonrecording gage, Aug. 1, 1930 to Dec. 31, 1935, water-stage recorder, Mar. 14, 1939 to Mar. 12, 1940 nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years (1921-35, 1939-72) 4,677 cfs (10.03 inches per year) (includes flow in Miami and Erie Canal at Waterville 1922-29; canal was abandoned in 1929 and was filled in prior to March 1939).

EXTREMES.--Current year: Maximum discharge, 47,900 cfs Apr. 23 (gage height, 10.50 ft); minimum daily, 214 cfs Nov. 22.

Period of record: Maximum discharge, 94,000 cfs Feb. 16, 1950 (gage height, 14.52 ft); maximum gage height, 16.17 ft Feb. 12, 1959 (ice jam); practically no flow at times prior to June 30, 1929, when entire river flow was being diverted by canal; minimum since canal was abandoned, 20 cfs Oct. 23, 24, 1964 (gage height, 1.29 ft).

Flood in March 1913 reached a stage of 19.9 ft, from information by local resident (estimated discharge, 180,000 cfs, from rating curve extended above 94,000 cfs).

REMARKS.--Records good except those for the winter period, which are fair. Low flow slightly regulated by powerplants upstream from station. Small diversion upstream from gage into Portage River basin (see station 04195500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 894: 1930(M). WSP 1084: 1946. WSP 1387: 1900(M), 1922-23, 1933. WRD Ohio 1968: 1967. WRD Ohio 1970: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT    | NOV    | DEC     | JAN     | FEB    | MAR     | APR     | MAY     | JUN    | JUL     | AUG    | SEP     |
|-------|--------|--------|---------|---------|--------|---------|---------|---------|--------|---------|--------|---------|
| 1     | 1,500  | 405    | 450     | 14,300  | 1,700  | 880     | 5,680   | 5,360   | 5,500  | 4,000   | 614    | 468     |
| 2     | 1,050  | 628    | 400     | 13,200  | 1,500  | 6,360   | 4,940   | 6,200   | 6,840  | 3,420   | 586    | 426     |
| 3     | 848    | 394    | 500     | 9,420   | 1,400  | 15,500  | 4,160   | 5,400   | 5,680  | 2,600   | 544    | 436     |
| 4     | 884    | 317    | 460     | 7,440   | 1,300  | 19,500  | 4,190   | 4,420   | 4,190  | 2,080   | 455    | 416     |
| 5     | 2,880  | 259    | 450     | 6,440   | 1,200  | 14,800  | 4,700   | 4,060   | 3,570  | 1,610   | 480    | 375     |
| 6     | 1,130  | 383    | 520     | 5,820   | 1,100  | 9,550   | 5,120   | 4,000   | 3,160  | 1,730   | 544    | 332     |
| 7     | 614    | 443    | 800     | 5,220   | 1,000  | 5,960   | 5,120   | 3,270   | 2,490  | 1,710   | 1,980  | 345     |
| 8     | 306    | 250    | 2,230   | 4,060   | 900    | 5,150   | 11,400  | 3,180   | 2,050  | 1,850   | 2,200  | 317     |
| 9     | 350    | 268    | 7,640   | 3,480   | 800    | 4,640   | 20,800  | 3,570   | 1,570  | 1,830   | 1,800  | 292     |
| 10    | 339    | 455    | 10,800  | 4,670   | 740    | 3,940   | 19,700  | 5,080   | 1,320  | 1,710   | 1,700  | 293     |
| 11    | 328    | 418    | 9,280   | 7,800   | 660    | 3,040   | 16,500  | 9,510   | 1,660  | 1,430   | 1,180  | 349     |
| 12    | 339    | 405    | 8,380   | 9,150   | 620    | 2,330   | 11,800  | 8,520   | 2,130  | 1,110   | 880    | 391     |
| 13    | 405    | 317    | 6,920   | 6,760   | 580    | 5,190   | 12,500  | 6,170   | 1,930  | 920     | 715    | 529     |
| 14    | 443    | 295    | 4,260   | 5,000   | 640    | 19,200  | 19,100  | 5,850   | 1,500  | 1,110   | 763    | 8,560   |
| 15    | 383    | 430    | 7,000   | 3,000   | 860    | 24,600  | 24,500  | 5,780   | 1,500  | 1,450   | 909    | 30,300  |
| 16    | 394    | 350    | 16,300  | 2,300   | 1,500  | 24,900  | 23,000  | 8,740   | 3,020  | 6,640   | 786    | 31,500  |
| 17    | 394    | 328    | 18,200  | 1,800   | 2,000  | 22,500  | 25,700  | 9,060   | 4,800  | 15,400  | 678    | 21,700  |
| 18    | 443    | 383    | 14,100  | 1,600   | 2,100  | 18,700  | 26,100  | 8,520   | 3,630  | 13,000  | 688    | 16,200  |
| 19    | 405    | 558    | 9,960   | 1,900   | 1,800  | 15,000  | 23,400  | 6,320   | 2,490  | 7,800   | 1,290  | 15,600  |
| 20    | 394    | 394    | 7,080   | 2,400   | 1,600  | 11,700  | 19,700  | 5,120   | 1,850  | 9,420   | 1,200  | 13,700  |
| 21    | 383    | 360    | 5,610   | 3,600   | 1,400  | 8,430   | 23,300  | 4,320   | 1,800  | 6,840   | 2,300  | 11,800  |
| 22    | 493    | 214    | 4,540   | 3,690   | 1,300  | 8,520   | 38,400  | 3,510   | 1,590  | 6,060   | 2,100  | 8,530   |
| 23    | 505    | 232    | 3,020   | 5,220   | 1,200  | 8,290   | 46,900  | 3,180   | 2,030  | 4,350   | 1,500  | 4,730   |
| 24    | 443    | 290    | 2,200   | 7,000   | 1,100  | 7,760   | 44,400  | 2,570   | 1,950  | 2,740   | 1,300  | 3,930   |
| 25    | 902    | 320    | 2,000   | 7,880   | 1,000  | 6,480   | 36,200  | 2,100   | 1,500  | 2,280   | 1,700  | 3,150   |
| 26    | 1,390  | 370    | 1,900   | 6,000   | 900    | 5,820   | 25,500  | 1,730   | 1,230  | 1,800   | 1,200  | 4,130   |
| 27    | 1,170  | 370    | 1,800   | 4,500   | 820    | 5,150   | 18,000  | 1,520   | 1,070  | 1,390   | 1,000  | 13,400  |
| 28    | 866    | 350    | 1,700   | 3,400   | 760    | 4,480   | 12,400  | 1,430   | 920    | 1,210   | 800    | 18,800  |
| 29    | 642    | 340    | 1,700   | 2,600   | 800    | 4,290   | 8,250   | 1,250   | 1,050  | 1,070   | 600    | 18,700  |
| 30    | 544    | 380    | 2,100   | 2,200   | -----  | 4,450   | 5,990   | 1,280   | 2,200  | 956     | 544    | 21,900  |
| 31    | 544    | -----  | 7,320   | 1,900   | -----  | 5,330   | -----   | 2,000   | -----  | 702     | 481    | -----   |
| TOTAL | 21,711 | 10,906 | 159,620 | 163,750 | 33,280 | 302,440 | 547,450 | 143,020 | 76,220 | 110,218 | 33,517 | 251,599 |
| MEAN  | 700    | 364    | 5,149   | 5,282   | 1,148  | 9,756   | 18,250  | 4,614   | 2,541  | 3,555   | 1,081  | 8,387   |
| MAX   | 2,880  | 628    | 18,200  | 14,300  | 2,100  | 24,900  | 46,900  | 9,510   | 6,840  | 15,400  | 2,300  | 31,500  |
| MIN   | 306    | 214    | 400     | 1,600   | 580    | 880     | 4,160   | 1,250   | 920    | 702     | 455    | 292     |
| CFSM  | .11    | .06    | .81     | .83     | .18    | 1.54    | 2.88    | .73     | .40    | .56     | .17    | 1.33    |
| IN.   | .13    | .06    | .94     | .96     | .20    | 1.78    | 3.22    | .84     | .45    | .65     | .20    | 1.48    |

CAL YR 1971 TOTAL 1,311,775 MEAN 3,594 MAX 38,900 MIN 170 CFSM .57 IN 7.71  
WTR YR 1972 TOTAL 1,853,731 MEAN 5,065 MAX 46,900 MIN 214 CFSM .80 IN 10.89



04195500 Portage River at Woodville, Ohio

LOCATION.--Lat 41°26'58", long 83°21'41", in sec. 28, T.6 N., R.13 E., Sandusky County, on left bank at upstream side of bridge on U.S. Highway 20 in Woodville, 600 ft downstream from unnamed right bank tributary, and 10.3 miles upstream from Sugar Creek.

DRAINAGE AREA.--428 sq mi.

PERIOD OF RECORD.--July 1928 to December 1935, October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.75 ft above mean sea level. Prior to Oct. 8, 1933, non-recording gage, Oct. 9, 1933, to Dec. 31, 1935, water-stage recorder, Oct. 17 to Nov. 29, 1939, nonrecording gage, all at same site and datum.

AVERAGE DISCHARGE.--(Adjusted for diversion).--40 years, 297 cfs (9.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,160 cfs July 17 (gage height, 11.26 ft); minimum, 9.3 cfs Nov. 25, 26.

Period of record: Maximum discharge, 11,500 cfs Feb. 15, 1950 (gage height, 14.51 ft); minimum, 0.3 cfs Aug. 28, 1931.

Flood in March 1913 reached a stage of 17 ft, from information by local residents (discharge, 17,000 cfs, from rating curve extended above 11,500 cfs).

REMARKS.--Records good. Flow supplemented by water imported from Maumee River basin for municipal supply for city of Bowling Green 16 miles upstream. The importation of this water began Sept. 1, 1951. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 894: 1929-30. WSP 1207: 1933. WSP 1387: 1931, 1933. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY          | OCT  | NOV   | DEC   | JAN    | FEB   | MAR    | APR    | MAY   | JUN   | JUL    | AUG   | SEP    |
|--------------|------|-------|-------|--------|-------|--------|--------|-------|-------|--------|-------|--------|
| 1            | 38   | 24    | 52    | 930    | 90    | 70     | 136    | 185   | 422   | 578    | 41    | 25     |
| 2            | 28   | 22    | 42    | 522    | 82    | 1,610  | 127    | 276   | 276   | 154    | 37    | 23     |
| 3            | 23   | 19    | 39    | 422    | 82    | 2,860  | 114    | 294   | 208   | 130    | 39    | 23     |
| 4            | 17   | 19    | 29    | 333    | 94    | 1,030  | 138    | 208   | 321   | 100    | 125   | 20     |
| 5            | 16   | 20    | 25    | 240    | 90    | 490    | 267    | 152   | 240   | 76     | 109   | 18     |
| 6            | 14   | 19    | 32    | 150    | 86    | 253    | 288    | 125   | 156   | 70     | 74    | 18     |
| 7            | 15   | 16    | 190   | 160    | 82    | 200    | 264    | 112   | 120   | 80     | 171   | 16     |
| 8            | 17   | 15    | 534   | 170    | 78    | 160    | 250    | 114   | 101   | 100    | 387   | 17     |
| 9            | 22   | 16    | 373   | 140    | 74    | 130    | 288    | 785   | 81    | 90     | 235   | 16     |
| 10           | 42   | 16    | 245   | 910    | 70    | 120    | 345    | 1,700 | 70    | 74     | 150   | 16     |
| 11           | 43   | 17    | 245   | 975    | 66    | 120    | 359    | 765   | 60    | 59     | 104   | 16     |
| 12           | 30   | 18    | 195   | 598    | 64    | 130    | 282    | 426   | 55    | 46     | 75    | 15     |
| 13           | 22   | 20    | 138   | 419    | 62    | 935    | 288    | 309   | 55    | 41     | 61    | 19     |
| 14           | 19   | 20    | 110   | 288    | 90    | 3,160  | 297    | 297   | 144   | 55     | 51    | 735    |
| 15           | 17   | 17    | 582   | 160    | 120   | 2,720  | 359    | 720   | 138   | 213    | 675   | 2,730  |
| 16           | 18   | 17    | 1,070 | 140    | 240   | 2,130  | 498    | 985   | 115   | 4,280  | 1,070 | 2,170  |
| 17           | 18   | 15    | 594   | 120    | 200   | 1,730  | 1,670  | 586   | 102   | 6,800  | 422   | 770    |
| 18           | 17   | 11    | 315   | 110    | 160   | 1,080  | 1,140  | 380   | 81    | 3,990  | 243   | 486    |
| 19           | 15   | 12    | 190   | 110    | 130   | 690    | 634    | 267   | 60    | 1,330  | 680   | 1,280  |
| 20           | 15   | 12    | 152   | 120    | 100   | 482    | 638    | 208   | 51    | 855    | 602   | 720    |
| 21           | 14   | 13    | 138   | 160    | 90    | 408    | 1,660  | 171   | 122   | 454    | 294   | 356    |
| 22           | 17   | 14    | 117   | 230    | 80    | 429    | 2,370  | 146   | 127   | 253    | 162   | 213    |
| 23           | 24   | 13    | 93    | 360    | 70    | 482    | 3,660  | 120   | 90    | 156    | 114   | 142    |
| 24           | 30   | 11    | 90    | 400    | 60    | 345    | 1,850  | 99    | 73    | 107    | 117   | 110    |
| 25           | 33   | 10    | 84    | 538    | 52    | 258    | 820    | 85    | 61    | 264    | 96    | 98     |
| 26           | 29   | 10    | 80    | 401    | 46    | 228    | 514    | 73    | 54    | 300    | 71    | 118    |
| 27           | 28   | 14    | 74    | 320    | 44    | 200    | 366    | 63    | 59    | 152    | 59    | 1,060  |
| 28           | 26   | 18    | 70    | 240    | 42    | 183    | 276    | 55    | 54    | 115    | 47    | 1,730  |
| 29           | 26   | 33    | 66    | 160    | 54    | 165    | 225    | 48    | 176   | 82     | 37    | 1,160  |
| 30           | 25   | 46    | 486   | 130    | ----- | 167    | 195    | 55    | 660   | 64     | 33    | 1,820  |
| 31           | 25   | ----- | 1,700 | 100    | ----- | 158    | -----  | 140   | ----- | 50     | 29    | -----  |
| TOTAL        | 723  | 527   | 8,150 | 10,056 | 2,598 | 23,123 | 20,318 | 9,949 | 4,332 | 21,118 | 6,410 | 15,940 |
| MEAN         | 23.3 | 17.6  | 263   | 324    | 85.6  | 746    | 677    | 321   | 144   | 681    | 207   | 531    |
| MAX          | 43   | 46    | 1,700 | 975    | 240   | 3,160  | 3,660  | 1,700 | 660   | 6,800  | 1,070 | 2,730  |
| MIN          | 14   | 10    | 25    | 100    | 42    | 70     | 114    | 48    | 51    | 41     | 29    | 15     |
| ( $\times$ ) | 5.37 | 4.71  | 4.24  | 4.78   | 4.82  | 4.38   | 4.78   | 5.16  | 4.54  | 4.54   | 5.22  | 5.79   |
| MEAN $\neq$  | 17.9 | 12.9  | 259   | 319    | 84.8  | 742    | 672    | 316   | 139   | 677    | 202   | 525    |
| CFSM $\neq$  | .04  | .03   | .61   | .75    | .20   | 1.73   | 1.57   | .74   | .32   | 1.58   | .47   | 1.23   |
| IN $\neq$    | .05  | .03   | .70   | .86    | .21   | 2.00   | 1.75   | .85   | .36   | 1.82   | .54   | 1.37   |

CAL YR 1971 TOTAL 82,966.5 MEAN 227 MAX 3,660 MIN 6.4 ( $\times$ ) 4.87 MEAN  $\neq$  222 CFSM  $\neq$  .52 IN  $\neq$  7.05  
WTR YR 1972 TOTAL 123,244 MEAN 337 MAX 6,800 MIN 10 ( $\times$ ) 4.86 MEAN  $\neq$  332 CFSM  $\neq$  .78 IN  $\neq$  10.55

PEAK DISCHARGE (BASE, 3,500 CFS).--Apr. 23 (0800) 4,460 cfs (8.68 ft); July 17 (0700) 7,160 cfs (11.26 ft).  
( $\times$ ) Diversion from Maumee River basin for municipal supply of city of Bowling Green, equivalent in cubic feet per second.

( $\neq$ ) Adjusted for diversion.



## 04196000 Sandusky River near Bucyrus, Ohio

LOCATION.--Lat 40°48'13", long 83°00'21", in NE 1/4 sec. 10, T.3 S., R.16 E., Crawford County, on right bank at downstream side of bridge on township road, 1 mile upstream from unnamed left bank tributary, 1.5 miles west of Bucyrus, and 12 miles downstream from Loss Creek.

DRAINAGE AREA.--88.8 sq mi.

PERIOD OF RECORD.--August 1925 to November 1935, July 1938 to December 1951, December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 955.04 ft above mean sea level. Prior to May 11, 1940, non-recording gage, and May 12, 1940, to December 31, 1951, water-stage recorder, at same site and datum.

AVERAGE DISCHARGE.--31 years (1925-35, 1938-51, 1964-72), 81.1 cfs (12.40 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,090 cfs Apr. 20 (gage height, 8.81 ft); minimum, 0.82 cfs Nov. 13.

Period of record: Maximum discharge observed, 5,800 cfs Dec. 14, 1927 (gage height, 9.15 ft); minimum, 0.4 cfs Sept. 29, 1941, July 16, 1942.

Flood of Mar. 23, 1913 reached a stage of 14.5 ft, from floodmarks. Flood of Jan. 22, 1959 reached a stage of 11.9 ft, from floodmarks (discharge, 13,500 cfs, on basis of contracted-opening measurement of peak flow at site 2.8 miles upstream with drainage area of 85.4 sq mi, adjusted to gage site by 0.8 power of drainage-area ratio).

REMARKS.--Records good except January and February, which are fair. Low flow slightly affected by operation of reservoirs 5.3 to 6.0 miles upstream from station, for municipal supply of Bucyrus. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 744: 1925-32. WSP 874: 1938. WSP 1307: 1926(M), 1928(M), 1931, 1932(M), 1934-35(M), 1939, 1940(M), 1946(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV       | DEC       | JAN     | FEB      | MAR      | APR   | MAY   | JUN     | JUL     | AUG   | SEP     |
|-------------|----------------|-----------|-----------|---------|----------|----------|-------|-------|---------|---------|-------|---------|
| 1           | 3.7            | 6.2       | 19        | 136     | 17       | 122      | 44    | 47    | 62      | 60      | 10    | 5.0     |
| 2           | 3.3            | 7.1       | 9.7       | 88      | 20       | 801      | 41    | 45    | 41      | 30      | 9.7   | 7.2     |
| 3           | 3.5            | 3.7       | 6.5       | 84      | 33       | 440      | 39    | 41    | 32      | 78      | 11    | 8.9     |
| 4           | 3.3            | 2.1       | 3.9       | 77      | 37       | 189      | 40    | 37    | 24      | 138     | 9.4   | 6.8     |
| 5           | 3.9            | 2.5       | 3.1       | 82      | 32       | 117      | 37    | 32    | 20      | 54      | 8.1   | 4.0     |
| 6           | 4.9            | 3.1       | 24        | 64      | 26       | 72       | 40    | 29    | 18      | 32      | 7.8   | 7.1     |
| 7           | 4.9            | 3.7       | 54        | 56      | 23       | 70       | 330   | 26    | 17      | 24      | 9.4   | 7.0     |
| 8           | 4.4            | 2.5       | 96        | 43      | 19       | 80       | 262   | 45    | 15      | 28      | 8.4   | 6.4     |
| 9           | 22             | 2.3       | 52        | 70      | 16       | 75       | 123   | 585   | 15      | 28      | 4.4   | 5.7     |
| 10          | 8.7            | 2.5       | 30        | 430     | 15       | 68       | 115   | 440   | 13      | 24      | 3.5   | 4.9     |
| 11          | 13             | 2.5       | 26        | 212     | 14       | 60       | 97    | 154   | 12      | 36      | 7.5   | 5.5     |
| 12          | 4.9            | 2.1       | 30        | 110     | 15       | 84       | 79    | 92    | 12      | 25      | 6.5   | 5.7     |
| 13          | 3.9            | 1.5       | 28        | 76      | 19       | 714      | 591   | 74    | 64      | 77      | 5.7   | 6.0     |
| 14          | 6.8            | 2.3       | 45        | 59      | 28       | 732      | 368   | 120   | 228     | 124     | 14    | 60      |
| 15          | 5.7            | 3.1       | 144       | 32      | 112      | 336      | 172   | 678   | 83      | 62      | 12    | 88      |
| 16          | 6.8            | 3.9       | 160       | 26      | 330      | 338      | 274   | 394   | 45      | 126     | 7.1   | 31      |
| 17          | 6.0            | 2.5       | 71        | 22      | 150      | 455      | 624   | 174   | 30      | 87      | 24    | 15      |
| 18          | 6.2            | 3.1       | 45        | 18      | 100      | 200      | 214   | 108   | 20      | 45      | 46    | 17      |
| 19          | 5.2            | 14        | 30        | 24      | 65       | 130      | 130   | 76    | 15      | 44      | 36    | 11      |
| 20          | 4.7            | 5.4       | 30        | 28      | 46       | 98       | 1,550 | 58    | 12      | 43      | 26    | 6.3     |
| 21          | 4.4            | 4.4       | 32        | 34      | 32       | 96       | 1,530 | 48    | 10      | 21      | 16    | 4.3     |
| 22          | 7.1            | 3.7       | 37        | 40      | 22       | 603      | 1,060 | 41    | 10      | 14      | 44    | 9.1     |
| 23          | 5.2            | 5.7       | 29        | 59      | 16       | 388      | 552   | 34    | 10      | 9.4     | 65    | 19      |
| 24          | 4.7            | 5.5       | 25        | 74      | 14       | 165      | 252   | 29    | 9.1     | 10      | 33    | 13      |
| 25          | 3.7            | 4.4       | 22        | 61      | 12       | 124      | 153   | 26    | 8.4     | 16      | 20    | 17      |
| 26          | 3.7            | 3.7       | 22        | 45      | 10       | 96       | 107   | 23    | 10      | 22      | 14    | 38      |
| 27          | 6.0            | 13        | 24        | 27      | 9.0      | 81       | 81    | 20    | 14      | 14      | 8.7   | 129     |
| 28          | 6.2            | 5.5       | 27        | 23      | 8.5      | 72       | 65    | 17    | 13      | 9.4     | 8.1   | 128     |
| 29          | 4.7            | 15        | 32        | 18      | 20       | 61       | 56    | 17    | 19      | 6.8     | 7.1   | 99      |
| 30          | 3.3            | 14        | 266       | 15      | -----    | 56       | 49    | 37    | 138     | 9.7     | 6.4   | 799     |
| 31          | 2.7            | -----     | 458       | 13      | -----    | 48       | ----- | 66    | -----   | 10      | 4.3   | -----   |
| TOTAL       | 177.5          | 151.0     | 1,881.2   | 2,146   | 1,260.5  | 6,971    | 9,075 | 3,613 | 1,019.5 | 1,307.3 | 493.1 | 1,563.9 |
| MEAN        | 5.73           | 5.03      | 60.7      | 69.2    | 43.5     | 225      | 303   | 117   | 34.0    | 42.2    | 15.9  | 52.1    |
| MAX         | 22             | 15        | 458       | 430     | 330      | 801      | 1,550 | 678   | 228     | 138     | 65    | 799     |
| MIN         | 2.7            | 1.5       | 3.1       | 13      | 8.5      | 48       | 37    | 17    | 8.4     | 6.8     | 3.5   | 4.0     |
| CFSM        | .06            | .06       | .68       | .78     | .49      | 2.53     | 3.41  | 1.32  | .38     | .48     | .18   | .59     |
| IN.         | .07            | .06       | .79       | .90     | .53      | 2.92     | 3.80  | 1.51  | .43     | .55     | .21   | .66     |
| CAL YR 1971 | TOTAL 24,413.7 | MEAN 66.9 | MAX 1,260 | MIN 1.5 | CFSM .75 | IN 10.23 |       |       |         |         |       |         |
| WTR YR 1972 | TOTAL 29,659.0 | MEAN 81.0 | MAX 1,550 | MIN 1.5 | CFSM .91 | IN 12.42 |       |       |         |         |       |         |

## PEAK DISCHARGE (BASE, 1,200 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-20 | 2200 | 8.81  | 3,090     | 9-30 | 2330 | 6.04  | 1,200     |
| 4-22 | 1930 | 6.41  | 1,380     |      |      |       |           |

## 04196500 Sandusky River near Upper Sandusky, Ohio

LOCATION.--Lat 40°51'02", long 83°15'23", in sec. 21, T.2 S., R.14 E., Wyandot County, on left bank at downstream side of county road bridge, 0.7 mile downstream from unnamed right bank tributary, 0.8 mile upstream from Rock Run, and 2 miles northeast of Upper Sandusky.

DRAINAGE AREA.--298 sq mi.

PERIOD OF RECORD.--October 1921 to December 1935, January 1938 to current year. Gage-height records collected at site 3 miles upstream since 1912 (fragmentary) are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 792.25 ft above mean sea level. Prior to Sept. 14, 1924, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--48 years, 235 cfs (10.71 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,420 cfs Apr. 22 (gage height, 9.64 ft); minimum, 3.3 cfs Oct. 6. Period of record: Maximum discharge, about 10,000 cfs Jan. 22, 1959; maximum gage height, 15.00 ft in gage well, 15.55 ft from outside floodmark, Jan. 22, 1959 (ice jam); minimum discharge, 0.50 cfs Oct. 2, 1963. Flood in June 1937 reached a stage of 14.3 ft, from high-water marks in gage well.

REMARKS.--Records good except those for January and February, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 874: 1927-30, 1933. WSP 1387: 1922(M), 1923-29, 1944. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT            | NOV      | DEC       | JAN     | FEB      | MAR      | APR    | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------------|----------------|----------|-----------|---------|----------|----------|--------|--------|-------|-------|-------|-------|
| 1           | 8.8            | 12       | 26        | 604     | 36       | 118      | 138    | 160    | 200   | 207   | 17    | 16    |
| 2           | 11             | 11       | 24        | 289     | 35       | 1,230    | 130    | 152    | 110   | 103   | 20    | 14    |
| 3           | 12             | 11       | 25        | 190     | 42       | 2,060    | 120    | 138    | 90    | 298   | 22    | 15    |
| 4           | 10             | 8.8      | 21        | 160     | 50       | 840      | 115    | 122    | 70    | 565   | 23    | 18    |
| 5           | 7.0            | 12       | 17        | 130     | 48       | 300      | 110    | 108    | 61    | 319   | 20    | 18    |
| 6           | 3.7            | 12       | 24        | 110     | 46       | 210      | 110    | 96     | 56    | 158   | 20    | 15    |
| 7           | 4.1            | 12       | 42        | 110     | 44       | 190      | 571    | 85     | 51    | 104   | 20    | 13    |
| 8           | 4.9            | 12       | 94        | 120     | 42       | 180      | 948    | 98     | 49    | 102   | 17    | 11    |
| 9           | 15             | 10       | 122       | 110     | 40       | 210      | 501    | 858    | 44    | 99    | 20    | 12    |
| 10          | 25             | 10       | 77        | 460     | 38       | 170      | 433    | 1,350  | 40    | 90    | 17    | 12    |
| 11          | 36             | 12       | 50        | 750     | 36       | 150      | 373    | 724    | 38    | 87    | 16    | 12    |
| 12          | 18             | 13       | 41        | 290     | 35       | 150      | 289    | 409    | 35    | 77    | 17    | 11    |
| 13          | 22             | 12       | 35        | 180     | 42       | 700      | 1,020  | 287    | 47    | 58    | 16    | 11    |
| 14          | 22             | 13       | 45        | 130     | 60       | 2,400    | 1,590  | 283    | 214   | 104   | 15    | 85    |
| 15          | 13             | 13       | 87        | 100     | 90       | 1,790    | 692    | 1,660  | 250   | 176   | 13    | 259   |
| 16          | 12             | 12       | 236       | 80      | 200      | 1,070    | 716    | 1,930  | 173   | 116   | 18    | 258   |
| 17          | 14             | 11       | 240       | 68      | 700      | 1,320    | 1,790  | 892    | 121   | 165   | 19    | 120   |
| 18          | 14             | 11       | 120       | 60      | 380      | 834      | 1,130  | 514    | 99    | 116   | 31    | 70    |
| 19          | 14             | 16       | 76        | 52      | 240      | 497      | 574    | 344    | 71    | 78    | 70    | 50    |
| 20          | 12             | 16       | 64        | 66      | 160      | 337      | 2,980  | 249    | 56    | 64    | 68    | 41    |
| 21          | 10             | 24       | 58        | 100     | 110      | 293      | 5,520  | 195    | 49    | 68    | 52    | 32    |
| 22          | 12             | 18       | 53        | 110     | 70       | 856      | 4,560  | 160    | 45    | 45    | 52    | 25    |
| 23          | 12             | 12       | 53        | 140     | 54       | 1,520    | 3,000  | 134    | 43    | 36    | 99    | 26    |
| 24          | 13             | 11       | 48        | 160     | 46       | 680      | 1,180  | 115    | 41    | 40    | 181   | 37    |
| 25          | 21             | 10       | 42        | 130     | 38       | 429      | 678    | 100    | 41    | 37    | 106   | 53    |
| 26          | 14             | 10       | 40        | 110     | 32       | 337      | 473    | 89     | 38    | 31    | 66    | 61    |
| 27          | 13             | 14       | 40        | 90      | 28       | 268      | 353    | 79     | 34    | 36    | 45    | 222   |
| 28          | 12             | 12       | 39        | 76      | 27       | 231      | 268    | 71     | 33    | 35    | 35    | 535   |
| 29          | 11             | 20       | 40        | 64      | 30       | 200      | 218    | 65     | 60    | 27    | 26    | 400   |
| 30          | 10             | 23       | 189       | 52      | -----    | 177      | 185    | 73     | 68    | 22    | 22    | 1,500 |
| 31          | 11             | -----    | 970       | 42      | -----    | 152      | -----  | 120    | ----- | 18    | 18    | ----- |
| TOTAL       | 417.5          | 393.8    | 3,038     | 5,133   | 2,799    | 19,899   | 30,765 | 11,660 | 2,327 | 3,481 | 1,181 | 3,952 |
| MEAN        | 13.5           | 13.1     | 98.0      | 166     | 96.5     | 642      | 1,026  | 376    | 77.6  | 112   | 38.1  | 132   |
| MAX         | 36             | 24       | 970       | 750     | 700      | 2,400    | 5,520  | 1,930  | 250   | 565   | 181   | 1,500 |
| MIN         | 3.7            | 8.8      | 17        | 42      | 27       | 118      | 110    | 65     | 33    | 18    | 13    | 11    |
| CFSM        | .05            | .04      | .33       | .56     | .32      | 2.15     | 3.44   | 1.26   | .26   | .38   | .13   | .44   |
| IN.         | .05            | .05      | .38       | .64     | .35      | 2.48     | 3.84   | 1.46   | .29   | .43   | .15   | .49   |
| CAL YR 1971 | TOTAL 75,884.8 | MEAN 208 | MAX 3,200 | MIN 3.7 | CFSM .70 | IN 9.47  |        |        |       |       |       |       |
| WTR YR 1972 | TOTAL 85,046.3 | MEAN 232 | MAX 5,520 | MIN 3.7 | CFSM .78 | IN 10.62 |        |        |       |       |       |       |

## PEAK DISCHARGE (BASE, 2,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-14 | 1930 | 6.11  | 2,550     | 4-22 | 0130 | 9.64  | 6,420     |

04196800 Tymochtee Creek at Crawford, Ohio

LOCATION.--Lat 40°55'22", long 83°20'56", in SE 1/4 sec.27, T.1 S., R.13 E., Wyandot County, on right bank at downstream side of bridge on State Highway 199 (formerly U.S. Highway 23), 0.4 mile northwest of Crawford, 1.5 miles downstream from Lick Run, 2.7 miles upstream from Little Tymochtee Creek, and 3 miles southeast of Carey.

DRAINAGE AREA.--229 sq mi.

PERIOD OF RECORD.--Water years 1961-64 (annual maximum), June 1964 to current year. Occasional low-flow measurements, water years 1961-63.

GAGE.--Water-stage recorder. Datum of gage is 785.86 ft above mean sea level. Oct. 1, 1960, to May 31, 1964, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--8 years, 161 cfs (9.54 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,580 cfs Apr. 21 (gage height, 8.82 ft); minimum, 0.09 cfs Oct. 9, 10.

Period of record: Maximum discharge, 6,040 cfs Apr. 22, 1964 (gage height, 9.82 ft); maximum gage height, 11.21 ft Mar. 6, 1963 (backwater from ice); no flow Aug. 10, Sept. 13-18, Oct. 23 to Nov. 4, 1964, Aug. 23-26, 1965.

Flood of January 1959 reached a stage of 12.9 ft, from information by local resident.

REMARKS.--Records good except those for the winter period, which are fair. Beginning Mar. 9, 1972 water was diverted at a point 29.4 miles upstream from station into Killdeer Reservoir. Storage is available for low-flow augmentation. Diversion totaled 1,580 million gallon during the period. No releases were made from the reservoir. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Ohio 1969: 1964(P), 1966(M), 1967(P).

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN     | JUL     | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|---------|---------|-------|---------|
| 1     | .40   | 2.8   | 2.8   | 574   | 18    | 37     | 43     | 75     | 74      | 326     | 8.4   | 5.1     |
| 2     | .55   | 2.8   | 2.4   | 326   | 16    | 695    | 42     | 62     | 76      | 214     | 7.6   | 4.5     |
| 3     | .75   | 2.8   | 2.3   | 130   | 18    | 1,120  | 41     | 54     | 60      | 286     | 6.8   | 4.5     |
| 4     | .55   | 2.4   | 2.1   | 100   | 24    | 1,320  | 42     | 49     | 46      | 715     | 6.0   | 4.0     |
| 5     | .30   | 2.4   | 1.9   | 80    | 22    | 780    | 40     | 40     | 32      | 780     | 5.1   | 4.0     |
| 6     | .16   | 2.4   | 2.6   | 60    | 20    | 280    | 41     | 30     | 25      | 402     | 6.8   | 4.0     |
| 7     | .10   | 2.0   | 6.0   | 60    | 19    | 150    | 414    | 24     | 21      | 160     | 8.4   | 3.2     |
| 8     | .10   | 1.6   | 7.6   | 70    | 18    | 110    | 928    | 26     | 19      | 126     | 7.6   | 2.8     |
| 9     | .55   | 1.6   | 10    | 60    | 17    | 90     | 1,230  | 695    | 21      | 135     | 6.8   | 2.8     |
| 10    | 1.6   | 2.0   | 26    | 160   | 16    | 75     | 785    | 1,260  | 20      | 67      | 5.1   | 2.0     |
| 11    | 1.6   | 2.0   | 26    | 478   | 15    | 62     | 478    | 1,880  | 17      | 43      | 6.0   | 1.6     |
| 12    | 1.6   | 2.0   | 18    | 410   | 15    | 54     | 304    | 898    | 13      | 31      | 6.8   | 2.0     |
| 13    | 1.6   | 2.0   | 12    | 150   | 17    | 498    | 595    | 322    | 45      | 25      | 6.0   | 4.0     |
| 14    | 3.2   | 2.0   | 12    | 110   | 35    | 1,070  | 1,080  | 235    | 77      | 29      | 4.5   | 170     |
| 15    | 2.4   | 2.4   | 18    | 70    | 64    | 1,220  | 1,820  | 780    | 90      | 23      | 4.0   | 152     |
| 16    | 2.0   | 2.0   | 28    | 50    | 102   | 1,080  | 1,020  | 1,330  | 104     | 20      | 3.6   | 111     |
| 17    | 2.4   | 1.6   | 155   | 40    | 176   | 770    | 1,100  | 1,840  | 60      | 19      | 3.6   | 90      |
| 18    | 2.8   | 2.4   | 124   | 34    | 100   | 635    | 1,520  | 991    | 47      | 19      | 4.0   | 48      |
| 19    | 2.8   | 2.4   | 60    | 30    | 78    | 358    | 1,180  | 370    | 35      | 18      | 5.1   | 32      |
| 20    | 2.4   | 1.3   | 37    | 26    | 60    | 211    | 1,460  | 217    | 23      | 15      | 4.5   | 23      |
| 21    | 2.4   | .75   | 24    | 30    | 46    | 145    | 3,820  | 142    | 17      | 22      | 6.8   | 17      |
| 22    | 2.8   | .75   | 18    | 50    | 36    | 182    | 3,950  | 100    | 14      | 24      | 7.6   | 11      |
| 23    | 2.8   | .55   | 14    | 90    | 28    | 430    | 2,560  | 72     | 13      | 14      | 6.8   | 9.2     |
| 24    | 2.8   | .55   | 13    | 150   | 23    | 378    | 1,920  | 54     | 11      | 13      | 17    | 11      |
| 25    | 2.8   | .75   | 12    | 100   | 20    | 193    | 910    | 43     | 10      | 26      | 27    | 14      |
| 26    | 2.8   | 1.3   | 8.4   | 70    | 19    | 130    | 418    | 34     | 9.2     | 20      | 20    | 117     |
| 27    | 2.4   | 2.0   | 6.8   | 50    | 18    | 98     | 262    | 31     | 9.2     | 16      | 13    | 238     |
| 28    | 2.4   | 2.0   | 6.0   | 40    | 19    | 75     | 173    | 24     | 9.2     | 16      | 8.4   | 262     |
| 29    | 2.4   | 2.4   | 5.1   | 32    | 21    | 65     | 124    | 20     | 24      | 13      | 6.8   | 223     |
| 30    | 2.4   | 2.4   | 17    | 24    | ----- | 58     | 93     | 46     | 338     | 9.2     | 4.5   | 695     |
| 31    | 2.4   | ----- | 202   | 20    | ----- | 49     | -----  | 76     | -----   | 8.4     | 5.1   | -----   |
| TOTAL | 56.26 | 56.35 | 880.0 | 3,674 | 1,080 | 12,418 | 28,393 | 11,820 | 1,359.6 | 3,634.6 | 239.7 | 2,267.7 |
| MEAN  | 1.81  | 1.88  | 28.4  | 119   | 37.2  | 401    | 946    | 381    | 45.3    | 117     | 7.73  | 75.6    |
| MAX   | 3.2   | 2.8   | 202   | 574   | 176   | 1,320  | 3,950  | 1,880  | 338     | 780     | 27    | 695     |
| MIN   | .10   | .55   | 1.9   | 20    | 15    | 37     | 40     | 20     | 9.2     | 8.4     | 3.6   | 1.6     |
| CFSM  | .008  | .008  | .12   | .52   | .16   | 1.75   | 4.13   | 1.66   | .20     | .51     | .03   | .33     |
| IN.   | .009  | .009  | .14   | .60   | .18   | 2.02   | 4.61   | 1.92   | .22     | .59     | .04   | .37     |

CAL YR 1971 TOTAL 39,723.02 MEAN 109 MAX 1,860 MIN .10 CFSM .48 IN 6.45  
WTR YR 1972 TOTAL 65,879.21 MEAN 180 MAX 3,950 MIN .10 CFSM .79 IN 10.70

## PEAK DISCHARGE (BASE, 1,880 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-15 | 1045 | 6.48  | 2,030     | 5-11 | 0630 | 6.54  | 2,090     |
| 4-21 | 2000 | 8.82  | 4,580     | 5-17 | 0430 | 6.48  | 2,030     |

## STREAMS TRIBUTARY TO LAKE ERIE

04197000 Sandusky River near Mexico, Ohio

LOCATION.--Lat 41°02'39", long 83°11'42", in sec. 13, T.1 N., R.14 E., Seneca County, on right bank at downstream side of county road bridge, 4.1 miles upstream from Honey Creek, 4.2 miles north of Mexico, 4.9 miles south of Tiffin, and 8.3 miles downstream from Mile Run.

DRAINAGE AREA.--774 sq mi.

PERIOD OF RECORD.--March 1923 to December 1935, July 1938 to current year. Discharge records for November 1898 to November 1900, published in 22nd Annual Report, Part 4, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 733.1 ft above mean sea level, adjustment of 1912. Prior to Aug. 15, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 558 cfs (9.79 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,900 cfs Apr. 23 (gage height, 17.77 ft); minimum, 13 cfs Oct. 5, 6.

Period of record: Maximum discharge, 18,900 cfs Jan. 23, 1959 (gage height, 22.43 ft, from floodmark); minimum, 1.8 cfs Oct. 31, 1942 (during repairs to small dam upstream from station).

Flood in June 1937 reached a stage of 22.5 ft, from information by local residents (discharge, 19,000 cfs).

REMARKS.--Records good except those for January and February, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 714: 1929-30. WSP 874: 1927(M). WSP 1387: 1925, 1928-29, 1930(M), 1931. WSP 1912: Drainage area. See also Period of Record.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT  | NOV   | DEC   | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL   | AUG   | SEP    |
|-------|------|-------|-------|--------|-------|--------|--------|--------|-------|-------|-------|--------|
| 1     | 18   | 26    | 49    | 1,460  | 110   | 140    | 274    | 396    | 341   | 571   | 51    | 45     |
| 2     | 17   | 26    | 47    | 1,010  | 90    | 1,790  | 248    | 351    | 315   | 552   | 50    | 46     |
| 3     | 17   | 24    | 50    | 567    | 120   | 3,790  | 232    | 314    | 276   | 343   | 53    | 54     |
| 4     | 15   | 24    | 47    | 380    | 150   | 3,310  | 235    | 279    | 223   | 1,050 | 52    | 46     |
| 5     | 14   | 25    | 47    | 300    | 160   | 2,150  | 238    | 249    | 177   | 1,260 | 48    | 41     |
| 6     | 14   | 26    | 53    | 260    | 140   | 1,200  | 224    | 221    | 148   | 968   | 47    | 40     |
| 7     | 14   | 29    | 74    | 240    | 130   | 700    | 523    | 196    | 129   | 467   | 52    | 37     |
| 8     | 14   | 31    | 108   | 280    | 120   | 480    | 2,100  | 190    | 116   | 318   | 56    | 36     |
| 9     | 19   | 31    | 145   | 296    | 120   | 400    | 2,060  | 1,660  | 109   | 344   | 52    | 35     |
| 10    | 21   | 30    | 165   | 522    | 110   | 360    | 1,830  | 3,650  | 105   | 277   | 48    | 33     |
| 11    | 21   | 29    | 139   | 1,340  | 110   | 340    | 1,280  | 3,290  | 97    | 202   | 44    | 32     |
| 12    | 32   | 29    | 108   | 1,290  | 100   | 310    | 912    | 2,520  | 88    | 167   | 44    | 32     |
| 13    | 41   | 29    | 86    | 803    | 100   | 1,150  | 1,790  | 1,170  | 108   | 140   | 44    | 180    |
| 14    | 34   | 29    | 83    | 539    | 110   | 4,150  | 3,240  | 761    | 232   | 144   | 41    | 1,610  |
| 15    | 41   | 31    | 122   | 340    | 180   | 4,480  | 2,980  | 2,530  | 387   | 205   | 40    | 1,740  |
| 16    | 36   | 31    | 309   | 260    | 380   | 3,720  | 2,590  | 4,050  | 394   | 250   | 35    | 847    |
| 17    | 29   | 30    | 494   | 200    | 650   | 3,110  | 3,680  | 3,690  | 311   | 220   | 41    | 548    |
| 18    | 24   | 31    | 443   | 170    | 911   | 2,520  | 3,690  | 2,730  | 228   | 232   | 45    | 322    |
| 19    | 22   | 34    | 285   | 150    | 560   | 1,530  | 2,820  | 1,350  | 184   | 190   | 57    | 218    |
| 20    | 21   | 34    | 182   | 140    | 450   | 957    | 3,670  | 756    | 143   | 164   | 96    | 163    |
| 21    | 22   | 36    | 139   | 190    | 320   | 696    | 6,260  | 539    | 120   | 125   | 103   | 128    |
| 22    | 26   | 36    | 115   | 220    | 240   | 1,100  | 9,290  | 416    | 108   | 123   | 89    | 103    |
| 23    | 31   | 42    | 103   | 517    | 190   | 2,380  | 11,200 | 335    | 102   | 104   | 114   | 87     |
| 24    | 38   | 40    | 98    | 610    | 150   | 2,070  | 7,910  | 277    | 99    | 88    | 162   | 83     |
| 25    | 32   | 36    | 91    | 500    | 130   | 1,080  | 4,630  | 233    | 91    | 93    | 253   | 93     |
| 26    | 28   | 33    | 83    | 340    | 110   | 731    | 1,810  | 199    | 88    | 97    | 178   | 263    |
| 27    | 30   | 33    | 78    | 280    | 90    | 571    | 1,040  | 171    | 85    | 85    | 120   | 1,080  |
| 28    | 31   | 36    | 75    | 240    | 82    | 471    | 742    | 154    | 80    | 79    | 90    | 1,350  |
| 29    | 28   | 43    | 74    | 200    | 76    | 403    | 572    | 139    | 165   | 79    | 72    | 1,140  |
| 30    | 28   | 43    | 93    | 160    | ----- | 360    | 461    | 170    | 395   | 69    | 58    | 2,460  |
| 31    | 29   | ----- | 624   | 130    | ----- | 312    | -----  | 352    | ----- | 58    | 50    | -----  |
| TOTAL | 787  | 957   | 4,609 | 13,934 | 6,189 | 46,761 | 78,531 | 33,338 | 5,444 | 9,064 | 2,285 | 12,892 |
| MEAN  | 25.4 | 31.9  | 149   | 449    | 213   | 1,508  | 2,618  | 1,075  | 181   | 292   | 73.7  | 430    |
| MAX   | 41   | 43    | 624   | 1,460  | 911   | 4,480  | 11,200 | 4,050  | 395   | 1,260 | 253   | 2,460  |
| MIN   | 14   | 24    | 47    | 130    | 76    | 140    | 224    | 139    | 80    | 58    | 35    | 32     |
| CFSM  | .03  | .04   | .19   | .58    | .28   | 1.95   | 3.38   | 1.39   | .23   | .38   | .10   | .56    |
| IN.   | .04  | .05   | .22   | .67    | .30   | 2.25   | 3.77   | 1.60   | .26   | .44   | .11   | .62    |

CAL YR 1971 TOTAL 163,783 MEAN 449 MAX 6,610 MIN 11 CFSM .58 IN 7.87  
WTR YR 1972 TOTAL 214,791 MEAN 587 MAX 11,200 MIN 14 CFSM .76 IN 10.32

## PEAK DISCHARGE (BASE, 4,200 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-15 | 0800 | 10.98 | 4,550     | 5-16 | 1800 | 10.54 | 4,200     |
| 4-23 | 0500 | 17.77 | 11,900    |      |      |       |           |



04198000 Sandusky River near Fremont, Ohio

LOCATION.--Lat 41°18'28", long 83°09'32", in sec. 17, T.4 N., R.15 E., Sandusky County, on left bank at downstream side of county road bridge, 2.3 miles upstream from Ballville diversion dam, 2.5 miles downstream from Wolf Creek, and 3.5 miles southwest of Fremont.

DRAINAGE AREA.--1,251 sq mi.

PERIOD OF RECORD.--November 1898 to March 1901 (gage heights and discharge measurements only, published as "at Fremont"), October 1923 to December 1935, July 1938 to current year. Monthly discharge only for October 1923, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 626.3 ft above mean sea level, adjustment of 1912. Nov. 18, 1898, to Mar. 10, 1901, nonrecording gage at site 4 miles downstream at different datum. Nov. 8, 1923, to Sept. 5, 1930, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--46 years (1923-35, 1938-72), 920 cfs (9.99 inches per year).

EXTREMES.--Current year: Maximum discharge, 17,300 cfs Apr. 23 (gage height, 8.28 ft); minimum, 28 cfs Oct. 7, 8 (gage height, 0.90 ft).

Period of record: Maximum discharge, about 28,000 cfs Feb. 10, 1959; maximum gage height, 15.20 ft Feb. 10, 1959, from floodmark (ice jam); minimum discharge, 4.4 cfs Feb. 29, 1964 (result of freezeup); minimum gage height, 0.78 ft Oct. 20, 1963.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 744: 1931-32. WSP 874: 1938. WSP 1144: 1924-30. WSP 1387: 1925, 1928-29, 1931-35. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV   | DEC      | JAN        | FEB    | MAR      | APR     | MAY    | JUN    | JUL    | AUG   | SEP    |
|-------------|---------------|-------|----------|------------|--------|----------|---------|--------|--------|--------|-------|--------|
| 1           | 41            | 39    | 62       | 1,640      | 180    | 190      | 440     | 660    | 600    | 834    | 80    | 68     |
| 2           | 39            | 41    | 62       | 1,610      | 160    | 2,610    | 392     | 640    | 526    | 749    | 74    | 61     |
| 3           | 37            | 41    | 57       | 940        | 180    | 6,380    | 361     | 553    | 473    | 600    | 83    | 59     |
| 4           | 35            | 39    | 55       | 630        | 240    | 5,120    | 369     | 473    | 415    | 640    | 101   | 67     |
| 5           | 33            | 37    | 55       | 520        | 300    | 3,460    | 384     | 415    | 490    | 1,430  | 89    | 62     |
| 6           | 31            | 33    | 62       | 460        | 250    | 1,900    | 384     | 369    | 384    | 1,250  | 80    | 61     |
| 7           | 28            | 35    | 97       | 500        | 230    | 1,100    | 392     | 323    | 281    | 761    | 86    | 56     |
| 8           | 29            | 37    | 172      | 560        | 210    | 740      | 1,790   | 316    | 223    | 465    | 83    | 52     |
| 9           | 35            | 37    | 187      | 399        | 200    | 600      | 2,590   | 3,050  | 187    | 399    | 83    | 50     |
| 10          | 51            | 39    | 235      | 808        | 190    | 500      | 2,290   | 6,430  | 172    | 392    | 80    | 49     |
| 11          | 47            | 41    | 223      | 1,850      | 180    | 540      | 1,830   | 4,990  | 156    | 295    | 74    | 47     |
| 12          | 37            | 39    | 177      | 2,160      | 170    | 499      | 1,320   | 3,700  | 141    | 229    | 68    | 48     |
| 13          | 37            | 39    | 141      | 1,450      | 170    | 1,880    | 1,430   | 2,160  | 482    | 187    | 65    | 62     |
| 14          | 53            | 39    | 129      | 840        | 240    | 7,700    | 3,940   | 1,250  | 738    | 204    | 62    | 1,190  |
| 15          | 55            | 41    | 267      | 600        | 340    | 7,620    | 4,020   | 3,000  | 1,200  | 323    | 59    | 3,800  |
| 16          | 49            | 41    | 465      | 440        | 500    | 6,190    | 3,630   | 5,740  | 1,610  | 834    | 57    | 2,120  |
| 17          | 51            | 41    | 703      | 360        | 900    | 5,120    | 5,400   | 5,320  | 969    | 590    | 65    | 1,380  |
| 18          | 49            | 41    | 715      | 300        | 1,500  | 4,090    | 5,300   | 4,150  | 670    | 424    | 71    | 846    |
| 19          | 45            | 45    | 526      | 270        | 1,100  | 2,760    | 4,190   | 2,460  | 482    | 440    | 80    | 523    |
| 20          | 41            | 47    | 353      | 250        | 700    | 1,710    | 4,880   | 1,300  | 369    | 954    | 141   | 384    |
| 21          | 37            | 45    | 248      | 300        | 460    | 1,210    | 8,660   | 886    | 288    | 482    | 166   | 281    |
| 22          | 35            | 45    | 193      | 400        | 360    | 1,380    | 12,300  | 670    | 235    | 302    | 182   | 207    |
| 23          | 37            | 45    | 161      | 600        | 280    | 3,460    | 16,500  | 535    | 210    | 229    | 166   | 158    |
| 24          | 39            | 45    | 141      | 1,000      | 240    | 3,390    | 12,600  | 440    | 193    | 166    | 182   | 137    |
| 25          | 45            | 49    | 137      | 700        | 200    | 2,020    | 7,400   | 369    | 177    | 166    | 261   | 126    |
| 26          | 47            | 47    | 129      | 500        | 180    | 1,250    | 3,510   | 309    | 172    | 150    | 304   | 179    |
| 27          | 43            | 49    | 125      | 420        | 160    | 940      | 1,830   | 267    | 182    | 161    | 209   | 1,510  |
| 28          | 41            | 53    | 113      | 360        | 150    | 761      | 1,260   | 235    | 150    | 137    | 154   | 3,100  |
| 29          | 41            | 51    | 109      | 300        | 140    | 640      | 940     | 217    | 235    | 113    | 123   | 2,390  |
| 30          | 41            | 62    | 172      | 240        | -----  | 562      | 749     | 260    | 726    | 105    | 96    | 3,990  |
| 31          | 39            | ----- | 499      | 200        | -----  | 499      | -----   | 482    | -----  | 89     | 78    | -----  |
| TOTAL       | 1,268         | 1,283 | 6,770    | 21,607     | 10,110 | 76,821   | 111,081 | 52,009 | 13,136 | 14,100 | 3,502 | 23,063 |
| MEAN        | 40.9          | 42.8  | 218      | 697        | 349    | 2,478    | 3,703   | 1,678  | 438    | 455    | 113   | 769    |
| MAX         | 55            | 62    | 715      | 2,160      | 1,500  | 7,700    | 16,500  | 6,430  | 1,610  | 1,430  | 304   | 3,990  |
| MIN         | 28            | 33    | 55       | 200        | 140    | 190      | 361     | 217    | 141    | 89     | 57    | 47     |
| CFSM        | .03           | .03   | .17      | .56        | .28    | 1.98     | 2.96    | 1.34   | .35    | .36    | .09   | .61    |
| IN.         | .04           | .04   | .20      | .64        | .30    | 2.28     | 3.30    | 1.55   | .39    | .42    | .10   | .69    |
| CAL YR 1971 | TOTAL 314,072 |       | MEAN 860 | MAX 19,900 | MIN 28 | CFSM .69 | IN 9.34 |        |        |        |       |        |
| WTR YR 1972 | TOTAL 334,750 |       | MEAN 915 | MAX 16,500 | MIN 28 | CFSM .73 | IN 9.95 |        |        |        |       |        |

## PEAK DISCHARGE (BASE, 7,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-3  | 0600 | 4.87  | 7,000     | 4-23 | 0930 | 8.28  | 17,300    |
| 3-14 | 1700 | 5.44  | 8,570     | 5-10 | 0330 | 4.90  | 7,080     |

## STREAMS TRIBUTARY TO LAKE ERIE

04199000 Huron River at Milan, Ohio

LOCATION.--Lat 41°18'06", long 82°36'25", in SW 1/4 sec.4, T.5 N., R.22 W., Erie County, on right bank 500 ft downstream from bridge on U.S. Highway 250, 0.2 mile northwest of Milan and 2.0 miles downstream from confluence of East and West Branches.

DRAINAGE AREA.--371 sq mi.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 573.26 ft above mean sea level. Prior to July 29, 1953, non-recording gage at site of former highway bridge 45 ft upstream at same datum.

AVERAGE DISCHARGE.--22 years, 279 cfs (10.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,650 cfs Sept. 30 (gage height, 16.15 ft); minimum, 6.3 cfs Oct. 3, 4.

Period of record: Maximum discharge, 49,600 cfs July 5, 1969 (gage height, 31.1 ft, from floodmark) from rating curve extended above 18,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 2.2 cfs Sept. 10, 15, 19, 20, 21, 1955.

REMARKS.--Records good. Water-quality records for the current year at the monitor station 4.2 miles downstream are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY    | JUN    | JUL   | AUG   | SEP    |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|--------|
| 1     | 9.1   | 24    | 33    | 328   | 36    | 181    | 168    | 160    | 125    | 445   | 33    | 58     |
| 2     | 7.7   | 28    | 29    | 199   | 32    | 3,140  | 156    | 172    | 104    | 255   | 31    | 49     |
| 3     | 6.3   | 10    | 23    | 175   | 36    | 2,020  | 144    | 148    | 88     | 214   | 31    | 48     |
| 4     | 7.7   | 18    | 25    | 165   | 42    | 622    | 152    | 123    | 229    | 242   | 52    | 48     |
| 5     | 8.2   | 15    | 27    | 141   | 50    | 378    | 144    | 106    | 372    | 196   | 48    | 50     |
| 6     | 10    | 15    | 37    | 128   | 44    | 236    | 129    | 96     | 174    | 150   | 39    | 48     |
| 7     | 11    | 18    | 75    | 110   | 40    | 238    | 138    | 102    | 111    | 121   | 54    | 41     |
| 8     | 9.6   | 14    | 114   | 101   | 36    | 220    | 172    | 116    | 82     | 100   | 57    | 36     |
| 9     | 19    | 16    | 134   | 141   | 32    | 208    | 178    | 1,630  | 67     | 92    | 49    | 35     |
| 10    | 19    | 20    | 92    | 1,020 | 30    | 168    | 194    | 1,220  | 58     | 88    | 42    | 31     |
| 11    | 19    | 19    | 75    | 700   | 28    | 158    | 188    | 526    | 45     | 75    | 37    | 31     |
| 12    | 18    | 10    | 67    | 402   | 26    | 172    | 176    | 332    | 41     | 83    | 34    | 33     |
| 13    | 18    | 20    | 65    | 200   | 30    | 2,110  | 228    | 250    | 1,000  | 236   | 33    | 81     |
| 14    | 38    | 19    | 66    | 120   | 40    | 3,460  | 455    | 298    | 2,050  | 280   | 45    | 1,790  |
| 15    | 20    | 19    | 263   | 95    | 352   | 1,260  | 603    | 1,240  | 712    | 262   | 27    | 2,560  |
| 16    | 17    | 19    | 494   | 80    | 646   | 937    | 766    | 1,150  | 874    | 268   | 23    | 664    |
| 17    | 15    | 16    | 245   | 70    | 450   | 1,170  | 1,560  | 658    | 452    | 210   | 503   | 722    |
| 18    | 15    | 17    | 139   | 65    | 260   | 721    | 760    | 395    | 250    | 142   | 2,040 | 1,770  |
| 19    | 15    | 21    | 100   | 70    | 210   | 493    | 450    | 292    | 180    | 1,250 | 742   | 532    |
| 20    | 19    | 21    | 89    | 80    | 190   | 372    | 1,320  | 230    | 142    | 520   | 438   | 312    |
| 21    | 10    | 23    | 81    | 95    | 170   | 320    | 1,730  | 194    | 123    | 206   | 228   | 214    |
| 22    | 19    | 24    | 75    | 130   | 156   | 1,330  | 2,840  | 180    | 119    | 208   | 254   | 160    |
| 23    | 19    | 20    | 65    | 170   | 192   | 1,200  | 1,920  | 132    | 245    | 74    | 739   | 130    |
| 24    | 21    | 21    | 62    | 240   | 129   | 508    | 751    | 118    | 380    | 78    | 355   | 127    |
| 25    | 24    | 19    | 52    | 210   | 101   | 388    | 460    | 102    | 300    | 111   | 310   | 125    |
| 26    | 19    | 19    | 50    | 130   | 89    | 312    | 342    | 88     | 335    | 79    | 469   | 404    |
| 27    | 21    | 24    | 48    | 90    | 90    | 262    | 270    | 75     | 320    | 72    | 305   | 1,180  |
| 28    | 19    | 24    | 48    | 70    | 86    | 228    | 222    | 67     | 222    | 53    | 162   | 1,460  |
| 29    | 19    | 29    | 46    | 60    | 101   | 218    | 190    | 63     | 452    | 42    | 116   | 652    |
| 30    | 18    | 42    | 227   | 50    | ----- | 212    | 168    | 110    | 808    | 35    | 88    | 3,810  |
| 31    | 16    | ----- | 788   | 42    | ----- | 186    | -----  | 148    | -----  | 30    | 70    | -----  |
| TOTAL | 515.6 | 622   | 3,734 | 5,677 | 3,724 | 23,428 | 16,974 | 10,521 | 10,460 | 6,217 | 7,454 | 17,201 |
| MEAN  | 16.6  | 20.7  | 120   | 183   | 128   | 756    | 566    | 339    | 349    | 201   | 240   | 573    |
| MAX   | 38    | 42    | 788   | 1,020 | 646   | 3,460  | 2,840  | 1,630  | 2,050  | 1,250 | 2,040 | 3,810  |
| MIN   | 6.3   | 14    | 23    | 42    | 26    | 158    | 129    | 63     | 41     | 30    | 23    | 31     |
| CFSM  | .04   | .06   | .32   | .49   | .35   | 2.04   | 1.53   | .91    | .94    | .54   | .65   | 1.54   |
| IN.   | .05   | .06   | .37   | .57   | .37   | 2.35   | 1.70   | 1.05   | 1.05   | .62   | .75   | 1.72   |

CAL YR 1971 TOTAL 64,980.2 MEAN 178 MAX 4,660 MIN 6.0 CFSM .48 IN 6.52  
WTR YR 1972 TOTAL 106,527.6 MEAN 291 MAX 3,810 MIN 6.3 CFSM .78 IN 10.68

PEAK DISCHARGE (BASE, 4,700 CFS).--Sept. 30 (1830) 5,650 cfs (16.15 ft).

## STREAMS TRIBUTARY TO LAKE ERIE

189

04199500 Vermilion River near Vermilion, Ohio

LOCATION.--Lat 41°22'55", long 82°19'01", in T.6 N., R.19 W., Lorain County, on right bank 40 ft downstream from bridge on North Ridge Road, 3.5 miles southeast of Vermilion and 4.5 miles upstream from mouth.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 595.14 ft above mean sea level. Prior to Aug. 3, 1953, non-recording gage at site 40 ft upstream at same datum.

AVERAGE DISCHARGE.--22 years, 226 cfs (11.72 inches per year).

EXTREMES.--Current record: Maximum discharge, 3,270 cfs Mar. 14; maximum gage height, 5.86 ft Feb. 16 (back-water from ice); minimum discharge, 1.6 cfs Oct. 5, 6.  
Period of record: Maximum discharge, 40,800 cfs July 6, 1969 (gage height, 17.14 ft), from rating curve extended above 9,800 cfs on basis of contracted-opening measurement of peak flow; no flow at times in many years.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1912: Drainage area. WRD Ohio 1970: 1969.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC     | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG     | SEP     |
|-------|-------|-------|---------|-------|-------|--------|--------|-------|-------|-------|---------|---------|
| 1     | 3.1   | 2.7   | 15      | 542   | 46    | 310    | 130    | 111   | 65    | 330   | 15      | 18      |
| 2     | 2.5   | 2.6   | 13      | 295   | 40    | 2,120  | 115    | 140   | 60    | 173   | 13      | 16      |
| 3     | 2.1   | 2.7   | 19      | 224   | 44    | 1,870  | 105    | 118   | 52    | 248   | 13      | 16      |
| 4     | 1.8   | 3.0   | 15      | 197   | 55    | 658    | 109    | 100   | 47    | 370   | 12      | 16      |
| 5     | 1.7   | 2.9   | 8.5     | 180   | 60    | 392    | 107    | 96    | 161   | 188   | 15      | 13      |
| 6     | 1.8   | 3.1   | 11      | 160   | 55    | 252    | 105    | 85    | 115   | 130   | 15      | 12      |
| 7     | 3.8   | 3.5   | 62      | 140   | 46    | 212    | 111    | 74    | 68    | 90    | 26      | 11      |
| 8     | 3.2   | 4.0   | 85      | 130   | 42    | 248    | 115    | 74    | 46    | 73    | 31      | 10      |
| 9     | 4.4   | 3.9   | 64      | 212   | 38    | 398    | 167    | 798   | 36    | 66    | 17      | 9.9     |
| 10    | 8.6   | 4.0   | 74      | 602   | 36    | 224    | 158    | 1,260 | 28    | 53    | 15      | 8.7     |
| 11    | 5.9   | 3.9   | 59      | 693   | 34    | 167    | 146    | 482   | 23    | 46    | 12      | 7.9     |
| 12    | 4.3   | 4.0   | 41      | 392   | 32    | 179    | 133    | 264   | 21    | 41    | 11      | 7.9     |
| 13    | 3.7   | 4.1   | 32      | 268   | 50    | 1,260  | 173    | 185   | 33    | 70    | 10      | 9.5     |
| 14    | 8.9   | 4.1   | 38      | 160   | 135   | 2,940  | 375    | 212   | 191   | 70    | 9.5     | 295     |
| 15    | 7.0   | 4.6   | 199     | 120   | 300   | 1,510  | 1,300  | 335   | 256   | 73    | 7.9     | 852     |
| 16    | 4.9   | 4.9   | 271     | 100   | 750   | 924    | 816    | 560   | 135   | 80    | 6.9     | 476     |
| 17    | 3.7   | 5.2   | 232     | 85    | 600   | 1,350  | 1,300  | 488   | 128   | 54    | 12      | 335     |
| 18    | 3.0   | 4.7   | 121     | 85    | 430   | 834    | 843    | 285   | 92    | 85    | 17      | 1,350   |
| 19    | 2.6   | 6.1   | 72      | 90    | 300   | 530    | 404    | 191   | 59    | 416   | 567     | 345     |
| 20    | 2.4   | 7.6   | 55      | 100   | 250   | 370    | 637    | 138   | 41    | 109   | 220     | 176     |
| 21    | 2.2   | 7.7   | 50      | 130   | 200   | 295    | 1,950  | 107   | 34    | 63    | 100     | 118     |
| 22    | 2.3   | 6.1   | 44      | 191   | 190   | 780    | 1,650  | 87    | 35    | 49    | 155     | 81      |
| 23    | 3.1   | 7.2   | 47      | 228   | 230   | 1,180  | 1,770  | 73    | 609   | 44    | 176     | 59      |
| 24    | 3.1   | 5.6   | 36      | 290   | 170   | 542    | 679    | 62    | 355   | 57    | 109     | 56      |
| 25    | 2.9   | 5.4   | 33      | 320   | 130   | 370    | 386    | 52    | 220   | 28    | 81      | 49      |
| 26    | 3.0   | 5.2   | 30      | 182   | 110   | 285    | 272    | 44    | 173   | 32    | 260     | 102     |
| 27    | 3.1   | 6.1   | 31      | 120   | 100   | 228    | 204    | 38    | 232   | 46    | 123     | 204     |
| 28    | 3.0   | 7.4   | 33      | 85    | 110   | 194    | 161    | 34    | 176   | 39    | 68      | 644     |
| 29    | 2.7   | 7.7   | 30      | 70    | 120   | 170    | 133    | 31    | 194   | 28    | 43      | 500     |
| 30    | 2.9   | 14    | 275     | 60    | ----- | 155    | 115    | 59    | 440   | 22    | 30      | 1,390   |
| 31    | 2.9   | ----- | 617     | 50    | ----- | 140    | -----  | 70    | ----- | 18    | 22      | -----   |
| TOTAL | 110.6 | 154.0 | 2,712.5 | 6,501 | 4,703 | 21,087 | 14,669 | 6,653 | 4,125 | 3,191 | 2,212.3 | 7,187.9 |
| MEAN  | 3.57  | 5.13  | 87.5    | 210   | 162   | 680    | 489    | 215   | 138   | 103   | 71.4    | 240     |
| MAX   | 8.9   | 14    | 617     | 693   | 750   | 2,940  | 1,950  | 1,260 | 609   | 416   | 567     | 1,390   |
| MIN   | 1.7   | 2.6   | 8.5     | 50    | 32    | 140    | 105    | 31    | 21    | 18    | 6.9     | 7.9     |
| CFSM  | .01   | .02   | .33     | .80   | .62   | 2.60   | 1.87   | .82   | .53   | .39   | .27     | .92     |
| IN.   | .02   | .02   | .39     | .92   | .67   | 2.99   | 2.08   | .94   | .59   | .45   | .31     | 1.02    |

CAL YR 1971 TOTAL 54,707.68 MEAN 150 MAX 3,400 MIN .90 CFSM .57 IN 7.77  
WTR YR 1972 TOTAL 73,306.30 MEAN 200 MAX 2,940 MIN 1.7 CFSM .76 IN 10.41

PEAK DISCHARGE (BASE, 3,200 CFS).--Mar. 14 (0800) 3,270 cfs (5.77 ft).

## 04200500 Black River at Elyria, Ohio

LOCATION.--Lat 41°22'49", long 82°06'17", in T.6 N., R.17 W., Lorain County, on left bank in Cascade Park at Elyria, 0.8 mile downstream from confluence of East and West Branches.

DRAINAGE AREA.--396 sq mi.

PERIOD OF RECORD.--October 1944 to current year. Records for May 1903 to July 1960 (published as "near Elyria") published in WSP 97, 129, and 205, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 620.83 ft above mean sea level.

AVERAGE DISCHARGE.--28 years, 304 cfs (10.43 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,100 cfs Sept. 18 (gage height, 11.60 ft); minimum, 6.0 cfs Oct. 24.

Period of record: Maximum discharge, 51,700 cfs July 6, 1969 (gage height, 26.4 ft, from floodmark), from rating curve extended above 13,000 cfs on basis of slope-area measurement of peak flow; no flow for part of Oct. 10, 1956 (result of temporary storage at dam upstream).

REMARKS.--Records good. Some regulation at low flow for industrial use. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area. See also PERIOD OF RECORD.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|--------|
| 1     | 14    | 10    | 38    | 992   | 58    | 585    | 185    | 157   | 59    | 628   | 22    | 45     |
| 2     | 18    | 15    | 33    | 397   | 50    | 2,720  | 159    | 171   | 53    | 265   | 20    | 33     |
| 3     | 25    | 11    | 32    | 335   | 68    | 2,670  | 149    | 165   | 44    | 249   | 19    | 34     |
| 4     | 22    | 12    | 22    | 283   | 75    | 1,020  | 155    | 165   | 37    | 559   | 19    | 27     |
| 5     | 17    | 14    | 15    | 253   | 86    | 400    | 151    | 145   | 33    | 288   | 15    | 25     |
| 6     | 22    | 11    | 52    | 195   | 74    | 240    | 145    | 118   | 31    | 175   | 18    | 25     |
| 7     | 24    | 8.8   | 208   | 187   | 70    | 277    | 155    | 96    | 28    | 123   | 72    | 22     |
| 8     | 12    | 9.6   | 348   | 165   | 65    | 604    | 163    | 165   | 25    | 88    | 53    | 22     |
| 9     | 29    | 12    | 388   | 230   | 58    | 716    | 189    | 1,370 | 29    | 77    | 31    | 20     |
| 10    | 29    | 13    | 189   | 890   | 52    | 360    | 201    | 1,880 | 22    | 74    | 25    | 15     |
| 11    | 24    | 14    | 147   | 922   | 48    | 249    | 193    | 778   | 16    | 64    | 20    | 16     |
| 12    | 22    | 15    | 120   | 514   | 42    | 275    | 171    | 345   | 18    | 52    | 17    | 20     |
| 13    | 28    | 11    | 99    | 310   | 51    | 2,390  | 193    | 225   | 44    | 43    | 14    | 75     |
| 14    | 25    | 8.4   | 122   | 237   | 75    | 4,540  | 392    | 235   | 26    | 158   | 16    | 755    |
| 15    | 19    | 14    | 680   | 163   | 175   | 2,430  | 3,020  | 418   | 50    | 145   | 20    | 2,070  |
| 16    | 13    | 14    | 866   | 130   | 508   | 1,390  | 1,580  | 454   | 41    | 104   | 28    | 1,110  |
| 17    | 10    | 16    | 526   | 120   | 649   | 2,020  | 1,770  | 370   | 31    | 75    | 500   | 885    |
| 18    | 11    | 15    | 265   | 106   | 628   | 1,560  | 1,110  | 277   | 24    | 171   | 251   | 4,930  |
| 19    | 11    | 23    | 173   | 113   | 582   | 803    | 520    | 195   | 23    | 351   | 690   | 2,240  |
| 20    | 10    | 11    | 145   | 138   | 406   | 535    | 1,150  | 143   | 23    | 163   | 684   | 862    |
| 21    | 9.2   | 12    | 169   | 171   | 308   | 378    | 2,650  | 111   | 20    | 106   | 330   | 340    |
| 22    | 8.8   | 12    | 157   | 179   | 265   | 979    | 2,360  | 92    | 31    | 65    | 235   | 203    |
| 23    | 8.8   | 14    | 123   | 275   | 298   | 1,660  | 2,090  | 78    | 979   | 53    | 259   | 155    |
| 24    | 7.6   | 12    | 90    | 397   | 265   | 866    | 846    | 67    | 826   | 50    | 167   | 129    |
| 25    | 11    | 14    | 65    | 360   | 195   | 550    | 445    | 57    | 454   | 41    | 131   | 116    |
| 26    | 12    | 13    | 59    | 181   | 155   | 415    | 310    | 49    | 275   | 35    | 507   | 236    |
| 27    | 14    | 17    | 65    | 140   | 147   | 322    | 241    | 39    | 167   | 48    | 529   | 1,190  |
| 28    | 14    | 12    | 82    | 110   | 147   | 269    | 195    | 33    | 109   | 43    | 205   | 1,430  |
| 29    | 13    | 24    | 86    | 96    | 217   | 237    | 155    | 31    | 344   | 32    | 116   | 1,010  |
| 30    | 8.4   | 44    | 685   | 80    | ----- | 215    | 134    | 57    | 846   | 25    | 78    | 2,980  |
| 31    | 7.6   | ----- | 1,520 | 65    | ----- | 201    | -----  | 64    | ----- | 24    | 58    | -----  |
| TOTAL | 499.4 | 431.8 | 7,569 | 8,734 | 5,817 | 31,876 | 21,177 | 8,550 | 4,708 | 4,374 | 5,149 | 21,020 |
| MEAN  | 16.1  | 14.4  | 244   | 282   | 201   | 1,028  | 706    | 276   | 157   | 141   | 166   | 701    |
| MAX   | 29    | 44    | 1,520 | 992   | 649   | 4,540  | 3,020  | 1,880 | 979   | 628   | 690   | 4,930  |
| MIN   | 7.6   | 8.4   | 15    | 65    | 42    | 201    | 134    | 31    | 16    | 24    | 14    | 15     |
| CFSM  | .04   | .04   | .62   | .71   | .51   | 2.60   | 1.78   | .70   | .40   | .36   | .42   | 1.77   |
| IN.   | .05   | .04   | .71   | .82   | .55   | 2.99   | 1.99   | .80   | .44   | .41   | .48   | 1.97   |

CAL YR 1971 TOTAL 82,172.7 MEAN 225 MAX 5,530 MIN 5.4 CFSM .57 IN 7.72  
WTR YR 1972 TOTAL 119,905.2 MEAN 328 MAX 4,930 MIN 7.6 CFSM .83 IN 11.26

## PEAK DISCHARGE (BASE, 3,200 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-2  | 2000 | 8.63  | 3,440     | 4-15 | 1130 | 10.08 | 4,680     |
| 3-14 | 1000 | 10.18 | 4,770     | 9-18 | 1100 | 11.60 | 6,100     |



04201500 Rocky River near Berea, Ohio

LOCATION.--Lat 41°24'24", long 81°53'14", in T.6 N., R.15 W., Cuyahoga County, on right bank at downstream side of Cedar Point Road Bridge in Rocky River Reservation just downstream from confluence of East and West Branches, and 3.0 miles northwest of Berea.

DRAINAGE AREA.--267 sq mi.

PERIOD OF RECORD.--October 1923 to September 1935, September 1943 to current year. Monthly discharge only for October 1923, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 649.90 ft above mean sea level (Cuyahoga County bench mark). Prior to Sept. 30, 1935, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 252 cfs (12.82 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,670 cfs June 29 (gage height, 6.27 ft); minimum, 2.4 cfs June 12.

Period of record: Maximum discharge, 21,400 cfs Jan. 22, 1959 (gage height, 14.10 ft), from rating curve extended above 11,000 cfs on basis of contracted-opening measurement of peak flow; maximum gage height, 18.6 ft June 29, 1924 (backwater caused by tornado); minimum discharge, 0.2 cfs Sept. 2, 1932, Aug. 18, 19, 27, 28, 30, 31, 1933.

Flood of March 1913 reached a stage of 20.9 ft.

REMARKS.--Records good. Some regulation at low flow by small reservoirs on East Branch. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1437: 1924, 1925(M), 1926, 1927(M), 1928-29, 1930-35(M), 1945. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT             | NOV      | DEC       | JAN     | FEB       | MAR      | APR    | MAY     | JUN      | JUL   | AUG   | SEP    |
|-------------|-----------------|----------|-----------|---------|-----------|----------|--------|---------|----------|-------|-------|--------|
| 1           | 60              | 17       | 284       | 435     | 50        | 1,380    | 163    | 197     | 82       | 681   | 29    | 46     |
| 2           | 29              | 18       | 130       | 317     | 44        | 3,180    | 150    | 295     | 211      | 367   | 25    | 37     |
| 3           | 20              | 16       | 85        | 344     | 55        | 1,300    | 138    | 306     | 99       | 1,230 | 27    | 58     |
| 4           | 15              | 20       | 54        | 256     | 65        | 595      | 167    | 235     | 34       | 799   | 30    | 46     |
| 5           | 13              | 17       | 50        | 220     | 75        | 373      | 167    | 167     | 17       | 467   | 27    | 30     |
| 6           | 14              | 18       | 218       | 190     | 65        | 216      | 138    | 131     | 11       | 588   | 25    | 25     |
| 7           | 68              | 19       | 1,040     | 184     | 60        | 262      | 193    | 105     | 9.5      | 355   | 105   | 24     |
| 8           | 48              | 17       | 908       | 135     | 55        | 1,090    | 221    | 154     | 6.2      | 226   | 71    | 25     |
| 9           | 102             | 19       | 316       | 251     | 50        | 448      | 180    | 1,220   | 5.1      | 202   | 60    | 24     |
| 10          | 250             | 20       | 198       | 807     | 46        | 262      | 171    | 975     | 7.3      | 251   | 46    | 22     |
| 11          | 141             | 19       | 218       | 501     | 44        | 207      | 154    | 409     | 6.2      | 240   | 39    | 20     |
| 12          | 60              | 20       | 214       | 289     | 42        | 415      | 123    | 202     | 3.2      | 146   | 30    | 36     |
| 13          | 35              | 21       | 136       | 207     | 50        | 2,750    | 251    | 146     | 17       | 112   | 27    | 150    |
| 14          | 26              | 21       | 244       | 180     | 120       | 2,880    | 339    | 216     | 25       | 135   | 48    | 450    |
| 15          | 21              | 22       | 1,640     | 140     | 550       | 1,320    | 4,180  | 311     | 66       | 119   | 262   | 1,400  |
| 16          | 20              | 23       | 884       | 110     | 938       | 1,130    | 1,950  | 256     | 150      | 95    | 105   | 750    |
| 17          | 17              | 23       | 311       | 95      | 409       | 1,620    | 1,730  | 193     | 74       | 216   | 610   | 600    |
| 18          | 15              | 22       | 187       | 90      | 422       | 965      | 739    | 150     | 20       | 295   | 474   | 3,400  |
| 19          | 15              | 39       | 140       | 100     | 428       | 543      | 461    | 105     | 8.4      | 714   | 467   | 1,480  |
| 20          | 16              | 31       | 169       | 120     | 226       | 355      | 2,020  | 69      | 3.6      | 171   | 588   | 508    |
| 21          | 17              | 36       | 330       | 160     | 197       | 317      | 1,340  | 46      | 6.2      | 71    | 188   | 250    |
| 22          | 18              | 40       | 226       | 221     | 391       | 1,300    | 1,800  | 32      | 22       | 44    | 573   | 184    |
| 23          | 17              | 32       | 133       | 361     | 367       | 1,240    | 1,170  | 30      | 2,560    | 44    | 391   | 142    |
| 24          | 20              | 29       | 108       | 391     | 207       | 573      | 588    | 18      | 1,330    | 48    | 180   | 142    |
| 25          | 20              | 28       | 92        | 300     | 131       | 480      | 397    | 20      | 1,120    | 39    | 105   | 163    |
| 26          | 20              | 26       | 102       | 138     | 142       | 409      | 295    | 17      | 673      | 32    | 251   | 765    |
| 27          | 20              | 42       | 152       | 112     | 127       | 379      | 231    | 13      | 322      | 48    | 367   | 1,800  |
| 28          | 19              | 75       | 202       | 79      | 146       | 284      | 180    | 8.4     | 180      | 50    | 221   | 790    |
| 29          | 19              | 119      | 190       | 74      | 657       | 216      | 150    | 4.0     | 3,450    | 46    | 119   | 501    |
| 30          | 17              | 385      | 1,290     | 65      | -----     | 245      | 135    | 20      | 2,720    | 39    | 79    | 3,500  |
| 31          | 16              | -----    | 1,600     | 55      | -----     | 211      | -----  | 44      | -----    | 32    | 60    | -----  |
| TOTAL       | 1,188           | 1,234    | 11,851    | 6,927   | 6,159     | 26,945   | 19,921 | 6,094.4 | 13,238.7 | 7,902 | 5,629 | 17,368 |
| MEAN        | 38.3            | 41.1     | 382       | 223     | 212       | 869      | 664    | 197     | 441      | 255   | 182   | 579    |
| MAX         | 250             | 385      | 1,640     | 807     | 938       | 3,180    | 4,180  | 1,220   | 3,450    | 1,230 | 610   | 3,500  |
| MIN         | 13              | 16       | 50        | 55      | 42        | 207      | 123    | 4.0     | 3.2      | 32    | 25    | 20     |
| CFSM        | .14             | .15      | 1.43      | .84     | .79       | 3.25     | 2.49   | .74     | 1.65     | .96   | .68   | 2.17   |
| IN.         | .17             | .17      | 1.65      | .97     | .86       | 3.75     | 2.78   | .85     | 1.84     | 1.10  | .78   | 2.42   |
| CAL YR 1971 | TOTAL 77,988.8  | MEAN 214 | MAX 4,560 | MIN 8.6 | CFSM .80  | IN 10.87 |        |         |          |       |       |        |
| WTR YR 1972 | TOTAL 124,457.1 | MEAN 340 | MAX 4,180 | MIN 3.2 | CFSM 1.27 | IN 17.34 |        |         |          |       |       |        |

## PEAK DISCHARGE (BASE, 4,000 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-13 | 1800 | 4.78  | 4,150     | 6-29 | 1800 | 6.27  | 6,670     |
| 4-15 | 1300 | 6.14  | 6,430     | 9-30 | 1300 | 5.02  | 4,530     |
| 6-23 | 1500 | 5.05  | 4,580     |      |      |       |           |

## STREAMS TRIBUTARY TO LAKE ERIE

04202000 Cuyahoga River at Hiram Rapids, Ohio

LOCATION.--Lat 41°20'26", long 81°10'01", in T.5 N., R.7 W., Portage County, on left bank at downstream side of bridge on Winchell Road at Hiram Rapids, 0.6 mile downstream from Black Brook.

DRAINAGE AREA.--151 sq mi.

PERIOD OF RECORD.--August 1927 to December 1935 (published as "near Hiram"), October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,087.46 ft above mean sea level, unadjusted. Prior to Aug. 26, 1927, nonrecording gage and Aug. 26, 1927, to Dec. 31, 1935, water-stage recorder, at site 2.8 miles downstream at different datum. Oct. 20, 1944, to Oct. 22, 1946, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years, 196 cfs (17.63 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,900 cfs Mar. 4 (gage height, 5.75 ft); minimum, 18 cfs Oct. 5. Period of record: Maximum discharge, 3,670 cfs Jan. 23, 1959 (gage height, 8.11 ft), from rating curve extended above 2,600 cfs; minimum, 5.1 cfs Sept. 2, 1933.

REMARKS.--Records good. Flow regulated by East Branch Reservoir (usable capacity, 4,140 acre-ft) 14.6 miles upstream since 1939 and by LaDue Reservoir (usable capacity, 18,110 acre-ft) 9.8 miles upstream since 1961. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1054: 1945. WSP 1437: 1931. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 1     | 31    | 40    | 209   | 446   | 110   | 277    | 208    | 164   | 106   | 333   | 24    | 55    |
| 2     | 28    | 39    | 235   | 524   | 96    | 646    | 200    | 164   | 54    | 277   | 32    | 52    |
| 3     | 25    | 39    | 235   | 479   | 95    | 1,420  | 195    | 178   | 44    | 241   | 48    | 51    |
| 4     | 21    | 42    | 209   | 402   | 117   | 1,770  | 193    | 183   | 39    | 210   | 56    | 52    |
| 5     | 19    | 48    | 177   | 333   | 100   | 1,320  | 190    | 178   | 35    | 185   | 58    | 51    |
| 6     | 25    | 54    | 202   | 284   | 110   | 1,040  | 190    | 166   | 34    | 173   | 56    | 50    |
| 7     | 67    | 59    | 347   | 235   | 120   | 686    | 190    | 160   | 31    | 162   | 56    | 48    |
| 8     | 98    | 68    | 533   | 218   | 110   | 668    | 180    | 148   | 42    | 154   | 64    | 47    |
| 9     | 116   | 71    | 646   | 178   | 110   | 619    | 170    | 208   | 50    | 142   | 76    | 47    |
| 10    | 140   | 71    | 605   | 173   | 100   | 637    | 164    | 271   | 52    | 128   | 89    | 48    |
| 11    | 145   | 73    | 515   | 180   | 100   | 547    | 158    | 354   | 60    | 117   | 98    | 49    |
| 12    | 143   | 74    | 418   | 188   | 110   | 479    | 150    | 336   | 64    | 107   | 98    | 50    |
| 13    | 135   | 74    | 340   | 195   | 116   | 511    | 150    | 294   | 73    | 109   | 92    | 58    |
| 14    | 127   | 70    | 287   | 198   | 128   | 731    | 154    | 253   | 84    | 102   | 84    | 81    |
| 15    | 113   | 70    | 358   | 180   | 150   | 1,050  | 247    | 220   | 101   | 104   | 73    | 96    |
| 16    | 89    | 70    | 406   | 170   | 170   | 1,160  | 398    | 195   | 128   | 125   | 66    | 109   |
| 17    | 68    | 68    | 450   | 150   | 200   | 1,120  | 765    | 166   | 138   | 126   | 63    | 156   |
| 18    | 51    | 65    | 450   | 130   | 198   | 1,010  | 935    | 144   | 138   | 128   | 60    | 233   |
| 19    | 42    | 65    | 394   | 128   | 208   | 845    | 845    | 130   | 126   | 142   | 58    | 195   |
| 20    | 33    | 72    | 340   | 142   | 215   | 673    | 718    | 119   | 107   | 150   | 58    | 168   |
| 21    | 27    | 87    | 294   | 162   | 198   | 529    | 592    | 106   | 82    | 152   | 60    | 142   |
| 22    | 25    | 107   | 256   | 180   | 195   | 462    | 547    | 94    | 56    | 148   | 58    | 112   |
| 23    | 24    | 118   | 223   | 205   | 205   | 442    | 542    | 81    | 68    | 138   | 61    | 84    |
| 24    | 31    | 116   | 208   | 215   | 173   | 442    | 542    | 94    | 106   | 128   | 62    | 58    |
| 25    | 40    | 100   | 200   | 229   | 168   | 438    | 502    | 123   | 152   | 114   | 62    | 48    |
| 26    | 44    | 87    | 185   | 220   | 164   | 406    | 426    | 117   | 247   | 95    | 62    | 63    |
| 27    | 46    | 85    | 175   | 213   | 210   | 358    | 343    | 114   | 422   | 73    | 61    | 121   |
| 28    | 45    | 105   | 185   | 193   | 148   | 315    | 280    | 109   | 493   | 53    | 63    | 126   |
| 29    | 43    | 129   | 198   | 170   | 166   | 277    | 232    | 104   | 458   | 40    | 64    | 142   |
| 30    | 41    | 183   | 262   | 150   | ----- | 250    | 190    | 107   | 394   | 34    | 63    | 315   |
| 31    | 41    | ----- | 354   | 130   | ----- | 226    | -----  | 110   | ----- | 28    | 60    | ----- |
| TOTAL | 1,923 | 2,349 | 9,896 | 7,000 | 4,290 | 21,354 | 10,596 | 5,190 | 3,984 | 4,218 | 1,985 | 2,927 |
| MEAN  | 62.0  | 78.3  | 319   | 226   | 148   | 689    | 353    | 167   | 133   | 136   | 64.0  | 97.6  |
| MAX   | 145   | 183   | 646   | 524   | 215   | 1,770  | 935    | 354   | 493   | 333   | 98    | 315   |
| MIN   | 19    | 39    | 175   | 128   | 95    | 226    | 150    | 81    | 31    | 28    | 24    | 47    |
| MEAN+ | 55.6  | 85.7  | 429   | 232   | 146   | 683    | 353    | 156   | 145   | 133   | 39.6  | 131   |
| CFSM+ | .37   | .57   | 2.84  | 1.54  | .97   | 4.52   | 2.34   | 1.03  | .96   | .88   | .26   | .87   |
| IN.+  | .42   | .63   | 3.28  | 1.77  | 1.04  | 5.21   | 2.60   | 1.19  | 1.07  | 1.01  | .30   | .97   |

CAL YR 1971 TOTAL 72,403 MEAN 198 MAX 2,010 MIN 19 MEAN+ 198 CFSM+ 1.31 IN.+ 17.79  
WTR YR 1972 TOTAL 75,712 MEAN 207 MAX 1,770 MIN 19 MEAN+ 217 CFSM+ 1.44 IN.+ 19.52

+ Adjusted for change in contents of East Branch and LaDue Reservoirs.

## STREAMS TRIBUTARY TO LAKE ERIE

193

04204000 Little Cuyahoga River at Mogadore, Ohio

LOCATION.--Lat 41°03'47", long 81°23'38", in T.1 N., R.10 W., Summit County, on left bank at upstream side of bridge on State Highway 532, 500 ft downstream from Mogadore Reservoir, 0.8 mile upstream from Wingfoot Lake Outlet, and 0.8 mile north of Mogadore.

DRAINAGE AREA.--17.3 sq mi, includes unnamed tributary 0.2 mile downstream.

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

GAGE.--Water-stage recorder. Datum of gage is 1,058.74 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--26 years, 12.9 cfs.

EXTREMES.--Current year: Maximum discharge, 149 cfs Apr. 20 (gage height, 4.25 ft); minimum, 1.0 cfs Aug. 8, 9. Period of record: Maximum discharge, 167 cfs Mar. 10, 1964 (gage height, 3.75 ft); maximum gage height, 4.30 ft Jan. 21, 1959 (backwater from aquatic growth); minimum discharge, 0.10 cfs Oct. 29, 30, 31, 1967.

REMARKS.--Records fair. Flow regulated by Mogadore Reservoir (usable capacity, 6,540 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1912: Drainage area. WRD Ohio 1970: 1969.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV       | DEC     | JAN     | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|---------------|-----------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 17            | 5.8       | 23      | 35      | 7.2   | 32    | 26    | 24    | 9.1   | 10    | 5.5   | 4.2   |
| 2           | 12            | 6.4       | 22      | 32      | 7.2   | 48    | 24    | 24    | 11    | 9.8   | 6.8   | 3.9   |
| 3           | 13            | 6.4       | 20      | 30      | 8.7   | 41    | 24    | 25    | 9.8   | 24    | 8.3   | 3.9   |
| 4           | 12            | 5.2       | 20      | 29      | 9.8   | 37    | 22    | 23    | 8.7   | 22    | 8.7   | 7.9   |
| 5           | 9.4           | 4.5       | 20      | 29      | 8.3   | 34    | 22    | 21    | 8.3   | 24    | 15    | 11    |
| 6           | 8.7           | 4.5       | 42      | 25      | 8.3   | 30    | 20    | 20    | 7.9   | 24    | 14    | 7.9   |
| 7           | 9.8           | 5.2       | 65      | 22      | 8.7   | 34    | 26    | 19    | 6.8   | 22    | 1.5   | 5.5   |
| 8           | 8.7           | 3.9       | 71      | 20      | 7.9   | 41    | 24    | 24    | 6.4   | 21    | 1.2   | 4.2   |
| 9           | 11            | 3.6       | 59      | 20      | 7.5   | 34    | 20    | 51    | 6.4   | 21    | 1.0   | 3.1   |
| 10          | 16            | 3.6       | 51      | 22      | 7.2   | 33    | 19    | 36    | 6.8   | 27    | 2.2   | 2.4   |
| 11          | 11            | 3.6       | 44      | 20      | 6.8   | 31    | 18    | 31    | 5.8   | 23    | 3.9   | 1.7   |
| 12          | 9.4           | 3.6       | 40      | 18      | 6.8   | 33    | 17    | 28    | 5.5   | 22    | 4.8   | 2.2   |
| 13          | 9.1           | 3.6       | 35      | 18      | 10    | 74    | 68    | 26    | 8.7   | 21    | 5.2   | 7.5   |
| 14          | 8.7           | 3.3       | 38      | 16      | 12    | 89    | 51    | 27    | 8.3   | 21    | 5.2   | 19    |
| 15          | 8.3           | 3.6       | 64      | 15      | 15    | 71    | 79    | 24    | 8.3   | 24    | 5.2   | 12    |
| 16          | 8.3           | 3.6       | 49      | 13      | 14    | 76    | 83    | 20    | 9.8   | 40    | 4.8   | 9.1   |
| 17          | 7.9           | 3.9       | 42      | 12      | 12    | 74    | 79    | 19    | 8.7   | 33    | 6.8   | 8.7   |
| 18          | 7.9           | 4.2       | 38      | 12      | 12    | 61    | 65    | 18    | 8.3   | 28    | 6.1   | 18    |
| 19          | 7.5           | 5.8       | 34      | 12      | 12    | 51    | 57    | 16    | 7.9   | 26    | 7.2   | 13    |
| 20          | 6.8           | 5.8       | 35      | 12      | 12    | 45    | 105   | 15    | 7.5   | 24    | 6.1   | 11    |
| 21          | 6.8           | 6.8       | 32      | 12      | 12    | 42    | 83    | 15    | 7.5   | 22    | 5.5   | 7.9   |
| 22          | 6.8           | 12        | 29      | 12      | 16    | 51    | 87    | 13    | 7.5   | 20    | 5.2   | 9.1   |
| 23          | 7.2           | 14        | 26      | 15      | 12    | 44    | 84    | 12    | 14    | 19    | 5.5   | 9.8   |
| 24          | 7.5           | 14        | 24      | 13      | 12    | 41    | 55    | 12    | 12    | 18    | 4.8   | 11    |
| 25          | 8.7           | 15        | 23      | 13      | 12    | 39    | 48    | 11    | 17    | 17    | 4.2   | 9.8   |
| 26          | 7.9           | 15        | 23      | 11      | 15    | 35    | 39    | 9.4   | 13    | 16    | 6.1   | 25    |
| 27          | 7.5           | 17        | 24      | 9.4     | 13    | 33    | 32    | 8.3   | 12    | 17    | 5.5   | 23    |
| 28          | 6.8           | 20        | 26      | 9.8     | 16    | 30    | 27    | 7.9   | 11    | 15    | 5.2   | 17    |
| 29          | 6.8           | 23        | 23      | 9.1     | 22    | 30    | 24    | 7.5   | 12    | 22    | 4.5   | 16    |
| 30          | 6.4           | 32        | 70      | 8.7     | ----- | 30    | 24    | 9.8   | 12    | 14    | 4.2   | 66    |
| 31          | 6.1           | -----     | 49      | 7.9     | ----- | 28    | ----- | 10    | ----- | 10    | 4.2   | ----- |
| TOTAL       | 281.0         | 258.9     | 1,161   | 532.9   | 323.4 | 1,371 | 1,352 | 606.9 | 278.0 | 656.8 | 174.4 | 350.8 |
| MEAN        | 9.06          | 8.63      | 37.5    | 17.2    | 11.2  | 44.2  | 45.1  | 19.6  | 9.27  | 21.2  | 5.63  | 11.7  |
| MAX         | 17            | 32        | 71      | 35      | 22    | 89    | 105   | 51    | 17    | 40    | 15    | 66    |
| MIN         | 6.1           | 3.3       | 20      | 7.9     | 6.8   | 28    | 17    | 7.5   | 5.5   | 9.8   | 1.0   | 1.7   |
| CAL YR 1971 | TOTAL 5,169.8 | MEAN 14.2 | MAX 91  | MIN 1.0 |       |       |       |       |       |       |       |       |
| WTP YR 1972 | TOTAL 7,347.1 | MEAN 20.1 | MAX 105 | MIN 1.0 |       |       |       |       |       |       |       |       |

## STREAMS TRIBUTARY TO LAKE ERIE

04204500 Little Cuyahoga River at Massillon Road, Akron, Ohio

LOCATION.--Lat 41°03'37", long 81°27'48", in T.1 N., R.10 W., Summit County, on left bank 50 ft downstream from bridge on Massillon Road in Akron and 250 ft upstream from Springfield Lake Outlet.

DRAINAGE AREA.--31.6 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,005.20 ft above mean sea level (city of Akron bench mark).

AVERAGE DISCHARGE.--26 years, 26.6 cfs.

EXTREMES.--Current year: Maximum discharge, 246 cfs Apr. 20 (gage height, 1.94 ft); minimum, 5.8 cfs Nov. 15 (gage height, 0.39 ft).

Period of record: Maximum discharge, 891 cfs Jan. 21, 1959 (gage height, 3.99 ft); minimum, 1.6 cfs Oct. 3, 19, 1963; minimum gage height, 0.16 ft Sept. 24, 1964, July 16, 1965.

REMARKS.--Records good. Flow regulated by Mogadore Reservoir 4.5 miles upstream (usable capacity, 6,540 acre-ft) and Wingfoot Lake 7.2 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 15    | 8.0   | 28    | 58    | 20    | 58    | 39    | 39    | 27    | 18    | 13    | 7.9   |
| 2     | 12    | 10    | 23    | 55    | 21    | 91    | 38    | 39    | 28    | 17    | 14    | 7.7   |
| 3     | 11    | 8.8   | 21    | 50    | 27    | 68    | 37    | 43    | 20    | 82    | 15    | 8.0   |
| 4     | 12    | 7.7   | 19    | 49    | 24    | 56    | 37    | 38    | 16    | 53    | 16    | 9.2   |
| 5     | 11    | 7.6   | 19    | 50    | 21    | 48    | 34    | 35    | 15    | 47    | 16    | 15    |
| 6     | 12    | 8.0   | 62    | 42    | 21    | 43    | 30    | 33    | 15    | 45    | 24    | 11    |
| 7     | 15    | 8.1   | 93    | 37    | 21    | 49    | 43    | 30    | 14    | 35    | 13    | 8.8   |
| 8     | 10    | 7.6   | 83    | 32    | 20    | 69    | 36    | 44    | 14    | 38    | 11    | 8.2   |
| 9     | 21    | 7.5   | 66    | 35    | 21    | 50    | 31    | 111   | 17    | 39    | 10    | 8.7   |
| 10    | 21    | 7.2   | 58    | 40    | 20    | 47    | 30    | 64    | 15    | 59    | 11    | 7.6   |
| 11    | 15    | 7.5   | 51    | 38    | 19    | 44    | 29    | 49    | 12    | 43    | 12    | 7.2   |
| 12    | 12    | 6.9   | 45    | 33    | 20    | 52    | 27    | 42    | 12    | 38    | 12    | 11    |
| 13    | 11    | 6.6   | 39    | 31    | 30    | 139   | 99    | 41    | 29    | 35    | 12    | 49    |
| 14    | 10    | 6.3   | 50    | 30    | 31    | 142   | 65    | 46    | 19    | 37    | 12    | 79    |
| 15    | 9.9   | 6.6   | 89    | 25    | 36    | 105   | 105   | 42    | 19    | 51    | 11    | 30    |
| 16    | 14    | 6.9   | 63    | 23    | 31    | 127   | 105   | 38    | 22    | 103   | 9.2   | 18    |
| 17    | 14    | 7.2   | 51    | 23    | 27    | 127   | 105   | 37    | 16    | 71    | 16    | 18    |
| 18    | 15    | 7.2   | 44    | 23    | 28    | 99    | 75    | 35    | 15    | 58    | 11    | 62    |
| 19    | 10    | 9.4   | 40    | 26    | 25    | 81    | 66    | 32    | 15    | 50    | 18    | 30    |
| 20    | 8.6   | 9.4   | 41    | 25    | 22    | 71    | 179   | 30    | 14    | 44    | 11    | 24    |
| 21    | 8.7   | 11    | 41    | 25    | 27    | 68    | 117   | 29    | 17    | 38    | 9.6   | 17    |
| 22    | 8.6   | 12    | 34    | 29    | 34    | 91    | 133   | 29    | 16    | 34    | 9.4   | 17    |
| 23    | 13    | 14    | 30    | 33    | 26    | 78    | 93    | 27    | 38    | 31    | 10    | 19    |
| 24    | 13    | 15    | 27    | 31    | 24    | 68    | 73    | 25    | 30    | 29    | 9.9   | 22    |
| 25    | 11    | 16    | 26    | 30    | 24    | 63    | 62    | 24    | 37    | 26    | 9.2   | 18    |
| 26    | 9.8   | 16    | 26    | 24    | 34    | 58    | 53    | 22    | 26    | 23    | 14    | 78    |
| 27    | 9.1   | 19    | 29    | 23    | 29    | 53    | 49    | 18    | 21    | 28    | 9.9   | 61    |
| 28    | 8.6   | 22    | 33    | 23    | 32    | 50    | 43    | 17    | 22    | 23    | 9.5   | 33    |
| 29    | 8.7   | 31    | 28    | 22    | 48    | 49    | 39    | 16    | 34    | 38    | 9.0   | 28    |
| 30    | 8.0   | 48    | 121   | 21    | ----- | 50    | 37    | 30    | 22    | 22    | 8.5   | 173   |
| 31    | 7.8   | ----- | 81    | 21    | ----- | 45    | ----- | 24    | ----- | 14    | 8.1   | ----- |
| TOTAL | 365.8 | 358.5 | 1,461 | 1,007 | 763   | 2,239 | 1,909 | 1,129 | 617   | 1,269 | 374.3 | 886.3 |
| MEAN  | 11.8  | 12.0  | 47.1  | 32.5  | 26.3  | 72.2  | 63.6  | 36.4  | 20.6  | 40.9  | 12.1  | 29.5  |
| MAX   | 21    | 48    | 121   | 58    | 48    | 142   | 179   | 111   | 38    | 103   | 24    | 173   |
| MIN   | 7.8   | 6.3   | 19    | 21    | 19    | 43    | 27    | 16    | 12    | 14    | 8.1   | 7.2   |

CAL YR 1971 TOTAL 9,293.7 MEAN 25.5 MAX 173 MIN 4.8  
WTR YR 1972 TOTAL 12,378.9 MEAN 33.8 MAX 179 MIN 6.3



## STREAMS TRIBUTARY TO LAKE ERIE

195

04205000 Springfield Lake Outlet at Akron, Ohio

LOCATION.--Lat 41°03'21", long 81°27'52", in T.1 N., R.10 W., Summit County, on right bank 3.0 miles downstream from Springfield Lake in Akron, and 0.3 mile upstream from mouth.

DRAINAGE AREA.--9.72 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,015.34 ft above mean sea level (city of Akron bench mark).

AVERAGE DISCHARGE.--26 years, 5.49 cfs.

EXTREMES.--Current year: Maximum discharge, 100 cfs Apr. 13 (gage height, 2.26 ft); maximum gage height, 2.28 ft Jan. 16 (backwater from ice); minimum discharge, 0.20 cfs Oct. 30 (gage height, 1.11 ft).

Period of record: Maximum discharge, 519 cfs Jan. 21, 1959 (gage height, 3.42 ft), from rating curve extended above 95 cfs; maximum gage height, 3.57 ft, probably occurred Feb. 5, 1971 (backwater from ice); no flow at times in 1953-54, 1961-67, 1970.

REMARKS.--Records good. Flow regulated by Springfield Lake, Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | .64   | .25   | 3.8   | 6.6   | 2.4   | 13    | 9.8   | 11    | 7.7   | 2.0   | 5.4   | 2.1   |
| 2     | .56   | .36   | 2.2   | 6.9   | 2.8   | 22    | 9.8   | 10    | 7.7   | 1.5   | 5.4   | 2.1   |
| 3     | .49   | .36   | 1.6   | 5.4   | 3.2   | 13    | 9.0   | 13    | 5.6   | 36    | 5.4   | 2.1   |
| 4     | .42   | .30   | 1.4   | 5.6   | 2.8   | 10    | 9.0   | 16    | 4.6   | 11    | 5.1   | 2.1   |
| 5     | .36   | .25   | 1.4   | 6.2   | 2.5   | 8.1   | 8.1   | 9.4   | 4.1   | 9.0   | 4.8   | 1.8   |
| 6     | .49   | .49   | 1.1   | 4.6   | 2.5   | 6.6   | 7.7   | 8.1   | 3.8   | 6.9   | 4.8   | 1.6   |
| 7     | 1.1   | .56   | 17    | 4.2   | 2.5   | 9.8   | 12    | 8.1   | 3.8   | 5.4   | 4.8   | 1.6   |
| 8     | .56   | .30   | 9.4   | 4.0   | 2.4   | 15    | 9.0   | 12    | 3.4   | 6.6   | 4.8   | 1.6   |
| 9     | 3.3   | .42   | 5.1   | 4.8   | 2.2   | 9.0   | 7.7   | 30    | 3.8   | 7.2   | 4.6   | 1.6   |
| 10    | 2.4   | .56   | 4.1   | 5.4   | 2.2   | 7.7   | 7.7   | 15    | 1.8   | 14    | 4.6   | 1.5   |
| 11    | 1.1   | .64   | 3.6   | 5.1   | 2.1   | 7.7   | 7.3   | 11    | 1.4   | 9.0   | 3.6   | 1.5   |
| 12    | .92   | .64   | 2.6   | 4.6   | 2.0   | 10    | 6.9   | 9.0   | 1.4   | 11    | 2.6   | 2.6   |
| 13    | .64   | .64   | 2.2   | 4.0   | 1.8   | 42    | 44    | 7.7   | 5.4   | 9.8   | 2.4   | 12    |
| 14    | .64   | .73   | 7.0   | 3.4   | 1.5   | 34    | 19    | 10    | 2.4   | 9.8   | 2.4   | 21    |
| 15    | .56   | .92   | 16    | 3.0   | 7.3   | 23    | 30    | 8.5   | 4.5   | 13    | 2.6   | 5.4   |
| 16    | .49   | .56   | 6.6   | 2.8   | 9.0   | 31    | 26    | 7.7   | 4.1   | 30    | 2.2   | 3.8   |
| 17    | .36   | .49   | 4.1   | 2.8   | 6.9   | 30    | 23    | 7.7   | 2.2   | 15    | 5.7   | 3.4   |
| 18    | .36   | .49   | 3.0   | 3.0   | 5.0   | 23    | 15    | 6.9   | 1.6   | 13    | 2.8   | 13    |
| 19    | .30   | 1.8   | 2.6   | 3.2   | 3.8   | 19    | 13    | 6.9   | 1.4   | 12    | 6.7   | 4.6   |
| 20    | .30   | .92   | 3.0   | 3.4   | 3.3   | 16    | 44    | 6.6   | 1.2   | 11    | 3.0   | 3.4   |
| 21    | .25   | 1.8   | 3.0   | 3.6   | 4.5   | 16    | 25    | 6.2   | 2.8   | 10    | 2.6   | 2.8   |
| 22    | .36   | 1.4   | 2.2   | 3.8   | 4.0   | 23    | 29    | 5.6   | 2.2   | 9.8   | 2.4   | 2.2   |
| 23    | .36   | 1.4   | 2.0   | 3.8   | 3.7   | 19    | 20    | 5.4   | 7.3   | 9.8   | 2.6   | 3.0   |
| 24    | .49   | 1.2   | 2.1   | 3.6   | 3.6   | 16    | 16    | 5.4   | 4.4   | 9.4   | 2.4   | 3.4   |
| 25    | .49   | 1.6   | 2.0   | 3.0   | 4.0   | 14    | 14    | 5.4   | 5.6   | 8.1   | 2.2   | 2.8   |
| 26    | .30   | 1.4   | 2.2   | 2.8   | 4.6   | 13    | 12    | 4.8   | 3.4   | 7.7   | 3.9   | 17    |
| 27    | .30   | 2.4   | 2.4   | 2.7   | 5.1   | 12    | 11    | 4.1   | 2.4   | 9.8   | 2.4   | 9.8   |
| 28    | .25   | 2.4   | 3.8   | 2.7   | 6.2   | 11    | 10    | 4.1   | 3.4   | 7.3   | 2.4   | 5.9   |
| 29    | .25   | 4.1   | 2.6   | 3.0   | 9.4   | 11    | 9.8   | 3.8   | 7.7   | 6.2   | 2.2   | 4.8   |
| 30    | .25   | 7.7   | 29    | 1.8   | ----- | 10    | 9.8   | 9.3   | 2.4   | 5.9   | 2.1   | 44    |
| 31    | .25   | ----- | 11    | 2.4   | ----- | 9.4   | ----- | 5.6   | ----- | 5.6   | 2.1   | ----- |
| TOTAL | 19.54 | 37.48 | 160.1 | 122.2 | 113.3 | 504.3 | 474.6 | 274.3 | 113.5 | 322.8 | 111.0 | 184.5 |
| MEAN  | .63   | 1.25  | 5.16  | 3.94  | 3.91  | 16.3  | 15.8  | 8.85  | 3.78  | 10.4  | 3.58  | 6.15  |
| MAX   | 3.3   | 7.7   | 29    | 6.9   | 9.4   | 42    | 44    | 30    | 7.7   | 36    | 6.7   | 44    |
| MIN   | .25   | .25   | 1.1   | 1.8   | 1.5   | 6.6   | 6.9   | 3.8   | 1.2   | 1.5   | 2.1   | 1.5   |

CAL YR 1971 TOTAL 1,485.89 MEAN 4.07 MAX 55 MIN .12  
WTR YR 1972 TOTAL 2,437.62 MEAN 6.66 MAX 44 MIN .25

## STREAMS TRIBUTARY TO LAKE ERIE

04206000 Cuyahoga River at Old Portage, Ohio

LOCATION.--Lat 41°08'08", long 81°32'50", Summit County, on right bank 230 ft upstream from North Portage Path bridge at Old Portage, 1.2 miles downstream from Little Cuyahoga River, and 4 miles northwest of Akron City Hall.

DRAINAGE AREA.--404 sq mi.

PERIOD OF RECORD.--September 1921 to December 1935, March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 740.11 ft above mean sea level, unadjusted. Prior to Dec. 21, 1923, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years, 404 cfs.

EXTREMES.--Current year: Maximum discharge, 3,280 cfs June 28 (gage height, 8.74 ft); minimum, 50 cfs Nov. 18. Period of record: Maximum discharge, 6,500 cfs Jan. 21, 1959 (gage height, 11.54 ft), from rating curve extended above 3,900 cfs on basis of contracted-opening estimate of peak flow at site with drainage area of 488 sq mi adjusted to gaging station by drainage-area relation; minimum, 14 cfs Aug. 27, 1944.

REMARKS.--Records good. Natural flow of stream affected by diversions, storage reservoirs and power plants. At Lake Rockwell, 17.7 miles upstream from gage, an average of 75 cfs was diverted for municipal supply of city of Akron. Sewage from city enters river 2.9 miles downstream from station. Some diversion from the Tuscarawas drainage into this basin at Portage Lakes (see REMARKS for station 03116000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1307: 1924(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB   | MAR    | APR    | MAY    | JUN   | JUL    | AUG   | SEP   |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|-------|--------|-------|-------|
| 1     | 141   | 72    | 476    | 1,050  | 208   | 746    | 485    | 449    | 225   | 589    | 126   | 79    |
| 2     | 133   | 88    | 395    | 976    | 199   | 1,400  | 476    | 431    | 235   | 488    | 124   | 81    |
| 3     | 126   | 81    | 371    | 1,000  | 230   | 1,540  | 473    | 470    | 184   | 784    | 124   | 79    |
| 4     | 91    | 77    | 359    | 932    | 240   | 1,610  | 458    | 452    | 155   | 554    | 133   | 72    |
| 5     | 77    | 69    | 332    | 828    | 182   | 1,980  | 440    | 416    | 144   | 561    | 113   | 81    |
| 6     | 75    | 66    | 599    | 652    | 216   | 1,800  | 404    | 380    | 148   | 506    | 111   | 75    |
| 7     | 97    | 81    | 1,220  | 522    | 233   | 1,480  | 473    | 356    | 139   | 446    | 115   | 71    |
| 8     | 79    | 74    | 1,340  | 470    | 211   | 1,460  | 425    | 437    | 124   | 458    | 133   | 69    |
| 9     | 159   | 69    | 1,230  | 449    | 201   | 1,260  | 401    | 872    | 141   | 467    | 119   | 69    |
| 10    | 161   | 72    | 1,190  | 449    | 194   | 1,060  | 395    | 848    | 141   | 519    | 148   | 64    |
| 11    | 115   | 71    | 1,130  | 443    | 192   | 1,020  | 362    | 694    | 107   | 401    | 139   | 61    |
| 12    | 107   | 69    | 968    | 416    | 196   | 1,060  | 314    | 673    | 101   | 335    | 95    | 111   |
| 13    | 107   | 66    | 780    | 407    | 270   | 1,510  | 690    | 624    | 218   | 290    | 90    | 389   |
| 14    | 146   | 63    | 768    | 407    | 311   | 1,850  | 526    | 631    | 161   | 285    | 103   | 533   |
| 15    | 144   | 64    | 1,100  | 332    | 341   | 1,860  | 1,420  | 589    | 182   | 413    | 103   | 258   |
| 16    | 144   | 61    | 1,150  | 248    | 377   | 2,080  | 2,170  | 568    | 225   | 554    | 109   | 161   |
| 17    | 144   | 61    | 912    | 238    | 377   | 2,270  | 1,790  | 482    | 240   | 494    | 213   | 159   |
| 18    | 141   | 60    | 852    | 245    | 404   | 2,040  | 1,580  | 419    | 230   | 428    | 159   | 1,040 |
| 19    | 137   | 86    | 820    | 265    | 383   | 1,690  | 1,560  | 359    | 230   | 470    | 225   | 876   |
| 20    | 133   | 77    | 772    | 263    | 332   | 1,450  | 2,070  | 326    | 211   | 540    | 155   | 458   |
| 21    | 130   | 97    | 697    | 275    | 368   | 1,220  | 1,710  | 305    | 206   | 561    | 107   | 335   |
| 22    | 128   | 113   | 599    | 298    | 416   | 1,240  | 1,580  | 295    | 189   | 485    | 117   | 273   |
| 23    | 90    | 144   | 485    | 377    | 377   | 1,170  | 1,500  | 189    | 341   | 422    | 133   | 270   |
| 24    | 84    | 166   | 422    | 407    | 401   | 996    | 1,300  | 161    | 323   | 401    | 117   | 285   |
| 25    | 84    | 180   | 392    | 413    | 371   | 912    | 1,100  | 155    | 395   | 335    | 113   | 250   |
| 26    | 107   | 189   | 392    | 344    | 395   | 864    | 960    | 148    | 383   | 263    | 182   | 645   |
| 27    | 86    | 192   | 380    | 332    | 341   | 796    | 812    | 135    | 401   | 265    | 122   | 529   |
| 28    | 67    | 204   | 416    | 314    | 389   | 694    | 718    | 122    | 832   | 213    | 113   | 404   |
| 29    | 72    | 308   | 386    | 273    | 506   | 627    | 589    | 115    | 1,030 | 189    | 99    | 359   |
| 30    | 74    | 467   | 1,050  | 253    | ----- | 592    | 491    | 206    | 697   | 155    | 86    | 1,450 |
| 31    | 74    | ----- | 1,260  | 230    | ----- | 522    | -----  | 199    | ----- | 137    | 81    | ----- |
| TOTAL | 3,453 | 3,487 | 23,243 | 14,108 | 8,861 | 40,799 | 27,672 | 12,506 | 8,338 | 13,008 | 3,907 | 9,586 |
| MEAN  | 111   | 116   | 750    | 455    | 306   | 1,316  | 922    | 403    | 278   | 420    | 126   | 320   |
| MAX   | 161   | 467   | 1,340  | 1,050  | 506   | 2,270  | 2,170  | 872    | 1,030 | 784    | 225   | 1,450 |
| MIN   | 67    | 60    | 332    | 230    | 182   | 522    | 314    | 115    | 101   | 137    | 81    | 61    |

CAL YR 1971 TOTAL 135,461 MEAN 371 MAX 2,890 MIN 52  
WTR YR 1972 TOTAL 168,968 MEAN 462 MAX 2,270 MIN 60

## 04207200 Tinkers Creek at Bedford, Ohio

LOCATION.--Lat 41°23'04", long 81°31'39", in T.6 N., R.11 W., Cuyahoga County, on left bank at downstream side of bridge on State Highway 14 in Bedford, 5.5 miles upstream from mouth.

DRAINAGE AREA.--83.9 sq mi.

PERIOD OF RECORD.--November 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.18 ft above mean sea level.

AVERAGE DISCHARGE.--9 years (1963-72), 108 cfs (17.49 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,170 cfs June 23 (gage height, 6.64 ft); minimum, 11 cfs Sept. 11. Period of record: Maximum discharge, 7,220 cfs July 20, 1969 (gage height, 10.10 ft) from rating curve extended above 3,400 cfs on the basis of contracted-opening measurement of peak flow; minimum, 5.2 cfs Aug. 19, 1963.

REMARKS.--Records good except for period of no gage-height record which is poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR    | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|
| 1     | 24    | 19    | 170   | 290   | 30    | 724    | 79    | 102   | 40    | 129   | 19    | 18    |
| 2     | 20    | 21    | 120   | 210   | 28    | 1,060  | 81    | 133   | 49    | 74    | 19    | 16    |
| 3     | 16    | 20    | 95    | 180   | 46    | 739    | 81    | 121   | 34    | 98    | 19    | 23    |
| 4     | 16    | 20    | 85    | 170   | 59    | 506    | 104   | 104   | 26    | 78    | 18    | 18    |
| 5     | 16    | 20    | 80    | 160   | 55    | 264    | 88    | 76    | 22    | 183   | 16    | 17    |
| 6     | 26    | 22    | 200   | 150   | 42    | 140    | 73    | 59    | 20    | 124   | 16    | 16    |
| 7     | 119   | 27    | 480   | 120   | 45    | 205    | 88    | 62    | 19    | 73    | 52    | 16    |
| 8     | 37    | 24    | 460   | 100   | 42    | 352    | 82    | 174   | 16    | 52    | 58    | 16    |
| 9     | 226   | 24    | 310   | 110   | 40    | 313    | 72    | 900   | 20    | 74    | 26    | 16    |
| 10    | 160   | 22    | 250   | 130   | 38    | 185    | 68    | 542   | 17    | 119   | 23    | 14    |
| 11    | 82    | 22    | 230   | 140   | 38    | 131    | 67    | 352   | 14    | 62    | 19    | 15    |
| 12    | 45    | 20    | 180   | 110   | 38    | 144    | 60    | 135   | 15    | 45    | 18    | 52    |
| 13    | 31    | 20    | 160   | 90    | 120   | 605    | 91    | 88    | 78    | 48    | 16    | 78    |
| 14    | 27    | 18    | 190   | 80    | 140   | 858    | 81    | 98    | 87    | 67    | 18    | 230   |
| 15    | 24    | 20    | 490   | 58    | 274   | 802    | 941   | 88    | 231   | 62    | 21    | 96    |
| 16    | 21    | 22    | 310   | 55    | 243   | 746    | 1,200 | 76    | 177   | 109   | 18    | 53    |
| 17    | 19    | 20    | 220   | 50    | 209   | 512    | 893   | 68    | 119   | 112   | 102   | 69    |
| 18    | 19    | 20    | 190   | 47    | 180   | 475    | 460   | 60    | 56    | 99    | 40    | 618   |
| 19    | 19    | 24    | 160   | 55    | 140   | 274    | 212   | 50    | 47    | 224   | 106   | 374   |
| 20    | 18    | 30    | 150   | 75    | 109   | 169    | 379   | 40    | 36    | 108   | 42    | 378   |
| 21    | 17    | 32    | 160   | 70    | 112   | 142    | 310   | 35    | 38    | 54    | 34    | 190   |
| 22    | 18    | 36    | 140   | 71    | 172   | 397    | 640   | 36    | 44    | 40    | 163   | 76    |
| 23    | 26    | 44    | 120   | 118   | 133   | 360    | 387   | 32    | 903   | 64    | 85    | 52    |
| 24    | 21    | 46    | 100   | 120   | 107   | 316    | 271   | 26    | 937   | 74    | 40    | 63    |
| 25    | 25    | 50    | 85    | 110   | 89    | 215    | 151   | 24    | 501   | 38    | 29    | 54    |
| 26    | 24    | 55    | 90    | 64    | 86    | 172    | 115   | 21    | 285   | 30    | 26    | 358   |
| 27    | 22    | 60    | 95    | 58    | 70    | 151    | 89    | 18    | 163   | 33    | 30    | 296   |
| 28    | 22    | 80    | 110   | 43    | 130   | 125    | 73    | 16    | 91    | 29    | 108   | 236   |
| 29    | 20    | 120   | 100   | 39    | 369   | 109    | 62    | 16    | 480   | 24    | 22    | 151   |
| 30    | 20    | 240   | 250   | 36    | ----- | 111    | 56    | 65    | 208   | 21    | 22    | 685   |
| 31    | 19    | ----- | 340   | 32    | ----- | 91     | ----- | 50    | ----- | 19    | 20    | ----- |
| TOTAL | 1,198 | 1,198 | 6,120 | 3,141 | 3,184 | 11,393 | 7,354 | 3,667 | 4,773 | 2,366 | 1,252 | 4,294 |
| MEAN  | 38.6  | 39.9  | 197   | 101   | 110   | 368    | 245   | 118   | 159   | 76.3  | 40.4  | 143   |
| MAX   | 226   | 240   | 490   | 290   | 369   | 1,060  | 1,200 | 900   | 937   | 224   | 163   | 685   |
| MIN   | 16    | 18    | 80    | 32    | 28    | 91     | 56    | 16    | 14    | 19    | 16    | 14    |
| CFSM  | .46   | .48   | 2.35  | 1.20  | 1.31  | 4.39   | 2.92  | 1.41  | 1.90  | .91   | .48   | 1.70  |
| IN.   | .53   | .53   | 2.71  | 1.39  | 1.41  | 5.05   | 3.26  | 1.63  | 2.12  | 1.05  | .56   | 1.90  |

CAL YR 1971 TOTAL 37,313 MEAN 102 MAX 1,370 MIN 11 CFSM 1.22 IN 16.54  
WTR YR 1972 TOTAL 49,940 MEAN 136 MAX 1,200 MIN 14 CFSM 1.62 IN 22.14

## PEAK DISCHARGE (BASE, 1,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 4-16 | 1400 | 6.27  | 1,670     | 6-29 | 1430 | 6.69  | 1,770     |
| 6-23 | 1100 | 6.64  | 2,170     |      |      |       |           |

NOTE.--No gage-height record Nov. 9 to Jan. 14.

## STREAMS TRIBUTARY TO LAKE ERIE

04207500 Ohio Canal at Independence, Ohio

LOCATION.--Lat 41°23'25", long 81°37'30", in T.6 N., R.12 W., Cuyahoga County, on right bank at upstream side of dam, 0.3 mile upstream from Rockside Road and 0.8 mile northeast of Independence.

PERIOD OF RECORD.--September 1921 to May 1923, August 1927 to December 1935, October 1940 to current year.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 605.31 ft above mean sea level. Prior to Dec. 9, 1946, nonrecording gage, or water-stage recorder at site 0.4 mile downstream at various datums. Dec. 10, 1946, to Nov. 3, 1950, nonrecording gage at present site and datum.

EXTREMES.--Period of record: Maximum daily discharge, 277 cfs Jan. 22, 1959; no flow June 4, 1947, July 2-7, 1950, July 16 to Aug. 19, 1959.

REMARKS.--Records good. Water is diverted from Cuyahoga River into canal at headgates at Brecksville, 6 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 51    | 30    | 72    | 77    | 60    | 84    | 70    | 58    | 64    | 83    | 71    | 67    |
| 2     | 50    | 32    | 68    | 75    | 60    | 95    | 69    | 62    | 67    | 78    | 70    | 66    |
| 3     | 49    | 34    | 66    | 75    | 63    | 85    | 69    | 60    | 66    | 87    | 71    | 66    |
| 4     | 49    | 42    | 66    | 74    | 65    | 80    | 70    | 59    | 63    | 83    | 72    | 66    |
| 5     | 50    | 53    | 66    | 74    | 62    | 78    | 69    | 58    | 62    | 82    | 74    | 66    |
| 6     | 51    | 53    | 69    | 71    | 61    | 78    | 68    | 57    | 62    | 83    | 73    | 67    |
| 7     | 49    | 54    | 74    | 70    | 62    | 78    | 71    | 56    | 63    | 76    | 74    | 67    |
| 8     | 26    | 54    | 64    | 68    | 62    | 85    | 70    | 58    | 62    | 74    | 75    | 67    |
| 9     | 30    | 54    | 75    | 70    | 61    | 76    | 69    | 81    | 62    | 74    | 74    | 67    |
| 10    | 36    | 54    | 74    | 75    | 62    | 74    | 68    | 68    | 64    | 64    | 73    | 67    |
| 11    | 29    | 55    | 74    | 71    | 62    | 72    | 68    | 60    | 62    | 68    | 74    | 67    |
| 12    | 27    | 54    | 71    | 69    | 62    | 74    | 67    | 57    | 62    | 70    | 71    | 68    |
| 13    | 27    | 55    | 69    | 69    | 70    | 81    | 72    | 56    | 65    | 76    | 70    | 75    |
| 14    | 27    | 55    | 75    | 69    | 77    | 84    | 72    | 57    | 70    | 75    | 69    | 83    |
| 15    | 28    | 55    | 90    | 66    | 81    | 91    | 79    | 56    | 72    | 78    | 70    | 82    |
| 16    | 28    | 55    | 84    | 61    | 77    | 83    | 72    | 56    | 79    | 84    | 70    | 75    |
| 17    | 29    | 55    | 78    | 60    | 71    | 80    | 89    | 54    | 71    | 88    | 77    | 74    |
| 18    | 28    | 55    | 74    | 63    | 72    | 88    | 79    | 53    | 69    | 84    | 76    | 90    |
| 19    | 29    | 57    | 73    | 67    | 69    | 85    | 76    | 52    | 68    | 97    | 77    | 84    |
| 20    | 29    | 57    | 74    | 66    | 66    | 82    | 76    | 50    | 68    | 84    | 76    | 83    |
| 21    | 29    | 58    | 75    | 66    | 65    | 80    | 68    | 49    | 67    | 83    | 70    | 78    |
| 22    | 29    | 60    | 72    | 65    | 70    | 89    | 94    | 48    | 68    | 82    | 72    | 75    |
| 23    | 29    | 59    | 70    | 70    | 66    | 85    | 85    | 48    | 66    | 79    | 80    | 73    |
| 24    | 28    | 61    | 68    | 69    | 65    | 80    | 78    | 59    | 61    | 82    | 72    | 77    |
| 25    | 28    | 61    | 67    | 68    | 65    | 78    | 70    | 61    | 81    | 77    | 70    | 76    |
| 26    | 29    | 62    | 67    | 65    | 66    | 77    | 67    | 61    | 73    | 75    | 72    | 88    |
| 27    | 30    | 64    | 69    | 64    | 64    | 76    | 63    | 60    | 67    | 75    | 75    | 95    |
| 28    | 31    | 65    | 70    | 63    | 67    | 75    | 61    | 60    | 66    | 75    | 71    | 87    |
| 29    | 31    | 67    | 69    | 62    | 76    | 73    | 60    | 59    | 94    | 74    | 69    | 82    |
| 30    | 32    | 80    | 88    | 62    | ----- | 74    | 58    | 61    | 61    | 72    | 68    | 85    |
| 31    | 30    | ----- | 83    | 62    | ----- | 71    | ----- | 66    | ----- | 70    | 68    | ----- |
| TOTAL | 1,048 | 1,650 | 2,254 | 2,106 | 1,929 | 2,491 | 2,147 | 1,800 | 2,025 | 2,432 | 2,244 | 2,263 |
| MEAN  | 33.8  | 55.0  | 72.7  | 67.9  | 66.5  | 80.4  | 71.6  | 58.1  | 67.5  | 78.5  | 72.4  | 75.4  |
| MAX   | 51    | 80    | 90    | 77    | 81    | 95    | 94    | 81    | 94    | 97    | 80    | 95    |
| MIN   | 26    | 30    | 64    | 60    | 60    | 71    | 58    | 48    | 61    | 64    | 68    | 66    |

CAL YR 1971 TOTAL 23,463.6 MEAN 64.3 MAX 112 MIN 2.2  
WTR YR 1972 TOTAL 24,389.0 MEAN 66.6 MAX 97 MIN 26



## 04208000 Cuyahoga River at Independence, Ohio

LOCATION.--Lat 41°23'43", long 81°37'48", in T.6 N., R.12 W., Cuyahoga County, on left bank 240 ft downstream from bridge on Old Rockside Road, 0.8 mile northeast of Independence, and 3.0 miles downstream from Tinkers Creek.

DRAINAGE AREA.--707 sq mi.

PERIOD OF RECORD.--September 1903 to December 1905 (fragmentary), January to July 1906 (gage heights and discharge measurements only), September 1921 to May 1923, September 1927 to December 1935, March 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 583.57 ft above mean sea level. Sept. 21, 1903, to July 21, 1906, nonrecording gage at bridge 240 ft upstream at present datum. Sept. 28, 1921, to May 30, 1923, nonrecording gage at bridge 240 ft upstream at datum 2.42 ft higher. Sept. 5, to Oct. 8, 1927, nonrecording gage, and Oct. 9, 1927, to Dec. 31, 1935, Mar. 5, 1940, to June 19, 1969, water-stage recorder, at site 100 ft upstream and at present datum.

AVERAGE DISCHARGE.--41 years, (1921-22, 1927-35, 1940-72), 752 cfs (not including flow in Ohio Canal).

EXTREMES.--Current year: Maximum discharge, 8,750 cfs Apr. 15 (gage height, 15.05 ft); minimum, 61 cfs Sept. 10, 11.

Period of record: Maximum discharge, 24,800 cfs Jan. 22, 1959 (gage height, 22.41 ft), from rating curve extended above 17,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 14 cfs Nov. 30, 1930; minimum daily, 21 cfs Aug. 28, 1933; minimum combined daily discharge of river and canal, 55 cfs Aug. 28, 1933.

REMARKS.--Records good. Natural flow of stream affected by diversions, storage reservoirs and power plants. Some diversion from the Tuscarawas drainage into this basin at Portage Lakes (see REMARKS for station 03116000). Water diverted into Ohio Canal at Brecksville, 6 miles above station, bypasses station. These records do not include flow in canal except above about 15,000 cfs, when channels merge; record of diversion published as Ohio Canal at Independence (see preceding page). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1307: 1922-23(M), 1928-30(M), 1933(M), 1940(M), 1947(M), 1950(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV        | DEC       | JAN     | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG   | SEP    |
|-------------|---------------|------------|-----------|---------|--------|--------|--------|--------|--------|--------|-------|--------|
| 1           | 338           | 198        | 1,290     | 2,060   | 413    | 2,610  | 951    | 859    | 386    | 1,340  | 198   | 129    |
| 2           | 289           | 230        | 998       | 1,640   | 398    | 4,560  | 949    | 989    | 627    | 914    | 192   | 118    |
| 3           | 261           | 237        | 792       | 1,560   | 534    | 3,290  | 901    | 1,000  | 428    | 1,660  | 195   | 115    |
| 4           | 237           | 198        | 682       | 1,480   | 659    | 2,720  | 942    | 894    | 343    | 1,210  | 182   | 103    |
| 5           | 205           | 182        | 646       | 1,430   | 455    | 2,480  | 859    | 787    | 289    | 1,290  | 172   | 95     |
| 6           | 198           | 169        | 2,290     | 1,160   | 436    | 2,400  | 792    | 699    | 283    | 1,280  | 142   | 115    |
| 7           | 521           | 216        | 4,050     | 986     | 457    | 2,210  | 964    | 669    | 275    | 854    | 195   | 110    |
| 8           | 310           | 185        | 3,770     | 838     | 435    | 3,010  | 867    | 768    | 247    | 755    | 300   | 105    |
| 9           | 700           | 185        | 2,440     | 921     | 407    | 2,180  | 782    | 3,390  | 238    | 734    | 198   | 105    |
| 10          | 1,020         | 189        | 1,970     | 1,190   | 389    | 1,730  | 767    | 2,240  | 306    | 1,230  | 175   | 90     |
| 11          | 489           | 185        | 1,930     | 1,050   | 383    | 1,480  | 744    | 1,620  | 222    | 763    | 209   | 76     |
| 12          | 358           | 179        | 1,570     | 883     | 400    | 1,590  | 647    | 1,210  | 192    | 595    | 151   | 205    |
| 13          | 307           | 172        | 1,270     | 857     | 791    | 3,570  | 1,140  | 1,050  | 413    | 516    | 129   | 595    |
| 14          | 307           | 163        | 1,580     | 834     | 1,130  | 4,910  | 1,060  | 1,110  | 468    | 514    | 118   | 1,520  |
| 15          | 318           | 185        | 4,060     | 647     | 1,510  | 3,790  | 6,090  | 997    | 692    | 547    | 163   | 895    |
| 16          | 307           | 189        | 2,560     | 570     | 1,380  | 3,580  | 5,160  | 996    | 1,050  | 998    | 139   | 425    |
| 17          | 300           | 179        | 1,900     | 550     | 1,130  | 4,210  | 4,610  | 879    | 564    | 1,040  | 498   | 416    |
| 18          | 289           | 169        | 1,470     | 550     | 1,060  | 3,480  | 2,910  | 769    | 432    | 824    | 342   | 3,510  |
| 19          | 300           | 244        | 1,270     | 714     | 973    | 2,740  | 2,340  | 666    | 377    | 1,640  | 561   | 2,380  |
| 20          | 286           | 258        | 1,330     | 623     | 757    | 2,160  | 3,820  | 590    | 391    | 825    | 358   | 1,480  |
| 21          | 279           | 293        | 1,360     | 614     | 754    | 1,850  | 3,320  | 543    | 343    | 750    | 216   | 873    |
| 22          | 282           | 374        | 1,120     | 598     | 1,120  | 2,780  | 4,230  | 512    | 388    | 660    | 471   | 578    |
| 23          | 289           | 370        | 901       | 926     | 873    | 2,300  | 2,960  | 462    | 4,260  | 595    | 552   | 449    |
| 24          | 237           | 395        | 757       | 902     | 834    | 1,850  | 2,290  | 354    | 2,430  | 750    | 265   | 591    |
| 25          | 244           | 426        | 677       | 933     | 775    | 1,710  | 1,820  | 322    | 1,900  | 498    | 212   | 477    |
| 26          | 251           | 444        | 727       | 697     | 800    | 1,540  | 1,530  | 296    | 1,100  | 408    | 307   | 1,770  |
| 27          | 261           | 605        | 779       | 605     | 697    | 1,480  | 1,290  | 272    | 819    | 399    | 310   | 2,100  |
| 28          | 230           | 775        | 907       | 574     | 812    | 1,310  | 1,120  | 244    | 787    | 358    | 314   | 1,200  |
| 29          | 205           | 1,030      | 784       | 505     | 1,620  | 1,180  | 971    | 222    | 5,340  | 296    | 209   | 865    |
| 30          | 212           | 2,080      | 2,810     | 455     | -----  | 1,250  | 844    | 362    | 3,270  | 251    | 163   | 4,740  |
| 31          | 202           | -----      | 2,880     | 415     | -----  | 1,060  | -----  | 598    | -----  | 209    | 145   | -----  |
| TOTAL       | 10,032        | 10,704     | 51,570    | 27,767  | 22,382 | 77,010 | 57,670 | 26,369 | 28,860 | 24,703 | 7,781 | 26,230 |
| MEAN        | 324           | 357        | 1,664     | 896     | 772    | 2,484  | 1,922  | 851    | 962    | 797    | 251   | 874    |
| MAX         | 1,020         | 2,080      | 4,060     | 2,060   | 1,620  | 4,910  | 6,090  | 3,390  | 5,340  | 1,660  | 561   | 4,740  |
| MIN         | 198           | 163        | 646       | 415     | 383    | 1,060  | 647    | 222    | 192    | 209    | 118   | 76     |
| CAL YR 1971 | TOTAL 295,673 | MEAN 810   | MAX 6,610 | MIN 139 |        |        |        |        |        |        |       |        |
| WTR YR 1972 | TOTAL 371,078 | MEAN 1,014 | MAX 6,090 | MIN 76  |        |        |        |        |        |        |       |        |

## 04209000 Chagrin River at Willoughby, Ohio

LOCATION.--Lat 41°37'51", long 81°24'13", in T.9 N., R.10 W., Lake County, on left bank, 150 ft downstream from city waterworks dam, 800 ft downstream from East Branch, 1.0 mile southeast of Willoughby, and 5.0 miles upstream from mouth.

DRAINAGE AREA.--246 sq mi.

PERIOD OF RECORD.--July 1925 to November 1935, October 1939 to current year (July 1925 to September 1932 monthly run-off in inches, adjusted for diversion, published in WSP 1307; previously published run-off was unadjusted and should not be used).

GAGE.--Water-stage recorder. Datum of gage is 594.24 ft above mean sea level. Prior to Dec. 20, 1939, non-recording gage 150 ft upstream at datum 7 ft higher.

AVERAGE DISCHARGE.--43 years, 315 cfs (17.39 inches per year) adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 9,720 cfs June 23 (gage height, 11.68 ft); minimum, 10 cfs Sept. 6 (temporary regulation).

Period of record: Maximum discharge, 28,000 cfs Mar. 22, 1948 (gage height, 17.95 ft, from high-water mark in well), from rating curve extended above 14,000 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 3.0 cfs July 25, 26, 1934.

Flood in March 1913 reached a stage of 10.3 ft, from floodmark, former site and datum (discharge, 24,500 cfs).

REMARKS.--Records good. Water diverted at dam just above station for municipal supply of city of Willoughby. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1084: 1929(M), 1931(M). WSP 1307: 1926-28(M), 1930(M), 1932-35(M), 1942(M). WSP 1912: Drainage area. See also PERIOD OF RECORD.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT           | NOV      | DEC       | JAN    | FEB       | MAR        | APR        | MAY    | JUN    | JUL   | AUG   | SEP   |
|-------------|---------------|----------|-----------|--------|-----------|------------|------------|--------|--------|-------|-------|-------|
| 1           | 77            | 52       | 679       | 574    | 95        | 2,740      | 220        | 195    | 195    | 405   | 55    | 49    |
| 2           | 67            | 52       | 390       | 470    | 90        | 4,830      | 238        | 690    | 145    | 250   | 57    | 49    |
| 3           | 63            | 57       | 311       | 420    | 226       | 1,700      | 275        | 415    | 121    | 279   | 62    | 55    |
| 4           | 57            | 90       | 262       | 345    | 415       | 768        | 345        | 275    | 98     | 279   | 55    | 53    |
| 5           | 55            | 99       | 246       | 320    | 258       | 470        | 311        | 213    | 85     | 476   | 66    | 49    |
| 6           | 58            | 99       | 1,800     | 238    | 180       | 311        | 246        | 185    | 80     | 514   | 46    | 44    |
| 7           | 274           | 133      | 3,510     | 210    | 150       | 481        | 246        | 178    | 83     | 262   | 1,100 | 39    |
| 8           | 164           | 113      | 2,080     | 180    | 120       | 1,520      | 227        | 266    | 75     | 209   | 355   | 42    |
| 9           | 261           | 124      | 882       | 292    | 100       | 630        | 209        | 2,720  | 93     | 178   | 171   | 48    |
| 10          | 705           | 121      | 608       | 558    | 90        | 405        | 202        | 936    | 106    | 262   | 130   | 48    |
| 11          | 259           | 174      | 618       | 448    | 80        | 385        | 185        | 437    | 83     | 209   | 106   | 49    |
| 12          | 159           | 127      | 470       | 302    | 90        | 613        | 167        | 293    | 73     | 178   | 80    | 90    |
| 13          | 118           | 98       | 365       | 274    | 330       | 1,540      | 275        | 238    | 227    | 238   | 73    | 181   |
| 14          | 107           | 83       | 525       | 306    | 635       | 2,950      | 227        | 311    | 234    | 174   | 66    | 726   |
| 15          | 93            | 83       | 2,280     | 167    | 744       | 1,470      | 2,560      | 284    | 181    | 167   | 68    | 234   |
| 16          | 95            | 90       | 1,020     | 140    | 738       | 1,150      | 2,180      | 275    | 390    | 330   | 60    | 121   |
| 17          | 92            | 85       | 542       | 130    | 525       | 1,420      | 1,590      | 234    | 171    | 405   | 60    | 98    |
| 18          | 78            | 80       | 375       | 120    | 448       | 792        | 744        | 227    | 115    | 284   | 73    | 786   |
| 19          | 71            | 127      | 302       | 150    | 365       | 531        | 509        | 199    | 93     | 1,580 | 73    | 432   |
| 20          | 67            | 167      | 385       | 170    | 242       | 432        | 997        | 164    | 109    | 395   | 68    | 167   |
| 21          | 63            | 262      | 459       | 220    | 270       | 355        | 768        | 151    | 90     | 213   | 55    | 109   |
| 22          | 64            | 302      | 325       | 292    | 448       | 1,170      | 1,460      | 139    | 133    | 164   | 55    | 85    |
| 23          | 72            | 195      | 238       | 591    | 320       | 954        | 972        | 127    | 4,890  | 160   | 199   | 78    |
| 24          | 76            | 167      | 216       | 476    | 284       | 547        | 536        | 115    | 4,150  | 145   | 100   | 103   |
| 25          | 78            | 167      | 206       | 552    | 238       | 487        | 360        | 106    | 2,780  | 109   | 71    | 93    |
| 26          | 81            | 178      | 320       | 258    | 230       | 476        | 266        | 90     | 990    | 93    | 60    | 481   |
| 27          | 75            | 284      | 426       | 190    | 202       | 405        | 230        | 83     | 547    | 85    | 83    | 1,050 |
| 28          | 67            | 531      | 437       | 160    | 227       | 288        | 202        | 78     | 330    | 80    | 133   | 400   |
| 29          | 60            | 602      | 355       | 130    | 624       | 250        | 185        | 75     | 1,030  | 75    | 98    | 220   |
| 30          | 54            | 1,530    | 2,470     | 110    | -----     | 311        | 167        | 136    | 1,440  | 71    | 64    | 2,220 |
| 31          | 51            | -----    | 1,260     | 100    | -----     | 250        | -----      | 213    | -----  | 60    | 53    | ----- |
| TOTAL       | 3,661         | 6,272    | 24,362    | 8,893  | 8,764     | 30,631     | 17,099     | 10,048 | 19,137 | 8,329 | 3,795 | 8,199 |
| MEAN        | 118           | 209      | 786       | 287    | 302       | 988        | 570        | 324    | 638    | 269   | 122   | 273   |
| MAX         | 705           | 1,530    | 3,510     | 591    | 744       | 4,830      | 2,560      | 2,720  | 4,890  | 1,580 | 1,100 | 2,220 |
| MIN         | 51            | 52       | 206       | 100    | 80        | 250        | 167        | 75     | 73     | 60    | 46    | 39    |
| MEAN+       | 122           | 213      | 790       | 291    | 306       | 992        | 573        | 328    | 642    | 273   | 127   | 277   |
| CFSM+       | .50           | .87      | 3.21      | 1.18   | 1.24      | 4.03       | 2.33       | 1.33   | 2.61   | 1.11  | .52   | 1.13  |
| IN.+        | .57           | .97      | 3.70      | 1.36   | 1.34      | 4.65       | 2.60       | 1.54   | 2.91   | 1.28  | .59   | 1.26  |
| CAL YR 1971 | TOTAL 117,794 | MEAN 323 | MAX 4,800 | MIN 27 | MEAN+ 327 | CFSM+ 1.33 | IN.+ 18.04 |        |        |       |       |       |
| WTR YR 1972 | TOTAL 149,190 | MEAN 408 | MAX 4,890 | MIN 39 | MEAN+ 412 | CFSM+ 1.67 | IN.+ 22.77 |        |        |       |       |       |

## PEAK DISCHARGE (BASE, 4,000 CFS)

+ Adjusted for municipal supply diversion to city of Willoughby.

| DATE  | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|-------|------|-------|-----------|------|------|-------|-----------|
| 12-6  | 2330 | 7.42  | 4,060     | 6-23 | 1130 | 11.68 | 9,720     |
| 12-7  | 1830 | 8.30  | 5,030     | 6-24 | 1800 | 11.04 | 8,760     |
| 12-30 | 1400 | 8.23  | 4,950     | 6-29 | 2330 | 7.85  | 4,540     |
| 3-2   | 0330 | 8.86  | 5,720     | 8-7  | 0930 | 7.50  | 4,060     |

04211500 Mill Creek near Jefferson, Ohio

LOCATION.--Lat 41°45'11", long 80°48'03", in T.11 N., R.3 W., Ashtabula County, on right bank at downstream side of bridge on State Highway 307, 1.9 miles northwest of Jefferson, and 3.5 miles downstream from Griggs Creek.

DRAINAGE AREA.--82.0 sq mi.

PERIOD OF RECORD.--March 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 822.59 ft above mean sea level (Ashtabula County bench mark). Prior to June 10, 1942, nonrecording gage at same site and datum. Since Nov. 27, 1962, supplementary water-stage recorder at crest of waterworks dam 0.2 mile upstream.

AVERAGE DISCHARGE.--30 years, 106 cfs (17.56 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,900 cfs Mar. 2 (gage height, 9.58 ft); minimum daily discharge, 0.10 cfs many days.

Period of record: Maximum discharge, 9,810 cfs Jan. 22, 1959 (gage height, 12.50 ft), from rating curve extended above 3,700 cfs on basis of contracted-opening measurement of peak flow; no flow at times.

REMARKS.--Records good except those below 1 cfs which are fair. Water diverted 0.2 mile upstream from station for part of municipal supply of city of Jefferson. Mean diversion for 1972 water year, 0.17 cfs. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT   | NOV       | DEC   | JAN   | FEB   | MAR    | APR   | MAY     | JUN     | JUL      | AUG   | SEP    |
|-------------|-------|-----------|-------|-------|-------|--------|-------|---------|---------|----------|-------|--------|
| 1           | 1.5   | .10       | 372   | 267   | 24    | 583    | 40    | 17      | 16      | 51       | .38   | .10    |
| 2           | 1.3   | .10       | 168   | 144   | 21    | 2,940  | 37    | 80      | 14      | 29       | .18   | .10    |
| 3           | 1.3   | .10       | 107   | 123   | 37    | 1,030  | 35    | 156     | 19      | 34       | .10   | .10    |
| 4           | 1.3   | .10       | 78    | 104   | 135   | 412    | 42    | 115     | 61      | 104      | .10   | .10    |
| 5           | 1.3   | 11        | 68    | 88    | 158   | 198    | 56    | 58      | 28      | 60       | .10   | .10    |
| 6           | 1.3   | 13        | 315   | 55    | 156   | 100    | 48    | 36      | 15      | 188      | .10   | .10    |
| 7           | 3.1   | 24        | 1,040 | 42    | 124   | 162    | 42    | 26      | 7.5     | 160      | 25    | .10    |
| 8           | 1.4   | 22        | 1,030 | 33    | 100   | 758    | 41    | 25      | 4.5     | 68       | 28    | .10    |
| 9           | 9.2   | 20        | 395   | 32    | 82    | 430    | 36    | 311     | 3.7     | 36       | 15    | .10    |
| 10          | 36    | 19        | 205   | 108   | 67    | 183    | 36    | 398     | 3.1     | 44       | 8.0   | .10    |
| 11          | 19    | 35        | 176   | 195   | 56    | 104    | 34    | 138     | 2.4     | 69       | 4.3   | .10    |
| 12          | 11    | 30        | 142   | 140   | 50    | 160    | 27    | 60      | 8.0     | 38       | 3.1   | .10    |
| 13          | 4.9   | 20        | 95    | 94    | 64    | 398    | 176   | 35      | 9.8     | 27       | 2.2   | .10    |
| 14          | 2.6   | 14        | 74    | 69    | 130   | 845    | 176   | 29      | 30      | 19       | 1.7   | 25     |
| 15          | 1.7   | 8.7       | 416   | 30    | 230   | 502    | 358   | 29      | 107     | 28       | .66   | 22     |
| 16          | 1.2   | 5.5       | 578   | 30    | 310   | 376    | 790   | 43      | 251     | 61       | .38   | 21     |
| 17          | .38   | 3.6       | 235   | 28    | 339   | 686    | 933   | 53      | 254     | 20       | .38   | 14     |
| 18          | .10   | 2.4       | 120   | 26    | 251   | 333    | 284   | 56      | 87      | 161      | .38   | 9.4    |
| 19          | .10   | 3.6       | 76    | 232   | 172   | 180    | 122   | 45      | 38      | 599      | .38   | 4.9    |
| 20          | .10   | 9.4       | 84    | 329   | 124   | 126    | 209   | 31      | 21      | 178      | .18   | 3.1    |
| 21          | .10   | 86        | 215   | 235   | 98    | 90     | 365   | 21      | 14      | 61       | .10   | 2.2    |
| 22          | .10   | 143       | 176   | 164   | 124   | 244    | 225   | 16      | 16      | 27       | .10   | 2.0    |
| 23          | .10   | 88        | 80    | 341   | 132   | 445    | 287   | 12      | 1,110   | 14       | .10   | 1.5    |
| 24          | .10   | 55        | 59    | 305   | 99    | 189    | 153   | 8.7     | 1,840   | 6.5      | .10   | 2.0    |
| 25          | .10   | 43        | 46    | 405   | 75    | 148    | 87    | 6.5     | 1,800   | 3.7      | .10   | 1.7    |
| 26          | .10   | 50        | 131   | 216   | 61    | 134    | 52    | 4.9     | 844     | 2.5      | .10   | 11     |
| 27          | .10   | 83        | 243   | 116   | 49    | 128    | 36    | 3.9     | 359     | 2.0      | .10   | 33     |
| 28          | .10   | 178       | 225   | 69    | 45    | 93     | 25    | 3.4     | 144     | 1.0      | .10   | 52     |
| 29          | .10   | 186       | 182   | 46    | 64    | 65     | 19    | 3.0     | 74      | .66      | .10   | 38     |
| 30          | .10   | 507       | 495   | 37    | ----- | 56     | 16    | 8.7     | 83      | .66      | .10   | 496    |
| 31          | .10   | -----     | 800   | 29    | ----- | 51     | ----- | 10      | -----   | .38      | .10   | -----  |
| TOTAL       | 99.88 | 1,660.60  | 8,426 | 4,132 | 3,377 | 12,149 | 4,787 | 1,839.1 | 7,264.0 | 2,093.40 | 91.72 | 740.10 |
| MEAN        | 3.22  | 55.4      | 272   | 133   | 116   | 392    | 160   | 59.3    | 242     | 67.5     | 2.96  | 24.7   |
| MAX         | 36    | 507       | 1,040 | 405   | 339   | 2,940  | 933   | 398     | 1,840   | 599      | 28    | 496    |
| MIN         | .10   | .10       | 46    | 26    | 21    | 51     | 16    | 3.0     | 2.4     | .38      | .10   | .10    |
| CFSM        | .04   | .68       | 3.32  | 1.62  | 1.41  | 4.78   | 1.95  | .72     | 2.95    | .82      | .04   | .30    |
| IN.         | .05   | .75       | 3.82  | 1.87  | 1.53  | 5.51   | 2.17  | .83     | 3.30    | .95      | .04   | .34    |
| CAL YR 1971 | TOTAL | 31,592.58 | MEAN  | 86.6  | MAX   | 1,040  | MIN   | .05     | CFSM    | 1.06     | IN    | 14.33  |
| WTR YR 1972 | TOTAL | 46,659.80 | MEAN  | 127   | MAX   | 2,940  | MIN   | .10     | CFSM    | 1.55     | IN    | 21.17  |

## PEAK DISCHARGE (BASE, 1,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-2  | 1430 | 9.58  | 3,900     | 6-25 | 0430 | 8.21  | 2,230     |
| 6-24 | 0300 | 8.11  | 2,140     |      |      |       |           |

04212000 Grand River near Madison, Ohio

LOCATION.--Lat 41°44'26", long 81°02'48", Lake County, on downstream end of center pier of abandoned highway bridge, 800 ft upstream from State Highway 528, 0.8 mile upstream from Griswold Creek and 2.1 miles south of Madison.

DRAINAGE AREA.--581 sq mi.

PERIOD OF RECORD.--July 1922 to December 1935, February 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 674.47 ft above mean sea level, adjustment of 1912. Prior to Jan. 20, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years, 654 cfs (15.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,900 cfs Mar. 2 (gage height, 10.96 ft); minimum, 9.0 cfs Oct. 25.

Period of record: Maximum discharge, 21,100 cfs Jan. 22, 1959 (gage height, 14.73 ft), from rating curve extended above 12,200 cfs on basis of estimates of peak flow over dam at site about 8 miles upstream with drainage area of 559 sq mi adjusted to gage site by 0.8 power of the drainage-area ratio; no flow July 31, Aug. 1, 2, 1934, Oct. 13-27, 1963.

REMARKS.--Records good except those for February which are poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1437: 1923-24(M), 1925-30, 1932(M), 1933, 1934(M), 1935, 1938(M), 1946, 1948(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT     | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1     | 19      | 73    | 2,160  | 2,590  | 220    | 2,800  | 397    | 280    | 136    | 414    | 45    | 15    |
| 2     | 35      | 72    | 1,320  | 1,650  | 210    | 9,380  | 369    | 372    | 205    | 318    | 41    | 14    |
| 3     | 35      | 68    | 900    | 1,540  | 240    | 9,000  | 354    | 555    | 207    | 221    | 45    | 13    |
| 4     | 32      | 92    | 682    | 1,340  | 300    | 4,980  | 381    | 590    | 205    | 251    | 41    | 12    |
| 5     | 22      | 125   | 519    | 984    | 315    | 3,540  | 433    | 492    | 203    | 272    | 37    | 13    |
| 6     | 16      | 110   | 1,040  | 716    | 318    | 2,450  | 418    | 411    | 148    | 369    | 34    | 12    |
| 7     | 19      | 125   | 3,760  | 555    | 300    | 1,890  | 381    | 351    | 110    | 560    | 240   | 11    |
| 8     | 19      | 151   | 5,400  | 453    | 270    | 3,020  | 348    | 315    | 87     | 437    | 336   | 10    |
| 9     | 32      | 154   | 4,000  | 418    | 250    | 3,040  | 336    | 773    | 80     | 318    | 300   | 11    |
| 10    | 122     | 145   | 2,640  | 496    | 240    | 2,040  | 339    | 2,040  | 80     | 318    | 126   | 10    |
| 11    | 186     | 170   | 2,280  | 734    | 250    | 1,510  | 325    | 1,600  | 76     | 253    | 87    | 10    |
| 12    | 199     | 201   | 1,920  | 837    | 300    | 1,470  | 308    | 1,090  | 73     | 421    | 68    | 11    |
| 13    | 229     | 168   | 1,360  | 752    | 400    | 2,080  | 622    | 758    | 90     | 360    | 56    | 17    |
| 14    | 177     | 125   | 872    | 630    | 500    | 4,280  | 1,120  | 488    | 126    | 270    | 47    | 1,020 |
| 15    | 112     | 92    | 1,370  | 414    | 700    | 4,230  | 1,060  | 366    | 239    | 482    | 39    | 585   |
| 16    | 71      | 73    | 2,960  | 250    | 1,000  | 3,590  | 3,660  | 336    | 908    | 806    | 31    | 262   |
| 17    | 45      | 62    | 2,340  | 280    | 1,200  | 4,380  | 5,720  | 351    | 1,370  | 524    | 28    | 168   |
| 18    | 36      | 54    | 1,660  | 240    | 1,200  | 3,690  | 3,730  | 422    | 758    | 1,120  | 26    | 122   |
| 19    | 31      | 50    | 1,430  | 550    | 1,100  | 2,580  | 2,490  | 425    | 378    | 2,180  | 24    | 107   |
| 20    | 22      | 58    | 1,170  | 1,540  | 950    | 1,920  | 2,050  | 381    | 241    | 764    | 22    | 107   |
| 21    | 17      | 130   | 1,030  | 1,240  | 850    | 1,220  | 2,270  | 325    | 172    | 348    | 20    | 132   |
| 22    | 14      | 400   | 907    | 956    | 800    | 1,060  | 1,860  | 280    | 140    | 275    | 22    | 96    |
| 23    | 13      | 453   | 682    | 1,400  | 750    | 1,730  | 2,200  | 241    | 2,690  | 213    | 20    | 68    |
| 24    | 11      | 360   | 546    | 1,550  | 700    | 1,480  | 1,800  | 211    | 6,190  | 153    | 19    | 64    |
| 25    | 9.5     | 318   | 429    | 1,690  | 650    | 1,230  | 1,320  | 161    | 7,380  | 112    | 19    | 55    |
| 26    | 23      | 308   | 433    | 1,370  | 600    | 1,020  | 977    | 118    | 5,230  | 84     | 17    | 155   |
| 27    | 74      | 369   | 710    | 740    | 550    | 837    | 645    | 100    | 2,580  | 72     | 17    | 734   |
| 28    | 74      | 570   | 858    | 478    | 1,600  | 666    | 429    | 86     | 1,110  | 66     | 19    | 837   |
| 29    | 78      | 886   | 851    | 363    | 1,500  | 519    | 348    | 76     | 560    | 58     | 13    | 550   |
| 30    | 92      | 1,980 | 1,760  | 292    | -----  | 453    | 300    | 74     | 461    | 50     | 19    | 1,890 |
| 31    | 82      | ----- | 3,860  | 250    | -----  | 433    | -----  | 86     | -----  | 48     | 18    | ----- |
| TOTAL | 1,946.5 | 7,942 | 51,849 | 27,298 | 18,263 | 82,518 | 36,990 | 14,154 | 32,233 | 12,137 | 1,876 | 7,111 |
| MEAN  | 62.8    | 265   | 1,673  | 881    | 630    | 2,662  | 1,233  | 457    | 1,074  | 392    | 60.5  | 237   |
| MAX   | 229     | 1,980 | 5,400  | 2,590  | 1,600  | 9,380  | 5,720  | 2,040  | 7,380  | 2,180  | 336   | 1,890 |
| MIN   | 9.5     | 50    | 429    | 240    | 210    | 433    | 300    | 74     | 73     | 48     | 13    | 10    |
| CFSM  | .11     | .46   | 2.88   | 1.52   | 1.08   | 4.58   | 2.12   | .79    | 1.85   | .67    | .10   | .41   |
| IN.   | .12     | .51   | 3.32   | 1.75   | 1.17   | 5.28   | 2.37   | .91    | 2.06   | .78    | .12   | .46   |

CAL YR 1971 TOTAL 218,412.23 MEAN 598 MAX 8,080 MIN .91 CFSM 1.03 IN 13.98  
WTR YR 1972 TOTAL 294,317.50 MEAN 804 MAX 9,380 MIN 9.5 CFSM 1.38 IN 18.84

## PEAK DISCHARGE (BASE, 5,500 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 12-8 | 0930 | 7.88  | 5,660     | 4-17 | 0700 | 8.10  | 6,060     |
| 3-2  | 2400 | 10.96 | 11,900    | 6-24 | 1500 | 9.32  | 8,420     |



## 04212500 Ashtabula River near Ashtabula, Ohio

LOCATION.--Lat 41°51'20", long 80°45'44", Ashtabula County, on left bank at downstream side of State Road bridge, 1.1 miles upstream from Hubbard Run, 1.3 miles southeast of Ashtabula, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--121 sq mi.

PERIOD OF RECORD.--July 1924 to December 1935, March 1939 to November 1947, March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 612.50 ft above mean sea level, unadjusted. Prior to Aug. 27, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 149 cfs (16.73 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,610 cfs Mar. 2 (gage height, 6.62 ft); maximum gage height, unknown, Mar. 1 (backwater from ice); minimum discharge, 1.6 cfs Sept. 8, 11, 12.  
Period of record: Maximum discharge, 11,600 cfs Jan. 22, 1959 (gage height, 11.03 ft), from rating curve extended above 4,600 cfs; no flow at times during most years.

REMARKS.--Records good except those for February which are poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 954: 1929(M). WSP 974: 1942. WSP 1437: 1926, 1932, 1934. WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY         | OCT             | NOV     | DEC      | JAN   | FEB       | MAR    | APR     | MAY     | JUN       | JUL     | AUG      | SEP     |
|-------------|-----------------|---------|----------|-------|-----------|--------|---------|---------|-----------|---------|----------|---------|
| 1           | 11              | 5.3     | 506      | 400   | 50        | 1,000  | 107     | 24      | 25        | 66      | 9.0      | 4.6     |
| 2           | 12              | 5.3     | 250      | 212   | 55        | 4,650  | 97      | 158     | 28        | 52      | 9.0      | 3.4     |
| 3           | 8.2             | 6.4     | 178      | 189   | 150       | 1,970  | 94      | 299     | 24        | 66      | 8.4      | 3.0     |
| 4           | 5.8             | 45      | 132      | 152   | 200       | 800    | 120     | 184     | 17        | 137     | 7.2      | 3.0     |
| 5           | 3.9             | 132     | 132      | 148   | 250       | 486    | 194     | 91      | 11        | 94      | 6.0      | 2.8     |
| 6           | 3.4             | 81      | 379      | 107   | 240       | 275    | 140     | 54      | 7.8       | 204     | 5.5      | 2.0     |
| 7           | 13              | 108     | 1,350    | 102   | 200       | 287    | 107     | 37      | 5.5       | 194     | 28       | 1.8     |
| 8           | 14              | 105     | 1,550    | 79    | 180       | 1,430  | 97      | 36      | 3.8       | 97      | 91       | 1.8     |
| 9           | 14              | 92      | 559      | 74    | 150       | 740    | 79      | 403     | 3.8       | 68      | 54       | 1.8     |
| 10          | 142             | 89      | 287      | 216   | 130       | 342    | 79      | 449     | 4.6       | 332     | 36       | 1.8     |
| 11          | 114             | 159     | 260      | 348   | 120       | 220    | 72      | 168     | 3.4       | 216     | 25       | 1.6     |
| 12          | 68              | 146     | 225      | 212   | 120       | 305    | 57      | 74      | 3.0       | 99      | 19       | 2.4     |
| 13          | 42              | 108     | 148      | 148   | 160       | 810    | 215     | 39      | 4.6       | 68      | 16       | 5.5     |
| 14          | 29              | 76      | 120      | 137   | 260       | 1,720  | 435     | 36      | 9.1       | 47      | 13       | 16      |
| 15          | 20              | 57      | 745      | 110   | 500       | 970    | 604     | 200     | 97        | 42      | 99       | 72      |
| 16          | 14              | 43      | 920      | 80    | 700       | 689    | 1,400   | 281     | 216       | 74      | 92       | 42      |
| 17          | 11              | 32      | 348      | 65    | 650       | 1,370  | 1,840   | 180     | 202       | 50      | 41       | 24      |
| 18          | 9.6             | 26      | 184      | 60    | 600       | 676    | 545     | 152     | 86        | 46      | 37       | 16      |
| 19          | 7.6             | 24      | 124      | 150   | 500       | 394    | 245     | 120     | 39        | 1,110   | 38       | 11      |
| 20          | 6.4             | 42      | 140      | 604   | 400       | 305    | 296     | 79      | 25        | 240     | 26       | 13      |
| 21          | 5.8             | 226     | 380      | 335   | 340       | 230    | 502     | 50      | 19        | 91      | 17       | 10      |
| 22          | 5.3             | 362     | 311      | 225   | 320       | 500    | 311     | 36      | 25        | 56      | 13       | 7.8     |
| 23          | 5.3             | 201     | 148      | 510   | 300       | 900    | 368     | 26      | 2,610     | 37      | 10       | 7.8     |
| 24          | 5.3             | 126     | 110      | 421   | 280       | 414    | 220     | 19      | 2,960     | 27      | 8.4      | 9.6     |
| 25          | 7.0             | 97      | 97       | 649   | 250       | 329    | 133     | 14      | 2,860     | 22      | 6.0      | 6.0     |
| 26          | 6.4             | 99      | 216      | 287   | 210       | 305    | 86      | 9.6     | 1,620     | 18      | 5.0      | 16      |
| 27          | 5.8             | 123     | 456      | 164   | 200       | 299    | 56      | 5.5     | 565       | 16      | 4.6      | 94      |
| 28          | 5.3             | 255     | 374      | 107   | 210       | 235    | 41      | 4.2     | 198       | 15      | 6.6      | 84      |
| 29          | 5.3             | 280     | 293      | 86    | 320       | 172    | 30      | 3.0     | 102       | 13      | 4.6      | 49      |
| 30          | 5.8             | 741     | 967      | 65    | -----     | 148    | 24      | 4.2     | 74        | 11      | 7.8      | 1,180   |
| 31          | 6.4             | -----   | 1,380    | 55    | -----     | 144    | -----   | 13      | -----     | 9.6     | 6.6      | -----   |
| TOTAL       | 613.6           | 3,892.0 | 13,269   | 6,497 | 8,045     | 23,115 | 8,594   | 3,248.5 | 11,848.6  | 3,617.6 | 749.7    | 1,693.7 |
| MEAN        | 19.8            | 130     | 428      | 210   | 277       | 746    | 286     | 105     | 395       | 117     | 24.2     | 56.5    |
| MAX         | 142             | 741     | 1,550    | 649   | 700       | 4,650  | 1,840   | 449     | 2,960     | 1,110   | 99       | 1,180   |
| MIN         | 3.4             | 5.3     | 97       | 55    | 50        | 144    | 24      | 3.0     | 3.0       | 9.6     | 4.6      | 1.6     |
| CFSM        | 0.16            | 1.07    | 3.54     | 1.74  | 2.29      | 6.17   | 2.36    | 0.87    | 3.26      | 0.97    | 0.20     | 0.47    |
| IN.         | 0.19            | 1.20    | 4.08     | 2.00  | 2.47      | 7.11   | 2.64    | 1.00    | 3.64      | 1.11    | 0.23     | 0.52    |
| CAL YR 1971 | TOTAL 50,029.95 |         | MEAN 137 |       | MAX 1,960 |        | MIN 0   |         | CFSM 1.13 |         | IN 15.38 |         |
| WTR YR 1972 | TOTAL 85,183.70 |         | MEAN 233 |       | MAX 4,650 |        | MIN 1.6 |         | CFSM 1.93 |         | IN 26.19 |         |

## PEAK DISCHARGE (BASE, 2,600 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 3-2  | 1300 | 6.62  | 5,610     | 6-23 | 2000 | 6.28  | 5,160     |
| 4-17 | 0100 | 4.38  | 2,870     | 6-25 | 0130 | 5.16  | 3,790     |

04213000 Conneaut Creek at Conneaut, Ohio

LOCATION.--Lat 41°55'37", long 80°36'15", Ashtabula County, on right bank at downstream side of Keefus Road bridge at Conneaut, and 6.4 miles upstream from mouth.

DRAINAGE AREA.--175 sq mi.

PERIOD OF RECORD.--July 1922 to December 1935, March 1950 to September 1961 (published as "at Amboy"), October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 610.30 ft above mean sea level, unadjusted. Prior to Aug. 17, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 252 cfs (19.56 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,820 cfs June 24 (gage height, 9.53 ft); minimum daily discharge, 4.3 cfs Sept. 10.

Period of record: Maximum discharge, 17,000 cfs Jan. 22, 1959 (gage height, 11.70 ft); maximum gage height, 12.94 ft Mar. 4, 1934 (backwater from ice); minimum discharge, 0.2 cfs July 31, Aug. 1, 1933, Aug. 1, 2, 1934.

REMARKS.--Records good except those for February which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 714: 1926. WSP 784: 1933. WSP 1437: 1923-25(M), 1926-30, 1931-32(M), 1933, 1935(M). WSP 1912: Drainage area.

## DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

| DAY   | OCT   | NOV   | DEC    | JAN    | FEB    | MAR    | APR   | MAY   | JUN    | JUL   | AUG   | SEP     |
|-------|-------|-------|--------|--------|--------|--------|-------|-------|--------|-------|-------|---------|
| 1     | 129   | 20    | 1,590  | 1,080  | 100    | 1,100  | 197   | 98    | 288    | 142   | 24    | 13      |
| 2     | 78    | 20    | 560    | 424    | 90     | 3,730  | 175   | 288   | 201    | 120   | 22    | 10      |
| 3     | 52    | 21    | 331    | 358    | 300    | 6,020  | 165   | 528   | 158    | 197   | 20    | 8.2     |
| 4     | 38    | 93    | 263    | 310    | 400    | 1,630  | 185   | 448   | 116    | 149   | 18    | 7.0     |
| 5     | 30    | 263   | 233    | 250    | 460    | 650    | 248   | 243   | 101    | 177   | 16    | 5.7     |
| 6     | 28    | 322   | 540    | 210    | 450    | 365    | 217   | 173   | 88     | 368   | 15    | 5.0     |
| 7     | 40    | 253   | 2,800  | 185    | 400    | 345    | 173   | 145   | 69     | 382   | 42    | 4.6     |
| 8     | 35    | 280   | 2,830  | 180    | 350    | 1,210  | 152   | 135   | 59     | 179   | 193   | 4.6     |
| 9     | 73    | 215   | 1,320  | 179    | 280    | 1,370  | 132   | 620   | 59     | 144   | 147   | 4.5     |
| 10    | 460   | 202   | 500    | 265    | 240    | 496    | 130   | 1,080 | 61     | 476   | 79    | 4.3     |
| 11    | 956   | 334   | 415    | 536    | 200    | 295    | 127   | 409   | 75     | 343   | 54    | 5.1     |
| 12    | 303   | 500   | 442    | 436    | 240    | 325    | 117   | 239   | 61     | 169   | 40    | 9.0     |
| 13    | 190   | 382   | 315    | 298    | 330    | 978    | 135   | 177   | 66     | 116   | 32    | 25      |
| 14    | 122   | 275   | 260    | 230    | 480    | 1,860  | 158   | 160   | 65     | 87    | 40    | 38      |
| 15    | 85    | 178   | 702    | 180    | 900    | 1,590  | 310   | 235   | 158    | 81    | 83    | 197     |
| 16    | 64    | 134   | 1,570  | 130    | 1,100  | 838    | 1,310 | 335   | 445    | 95    | 49    | 152     |
| 17    | 52    | 112   | 702    | 110    | 1,100  | 1,420  | 2,020 | 565   | 476    | 72    | 91    | 79      |
| 18    | 42    | 90    | 355    | 100    | 900    | 1,010  | 1,050 | 600   | 189    | 72    | 54    | 51      |
| 19    | 36    | 85    | 278    | 450    | 750    | 488    | 353   | 313   | 111    | 133   | 39    | 36      |
| 20    | 31    | 118   | 285    | 817    | 600    | 358    | 285   | 215   | 81     | 227   | 43    | 33      |
| 21    | 28    | 331   | 476    | 500    | 550    | 310    | 516   | 163   | 66     | 156   | 34    | 29      |
| 22    | 25    | 776   | 680    | 365    | 480    | 430    | 368   | 142   | 78     | 94    | 26    | 25      |
| 23    | 25    | 472   | 394    | 516    | 420    | 1,120  | 308   | 124   | 2,300  | 70    | 22    | 20      |
| 24    | 25    | 233   | 253    | 665    | 380    | 575    | 278   | 104   | 8,230  | 55    | 19    | 27      |
| 25    | 27    | 172   | 325    | 804    | 340    | 368    | 209   | 91    | 6,460  | 48    | 16    | 20      |
| 26    | 26    | 156   | 382    | 738    | 310    | 328    | 167   | 80    | 4,230  | 39    | 13    | 40      |
| 27    | 27    | 182   | 894    | 290    | 270    | 323    | 135   | 71    | 1,620  | 34    | 13    | 78      |
| 28    | 26    | 500   | 585    | 225    | 250    | 315    | 116   | 64    | 397    | 30    | 17    | 177     |
| 29    | 24    | 940   | 550    | 170    | 270    | 270    | 101   | 59    | 221    | 28    | 13    | 119     |
| 30    | 24    | 1,390 | 936    | 130    | -----  | 235    | 92    | 69    | 161    | 27    | 19    | 595     |
| 31    | 22    | ----- | 2,100  | 110    | -----  | 239    | ----- | 124   | -----  | 26    | 15    | -----   |
| TOTAL | 3,123 | 9,049 | 23,866 | 11,241 | 12,940 | 30,591 | 9,929 | 8,097 | 26,690 | 4,336 | 1,308 | 1,822.0 |
| MEAN  | 101   | 302   | 770    | 363    | 446    | 987    | 331   | 261   | 890    | 140   | 42.2  | 60.7    |
| MAX   | 956   | 1,390 | 2,830  | 1,080  | 1,100  | 6,020  | 2,020 | 1,080 | 8,230  | 476   | 193   | 595     |
| MIN   | 22    | 20    | 233    | 100    | 90     | 235    | 92    | 59    | 59     | 26    | 13    | 4.3     |
| CFSM  | .58   | 1.73  | 4.40   | 2.07   | 2.55   | 5.64   | 1.89  | 1.49  | 5.09   | .80   | .24   | .35     |
| IN.   | .66   | 1.92  | 5.07   | 2.39   | 2.75   | 6.50   | 2.11  | 1.72  | 5.67   | .92   | .28   | .39     |

CAL YR 1971 TOTAL 101,447.5 MEAN 278 MAX 3,300 MIN 5.0 CFSM 1.59 IN 21.56  
WTR YR 1972 TOTAL 142,992.0 MEAN 391 MAX 8,230 MIN 4.3 CFSM 2.23 IN 30.40

## PEAK DISCHARGE (BASE, 2,900 CFS)

| DATE | TIME | G. H. | DISCHARGE | DATE | TIME | G. H. | DISCHARGE |
|------|------|-------|-----------|------|------|-------|-----------|
| 12-7 | 2100 | 6.69  | 3,980     | 6-24 | 1700 | 9.53  | 9,820     |
| 3-3  | 0800 | 8.74  | 7,850     |      |      |       |           |



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 floodflow 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.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

#### 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, give a picture of the low-flow potentiality of a 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 1972

| Station No.                  | Station name                                      | Location   | Drainage area (sq mi) | Period of record    | Measurements                              |                              |
|------------------------------|---|--|-----------------------|---------------------|---|------------------------------|
|                              |   |  |                       |                     | Date                                      | Discharge (cfs)              |
| Beaver River basin           |   |  |                       |                     |   |                              |
| *03092099                    | Hinkley Creek at Charlestown, Ohio                | Lat 41°09'16", long 81°08'51", Portage County, at bridge on Rock Spring Road, 0.6 mile south of Charlestown, 2.2 miles upstream from mouth.                    | 7.85                  | 1969-72             | 7-31-72<br>a9- 8-72                       | .32<br>.23                   |
| Little Beaver Creek basin    |   |  |                       |                     |   |                              |
| 03109100                     | Middle Fork Little Beaver Creek near Rogers, Ohio | Lat 40°43'22", long 80°38'03", Columbiana County, at bridge on State Highway 7, 0.4 mile upstream from West Fork Little Beaver Creek, 5 miles south of Rogers. | 149                   | 1972                | 5-25-72<br>7-25-72<br>a9- 6-72            | 61.2<br>45.9<br>29.2         |
| 03109200                     | West Fork Little Beaver Creek at West Point, Ohio | Lat 40°42'38", long 80°41'49", Columbiana County, at bridge on U.S. Highway 30, 0.3 mile downstream from Patterson Creek, at West Point.                       | 99.9                  | 1959,<br>1972       | 5-25-72<br>7-25-72<br>9- 6-72             | 35.6<br>24.8<br>10.1         |
| 03109400                     | North Fork Little Beaver Creek near Negley, Ohio  | Lat 40°46'30", long 80°32'36", Columbiana County, at county road bridge at Achor, 0.5 mile downstream from Bull Creek, 1.1 miles south of Negley.              | 166                   | 1959,<br>1972       | 5-25-72<br>7-25-72<br>a9- 6-72            | 70.4<br>59.5<br>35.5         |
| Yellow Creek basin           |   |  |                       |                     |   |                              |
| 03110600                     | North Fork Yellow Creek at Hammondsville, Ohio    | Lat 40°33'27", long 80°42'20", Jefferson County, at bridge on State Highway 213, at north edge of Hammondsville.   | 59.4                  | 1959,<br>1962-72    | 7-25-72<br>a9- 7-72                       | 14.0<br>3.68                 |
| Sunfish Creek basin          |   |  |                       |                     |   |                              |
| 03114250                     | Sunfish Creek at Cameron, Ohio                    | Lat 39°46'00", long 80°56'09", Monroe County, at bridge on State Highway 78, 0.5 mile east of Cameron, 4 miles upstream from mouth.                            | 99.6                  | 1959,<br>1962-72    | 7-27-72<br>a9- 5-72                       | 16.1<br>10.3                 |
| Little Muskingum River basin |   |  |                       |                     |   |                              |
| 03115300                     | Little Muskingum River near Rinard Mills, Ohio    | Lat 39°36'25", long 81°07'21", Monroe County, at bridge on County Road 68, 1.5 miles upstream from Straight Fork, 2.3 miles north-east of Rinard Mills.        | 130                   | 1972                | 5-26-72<br>8- 9-72<br>a8-11-72<br>9- 5-72 | 26.4<br>32.6<br>16.5<br>19.3 |
| Duck Creek basin             |   |  |                       |                     |   |                              |
| 03115650                     | East Fork Duck Creek at Lower Salem, Ohio         | Lat 39°34'26", long 81°23'25", Washington County, at bridge on Township Road 319, 0.9 mile north-east of Lower Salem, 1.0 mile upstream from Pawpaw Creek.     | 111                   | 1959,<br>1972       | 5-26-72<br>7-27-72<br>a9- 5-72            | 34.8<br>22.7<br>31.0         |
| 03115700                     | West Fork Duck Creek at Dexter City, Ohio         | Lat 39°39'45", long 81°28'25", Noble County, at bridge on State Highway 821 at Dexter City, 0.7 mile upstream from Buffalo Run.                                | 75.4                  | 1965-69,<br>1972    | 5-26-72<br>7-27-72<br>a9- 6-72            | 15.5<br>4.78<br>6.69         |
| 03115800                     | Duck Creek at Stanleyville, Ohio                  | Lat 39°28'14", long 81°24'41", Washington County, at bridge on county road at Stanleyville, 1 mile upstream from Sugar Creek.                                  | 267                   | 1959,<br>1962-72    | 5-26-72<br>7-27-72<br>a9- 5-72            | 75.0<br>45.1<br>93.3         |
| Muskingum River basin        |   |  |                       |                     |   |                              |
| 03115900                     | Tuscarawas River near East Liberty, Ohio          | Lat 41°00'25", long 81°29'31", Summit County, at bridge on Arlington Road, 2.3 miles north of East Liberty.  | 33.1                  | 1960-67,<br>1969-72 | 8- 1-72<br>8- 9-72<br>a9- 7-72            | 25.3<br>23.6<br>19.0         |
| *03116100                    | Little Chippewa Creek near Smithville, Ohio       | Lat 40°53'39", long 81°48'46", Wayne County, at bridge on State Highway 5, 3.3 miles northeast of Smithville.  | 16.4                  | 1965-67,<br>1969-72 | 8- 1-72<br>a9- 6-72                       | 5.38<br>4.97                 |
| *03119700                    | Conotton Creek at Jewett, Ohio                    | Lat 40°21'59", long 81°00'13", Harrison County, at bridge on State Highway 9, in Jewett.   | 14.3                  | 1965-72             | 7-28-72<br>a9- 8-72                       | 2.15<br>.67                  |
| 03119900                     | Conotton Creek at Leesville, Ohio                 | Lat 40°26'44", long 81°11'49", Carroll County, at bridge on State Highway 164, 0.9 mile south-east of Leesville, 2.5 miles upstream from McGuire Creek.        | 87.1                  | 1959,<br>1972       | 5-25-72<br>7-25-72<br>a9- 8-72            | 35.9<br>9.72<br>3.61         |
| 03129100                     | White Eyes Creek near Fresno, Ohio                | Lat 40°18'17", long 81°45'01", Coshocton County, at bridge on private road adjacent to State Highway 93, 2 miles south of Fresno.                              | 52.1                  | 1972                | 6- 7-72<br>7-24-72<br>a9- 5-72            | 11.2<br>7.15<br>3.79         |

See footnotes at end of table, p. 210.



## Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

| Station No.                      | Station name  | Location   | Drainage area (sq mi) | Period of record                   | Measurements                   |                      |
|----------------------------------|---|--|-----------------------|------------------------------------|--------------------------------|----------------------|
|                                  |   |  |                       |                                    | Date                           | Discharge (cfs)      |
| Muskingum River basin--Continued |   |  |                       |                                    |                                |                      |
| 03134300                         | Muddy Fork near Rowsburg, Ohio                            | Lat 40°50'10", long 82°08'16", Ashland County, at bridge on Township Road 1550, 1.8 miles southeast of Rowsburg.   | 66.2                  | 1972                               | 6- 7-72<br>7-31-72<br>a9- 5-72 | 9.00<br>6.50<br>7.01 |
| 03138800                         | Killbuck Creek at Wooster, Ohio                           | Lat 40°48'03", long 81°58'30", Wayne County, at bridge on Old Mansfield Road, 2 miles northwest of Wooster.  | 128                   | 1959,<br>1962-67,<br>1970-72       | a7-31-72<br>9- 6-72            | 18.3<br>32.2         |
| 03140700                         | Buffalo Fork (head of Wills Creek) at Pleasant City, Ohio | Lat 39°54'15", long 81°33'14", Guernsey County, at bridge on U.S. Highway 21, at Pleasant City, 0.2 mile upstream from Buffalo Creek.                                | 71.1                  | 1959,<br>1962-67,<br>1969-72       | 7-28-72<br>a9- 7-72            | 8.36<br>8.07         |
| 03140800                         | Buffalo Creek at Pleasant City, Ohio                      | Lat 39°54'10", long 81°33'03", Guernsey County, at bridge on State Highway 146, at Pleasant City, just upstream from mouth.  | 49.9                  | 1959,<br>1962-67,<br>1969-72       | 7-28-72<br>a9- 7-72            | 6.99<br>4.48         |
| 03141900                         | Leatherwood Creek near Cambridge, Ohio                    | Lat 40°01'18", long 81°32'51", Guernsey County, at bridge on County Road 461, 2.2 miles east of Cambridge, 3.5 miles upstream from mouth.                            | 88.0                  | 1959,<br>1962-67,<br>1969-72       | 7-28-72<br>a9- 7-72            | 3.61<br>4.42         |
| 03146250                         | North Fork Licking River above Newark, Ohio               | Lat 40°06'19", long 82°25'02", Licking County, at American Aggregates plant, 1.3 miles downstream from Dry Creek, 1.5 miles upstream from Newark Water Supply plant. | 224                   | 1944,<br>1964,<br>1972             | 6- 7-72<br>a8-15-72            | 80.5<br>32.2         |
| 03148450                         | Jonathan Creek at East Fultonham, Ohio                    | Lat 39°51'20", long 82°07'35", Muskingum County, at bridge on old U.S. Highway 22, at East Fultonham, 1 mile upstream from Buckeye Fork.                             | 125                   | 1972                               | 5-23-72<br>a8-11-72            | 55.2<br>3.23         |
| 03149500                         | Salt Creek near Chandlerville, Ohio                       | Lat 39°54'31", long 81°51'38", Muskingum County, at bridge on State Highway 146, 1 mile upstream from Buffalo Fork, 2 miles northwest of Chandlerville.              | 75.7                  | 1935-47,<br>1959,<br>1962-72       | 7-28-72<br>a8-11-72<br>9- 7-72 | 8.52<br>1.97<br>2.60 |
| 03150480                         | West Branch Wolf Creek near Waterford, Ohio               | Lat 39°31'43", long 81°39'22", Washington County, adjacent to State Highway 76, 400 ft upstream from South Branch, 1.2 miles southwest of Waterford.                 | 144                   | 1959,<br>1972                      | 3-15-72<br>7-26-72<br>a9- 6-72 | 135<br>10.3<br>19.4  |
| 03150490                         | South Branch Wolf Creek near Waterford, Ohio              | Lat 39°31'28", long 81°39'31", Washington County, at bridge on State Highway 76, 0.8 mile upstream from mouth, 1.5 miles southwest of Waterford.                     | 79.3                  | 1972                               | 3-15-72<br>7-26-72<br>a9- 6-72 | 43.8<br>2.80<br>7.25 |
| Little Hocking River basin       |   |  |                       |                                    |                                |                      |
| 03155800                         | Little Hocking River near Little Hocking, Ohio            | Lat 39°17'38", long 81°41'17", Washington County, at bridge on county road, 2.2 miles north of Little Hocking, 3.2 miles upstream from mouth.                        | 47.9                  | 1959-60,<br>1962-72                | 7-26-72<br>a9- 6-72            | .57<br>1.88          |
| Hocking River basin              |   |  |                       |                                    |                                |                      |
| 03156700                         | Rush Creek near Sugar Grove, Ohio                         | Lat 39°38'18", long 82°30'42", Fairfield County, at bridge on Berne Township Road 294, 2 miles northeast of Sugar Grove.   | 229                   | 1956,<br>1961-72                   | a8-11-72<br>9-22-72            | 21.5<br>45.2         |
| 03159520                         | Federal Creek near Stewart, Ohio                          | Lat 39°20'30", long 81°53'03", Athens County, at bridge on State Highway 329, 2.5 miles north of Stewart, 4 miles north of U.S. Highway 50.                          | 136                   | 1956,<br>1962-72                   | 5-22-72<br>8-10-72<br>9-21-72  | 50.9<br>3.25<br>6.61 |
| Leading Creek basin              |   |  |                       |                                    |                                |                      |
| 03160050                         | Leading Creek near Middleport, Ohio                       | Lat 39°00'31", long 82°05'07", Meigs County, at first private bridge 1.5 miles upstream from State Highway 7 bridge, 1.8 miles northwest of Middleport.              | 117                   | 1956,<br>1962-72                   | a8-10-72                       | 1.95                 |
| Raccoon Creek basin              |   |  |                       |                                    |                                |                      |
| 03201990                         | Little Raccoon Creek near Vinton, Ohio                    | Lat 38°57'12", long 82°21'57", Gallia County, at bridge on State Highway 325, 1.2 miles upstream from mouth, 2 miles southwest of Vinton.                            | 154                   | 1951-53,<br>1959,<br>1965,<br>1972 | 5-22-72<br>a8-10-72            | 105<br>14.4          |
| Indian Guyan Creek basin         |   |  |                       |                                    |                                |                      |
| 03205210                         | Indian Guyan Creek near Bradrick, Ohio                    | Lat 38°28'41", long 82°23'54", Lawrence County, at bridge on Township Road C-69, 200 ft upstream from relocated Fourmile Creek, 2.5 miles north of Bradrick.         | 67.5                  | 1972                               | 5-22-72<br>8- 9-72<br>a9-13-72 | 28.8<br>6.41<br>3.62 |
| Pine Creek basin                 |   |  |                       |                                    |                                |                      |
| 03216640                         | Pine Creek near Wheelersburg, Ohio                        | Lat 38°39'12", long 82°48'09", Scioto County, at bridge on Junior Furnace-Powellville Road, 1.7 miles upstream from Poplar Fork, 6 miles southeast of Wheelersburg.  | 152                   | 1972                               | 5-22-72<br>8- 9-72<br>a9-13-72 | 83.9<br>11.4<br>1.98 |

See footnotes at end of table, p. 210.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

| Station No.               | Station name                                   | Location  | Drainage area (sq mi) | Period of record   | Measurements   |                                     |
|---------------------------|--|---|-----------------------|--|--|-------------------------------------|
|                           |  |   |                       |  | Date   | Discharge (cfs)                     |
| Little Scioto River basin |  |   |                       |  |  |                                     |
| 03216700                  | Little Scioto River at Sciotoville, Ohio       | Lat 38°46'19", long 82°52'38", Scioto County, at bridge just east of State Highway 335, 0.2 mile upstream from Swamp Valley Run, 1.5 miles northeast of junction of U.S. Highway 52 and State Highway 335 in Sciotoville. | 223                   | 1959, 1962-67, 1969-72   | 8- 9-72<br>a9-13-72                                  | 7.99<br>1.98                        |
| Scioto River basin        |  |   |                       |  |  |                                     |
| 03217400                  | Scioto River near Kenton, Ohio                 | Lat 40°38'50", long 83°38'20", Hardin County, at bridge on County Road 130, 1.5 miles west of Kenton.   | 129                   | 1961-67, 1969-72   | a8-10-72   | 11.4                                |
| 03217500                  | Scioto River at LaRue, Ohio                    | Lat 40°34'28", long 83°23'15", Marion County, 200 ft below bridge on State Highway 95, at LaRue, 3.5 miles above Rush Creek.  | 257                   | 1927-35 <sup>F</sup> , 1939-51 <sup>F</sup> , 1962-67, 1971-72 | 8-20-71<br>8- 9-72<br>a8-17-72                       | 12.0<br>24.6<br>11.4                |
| 03217600                  | Rush Creek near LaRue, Ohio                    | Lat 40°33'33", long 83°19'57", Marion County, at bridge on County Road 38, 0.5 mile upstream from mouth, 3 miles southeast of LaRue.  | 105                   | 1956, 1961-67, 1969-72   | a8- 8-72   | 4.07                                |
| *03218000                 | Little Scioto River above Marion, Ohio         | Lat 40°37'43", long 83°10'11", Marion County, at bridge on Chesapeake and Ohio Railway, 1 mile downstream from Rock Fork, 3.5 miles northwest of Marion, 7.2 miles upstream from Honey Creek.                             | 72.4                  | 1939-71 <sup>F</sup> , 1972                                    | a8- 9-72   | 3.44                                |
| 03228200                  | Big Walnut Creek above Sunbury, Ohio           | Lat 40°15'04", long 82°50'46", Delaware County, at bridge on U.S. Highway 36, 0.5 mile downstream from Perfect Creek, at Sunbury.   | 77.8                  | 1972   | 6- 7-72<br>a8-16-72                                  | 7.16<br>.83                         |
| 03228700                  | Blacklick Creek near Groveport, Ohio           | Lat 39°53'26", long 82°51'50", Franklin County, at bridge on Winchester Pike, 2 miles upstream from mouth, 2.5 miles northeast of Groveport.  | 57.4                  | 1950, 1959, 1961-72  | a8-15-72   | 7.71                                |
| 03229800                  | Walnut Creek near Ashville, Ohio               | Lat 39°40'56", long 82°58'30", Pickaway County, at bridge on U.S. Highway 23, 0.5 mile upstream from mouth, 1.2 miles southwest of Ashville.  | 285                   | 1954, 1961-67, 1969-72   | 9- 3-70<br>a8-11-72<br>9-21-72                       | b35.0<br>41.4<br>57.1               |
| *03230600                 | Hominy Creek at Circleville, Ohio              | Lat 39°35'26", long 82°55'25", Pickaway County, at bridge adjacent to State Highway 56, 0.4 mile southeast of railroad crossing at east edge of Circleville.  | 5.66                  | 1947, 1952, 1962-72  | 5-23-72<br>8-11-72<br>a9-15-72                       | 2.88<br>.34<br>1.57                 |
| 03231300                  | Kinnikinnick Creek near Kinnikinnick, Ohio     | Lat 39°26'23", long 82°58'35", Ross County, at bridge on old U.S. Highway 23, 1 mile upstream from mouth, 1.5 miles northwest of Kinnikinnick.  | 36.2                  | 1954, 1958, 1961-72  | 5-23-72<br>8-11-72<br>a9-21-72                       | 26.6<br>9.75<br>8.80                |
| 03234080                  | North Fork Paint Creek near Frankfort, Ohio    | Lat 39°26'11", long 83°13'22", Ross County, at bridge on State Highway 138 at Austin, 3.5 miles northwest of Frankfort.   | 151                   | 1972   | 3-10-72<br>8- 8-72<br>a9-11-72                       | 109<br>10.6<br>5.59                 |
| *03235000                 | Salt Creek at Tarlton, Ohio                    | Lat 39°17'26", long 82°46'51", Pickaway County, at bridge on State Highway 159 in Tarlton.  | 11.5                  | 1946-61 <sup>F</sup> , 1962-67, 1969-72                        | 5-23-72<br>a8-10-72<br>9-21-72                       | 4.56<br>.22<br>.60                  |
| 03235100                  | Salt Creek at Laurelville, Ohio                | Lat 39°27'46", long 82°44'08", Hocking County, at bridge on Township Road 174, 200 ft upstream from Brimstone Creek, 0.5 mile south of Laurelville.   | 106                   | 1972   | 3-10-72<br>5-23-72<br>a8-10-72<br>8-11-72<br>9-15-72 | 124<br>64.3<br>6.08<br>7.27<br>23.7 |
| 03237130                  | Scioto Brush Creek at Otway, Ohio              | Lat 38°51'43", long 83°11'24", Scioto County, at bridge on State Highway 348, 600 ft upstream from South Fork, at Otway.  | 94.4                  | 1956, 1972   | 3- 9-72<br>8- 9-72<br>a9-12-72                       | 238<br>2.35<br>.41                  |
| 03237150                  | South Fork Scioto Brush Creek at Wamsley, Ohio | Lat 38°49'54", long 83°16'42", Adams County, at bridge on State Highway 348, at Wamsley.  | 56.1                  | 1972   | 3- 9-72<br>8- 9-72<br>a9-12-72                       | 126<br>6.20<br>.35                  |
| Ohio Brush Creek basin    |  |   |                       |  |  |                                     |
| 03237295                  | Ohio Brush Creek near Peebles, Ohio            | Lat 38°58'06", long 83°25'34", Adams County, at bridge on State Highway 32, 1.6 miles upstream from Little East Fork, 1.7 miles northwest of Peebles.   | 154                   | 1959-60, 1972  | 3- 9-72<br>8- 8-72<br>a9-12-72                       | 228<br>7.64<br>1.46                 |
| 03237400                  | West Fork Ohio Brush Creek at Lawshe, Ohio     | Lat 38°56'22", long 83°28'28", Adams County, at bridge on Township Road C-13 at Lawshe, 0.4 mile upstream from mouth.   | 134                   | 1959-60, 1972  | 3- 9-72<br>8- 8-72<br>a9-12-72                       | 151<br>.51<br>.15                   |
| Eagle Creek basin         |  |   |                       |  |  |                                     |
| 03238200                  | Eagle Creek near Ripley, Ohio                  | Lat 38°43'35", long 83°47'15", Brown County, at highway bridge 0.4 mile upstream from Beetle Creek, 3.2 miles southeast of Ripley.  | 137                   | 1959-72  | a8- 8-72<br>9-12-72                                  | 1.73<br>.12                         |

See footnotes at end of table, p. 210.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

| Station No.                    | Station name                                     | Location   | Drainage area (sq mi) | Period of record                           | Measurements  |  |
|--------------------------------|--|--|-----------------------|--|---|--|
|                                |  |  |                       |  | Date  | Discharge (cfs)  |
| Little Miami River basin       |  |  |                       |  |   |  |
| *03239000                      | Little Miami River near Selma, Ohio              | Lat 39°48'36", long 83°44'21", Clark County, at bridge on Selma Pike, 2.3 miles northwest of Selma, 3.1 miles upstream from Forth Fork.  | 48.9                  | 1952-58 <sup>#</sup> , 1959-72             | a8- 3-72<br>9-11-72   | 6.40<br>1.80   |
| *03239500                      | North Fork Little Miami River near Pitchin, Ohio | Lat 39°49'40", long 83°46'38", Clark County, at county highway bridge, 1.1 miles upstream from Goose Creek, 1.3 miles southwest of Pitchin.  | 28.9                  | 1952-58 <sup>#</sup> , 1959-72             | a8- 3-72  | 4.81   |
| Great Miami River basin        |  |  |                       |  |   |  |
| 03260620                       | Muchinippi Creek near Russells Point, Ohio       | Lat 40°26'21", long 83°56'28", Logan County, at bridge on State Highway 274, 2.3 miles upstream from mouth, 3.5 miles southwest of Russells Point.                                     | 86.2                  | 1959, 1972                                 | 3-20-72<br>8- 3-72<br>a9-22-72  | 60.5<br>14.4<br>3.81                                       |
| 03262650                       | Spring Creek near Troy, Ohio <u>c/</u>           | Lat 40°05'18", long 84°10'27", Miami County, adjacent to DeWeese Road, 600 ft south of Rusk Road, 2.5 miles upstream from mouth, 3 miles north-northeast of Troy.                      | 21.0                  | 1968-72                                    | 11-15-71<br>12-22-71<br>1-28-72<br>5- 3-72<br>6-15-72<br>7-25-72<br>a8- 2-72<br>9-14-72 | .67<br>11.1<br>13.2<br>15.0<br>6.22<br>1.38<br>.24<br>5.88 |
| 03262900                       | Honey Creek near New Carlisle, Ohio <u>c/</u>    | Lat 39°58'11", long 84°06'33", Miami County, at bridge on Rudy Road, 0.5 mile downstream from Indian Creek, 5 miles northwest of New Carlisle.   | 72.8                  | 1969-72                                    | 3- 7-72<br>7-19-72<br>a8- 2-72<br>9-26-72   | 71.5<br>20.5<br>12.5<br>24.0                               |
| 03267400                       | Cedar Run near Tremont City, Ohio                | Lat 40°01'49", long 83°48'59", Champaign County, at bridge on private road, 900 ft north of County Line Road, 0.3 mile upstream from mouth, 1.6 miles northeast of Tremont City.       | 2.08                  | 1972                                       | 3- 7-72<br>8- 2-72<br>a9-18-72  | 8.01<br>5.36<br>5.55                                       |
| 03267600                       | Chapman Creek at Tremont City, Ohio              | Lat 40°00'38", long 83°50'08", Clark County, at bridge on Upper Valley Pike, at Tremont City, 0.8 mile upstream from mouth.  | 24.0                  | 1944, 1948, 1968-69 <sup>#</sup> , 1971-72 | 3- 7-72<br>8- 2-72<br>a9-18-72  | 26.1<br>3.13<br>2.54                                       |
| 03271000                       | Wolf Creek at Dayton, Ohio <u>c/</u>             | Lat 39°46'00", long 84°14'12", Montgomery County, at West Riverview Avenue Bridge in Dayton, 1.8 miles upstream from mouth.  | 68.7                  | 1939-50 <sup>#</sup> , 1953-72             | 10-22-71<br>12-17-71<br>2- 9-72<br>4-21-72<br>6- 9-72<br>a9-21-72                       | 9.02<br>52.5<br>17.4<br>90.7<br>21.3<br>8.14               |
| 03272700                       | Sevenmile Creek at Camden, Ohio <u>c/</u>        | Lat 39°37'45", long 84°38'40", Preble County, at bridge on State Highway 725, at Camden, 0.3 mile downstream from Beasley Run.   | 69.0                  | 1970-72                                    | 12- 2-71<br>2-22-72<br>3- 8-72<br>8- 2-72<br>8-24-72<br>a9-11-72                        | 5.22<br>32.1<br>88.9<br>4.34<br>3.67<br>5.33               |
| Wabash River basin             |  |  |                       |  |   |  |
| 03322480                       | Wabash River above Beaver Creek at Wabash, Ohio  | Lat 40°32'44", long 84°44'29", Mercer County, at bridge on State Highway 29, 0.2 mile upstream from Crab Branch, 0.5 mile east of Wabash.  | 119                   | 1959, 1972                                 | 3-20-72<br>a8- 1-72   | 38.9<br>6.45   |
| Streams tributary to Lake Erie |  |  |                       |  |   |  |
| 04177100                       | East Branch St. Joseph River near Pioneer, Ohio  | Lat 41°39'56", long 84°32'31", Williams County, at bridge on U.S. Highway 20, 1.2 miles southeast of Pioneer.  | 158                   | 1955-56, 1962-67, 1969-72                  | a9- 6-72  | 13.6   |
| 04177230                       | West Branch St. Joseph River near Pioneer, Ohio  | Lat 41°39'14", long 84°34'20", Williams County, at bridge on U.S. Highway 20, 0.7 mile upstream from mouth 2 miles southwest of Pioneer.   | 113                   | 1955-56, 1972                              | a8- 1-72<br>9- 6-72   | 11.0<br>18.6   |
| 04177820                       | Fish Creek near Edgerton, Ohio                   | Lat 41°27'59", long 84°46'37", Williams County, at bridge on County Road C-60, 2 miles northwest of Edgerton, 2.7 miles upstream from mouth.   | 107                   | 1972                                       | 8- 1-72<br>a9- 6-72   | 8.95<br>4.75   |
| 04180950                       | St. Marys River at Mendon, Ohio                  | Lat 40°40'35", long 84°31'07", Mercer County, at bridge on State Highway 707, at Mendon.   | 297                   | 1955, 1962-69, 1971-72                     | a9- 5-72  | 18.6   |
| 04181000                       | St. Marys River near Willshire, Ohio             | Lat 40°44'05", long 84°44'10", Van Wert County, at bridge on Horner Road, 0.8 mile upstream from Black Creek, 3 miles southeast of Willshire.  | 354                   | 1926-32 <sup>#</sup> , 1955, 1963-67, 1972 | a9- 5-72  | 17.8   |
| 04185900                       | Auglaize River near Buckland, Ohio               | Lat 40°39'11", long 84°15'35", Auglaize County, at bridge on National Road, 2 miles north of Buckland.   | 158                   | 1955, 1961-67, 1969-72                     | a9- 5-72  | 9.00   |
| 04188300                       | Blanchard River at Mt. Blanchard, Ohio           | Lat 40°53'28", long 83°33'50", Hancock County, at bridge on State Highway 103, 0.6 mile southwest of Mt. Blanchard, and 0.4 mile west of intersection with State Highway 37. <u>d/</u> | 109                   | 1955-56, 1962-67, 1969-72                  | 8-17-72<br>a9- 7-72   | 1.40<br>.61  |

See footnotes at end of table, p. 210.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

| Station No.                               | Station name                                     | Location  | Drainage area (sq mi) | Period of record           | Measurements                   |                      |
|---|--|---|-----------------------|----------------------------|--------------------------------|----------------------|
|   |  |   |                       |                            | Date                           | Discharge (cfs)      |
| Streams tributary to Lake Erie--Continued |  |   |                       |                            |                                |                      |
| 04189180                                  | Riley Creek near Ottawa, Ohio                    | Lat 41°00'00", long 84°00'00", Putnam County, at bridge on County Road K-6, 1.2 miles upstream from mouth, 3 miles southeast of Ottawa.                                       | 84.9                  | 1955-56, 1972              | 3-20-72<br>a9- 5-72            | 46.8<br>4.44         |
| 04190400                                  | Little Auglaize River near Melrose, Ohio         | Lat 41°03'33", long 84°24'01", Paulding County, at bridge 0.4 mile above Middle Creek, 2.2 miles southeast of Melrose.  | 186                   | 1955-56, 1962-67, 1970-72  | a9- 6-72                       | 1.01                 |
| 04191100                                  | Flatrock Creek near Payne, Ohio                  | Lat 41°05'57", long 84°40'06", Paulding County, at bridge on Township Road 71, 2 miles downstream from Wildcat Creek, 3.5 miles northeast of Payne.                           | 147                   | 1972                       | a8- 1-72<br>9- 6-72            | 2.37<br>3.44         |
| 04192600                                  | South Turkeyfoot Creek near Malinta, Ohio        | Lat 41°22'15", long 84°01'22", Henry County, at bridge on U.S. Highway 6, 1.8 miles upstream from Little Turkeyfoot Creek, 3.5 miles north of Malinta.                        | 121                   | 1955-56, 1972              | 8- 1-72<br>a9- 6-72            | 3.22<br>1.22         |
| 04192800                                  | Beaver Creek near Grand Rapids, Ohio             | Lat 41°23'37", long 83°50'42", Wood County, at bridge on Wintergreen Road, 1.8 miles southeast of Grand Rapids.   | 185                   | 1955-56, 1962-72           | a9- 6-72                       | 2.70                 |
| 04194200                                  | Toussaint Creek near Limestone, Ohio             | Lat 41°32'54", long 83°14'29", Ottawa County, at bridge 1.2 miles west of Limestone.  | 79.0                  | 1959-72                    | a9- 7-72                       | 2.84                 |
| 04194400                                  | South Branch Portage River near Six Points, Ohio | Lat 41°18'41", long 83°30'36", Wood County, at bridge on Greensburg Pike, 3 miles northeast of Six Points.  | 99.5                  | 1959-72                    | a9- 7-72                       | 5.80                 |
| 04194500                                  | Portage River near Pemberville, Ohio             | Lat 41°22'45", long 83°28'35", Wood County, at highway bridge 0.1 mile west of junction of Wayne Road and South River Road, 2.5 miles southwest of Pemberville.               | 337                   | 1930-35*, 1959-72          | 8-25-71<br>a9- 7-72            | 6.68<br>10.4         |
| 04198010                                  | Green Creek near Fremont, Ohio                   | Lat 41°23'36", long 83°01'35", Sandusky County, at bridge on U.S. Highway 6, 5 miles northeast of Fremont.  | 81.5                  | 1959-72                    | 8- 1-72<br>a9- 7-72            | 16.2<br>16.3         |
| 04198015                                  | Cold Creek near Castalia, Ohio                   | Lat 41°25'12", long 82°48'02", Erie County, 0.4 mile downstream from bridge on Homegardner Road, 1.2 miles downstream from Blue Hole Outlet, 1.5 miles northeast of Castalia. | (e)                   | 1950, 1962-72              | 8- 1-72<br>a9- 7-72            | 33.5<br>33.2         |
| 04198020                                  | West Branch Huron River near Monroeville, Ohio   | Lat 41°16'46", long 82°40'32", Huron County, at bridge on Lamoreaux Road, 2.5 miles northeast of Monroeville, 2.5 miles upstream from mouth.                                  | 220                   | 1960-72                    | a8- 1-72<br>9- 7-72            | 22.0<br>24.3         |
| 04200050                                  | West Branch Black River near Oberlin, Ohio       | Lat 41°15'54", long 82°10'47", Lorain County, at bridge at corner of Kipton Nickel Plate Road and West Road, 2.5 miles southeast of Oberlin.                                  | 81.9                  | 1960-72                    | 7-31-72<br>a9- 6-72            | 2.30<br>1.15         |
| 04201400                                  | West Branch Rocky River at West View, Ohio       | Lat 41°21'03", long 81°54'12", on Cuyahoga-Lorain County line, at bridge on State Highway 252 at West View.   | 147                   | 1951, 1960-72              | 7-31-72<br>a9- 6-72            | 12.4<br>7.23         |
| 04208900                                  | Aurora Branch near Chagrin Falls, Ohio           | Lat 41°24'40", long 81°24'44", Cuyahoga County, at bridge on Solon Road, 1.0 miles upstream from mouth, 1.6 miles southwest of Chagrin Falls.                                 | 57.4                  | 1953, 1972                 | 6- 8-72<br>8- 1-72<br>a9- 5-72 | 15.2<br>17.1<br>12.5 |
| 04210000                                  | Phelps Creek near Windsor, Ohio                  | Lat 41°30'56", long 80°56'07", Ashtabula County, at bridge on State Highway 534, 1.4 miles south of Windsor, 1.5 miles upstream from mouth.                                   | 25.6                  | 1942-59*, 1962-66, 1971-72 | 8-17-71<br>7-31-72<br>a9- 5-72 | .41<br>1.03<br>.60   |

\* Also a crest-stage station.

\* Operated as a continuous-record gaging station.

a Water quality records for the current year are published in part 2 of this report.

b Corrected.

c Miami Conservancy District station, data furnished.

d Prior to 1970 water year, at site 1.2 miles downstream at bridge on Brooklyn Street (Drainage area, 112 sq mi).

e Flow largely from limestone springs.



The following table contains annual maximum discharge for crest-stage stations. A crest-stage 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, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1972

| Annual maximum discharge at crest-stage partial-record stations during water year 1972 |  |   |                       |                                |                |                    |                 |
|--|--|---|-----------------------|--------------------------------|----------------|--------------------|-----------------|
| Station No.  | Station name   | Location  | Drainage area (sq mi) | Period of record               | Annual maximum |                    |                 |
|  |  |   |                       |                                | Date           | Gage height (feet) | Discharge (cfs) |
| Beaver River basin   |  |   |                       |                                |                |                    |                 |
| 03089500   | Mill Creek near Berlin Center, Ohio                  | Lat 41°00'01", long 80°58'07", Mahoning County, at bridge on county road, 1 mile upstream from flow line of Berlin Reservoir, 1.2 miles upstream from Turkeybroth Creek, 2 miles south-west of Berlin Center. | 19.1                  | 1942-71 <sup>†</sup> , 1972    | 5-23-72        | 5.32               | 779             |
| *03092099  | Hinkley Creek at Charlestown, Ohio                   | Lat 41°09'16", long 81°08'51", Portage County, at bridge on Rock Spring Road, 0.6 mile south of Charlestown, 2.2 miles upstream from mouth.   | 7.85                  | 1970-72                        | 4-15-72        | 12.98              | 1,080           |
| 03094900   | Walnut Creek at Cortland, Ohio                       | Lat 41°19'49", long 80°43'28", Trumbull County, at Main Street Bridge in Cortland, 1.8 miles upstream from mouth.   | 8.45                  | 1947-72                        | 4-16-72        | 3.13               | 275             |
| 03098500   | Mill Creek at Youngstown, Ohio                       | Lat 41°04'19", long 80°41'26", Mahoning County, 600 ft upstream from suspension bridge in Mill Creek Park at Youngstown, 1 mile downstream from Newport Dam, 2.5 miles upstream from mouth.                   | 66.3                  | 1944-71 <sup>†</sup> , 1972    | 4-15-72        | 4.51               | 1,540           |
| 03098700   | Crab Creek at Youngstown, Ohio                       | Lat 41°07'20", long 80°38'08", Mahoning County, at bridge on Hubbard Road at Youngstown, 2 miles upstream from mouth.   | 14.0                  | 1959-72                        | 4-16-72        | 7.67               | 960             |
| 03102900   | Clear Creek at Dilworth, Ohio                        | Lat 41°26'45", long 80°39'56", Trumbull County, at bridge on State Highway 170 at Dilworth, 1.1 miles south of Gustavus, 3 miles upstream from mouth.   | 1.13                  | 1947-72                        | 6-23-72        | 10.15              | 44              |
| Little Beaver Creek basin  |  |   |                       |                                |                |                    |                 |
| 03109000   | Lisbon Creek at Lisbon, Ohio                         | Lat 40°46'55", long 80°45'53", Columbiana County, at city water works of Lisbon, 800 feet upstream from bridge on State Highway 164.  | 6.19                  | 1946-62 <sup>†</sup> , 1963-72 | 4-15-72        | 3.15               | 216             |
| Duck Creek basin   |  |   |                       |                                |                |                    |                 |
| 03115600   | Barnes Run near Summerfield, Ohio                    | Lat 39°46'20", long 81°22'26", Noble County, at bridge on county road adjacent to State Highway 78, 2.5 miles southwest of Summerfield.   | 3.46                  | 1947-72                        | 7-16-72        | 10.40              | 415             |
| Muskingum River basin  |  |   |                       |                                |                |                    |                 |
| *03116100  | Little Chippewa Creek near Smithville, Ohio          | Lat 40°53'39", long 81°48'46", Wayne County, at bridge on State Highway 5, 3.3 miles northeast of Smithville.   | 16.4                  | 1947-72                        | 7-15-72        | 12.52              | 1,000           |
| 03119600   | Jefferson Creek near Jewett, Ohio                    | Lat 40°22'57", long 80°58'36", Harrison County, at culvert adjacent to State Highway 9, 1.4 miles northeast of Jewett.  | 2.54                  | 1947-72                        | - -72          | a                  | < 37            |
| *03119700  | Conotton Creek at Jewett, Ohio                       | Lat 40°21'59", long 81°00'13", Harrison County, at bridge on State Highway 9 in Jewett.   | 14.3                  | 1947-72                        | - -72          | a                  | < 183           |
| 03123400   | Dundee Creek at Dundee, Ohio                         | Lat 40°35'35", long 81°36'13", Tuscarawas County, at culvert on State Highway 93, 0.4 mile upstream from mouth, 0.5 mile northeast of Dundee.   | .71                   | 1966-72                        | 6-16-72        | 20.21              | 42              |
| 03129300   | Whetstone Creek tributary near Olivesburg, Ohio      | Lat 40°53'15", long 82°24'25", Ashland County, at culvert on State Highway 96, 1.1 miles east of Olivesburg.  | .236                  | 1950-72                        | 4-20-72        | 5.80               | 52              |
| 03136400   | North Branch Kokosing River near Fredericktown, Ohio | Lat 40°30'08", long 82°34'18", Knox County, at bridge on county road, 2 miles north-west of Fredericktown, 2.7 miles upstream from East Branch.   | 45.5                  | 1963-72                        | 7-16-72        | 4.80               | b750            |
| 03138900   | Jennings Ditch tributary near Wooster, Ohio          | Lat 40°44'45", long 81°55'48", Wayne County, at culvert on State Highway 76, 0.8 mile upstream from mouth, 4 miles south of Wooster.  | .90                   | 1946, 1966-72                  | 7-16-72        | 18.40              | 67              |
| 03144800   | Etna Creek at Etna, Ohio                             | Lat 39°58'08", long 82°40'55", Licking County, at culvert on State Highway 310, 0.7 mile north of Etna.   | 1.10                  | 1966-72                        | 4-7-72         | 9.40               | 36              |
| 03145600   | Otter Fork near Centerburg, Ohio                     | Lat 40°17'35", long 82°43'09", Knox County, at culvert on State Highway 3, 1.2 miles west of Centerburg.  | 3.17                  | 1947-72                        | 8-18-72        | 12.52              | 130             |
| 03147900   | Timber Run near Zanesville, Ohio                     | Lat 39°57'00", long 82°03'07", Muskingum County, at bridge on private road adjacent to old U.S. Highway 40, 0.5 mile west of junction of Interstate 70 with old U.S. Highway 40, 2 miles west of Zanesville.  | 10.6                  | 1947-72                        | 4- -72         | 9.67               | 225             |

See footnotes at end of table, p. 215.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

| Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued |  |   |                       |                                |   |   |  |
|---|--|---|-----------------------|--------------------------------|---|---|--|
| Station No.   | Station name   | Location  | Drainage area (sq mi) | Period of record               | Annual maximum  |   |  |
|   |  |   |                       |                                | Date  | Gage height (feet)                          | Dis-charge (cfs)                                     |
| Muskingum River basin--Continued  |  |   |                       |                                |   |   |  |
| 03148300  | Moxahala Creek at Roseville, Ohio                      | Lat 39°48'38", long 82°04'13", Muskingum County, at pumping station about 2,500 feet downstream from First Street bridge in Roseville.  | 80.8                  | 1964-72                        | 4-13-72   | 10.60                                       | 1,630  |
| 03150100  | Bell Creek at McConnellsville, Ohio                    | Lat 39°38'50", long 81°50'36", Morgan County, at culvert on State Highway 60, 0.1 mile upstream from mouth, 0.5 mile east of McConnellsville.   | 1.07                  | 1947-48, 1950-72               | 3- 3-72   | 2.82  | 111  |
| 03150600  | Tupper Creek at DeVola, Ohio                           | Lat 39°28'24", long 81°27'58", Washington County, at culvert on State Highway 60 at DeVola.   | .99                   | 1966-72                        | 12- 7-71  | 9.11  | 88   |
| Hocking River basin   |  |   |                       |                                |   |   |  |
| 03158100  | Hayden Run at Haydenville Ohio                         | Lat 39°28'57", long 82°19'06", Hocking County, at culvert on U.S. Highway 33, 0.5 mile east of Haydenville.   | 1.04                  | 1966-72                        | - -72   | a   | < 70   |
| Scioto River basin  |  |   |                       |                                |   |   |  |
| 03218000  | Little Scioto River above Marion, Ohio                 | Lat 40°37'43", long 83°10'11", Marion County, at bridge on Chesapeake and Ohio Railway, 1 mile downstream from Rock Fork, 3.5 miles northwest of Marion.                              | 72.4                  | 1939-71 <sup>a</sup> , 1972    | 4-20-72   | 7.02  | 1,910  |
| 03219600  | Eagon Run near Warrensburg, Ohio                       | Lat 40°19'42", long 83°09'11", Delaware County, at Herbert Eagon farm, 0.9 mile upstream from mouth, 1.7 miles northeast of Warrensburg, 5 miles northwest of Delaware.               | .123                  | 1950-62 <sup>a</sup> , 1963-72 | 4-12-72   | 4.95  | 25   |
| 03221900  | Dry Run at Columbus, Ohio                              | Lat 39°57'22", long 83°06'19", Franklin County, at culvert in Westinghouse employees parking lot at entrance to plant, 1,000 ft north of U.S. Highway 40, near west edge of Columbus. | 1.72                  | 1965-72                        | 8-17-65<br>8-11-66<br>8-22-67<br>4-23-68<br>6-23-69<br>6-13-70<br>8-27-71<br>12-30-71 | 22.00<br>-<br>-<br>-<br>-<br>24.26<br>21.64 | 546<br>378<br>263<br>262<br>630<br>513<br>760<br>510 |
| 03226200  | Delaware Run near Delaware, Ohio                       | Lat 40°18'28", long 83°06'35", Delaware County, at culvert on county highway, 400 feet south of State Highway 37, 1 mile west of Delaware Corporation line.                           | 5.84                  | 1947-72                        | 4-13-72   | 12.12                                       | 490  |
| 03226850  | Linworth Run near Linworth, Ohio                       | Lat 40°06'24", long 83°02'35", Franklin County, at culvert on Linworth Road, 0.4 mile upstream from mouth, 1.2 miles north of Linworth.   | c.40                  | 1966-72                        | 4-16-72   | 19.70                                       | 79   |
| 03226890  | Turkey Run at Upper Arlington, Ohio                    | Lat 40°02'10", long 83°04'06", Franklin County, at culvert on Lytham Road at Upper Arlington.   | .90                   | 1972                           | 8-18-72   | 14.63                                       | 137  |
| 03226900  | Fishing Road Creek at Upper Arlington, Ohio            | Lat 40°01'27", long 83°02'38", Franklin County, at culvert on Kenny Road at Upper Arlington.  | .45                   | 1964-72                        | 8-18-72   | 18.30                                       | 210  |
| 03228000  | Scioto Big Run at Briggsdale, Ohio                     | Lat 39°54'56", long 83°03'55", Franklin County, at bridge on U.S. Highway 62 at Briggsdale, 2.8 miles northeast of Grove City, 4 miles upstream from mouth.                           | 11.0                  | 1947-58 <sup>a</sup> , 1959-72 | 5- 9-72   | 7.45  | 1,270  |
| 03230400  | Big Darby Creek at Darbydale, Ohio                     | Lat 39°50'58", long 83°11'20", Franklin County, at McKinley Bridge at Darbydale.  | 449                   | 1964-72                        | 5-10-72   | 12.67                                       | 6,410  |
| *03230600   | Hominy Creek at Circleville, Ohio                      | Lat 39°35'26", long 82°55'25", Pickaway County, at bridge adjacent to State Highway 56, 0.4 mile southeast of railroad crossing at east edge of Circleville.                          | 5.66                  | 1947-72                        | 6-29-72   | 5.08  | 405  |
| 03231600  | East Fork Paint Creek near Sedalia, Ohio               | Lat 39°42'36", long 83°27'48", Madison County, at culvert on State Highway 38, 1.8 miles southeast of Sedalia.  | 3.82                  | 1947-72                        | 4-13-72   | 13.21                                       | 265  |
| 03234100  | Indian Creek at Massieville, Ohio                      | Lat 39°15'42", long 82°58'08", Ross County, at bridge adjacent to U.S. Highway 23, 0.2 mile south of Massieville.   | 9.60                  | 1947-72                        | 4-22-72   | 14.66                                       | 2,400  |
| *03235000   | Salt Creek at Tarlton, Ohio                            | Lat 39°33'20", long 82°46'51", Pickaway County, at bridge on State Highway 159 at Tarlton.  | 11.5                  | 1947-61 <sup>a</sup> , 1962-72 | 4-13-72   | 458.5                                       | 255  |
| 03235200  | Little Blackjack Branch near South Bloomingville, Ohio | Lat 39°27'23", long 82°30'25", Hocking County, at culvert on State Highway 664, 5.5 miles northeast of South Bloomingville.   | .89                   | 1966-72                        | 5- 9-72   | 18.84                                       | 68   |

See footnotes at end of table, p. 215.

## Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

| Station No.                   | Station name  | Location  | Drainage area (sq mi) | Period of record               | Annual maximum |                    |                 |
|-------------------------------|---|---|-----------------------|--------------------------------|----------------|--------------------|-----------------|
|                               |   |   |                       |                                | Date           | Gage height (feet) | Discharge (cfs) |
| Scioto River basin--Continued |   |   |                       |                                |                |                    |                 |
| 03235400                      | West Branch Tar Hollow Creek at Tar Hollow State Park, Ohio | Lat 39°23'35", long 82°45'12", Ross County, in Tar Hollow State Park, 300 feet upstream from Tar Hollow Creek, 5 miles south of Adelphi.  | 0.305                 | 1950-72                        | 4- 7-72        | 5.01               | 19              |
| 03235995                      | Salt Creek above damsite near Londonderry, Ohio             | Lat 39°17'26", long 82°44'45", Vinton County, at bridge on State Highway 671, 0.5 mile east of Ross County line, 2.8 miles north-east of Londonderry.                           | 268                   | 1963-72                        | 4-22-72        | 11.5               | 5,500           |
| 03236100                      | South Branch Little Salt Creek at Jackson, Ohio             | Lat 39°02'38", long 82°38'35", Jackson County, at culvert adjacent to State Highway 139, 800 feet south of Jackson High School, 1 mile upstream from mouth.                     | 3.76                  | 1947-72                        | 4-22-72        | 14.77              | 490             |
| 03237210                      | Rose Run near Portsmouth, Ohio                              | Lat 38°48'07", long 82°59'03", Scioto County, at culvert on U.S. Highway 23, 2.9 miles north of Portsmouth city limits.   | 1.04                  | 1966-72                        | 5- 3-72        | 15.69              | 105             |
| Ohio Brush Creek basin        |   |   |                       |                                |                |                    |                 |
| 03237300                      | West Branch Turkey Run near Winchester, Ohio                | Lat 38°56'56", long 83°40'19", Adams County, at culvert on State Highway 32, 1.3 miles west of Winchester.  | .89                   | 1956-72                        | 4-22-72        | 11.65              | 142             |
| Whiteoak Creek basin          |   |   |                       |                                |                |                    |                 |
| 03238400                      | Harwood Creek near Fayetteville, Ohio                       | Lat 39°07'51", long 83°51'00", Brown County, at culvert on State Highway 131, 0.2 mile west of junction of State Highways 131 and 134, 6 miles southeast of Fayetteville.       | .88                   | 1966-72                        | 4-22-72        | 18.74              | 90              |
| 03238600                      | Higgins Run near Higginsport, Ohio                          | Lat 38°49'10", long 83°57'28", Brown County, at culvert on State Highway 221, 150 feet upstream from mouth, 2 miles north of Higginsport.                                       | .55                   | 1966-72                        | 4-21-72        | 19.07              | 47              |
| Ray Run basin                 |   |   |                       |                                |                |                    |                 |
| 03238700                      | Ray Run near Moscow, Ohio                                   | Lat 38°51'15", long 84°12'00", Clermont County, at culvert on State Highway 743, 1.5 miles east of Moscow.  | .86                   | 1966-72                        | 4-16-72        | 19.48              | 50              |
| Little Miami River basin      |   |   |                       |                                |                |                    |                 |
| *03239000                     | Little Miami River near Selma, Ohio                         | Lat 39°48'36", long 83°44'21", Clark County, at bridge on Selma Pike, 2.3 miles northwest of Selma, 3.1 miles upstream from North Fork.   | 48.9                  | 1952-58 <sup>a</sup> , 1959-72 | 5- 8-72        | 6.84               | 1,160           |
| *03239500                     | North Fork Little Miami River near Pitchin, Ohio            | Lat 39°49'40", long 83°46'38", Clark County, at bridge on county road, 1.1 miles upstream from Goose Creek, 1.3 miles southwest of Pitchin.                                     | 28.9                  | 1952-58 <sup>a</sup> , 1959-72 | 5- 9-72        | 4.38               | 260             |
| 03241600                      | Shawnee Creek at Xenia, Ohio                                | Lat 39°40'32", long 83°55'32", Greene County, at bridge on U.S. Highway 68, 0.7 mile southeast of intersection with U.S. Highway 42 in Xenia.                                   | 4.21                  | 1948-72                        | 4-15-72        | 13.63              | 420             |
| 03242100                      | Wayne Creek at Waynesville, Ohio                            | Lat 39°31'08", long 84°04'47", Warren County, at culvert on State Highway 73, 0.8 mile southeast of intersection of State Highway 73 and U.S. Highway 42 at Waynesville.        | 1.01                  | 1966-72                        | 4-18-72        | 19.8               | 118             |
| 03247100                      | Patterson Run near Owensville, Ohio                         | Lat 39°07'38", long 84°06'44", Clermont County, at bridge on private road, 200 feet north of U.S. Highway 50, 0.5 mile upstream from Brushy Fork, 1.2 miles east of Owensville. | 3.34                  | 1947-72                        | 12-30-71       | 3.88               | 539             |
| Great Miami River basin       |   |   |                       |                                |                |                    |                 |
| 03262750                      | Millers Ditch at Tipp City, Ohio                            | Lat 39°57'59", long 84°10'22", Miami County, at culvert on 4th Street in Tipp City.   | 1.50                  | 1966-72                        | 5-15-72        | 12.48              | 90              |
| 03263100                      | Poplar Creek near Vandalia, Ohio                            | Lat 39°52'10", long 84°11'21", Montgomery County, at culvert on Interstate Highway 75, 1.2 miles upstream from mouth, 1.5 miles southeast of Vandalia.                          | 3.11                  | 1947-72                        | 5-15-72        | 3.33               | 197             |
| 03263700                      | Bridge Creek near Greenville, Ohio                          | Lat 40°04'13", long 84°37'45", Darke County, at culvert on State Highway 49, 2.2 miles south of Greenville.   | 4.83                  | 1947-72                        | 4-22-72        | 12.84              | 250             |
| 03265100                      | Hog Run tributary at Laura, Ohio                            | Lat 40°00'30", long 84°25'26", Miami County, at culvert on State Highway 571, 0.3 mile upstream from mouth, 1 mile northwest of Laura.  | .463                  | 1950-72                        | 4-30-72        | 5.85               | 44              |
| 03268300                      | Beaver Creek at Brighton, Ohio                              | Lat 39°55'46", long 83°34'04", Clark County, at culvert on U.S. Highway 40, 0.2 mile west of Brighton.  | 3.33                  | 1959-72                        | 12-30-71       | 10.15              | 188             |

See footnotes at end of table, p. 215.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

| Station No.                        | Station name                                | Location   | Drainage area (sq mi) | Period of record  | Annual maximum               |                      |                   |
|------------------------------------|---|--|-----------------------|---|------------------------------|----------------------|-------------------|
|                                    |   |  |                       |   | Date                         | Gage height (feet)   | Dis-charge (cfs)  |
| Great Miami River basin--Continued |   |  |                       |   |                              |                      |                   |
| 03269000                           | Buck Creek at Springfield, Ohio             | Lat 39°55'57", long 83°49'02", Clark County, at Plum Street Bridge in Springfield, 0.3 mile upstream from concrete control dam, 2.2 miles upstream from mouth.                             | 139                   | 1913, 1914-21 <sup>#</sup> , 1924-49 <sup>#</sup> , 1959-72 | 5- 9-72                      | 5.04                 | 1,640             |
| 03272900                           | Collins Creek at Collinsville, Ohio         | Lat 39°31'05", long 84°36'53", Butler County, at culvert on U.S. Highway 127, 0.3 mile upstream from mouth, 0.4 mile northwest of Collinsville.  | .94                   | 1966-72   | 12-30-71                     | 21.63                | 297               |
| 03274100                           | Blake Run near Reilly, Ohio                 | Lat 39°27'59", long 84°45'22", Butler County, 600 feet upstream from culvert on Stevenson Road, 2.2 miles north of Reilly, 3 miles upstream from mouth.                                    | .29                   | 1939-40, 1942-43, 1947-72                                   | 12-30-71                     | 2.76                 | 29                |
| Streams tributary to Lake Erie     |   |  |                       |   |                              |                      |                   |
| 04176900                           | Hill Ditch near Richards, Ohio              | Lat 41°39'54", long 83°40'05", Lucas County, at culvert on U.S. Highway 20, 1.4 miles west of Richards, 3.4 miles north of intersection of U.S. Highway 20 and State Highway 2.            | 3.35                  | 1947-72   | 9-17-72                      | 13.78                | 340               |
| 04177400                           | Eagle Creek tributary near Montpelier, Ohio | Lat 41°35'10", long 84°40'50", Williams County, at culvert on State Highway 107, 3.5 miles west of Montpelier.   | 1.84                  | 1950-72   | 11-20-69<br>2- 4-71<br>- -72 | c10.84<br>10.17<br>- | c66<br>c43<br>d40 |
| 04186800                           | King Run near Harrod, Ohio                  | Lat 40°43'56", long 83°53'47", Allen County, at culvert on U.S. Highway 30 South, 0.9 mile west of Allen-Hardin County line, 2.2 miles northeast of Harrod.                                | .53                   | 1966-72   | 4-20-72                      | 21.56                | 135               |
| 04189100                           | Tiderishi Creek near Jenera, Ohio           | Lat 40°55'53", long 83°43'39", Hancock County, at culvert on State Highway 698, 2.2 miles north of Jenera.   | 4.65                  | 1947-72   | 9-13-72                      | 13.72                | 245               |
| 04190500                           | Roller Creek at Ohio City, Ohio             | Lat 40°46'16", long 84°38'15", Van Wert County, at bridge on county road, 0.8 mile west of Ohio City.  | 5.14                  | 1947-48 <sup>#</sup> , 1949-72                              | 4-20-72                      | 8.05                 | 230               |
| 04192900                           | Reitz Run at Waterville, Ohio               | Lat 41°29'50", long 83°42'35", Wood County, at culvert on State Highways 64 and 65, 0.1 mile upstream from mouth, 0.5 mile southeast of Waterville.  | 1.06                  | 1966-72   | 3-14-72                      | 18.45                | 37                |
| 04196700                           | St. James Run near Upper Sandusky, Ohio     | Lat 40°46'53", long 83°18'05" (revised), Wyandot County, 500 ft upstream from bridge on State Highway 67 (revised), 3.5 miles southwest of Upper Sandusky.                                 | 5.29                  | 1947-72   | 4-20-72                      | 12.67                | 300               |
| 04197100                           | Honey Creek at Melmore, Ohio                | Lat 41°01'20", long 83°06'35", Seneca County, at bridge on State Highways 67 and 100 at Melmore, 1.5 miles upstream from Buckeye Creek.  | 149                   | 1961-72   | 5- 9-72                      | 7.42                 | 1,490             |
| 04197300                           | Wolf Creek at Bettsville, Ohio              | Lat 41°14'58", long 83°14'08", Seneca County, at bridge on State Highway 590 at Bettsville, 3.5 miles upstream from East Branch Wolf Creek.  | 66.2                  | 1961-72   | 4-22-72                      | 6.01                 | 1,340             |
| 04197400                           | East Branch Wolf Creek at Fort Seneca, Ohio | Lat 41°12'40", long 83°10'50", Seneca County, at bridge on County Road 30, 0.8 mile west of Fort Seneca, 2.2 miles downstream from Snuff Creek.  | 70.1                  | 1961-72   | 4-22-72                      | 10.91                | 1,480             |
| 04197500                           | Havens Creek at Havens, Ohio                | Lat 41°17'36", long 83°11'50", Sandusky County, at bridge on County Road 12, 0.8 mile southwest of Havens, 1.8 miles upstream from mouth.  | 4.28                  | 1947-49 <sup>#</sup> , 1950-72                              | 8- 7-72                      | 5.04                 | 92                |
| 04198100                           | Norwalk Creek near Norwalk, Ohio            | Lat 41°13'58", long 82°32'28", Huron County, at bridge on county road, 300 feet south of junction of State Highways 601 and 18, 4 miles southeast of Norwalk, 6 miles upstream from mouth. | 4.92                  | 1947-72   | 9-18-72                      | 13.82                | 400               |
| 04199800                           | Neff Run near Litchfield, Ohio              | Lat 41°12'33", long 82°01'26", Lorain County, at culvert on State Highway 76, 0.7 mile north of county line, 2.8 miles north of Litchfield.  | .76                   | 1966-72   | 9-18-72                      | 17.86                | 21                |
| 04200100                           | Plum Creek at Oberlin, Ohio                 | Lat 41°17'15", long 82°13'12", Lorain County, at bridge on Professor Street in Oberlin.  | 4.83                  | 1947-72   | 9-18-72                      | 13.35                | 400               |
| 04210090                           | Montville Ditch at Montville, Ohio          | Lat 41°36'04", long 81°03'03", Geauga County, at culvert on State Highway 528, 0.4 mile south of Montville.  | .29                   | 1969-72   | 8- 6-72                      | 11.94                | 73                |

See footnotes at end of table, p. 215.



## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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## Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

| Station No.                               | Station name                            | Location  | Drainage area (sq mi) | Period of record | Annual maximum     |                    |                  |
|---|---|---|-----------------------|------------------|--------------------|--------------------|------------------|
|   |   |   |                       |                  | Date               | Gage height (feet) | Dis-charge (cfs) |
| Streams tributary to Lake Erie--Continued |   |   |                       |                  |                    |                    |                  |
| 04210100                                  | Hoskins Creek at Hartsgrove, Ohio       | Lat 41°36'00", long 80°57'12", Ashtabula County, at culvert on State Highway 534, 0.4 mile south of Hartsgrove, 4,000 feet downstream from former site. | 5.42                  | 1947-72          | 3-13-72            | 8.73               | 350              |
| 04212600                                  | Hubbard Run tributary at Ashtabla, Ohio | Lat 41°50'38", long 80°46'42", Ashtabula County, at culvert on Seven Hills Road, 0.5 mile upstream from mouth, 1.6 miles south of center of Ashtabula.  | .88                   | 1966-72          | 7- 5-69<br>4-17-72 | 19.85<br>17.63     | c270<br>163      |

\* Also a low-flow partial-record station.  
 † Operated as a continuous-record station.  
 < Less than.  
 a Peak stage did not reach bottom of gage.  
 b Regulation by reservoir 0.4 mile upstream.  
 c Revised.  
 d Estimated.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

## Discharge measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (\*); measurements of peak flow by a dagger (+).

## Discharge measurements made at miscellaneous sites during water year 1972

| Stream                 | Tributary to      | Location   | Drainage area (sq mi) | Measured previously (water year)           | Measurements                              |                              |
|------------------------|-------------------|--|-----------------------|--|---|------------------------------|
|                        |                   |  |                       |  | Date                                      | Discharge (cfs)              |
| Part 3                 |                   | Beaver River basin   |                       |  |   |                              |
| Mill Creek             | Mahoning River    | Lat 41°00'01", long 80°58'07", Mahoning County, at county road bridge, 1 mile upstream from flowline of Berlin Reservoir, 1.2 miles upstream from Turkeybroth Creek, 2 miles southwest of Berlin Center, Ohio. | 19.1                  | 1942-71 <sup>†</sup>                       | 7-31-72<br>9- 7-72                        | *1.55<br>* .57               |
|                        |                   | Cross Creek basin  |                       |  |   |                              |
| Cross Creek            | Ohio River        | Lat 40°19'03", long 80°37'45", Jefferson County, adjacent to County Road 74, 1.3 miles east of Gould, 1 mile southwest of Mingo Junction, Ohio, 1.6 miles upstream from mouth.                                 | 125                   | 1903, 1950, 1952-53, 1959, 1962-71         | 9- 7-72                                   | *12.7                        |
|                        |                   | Wheeling Creek basin   |                       |  |   |                              |
| Wheeling Creek         | Ohio River        | Lat 40°04'05", long 80°46'49", Belmont County, at bridge on County Road 28, in Brookside, Ohio, 0.2 mile downstream from Mutton Hollow.  | 103                   | 1959, 1962-71                              | 9- 7-72                                   | *22.5                        |
|                        |                   | Muskingum River basin  |                       |  |   |                              |
| Dry Creek              | Kokosing River    | Lat 40°20'48", long 82°34'14", Knox County, at bridge on county road, 300 ft south of U.S. Highway 36 (State Highway 3) 1 mile west of Bangs, 6 miles southwest of Mount Vernon, Ohio.                         | 21.9                  | 1959                                       | 7-12-72                                   | +5,250                       |
| Walhonding River       | Muskingum River   | Lat 40°19'38", long 81°56'34", Coshocton County, at bridge on U.S. Highway 36, 0.2 mile upstream from Killbuck Creek, 5 miles northwest of Coshocton, Ohio.  | 1,577                 | -  | 12-23-71                                  | *928                         |
| Muskingum River        | Ohio River        | Lat 40°11'15", long 81°53'19", Coshocton County, at bridge on county road at Conesville, Ohio  | 4,879                 | -  | 10-20-71                                  | *742                         |
| Moxahala Creek         | Muskingum River   | Lat 39°53'48", long 82°00'20", Muskingum County, 0.5 mile upstream from mouth, 1 mile east of south Zanesville, Ohio.  | 302                   | 1959, 1962-71                              | 8-11-72<br>9-22-72                        | *19.2<br>*27.0               |
|                        |                   | Hocking River basin  |                       |  |   |                              |
| Indian Creek           | Little Rush Creek | Lat 39°48'22", long 82°26'47", Fairfield County, at bridge on County Road 17, at Oakthorpe, Ohio.  | 7.64                  | -  | 6- 9-72                                   | +3,320                       |
| Monday Creek           | Hocking River     | Lat 39°26'07", long 82°11'30", Athens County, at highway bridge in Doanville, Ohio, 1.8 miles upstream from mouth.   | 114                   | 1956, 1961-71                              | 10- 2-71<br>8-10-72<br>9-21-72            | *20.3<br>*7.64<br>*20.4      |
|                        |                   | Symmes Creek basin   |                       |  |   |                              |
| Symmes Creek           | Ohio River        | Lat 38°29'42", long 82°28'37", Lawrence County, at bridge on State Highway 243 at north edge of Getaway, Ohio, 0.8 mile downstream from Leatherwood Creek, 6.5 miles northwest of Huntington, West Virginia.   | 335                   | 1938-47 <sup>†</sup>                       | 8- 9-72                                   | *18.9                        |
|                        |                   | Scioto River basin   |                       |  |   |                              |
| Walnut Creek tributary | Walnut Creek      | Lat 39°50'50", long 82°29'26", Fairfield County, at culvert on Township Road 419, 0.9 mile west of New Salem, Ohio.  | .24                   | -  | 6- 9-72                                   | +377                         |
| Walnut Creek           | Scioto River      | Lat 39°50'25", long 82°33'22", Fairfield County, at bridge on State Highway 256, 0.5 mile west of Thurston, Ohio.  | 21.0                  | -  | 6- 9-72                                   | +6,010                       |
| Scioto River           | Ohio River        | Lat 39°04'15", long 83°01'00", Pike County, at bridge on U.S. Highway 23 in Piketon, Ohio.   | 5,836                 | 1949, 1953-54, 1962-69                     | 2-24-71<br>9- 3-71                        | *43,800<br>*1,540            |
|                        |                   | Mill Creek basin   |                       |  |   |                              |
| West Fork Mill Creek   | Mill Creek        | Lat 39°13'35", long 84°27'20", Hamilton County, at Lock Street Bridge in Lockland, Ohio, 1.2 miles upstream from mouth.  | 35.6                  | 1938-57 <sup>†</sup> , 1968                | 11-10-71<br>4-12-72<br>6-14-72<br>9-28-72 | 10.0<br>26.9<br>3.27<br>13.0 |
|                        |                   | Great Miami River basin  |                       |  |   |                              |
| Great Miami River      | Ohio River        | Lat 40°09'03", long 84°13'44", Miami County, at Ash Street (U.S. Highway 36) Bridge in Piqua, Ohio. <sup>b/</sup>  | 866                   | 1914, 1915-17 <sup>†</sup> , 1948, 1962-71 | 7-19-72<br>8- 7-72                        | 402<br>*128                  |

See footnotes at end of table, p. 218.

## Discharge measurements made at miscellaneous sites during water year 1972--Continued

| Stream                                    | Tributary to      | Location  | Drainage area (sq mi) | Measured previously (water year) | Measurements   |   |
|---|-------------------|---|-----------------------|----------------------------------|--|---|
|   |                   |   |                       |                                  | Date   | Discharge (cfs)   |
| Part 3 Great Miami River basin--Continued |                   |   |                       |                                  |  |   |
| Lost Creek                                | Great Miami River | Lat 40°01'05", long 84°09'28", Miami County, at Knoop Road bridge, 0.2 mile south of State Highway 41, 2.8 miles southeast of Troy, Ohio, 2.8 miles southwest of Casstown, 4.3 miles upstream from mouth. <u>b/</u> | 58.3                  | 1959, 1962-71                    | 10- 6-71<br>11-19-71<br>12-16-71<br>1-28-72<br>3-20-72<br>5- 3-72<br>7-25-72<br>9- 5-72  | *2.79<br>*5.24<br>141<br>36.7<br>58.0<br>40.1<br>*7.20<br>*2.24   |
| Holes Creek                               | Great Miami River | Lat 39°39'15", long 84°11'45", Montgomery County, at Mad River Road bridge, 200 ft south of Alexandria-Bellbrook Road, 2.8 miles southwest of Kettering, Ohio. <u>b/</u>  | 18.7                  | 1959, 1961-71                    | 10-12-71<br>12- 1-71<br>1-20-72<br>3- 2-72<br>5-18-72<br>7-19-72<br>9-26-72  | *2.40<br>9.09<br>9.42<br>281<br>12.4<br>*2.05<br>*21.2  |
| Bear Creek                                | Great Miami River | Lat 39°40'23", long 84°18'38", Montgomery County, at bridge on Farmersville-West Carrollton Road, 0.2 mile south of Ellerton, Ohio, 1.2 miles upstream from mouth. <u>b/</u>  | 37.8                  | 1959, 1962-71                    | 10- 4-71<br>12- 1-71<br>1-20-72<br>3- 2-72<br>7-19-72  | *1.93<br>*4.56<br>17.3<br>285<br>*4.54  |
| Clear Creek                               | Great Miami River | Lat 39°33'06", long 84°18'18", Warren County, at bridge on Shaker Road at south edge of Franklin, Ohio, 1.6 miles upstream from mouth. <u>b/</u>  | 51.5                  | 1959, 1961-71                    | 10-14-71<br>12- 7-71<br>2- 8-72<br>3-21-72<br>5-23-72<br>8- 3-72<br>9-27-72  | *10.6<br>141<br>22.9<br>47.9<br>26.3<br>*3.16<br>*3.79  |
| Elk Creek                                 | Great Miami River | Lat 39°30'04", long 84°27'35", Butler County, at county road bridge at east edge of Miltonville, Ohio, 1.5 miles upstream from mouth. <u>b/</u>   | 46.2                  | 1959, 1961-71                    | 7-11-72  | *3.97   |
| Dicks Creek                               | Great Miami River | Lat 39°28'25", long 84°23'51", Butler County, at Yankee Road Bridge, 1.3 miles southeast of Exello, Ohio, 2.5 miles upstream from mouth. <u>b/</u>  | 44.7                  | 1959, 1961-71                    | 10-26-71<br>12- 7-71<br>2- 2-72<br>3-21-72<br>7-11-72<br>9-12-72   | 25.9<br>100<br>23.2<br>38.2<br>21.4<br>*12.7  |
| Fourmile Creek                            | Great Miami River | Lat 39°28'58", long 84°42'05", Butler County, near western end of Wallace Road, 2.2 miles southwest of Darrown, Ohio. <u>b/</u>   | 127                   | 1964-65, 1969-71                 | 7-18-72<br>9- 8-72   | *7.98<br>*1.64  |
| Indian Creek                              | Great Miami River | Lat 39°21'45", long 84°38'35", Butler County, at Hamilton-New London Road bridge, 1.9 miles south of Millville, Ohio, 4.3 miles upstream from mouth. <u>b/</u>  | 102                   | 1959, 1961-71                    | 10-12-71<br>10-21-71<br>12- 9-71<br>3-17-72<br>8- 8-72   | *1.02<br>*2.79<br>49.4<br>280<br>*1.46  |
| Great Miami River                         | Ohio River        | Lat 39°15'47", long 84°40'04", Hamilton County, at bridge on Little Rock Road at New Baltimore, Ohio. <u>b/</u>   | 3,814                 | 1961-71                          | 10-26-71<br>2-17-72<br>4-12-72   | *818<br>4,330<br>9,690  |
| Whitewater River                          | Great Miami River | Lat 39°11'14", long 84°47'37", Hamilton County, 0.3 mile upstream from county road bridge, 1.5 miles upstream from mouth, 2.0 miles northwest of Hooven, Ohio.  | 1,467                 | 1971                             | 11-16-71   | *220  |
| Part 4 Streams tributary to Lake Erie     |                   |   |                       |                                  |  |   |
| Middle Fork Gordon Creek                  | Gordon Creek      | Lat 41°17'45", long 84°43'43", Defiance County, at bridge on State Highway 18, 1 mile east of Hicksville, Ohio.   | 4.58                  | -                                | 9-14-72  | +2,630  |
| South Fork                                | Gordon Creek      | Lat 41°17'08", long 84°46'39", Defiance County, at bridge on State Highway 2, at west city limits of Hicksville, Ohio.  | 4.59                  | -                                | 9-14-72  | +2,120  |
| Auglaize River                            | Maumee River      | Lat 40°44'36", long 84°18'57", Allen County, at bridge on State Highway 81, 0.5 mile upstream from Sixmile Creek, 3.1 miles northeast of intersection of State Highways 66 and 117 in Spencerville, Ohio.           | 219                   | -                                | 3- 7-70<br>4- 2-70<br>4-14-70<br>4-21-70<br>5-21-70<br>7- 9-70<br>9-16-70<br>11- 2-70<br>12-29-70<br>3- 4-71<br>4-19-71<br>5-10-71<br>6-14-71<br>8- 5-71<br>10- 4-71<br>11-15-71<br>1-11-72<br>3-20-72<br>4-22-72<br>5-15-72<br>6-27-72<br>8-25-72 | a436<br>a1,250<br>a118<br>a1,060<br>a96.0<br>a19.2<br>a5.55<br>a8.78<br>a29.7<br>a27.4<br>a24.0<br>a349<br>a68.4<br>a21.2<br>16.7<br>11.8<br>410<br>117<br>3,420<br>1,250<br>61<br>11.6 |

See footnotes at end of table, p. 218.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1972--Continued

| Stream   | Tributary to            | Location   | Drainage area (sq mi) | Measured previously (water year)        | Measurements  |  |
|--|-------------------------|--|-----------------------|---|---|--|
|  |                         |  |                       |   | Date  | Discharge (cfs)  |
| Part 4 Streams tributary to Lake Erie--Continued |                         |  |                       |   |   |  |
| Miami and Erie Canal                             | Jennings Creek          | Lat 40°51'35", long 84°20'25", on Van-Wert-Putnam County line, at bridge on Pohlman Road, 0.9 mile north of Delphos, Ohio.   | -                     | 1928-33 <sup>†</sup> , 1934-35, 1945-70 | 11- 3-70<br>12-29-70<br>3- 4-71<br>4-19-71<br>6-15-71<br>8-12-71<br>10- 5-71<br>11-16-71<br>1-20-72<br>3-21-72<br>5-16-72<br>8-24-72  | a6.24<br>a2.99<br>a2.11<br>a5.05<br>a6.03<br>a5.52<br>5.07<br>5.38<br>3.34<br>5.22<br>10.3<br>4.52   |
| Blanchard River                                  | Auglaize River          | Lat 41°02'02", long 83°34'46", Hancock County, at pump house no. 2 for Findlay Reservoir, 4 miles east of Findlay, Ohio.   | 233                   | -                                       | 3- 7-70<br>4-15-70<br>4-21-70<br>6-11-70<br>7-10-70<br>7-28-70<br>9-30-70<br>11- 9-70<br>1-13-71<br>3-10-71<br>4-13-71<br>6-22-71<br>8- 6-71<br>9-28-71<br>10-26-71<br>11-16-71<br>1-18-72<br>3- 7-72<br>4-23-72<br>5-17-72<br>6-26-72<br>8-21-72             | a1,180<br>a452<br>a1,440<br>a41.0<br>a14.3<br>a6.22<br>a4.42<br>a5.99<br>a17.6<br>a210<br>a30.1<br>a14.2<br>a3.46<br>a3.43<br>2.30<br>2.96<br>25.0<br>74.1<br>2,350<br>569<br>22.0<br>15.1       |
| Tymochtee Creek                                  | Sandusky River          | Lat 40°42'58", long 83°23'32", Wyandot County, at bridge on township road, 1 mile north of Marseilles, Ohio, 1.1 miles downstream from intake to Killdeer Reservoir. | 137                   | -                                       | 10-28-69<br>12-23-69<br>3- 6-70<br>4- 2-70<br>4-16-70<br>4-21-70<br>6- 2-70<br>7-20-70<br>9-25-70<br>11-12-70<br>1- 4-71<br>3- 1-71<br>4-12-71<br>6- 8-71<br>8- 3-71<br>9-27-71<br>12- 6-71<br>1-17-72<br>3- 9-72<br>4-21-72<br>5-17-72<br>7-12-72<br>8-31-72 | a6.18<br>a26.2<br>a686<br>a3,200<br>a83.2<br>a366<br>a19.3<br>a1.12<br>a.84<br>a1.55<br>a45.8<br>a182<br>a12.9<br>a16.8<br>a.79<br>a1.59<br>1.23<br>24.8<br>52.7<br>2,650<br>379<br>14.6<br>3.48 |
| Jackson Ditch                                    | East Branch Black River | Lat 41°18'50", long 82°02'05", Lorain County, at culvert on State Highway 82, 0.8 mile west of Eaton, 2.2 miles southwest of LaPorte, Ohio.                          | .90                   | -                                       | 9-18-72   | +125   |
| Plum Creek                                       | West Branch Rocky River | Lat 41°21'32", long 81°55'16", Cuyahoga County, at bridge on Usher Road, 1.4 miles southwest of Olmstead Falls, Ohio.  | 15.7                  | -                                       | 9-18-72   | +2,650   |
| Big Creek  | Cuyahoga River          | Lat 41°27'01", long 81°43'18", Cuyahoga County, 8 ft downstream from footbridge in Brookside Park, 2.5 miles upstream from mouth. (Revised)                          | 35.3                  | 1948, 1959, 1964                        | 6-23-72   | +8,400   |

\* Base flow.

+ Peak flow.

† Operated as a continuous-record gaging station.

a Not previously published.

b Data furnished by Miami Conservancy District.



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