

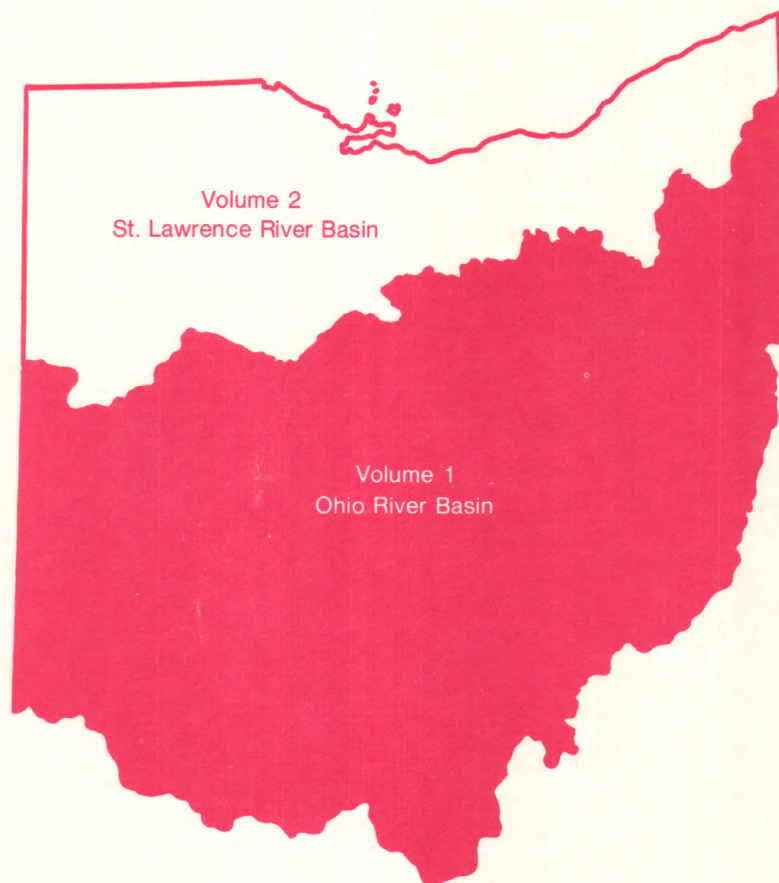
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# Water Resources Data Ohio

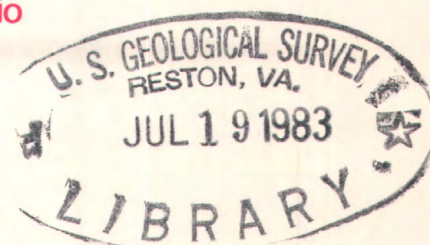
## Water Year 1982

### Volume 1. Ohio River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-82-1

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



# CALENDAR FOR WATER YEAR 1982

1981

## OCTOBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
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## NOVEMBER

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## DECEMBER

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1982

## JANUARY

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## FEBRUARY

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30	31					

## JUNE

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## AUGUST

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## SEPTEMBER

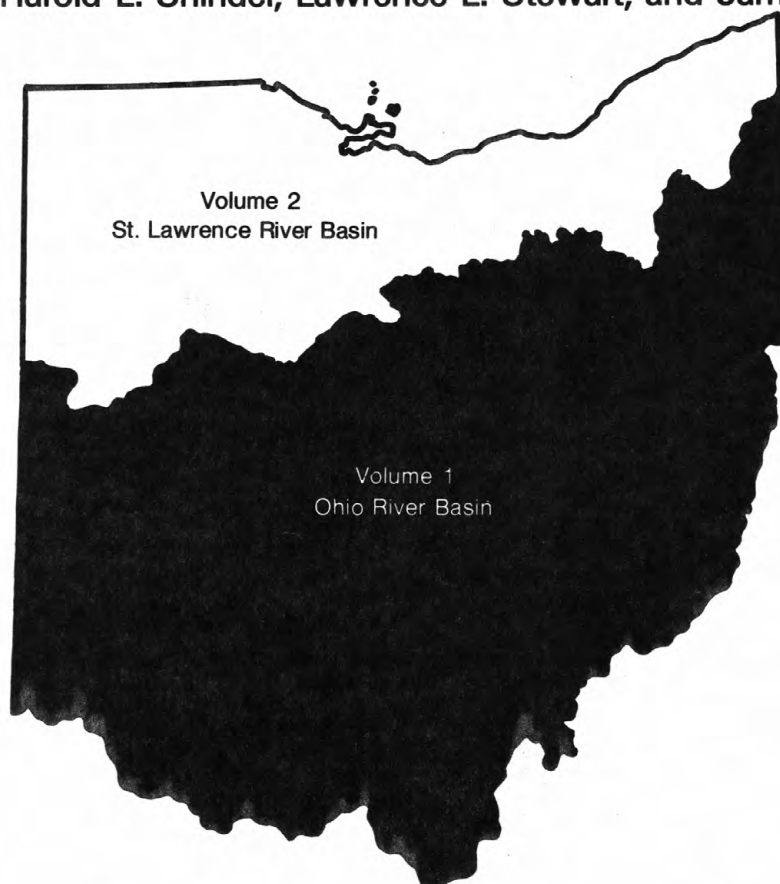
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26	27	28	29	30		



# Water Resources Data Ohio Water Year 1982

## Volume 1. Ohio River Basin

by Harold L. Shindel, Lawrence L. Stewart, and James R. Kolva



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

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Ohio write to  
District Chief, Water Research Division  
U.S. Geological Survey  
975 West Third Avenue  
Columbus, Ohio 43212

1983

## PREFACE

This volume of the annual hydrologic data report of Ohio is one of the series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provides the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Ohio are contained in 2 volumes:

Volume 1. Ohio River Basin

Volume 2. St. Lawrence River Basin - Statewide Project Data

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report.

This report was prepared in cooperation with the State of Ohio and with other agencies under the general supervision of S.M. Hindall District Chief, Ohio.

III

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			<b>14.</b>
<b>16. Abstract (Limit: 200 words)</b>  Water resources data for the 1982 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage and contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This report in two volumes contains records for water discharge at 135 gaging stations; stage and contents at 39 lakes and reservoirs; water quality at 21 gaging stations and 92 wells; and water levels at 194 observation wells. Also included are data from 100 crest-stage partial-record stations; 118 low-flow partial-record stations, and 275 coal hydrology synoptic sites. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.			
<b>17. Document Analysis a. Descriptors</b>  *Ohio, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Sampling sites, Water levels, Water analyses, Streamflow, Water wells, Benthic fauna.  <b>b. Identifiers/Open-Ended Terms</b>          <b>c. COSATI Field/Group</b>			
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(Letter after station location designates type of data: (c) chemical, (l) water level.)

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405425082173000	AS-3	Jerome Fork (l) .....	282
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392009082072200	AT-5	Athens (l) .....	284
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BELMONT COUNTY			
400619080423200	B-1	Martins Ferry (l) .....	287
BUTLER COUNTY			
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391904084371800	BU-12	East of Ross (l) .....	289
392017084345200	BU-7	Fairfield (l) .....	290
392021084340300	BU-56	Fairfield (l) .....	291
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400101083021800	FR-10	Columbus (1) .....	314
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390653084485700	H-5	South of Elizabethtown (1) .....	318
391039084291500	H-11	Cincinnati (1) .....	319
391101084172100	H-3	Southeast of Miami (1) .....	320
391201084281600	H-10	Cincinnati (1) .....	321
391214084470100	H-1	Southeast of Harrison (1) .....	322
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403601083110400	MN-2	West of Marion (1) .....	339
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400308084112900	MI-44	Troy (c) .....	343
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X

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393402082572500	PK-4	South of Circleville (1) .....	351
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403653081321800	TU-1	North of Strasburg (1) .....	371
403823081324200	TU-5	Near Strasburg (1) .....	372
UNION COUNTY			
401826083255200	U-4	Southeast of Raymond (1) .....	373
VINTON COUNTY			
391452082282900	V-1	McArthur (1) .....	374
WARREN COUNTY			
392511084182500	W-14	East of Monroe (1) .....	375
392712084191700	W-5	East of Monroe (1) .....	376
WASHINGTON COUNTY			
392438081271100	WA-1	Marietta (1) .....	377
392553081281600	WA-2	Marietta (1) .....	378
WAYNE COUNTY			
404655081553200	WN-3	Near Wooster (1) .....	379
404802081583100	WN-2A	Near Wooster (1) .....	380
405745081510200	WN-7	Near Sterling (1) .....	381
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## WATER RESOURCES DATA FOR OHIO, 1982

### INTRODUCTION

Water resources data for the 1982 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This two-volume report, contains records for water discharge at 135 gaging stations; stage stations and contents for 39 lakes and reservoirs; water quality for 21 gaging stations and 92 wells; and water levels for 194 observation wells. Also included are 100 crest-stage stations, 118 low-flow stations, and 69 water-quality partial-record stations, and 275 coal hydrology synoptic sites. Locations of these sites are shown on figures 3a-3f. Additional water data which were collected at various sites not involved in the systematic data-collection program are published as miscellaneous measurements. Data collected for short-term projects are presented in volume 2. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Ohio.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Virginia, 22304.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report OH-82-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161.

### COOPERATION

The U.S. Geological Survey and organizations of the State of Ohio have had cooperative agreements for the systematic collection of streamflow records since 1898, for ground-water levels since 1936, and for water-quality records since 1946. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Ohio Department of Natural Resources, R.W. Teater, director.

Ohio Environmental Protection Agency, W. F. Nichols, director.

Ohio Department of Transportation, D.L. Weir, director.

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

City of Columbus Department of Public Service, R.C. Parkinson, director.

City of Canton Water Department, J.D. Williams, superintendent.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 130 hydrologic-data stations in this report.

Organizations that supplied data are acknowledged in station descriptions.

## ACKNOWLEDGMENT

The water-resources data for Ohio were processed and prepared for publication under the supervision of Harold L. Shindel, Hydrologic Records Section; by R. V. Swisshelm (project information), Hydrologic Studies Section; C. G. Angelo and M. K. Katzenbach (water quality); A.C. Sedam (ground water); and C. M. Eberle (Publications Unit). Most of the data were collected, computed, and processed from the Columbus District Office and the New Philadelphia Subdistrict Office. Technicians and Hydrologists in charge of the various areas are as follows:

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## SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

At the start of the 1982 water year streamflow was excessive in southwestern Ohio and in the normal range throughout the rest of the state. November and December streamflow was normal throughout the state. January streamflow was normal, except in northwest Ohio where it was excessive. Streamflow throughout the entire state was excessive during February.

Rain totaling less than 2 inches fell in northwest Ohio March 11-13, triggering snowmelt that caused major flooding. Discharges in the Maumee River basin exceeded the 100-year recurrence interval. Streamflow in western Ohio was excessive for March, whereas it was normal for the rest of the state. April and May were normal, except in northwestern Ohio where streamflow was deficient.

June streamflow was normal in most of the state, except in western Ohio where it was excessive. It remained excessive in the northwest part of the state during July, but fell to the normal range in southwest Ohio. Streamflow was normal throughout the state in August and September.

Figure 2 compares the 1982 mean discharges at four selected long-term stations with median discharges for the base period 1951-1980.

Water Quality

The chemical quality of surface waters statewide showed very little change from previous years. All four of National Pesticide Network stations, Cuyahoga River at Independence, Great Miami River at New Baltimore, Muskingum River at McConnelsville, and the Hocking River at Athens, were above the alert limit set by the USGS Central Laboratory System for total pesticides in water during the spring sampling. The first three of these stations were above limits for PCB in bottom material for May 1982.

In addition, the Hocking River below Athens was above the limit for dissolved manganese in October and December 1981 and in May and June 1982. Grand River at Painesville was over the limit for total chromium in May 1982.

Two of the four major basins in the state that have U.S. Geological Survey monitors at NASQAN sites showed slight improvement in water quality (dissolved oxygen). The Great Miami basin and the Scioto basin showed improved quality partly because of the closing of industrial plants that discharged into them. Water quality from ground-water observation wells showed little change.

Ground-Water Levels in Ohio: 1982 Water Year

Most of the observation wells in Ohio are located in sand and gravel aquifers in buried-valley or watercourse systems associated with the State's principal streams. The observation network also includes some bedrock wells in areas where deeper aquifers are important water supplies, such as the carbonate rock region of northwestern Ohio and various sandstone units of Eastern Ohio. The yearly low for most wells occurs during the winter months, especially in colder, drier years. Otherwise, the low is likely to occur toward the end of the growing season. Highs for the year usually occur between March and June when recharge from snowmelt and springtime storms is greatest. The normal yearly water level fluctuation for both water-table and confined-aquifer wells is 3 to 5 feet.

As the 1982 water year ended, ground-water levels were fairly normal in the northwest half of the state. In contrast, the rest of the state was deficient in rainfall; a number of wells approached or reached record lows.

Overall, the range between the 1982 high and low extremes throughout the observation well network was greater than in 1981. Water levels for two-thirds of the observation well network were lower than in the 1981 water year. Nevertheless, some wells reached highs that exceeded those recorded in 1981. There was recharge for the states' aquifers during the winter months culminating in 1982 water-year highs for most wells in late March or early April. Despite the excessive rainfall and melting snow that caused severe flooding in the Maumee basin in late March, only one well in the area reached a record high. The lowest water levels for the water year in southwestern Ohio occurred before the end of December 1981, when cumulative precipitation for that region was still deficient. Elsewhere in Ohio the annual lows generally were recorded near the end of the water year.

## DEFINITION OF TERMS

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

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

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

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

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

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

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

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

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

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

Bottom material: See Bed material.

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

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

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

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

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

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

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

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

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

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

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

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

Drainage area of a stream at a specific 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 river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution area, within the area unless otherwise noted.

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ( $\text{CaCO}_3$ ).

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

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (UG/G, ug/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Microgram per kilogram (UG/KG, ug/kg) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (kilogram) of bottom material.

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

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

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

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m<sup>2</sup>), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	0.004 - 0.062	Sedimentation.
Sand.....	0.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

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

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

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

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

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

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

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

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

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

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

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

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

Suspended-sediment load is the quantity of suspended sediment passing a section in a specified period.

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

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

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

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

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

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

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

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

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

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

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

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

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

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

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

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

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published after 1975.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

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

## DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic 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 other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 04041000, which appears just to the left of the station name, includes the 2-digit part number "04" plus the 6-digit downstream order number "041000".

## NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 1.

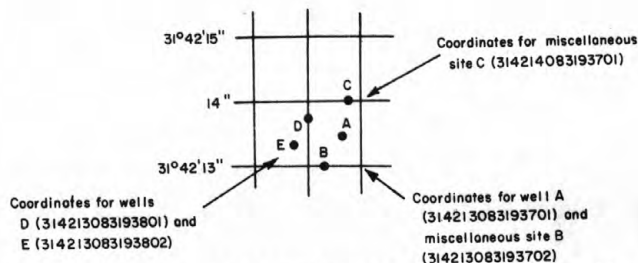


Figure 1 System for numbering wells and miscellaneous sites (latitude and longitude)

## 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 manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

## EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

## Collection and computation of data

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

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-back water techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage height and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

At some northern 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 gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

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

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

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

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30.

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

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

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

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

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

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

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

Data collected at partial-record stations follow the information for continuous record sites. Data for 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. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made or water-quality samples are taken to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements and chemical analyses are also given in special tables following the tables of partial-record stations.

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

## Accuracy of field data and computed results

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

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

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

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

## Other data available

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

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

## Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected during water year 1978 at many sites in Ohio by the National Weather Service, NOAA, U.S. Department of Commerce, by the Corps of Engineers, U.S. Army and by other agencies. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, Va. 22092, maintains an index of such sites. Information on records available at specific sites can be obtained upon request.

## EXPLANATION OF WATER-QUALITY RECORDS

## Collection and examination of data

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

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, descriptive statements are given; the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

## Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

### Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum temperatures for each day are published.

### Sediment

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

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

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

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

## EXPLANATION OF GROUND-WATER LEVEL RECORDS

### Collection of the data

Ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 2.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lstd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

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

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

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

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greenson, T. A. Ehlike, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

## WATER RESOURCES DATA FOR OHIO 1982

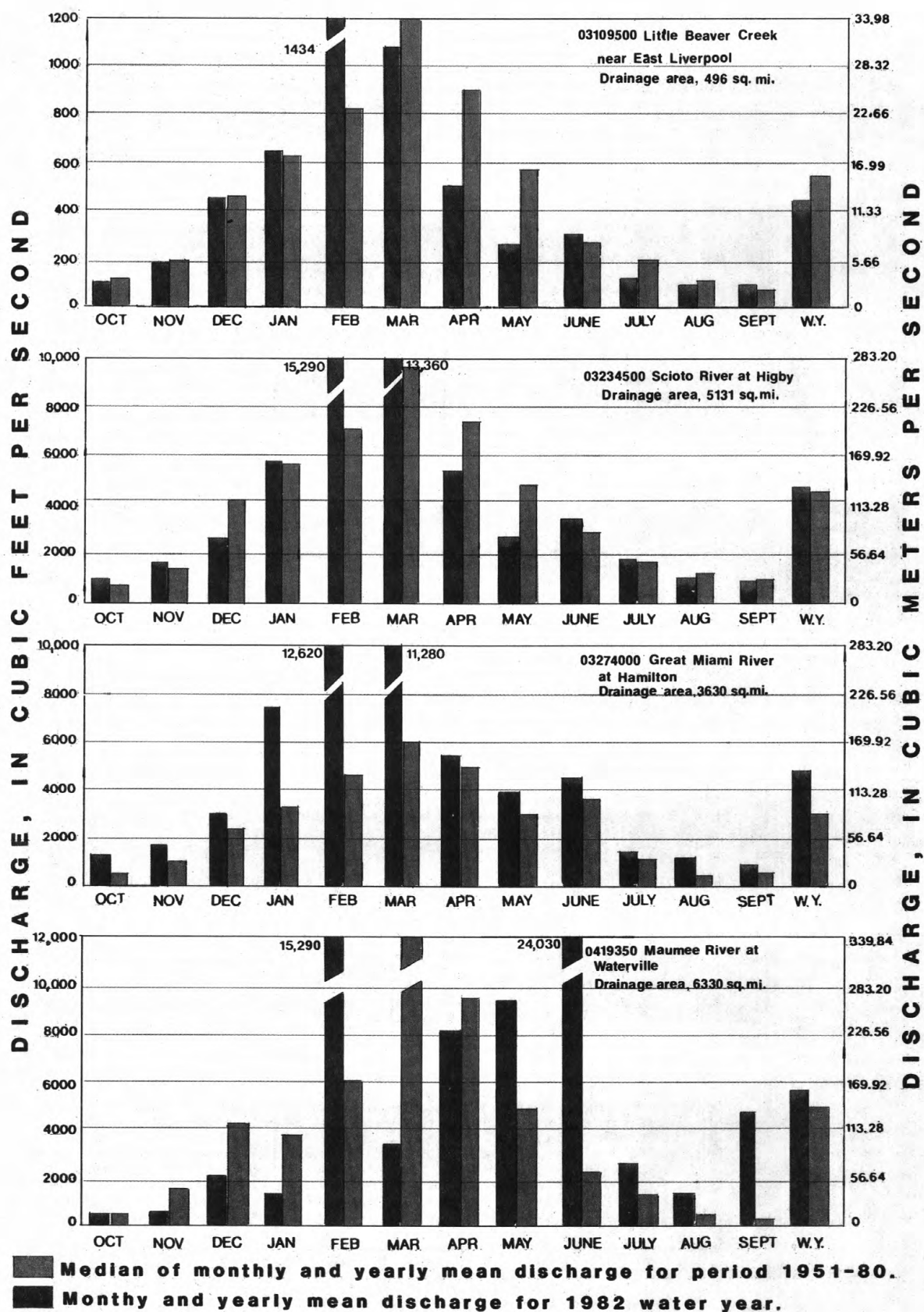
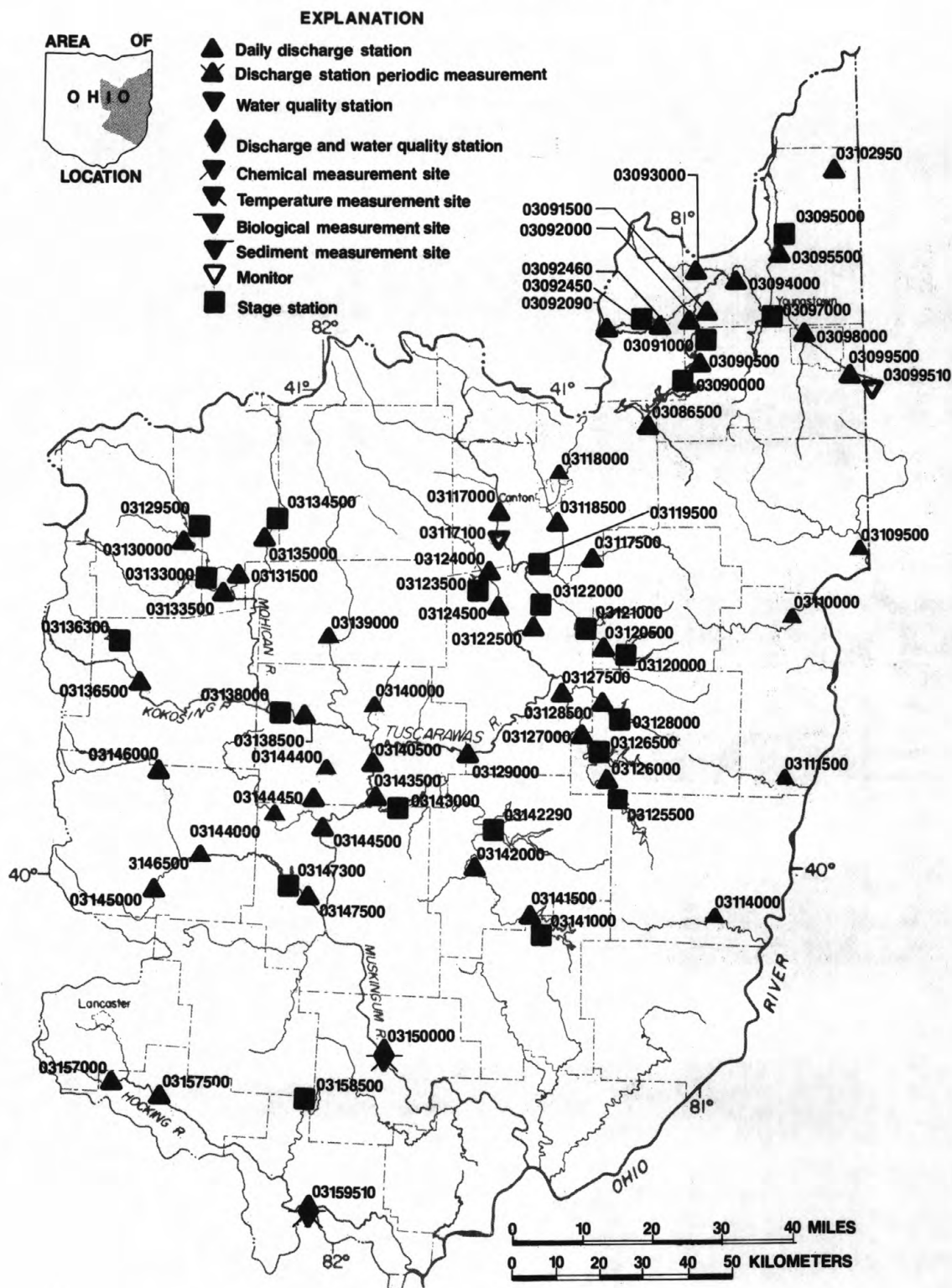


Figure 2.--Runoff during 1982 water year compared with median runoff for period 1951-80 for four representative gaging stations.





**Figure 3b. --Location of data-collection stations excluding crest-stage and low-flow partial record sites and wells.**

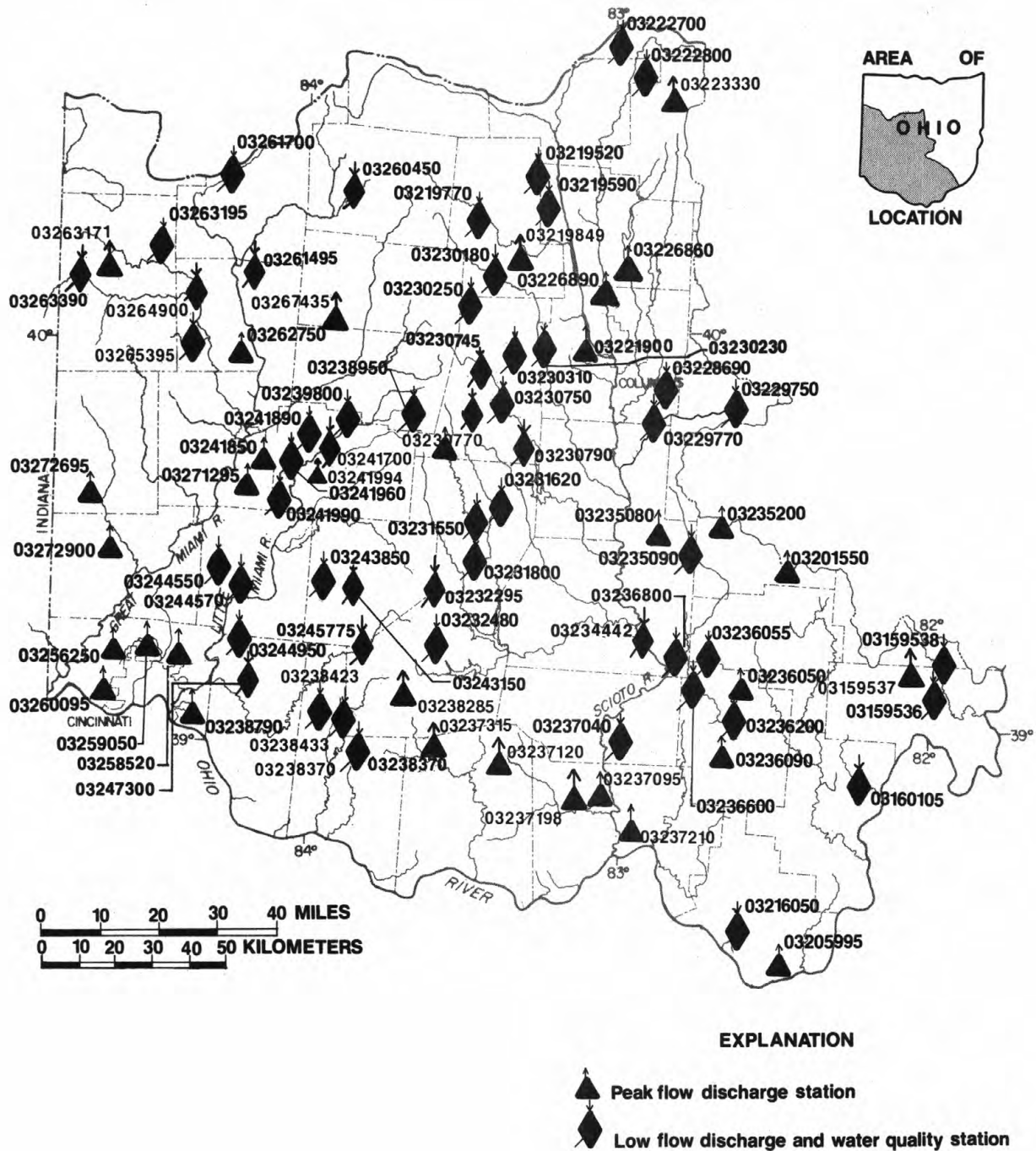


Figure 3c. --Location of crest-stage and low-flow partial record sites.

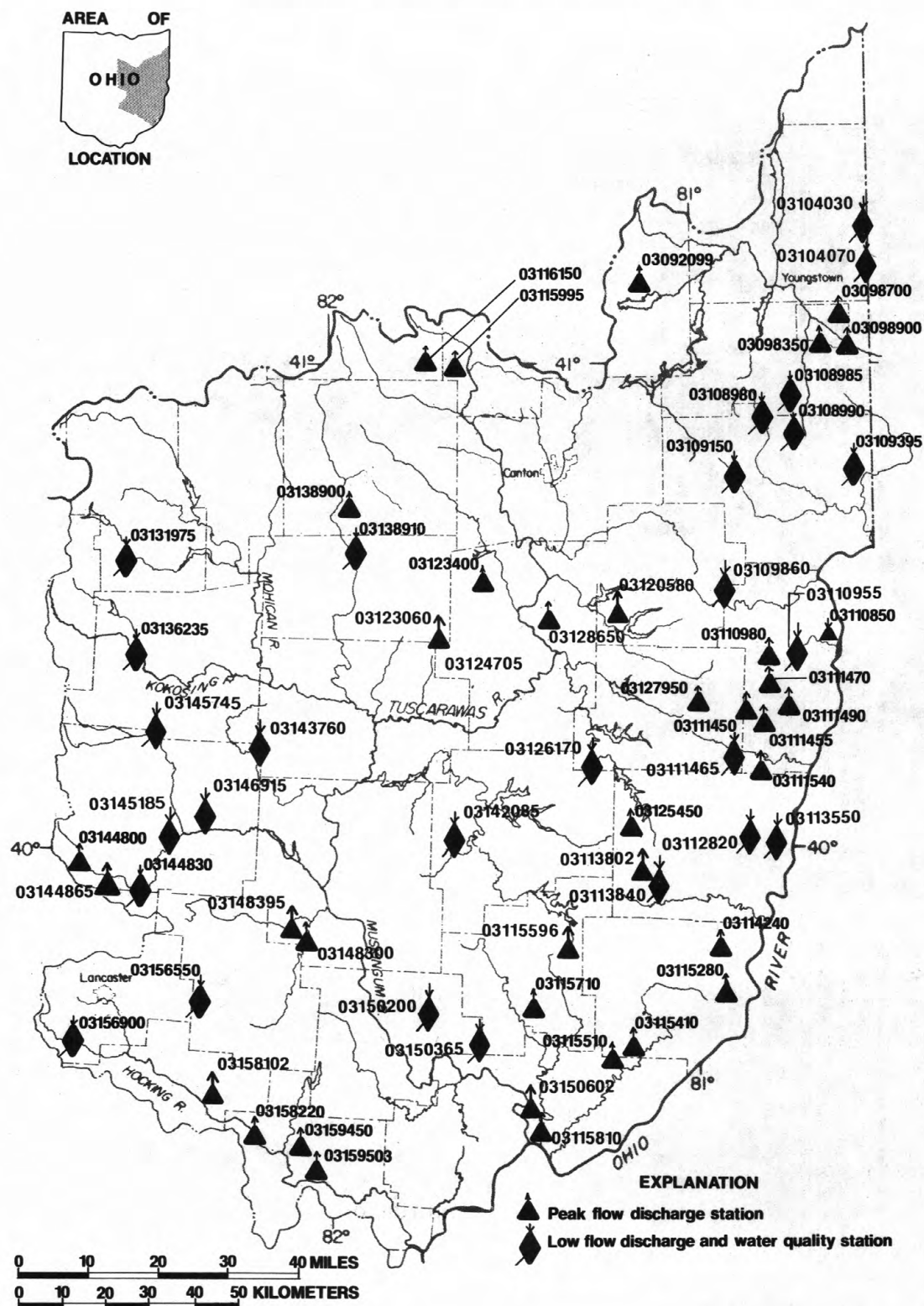


Figure 3d. --Location of crest-stage and low-flow partial record sites.

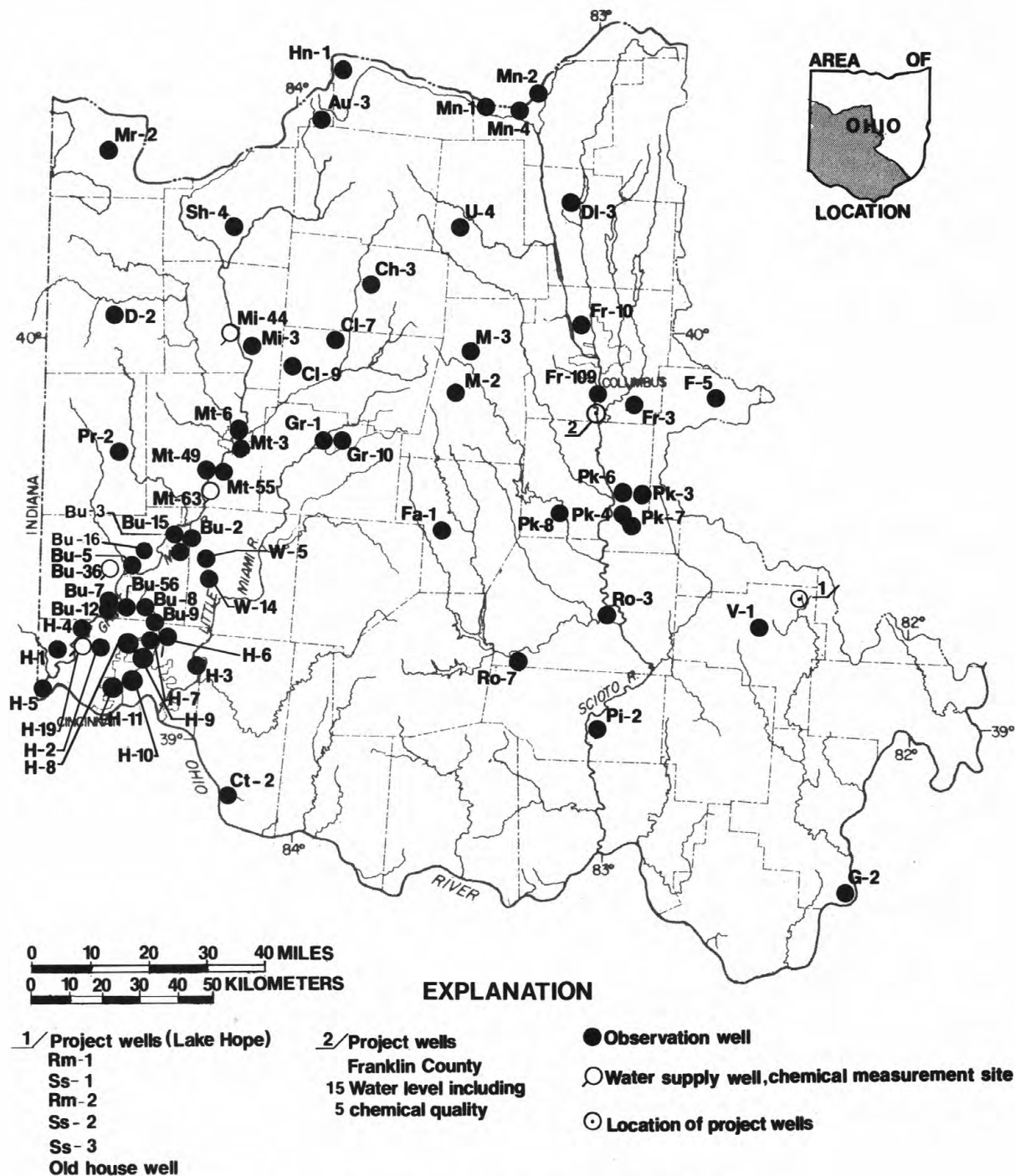


Figure e.--Location of wells.

Figure 3e. --Location of wells.

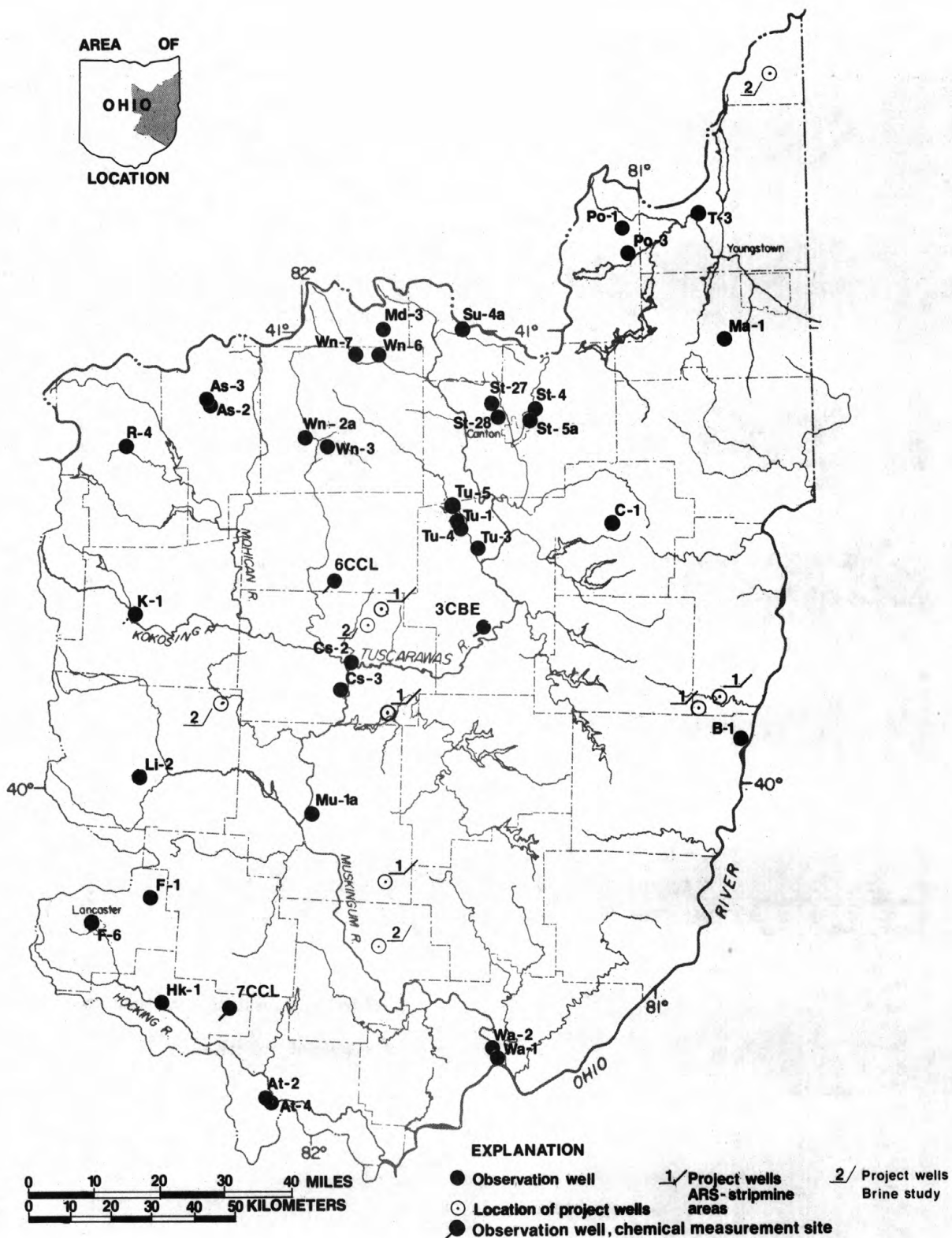


Figure 3f. --Location of wells.

## HYDROLOGIC-DATA STATION RECORDS

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## OHIO RIVER BASIN

## BEAVER RIVER BASIN

03086500 MAHONING RIVER AT ALLIANCE, OH

LOCATION.--Lat 40°55'58", long 81°05'41", in SE 1/4 sec. 24, T.19 N., R.6 W., Stark County, Hydrologic Unit 05030103, on right bank 15 ft (5 m) upstream from Webb Avenue Bridge in Alliance, 0.2 mi (0.3 km) upstream from waterworks dam, and 4 mi (6 km) upstream from Beech Creek.

DRAINAGE AREA.--89.2 mi<sup>2</sup> (231 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 1,037.3 ft (316.17 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow slightly regulated by Westville Reservoir 9.3 mi (15.0 km) upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 88.8 ft<sup>3</sup>/s (2.515 m<sup>3</sup>/s), 13.52 in/yr (343 mm/yr), unadjusted for diversion 1941-55.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft<sup>3</sup>/s (276 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 9.11 ft (2.777 m), from rating curve extended above 3,300 ft<sup>3</sup>/s (93.5 m<sup>3</sup>/s) on basis of computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft<sup>3</sup>/s (25.5 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Dec. 23	2300	1300 36.8	3.77 1.149	Mar. 17	0600	1130 32.0	3.54 1.079
Feb. 1	0400	*2510 71.1	5.10 1.554				

Minimum daily discharge, 1.1 ft<sup>3</sup>/s (0.03 m<sup>3</sup>/s) Sept. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	31	31	137	1950	120	445	36	24	39	3.7	3.0
2	24	31	57	142	696	110	320	31	26	24	4.4	33
3	26	31	42	112	378	100	250	28	24	83	3.7	12
4	24	31	36	253	440	100	180	28	19	205	6.0	3.7
5	24	36	48	299	289	602	120	26	19	90	5.2	3.7
6	31	51	48	146	130	445	140	28	33	48	4.4	3.7
7	31	51	42	100	90	289	150	45	28	31	3.7	3.7
8	26	36	90	80	70	180	130	57	24	33	31	3.7
9	24	21	90	70	70	130	120	61	21	24	26	3.0
10	24	17	64	65	65	110	140	36	19	19	13	3.7
11	24	15	57	60	65	346	130	31	15	15	5.2	3.0
12	26	13	57	55	65	610	120	28	13	17	4.4	3.0
13	24	13	57	50	60	526	120	26	13	12	4.4	1.5
14	31	13	57	50	60	480	110	24	12	12	75	1.9
15	31	13	64	48	214	352	104	21	12	12	90	3.0
16	31	13	57	46	425	526	101	19	68	12	90	1.9
17	33	13	39	44	420	1000	108	17	172	17	57	1.9
18	33	13	42	44	734	480	112	17	79	13	3.0	1.9
19	33	15	36	42	559	352	97	17	48	8.6	3.0	1.1
20	33	244	36	40	393	250	87	21	33	8.6	3.7	1.5
21	33	154	31	40	333	200	79	57	33	7.2	4.4	1.9
22	31	68	42	40	284	170	75	36	28	6.0	3.7	3.7
23	42	51	646	294	279	150	64	42	24	5.2	3.0	3.7
24	42	39	891	675	304	130	57	75	19	4.4	2.4	2.4
25	36	33	279	500	279	120	61	39	17	4.4	3.0	3.7
26	42	31	159	234	220	110	68	26	13	4.4	2.4	4.4
27	42	26	146	160	160	110	87	24	17	5.2	2.4	24
28	39	24	154	130	130	100	48	42	33	12	2.4	17
29	36	24	168	120	---	100	42	48	177	8.6	3.0	4.4
30	33	21	137	273	---	294	39	33	108	6.0	2.4	7.2
31	31	---	94	1000	---	384	---	31	---	3.7	3.0	---
TOTAL	971	1172	3797	5349	9162	8976	3704	1050	1171	790.3	468.9	166.3
MEAN	31.3	39.1	122	173	327	290	123	33.9	39.0	25.5	15.1	5.54
MAX	42	244	891	1000	1950	1000	445	75	177	205	90	33
MIN	24	13	31	40	60	100	39	17	12	3.7	2.4	1.1
CFSM	.35	.44	1.37	1.94	3.67	3.25	1.38	.38	.44	.29	.17	.06
IN.	.40	.49	1.58	2.23	3.82	3.74	1.54	.44	.49	.33	.20	.07

CAL YR 1981	TOTAL	47429.0	MEAN 130	MAX 2040	MIN 6.0	CFSM 1.46	IN 19.78
WTR YR 1982	TOTAL	36777.5	MEAN 101	MAX 1950	MIN 1.1	CFSM 1.13	IN 15.34

## BEAVER RIVER BASIN

03090500 MAHONING RIVER BELOW BERLIN DAM, NEAR BERLIN CENTER, OH

LOCATION.--Lat 41°02'54", long 81°00'05", in T.1 N., R.6 W., Mahoning County, Hydrologic Unit 05030103, on left bank 600 ft (183 m) downstream from Berlin Dam, and 3.2 mi (5.1 km) northwest of Berlin Center.

DRAINAGE AREA.--248 mi<sup>2</sup> (642 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 743: 1932. WSP 853: 1936. WSP 873: 1932-34, 1935(M), 1936-38. WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 958.00 ft (291.998 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to Oct. 1, 1942, at site 1.8 mi (2.9 km) upstream at datum 966.15 ft (294.482 m) above mean sea level, adjustment of 1912, levels by Mahoning Valley Sanitary District. Oct 1, 1942, to May 11, 1949, at site 200 ft (61 m) downstream from present site at datum 8.00 ft (2.438 m) lower than present datum.

REMARKS.--Records good. Flow regulated since 1942 by Berlin Lake (see station 03090000). Occasional small diversion during drought periods since 1958 from Berlin Lake to Meander Creek Reservoir (see station 03097000) by the Berlin pipeline; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

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

AVERAGE DISCHARGE.--52 years, 236 ft<sup>3</sup>/s (6.684 m<sup>3</sup>/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft<sup>3</sup>/s (244 m<sup>3</sup>/s) Jan. 25, 1937 gage height, 10.97 ft (3.344 m), site and datum then in use; no flow at times during 1948-49, 1967, 1970-71.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 834 ft<sup>3</sup>/s (23.6 m<sup>3</sup>/s) Mar. 19, gage height, 3.32 ft (1.012 m); minimum daily discharge, 31 ft<sup>3</sup>/s (0.88 m<sup>3</sup>/s) June 18-28, July 5-10, 19-29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	388	81	461	118	232	765	50	51	32	133	131
2	206	273	81	467	118	100	765	49	52	32	133	131
3	201	158	81	455	189	102	757	49	52	34	133	131
4	193	158	81	455	286	102	757	49	52	32	133	131
5	189	158	81	461	396	106	750	49	52	31	133	131
6	212	158	81	461	570	109	750	49	51	31	124	131
7	232	158	81	461	570	111	748	49	51	31	113	131
8	224	154	83	474	556	162	742	50	51	31	113	131
9	217	126	83	494	556	306	735	50	51	31	113	131
10	217	98	83	507	585	396	729	50	51	31	113	131
11	217	98	83	313	570	396	721	50	51	32	113	131
12	217	98	83	106	570	421	491	50	51	32	114	131
13	217	100	83	106	563	442	197	50	51	32	116	131
14	217	100	83	106	542	448	131	51	52	32	116	131
15	217	100	83	106	514	535	131	51	41	32	116	131
16	319	91	83	106	507	648	131	51	33	32	116	131
17	413	83	83	106	380	662	131	51	33	32	116	131
18	413	83	81	106	255	669	119	44	31	32	116	131
19	413	83	81	106	263	780	107	53	31	31	115	131
20	413	81	81	106	263	834	106	53	31	31	113	131
21	404	81	80	106	263	827	106	53	31	31	114	131
22	404	81	80	106	263	820	106	52	31	31	113	131
23	404	81	84	109	263	820	82	53	31	31	113	131
24	404	81	320	109	271	804	68	53	31	31	125	129
25	404	81	494	111	364	796	67	52	31	31	133	128
26	396	81	474	111	413	788	58	52	31	31	133	128
27	396	81	474	111	396	788	49	51	31	31	133	128
28	388	81	467	111	388	780	49	52	31	31	133	128
29	388	81	467	113	---	765	49	52	34	31	133	128
30	388	81	487	111	---	757	50	52	32	79	132	128
31	388	---	467	116	---	750	---	51	---	133	131	---
TOTAL	9521	3556	5534	7177	10992	16256	10447	1571	1233	1125	3785	3910
MEAN	307	119	179	232	393	524	348	50.7	41.1	36.3	122	130
MAX	413	388	494	507	585	834	765	53	52	133	133	131
MIN	189	81	80	106	118	100	49	44	31	31	113	128
(+)	0	0	0	0	0	0	0	0	10.5	10.8	10.7	10.9
CAL YR 1981 TOTAL	106318											
WTR YR 1982 TOTAL	75107											
MEAN 291												
MAX 2010												
MIN 80												
(+) 0												
(-) 3.58												

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

## BEAVER RIVER BASIN

23

03091500 MAHONING RIVER AT PRICETOWN, OH

LOCATION.--Lat 41°07'53", long 80°58'17", in T.2 N., R.5 W., Mahoning County, Hydrologic Unit 05030103, on left bank 0.3 mi (0.5 km) downstream from Milton Dam, 0.5 mi (0.8 km) southwest of Pricetown, and 3 mi (5 km) upstream from Kale Creek.

DRAINAGE AREA.--273 mi<sup>2</sup> (707 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 728: 1930(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 905.00 ft (275.844 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 14, 1929 nonrecording gage at same site and datum.

REMARKS.--Records fair. 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 data collected at this site 1965 to 1977.

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

AVERAGE DISCHARGE.--53 years, 259 ft<sup>3</sup>/s (7.335 m<sup>3</sup>/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,770 ft<sup>3</sup>/s (192 m<sup>3</sup>/s) Jan. 25, 1937, gage height, 15.01 ft (4.575 m), from rating curve extended above 4,200 ft<sup>3</sup>/s (119 m<sup>3</sup>/s) on basis of velocity-area studies; minimum daily, 0.4 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) Nov. 9, 1941, Feb. 19, 20, Oct. 11, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 867 ft<sup>3</sup>/s (24.6 m<sup>3</sup>/s) Mar. 19, gage height, 4.37 ft (1.332 m); minimum daily discharge, 33 ft<sup>3</sup>/s (0.94 m<sup>3</sup>/s) May 12, 14, 16-18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	586	121	555	129	270	862	130	59	43	85	108
2	210	413	119	551	121	119	863	130	60	41	85	110
3	210	270	121	551	247	119	863	127	60	44	114	108
4	207	270	121	551	394	123	861	91	62	43	138	108
5	207	270	121	551	509	125	858	36	63	41	138	108
6	247	270	119	551	664	121	856	36	64	41	138	108
7	286	270	119	551	664	121	854	36	63	41	136	108
8	283	270	119	551	664	121	851	36	63	40	138	108
9	283	225	119	551	660	121	701	35	62	40	136	108
10	283	160	119	551	660	123	585	35	63	40	136	108
11	283	158	119	551	660	129	586	34	63	40	134	108
12	283	158	119	548	660	127	451	33	62	40	134	108
13	283	158	119	541	657	127	203	34	63	40	134	108
14	283	158	117	534	657	127	138	33	63	40	134	108
15	283	158	117	391	657	259	138	34	63	39	134	108
16	345	150	117	244	653	422	138	33	64	39	134	108
17	425	132	117	244	530	569	137	33	63	39	132	108
18	425	129	117	182	391	715	136	33	59	37	132	108
19	432	125	117	121	391	793	136	34	56	37	132	108
20	432	125	117	121	391	867	136	35	56	37	132	108
21	432	123	117	121	388	867	134	36	55	37	132	108
22	432	123	117	121	388	867	134	39	53	37	130	108
23	513	123	121	129	388	867	134	44	52	37	129	108
24	601	121	357	123	388	867	134	44	52	37	129	108
25	597	121	558	123	388	867	132	43	49	37	125	108
26	594	121	558	123	388	867	132	44	48	39	125	108
27	594	121	558	123	388	867	134	46	48	39	103	110
28	590	121	555	123	391	862	132	49	48	39	110	108
29	590	121	555	123	---	862	132	50	50	39	110	108
30	590	121	555	127	---	862	130	53	44	62	110	108
31	586	---	555	132	---	862	---	56	---	85	108	---
TOTAL	12019	5671	6980	10359	13466	15015	11681	1532	1730	1290	3887	3244
MEAN	388	189	225	334	481	484	389	49.4	57.7	41.6	125	108
MAX	601	586	558	555	664	867	863	130	64	85	138	110
MIN	207	121	117	121	121	119	130	33	44	37	85	108
CAL YR 1981	TOTAL	113545	MEAN	311	MAX	2070	MIN	74				
WTR YR 1982	TOTAL	86874	MEAN	238	MAX	867	MIN	33				

## BEAVER RIVER BASIN

03092000 KALE CREEK NEAR PRICETOWN, OH

LOCATION.--Lat 41°08'23", long 80°59'43", in T.3 N., R.5 W., Trumbull County, Hydrologic Unit 05030103, on right bank at downstream side of county line road bridge, 0.4 mi (0.6 km) north of Mahoning-Trumbull County line, 1.5 mi (2.4 km) northwest of Pricetown, 2.2 mi (3.5 km) upstream from mouth, and 3.5 mi (5.6 km) south of Newton Falls.

DRAINAGE AREA.--21.9 mi<sup>2</sup> (56.7 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 973: 1942. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 914.70 ft (278.800 m) National Geodetic Vertical Datum of 1929. Prior to June 27, 1941, nonrecording gage at same site and datum.

REMARKS.--Records poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--42 years, 23.3 ft<sup>3</sup>/s (0.660 m<sup>3</sup>/s), 14.45 in/yr (367 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,890 ft<sup>3</sup>/s (110 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 8.52 ft (2.597 m); no flow at times in 1952-55, 1962-66.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft<sup>3</sup>/s (14.2 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
Feb. 1	0200	*851	24.1	*5.85	1.783	Mar. 17	0200	522	14.8	4.72	1.439

Minimum daily discharge, 0.03 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) Aug. 31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	2.7	4.9	18	450	14	85	11	3.3	13	.30	.04
2	.33	2.5	9.7	27	180	16	28	12	3.0	5.2	.27	.08
3	.37	2.6	8.7	18	59	13	23	16	2.6	22	.27	.45
4	.30	2.9	6.9	66	100	17	28	17	2.1	120	.33	.90
5	.24	4.0	7.8	91	67	166	19	20	3.0	20	.37	.90
6	.41	7.2	9.2	31	26	129	17	22	7.8	7.1	.30	.55
7	2.1	7.4	7.7	36	17	39	20	26	6.9	4.3	.33	.49
8	2.0	6.9	11	30	12	24	25	33	5.0	3.1	.55	.37
9	1.9	6.0	17	16	10	20	26	38	3.7	2.5	.75	.30
10	1.6	5.0	11	11	8.7	19	34	37	3.0	1.8	.75	.24
11	1.7	4.1	9.0	8.7	7.8	135	43	36	2.5	1.4	.55	.21
12	1.6	3.5	7.8	7.6	6.9	268	26	34	2.2	1.4	.33	.16
13	1.7	3.1	7.3	7.0	6.0	152	19	33	2.2	1.2	.27	.16
14	1.7	2.6	7.1	7.0	5.5	106	15	30	1.8	.98	.24	.19
15	1.3	2.5	6.7	6.5	10	45	11	29	1.7	.98	.19	.24
16	.88	2.3	6.7	6.5	62	168	10	26	9.0	.82	.14	.21
17	.77	2.0	6.5	6.0	94	302	9.3	21	58	.61	.06	.21
18	.81	1.8	5.5	6.0	129	65	8.7	19	21	.55	.06	.21
19	.82	1.7	4.5	6.0	95	39	8.2	21	7.3	.55	.06	.21
20	.92	10	3.8	6.0	81	33	7.3	27	4.7	.61	.10	.19
21	1.1	14	3.3	6.0	68	30	6.7	29	3.4	.61	.19	.16
22	1.1	9.8	11	6.0	45	23	6.1	29	2.9	.61	.10	.21
23	1.9	7.8	248	97	35	19	5.4	53	2.5	.55	.08	.27
24	2.9	6.5	213	190	46	16	5.2	86	2.1	.41	.10	.30
25	3.5	5.7	45	90	31	14	5.0	26	1.7	.37	.12	.45
26	3.5	5.4	27	46	21	14	5.0	10	1.9	.33	.10	.45
27	4.1	5.1	17	18	15	16	5.5	6.3	2.2	.30	.10	1.4
28	4.5	4.7	13	13	13	14	8.0	5.5	3.0	.30	.06	2.5
29	4.0	3.5	12	10	---	14	8.5	4.7	115	.33	.04	2.0
30	4.0	3.1	10	23	---	14	8.7	3.8	108	.33	.04	1.4
31	5.4	---	10	344	---	94	---	4.0	---	.33	.03	---
TOTAL	57.69	146.4	768.1	1254.3	1700.9	2038	526.6	765.3	393.5	212.57	7.18	15.45
MEAN	1.86	4.88	24.8	40.5	60.7	65.7	17.6	24.7	13.1	6.86	.23	.52
MAX	5.4	14	248	344	450	302	85	86	115	120	.75	2.5
MIN	.24	1.7	3.3	6.0	5.5	13	5.0	3.8	1.7	.30	.03	.04
CFSM	.09	.22	1.13	1.85	2.77	3.00	.80	1.13	.60	.31	.01	.02
IN.	.10	.25	1.30	2.13	2.89	3.46	.89	1.30	.67	.36	.01	.03

CAL YR 1981	TOTAL	7915.66	MEAN 21.7	MAX 401	MIN .12	CFSM .99	IN 13.45
WTR YR 1982	TOTAL	7885.99	MEAN 21.6	MAX 450	MIN .03	CFSM .99	IN 13.39

BEAVER RIVER BASIN

25

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 W., Portage County, Hydrologic Unit 05030103, on left bank at downstream side of bridge on Newton Falls Road, 2.5 mi (4.0 km) east of Ravenna.

DRAINAGE AREA.--21.8 mi<sup>2</sup> (56.5 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 1,011.8 ft (308.40 m) Portage County bench mark.

REMARKS.--Records fair. Water-quality data collected at this site 1966 to 1978.

AVERAGE DISCHARGE.--17 years, 27.9 ft<sup>3</sup>/s (0.790 m<sup>3</sup>/s), 17.38 in/yr (441 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,810 ft<sup>3</sup>/s (79.6 m<sup>3</sup>/s) Sept. 14, 1979, inside gage height 8.63 ft (2.630 m), outside gage height, 9.34 ft (2.847 m); minimum, 0.29 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Aug. 18, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft<sup>3</sup>/s (12.7 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Dec. 23	1630	604 17.1	5.11 1.558	Feb. 1	0030	*854 24.2	*5.85 1.783

Minimum discharge, 0.29 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Aug. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	4.7	36	43	470	19	79	5.3	6.8	19	.78	.77
2	10	4.4	48	42	143	18	34	5.3	6.8	12	1.0	2.6
3	13	4.2	25	24	78	17	43	4.9	4.5	37	1.5	6.0
4	7.7	3.9	24	227	94	41	43	4.5	2.7	48	2.0	6.7
5	8.0	10	38	119	73	174	27	4.5	6.8	21	1.2	2.8
6	15	52	28	44	38	104	27	4.9	35	13	.90	1.6
7	21	41	22	44	22	39	28	4.9	19	9.5	.78	1.8
8	15	20	48	28	17	25	36	26	10	7.3	1.0	1.6
9	9.1	13	50	17	15	18	57	21	6.3	5.8	1.0	1.4
10	5.8	9.6	32	12	13	37	51	11	4.5	4.9	.78	1.1
11	4.2	7.9	28	11	12	198	40	8.3	2.7	4.9	.68	1.4
12	3.2	6.7	26	10	12	181	30	7.3	1.7	4.9	.59	.98
13	3.5	5.5	24	9.5	11	210	26	5.3	1.5	3.9	.59	.85
14	2.8	4.8	23	9.5	11	97	22	3.9	1.0	4.9	.59	.94
15	2.7	4.5	22	9.0	29	49	18	3.1	1.7	3.5	.51	3.0
16	2.5	4.4	21	8.5	139	215	16	2.4	65	2.7	.43	1.5
17	2.8	4.6	19	8.5	149	220	16	1.7	83	3.5	.51	1.3
18	4.7	4.1	15	8.5	115	69	18	1.5	25	2.4	.43	2.2
19	7.4	5.0	11	8.0	117	44	19	1.7	14	2.0	.51	2.2
20	5.4	139	10	8.0	84	43	13	4.5	11	2.7	1.5	2.9
21	4.8	61	12	8.0	89	38	12	3.5	13	2.0	1.5	2.9
22	4.2	39	18	7.5	54	27	11	2.4	9.5	1.7	1.2	4.6
23	15	30	428	179	54	22	10	24	6.8	1.5	1.2	5.3
24	13	24	170	120	70	19	9.5	30	4.5	1.0	.90	6.2
25	8.7	22	61	75	48	17	7.8	13	3.5	.90	.92	9.2
26	16	23	39	46	30	21	7.3	7.3	2.7	1.0	.79	7.6
27	19	34	26	49	24	23	7.8	4.5	2.4	1.0	.77	17
28	12	24	20	21	21	23	7.3	21	4.9	2.0	1.3	15
29	12	18	17	16	---	28	6.3	15	172	1.5	.83	7.4
30	6.6	16	15	97	---	32	5.8	11	52	1.0	.78	3.8
31	5.1	---	14	454	---	176	---	11	---	.90	.74	---
TOTAL	267.0	640.3	1370	1763.0	2032	2244	727.8	274.7	580.3	227.40	28.21	122.64
MEAN	8.61	21.3	44.2	56.9	72.6	72.4	24.3	8.86	19.3	7.34	.91	4.09
MAX	21	139	428	454	470	220	79	30	172	48	2.0	17
MIN	2.5	3.9	10	7.5	11	17	5.8	1.5	1.0	.90	.43	.77
CFSM	.40	.98	2.03	2.61	3.33	3.32	1.12	.41	.89	.34	.04	.19
IN.	.46	1.09	2.34	3.01	3.47	3.83	1.24	.47	.99	.39	.05	.21

CAL YR 1981 TOTAL 12121.09 MEAN 33.2 MAX 632 MIN .81 CFSM 1.52 IN 20.68  
WTR YR 1982 TOTAL 10277.35 MEAN 28.2 MAX 470 MIN .43 CFSM 1.29 IN 17.54

03092460 WEST BRANCH MAHONING RIVER BELOW MICHAEL J. KIRWAN DAM, AT WAYLAND, OH

LOCATION.--Lat 41°09'25", long 81°04'19", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, on right bank 200 ft (61 m) upstream from bridge on Wayland Road, 0.4 mi (0.6 km) downstream from Michael J. Kirwan Dam, and 0.2 mi (0.3 km) south of Wayland.

DRAINAGE AREA.--81.7 mi<sup>2</sup> (212 km<sup>2</sup>).

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 (282.379 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to October 1971 at datum 0.89 ft (0.271 m) higher.

REMARKS.--Records good. Flow completely regulated by Michael J. Kirwan Reservoir (see station 03092450). Water-quality data collected at this site 1969 to 1977.

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

AVERAGE DISCHARGE.--14 years, 106 ft<sup>3</sup>/s (3.002 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft<sup>3</sup>/s (39.1 m<sup>3</sup>/s) Feb. 25, 1971, gage height, 11.82 ft (3.603 m) present datum; minimum daily, 2.5 ft<sup>3</sup>/s (0.071 m<sup>3</sup>/s) Apr. 9, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 465 ft<sup>3</sup>/s (13.2 m<sup>3</sup>/s) Jan. 12, gage height, 7.03 ft (2.143 m); minimum daily, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s) May 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	200	24	180	224	52	72	22	110	33	168	83
2	98	155	23	179	189	23	206	22	172	58	168	83
3	98	84	23	178	205	22	207	20	172	91	168	83
4	97	83	23	186	203	25	209	38	172	89	168	82
5	96	82	23	183	202	29	208	90	173	89	154	81
6	107	83	23	181	203	23	208	107	175	89	135	81
7	117	82	23	181	202	22	207	106	106	89	135	81
8	116	81	24	188	201	22	208	109	78	165	135	80
9	116	81	23	200	201	22	211	107	78	224	117	79
10	115	80	23	328	202	23	210	107	78	225	98	78
11	115	79	23	430	204	29	209	107	126	227	98	78
12	116	79	23	414	203	24	208	104	174	228	97	78
13	117	78	23	289	202	27	209	102	174	228	96	78
14	117	78	23	235	200	23	130	133	174	228	96	78
15	118	77	23	214	200	74	74	173	175	229	95	77
16	148	77	22	207	202	221	74	173	137	230	94	77
17	181	77	22	207	150	212	74	173	58	231	93	77
18	190	76	22	207	76	208	74	173	31	232	93	77
19	196	61	22	205	77	207	74	172	31	232	92	77
20	200	48	22	198	76	207	59	173	55	234	91	64
21	205	44	22	197	76	207	42	172	118	234	90	48
22	204	43	22	200	75	207	32	172	194	234	90	52
23	206	43	43	215	76	206	21	182	214	234	89	52
24	205	34	93	201	76	205	21	147	214	235	87	52
25	205	24	180	201	75	204	21	78	215	235	87	52
26	206	24	180	200	75	206	21	77	216	235	86	52
27	205	24	179	199	74	206	21	77	216	236	86	46
28	205	24	179	199	74	206	21	78	216	236	85	37
29	204	23	179	200	---	202	21	78	133	226	85	37
30	203	23	180	206	---	202	21	78	34	207	84	36
31	202	---	180	229	---	121	---	78	---	168	83	---
TOTAL	4805	2047	1894	6837	4223	3667	3373	3428	4219	5931	3343	2036
MEAN	155	68.2	61.1	221	151	118	112	111	141	191	108	67.9
MAX	206	200	180	430	224	221	211	182	216	236	168	83
MIN	96	23	22	178	74	22	21	20	31	33	83	36
CAL YR 1981	TOTAL	35192	MEAN	96.4	MAX	350	MIN	21				
WTR YR 1982	TOTAL	45803	MEAN	125	MAX	430	MIN	20				

## 03093000 EAGLE CREEK AT PHALANX STATION, OH

LOCATION.--Lat 41°15'40", long 80°57'16", Trumbull County, Hydrologic Unit 05030103, on right bank 75 ft (23 m) downstream from county road bridge, 1 mi (2 km) north of Phalanx Station, 2 mi (3 km) downstream from Tinkers Creek, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--97.6 mi<sup>2</sup> (253 km<sup>2</sup>).

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

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

GAGE.--Water-stage recorder. Datum of gage is 887.14 ft (270.400 m) National Geodetic Vertical Datum of 1929, (levels by Mahoning Valley Sanitary District). Prior to Sept. 14, 1929, nonrecording gage at same site and datum. Sept. 14, 1929 to Sept. 30, 1977 at same site and datum 0.28 ft (0.085 m) higher.

REMARKS.--Records fair. Low flow slightly regulated by mill several miles upstream from station. Water-quality data collected at this site 1965 to 1977.

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

AVERAGE DISCHARGE.--53 years, 110 ft<sup>3</sup>/s (3.115 m<sup>3</sup>/s), 15.31 in/yr (389 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,150 ft<sup>3</sup>/s (231 m<sup>3</sup>/s) Sept. 15, 1979, gage height, 13.71 ft (4.179 m); minimum daily, 0.9 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Aug. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft<sup>3</sup>/s (36.8 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Dec. 24	1230	1920 54.4	10.96 3.341	Mar. 12	1200	1310 37.1	9.82 2.993
Feb. 1	1800	*3570 101	*12.32 3.755	Mar. 17	1230	1380 39.1	9.99 3.045

Minimum daily discharge, 12 ft<sup>3</sup>/s (0.34 m<sup>3</sup>/s) Aug. 19, Aug. 28 to Sept. 1, Sept. 6-8, 10-13, 18, 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	42	81	117	2350	95	627	42	55	207	18	12
2	52	36	218	168	1870	75	280	40	55	76	19	13
3	56	33	141	123	874	55	189	38	48	106	20	18
4	48	40	100	331	645	101	267	38	43	360	20	17
5	35	37	160	898	559	445	191	36	46	163	19	13
6	37	94	150	438	318	699	180	32	185	76	18	12
7	96	179	104	242	167	381	171	32	189	53	17	12
8	88	111	113	160	119	160	191	60	90	45	16	12
9	51	68	245	120	97	100	280	120	62	39	17	25
10	38	51	161	102	84	75	307	55	51	35	17	12
11	33	42	114	80	70	421	250	43	46	34	15	12
12	30	41	99	68	64	1080	191	37	42	34	15	12
13	28	43	90	61	61	864	153	34	41	33	14	12
14	27	40	84	60	59	933	132	33	40	30	14	13
15	26	37	79	55	63	450	105	30	40	28	14	15
16	28	34	78	55	338	399	91	29	80	28	13	15
17	30	33	69	50	703	1120	85	27	450	27	13	13
18	30	33	61	50	751	631	102	28	276	27	13	12
19	34	33	55	50	599	328	82	27	79	27	12	12
20	51	247	55	48	584	257	74	31	54	28	13	13
21	48	531	49	46	492	255	69	30	57	27	16	13
22	38	276	60	48	439	199	61	28	55	25	15	13
23	50	160	486	189	315	159	55	77	43	24	14	14
24	89	117	1550	670	414	131	55	406	37	23	14	16
25	59	98	653	1090	334	115	51	196	34	21	14	25
26	61	89	252	450	191	119	50	82	33	21	13	33
27	127	104	149	212	128	134	51	57	31	21	13	39
28	84	127	117	125	99	113	48	70	31	21	12	44
29	56	83	102	92	---	138	44	104	582	21	12	28
30	45	66	85	137	---	152	42	70	866	20	12	22
31	40	---	77	613	---	331	---	64	---	19	12	---
TOTAL	1546	2925	5837	6948	12787	10515	4474	1996	3741	1699	464	522
MEAN	49.9	97.5	188	224	457	339	149	64.4	125	54.8	15.0	17.4
MAX	127	531	1550	1090	2350	1120	627	406	866	360	20	44
MIN	26	33	49	46	59	55	42	27	31	19	12	12
CFSM	.51	1.00	1.93	2.30	4.68	3.47	1.53	.66	1.28	.56	.15	.18
IN.	.59	1.11	2.22	2.65	4.87	4.01	1.71	.76	1.43	.65	.18	.20

CAL YR 1981 TOTAL 50201 MEAN 138 MAX 2680 MIN 18 CFSM 1.41 IN 19.13  
WTR YR 1982 TOTAL 53454 MEAN 146 MAX 2350 MIN 12 CFSM 1.50 IN 20.37

## BEAVER RIVER BASIN

03094000 MAHONING RIVER AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'21", long 80°52'51", in T.4 N., R.4 W., Trumbull County, Hydrologic Unit 05030103, on right bank at upstream side of Leavitt Road Bridge at Leavittsburg, 300 ft (91 m) downstream from Duck Creek and 1.2 mi (1.9 km) downstream from Eagle Creek.

DRAINAGE AREA.--575 mi<sup>2</sup> (1,489 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 871.25 ft (265.557 m) National Geodetic Vertical Datum of 1929. Prior to July 2, 1941, nonrecording gage, and July 2, 1941, to July 22, 1952, water-stage recorder, at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Berlin Lake, 25 mi (40 km) upstream, beginning in 1942, by Milton Reservoir, 17 mi (27 km) upstream, and by Michael J. Kirwan Reservoir, 20 mi (32 km) 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 data collected at this site 1943 to 1971.

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

AVERAGE DISCHARGE.--42 years, 577 ft<sup>3</sup>/s (16.34 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft<sup>3</sup>/s (575 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 19.37 ft (5.904 m); minimum daily, 60 ft<sup>3</sup>/s (1.70 m<sup>3</sup>/s) July 6, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of about 24 ft (7 m). Flood of Jan. 25 or 26, 1937 reached a stage of 17.8 ft (5.43 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,500 ft<sup>3</sup>/s (127 m<sup>3</sup>/s) Feb. 1, based on hydrographic comparison with nearby stations; maximum recorded gage height 10.28 ft (3.133 m); minimum daily, 167 ft<sup>3</sup>/s (4.73 m<sup>3</sup>/s) May 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	771	271	885	4000	645	1920	227	217	667	231	227
2	363	743	387	969	3000	416	1520	221	251	268	234	248
3	363	448	368	923	2320	333	1330	217	254	355	237	251
4	363	390	315	1130	2150	362	1390	211	244	831	289	251
5	345	405	355	1710	1810	979	1310	167	268	602	293	237
6	359	440	380	1530	1670	1330	1270	201	458	348	279	234
7	470	539	326	1130	1300	937	1270	204	516	261	272	231
8	501	507	328	995	1200	529	1300	241	325	224	279	231
9	464	449	443	880	1100	423	1370	333	244	282	286	231
10	444	337	405	798	1100	377	1250	279	208	289	261	227
11	433	300	331	810	1100	884	1210	244	195	282	254	227
12	425	297	304	900	1100	2200	1100	231	237	279	251	227
13	419	296	290	1000	1000	2010	781	221	237	275	248	227
14	418	298	280	1000	1000	1920	593	214	234	268	248	227
15	418	294	272	800	1100	1140	450	241	231	261	248	231
16	421	291	267	650	1570	1380	404	248	381	258	251	234
17	582	268	261	620	1670	3040	389	248	1030	258	244	234
18	617	260	249	600	1670	2440	396	244	747	258	244	234
19	623	259	230	560	1510	1600	385	248	322	258	244	231
20	631	476	232	540	1400	1500	362	248	208	261	254	231
21	644	698	216	520	1310	1470	322	254	227	258	258	214
22	638	567	243	500	1170	1370	293	254	286	251	258	201
23	659	399	997	960	1010	1280	268	318	293	251	254	214
24	808	339	2220	1900	1060	1230	254	970	286	248	251	214
25	802	300	1940	1500	993	1200	248	726	272	244	248	221
26	816	275	1200	1000	772	1190	244	362	265	244	244	217
27	858	273	989	780	714	1210	248	258	265	244	237	244
28	842	302	923	720	667	1190	244	265	258	248	221	248
29	804	267	892	680	---	1190	237	311	841	244	227	217
30	786	244	861	860	---	1200	231	261	1450	234	227	198
31	775	---	845	2000	---	1470	---	237	---	237	227	---
TOTAL	17447	11732	17620	29850	40466	38445	22589	8904	11250	9488	7799	6859
MEAN	563	391	568	963	1445	1240	753	287	375	306	252	229
MAX	858	771	2220	2000	4000	3040	1920	970	1450	831	293	251
MIN	345	244	216	500	667	333	231	167	195	224	221	198
CAL YR 1981 TOTAL	234218			MEAN 642	MAX 4590	MIN 170						
WTR YR 1982 TOTAL	222449			MEAN 609	MAX 4000	MIN 167						

## 03095500 MOSQUITO CREEK BELOW MOSQUITO CREEK DAM, NEAR CORTLAND, OH

LOCATION.--Lat 41°17'59", long 80°45'31", in T.5 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, on right bank 100 ft (30 m) downstream from Mosquito Creek Dam, 0.8 mi (1.3 km) upstream from Confusion Run, and 2.5 mi (4.0 km) southwest of Cortland.

DRAINAGE AREA.--97.5 mi<sup>2</sup> (253 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 873.98 ft (266.389 m) 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 (274 m) downstream at datum 6.63 ft (2.021 m) lower.

REMARKS.--Records fair. 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 data collected at this site 1965 to 1977.

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

AVERAGE DISCHARGE.--42 years, 87.9 ft<sup>3</sup>/s (2.489 m<sup>3</sup>/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft<sup>3</sup>/s (53.5 m<sup>3</sup>/s) Jan. 19, 1929, gage height, 11.5 ft (3.51 m), from floodmark, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 396 ft<sup>3</sup>/s (11.2 m<sup>3</sup>/s) Oct. 31, gage height, 2.95 ft (0.899 m), minimum daily 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Dec. 18-23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	392	17	170	173	85	181	27	25	184	137	86
2	179	392	16	170	176	85	181	27	25	184	137	86
3	179	388	17	170	176	85	181	27	55	184	137	88
4	179	388	17	170	176	85	181	27	85	184	137	88
5	179	388	16	170	176	85	181	27	85	184	137	88
6	179	388	16	170	176	85	181	27	133	184	137	88
7	179	278	16	170	176	85	181	26	181	184	137	88
8	179	119	16	170	181	85	181	26	181	184	137	88
9	179	43	16	170	176	85	181	26	181	184	137	88
10	179	16	16	170	177	85	181	26	182	183	137	88
11	179	16	15	170	177	85	181	26	183	182	137	88
12	179	16	15	170	176	86	181	26	180	182	137	88
13	179	16	15	170	176	86	181	21	181	182	137	86
14	176	16	15	170	176	86	122	22	181	181	138	86
15	176	16	15	170	176	134	86	20	180	161	139	86
16	242	16	15	170	176	181	86	21	182	140	139	86
17	310	16	15	170	130	183	86	24	185	140	139	85
18	310	16	14	170	83	183	86	25	187	140	139	85
19	310	17	14	170	84	182	86	25	186	140	139	85
20	307	17	14	170	85	182	87	25	189	140	139	83
21	307	17	14	167	85	181	88	25	139	139	140	69
22	307	17	14	167	85	181	57	25	86	139	140	50
23	348	16	14	167	85	181	26	25	86	137	113	50
24	384	17	102	170	85	181	26	25	86	137	86	50
25	384	17	170	170	85	181	26	25	86	137	86	50
26	384	17	170	170	85	181	26	25	86	137	86	50
27	380	17	170	170	85	181	26	24	86	137	86	38
28	380	17	170	170	85	181	25	24	86	137	86	23
29	380	17	170	170	---	181	27	26	87	137	86	23
30	380	17	170	170	---	180	27	26	136	137	86	23
31	384	---	170	170	---	181	---	25	---	137	86	---
TOTAL	8176	3123	1644	5261	3882	4228	3346	776	3931	4938	3834	2160
MEAN	264	104	53.0	170	139	136	112	25.0	131	159	124	72.0
MAX	384	392	170	170	181	183	181	27	189	184	140	88
MIN	176	16	14	167	83	85	25	20	25	137	86	23
(+)	23.3	22.7	21.5	24.1	23.0	22.5	21.6	23.0	22.7	23.9	23.4	22.6
CAL YR 1981 TOTAL	37068.2											
WTR YR 1982 TOTAL	45299.0											
MEAN 102												
MAX 570												
MIN 9.4												
(+) 23.3												
MEAN 124												
MAX 392												
MIN 14												
(+) 22.9												

(+) Diversion in cubic feet per second, furnished by city of Warren.

## 03098000 MAHONING RIVER AT YOUNGSTOWN, OH

LOCATION.--Lat 41°06'40", long 80°40'23", Mahoning County, Hydrologic Unit 05030103, on left bank 400 ft (122 m) upstream from Bridge Street bridge in Youngstown, and 0.8 mi (1.3 km) upstream from Mill Creek.

DRAINAGE AREA.--898 mi<sup>2</sup> (2,326 km<sup>2</sup>).

PERIOD OF RECORD.--October 1921 to September 1982 (discontinued). Records for May 1903 to July 1906, published in WSP 98, 128, 169, and 205, are unreliable and should not be used.

REVISED RECORDS.--WSP 623: 1924(M). WSP 1907: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 826.53 ft (251.926 m) National Geodetic Vertical Datum of 1912, (levels by Mahoning Valley Sanitary District). Prior to Nov. 16, 1926, nonrecording gage at site 400 ft (122 m) downstream at same datum.

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 mi (77 km) upstream, beginning in 1942, by Milton Reservoir, 40 mi (64 km) upstream, by Michael J. Kirwan Reservoir, 43 mi (69 km) upstream on West Branch, beginning in 1966, by Mosquito Creek Lake, 22 mi (35 km) upstream, beginning in 1943, by Meander Creek Reservoir, 11 mi (18 km) upstream, beginning in 1929, and by reservoir on Squaw Creek, 5 mi (8 km) upstream. Water-quality data collected at this site 1951, 1965 to 1977.

COOPERATION.--Two discharge measurements furnished by the Corps of Engineers.

AVERAGE DISCHARGE.--61 years, 873 ft<sup>3</sup>/s (24.72 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft<sup>3</sup>/s (498 m<sup>3</sup>/s) Jan. 25, 1937, gage height, 14.92 ft (4.548 m); maximum gage height, 18.62 ft (5.675 m) Jan. 22, 1959 (backwater from Mill Creek); minimum daily discharge, 30 ft<sup>3</sup>/s (0.85 m<sup>3</sup>/s) Aug. 16, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 26.5 ft (8.08 m), discharge, 42,500 ft<sup>3</sup>/s (1,200 m<sup>3</sup>/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,980 ft<sup>3</sup>/s (198 m<sup>3</sup>/s) Feb. 1, gage height, 11.21 ft (3.417 m) (backwater from Mill Creek); minimum daily discharge, 245 ft<sup>3</sup>/s (6.94 m<sup>3</sup>/s) Dec. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	755	1240	378	1240	5980	881	2820	307	328	1400	406	378
2	679	1270	448	1360	5680	741	2440	296	328	638	412	618
3	631	1040	478	1320	3490	546	2100	275	339	902	424	560
4	611	846	406	1730	2690	631	2020	291	345	1590	436	400
5	598	930	418	2320	2260	1850	1870	260	515	1360	496	378
6	686	1020	460	2380	1870	2520	1810	255	1030	811	454	373
7	720	1040	412	1820	1540	1910	1800	265	1040	585	436	373
8	811	993	472	1540	1380	1080	1810	378	776	490	540	373
9	776	811	509	1300	1320	783	1960	389	546	466	521	373
10	720	559	534	881	1240	665	1950	378	472	503	460	373
11	692	373	430	881	1200	1490	1850	323	466	509	430	373
12	672	350	373	1050	1180	3450	1700	291	552	509	430	373
13	658	334	345	1140	1150	3890	1360	280	534	490	424	373
14	645	328	334	1130	1140	3440	1010	265	484	478	424	373
15	645	328	323	1100	1240	2360	762	260	454	472	418	378
16	638	312	317	923	1800	2640	591	275	1150	460	424	373
17	686	307	312	713	2640	4940	585	275	2520	436	424	373
18	895	291	296	713	3260	4470	559	275	2070	430	418	373
19	965	301	280	686	2920	2770	534	296	1060	454	424	367
20	986	862	260	611	2380	2300	509	296	611	436	472	367
21	1020	944	245	598	2250	2190	478	301	521	430	460	373
22	1030	860	307	578	2000	2000	430	328	515	430	436	350
23	1100	546	2140	1510	1680	1830	395	515	466	424	430	367
24	1120	430	3130	2340	1620	1730	339	1360	430	418	418	339
25	1270	384	2990	2010	1580	1640	328	1280	418	418	395	367
26	1290	339	1940	1630	1210	1630	323	585	406	418	389	345
27	1370	323	1500	1070	993	1640	328	389	400	418	389	496
28	1400	323	1340	853	909	1600	328	598	400	430	367	406
29	1340	328	1280	741	---	1580	317	578	1240	418	367	339
30	1280	286	1220	1150	---	1610	312	466	2200	418	373	296
31	1250	---	1170	3550	---	2170	---	395	---	418	373	---
TOTAL	27939	18298	25047	40868	58602	62977	33618	12725	22616	18059	13270	11600
MEAN	901	610	808	1318	2093	2032	1121	410	754	583	428	387
MAX	1400	1270	3130	3550	5980	4940	2820	1360	2520	1590	540	618
MIN	598	286	245	578	909	546	312	255	328	418	367	296
CAL YR 1981	TOTAL	368253	MEAN	1009	MAX	7840	MIN	220				
WTR YR 1982	TOTAL	345619	MEAN	947	MAX	5980	MIN	245				

## BEAVER RIVER BASIN

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03099500 MAHONING RIVER AT LOWELLVILLE, OH

LOCATION.--Lat 41°02'12", long 80°32'11", in T.1 N., R.1 W., Mahoning County, Hydrologic Unit 05030103, on left bank 100 ft (30 m) upstream from First Street Bridge at Lowellville, 1 mi (2 km) upstream from Ohio-Pennsylvania State line, and 3 mi (5 km) downstream from Yellow Creek.

DRAINAGE AREA.--1,073 mi<sup>2</sup> (2,779 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1555: 1946(M), 1952(M), 1955(M), 1956. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 796.84 ft (242.877 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 26, 1944, nonrecording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by 5 flood control reservoirs at points 21 mi (34 km) to 58 mi (93 km) upstream (see REMARKS for station 03098000), and by reservoirs on Squaw Creek, 15 mi (24 km) upstream, on Dry Run, 9 mi (14 km) upstream, and on Yellow Creek, 5 mi (8 km) upstream. Water-quality data collected at this site 1949 to 1973.

AVERAGE DISCHARGE.--40 years, 1,101 ft<sup>3</sup>/s (31.18 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 21,000 ft<sup>3</sup>/s (595 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 14.43 ft (4.398 m); minimum daily, 155 ft<sup>3</sup>/s (4.39 m<sup>3</sup>/s) Feb. 5, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 17.8 ft (5.43 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,000 ft<sup>3</sup>/s (312 m<sup>3</sup>/s) Jan. 31, gage height, 9.93 ft (3.027 m); minimum daily, 353 ft<sup>3</sup>/s (10.0 m<sup>3</sup>/s) May 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	990	1290	646	1410	8350	1080	3290	433	463	1620	532	522
2	808	1300	708	1520	6250	1000	2820	423	427	830	551	1280
3	743	1170	729	1480	4220	815	2490	410	431	1310	594	1360
4	715	936	648	2020	3460	936	2360	405	419	1890	586	617
5	705	1080	677	2550	2770	2520	2140	386	716	1590	660	525
6	883	1290	716	2630	2210	3140	2060	353	1220	1010	620	494
7	868	1170	681	2110	1770	2390	2030	365	1160	809	599	491
8	909	1130	855	1740	1600	1460	2020	563	936	694	713	494
9	880	965	823	1470	1530	1080	2140	539	710	619	809	487
10	825	752	828	1080	1430	956	2200	519	613	645	698	486
11	792	539	695	989	1360	1980	2130	465	594	722	610	486
12	774	501	612	1130	1340	3940	1950	425	661	691	591	471
13	765	486	570	1250	1320	4530	1640	461	663	636	585	484
14	756	474	554	1240	1290	4040	1240	431	611	615	577	490
15	755	466	543	1220	1460	3010	998	376	579	607	571	506
16	751	458	529	1080	2220	3390	818	376	1360	594	583	487
17	794	452	524	863	3430	5780	799	368	2990	571	586	478
18	985	425	510	847	3850	5150	781	370	2390	559	582	477
19	1020	445	480	840	3500	3430	735	396	1340	719	585	463
20	1040	1560	442	768	2910	2790	698	400	811	635	675	463
21	1070	1210	412	749	2750	2600	671	394	685	569	662	475
22	1070	1140	528	729	2340	2350	608	414	686	561	608	469
23	1240	857	3350	2240	1940	2130	562	602	665	557	604	504
24	1200	696	3780	3020	2000	2010	484	1440	578	543	589	481
25	1310	608	3390	2420	1830	1910	461	1460	550	532	555	498
26	1400	550	2250	1960	1450	1910	470	767	524	540	534	467
27	1440	516	1700	1330	1220	1890	489	504	510	558	535	820
28	1460	501	1530	1040	1110	1830	474	806	501	577	509	619
29	1390	502	1460	915	---	1800	462	745	1590	553	488	493
30	1340	467	1370	1520	---	1820	449	631	2360	553	502	432
31	1310	---	1310	5440	---	2610	---	517	---	545	510	---
TOTAL	30988	23936	33850	49600	70910	76277	40469	16744	27743	23454	18403	16819
MEAN	1000	798	1092	1600	2533	2461	1349	540	925	757	594	561
MAX	1460	1560	3780	5440	8350	5780	3290	1460	2990	1890	809	1360
MIN	705	425	412	729	1110	815	449	353	419	532	488	432
CAL YR 1981	TOTAL	458583	MEAN	1256	MAX	9120	MIN	300				
WTR YR 1982	TOTAL	429193	MEAN	1176	MAX	8350	MIN	353				

## BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH

LOCATION.--Lat 41°01'53", long 80°31'10", Mahoning County, Hydrologic Unit 05030103, on left bank 800 ft (244 m) upstream from Ohio-Pennsylvania State line, just below Lowellville, 0.9 mi (1.4 km) downstream from gaging station at Lowellville, and 3.9 mi (6.3 km) downstream from Yellow Creek.

DRAINAGE AREA.--1,075 mi<sup>2</sup> (2,784 km<sup>2</sup>).

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

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1967 to current year.

pH: January 1967 to current year.

WATER TEMPERATURES: January 1967 to current year.

DISSOLVED OXYGEN: January 1967 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of daily discharge for gaging station at Lowellville (station 03099500).

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,640 micromhos Feb. 22, 1979; minimum, 204 micromhos July 13, 1976.

pH: Maximum, 9.9 units Jan. 26, 1969; minimum, 3.0 units Jan. 24, 1967.

WATER TEMPERATURES: Maximum, 39.0°C June 29, 1971; minimum, 0.5°C Jan. 10, 1978, Jan. 11, 17, Feb. 7, 1982.

DISSOLVED OXYGEN: Maximum, 14.2 mg/L Mar. 25, 1970; minimum, 0.0 mg/L June 1, 1975, June 17, 1977.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 998 micromhos Dec. 23; minimum, 232 micromhos Feb. 2.

pH: Maximum recorded, 8.4 units Dec. 30; minimum recorded, 6.6 units June 11.

WATER TEMPERATURES: Maximum, 31.0°C July 18; minimum, 0.5°C Jan. 11, 17, Feb. 7.

DISSOLVED OXYGEN: Maximum recorded, 14.4 mg/L Jan. 25; minimum recorded, 3.4 mg/L Aug. 31.

## BEAVER RIVER BASIN

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03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	542	430	501	448	424	431	612	562	586	550	526	535
2	524	496	505	440	418	424	606	582	591	544	522	532
3	536	506	519	454	422	433	602	576	589	546	526	533
4	556	506	523	462	442	453	608	596	601	532	514	524
5	516	496	504	468	412	450	608	570	587	526	480	510
6	518	460	494	476	400	450	616	588	600	478	428	451
7	532	498	513	470	450	458	608	596	606	470	432	450
8	526	506	518	468	450	458	604	546	577	496	472	484
9	542	506	517	488	456	468	680	590	630	510	494	503
10	542	510	526	544	490	514	690	610	633	552	510	527
11	554	532	539	578	534	554	674	628	648	560	538	547
12	544	506	519	614	562	581	682	648	662	568	544	553
13	526	504	513	628	590	604	654	620	637	566	542	554
14	534	512	520	630	604	611	640	622	627	582	556	569
15	544	502	515	626	598	610	690	630	646	590	548	562
16	580	502	636	624	604	611	682	604	636	578	552	562
17	548	510	524	634	594	612	662	634	641	574	554	564
18	520	476	499	622	600	608	774	668	724	576	552	562
19	480	456	471	626	596	612	842	672	756	590	550	565
20	468	442	457	590	380	504	700	658	671	646	588	608
21	456	432	441	538	496	520	698	668	681	612	592	600
22	452	434	444	524	504	516	924	676	715	604	570	586
23	462	428	447	---	---	---	998	550	673	990	568	701
24	466	450	457	---	---	---	544	410	468	614	514	571
25	452	442	447	---	---	---	404	352	370	506	436	468
26	440	416	428	---	---	---	416	352	386	434	416	422
27	444	424	430	---	---	---	548	418	461	456	414	429
28	442	426	433	---	---	---	512	476	491	550	456	480
29	454	442	445	---	---	---	520	498	511	556	512	530
30	454	438	444	---	---	---	532	502	514	848	536	603
31	452	436	444	---	---	---	524	506	514	560	350	485
MONTH	580	416	489	634	380	522	998	352	595	990	350	535

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	352	272	305	522	506	513	440	410	423	640	618	629
2	268	232	240	598	496	526	412	394	400	638	624	632
3	322	240	282	700	586	614	426	396	412	638	622	629
4	352	314	331	978	662	755	436	412	424	644	632	638
5	390	352	372	900	584	689	416	404	411	638	620	629
6	416	390	404	582	470	512	452	408	428	660	634	644
7	468	418	442	466	434	450	450	424	434	652	626	637
8	492	462	479	460	436	446	434	416	425	644	582	619
9	554	492	510	548	462	495	478	414	437	664	598	640
10	548	502	520	564	508	526	474	432	444	656	592	620
11	530	510	519	600	520	562	442	420	433	618	594	607
12	534	520	528	512	390	447	426	416	421	616	594	607
13	560	522	533	386	352	363	448	424	433	632	604	613
14	564	520	533	360	336	345	468	444	453	648	626	634
15	678	522	566	362	338	347	494	452	467	652	636	644
16	600	540	569	402	356	376	522	482	496	656	624	641
17	538	430	502	410	346	374	536	516	523	654	626	637
18	432	408	420	340	314	323	546	508	521	700	620	644
19	424	408	414	386	344	361	540	496	521	656	606	624
20	410	392	401	412	386	400	540	520	526	620	600	609
21	422	410	414	416	402	410	536	516	528	646	616	634
22	426	404	413	430	402	412	554	532	543	628	604	617
23	440	418	428	430	414	422	560	542	549	622	572	599
24	494	434	457	424	414	418	578	554	567	586	510	539
25	498	452	474	442	416	423	598	568	580	532	498	516
26	494	464	478	448	420	432	604	590	597	510	486	495
27	506	476	490	438	418	427	630	604	613	530	504	520
28	512	494	501	438	418	425	628	610	617	540	462	515
29	---	---	---	426	412	419	632	618	624	538	514	529
30	---	---	---	432	412	419	636	618	627	562	504	526
31	---	---	---	458	416	438	---	---	---	556	534	544
MONTH	678	232	447	978	314	454	636	394	496	700	462	600

## BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	572	552	560	406	368	382	520	508	513	562	542	554
2	608	572	590	446	398	414	626	500	528	562	420	508
3	638	606	618	448	396	431	542	498	522	542	392	494
4	630	614	621	450	420	435	532	506	519	544	504	513
5	644	504	590	434	416	422	536	506	520	552	538	545
6	552	488	520	488	434	449	534	514	525	570	550	563
7	502	476	487	564	466	486	526	500	511	612	548	569
8	512	480	492	556	464	504	516	468	503	628	548	569
9	622	492	517	568	508	523	536	462	487	604	548	563
10	552	516	526	528	500	510	568	502	533	636	544	561
11	532	514	522	520	454	490	538	514	523	770	548	628
12	524	502	511	518	492	501	548	532	537	560	540	550
13	508	454	475	520	498	511	550	524	537	586	540	554
14	486	462	469	524	496	506	---	---	---	580	542	555
15	622	478	504	530	502	513	---	---	---	564	534	545
16	518	390	477	516	498	508	---	---	---	598	544	556
17	446	394	424	526	498	512	---	---	---	572	548	560
18	428	406	415	518	504	511	---	---	---	572	550	561
19	530	406	430	524	424	498	---	---	---	564	540	554
20	468	432	444	544	446	512	---	---	---	590	558	568
21	504	466	475	574	510	530	---	---	---	582	558	569
22	528	476	502	566	514	534	---	---	---	558	540	551
23	530	500	517	616	514	533	502	498	500	578	540	556
24	576	534	549	546	514	528	534	498	515	568	536	552
25	606	560	572	536	510	524	604	506	522	698	568	592
26	580	562	570	582	514	525	556	506	532	572	556	565
27	564	548	558	530	522	527	558	534	545	562	460	521
28	668	548	566	538	500	519	576	538	558	576	546	557
29	580	390	471	540	510	523	552	524	542	594	560	571
30	468	386	429	600	514	539	558	528	542	664	566	602
31	---	---	---	536	514	525	570	546	560	---	---	---
MONTH	668	386	513	616	368	498	626	462	526	770	392	557
YEAR	998	232	520									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.1	6.8	6.9	7.2	7.0	7.1	7.3	7.3	7.3	7.7	7.6	7.6
2	7.0	6.9	7.0	7.1	7.1	7.1	7.3	7.2	7.3	7.7	7.6	7.7
3	7.0	6.9	6.9	7.1	7.0	7.1	7.4	7.2	7.3	7.7	7.6	7.7
4	7.0	6.9	7.0	7.0	6.9	7.0	7.4	7.3	7.3	7.8	7.6	7.7
5	7.0	7.0	7.0	7.0	6.9	6.9	7.4	7.2	7.3	7.7	7.7	7.7
6	7.0	6.9	6.9	7.1	6.9	7.0	7.3	7.2	7.3	7.7	7.5	7.6
7	7.1	7.0	7.0	7.1	6.9	7.0	7.3	7.2	7.2	7.6	7.5	7.6
8	7.0	6.9	7.0	7.1	7.0	7.1	7.3	7.1	7.3	7.8	7.6	7.6
9	7.0	6.9	7.0	7.2	7.0	7.1	7.3	7.2	7.3	7.8	7.6	7.7
10	7.0	6.9	7.0	7.2	7.0	7.1	7.3	7.3	7.3	7.7	7.5	7.6
11	7.0	6.9	7.0	7.1	7.0	7.0	7.4	7.3	7.4	7.8	7.7	7.7
12	7.0	6.9	7.0	7.1	7.0	7.0	7.3	7.3	7.3	7.7	7.6	7.7
13	7.0	7.0	7.0	7.1	7.0	7.0	7.3	7.3	7.3	7.7	7.5	7.6
14	7.0	6.8	6.9	7.0	7.0	7.0	7.4	7.3	7.3	7.6	7.5	7.6
15	7.0	6.8	6.9	7.0	6.9	7.0	7.4	7.1	7.3	7.7	7.5	7.6
16	7.0	6.9	6.9	7.0	6.9	7.0	7.2	7.1	7.2	7.6	7.5	7.6
17	7.0	6.9	7.0	7.0	6.9	7.0	7.2	7.1	7.2	7.7	7.6	7.6
18	7.0	6.9	7.0	7.0	6.9	7.0	7.3	7.2	7.2	7.6	7.3	7.5
19	7.1	7.0	7.0	7.1	7.0	7.1	7.3	7.2	7.3	7.6	7.4	7.5
20	7.1	7.0	7.0	7.3	7.1	7.2	7.5	7.3	7.4	7.5	7.4	7.5
21	7.1	7.0	7.1	7.3	7.2	7.3	7.4	7.4	7.4	7.5	7.4	7.5
22	7.1	6.9	7.0	7.4	7.3	7.3	7.4	7.2	7.4	7.8	7.4	7.5
23	7.2	6.9	7.0	---	---	---	7.8	7.4	7.6	7.5	7.3	7.4
24	7.0	7.0	7.0	---	---	---	7.8	7.6	7.7	7.6	7.5	7.6
25	7.2	7.0	7.1	---	---	---	7.6	7.4	7.5	7.5	7.4	7.5
26	7.2	7.1	7.1	---	---	---	7.7	7.4	7.5	7.4	7.1	7.3
27	7.1	7.0	7.1	---	---	---	7.7	7.6	7.6	7.4	7.3	7.3
28	7.2	7.1	7.1	---	---	---	7.7	7.6	7.7	7.5	7.3	7.4
29	7.1	7.0	7.1	---	---	---	7.9	7.5	7.7	7.5	7.4	7.5
30	7.1	7.0	7.1	---	---	---	8.4	7.7	7.8	7.6	7.4	7.5
31	7.2	7.0	7.1	---	---	---	7.7	7.6	7.6	7.6	7.4	7.6
MONTH	7.2	6.8	7.0	7.4	6.9	7.1	8.4	7.1	7.4	7.8	7.1	7.6

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PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

## BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.0	18.5	19.5	13.0	12.0	12.5	9.0	9.0	9.0	5.5	5.0	5.0
2	19.5	18.0	18.5	13.5	12.5	13.0	10.0	9.0	9.5	5.0	4.5	4.5
3	18.0	17.5	18.0	15.0	13.5	14.0	9.5	9.0	9.5	4.5	4.5	4.5
4	17.5	16.5	16.5	14.5	13.5	14.0	9.5	9.0	9.0	5.0	4.5	4.5
5	19.0	16.5	17.5	14.0	13.5	14.0	9.5	8.5	9.0	4.5	3.5	4.0
6	19.5	18.5	19.0	13.5	12.5	13.5	10.0	8.5	9.0	3.5	3.5	3.5
7	18.5	16.5	17.0	12.5	11.5	12.5	9.0	8.5	8.5	4.5	3.5	4.0
8	17.5	16.5	17.0	12.0	11.0	11.5	9.5	8.5	9.0	4.0	3.5	4.0
9	18.0	16.5	17.5	12.0	11.5	11.5	8.5	8.0	8.0	3.5	2.5	3.0
10	17.5	16.5	17.0	12.0	11.0	11.5	8.0	7.5	8.0	2.5	1.0	1.5
11	18.0	17.0	17.5	12.0	11.0	11.5	7.5	7.0	7.5	2.0	.5	1.0
12	18.5	17.0	17.5	12.0	11.5	12.0	8.0	7.5	7.5	3.5	2.0	2.5
13	18.5	17.0	17.5	12.5	11.5	12.0	8.0	7.5	8.0	3.0	2.0	2.5
14	18.5	16.5	17.5	13.0	12.0	12.5	7.5	7.0	7.0	4.0	2.5	3.0
15	18.0	17.0	17.5	13.5	12.0	12.5	9.0	7.0	7.5	4.0	3.0	3.5
16	18.0	17.5	18.0	13.0	12.0	12.5	9.0	9.0	9.0	3.5	1.5	3.0
17	17.5	15.5	16.5	13.5	12.5	13.0	9.0	9.0	9.0	1.5	.5	1.0
18	17.0	16.0	16.0	13.0	12.0	12.5	9.0	8.0	8.5	2.0	1.0	1.5
19	15.5	15.0	15.5	13.0	12.0	12.5	8.0	7.0	7.5	5.0	2.0	3.5
20	15.0	14.0	14.5	13.0	10.5	11.0	7.0	6.0	6.5	6.0	5.0	5.5
21	15.0	13.5	14.5	10.5	9.5	10.0	6.5	5.5	5.5	6.5	6.0	6.0
22	16.0	15.0	15.5	9.0	8.0	8.5	7.5	6.5	7.0	6.0	5.5	5.5
23	16.0	14.5	15.5	---	---	---	7.0	4.0	5.0	6.0	2.5	5.0
24	14.5	13.0	14.0	---	---	---	4.0	2.0	3.0	2.0	1.0	1.5
25	13.0	12.0	12.5	---	---	---	2.5	2.0	2.5	2.0	1.0	1.5
26	13.0	12.5	12.5	---	---	---	3.5	2.0	3.0	2.5	1.5	2.0
27	14.0	13.0	14.0	---	---	---	4.0	3.5	4.0	3.5	2.0	3.0
28	15.0	14.0	14.5	---	---	---	5.0	4.0	4.5	4.5	3.5	4.0
29	14.5	13.5	14.0	---	---	---	5.5	4.5	5.0	4.5	3.0	4.0
30	14.0	13.0	13.5	---	---	---	5.0	4.5	4.5	4.5	3.5	4.5
31	14.0	13.0	13.5	---	---	---	5.0	4.5	4.5	3.5	1.5	2.5
MONTH	20.0	12.0	16.0	15.0	8.0	12.0	10.0	2.0	7.0	6.5	.5	3.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	1.0	1.5	5.5	3.5	4.5	10.5	9.5	10.0	20.0	18.5	19.0
2	1.5	1.0	1.0	5.5	5.0	5.0	11.0	9.5	10.0	19.0	17.5	18.5
3	2.5	1.5	2.0	6.5	4.5	5.5	11.5	10.0	10.5	20.0	17.0	18.5
4	2.5	2.0	2.0	6.5	5.5	6.0	9.5	8.0	8.5	19.5	17.0	18.0
5	2.5	2.0	2.5	5.5	4.5	5.0	9.0	7.5	8.0	21.0	17.0	19.0
6	2.5	1.5	2.0	4.0	2.5	3.0	8.0	7.0	7.5	23.5	19.5	21.5
7	1.5	.5	1.0	3.0	2.5	2.5	8.0	6.0	7.0	23.5	21.5	22.5
8	2.5	1.0	1.5	4.0	2.0	3.0	8.5	6.0	7.0	22.5	21.0	21.5
9	3.0	2.5	2.5	5.0	4.0	4.5	8.0	6.5	7.0	23.5	21.0	22.0
10	2.5	1.0	2.0	6.5	4.5	5.5	7.5	6.0	7.0	21.5	19.5	20.5
11	3.0	1.5	2.0	7.0	6.0	6.5	7.5	6.5	7.0	22.0	18.5	20.5
12	3.0	1.5	2.0	6.0	4.0	4.5	8.5	6.0	7.5	23.0	20.0	21.5
13	3.0	2.0	2.5	5.0	4.0	4.5	9.5	8.0	9.0	23.5	21.5	22.5
14	3.5	2.5	3.0	5.5	4.5	5.0	11.5	9.0	10.5	24.5	21.5	23.0
15	4.0	3.0	3.5	5.5	5.0	5.0	12.5	9.5	11.0	24.5	22.0	23.0
16	5.0	4.0	4.5	6.0	5.5	5.5	15.5	12.0	13.5	24.5	22.0	23.5
17	5.0	2.5	4.0	5.5	5.0	5.0	16.5	15.5	15.5	24.5	22.0	23.5
18	3.0	2.5	2.5	5.5	5.0	5.0	17.0	14.5	15.5	25.5	22.5	24.0
19	3.0	3.0	3.0	6.0	5.5	5.5	16.0	14.5	15.5	25.0	23.5	24.0
20	3.5	3.0	3.0	7.0	6.0	6.5	16.0	15.0	15.5	24.5	23.0	23.5
21	3.5	3.5	3.5	7.5	6.5	7.0	16.0	14.0	15.0	24.0	23.0	23.5
22	3.5	3.0	3.5	7.0	6.5	6.5	16.5	14.0	15.0	24.5	23.0	23.5
23	5.0	3.5	4.5	7.5	6.0	7.0	16.0	13.5	15.0	23.5	22.5	23.0
24	4.5	3.5	4.5	8.5	6.5	7.5	18.0	14.5	16.0	22.5	20.0	21.5
25	4.0	3.0	3.5	8.5	7.0	7.5	18.5	16.0	17.0	20.5	19.5	20.0
26	4.5	2.5	3.5	7.5	6.5	7.0	18.5	17.5	18.0	21.5	19.0	20.5
27	4.5	3.0	4.0	6.5	5.5	6.0	18.0	16.5	17.5	23.0	21.0	22.0
28	4.5	3.0	3.5	7.0	5.0	6.0	19.0	16.0	17.0	22.5	21.0	21.5
29	---	---	---	8.0	5.5	6.5	18.5	16.0	17.5	24.5	21.5	23.0
30	---	---	---	9.5	6.5	8.0	20.0	17.5	18.5	23.5	22.5	23.0
31	---	---	---	11.0	8.5	10.0	---	---	---	25.0	22.5	23.5
MONTH	5.0	.5	3.0	11.0	2.0	5.5	20.0	6.0	12.5	25.5	17.0	22.0

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	23.0	23.5	23.0	21.0	21.5	29.0	26.5	28.0	25.0	24.0	24.5
2	25.5	22.5	24.0	23.5	21.0	22.0	28.0	27.0	27.5	25.0	22.0	24.0
3	25.0	23.5	24.0	23.0	21.5	22.5	27.0	24.5	25.5	23.0	21.5	22.0
4	24.5	23.5	24.0	23.0	22.5	23.0	28.0	26.0	27.0	24.5	22.0	23.0
5	24.0	21.5	23.0	23.0	21.5	22.5	28.5	26.0	27.0	24.5	22.5	23.5
6	22.0	20.0	21.5	24.5	22.0	23.5	29.5	27.5	28.5	23.5	22.0	23.0
7	20.0	19.5	19.5	26.5	24.0	25.0	29.5	28.0	28.5	23.5	22.5	23.0
8	21.0	19.0	20.0	27.5	25.0	26.5	28.5	27.0	27.5	24.0	22.0	23.0
9	23.0	20.5	21.5	28.5	26.5	27.5	28.5	27.5	28.0	26.0	23.0	24.5
10	23.5	22.5	23.0	29.5	27.0	28.0	27.5	26.5	27.0	26.0	24.5	25.0
11	25.0	23.0	24.0	28.5	27.5	28.0	27.5	26.0	26.5	26.5	25.0	25.5
12	25.0	23.5	24.0	29.0	27.0	28.0	27.0	25.0	26.0	27.5	25.5	26.5
13	24.5	23.0	24.0	29.0	27.0	28.0	27.0	24.5	26.0	28.0	26.0	27.0
14	24.0	22.0	23.0	29.5	27.0	28.0	---	---	---	27.5	26.0	26.5
15	25.0	23.0	23.5	30.0	27.5	28.5	---	---	---	27.5	26.0	26.5
16	24.0	21.5	23.0	30.5	28.0	29.0	---	---	---	27.5	26.0	27.0
17	21.5	19.5	20.5	30.5	28.5	29.5	---	---	---	26.0	24.5	25.5
18	20.5	19.0	19.5	31.0	29.0	30.0	---	---	---	25.5	24.5	25.0
19	20.5	19.5	20.0	30.0	27.5	29.5	---	---	---	24.5	23.0	24.0
20	21.5	19.5	20.5	30.0	27.5	29.0	---	---	---	24.5	23.0	23.5
21	22.5	20.5	21.5	29.0	27.5	28.0	---	---	---	23.5	22.5	23.0
22	22.0	21.0	21.5	28.0	26.0	27.0	---	---	---	22.5	21.0	22.0
23	22.5	21.5	22.0	29.0	26.5	27.5	24.5	24.0	24.0	21.5	20.5	21.0
24	23.0	21.0	22.0	30.0	27.0	28.5	25.0	23.5	24.0	22.0	20.0	21.0
25	24.5	22.0	23.0	30.0	27.5	28.5	25.0	24.0	24.5	22.5	21.5	22.0
26	25.5	23.0	24.0	30.0	28.0	29.0	26.0	23.5	24.5	22.0	21.5	22.0
27	26.5	24.0	25.0	29.5	28.5	28.5	26.5	25.0	25.5	21.5	20.0	20.5
28	28.0	25.0	26.5	29.5	28.5	29.0	26.0	24.0	25.0	21.5	20.5	21.0
29	26.5	23.0	24.5	29.5	27.5	28.5	24.5	22.5	23.5	21.5	20.0	20.5
30	23.0	21.5	22.0	29.5	27.0	28.5	24.5	23.0	24.0	21.0	19.5	20.5
31	---	---	---	29.0	27.5	28.5	24.0	23.5	24.0	---	---	---
MONTH	28.0	19.0	22.5	31.0	21.0	27.0	29.5	22.5	26.0	28.0	19.5	23.5
YEAR	31.0	.5	15.0									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.1	4.0	5.0	---	---	---	---	---	---	12.8	12.5	12.6
2	5.2	4.0	4.8	---	---	---	---	---	---	13.0	12.6	12.8
3	6.0	4.8	5.4	---	---	---	---	---	---	13.1	12.8	12.9
4	7.0	5.0	6.0	---	---	---	---	---	---	12.9	12.5	12.7
5	7.9	5.4	6.0	8.4	7.5	8.0	---	---	---	13.2	12.6	13.0
6	8.1	5.1	6.9	9.5	7.9	9.0	---	---	---	13.2	13.1	13.2
7	8.9	7.2	8.1	9.9	9.1	9.6	---	---	---	13.1	12.8	13.0
8	8.4	7.3	8.1	10.2	9.7	10.0	---	---	---	13.1	12.9	13.0
9	9.3	6.8	7.7	10.3	9.6	10.0	---	---	---	13.1	12.9	13.0
10	8.9	6.5	7.4	9.8	9.4	9.6	---	---	---	13.5	13.1	13.3
11	8.2	6.4	7.6	9.3	8.9	9.0	---	---	---	13.5	13.2	13.4
12	8.5	6.1	7.0	8.7	8.4	8.5	---	---	---	13.3	13.0	13.1
13	8.9	6.2	7.4	8.5	7.8	8.1	---	---	---	13.4	13.2	13.3
14	8.9	5.7	7.8	7.9	7.3	7.6	---	---	---	13.4	12.9	13.2
15	8.9	5.2	7.4	7.7	7.1	7.4	---	---	---	13.2	12.9	13.1
16	---	---	---	7.7	7.0	7.4	---	---	---	13.7	13.0	13.2
17	---	---	---	7.3	6.6	6.9	8.7	8.2	8.5	14.1	13.7	14.0
18	---	---	---	7.1	6.6	6.8	9.0	7.8	8.5	14.0	13.5	13.8
19	---	---	---	7.5	7.0	7.1	10.0	8.5	9.2	13.5	12.2	12.9
20	---	---	---	10.3	7.5	9.6	10.4	9.7	10.0	12.2	11.7	12.0
21	---	---	---	10.8	10.1	10.6	10.7	9.8	10.3	11.7	11.5	11.6
22	---	---	---	11.7	10.8	11.4	9.7	7.7	8.4	12.1	11.7	11.9
23	---	---	---	---	---	---	10.0	7.8	9.0	13.5	11.6	12.2
24	---	---	---	---	---	---	10.4	9.2	9.9	14.3	13.6	14.0
25	---	---	---	---	---	---	12.1	8.4	10.4	14.4	14.0	14.2
26	---	---	---	---	---	---	13.2	9.2	11.2	14.2	13.9	14.0
27	---	---	---	---	---	---	10.7	9.9	10.4	14.0	13.3	13.7
28	---	---	---	---	---	---	12.0	9.7	10.5	13.2	12.6	12.9
29	---	---	---	---	---	---	11.1	10.2	10.7	12.9	12.5	12.7
30	---	---	---	---	---	---	13.4	11.0	12.7	12.9	12.4	12.5
31	---	---	---	---	---	---	13.2	12.6	13.0	13.3	12.9	13.1
MONTH	9.3	4.0	6.8	11.7	6.6	8.7	13.4	7.7	10.2	14.4	11.5	13.0

## BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.1	12.9	13.0	12.8	11.8	12.5	---	---	---	7.2	5.7	6.4
2	---	---	---	12.0	11.8	11.9	---	---	---	7.5	5.6	6.5
3	---	---	---	12.0	11.5	11.7	---	---	---	7.6	6.4	6.9
4	---	---	---	11.5	11.0	11.3	---	---	---	7.8	6.0	6.8
5	---	---	---	12.4	11.6	12.1	---	---	---	7.7	6.0	6.7
6	---	---	---	13.3	12.6	13.1	---	---	---	7.6	5.4	6.3
7	---	---	---	13.4	13.3	13.4	11.7	10.1	10.9	6.7	4.9	5.7
8	---	---	---	13.5	12.7	13.2	12.3	10.3	11.6	6.0	4.9	5.4
9	13.4	13.2	13.3	12.7	12.1	12.5	12.4	11.9	12.2	6.4	5.2	5.8
10	13.8	13.3	13.5	12.2	11.5	11.9	12.6	12.3	12.5	7.4	5.3	6.2
11	13.7	13.4	13.5	11.8	11.4	11.6	12.6	12.5	12.6	6.6	5.3	5.9
12	13.7	13.3	13.5	12.8	11.8	12.5	12.9	11.9	12.4	6.6	5.0	5.7
13	13.5	13.2	13.4	12.7	12.4	12.6	11.9	11.2	11.6	6.7	4.3	5.5
14	13.3	13.0	13.2	12.6	12.3	12.4	11.2	10.5	10.9	6.5	4.0	5.1
15	13.1	12.6	12.9	12.5	12.2	12.4	10.9	9.7	10.5	6.4	4.1	5.2
16	12.8	12.4	12.6	12.2	12.0	12.1	9.6	8.1	9.0	6.2	4.2	5.1
17	13.3	12.5	12.8	12.3	12.1	12.2	8.1	7.8	8.0	5.8	4.3	4.9
18	13.4	13.0	13.2	12.3	12.1	12.2	8.7	6.4	7.6	6.5	3.9	5.1
19	13.2	13.1	13.1	12.3	12.1	12.2	8.4	6.0	7.4	6.7	4.0	5.1
20	13.2	13.0	13.1	12.1	11.9	12.0	8.1	7.1	7.6	5.7	4.3	5.0
21	13.1	13.0	13.0	11.9	11.7	11.8	8.5	7.1	7.8	4.9	4.1	4.5
22	13.2	13.0	13.1	11.9	11.5	11.8	8.7	7.2	7.7	5.7	4.4	4.9
23	13.1	12.6	12.8	11.9	11.7	11.8	8.3	7.2	7.7	5.3	4.0	4.8
24	13.0	12.6	12.7	11.8	11.4	11.6	7.4	6.6	7.0	6.4	3.9	5.6
25	13.3	12.9	13.1	11.6	11.4	11.5	7.3	6.5	6.8	6.8	6.0	6.5
26	13.5	12.9	13.2	11.7	11.4	11.6	7.1	6.1	6.5	6.6	5.8	6.4
27	13.3	12.8	13.0	12.1	11.7	12.0	7.1	5.6	6.4	5.8	5.4	5.6
28	13.2	12.7	13.0	12.5	12.0	12.3	7.4	6.3	6.9	6.0	5.0	5.4
29	---	---	---	---	---	---	8.0	6.3	7.1	5.8	5.2	5.5
30	---	---	---	---	---	---	7.5	5.9	6.7	5.4	5.0	5.2
31	---	---	---	---	---	---	---	---	---	5.7	4.7	5.3
MONTH	13.8	12.4	13.1	13.5	11.0	12.2	12.9	5.6	9.0	7.8	3.9	5.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	5.3	4.7	5.1	6.9	6.3	6.6	6.1	4.5	5.1	5.3	4.3	4.7
2	5.6	4.1	4.9	6.7	5.7	6.3	5.5	4.4	4.9	5.6	4.0	4.6
3	6.1	4.6	5.2	6.2	5.4	5.8	6.2	4.2	5.1	7.1	5.6	6.6
4	6.1	4.7	5.2	6.7	6.1	6.4	5.6	4.3	4.9	6.4	5.3	5.8
5	5.5	4.7	5.1	7.3	6.5	6.9	6.2	4.5	5.2	6.0	4.9	5.4
6	6.8	5.1	6.2	7.0	5.7	6.6	5.8	4.3	5.0	5.9	5.2	5.5
7	7.2	6.4	6.8	6.6	5.2	5.9	6.3	4.3	5.1	5.5	4.9	5.2
8	6.9	5.9	6.7	6.7	4.9	5.7	5.2	4.3	4.7	6.0	5.0	5.4
9	6.1	5.2	5.9	6.2	4.6	5.3	5.4	4.3	4.8	5.9	4.6	5.2
10	5.5	4.9	5.2	6.8	4.5	5.5	5.6	4.0	4.9	5.7	4.4	5.1
11	5.2	4.2	4.7	5.9	4.5	5.2	5.5	4.3	4.9	6.3	4.4	5.2
12	5.2	4.1	4.5	6.5	4.8	5.5	5.7	4.2	4.9	5.6	4.2	4.9
13	5.1	4.6	4.8	6.6	4.6	5.5	5.8	4.4	5.1	5.9	4.4	5.0
14	5.2	3.8	4.5	6.7	4.9	5.5	---	---	---	5.4	4.0	4.6
15	5.1	3.6	4.3	6.7	4.5	5.4	---	---	---	5.3	4.2	4.6
16	6.3	3.6	4.8	6.2	4.8	5.3	---	---	---	5.1	4.1	4.6
17	7.2	5.8	6.8	6.9	4.7	5.5	---	---	---	5.6	4.3	4.8
18	7.6	7.2	7.5	6.1	4.4	5.2	---	---	---	5.4	4.3	4.8
19	7.5	7.0	7.3	5.3	4.6	4.9	---	---	---	5.8	4.4	4.9
20	7.0	6.7	6.9	6.4	4.0	5.1	---	---	---	5.2	4.5	4.7
21	6.7	6.0	6.4	6.5	4.2	5.2	---	---	---	4.7	4.1	4.4
22	6.5	5.5	6.0	6.3	4.5	5.2	---	---	---	4.8	4.2	4.5
23	6.5	5.4	6.0	6.5	4.4	5.4	5.4	4.9	5.1	5.2	4.3	4.7
24	6.7	5.5	6.1	6.5	4.5	5.2	5.2	3.8	4.4	5.2	4.5	4.8
25	6.7	5.1	5.8	5.9	4.3	5.0	5.1	3.7	4.3	5.0	4.3	4.6
26	6.4	5.0	5.6	5.5	4.6	5.0	5.1	4.1	4.6	4.6	4.3	4.5
27	5.7	4.9	5.3	4.6	4.2	4.4	4.7	3.6	4.1	5.9	4.5	5.2
28	5.9	4.6	5.1	5.4	4.1	4.6	4.9	4.0	4.5	5.4	4.8	5.1
29	6.0	4.6	5.5	5.9	4.3	5.0	4.9	3.9	4.3	5.3	4.8	5.1
30	6.5	5.5	6.1	6.2	4.4	5.2	4.9	4.0	4.3	5.3	4.7	5.0
31	---	---	---	6.1	4.3	5.1	5.3	3.4	4.4	---	---	---
MONTH	7.6	3.6	5.7	7.3	4.0	5.5	6.3	3.4	4.8	7.1	4.0	5.0
YEAR	14.4	3.4	8.2									

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	429	586	536	300	510	423	628	558	380	510	555
2	504	424	590	534	236	520	398	632	591	411	513	538
3	515	430	590	533	278	606	415	628	616	439	526	502
4	518	452	602	524	329	725	424	637	621	438	519	508
5	504	454	589	515	375	674	411	631	610	420	520	546
6	498	461	600	449	407	502	425	639	522	440	525	563
7	512	458	606	445	445	450	432	635	486	480	508	565
8	518	457	576	487	478	444	426	627	492	505	509	564
9	517	467	639	504	503	485	429	641	510	522	484	559
10	522	508	620	523	519	522	438	618	525	507	535	557
11	540	552	649	547	520	562	434	608	520	488	522	595
12	514	579	657	552	529	449	420	609	510	499	536	549
13	512	604	634	553	529	358	432	614	467	511	539	546
14	517	610	625	567	530	344	451	632	468	504	---	552
15	515	610	640	559	542	346	462	643	490	511	---	546
16	509	611	640	557	571	375	491	642	482	508	---	553
17	517	611	637	564	514	377	522	635	426	510	---	562
18	496	608	726	562	419	320	521	643	413	511	---	561
19	474	612	767	564	412	362	520	622	420	516	---	554
20	457	524	670	600	400	401	524	608	440	517	---	565
21	439	520	681	599	412	410	529	638	471	527	---	566
22	444	---	688	587	415	412	541	616	504	530	---	553
23	446	---	607	664	427	422	548	597	518	530	500	556
24	457	---	460	589	447	418	568	531	544	528	512	552
25	448	---	362	469	473	422	574	516	570	527	516	582
26	428	---	390	420	477	432	596	494	567	520	528	564
27	428	---	442	422	493	428	612	520	560	530	545	536
28	432	---	487	470	500	423	616	523	554	517	557	556
29	444	---	513	530	---	419	624	532	473	522	545	569
30	444	---	507	552	---	417	627	529	436	536	545	585
31	444	---	514	522	---	439	---	546	---	526	563	---
MEAN	485	523	590	532	446	451	494	600	512	497	525	555
WTR YR 1982	MEAN	518	MAX	767	MIN	236						

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	7.1	7.3	7.6	7.5	7.5	7.4	7.1	6.9	7.0	7.2	7.2
2	7.0	7.1	7.3	7.7	7.2	7.4	7.3	7.2	7.0	7.0	7.2	7.0
3	6.9	7.1	7.3	7.7	7.2	7.5	7.3	7.1	7.0	7.0	7.2	7.3
4	7.0	7.0	7.3	7.7	7.4	7.4	7.5	7.2	7.1	7.1	7.2	7.1
5	7.0	6.9	7.3	7.7	7.4	7.5	7.5	7.1	7.0	7.2	7.2	7.1
6	6.9	7.0	7.3	7.6	7.4	7.4	7.4	7.1	6.9	7.2	7.2	7.1
7	7.0	7.1	7.3	7.6	7.5	7.4	7.4	7.1	7.0	7.1	7.2	7.1
8	7.0	7.1	7.3	7.6	7.6	7.4	7.4	7.0	7.0	7.0	7.2	7.1
9	7.0	7.1	7.3	7.7	7.6	7.4	7.4	7.1	6.9	7.0	7.2	7.1
10	7.0	7.1	7.3	7.6	7.6	7.3	7.6	7.1	6.9	7.0	7.3	7.1
11	7.0	7.0	7.4	7.7	7.6	7.4	7.6	7.1	6.8	7.0	7.2	7.1
12	7.0	7.0	7.3	7.7	7.6	7.4	7.6	7.1	6.8	7.1	7.2	7.1
13	7.0	7.0	7.3	7.6	7.6	7.3	7.5	7.1	6.7	7.1	7.2	7.1
14	6.9	7.0	7.3	7.6	7.6	7.3	7.5	7.1	6.8	7.1	---	7.0
15	6.9	7.0	7.3	7.6	7.6	7.3	7.4	7.0	6.9	7.1	---	7.0
16	6.9	7.0	7.2	7.6	7.6	7.4	7.3	7.0	7.0	7.1	---	7.0
17	7.0	7.0	7.2	7.6	7.5	7.5	7.2	7.0	7.2	7.1	---	7.0
18	7.0	7.0	7.2	7.6	7.6	7.3	7.3	7.1	7.1	7.1	---	7.0
19	7.0	7.1	7.3	7.5	7.5	7.3	7.3	7.1	7.1	7.1	---	7.0
20	7.0	7.2	7.4	7.5	7.3	7.4	7.2	7.0	7.0	7.1	---	7.0
21	7.1	7.3	7.4	7.5	7.4	7.4	7.2	7.0	7.0	7.1	---	7.0
22	7.0	7.3	7.4	7.5	7.4	7.4	7.2	7.0	7.0	7.1	---	7.1
23	7.0	---	7.6	7.5	7.4	7.4	7.2	6.9	7.0	7.1	7.2	7.1
24	7.0	---	7.7	7.6	7.4	7.4	7.2	6.9	7.0	7.1	7.2	7.1
25	7.1	---	7.4	7.5	7.4	7.4	7.2	7.1	7.0	7.1	7.0	7.1
26	7.1	---	7.5	7.3	7.4	7.4	7.1	7.0	7.0	7.1	7.2	7.0
27	7.1	---	7.6	7.3	7.5	7.4	7.1	6.9	7.0	7.0	7.2	7.1
28	7.1	---	7.7	7.4	7.5	7.5	7.2	6.9	7.0	7.2	7.2	7.1
29	7.1	---	7.7	7.5	---	7.5	7.1	6.8	7.0	7.2	7.2	7.1
30	7.1	---	7.7	7.5	---	7.4	7.1	6.8	7.1	7.2	7.2	7.1
31	7.1	---	7.7	7.6	---	7.4	---	6.9	---	7.3	7.2	---
MEAN	7.0	7.1	7.4	7.6	7.5	7.4	7.3	7.0	7.0	7.1	7.2	7.1
WTR YR 1982	MEAN	7.2	MAX	7.7	MIN	6.7						

## BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	12.5	9.0	5.0	1.5	4.5	10.0	19.0	23.5	21.5	28.0	24.5
2	18.0	13.0	9.5	5.0	1.0	5.0	10.5	18.5	23.5	22.0	27.5	24.5
3	17.5	14.0	9.5	4.5	2.0	5.5	10.5	18.5	24.0	22.5	25.5	22.0
4	16.5	14.0	9.0	4.5	2.0	6.0	9.0	18.0	24.0	23.0	27.0	23.0
5	17.5	14.0	9.0	4.0	2.5	5.0	8.0	18.5	23.0	22.5	27.0	23.5
6	19.0	13.0	9.0	3.5	2.0	3.0	7.5	21.5	21.5	23.0	28.5	23.5
7	17.0	12.5	8.5	4.0	1.5	2.5	7.0	22.5	19.5	25.0	28.5	23.0
8	16.5	12.0	9.0	4.0	1.5	3.0	7.5	21.5	19.5	26.0	27.5	23.0
9	17.0	11.5	8.0	3.0	2.5	4.5	7.0	22.0	21.5	27.5	28.0	24.5
10	17.0	11.5	8.0	2.0	2.0	5.5	7.0	20.5	23.0	28.0	27.0	25.0
11	17.5	11.5	7.5	1.0	2.0	6.5	7.0	20.0	24.0	27.5	26.5	25.5
12	17.5	12.0	7.5	2.5	2.5	4.5	7.5	21.5	24.0	27.5	26.0	26.5
13	17.5	12.5	8.0	2.5	3.0	4.5	9.0	22.5	24.0	28.0	26.0	27.0
14	17.5	12.5	7.0	3.0	3.0	5.0	10.5	23.0	23.0	27.5	---	26.5
15	17.5	12.5	7.5	3.5	3.5	5.0	11.5	23.0	23.5	28.0	---	26.5
16	18.0	12.5	9.0	3.5	4.5	5.5	13.5	23.0	23.5	29.0	---	27.0
17	16.5	13.0	9.0	1.0	4.0	5.0	15.5	23.5	20.0	29.5	---	25.5
18	16.0	12.5	8.5	1.0	3.0	5.0	15.5	24.0	19.5	30.0	---	25.0
19	15.5	12.0	7.5	3.0	3.0	5.5	15.5	24.0	20.0	29.5	---	24.0
20	14.5	10.5	6.5	5.5	3.0	6.5	15.5	24.0	20.5	28.5	---	23.5
21	14.0	10.0	5.5	6.0	3.5	7.0	15.0	23.5	21.0	28.0	---	23.0
22	15.5	---	7.0	5.5	3.5	6.5	15.0	23.5	21.5	27.0	---	22.0
23	15.5	---	5.0	5.5	4.5	7.0	15.0	23.0	22.0	27.5	24.0	21.0
24	14.0	---	2.5	1.5	4.5	7.5	16.0	21.0	22.0	28.0	24.0	21.0
25	12.5	---	2.5	1.5	3.5	7.5	17.0	20.0	23.0	28.5	24.5	21.5
26	12.5	---	3.0	2.0	3.5	7.0	18.0	20.5	24.0	29.0	24.5	22.0
27	14.0	---	4.0	3.0	4.0	6.0	17.0	22.0	25.0	29.5	25.5	21.0
28	14.0	---	4.5	4.0	4.0	6.0	17.5	22.0	26.0	29.0	25.0	21.0
29	14.0	---	5.0	4.0	---	7.0	17.5	23.5	24.0	28.5	24.0	20.5
30	13.5	---	4.5	4.5	---	8.5	19.0	23.0	22.0	28.5	24.0	20.5
31	13.5	---	4.5	2.5	---	10.0	---	23.5	---	28.5	24.0	---
MEAN	16.0	12.5	7.0	3.5	3.0	5.5	12.5	22.0	22.5	27.0	26.0	23.5
WTR YR 1982	MEAN	15.0		MAX	30.0	MIN	1.0					

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	---	---	12.7	13.0	12.7	---	6.4	5.2	6.5	4.9	4.6
2	5.0	---	---	12.8	---	11.9	---	6.6	5.0	6.3	4.8	4.5
3	5.3	---	---	13.0	---	11.8	---	6.8	5.2	6.0	5.2	6.7
4	6.1	---	---	12.6	---	11.3	---	6.6	5.2	6.5	4.8	5.7
5	6.2	8.0	---	13.0	---	12.2	---	6.5	5.1	6.9	5.0	5.4
6	7.2	9.1	---	13.2	---	13.2	---	6.0	6.5	6.7	4.9	5.5
7	7.9	9.7	---	13.0	---	13.4	11.0	5.5	6.9	5.8	5.0	5.2
8	8.2	10.1	---	13.0	---	13.4	12.1	5.2	6.7	5.6	4.6	5.4
9	7.7	9.9	---	13.1	13.3	12.5	12.2	5.9	5.9	5.2	4.8	5.1
10	7.3	9.6	---	13.4	13.5	12.0	12.5	6.2	5.2	5.3	5.0	5.1
11	7.7	8.9	---	13.5	13.6	11.6	12.6	5.9	4.8	5.2	4.9	4.9
12	6.9	8.5	---	13.1	13.5	12.7	12.4	5.6	4.5	5.2	5.0	4.7
13	7.7	8.0	---	13.3	13.4	12.6	11.6	5.3	4.8	5.5	5.0	4.9
14	8.2	7.6	---	13.3	13.2	12.5	11.0	5.1	4.4	5.3	---	4.6
15	8.4	7.5	---	13.1	13.0	12.4	10.6	5.0	4.5	5.3	---	4.5
16	---	7.3	---	13.2	12.6	12.2	9.3	5.0	5.2	5.2	---	4.5
17	---	6.9	8.5	14.1	12.8	12.2	8.1	4.9	7.0	5.2	---	4.6
18	---	6.8	8.5	13.8	13.3	12.2	7.8	5.0	7.5	5.1	---	4.7
19	---	7.1	9.2	13.1	13.1	12.2	7.8	5.0	7.3	4.9	---	4.7
20	---	10.2	10.1	12.1	13.1	12.1	7.6	4.8	6.8	5.1	---	4.7
21	---	10.6	10.3	11.6	13.0	11.8	7.7	4.4	6.4	5.2	---	4.5
22	---	11.4	8.3	11.9	13.1	11.8	7.7	4.9	5.9	5.2	---	4.5
23	---	---	9.1	12.0	12.9	11.8	7.6	4.7	6.1	5.3	5.1	4.9
24	---	---	10.0	14.0	12.7	11.5	6.9	6.0	6.0	5.0	4.4	4.7
25	---	---	10.7	14.1	13.1	11.4	6.7	6.6	5.8	4.9	4.4	4.6
26	---	---	11.8	14.0	13.2	11.6	6.5	6.4	5.4	4.9	4.5	4.5
27	---	---	10.4	13.8	13.0	12.1	6.4	5.6	5.2	4.4	4.2	5.3
28	---	---	10.4	12.8	13.0	12.3	7.0	5.4	5.0	4.5	4.4	5.1
29	---	---	10.8	12.7	---	---	7.0	5.5	5.7	4.9	4.2	5.1
30	---	---	12.7	12.5	---	---	6.6	5.1	6.3	5.0	4.2	5.0
31	---	---	13.0	13.1	---	---	---	5.4	---	5.1	4.7	---
MEAN	6.9	8.7	10.3	13.1	13.1	12.2	9.0	5.6	5.7	5.4	4.7	4.9
WTR YR 1982	MEAN	8.2		MAX	14.1	MIN	4.2					

## BEAVER RIVER BASIN

41

03102950 PYMATUNING CREEK AT KINSMAN, OH

LOCATION.--Lat 41°26'34", long 80°35'18", in T.7 N., R.1 W., Trumbull County, Hydrologic Unit 05030102, on left bank at downstream side of bridge on State Highway 7 at Kinsman, 0.8 mi (1.3 km) downstream from Sugar Creek, and 1.2 mi (1.9 km) upstream from Stratton Creek.

DRAINAGE AREA.--96.7 mi<sup>2</sup> (250 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 906.8 ft (276.39 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--17 years, 126 ft<sup>3</sup>/s (3.568 m<sup>3</sup>/s), 17.69 in/yr (449 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft<sup>3</sup>/s (68.5 m<sup>3</sup>/s) Feb. 17, 1976, gage height, 12.27 ft (3.740 m) from rating curve extended above 800 ft<sup>3</sup>/s (22.7 m<sup>3</sup>/s); maximum gage-height, 12.32 ft (3.755 m) Sept. 15, 1979; minimum discharge, 0.10 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Aug. 8, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft<sup>3</sup>/s (19.8 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)		
Oct. 5	0700	731	20.7	9.90	3.018	Feb. 21	1000	738	20.9	9.92	3.024
Dec. 24	0300	1040	29.5	10.59	3.228	Mar. 13	2200	1230	34.8	10.89	3.319
Jan. 6	1300	803	22.7	10.10	3.078	June 29	2400	1050	29.7	10.60	3.231
Feb. 1	1100	*1490	42.2	*11.25	3.429						

Minimum daily discharge, 3.1 ft<sup>3</sup>/s (0.088 m<sup>3</sup>/s) Sept. 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	76	120	142	800	95	480	23	130	673	18	5.6
2	159	54	180	193	1100	75	522	20	110	493	17	5.4
3	324	46	220	168	800	90	441	18	100	347	15	6.3
4	634	42	210	365	640	110	320	17	50	341	16	6.0
5	720	38	170	720	500	220	225	16	150	269	18	5.6
6	690	97	150	788	390	480	186	15	498	187	17	5.8
7	637	164	130	727	300	370	168	14	588	113	15	6.7
8	503	170	198	546	220	250	170	22	583	68	12	4.9
9	300	160	295	365	187	180	208	48	516	57	13	4.6
10	180	120	302	260	122	150	237	62	180	45	14	4.3
11	130	90	250	170	86	260	241	47	70	29	13	4.1
12	90	66	210	120	63	799	229	32	34	24	14	3.6
13	64	48	180	91	50	1060	211	25	28	28	11	3.6
14	55	38	170	66	43	1150	190	27	24	23	8.5	3.1
15	42	34	150	55	47	950	162	20	20	14	6.7	3.8
16	30	30	140	50	217	752	130	15	27	11	6.0	4.6
17	27	28	120	45	427	845	100	14	40	10	7.6	4.9
18	24	26	110	39	535	724	96	12	80	9.7	10	5.1
19	40	25	110	36	470	597	91	12	130	13	9.2	5.1
20	45	187	100	33	430	446	80	12	120	27	11	4.9
21	50	327	100	31	410	311	70	13	100	30	14	5.8
22	56	355	140	29	360	224	63	13	65	22	14	5.8
23	66	363	511	74	320	167	55	15	48	19	12	6.0
24	76	240	961	288	290	128	47	21	38	16	11	6.1
25	88	180	841	355	250	104	40	45	33	15	9.7	6.3
26	100	150	756	270	200	96	36	70	23	16	10	5.8
27	120	180	594	160	150	96	34	84	19	17	8.7	8.2
28	150	234	434	120	110	93	31	80	17	21	7.8	10
29	150	227	299	100	---	100	29	80	591	23	6.9	8.7
30	130	130	224	143	---	120	27	100	917	22	6.3	6.9
31	100	---	147	460	---	268	---	140	---	20	6.1	---
TOTAL	5838	3925	8522	7009	9517	11310	4919	1132	5329	3002.7	358.5	167.6
MEAN	188	131	275	226	340	365	164	36.5	178	96.9	11.6	5.59
MAX	720	363	961	788	1100	1150	522	140	917	973	18	10
MIN	24	25	100	29	43	75	27	12	17	6.7	6.0	3.1
CFSM	1.94	1.36	2.84	2.34	3.52	3.78	1.70	.38	1.84	1.00	.12	.06
IN.	2.25	1.51	3.28	2.70	3.66	4.35	1.89	.44	2.05	1.16	.14	.06

CAL YR 1981 TOTAL 63473.5 MEAN 174 MAX 2090 MIN 3.7 CFSM 1.80 IN 24.42  
WTR YR 1982 TOTAL 61029.8 MEAN 167 MAX 1150 MIN 3.1 CFSM 1.73 IN 23.48

## BEAVER RIVER BASIN

## RESERVOIRS IN BEAVER RIVER BASIN, OH

03090000 BERLIN LAKE NEAR BERLIN CENTER.--Lat 41°02'46", long 81°00'10", in T.1 N., R.6 W., Portage County, Hydrologic Unit 05030103, at dam on Mahoning River, 3.2 mi (5.1 km) northwest of Berlin Center. DRAINAGE AREA, 248 mi<sup>2</sup> (642 km<sup>2</sup>). PERIOD OF RECORD, December 1942 to current year. Prior to October 1971 published as Berlin Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earthfill dam with concrete spillway; storage began in December 1942. Usable capacity 91,150 acre-ft (112 hm<sup>3</sup>) between elevations 956.5 ft (291.54 m) (invert of lowest outlet) and 1,032 ft (315 m) (top of taintor gates on controlled section) of which 1,800 acre-ft (2.22 hm<sup>3</sup>) is in the conservation pool, elevation, 980.0 ft (298.70 m). 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-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 91,150 acre-ft (112 hm<sup>3</sup>) July 9, 1943, elevation, 1,032.0 ft (375.51 m); minimum, 1,540 acre-ft (1.90 hm<sup>3</sup>) Jan. 10, 1944, elevation, 978.82 ft (298.344 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 63,300 acre-ft (78.0 hm<sup>3</sup>) Mar 18, elevation, 1,026.04 ft (312.737 m); minimum, 15,840 acre-ft (19.5 hm<sup>3</sup>) Nov. 19, elevation, 1,004.04 ft (306.031 m).

03091000 MILTON RESERVOIR NEAR PRICETOWN.--Lat 41°07'38", long 80°58'40", in T.2 N., R.5 W., Mahoning County, Hydrologic Unit 05030103, at dam on Mahoning River, 0.8 mi (1.3 km) southwest of Pricetown. DRAINAGE AREA, 273 mi<sup>2</sup> (707 km<sup>2</sup>). PERIOD OF RECORD, December 1923 to current year. Month-end contents for some periods published in WSP 1305. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Youngstown). Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1916. Usable capacity 29,150 acre-ft (35.9 hm<sup>3</sup>) between elevations 906.0 ft (276.15 m) (bottom of gates) and 951.0 ft (289.86 m) (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.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 35,020 acre-ft (43.2 hm<sup>3</sup>) June 29, 1924, elevation, 953.8 ft (290.72 m), of which 5,870 acre-ft (7.24 hm<sup>3</sup>) was in uncontrolled storage; minimum, 1,220 acre-ft (1.50 hm<sup>3</sup>) Jan. 23, 1954, elevation, 924.27 ft (281.717 m), from graph based on gage readings.

EXTREMES FOR CURRENT YEAR: Maximum contents, 23,500 acre-ft (29.0 hm<sup>3</sup>) Oct. 6, elevation, 947.99 ft (288.947 m); minimum, 13,040 acre-ft (16.1 hm<sup>3</sup>) Jan. 18, elevation, 940.66 ft (286.713 m).

03092450 MICHAEL J. KIRWAN RESERVOIR AT WAYLAND.--Lat 41°09'24", long 81°04'47", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, at dam on West Branch Mahoning River, 0.5 mi (0.8 km) southwest of Wayland. DRAINAGE AREA, 80.5 mi<sup>2</sup> (208 km<sup>2</sup>). PERIOD OF RECORD, December 1966 to current year. Prior to October 1971 published as West Branch Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir is formed by earthfill dam with concrete spillway; storage began in December 1966. Usable capacity 78,660 acre-ft (97.0 hm<sup>3</sup>) between elevations 936.8 ft (285.54 m) (lowest outlet) and 993.0 ft (302.67 m) (crest of spillway) of which 3,740 acre-ft (4.61 hm<sup>3</sup>) is in conservation pool. Dead storage below elevation 936.8 ft (285.54 m), 85 acre-ft (105,000 m<sup>3</sup>). 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-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 66,940 acre-ft (82.5 hm<sup>3</sup>) Apr. 18, 1972, elevation, 989.19 ft (301.505 m); minimum, 5,370 acre-ft (6.62 hm<sup>3</sup>) Jan. 5, 1967, elevation, 953.50 ft (290.627 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 57,980 acre-ft (71.5 hm<sup>3</sup>) Mar. 19, elevation, 986.00 ft (300.533 m); minimum, 35,000 acre-ft (43.2 hm<sup>3</sup>) Sept. 26, 30, elevation, 976.18 ft (297.540 m).

## RESERVOIRS IN BEAVER RIVER BASIN, OH--Continued

03095000 MOSQUITO CREEK LAKE NEAR CORTLAND.--Lat 41°17'58", long 80°45'31", in T.5 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, at dam on Mosquito Creek, 3.0 mi (4.8 km) southwest of Cortland. DRAINAGE AREA, 97.5 mi<sup>2</sup> (253 km<sup>2</sup>). PERIOD OF RECORD, October 1943 to current year. Prior to October 1971 published as Mosquito Creek Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earthfill dam. A natural wasteway, elevation, 903.5 ft (275.39 m), discharges into the Grand River basin; storage began in October 1943. Usable capacity 102,200 acre-ft (126 hm<sup>3</sup>) between elevations 881.0 ft (268.53 m) (lowest outlet), and 904.00 ft (275.539 m), (lake-full level). Dead storage below 881.0 ft (268.53 m), 2,000 acre-ft (2.47 hm<sup>3</sup>). 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-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 99,100 acre-ft (122 hm<sup>3</sup>) June 3, 1947, elevation, 903.65 ft (275.432 m); minimum, 8,600 acre-ft (10.6 hm<sup>3</sup>) Nov. 16, 1944, elevation, 886.97 ft (270.348 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 85,320 acre-ft (105 hm<sup>3</sup>) June 30, elevation, 902.02 ft (274.936 m); minimum, 49,980 acre-ft (61.6 hm<sup>3</sup>) Nov. 19, elevation, 897.03 ft (273.415 m).

03097000 MEANDER CREEK RESERVOIR NEAR MINERAL RIDGE.--Lat 41°09'12", long 80°46'45", in T.3 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, on right side of spillway near center of dam on Meander Creek, 0.8 mi (1.3 km) northwest of Mineral Ridge. DRAINAGE AREA, 83.9 mi<sup>2</sup> (217 km<sup>2</sup>). PERIOD OF RECORD, November 1929 to current year. Month-end contents for some periods published in WSP 1305. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Mahoning Valley Sanitary District).

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1929. Usable capacity at spillway level, elevation, 905 ft (276 m), 32,410 acre-ft (40.0 hm<sup>3</sup>). No dead storage. Figures given herein represent usable contents. Water is used for municipal supply of cities of Niles and Youngstown. Gage-heights furnished by Mahoning Valley Sanitary District. Capacity table computed from base data furnished by Mahoning Valley Sanitary District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 41,800 acre-ft (51.5 hm<sup>3</sup>) Jan. 21, 1959, elevation, 909.25 ft (277.139 m); minimum, 9,370 acre-ft (11.6 hm<sup>3</sup>) Feb. 28, 1954, elevation, 888.78 ft (270.900 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 34,900 acre-ft (43.0 hm<sup>3</sup>) Mar. 16, elevation, 906.22 ft (276.216 m); minimum 20,480 acre-ft (25.3 hm<sup>3</sup>) Dec. 22, elevation, 898.05 ft (273.726 m).

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03090000 BERLIN LAKE				03091000 MILTON RESERVOIR			03092450 M. J. KIRWAN RES.		
Sept. 30.....	1,017.48	37,420	--	947.90	23,350	--	981.11	45,670	--
Oct. 31.....	1,007.83	20,280	-17,140	946.04	20,230	-3,120	978.15	39,050	-6,620
Nov. 30.....	1,004.60	16,440	-3,840	944.15	17,470	-2,760	977.83	38,370	-680
Dec. 31.....	1,008.05	20,570	+4,130	943.68	16,830	-640	979.81	42,680	+4,310
CAL YR 1981	--	--	+6,120	--	--	+1,000	--	--	+1,970
Jan. 31.....	1,013.25	28,740	+8,170	942.83	15,710	-1,120	979.82	42,700	+20
Feb. 28.....	1,021.12	46,780	+18,040	942.53	15,330	-380	981.93	47,620	+4,920
Mar. 31.....	1,023.55	54,330	+7,550	947.45	22,570	+7,240	985.69	57,160	+9,540
Apr. 30.....	1,021.87	48,990	-5,340	946.37	20,760	-1,810	985.01	55,350	-1,810
May 31.....	1,021.90	49,080	+90	946.82	21,500	+740	983.75	52,120	-3,230
June 30.....	1,022.54	51,060	+1,980	947.61	22,850	+1,350	983.39	51,210	-910
July 31.....	1,022.48	50,870	-190	947.65	22,910	+60	980.28	43,750	-7,460
Aug. 31.....	1,020.02	43,730	-7,140	947.04	21,860	-1,050	977.78	38,270	-5,480
Sept. 30.....	1,017.60	37,700	-6,030	947.51	22,670	+810	976.18	35,000	-3,270
WTR YR 1982	--	--	+280	--	--	-680	--	--	-10,670
03095000 MOSQUITO CR. LAKE				03097000 MEANDER CR RES.					
Sept. 30.....	899.55	66,600	--	901.44	25,860	--			
Oct. 31.....	897.87	55,240	-11,360	899.65	22,930	-2,930			
Nov. 30.....	897.54	53,170	-2,070	898.55	21,240	-1,690			
Dec. 31.....	899.10	63,420	+10,250	900.07	23,590	+2,350			
CAL YR 1981	--	--	+1,980	--	--	-6,080			
Jan. 31.....	899.42	65,680	+2,260	903.77	30,040	+6,450			
Feb. 28.....	900.31	72,100	+6,420	905.30	33,020	+2,980			
Mar. 31.....	901.63	82,230	+10,130	905.49	33,400	+380			
Apr. 30.....	901.20	78,840	-3,390	904.55	31,540	-1,860			
May 31.....	901.51	81,280	+2,440	903.15	28,880	-2,660			
June 30.....	902.01	85,230	+3,950	902.90	28,420	-460			
July 31.....	900.51	73,590	-11,640	901.50	25,960	-2,460			
Aug. 31.....	898.94	62,310	-11,280	899.60	22,850	-3,110			
Sept. 30.....	898.09	56,650	-5,660	898.64	21,370	-1,480			
WTR YR 1982	--	--	-9,950	--	--	-4,490			

## LITTLE BEAVER CREEK BASIN

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH

LOCATION.--Lat 40°40'33", long 80°32'27", Columbiana County, Hydrologic Unit 05030101, on right bank at downstream side of Grimms Bridge, 1.5 mi (2.4 km) upstream from Island Run, 4 mi (6 km) upstream from mouth, and 4 mi (6 km) northeast of East Liverpool.

DRAINAGE AREA.--496 mi<sup>2</sup> (1,285 km<sup>2</sup>).

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

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft (214.204 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1964-1978. Sediment data collected at this site 1969 to 1974.

AVERAGE DISCHARGE.--67 years, 521 ft<sup>3</sup>/s (14.75 m<sup>3</sup>/s), 14.26 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s) July 19, 1941, gage height, 17.4 ft (5.30 m), from rating curve extended above 16,000 ft<sup>3</sup>/s (453 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 12 ft<sup>3</sup>/s (0.34 m<sup>3</sup>/s) several days in 1918, 1930, 1932, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,400 ft<sup>3</sup>/s (323 m<sup>3</sup>/s) Feb. 1, gage height 12.27 ft (3.740 m); above base of 5,000 ft<sup>3</sup>/s (142 m<sup>3</sup>/s); minimum discharge, 42 ft<sup>3</sup>/s (1.19 m<sup>3</sup>/s) Sept. 19, 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	94	237	341	8010	513	929	247	185	225	66	49
2	110	91	372	402	3590	508	720	241	200	168	68	87
3	116	91	318	369	2190	482	708	232	181	287	85	137
4	111	89	265	382	2180	502	821	221	158	658	84	134
5	103	92	276	797	1360	1740	669	213	266	424	79	91
6	111	168	285	693	1040	1510	695	208	440	283	74	70
7	137	205	255	564	724	1070	675	205	366	229	69	63
8	135	172	299	470	560	809	602	299	268	232	110	59
9	113	142	447	430	480	732	603	379	230	215	102	56
10	103	126	353	370	440	641	646	295	217	177	151	54
11	96	117	292	350	410	943	642	246	201	155	117	55
12	93	108	269	320	390	1490	581	228	191	154	96	51
13	89	104	239	300	360	1680	551	212	166	145	77	48
14	84	97	225	280	350	1780	513	205	147	125	69	49
15	86	94	219	270	487	1270	465	189	130	115	64	46
16	83	94	210	260	1170	1610	432	172	206	106	57	44
17	82	102	200	250	1630	3400	418	160	1080	102	54	44
18	81	134	190	240	3000	2250	441	153	704	107	51	44
19	83	142	180	240	2190	1530	396	149	417	116	50	43
20	83	498	180	230	1920	1270	364	174	315	111	50	43
21	85	660	170	230	1620	1150	352	272	263	107	60	54
22	82	406	485	220	1270	957	317	210	234	93	66	67
23	102	312	1220	780	1040	806	291	344	209	85	68	71
24	140	266	2250	2220	1030	709	277	363	181	79	65	71
25	134	240	1340	1500	869	656	263	313	163	74	95	70
26	114	225	735	843	656	650	277	222	151	70	98	80
27	117	215	549	670	616	626	350	191	145	70	72	156
28	128	205	479	570	565	532	333	280	223	70	62	169
29	121	193	427	510	---	508	292	306	290	106	54	133
30	110	185	375	642	---	490	258	234	328	89	51	100
31	102	---	327	4100	---	604	---	199	---	73	50	---
TOTAL	3239	5667	13668	19843	40147	33418	14881	7362	8255	5057	2314	2238
MEAN	104	189	441	640	1434	1078	496	237	275	163	74.6	74.6
MAX	140	660	2250	4100	8010	3400	929	379	1080	658	151	169
MIN	81	89	170	220	350	482	258	149	130	70	50	43
CFSM	.21	.38	.89	1.29	2.89	2.17	1.00	.48	.55	.33	.15	.15
IN.	.24	.43	1.03	1.49	3.01	2.51	1.12	.55	.62	.38	.17	.17

CAL YR 1981 TOTAL 213979 MEAN 586 MAX 7470 MIN 64 CFSM 1.18 IN 16.05  
WTR YR 1982 TOTAL 156089 MEAN 428 MAX 8010 MIN 43 CFSM .86 IN 11.71

## 03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OH

LOCATION.--Lat 40°32'16", long 80°43'31", in sec. 29, T.8 N., R.2 W., Jefferson County, Hydrologic Unit 05030101, on right bank 1,000 ft (305 m) upstream from Lowery Run, 0.9 mi (1.4 km) upstream from Brush Creek, and 1.6 mi (2.6 km) southwest of Hammondsville.

DRAINAGE AREA.--147 mi<sup>2</sup> (381 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 692.10 ft (210.952 m) Ohio State Highway Department bench mark.

REMARKS.--Records good. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--42 years, 161 ft<sup>3</sup>/s (4.560 m<sup>3</sup>/s), 14.87 in/yr (378 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,580 ft<sup>3</sup>/s (271 m<sup>3</sup>/s) Jan. 27, 1952, gage height, 12.17 ft (3.709 m); minimum, 0.8 ft<sup>3</sup>/s (0.023 m<sup>3</sup>/s) Sept. 24 to Oct. 1, Oct. 7, 8, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--The highest stage observed is reported to have occurred in 1912.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,770 ft<sup>3</sup>/s (78.4 m<sup>3</sup>/s) Feb. 1, gage height 6.91 ft (2.106 m), above base of 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/s); minimum daily discharge, 8.7 ft<sup>3</sup>/s (0.25 m<sup>3</sup>/s) Sept. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	53	50	104	2190	165	294	79	58	63	16	13
2	18	27	102	100	757	165	242	77	79	43	16	20
3	19	19	75	103	576	153	286	73	60	112	20	96
4	18	19	64	231	420	168	302	69	48	138	21	36
5	17	18	62	278	330	610	245	58	65	115	23	22
6	19	30	56	197	250	404	271	56	79	81	22	18
7	42	42	50	202	200	330	231	55	67	60	18	15
8	28	33	71	149	170	260	209	90	55	242	22	14
9	23	27	89	110	160	238	220	101	48	294	31	13
10	19	25	79	90	140	212	212	73	63	136	23	13
11	18	23	73	80	130	263	209	65	75	105	20	12
12	18	22	69	75	120	404	191	62	56	88	17	12
13	16	20	61	70	110	435	191	56	47	65	16	11
14	14	18	56	70	110	422	178	53	41	53	14	11
15	14	17	53	65	138	342	159	48	36	45	13	10
16	14	17	46	65	263	555	150	45	36	40	12	10
17	17	16	40	60	381	1130	147	43	130	36	12	9.7
18	27	16	38	60	555	702	150	40	79	32	11	9.4
19	27	16	36	55	498	483	128	44	55	39	11	9.1
20	28	51	34	55	468	435	122	112	47	55	11	8.7
21	27	80	32	50	440	834	120	92	41	48	12	9.7
22	24	58	53	110	355	664	108	71	37	31	11	16
23	29	48	611	400	298	473	101	90	39	26	12	15
24	43	42	450	700	278	377	96	90	36	23	11	14
25	33	40	228	290	242	318	94	79	29	21	73	13
26	28	36	155	250	194	286	99	67	26	20	53	13
27	30	36	132	220	191	245	117	60	24	19	23	35
28	29	36	115	190	178	198	101	79	32	21	17	43
29	33	33	101	167	---	184	88	75	96	23	14	23
30	54	31	83	167	---	209	81	60	133	20	13	17
31	49	---	82	1100	---	235	---	65	---	18	13	---
TOTAL	793	949	3246	5863	10142	11899	5142	2127	1717	2112	601	561.6
MEAN	25.6	31.6	105	189	362	384	171	68.6	57.2	68.1	19.4	18.7
MAX	54	80	611	1100	2190	1130	302	112	133	294	73	96
MIN	14	16	32	50	110	153	81	40	24	18	11	8.7
CFSM	.17	.22	.71	1.29	2.46	2.61	1.16	.47	.39	.46	.13	.13
IN.	.20	.24	.82	1.48	2.57	3.01	1.30	.54	.43	.53	.15	.14
CAL YR 1981 TOTAL	64995.8			MEAN 178	MAX 2990	MIN 8.6	CFSM 1.21	IN 16.45				
WTR YR 1982 TOTAL	45152.6			MEAN 124	MAX 2190	MIN 8.7	CFSM .84	IN 11.43				

## REVISION OF RECORD FOR DISCONTINUED STATION

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH

LOCATION.--Lat 40°19'18", long 80°48'49", in SE 1/4 sec. 21, T6 N., R3 W., Jefferson County, Hydrologic Unit 05030101, at bridge on Wayne Township Road 139 (Bloomfield Road), 0.9 mi (1.4 km) upstream from mouth (at McIntire Creek) and 1.6 mi (2.6 km) south of Bloomingdale.

DRAINAGE AREA.--0.98 mi<sup>2</sup> (2.54 km<sup>2</sup>).

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to September 1981 (discontinued).

INSTRUMENTATION.--Sediment-pumping sampler.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 395 mg/L May 27, 1980; minimum daily mean 3 mg/L Nov. 15, 1980.

SEDIMENT LOADS: Maximum daily, 13 tons (12 tonnes) June 3, 1980 (Revised); minimum daily, 0.00 tons Nov. 10-15, 1980, Sept. 13, 1981.

REVISIONS:--Revised figures of sediment discharge for the Water Years 1980, 1981 superseding those published in WRD-OH-81-1 are given herein.

Extremes period of record: Maximum daily 13 tons (12 tonnes) June 3, 1980.

Extremes water year 1980: Maximum daily 13 tons (12 tonnes) June 3.

Date	Sediment Discharge (Tons/Day)	Date	Sediment Discharge (Tons/Day)	Date	Sediment Discharge (Tons/Day)	Date	Sediment Discharge (Tons/Day)
Feb. 15, 1980	0.24	May 12, 1980	1.4	July 8, 1980	0.38	Aug. 15, 1980	1.4
16	-- .30	14	-- 4.0	22	-- 7.5	16	-- .69
17	-- .31	30	-- .09	23	-- 6.6	17	-- .28
Mar. 7	-- .51	31	-- 1.4	Aug. 2	-- .65	18	-- 3.8
8	-- 2.3	June 2	-- 4.5	4	-- 2.4	19	-- .88
17	-- .93	3	-- 13	5	-- 1.0		
18	-- .70	15	-- .54	11	-- 3.4		
21	-- 1.4	16	-- 5.6	12	-- 1.9		

February 1980	Total	4.80
Mar	Total	15.51
May	Total	14.59
June	Total	40.69
July	Total	26.19
August	Total	33.79
Wtr Yr 1980	Total	175.99

Date	Sediment Discharge (Tons/Day)	Date	Sediment Discharge (Tons/Day)	Date	Sediment Discharge (Tons/Day)	Date	Sediment Discharge (Tons/Day)
Apr. 8, 1981	2.1	Apr. 15, 1981	0.83	July 19, 1981	0.39	Aug. 3, 1981	0.33
9	-- .42	29	-- .83	20	-- .40	4	-- .24
11	-- .91	30	-- 1.8	28	-- .52		
12	-- 4.6	June 25	-- .96	29	-- .25		

April	Total	24.30
June	Total	4.95
July	Total	3.51
August	Total	2.49
Wtr Yr 1981	Total	81.35

## 03111500 SHORT CREEK NEAR DILLONVALE, OH

LOCATION.--Lat 40°11'36", long 80°44'04", in sec. 30, T.4 N., R.2 W., Jefferson County, Hydrologic Unit 05030106, on right bank at downstream side of bridge on State Highway 150, 2.1 mi (3.4 km) east of Dillonvale, 2.2 mi (3.5 km) downstream from Jug Run, and 2.9 mi (4.7 km) upstream from Little Short Creek.

DRAINAGE AREA.--123 mi<sup>2</sup> (319 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1003: 1942-43. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 676.1 ft (206.08 m) State of Ohio bench mark. Prior to Oct. 21, 1941, nonrecording gage at same site and datum.

REMARKS.--Records poor. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--41 years, 131 ft<sup>3</sup>/s (3.710 m<sup>3</sup>/s), 14.46 in/yr (367 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft<sup>3</sup>/s (184 m<sup>3</sup>/s) Mar. 6, 1945, gage height, 8.77 ft (2.673 m); maximum gage height, 10.15 ft (3.094 m) Mar. 5, 1963, from graph based on gage readings; minimum daily discharge, 2.8 ft<sup>3</sup>/s (0.079 m<sup>3</sup>/s) Sept. 21, 27, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft<sup>3</sup>/s (34.0 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage (ft)	Gage (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage (ft)	Gage (m)
Jan. 23	1900	*2550	72.2	*6.87	2.094	Jan. 31	2400	1910	54.1	5.87	1.789

Minimum daily discharge, 25 ft<sup>3</sup>/s (1.02 m<sup>3</sup>/s) Sept. 20.

REVISIONS.--The daily discharges for the water year 1981 have been revised as shown in the following table. They supersede figures published in WRD-OH-81-1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	73	143	60	171	240	123	295	120	250	129	71
2	85	69	128	50	465	220	116	255	115	220	118	203
3	86	67	121	44	261	206	111	231	170	200	115	296
4	88	70	101	38	220	192	111	214	760	180	261	161
5	80	70	96	36	160	250	377	201	800	180	135	109
6	76	62	98	36	140	271	238	229	1300	170	115	87
7	74	60	113	36	130	231	186	208	700	160	110	78
8	71	73	144	36	120	210	166	185	400	140	105	121
9	70	69	190	36	120	196	162	174	1500	123	95	112
10	66	62	243	36	154	190	154	172	450	117	89	86
11	88	60	169	36	383	185	205	277	320	109	91	79
12	76	57	146	36	176	171	2600	257	245	105	87	72
13	69	56	134	36	130	162	1590	212	225	155	81	66
14	65	56	116	36	120	152	788	195	800	158	79	65
15	65	56	107	36	110	145	555	282	740	115	80	106
16	65	56	100	36	360	180	441	223	240	105	87	83
17	64	56	90	36	660	167	413	193	225	99	75	108
18	85	69	80	36	600	150	492	176	223	92	72	77
19	88	64	75	36	800	149	384	171	240	87	65	87
20	71	55	65	36	1100	145	347	163	250	127	65	70
21	74	64	60	36	960	146	298	155	210	146	62	64
22	64	65	55	36	620	140	282	146	280	128	61	68
23	61	60	50	36	660	137	336	139	260	99	58	67
24	61	131	50	36	750	130	311	139	200	89	54	57
25	156	184	50	60	510	125	285	134	470	85	55	55
26	149	116	50	107	370	122	252	133	450	187	53	52
27	98	171	50	190	300	138	252	172	280	282	51	50
28	93	241	50	123	260	128	267	178	220	380	54	47
29	93	180	85	107	---	123	387	150	190	331	51	46
30	83	153	90	70	---	131	355	135	170	187	114	45
31	77	---	70	60	---	133	---	125	---	149	82	---
TOTAL	2525	2625	3119	1629	10810	5265	12584	5919	12553	4955	2749	2688
MEAN	81.5	87.5	101	52.5	386	170	419	191	418	160	88.7	89.6
MAX	156	241	243	190	1100	271	2600	295	1500	380	261	296
MIN	61	56	50	36	110	122	111	125	115	85	51	45
CFSM	.66	.71	.82	.43	3.14	1.38	3.41	1.55	3.40	1.30	.72	.73
IN.	.76	.79	.94	.49	3.27	1.59	3.81	1.79	3.80	1.50	.83	.81

CAL YR 1980	TOTAL	78928	MEAN 2.15	MAX	2630	MIN	50	CFSM	1.76	IN	23.87
WTR YR 1981	TOTAL	67421	MEAN 185	MAX	2600	MIN	36	CFSM	1.50	IN	20.39

## SHORT CREEK BASIN

03111500 SHORT CREEK NEAR DILLONVALE, OH--Continued.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	48	147	119	900	147	249	82	103	128	39	35
2	45	48	136	101	327	149	196	80	135	94	36	34
3	43	47	94	97	332	154	206	77	95	411	40	114
4	42	47	82	266	337	234	189	73	80	275	44	46
5	42	49	85	215	253	586	171	73	114	209	49	36
6	55	82	77	157	221	297	196	69	114	149	41	31
7	57	69	72	155	187	266	180	67	97	121	38	30
8	46	59	109	123	150	224	171	177	82	142	47	29
9	45	58	113	126	130	217	180	131	83	186	60	31
10	45	66	92	71	110	206	180	92	88	119	48	31
11	45	58	82	50	100	234	193	80	126	101	47	32
12	45	53	76	48	95	290	180	73	85	92	40	32
13	46	50	72	46	90	273	175	68	76	80	39	26
14	45	49	68	44	80	240	162	63	69	76	38	29
15	45	46	60	42	173	219	154	63	61	72	37	31
16	47	46	60	42	236	469	155	59	63	69	33	30
17	47	45	55	40	293	510	159	59	101	66	33	29
18	51	45	55	38	320	330	154	57	68	61	34	28
19	58	50	50	38	293	279	136	57	59	64	33	28
20	51	126	48	36	266	337	131	109	56	68	32	25
21	49	95	46	36	249	297	124	109	52	68	34	27
22	48	76	98	34	222	249	113	140	49	56	30	36
23	80	66	411	1270	202	224	106	97	62	53	32	36
24	76	62	206	682	195	209	103	149	52	51	38	32
25	57	61	142	295	179	200	98	106	47	45	72	33
26	56	56	113	170	157	204	108	79	45	42	57	33
27	66	56	90	130	157	186	113	73	44	40	40	57
28	63	52	75	120	150	168	98	173	77	68	38	49
29	56	50	65	120	---	164	89	111	286	59	33	38
30	51	46	55	160	---	159	86	97	187	49	33	35
31	50	---	80	854	---	238	---	126	---	47	32	---
TOTAL	1597	1761	3014	5725	6404	7959	4555	2869	2656	3161	1247	1083
MEAN	51.5	58.7	97.2	185	229	257	152	92.5	88.5	102	40.2	36.1
MAX	80	126	411	1270	900	586	249	177	286	411	72	114
MIN	42	45	46	34	80	147	86	57	44	40	30	25
CFSM	.42	.48	.79	1.50	1.86	2.09	1.24	.75	.72	.83	.33	.29
IN.	.48	.53	.91	1.73	1.94	2.41	1.38	.87	.80	.96	.38	.33
CAL YR 1981	TOTAL	65524	MEAN 180	MAX 2600	MIN 36	CFSM 1.46	IN 19.82					
WTR YR 1982	TOTAL	42031	MEAN 115	MAX 1270	MIN 25	CFSM .94	IN 12.71					

LOCATION.--Lat 39°54'31", long 80°55'27", in NE 1/4 sec. 10, T.5 N., R.4 W., Belmont County, Hydrologic Unit 05030106, on left bank at downstream side of bridge on State Highway 148, 0.5 mi (0.8 km) east of Armstrongs Mills, and 0.7 mi (1.1 km) downstream from Anderson Run.

## MUSKINGUM RIVER BASIN

03117000 TUSCARAWAS RIVER AT MASSILLON, OH

LOCATION.--Lat 40°46'13", long 81°31'27", in sec. 20 T.10 N., R.9 W., Stark County, Hydrologic Unit 05040001, on left bank at sewage-treatment works, 0.7 mi (1.1 km) south of Massillon, and 3 mi (5 km) downstream from Newman Creek.

DRAINAGE AREA.--518 mi<sup>2</sup> (1,342 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 916.00 ft (279.197 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

REMARKS.--Records fair. Some water diverted through the Portage Lakes into the Ohio Canal at Long Lake, 28 mi (45 km) and 3 mi (5 km) 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 (8.01 hm<sup>3</sup>), since 1939. Water-quality data collected at this site 1965 to 1977.

**AVERAGE DISCHARGE.**--45 years, 441 ft<sup>3</sup>/s (12.49 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft<sup>3</sup>/s (303 m<sup>3</sup>/s) July 5, 1969, gage height, 16.43 ft (5.008 m); minimum daily, 57 ft<sup>3</sup>/s (1.61 m<sup>3</sup>/s) Oct. 13, 14, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,020 ft<sup>3</sup>/s (114 m<sup>3</sup>/s) Feb. 1, gage height, 9.65 ft (2.941 m); minimum daily, 104 ft<sup>3</sup>/s (2.95 m<sup>3</sup>/s) Aug. 29.

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

MUSKINGUM RIVER BASIN

5.1

03117100 TUSCARAWAS RIVER AT NAVARRE, OH

LOCATION.--Lat 40°43'36", long 81°31'47", Stark County, Hydrologic Unit 05040001, on left bank at Navarre water treatment plant, 800 ft (244 m) upstream from bridge on Elton Road at Navarre, 3.5 mi (5.6 km) downstream from gaging station at Massillon, 1.2 mi (1.9 km) downstream from Pigeon Run, and just upstream from Wolf Creek.

DRAINAGE AREA.--534 mi<sup>2</sup> (1,383 km<sup>2</sup>).

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1968 to current year.

pH: March 1968 to current year.

WATER TEMPERATURES: March 1968 to current year.

DISSOLVED OXYGEN: March 1968 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of daily discharge for gaging station at Massillon (station 03117000).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 16,700 micromhos Jan. 27, 1970; minimum, 200 micromhos Mar. 8, 9, 1980.

pH: Maximum, 10.7 units Oct. 27, 1971; minimum, 3.9 units Oct. 26, 1969.

WATER TEMPERATURES: Maximum, 30.0°C June 27, 28, 1969, Aug. 25, 1975, July 7, 16, 20, 1977; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L July 15, 16, 23-26, 1982; minimum, 0.0 mg/L on many days during 1971 to 1973.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,560 micromhos Feb. 13; minimum, 390 micromhos Mar. 17.

pH: Maximum, 9.0 units Feb. 24, Aug. 15; minimum, 7.2 units Sept. 15.

WATER TEMPERATURES: Maximum, 28.0°C July 18; minimum, 0.0°C Jan. 10, 11, Feb. 1.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L July 15, 16, 23-26; minimum, 0.1 mg/L Sept. 2.

## MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1920	1830	1870	1980	1790	1880	2150	1820	1940	1500	1370	1440
2	1950	1800	1900	1980	1720	1840	2350	1530	1970	1480	1150	1240
3	1930	1650	1750	1990	1800	1910	1720	1510	1610	1290	1150	1210
4	1820	1680	1750	2060	1830	1950	1850	1660	1760	1350	960	1230
5	1860	1740	1800	2100	1620	1950	1950	1720	1840	1560	1090	1350
6	1810	1550	1690	2250	1070	1730	1950	1690	1780	1620	1410	1520
7	2060	1410	1800	1200	980	1060	1800	1630	1720	1560	1230	1360
8	1400	1260	1330	1400	1220	1260	2070	1660	1800	1420	1230	1340
9	1700	1400	1560	1670	1420	1520	2030	1370	1510	1700	1220	1400
10	1750	1640	1690	1870	1700	1760	1790	1550	1640	1350	1220	1300
11	1830	1720	1780	1830	1660	1750	2190	1790	1940	1650	1290	1360
12	1910	1750	1830	1850	1760	1790	2590	2210	2470	1710	1330	1520
13	2050	1890	1930	1910	1800	1850	2630	2360	2510	1680	1560	1620
14	2320	1490	1870	1940	1840	1890	2710	2450	2600	1600	1510	1570
15	2090	1560	1860	1990	1850	1920	2810	2520	2670	1650	1550	1580
16	2240	1960	2050	2140	1870	2000	2780	2470	2660	1860	1540	1670
17	2290	2190	2240	2200	2050	2120	2820	2600	2710	1740	1550	1610
18	2230	1460	1920	2110	1990	2050	2810	1950	2290	1970	1460	1670
19	2120	1610	1930	2090	1890	2040	2160	1980	2050	2080	1700	1950
20	2030	1790	1930	1980	730	1350	---	---	---	2050	1560	1740
21	2010	1670	1770	2220	760	1780	---	---	---	2130	1730	1910
22	2060	1690	1880	2030	1380	1720	---	---	---	1820	1700	1740
23	1900	1600	1730	1910	1680	1780	1200	520	804	1850	1090	1460
24	1930	1720	1870	1840	1530	1650	1310	760	1060	1100	600	703
25	1800	1430	1520	1880	1660	1760	1740	1330	1550	910	780	836
26	1660	1450	1550	1890	1740	1820	1840	1520	1660	1090	920	1020
27	2120	1660	1920	2120	1670	1860	1870	1320	1510	1260	1110	1200
28	2170	1410	1680	2080	1800	1880	1960	1380	1690	1420	1250	1340
29	1770	1520	1670	2010	1830	1910	2150	1880	2030	1520	1370	1450
30	1910	1680	1800	2130	1880	2010	2290	2040	2170	1570	1050	1380
31	2020	1740	1880	---	---	---	2420	1170	1940	1250	550	728
MONTH	2320	1260	1800	2250	730	1790	2820	520	1920	2130	550	1400

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	640	550	594	1210	1090	1140	1250	960	1130	1590	1470	1560
2	840	650	734	1250	1090	1160	850	750	771	1810	1470	1630
3	1050	840	931	1220	1100	1150	850	790	826	1590	1290	1400
4	650	550	571	1250	1110	1180	850	760	792	1730	1440	1600
5	720	600	673	1110	530	755	870	780	823	1730	1600	1660
6	910	710	795	1050	740	922	930	810	874	1810	1640	1720
7	1030	900	963	780	690	723	960	880	924	1850	1690	1780
8	1100	980	1040	920	780	833	1120	900	966	1770	1530	1680
9	1160	1050	1120	1040	920	983	950	810	889	1850	1050	1380
10	1310	1150	1200	1060	970	1020	840	770	797	1330	1070	1240
11	1400	1190	1290	1040	600	848	890	770	798	1550	1290	1410
12	3550	1260	1890	800	440	500	850	800	820	1660	1450	1530
13	3560	1480	1920	950	550	850	830	780	808	1650	1490	1560
14	2760	1490	2100	590	530	558	880	790	831	1650	1480	1590
15	2720	1020	1770	750	600	672	1040	880	943	1690	1520	1630
16	1020	410	556	850	420	637	1210	1050	1130	2080	1590	1770
17	710	430	638	450	390	415	1220	1030	1090	1760	1570	1700
18	780	620	676	540	450	497	1100	1030	1070	1840	1630	1740
19	830	560	632	700	540	624	1130	1010	1080	1950	1570	1780
20	660	560	605	770	650	676	1200	1080	1140	2110	1630	1840
21	670	590	619	720	660	695	1280	1100	1180	1710	1050	1300
22	730	600	654	800	700	740	1300	1160	1230	1270	1100	1170
23	970	720	781	840	780	804	1370	1210	1280	1780	490	1040
24	1380	780	923	1020	850	928	1340	1130	1220	1330	570	1090
25	1290	830	912	1120	940	976	1370	1190	1310	1950	1370	1680
26	1050	860	944	1140	950	1010	1420	1320	1370	1840	1240	1480
27	1170	1010	1110	1080	950	1010	1560	1310	1420	1990	1420	1690
28	1180	1090	1130	1020	950	986	1660	1240	1380	2150	1780	1970
29	---	---	---	1150	970	1050	1510	1410	1450	2640	1510	2160
30	---	---	---	1130	1050	1090	1590	1420	1490	2610	1050	1800
31	---	---	---	1090	610	915	---	---	---	1320	1110	1210
MONTH	3560	410	992	1250	390	850	1660	750	1060	2640	490	1570

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1240	1160	1190	1570	1270	1420	2030	1870	1940	2220	1990	2080
2	1460	1260	1330	1940	1570	1780	1960	1850	1910	2100	1130	1710
3	1540	1370	1450	1910	1010	1570	2070	1900	1970	2330	1180	1780
4	1620	1390	1460	1120	540	610	2120	1710	1970	1320	1050	1150
5	2680	1500	1830	690	590	636	2150	1180	1710	1610	1360	1480
6	1650	1380	1520	2140	660	1790	1210	1030	1090	1830	1600	1720
7	1650	1440	1570	2460	1760	2070	1420	1210	1290	1970	1690	1850
8	1550	1380	1460	2060	1310	1770	1690	1460	1590	2090	1850	1960
9	1580	1510	1540	1350	1200	1270	1780	1520	1650	2150	1930	2080
10	1630	1520	1590	1460	1230	1340	1990	1630	1810	2170	1920	2060
11	1710	1570	1650	1490	1390	1450	1730	1640	1690	2030	1790	1930
12	1700	1580	1650	1590	1460	1540	1850	1710	1780	2230	1950	2060
13	1700	1610	1660	1740	1540	1650	2060	1740	1930	2160	1910	2050
14	1790	1610	1710	1840	1250	1590	2040	1850	1940	2300	2010	2160
15	1860	1660	1770	1980	1470	1760	2020	1810	1900	2240	1760	2060
16	1680	1130	1420	1870	1630	1750	1950	1860	1910	2380	1440	2020
17	1820	1050	1430	1890	1680	1780	1980	1830	1910	1600	1360	1430
18	2000	1390	1720	2110	1790	1920	2060	1850	1950	1870	1620	1730
19	2230	1800	2030	2100	1480	1770	2050	1900	1990	2040	1770	1900
20	1990	1510	1840	1920	1610	1730	2020	1870	1940	2400	1990	2190
21	1480	1260	1340	1750	1500	1580	2320	1720	1940	2260	1990	2120
22	1640	1080	1260	1800	1550	1640	2100	1840	1970	2480	1970	2290
23	1340	1190	1250	1920	1620	1750	1970	1500	1770	2570	2390	2470
24	1570	1200	1390	1900	1730	1820	1950	1640	1780	2540	2220	2430
25	1500	1320	1370	1860	1660	1800	2000	1930	1970	2210	1940	2050
26	1490	1390	1450	1960	1640	1800	---	---	---	2180	1900	2040
27	1620	1450	1550	1950	1810	1880	---	---	---	1950	1400	1620
28	1750	1570	1670	2080	1850	1940	---	---	---	2120	1160	1530
29	1690	960	1180	1920	1790	1870	---	---	---	1420	1170	1300
30	1530	730	1230	2330	1910	2080	2480	2230	2340	1710	1420	1540
31	---	---	---	2030	1840	1950	2220	2020	2110	---	---	---
MONTH	2680	730	1520	2460	540	1660	2480	1030	1840	2570	1050	1890
YEAR	3560	390	1520									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.6	7.6	7.6	7.9	7.7	7.8	7.9	7.8	7.8	8.4	8.2	8.3
2	7.8	7.6	7.7	7.8	7.7	7.8	8.2	7.8	8.0	8.4	8.1	8.2
3	7.8	7.7	7.8	7.8	7.7	7.7	8.1	8.0	8.1	8.2	8.0	8.1
4	7.9	7.8	7.9	7.7	7.6	7.6	8.6	8.0	8.1	8.2	8.0	8.1
5	7.9	7.7	7.8	7.7	7.5	7.6	8.2	7.9	8.1	8.2	8.0	8.1
6	7.7	7.5	7.6	7.9	7.6	7.8	8.3	8.0	8.1	8.1	8.1	8.1
7	7.9	7.6	7.7	7.7	7.7	7.7	8.2	7.9	8.1	8.1	8.0	8.1
8	7.8	7.8	7.8	7.8	7.7	7.7	8.0	7.9	7.9	8.2	8.0	8.1
9	7.9	7.8	7.8	7.9	7.7	7.8	8.3	8.1	8.2	8.5	8.1	8.2
10	7.9	7.8	7.9	7.9	7.8	7.8	8.5	8.2	8.4	8.3	8.2	8.2
11	7.9	7.8	7.9	7.9	7.8	7.9	8.5	8.4	8.5	8.2	8.0	8.2
12	7.8	7.8	7.8	8.0	7.9	8.0	8.5	8.4	8.5	8.1	8.0	8.1
13	7.9	7.8	7.8	8.1	8.0	8.0	8.4	8.2	8.3	8.1	8.0	8.0
14	8.0	7.8	7.9	8.2	8.0	8.1	8.4	8.0	8.2	8.1	8.0	8.0
15	8.0	7.9	7.9	8.2	8.0	8.1	8.1	8.0	8.0	8.1	8.0	8.1
16	8.0	7.9	7.9	8.1	8.1	8.1	8.5	8.0	8.3	8.1	8.0	8.1
17	7.9	7.9	7.9	8.1	7.9	8.0	8.4	8.4	8.4	8.1	8.0	8.1
18	7.8	7.7	7.8	7.9	7.8	7.8	8.4	8.3	8.3	8.1	7.9	8.0
19	7.9	7.7	7.8	7.9	7.9	7.9	8.3	8.3	8.3	8.1	8.0	8.1
20	7.9	7.8	7.8	8.2	7.7	7.9	---	---	---	8.1	8.0	8.0
21	7.8	7.7	7.8	8.2	7.9	8.1	---	---	---	8.2	8.0	8.1
22	7.7	7.6	7.7	8.4	8.2	8.3	---	---	---	8.1	8.0	8.1
23	7.6	7.5	7.5	8.4	8.0	8.2	8.6	7.9	8.1	8.4	8.0	8.1
24	7.6	7.5	7.6	8.0	7.7	7.9	8.1	7.9	8.0	8.6	7.8	8.0
25	8.0	7.6	7.8	8.2	7.9	8.1	8.2	8.1	8.2	7.9	7.8	7.9
26	7.9	7.7	7.8	8.3	8.1	8.2	8.4	8.2	8.3	8.0	7.9	7.9
27	7.7	7.6	7.7	8.2	7.9	8.1	8.4	8.2	8.3	8.0	7.9	8.0
28	7.8	7.7	7.7	7.9	7.8	7.9	8.5	8.2	8.4	8.0	7.9	8.0
29	7.8	7.7	7.7	8.2	7.8	7.9	8.5	8.4	8.5	8.1	7.9	8.0
30	7.9	7.7	7.8	8.2	7.9	8.1	8.6	8.5	8.5	8.0	8.0	8.0
31	7.9	7.8	7.8	---	---	---	8.6	8.3	8.5	8.3	7.9	8.0
MONTH	8.0	7.5	7.8	8.4	7.5	7.9	8.6	7.8	8.2	8.6	7.8	8.1

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	18.0	16.0	16.5	14.5	11.5	13.0	7.0	5.5	6.0	3.5	3.0	3.0
2	17.0	14.0	15.0	15.0	13.0	14.0	7.0	6.5	6.5	3.0	2.5	3.0
3	14.0	13.0	13.5	15.0	13.0	14.0	7.0	6.0	6.5	4.0	2.5	3.0
4	14.0	11.0	12.5	14.5	12.0	13.5	7.0	6.5	6.5	5.5	4.0	5.0
5	16.5	13.0	14.5	14.0	12.0	13.0	6.5	5.5	6.0	4.0	2.5	3.0
6	17.0	15.5	16.0	13.5	11.5	12.5	5.5	4.5	5.0	3.5	2.5	3.0
7	15.5	14.5	15.0	11.0	10.0	10.5	6.0	4.5	5.5	3.5	3.0	3.5
8	14.5	13.0	13.5	10.5	8.5	9.5	6.5	5.5	6.0	3.0	1.0	2.0
9	14.5	11.5	13.0	10.5	9.0	9.5	5.5	4.0	5.0	1.0	.5	1.0
10	14.5	11.5	13.0	10.0	8.0	9.0	4.0	2.5	3.0	.5	.0	.5
11	15.5	12.5	14.0	9.5	8.0	9.0	3.0	2.0	2.5	.5	.0	.5
12	15.5	12.5	14.0	9.5	7.5	8.5	3.5	2.5	3.0	1.0	.5	.5
13	15.5	12.5	14.0	9.0	6.5	8.0	4.0	3.5	3.5	1.5	.5	1.0
14	15.0	13.0	14.0	9.0	6.0	7.5	5.0	4.0	4.0	2.0	1.0	1.5
15	14.5	13.0	14.0	9.5	6.0	8.0	5.0	4.5	4.5	1.5	.5	1.0
16	15.0	13.5	14.5	10.0	6.5	8.5	4.5	4.0	4.0	1.0	.5	1.0
17	14.5	12.0	13.0	10.0	7.5	9.0	4.0	3.0	3.5	.5	.5	.5
18	14.5	13.0	14.0	10.0	9.0	9.5	3.5	2.5	3.0	1.5	.5	1.0
19	13.0	11.5	12.0	10.0	8.0	9.0	2.5	1.5	2.0	2.5	1.0	1.5
20	12.5	9.5	11.0	10.0	8.0	9.0	---	---	---	2.5	1.0	2.0
21	13.5	10.5	12.0	8.0	6.0	7.0	---	---	---	2.5	1.5	2.0
22	14.0	12.0	13.0	6.0	5.0	5.5	---	---	---	2.0	1.0	1.5
23	13.5	12.0	13.0	6.0	4.5	5.0	3.5	1.5	2.0	2.0	.5	1.5
24	12.0	10.0	11.0	6.0	5.0	5.5	2.0	1.5	1.5	1.5	.5	.5
25	11.5	9.0	10.0	6.5	5.5	6.0	2.0	1.5	2.0	.5	.5	.5
26	13.0	10.5	11.5	7.5	5.5	6.0	3.0	2.0	2.5	1.0	.5	.5
27	14.0	12.5	13.0	8.0	7.0	7.5	3.0	2.5	3.0	1.5	.5	.5
28	14.5	13.0	14.0	7.0	6.5	6.5	3.5	2.5	3.0	2.5	1.0	1.5
29	14.5	12.0	13.0	6.5	6.0	6.0	3.5	3.0	3.0	3.0	1.0	2.0
30	14.5	11.5	13.0	6.5	4.5	5.5	3.0	2.0	2.5	3.0	2.0	2.5
31	14.0	11.5	13.0	---	---	---	3.5	2.0	2.5	2.0	.5	1.0
MONTH	18.0	9.0	13.5	15.0	4.5	9.0	7.0	1.5	4.0	5.5	.0	1.5

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

## MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.5	21.0	21.5	23.5	21.0	22.0	24.5	21.0	23.0	22.0	20.0	21.0
2	23.0	19.5	21.0	23.5	19.5	21.5	24.0	21.5	22.5	22.0	21.0	21.5
3	22.0	19.5	20.5	22.5	20.0	21.0	24.5	21.0	22.5	22.0	19.5	20.5
4	21.0	19.5	20.0	21.0	20.0	20.5	24.0	21.0	22.5	21.0	18.0	19.5
5	20.0	18.0	19.0	22.5	21.0	21.5	25.5	22.5	23.5	21.5	17.0	19.0
6	18.0	17.0	17.5	24.0	21.5	22.5	25.5	22.5	23.5	20.5	17.0	19.0
7	19.5	17.0	18.0	26.0	23.0	24.0	25.5	22.5	24.0	20.5	18.5	19.0
8	22.5	18.0	20.0	26.5	24.0	25.0	25.0	23.0	24.0	20.5	17.5	19.0
9	23.0	20.0	21.5	27.0	23.5	25.0	25.0	22.5	23.5	21.5	17.0	19.5
10	23.0	21.0	22.0	26.5	23.5	25.0	24.0	21.5	22.5	21.0	18.0	19.5
11	24.0	20.0	22.0	25.5	23.5	24.5	23.0	20.5	22.0	22.0	19.0	20.5
12	22.5	20.0	21.0	26.5	22.5	24.5	22.5	19.0	21.0	22.5	19.5	21.0
13	23.0	18.5	21.0	26.5	22.5	24.5	23.0	18.0	20.5	23.0	20.0	21.5
14	23.0	18.5	20.5	26.5	22.5	24.5	23.0	19.0	21.0	23.0	21.0	22.0
15	23.0	19.0	21.0	27.0	23.0	25.0	23.5	19.5	21.5	23.5	21.5	22.5
16	22.0	20.0	20.5	27.0	23.0	25.0	24.0	20.0	22.0	22.5	20.5	21.5
17	20.0	19.0	19.5	27.5	23.5	25.5	23.5	21.0	22.5	21.0	18.0	19.5
18	22.0	18.5	20.0	28.0	24.0	26.0	23.0	19.5	21.5	20.5	18.5	19.0
19	20.5	19.5	20.0	26.5	24.5	25.0	23.0	19.5	21.5	19.0	16.0	17.5
20	20.5	18.0	19.5	26.0	23.0	24.5	23.0	20.0	21.0	19.0	16.5	17.5
21	21.0	18.0	19.5	26.0	21.5	24.0	22.0	20.0	21.0	18.0	16.5	17.0
22	21.0	18.5	20.0	25.0	21.5	23.5	20.5	17.5	19.0	17.0	15.5	16.0
23	21.0	18.0	19.5	26.0	21.5	23.5	20.0	18.0	19.0	16.5	15.0	15.5
24	21.5	18.0	20.0	26.0	21.5	24.0	22.0	18.5	20.0	16.0	14.5	15.0
25	22.5	18.5	20.5	26.5	22.0	24.0	21.5	20.0	20.5	16.5	15.0	16.0
26	23.0	19.5	21.0	26.0	22.5	24.5	---	---	---	16.5	15.0	15.5
27	24.0	20.0	22.0	26.0	23.5	24.5	---	---	---	16.0	15.0	15.5
28	25.0	21.0	23.0	25.5	23.0	24.0	---	---	---	17.0	15.5	16.5
29	24.0	22.0	22.5	24.5	20.5	22.5	---	---	---	17.5	15.0	16.5
30	23.5	22.0	22.5	25.0	21.0	23.0	20.5	18.5	18.5	18.5	15.5	17.0
31	---	---	---	24.5	21.5	23.0	21.0	20.0	20.5	---	---	---
MONTH	25.0	17.0	20.5	28.0	19.5	24.0	25.5	17.5	21.5	23.5	14.5	18.5
YEAR	28.0	.0	12.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.7	3.8	4.8	7.0	4.4	5.5	10.0	9.0	9.6	12.4	12.1	12.3
2	6.0	4.5	5.2	6.2	4.1	5.0	---	---	---	12.4	12.0	12.3
3	6.2	4.6	5.3	6.8	4.0	5.2	---	---	---	12.5	12.2	12.4
4	6.7	5.3	5.9	6.9	4.2	5.4	---	---	---	12.2	11.8	12.0
5	6.1	5.1	5.5	5.8	4.4	5.0	---	---	---	12.6	11.8	12.3
6	5.1	4.5	4.8	5.1	3.9	4.7	---	---	---	12.6	12.2	12.4
7	5.6	4.8	5.2	5.9	4.6	5.2	---	---	---	12.4	11.7	12.2
8	6.0	4.7	5.4	---	---	---	---	---	---	13.0	12.4	12.7
9	7.0	5.6	6.2	6.9	6.4	6.7	---	---	---	13.0	12.8	12.9
10	6.8	5.7	6.2	7.2	6.4	6.6	---	---	---	12.8	12.5	12.7
11	6.5	5.4	5.9	7.5	5.9	6.5	11.7	10.9	11.0	12.6	11.6	12.1
12	6.6	5.2	5.8	7.4	5.8	6.6	12.3	11.1	11.5	11.8	11.1	11.5
13	6.9	5.2	5.9	8.0	6.0	7.0	12.4	11.1	11.6	11.3	10.6	10.9
14	6.8	4.7	5.6	7.7	6.2	6.9	12.3	10.9	11.5	10.6	10.2	10.3
15	5.8	5.1	5.4	7.7	6.0	6.7	12.3	11.1	11.5	10.4	10.1	10.3
16	6.8	4.8	5.7	7.5	5.9	6.5	12.7	11.1	11.7	10.5	10.3	10.4
17	6.9	5.4	6.0	7.2	5.3	6.1	12.6	11.2	11.7	10.5	10.2	10.4
18	6.4	5.1	5.7	6.9	5.0	5.9	13.2	11.6	12.2	10.6	9.8	10.2
19	6.7	5.2	5.9	6.1	5.1	5.6	11.8	11.7	11.8	10.1	9.8	9.9
20	7.3	5.4	6.3	6.3	4.5	5.5	---	---	---	9.9	9.3	9.5
21	6.8	5.6	6.1	---	---	---	---	---	---	9.5	8.9	9.1
22	6.1	4.8	5.4	---	---	---	---	---	---	9.5	9.1	9.2
23	6.0	4.3	5.1	---	---	---	11.8	10.0	11.1	11.7	9.3	10.5
24	6.5	4.8	5.5	10.7	7.6	9.1	12.5	11.9	12.3	12.3	11.0	12.1
25	7.3	4.7	5.8	10.3	9.7	10.0	12.5	12.3	12.4	12.2	12.1	12.1
26	6.1	5.3	5.6	9.7	9.2	9.5	12.5	12.3	12.4	12.2	11.5	11.9
27	5.9	4.8	5.2	9.5	8.1	9.0	12.3	12.1	12.2	11.9	11.6	11.7
28	6.2	4.5	5.2	9.4	7.3	8.6	12.4	12.2	12.3	11.7	11.3	11.5
29	6.3	4.5	5.3	9.9	8.0	9.0	12.4	12.1	12.3	11.3	10.5	11.1
30	6.8	4.6	5.5	10.5	8.9	9.6	12.6	12.3	12.4	12.2	10.5	11.3
31	7.0	4.6	5.6	---	---	---	12.6	12.2	12.4	13.1	12.0	12.7
MONTH	7.3	3.8	5.6	10.7	3.9	6.8	13.2	9.0	11.8	13.1	8.9	11.4

## MUSKINGUM RIVER BASIN

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03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.1	12.7	12.8	11.3	10.8	11.1	9.6	9.0	9.4	12.4	5.3	8.1
2	12.8	12.3	12.5	11.0	10.7	10.8	10.3	9.6	10.0	12.2	5.2	8.0
3	12.3	11.9	12.1	11.1	10.7	10.9	9.6	9.3	9.5	12.6	4.9	8.1
4	12.4	12.1	12.3	11.4	10.7	11.0	11.3	9.5	10.4	13.3	4.6	8.1
5	12.4	12.2	12.3	12.3	11.4	11.8	12.5	11.4	11.9	12.0	4.2	7.5
6	12.4	12.1	12.2	12.3	11.8	12.1	12.0	11.3	11.6	---	---	---
7	12.3	12.1	12.2	11.7	11.6	11.6	12.6	11.5	12.1	---	---	---
8	12.3	11.9	12.2	11.8	11.5	11.7	12.2	11.4	11.9	---	---	---
9	11.9	11.3	11.7	11.6	11.3	11.5	12.1	11.1	11.5	---	---	---
10	11.3	11.1	11.2	11.6	11.3	11.5	12.2	11.2	11.6	---	---	---
11	11.2	10.8	11.0	11.7	11.3	11.4	12.6	11.3	11.9	---	---	---
12	11.1	10.1	10.8	11.5	10.8	11.2	12.8	11.2	11.9	---	---	---
13	10.8	10.1	10.5	11.3	10.8	11.1	11.1	9.9	10.6	---	---	---
14	10.7	10.3	10.5	11.2	10.7	10.9	11.6	9.7	10.4	---	---	---
15	11.9	10.3	10.7	11.2	10.9	11.0	11.3	9.2	10.1	---	---	---
16	12.2	11.4	11.9	11.8	11.1	11.3	11.8	8.2	9.5	---	---	---
17	12.0	11.8	11.9	11.1	10.7	10.9	9.8	7.4	8.5	---	---	---
18	12.1	11.8	12.0	11.0	10.8	10.9	12.4	7.4	9.5	---	---	---
19	11.8	11.5	11.6	10.8	10.5	10.6	13.0	7.9	10.0	---	---	---
20	11.8	11.5	11.6	11.0	10.6	10.9	11.1	7.5	8.8	---	---	---
21	11.7	11.4	11.5	10.9	10.1	10.6	13.4	7.1	9.7	---	---	---
22	11.8	11.7	11.7	11.0	10.3	10.8	13.9	7.5	10.3	---	---	---
23	11.7	11.3	11.5	11.2	11.0	11.2	14.2	8.0	10.5	---	---	---
24	11.5	11.2	11.3	11.1	10.5	10.9	15.1	7.3	10.5	---	---	---
25	12.1	11.6	11.9	10.5	10.2	10.4	14.0	7.2	10.0	---	---	---
26	12.2	11.7	12.0	10.9	10.1	10.5	9.8	6.2	7.6	---	---	---
27	11.8	11.4	11.7	11.8	10.7	11.3	10.9	5.5	7.5	---	---	---
28	11.6	11.2	11.4	11.9	11.5	11.7	12.2	6.1	8.7	---	---	---
29	---	---	---	11.6	11.0	11.4	13.0	6.2	9.2	---	---	---
30	---	---	---	10.9	9.9	10.5	13.2	6.4	9.2	---	---	---
31	---	---	---	9.7	8.3	9.1	---	---	---	---	---	---
MONTH	13.1	10.1	11.7	12.3	8.3	11.1	15.1	5.5	10.1	13.3	4.2	8.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	---	---	---	15.3	4.2	9.6	6.5	2.8	4.5
2	---	---	---	---	---	---	12.5	4.6	7.6	2.4	.1	1.0
3	---	---	---	---	---	---	8.3	3.5	6.0	3.7	1.6	2.5
4	---	---	---	---	---	---	6.8	3.0	4.5	4.8	1.8	3.1
5	---	---	---	---	---	---	6.7	1.8	3.8	7.2	2.4	4.4
6	---	---	---	---	---	---	7.9	1.5	4.4	7.3	2.7	4.7
7	---	---	---	---	---	---	11.8	2.5	6.6	5.4	2.7	4.0
8	---	---	---	---	---	---	10.4	2.1	5.9	5.9	2.6	4.2
9	---	---	---	---	---	---	6.6	1.4	3.6	6.3	2.8	4.6
10	---	---	---	---	---	---	7.3	2.0	4.4	5.7	2.6	4.2
11	---	---	---	---	---	---	7.9	2.1	4.7	7.8	2.3	4.7
12	---	---	---	---	---	---	9.3	2.5	5.5	9.7	2.6	5.9
13	---	---	---	12.6	4.1	9.9	10.1	3.1	6.5	8.8	2.6	5.7
14	---	---	---	19.9	3.9	10.5	14.5	3.5	8.6	5.9	2.1	4.2
15	---	---	---	20.0	4.4	11.8	18.2	5.2	11.4	4.5	1.8	3.4
16	---	---	---	20.0	3.8	11.5	17.2	5.4	11.4	5.5	2.3	3.6
17	---	---	---	19.4	4.8	11.7	17.0	5.8	11.4	7.4	2.9	4.8
18	---	---	---	17.6	3.8	10.3	14.8	4.8	9.6	5.8	2.7	4.3
19	---	---	---	9.2	3.0	6.0	13.2	4.6	8.9	6.3	3.6	4.9
20	---	---	---	12.4	2.3	6.3	9.4	3.8	6.1	5.7	3.2	4.5
21	---	---	---	15.4	3.0	7.9	9.3	2.8	5.4	5.0	3.2	4.2
22	---	---	---	15.5	3.2	8.5	12.2	3.7	7.3	5.3	3.6	4.5
23	---	---	---	20.0	3.3	10.9	7.8	2.9	5.0	5.0	3.4	4.3
24	---	---	---	20.0	5.3	13.2	10.0	2.8	5.7	5.4	3.5	4.5
25	---	---	---	20.0	7.4	14.8	10.3	2.5	5.2	5.2	3.4	4.3
26	---	---	---	20.0	6.8	12.1	---	---	---	4.8	3.3	4.0
27	---	---	---	19.0	5.3	11.7	---	---	---	5.2	4.0	4.7
28	---	---	---	13.0	3.8	7.9	---	---	---	6.0	3.6	4.8
29	---	---	---	11.3	3.4	6.9	---	---	---	6.8	4.9	5.7
30	---	---	---	11.1	3.3	7.1	9.4	6.9	8.6	6.8	4.9	5.7
31	---	---	---	13.4	3.6	8.3	9.0	2.8	5.9	---	---	---
MONTH	---	---	---	20.0	2.3	9.9	18.2	1.4	6.8	9.7	.1	4.3
YEAR	20.0	.1	8.8	---	---	---	---	---	---	---	---	---

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1870	1870	1920	1450	590	1150	1120	1560	1190	1450	1940	2060
2	1920	1810	2010	1220	725	1160	765	1630	1330	1810	1910	1930
3	1740	1950	1620	1210	890	1140	830	1400	1450	1650	1960	1850
4	1740	1950	1760	1270	570	1190	780	1620	1450	565	1990	1140
5	1810	1980	1850	1380	670	705	820	1670	1640	630	1750	1470
6	1680	1760	1780	1540	780	890	880	1720	1520	2030	1070	1750
7	1800	1050	1740	1320	960	710	925	1790	1590	2040	1300	1830
8	1340	1240	1730	1330	1040	820	950	1700	1470	1830	1620	1960
9	1580	1530	1420	1370	1140	985	890	1230	1540	1270	1660	2110
10	1690	1780	1630	1310	1180	1020	800	1250	1600	1330	1810	2060
11	1780	1770	1870	1350	1290	940	790	1380	1660	1460	1700	1930
12	1830	1790	2480	1510	1340	490	820	1520	1660	1550	1780	2050
13	1910	1840	2530	1620	1600	890	810	1560	1660	1670	1960	2060
14	1860	1890	2620	1580	2020	560	830	1610	1700	1690	1930	2180
15	1880	1920	2670	1580	1680	670	945	1630	1780	1750	1910	2100
16	2020	2020	2680	1680	450	685	1150	1670	1420	1750	1910	2170
17	2250	2110	2710	1600	680	415	1080	1720	1450	1780	1910	1410
18	2060	2040	2230	1650	665	500	1070	1750	1740	1890	1950	1720
19	1960	2060	2050	1980	580	620	1080	1820	2080	1830	2020	1870
20	1930	1310	---	1720	600	675	1140	1810	1870	1700	1930	2210
21	1710	1710	---	1890	605	690	1180	1280	1340	1590	1890	2110
22	1880	1730	---	1730	640	735	1230	1160	1160	1600	1950	2400
23	1720	1770	804	1450	760	805	1290	1110	1230	1740	1890	2470
24	1890	1630	1080	680	825	920	1210	1110	1380	1810	1790	2450
25	1480	1750	1540	830	870	965	1330	1690	1360	1810	1970	2020
26	1560	1820	1650	1020	940	995	1370	1390	1460	1790	---	2020
27	1940	1870	1410	1210	1110	1000	1410	1620	1570	1890	---	1580
28	1540	1880	1670	1370	1130	985	1330	2000	1670	1920	---	1360
29	1720	1900	2020	1460	---	1050	1450	2210	1150	1870	---	1300
30	1810	2010	2180	1430	---	1100	1490	1630	1220	2000	2320	1530
31	1880	---	2050	710	---	920	---	1200	---	1960	2100	---
MEAN	1800	1790	1920	1400	940	851	1060	1560	1510	1670	1850	1900
WTR YR 1982	MEAN	1520	MAX	2710	MIN	415						

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	7.8	7.8	8.3	7.9	8.0	8.1	7.9	7.5	7.6	8.2	7.8
2	7.6	7.8	8.1	8.2	7.8	8.0	7.9	7.9	7.5	7.7	7.9	7.6
3	7.8	7.7	8.1	8.1	7.8	8.0	7.9	7.8	7.6	7.6	7.6	7.7
4	7.9	7.6	8.0	8.2	7.6	8.0	7.9	7.5	7.6	7.5	7.5	7.6
5	7.8	7.6	8.1	8.1	7.7	7.8	8.2	7.5	7.6	7.5	7.4	7.7
6	7.6	7.8	8.2	8.1	7.7	7.8	8.1	7.5	7.7	7.8	7.3	7.7
7	7.8	7.7	8.1	8.1	7.9	7.8	8.2	7.5	7.7	7.6	7.6	7.6
8	7.8	7.7	7.9	8.1	7.9	7.8	8.2	7.5	7.6	7.6	7.7	7.6
9	7.8	7.9	8.2	8.2	7.9	7.9	8.1	7.5	7.5	7.5	7.5	7.6
10	7.9	7.9	8.4	8.2	8.0	7.9	8.1	7.6	7.5	7.5	7.5	7.7
11	7.9	7.9	8.5	8.2	8.0	7.9	8.2	7.6	7.6	7.5	7.6	7.7
12	7.8	8.0	8.5	8.1	8.0	7.6	8.2	7.5	7.6	7.6	7.8	7.6
13	7.8	8.0	8.4	8.0	7.9	7.6	8.1	7.5	7.5	7.6	7.9	7.6
14	7.8	8.1	8.2	8.0	8.0	7.7	8.0	7.4	7.6	7.8	8.0	7.4
15	7.9	8.1	8.0	8.1	7.9	7.7	8.0	7.4	7.5	8.2	8.3	7.3
16	7.9	8.1	8.4	8.1	7.7	7.7	8.0	7.4	7.6	8.1	8.1	7.4
17	7.9	8.0	8.4	8.1	7.8	7.7	7.9	7.4	7.7	8.0	8.0	7.4
18	7.8	7.8	8.3	8.0	7.9	7.6	7.9	7.3	7.8	8.3	7.9	7.4
19	7.7	7.9	8.3	8.1	7.7	7.7	7.9	7.3	7.8	7.8	7.9	7.4
20	7.8	7.9	---	8.0	7.7	7.7	7.8	7.4	7.7	7.7	7.8	7.4
21	7.8	8.1	---	8.1	7.7	7.7	7.8	7.4	7.6	7.7	7.8	7.5
22	7.7	8.3	---	8.1	7.7	7.9	7.8	7.4	7.6	7.9	7.9	7.4
23	7.5	8.3	---	8.1	7.8	7.9	8.2	7.4	7.6	7.9	7.8	7.5
24	7.6	7.9	8.0	7.9	7.8	7.9	8.1	7.7	7.6	8.2	7.7	7.7
25	7.9	8.1	8.2	7.9	7.8	7.9	7.9	8.0	7.6	8.2	7.7	7.7
26	7.8	8.2	8.2	7.9	7.7	8.0	7.7	7.7	7.7	8.1	---	7.7
27	7.7	8.1	8.3	8.0	7.9	8.0	7.7	7.7	7.9	8.0	---	7.7
28	7.7	7.9	8.4	8.0	7.9	8.1	7.9	7.7	7.8	7.7	---	7.7
29	7.7	7.9	8.5	8.0	---	8.1	7.9	8.0	7.5	7.8	---	7.8
30	7.8	8.1	8.5	8.0	---	8.0	8.1	7.8	7.5	7.9	8.0	7.8
31	7.8	---	8.5	7.9	---	7.9	---	7.5	---	8.1	7.9	---
MEAN	7.8	7.9	8.2	8.1	7.8	7.9	8.0	7.6	7.6	7.8	7.8	7.6
WTR YR 1982	MEAN	7.8	MAX	8.5	MIN	7.3						

## 03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.5	13.0	5.5	3.0	.5	4.5	10.5	16.0	21.5	22.0	23.0	21.0
2	14.5	14.0	6.5	3.0	.5	4.5	10.0	16.5	21.0	21.5	22.5	21.5
3	13.5	14.5	6.5	3.0	1.5	3.0	10.5	16.5	20.5	21.0	22.5	20.5
4	12.5	13.5	6.5	5.0	1.0	3.0	7.5	16.5	20.0	20.5	23.0	19.5
5	13.5	13.0	6.0	3.0	1.5	2.0	5.5	17.5	19.0	21.0	23.0	19.0
6	16.0	12.5	5.5	3.0	1.0	2.0	5.5	18.5	17.5	22.5	23.5	19.0
7	15.0	10.5	5.0	3.5	.5	2.5	4.5	20.0	17.5	24.0	24.0	19.0
8	13.5	9.5	6.0	2.0	1.0	3.0	5.5	18.5	19.0	24.5	24.0	18.5
9	12.5	9.5	5.0	1.0	2.0	3.5	6.5	18.5	21.0	25.0	23.5	19.0
10	13.0	9.0	3.5	.5	1.0	4.0	6.0	17.5	22.0	25.0	23.0	19.5
11	13.5	9.0	2.5	.5	1.0	4.5	6.0	17.5	21.5	24.5	22.0	20.5
12	14.0	8.5	3.0	.5	1.0	4.5	7.0	19.0	21.5	24.0	21.0	21.0
13	14.0	8.0	3.5	1.0	2.0	6.5	9.0	20.5	20.5	24.5	20.5	21.5
14	13.5	8.0	4.0	1.0	2.5	6.0	10.0	21.5	20.5	24.5	21.0	22.0
15	14.0	8.0	4.5	1.0	3.5	6.0	11.5	21.5	21.0	25.0	21.5	22.0
16	14.5	8.0	4.0	1.0	1.5	5.5	14.0	20.5	20.5	24.5	22.0	21.5
17	13.5	9.0	3.5	.5	1.5	5.0	15.0	20.5	19.5	25.5	22.5	19.5
18	13.5	9.5	3.0	1.0	1.5	5.5	14.0	21.5	19.5	26.0	21.0	19.5
19	12.0	9.0	2.0	1.5	2.0	6.0	14.0	22.0	20.0	25.0	21.5	17.5
20	11.0	9.0	---	2.0	2.0	6.5	14.0	21.5	19.5	24.5	21.0	17.5
21	11.5	6.5	---	1.5	2.5	7.5	13.5	20.0	19.5	23.5	21.0	17.0
22	13.0	5.5	---	1.5	3.0	7.0	13.0	19.5	19.5	23.5	19.5	16.0
23	13.0	5.0	2.0	2.0	3.5	6.0	12.5	19.5	19.5	23.5	19.0	15.5
24	11.0	5.5	2.0	.5	4.0	7.0	14.0	19.5	19.5	24.0	19.5	15.0
25	10.0	6.0	2.0	.5	2.5	7.0	15.0	20.0	20.0	24.0	20.5	15.5
26	11.5	6.0	2.5	.5	2.0	6.5	15.5	20.0	21.0	24.5	---	16.0
27	13.0	7.5	3.0	.5	3.0	4.5	15.0	21.0	21.5	24.5	---	15.5
28	13.5	6.5	3.0	1.5	3.5	4.0	13.5	21.5	22.5	24.5	---	16.0
29	13.0	6.0	3.0	1.5	---	5.5	14.0	22.0	22.5	22.5	---	16.0
30	13.0	5.5	2.5	2.5	---	8.5	15.0	21.5	22.5	23.0	18.5	16.5
31	13.0	---	2.5	.5	---	11.0	---	21.5	---	23.5	20.5	---
MEAN	13.0	9.0	4.0	1.5	2.0	5.0	11.0	19.5	20.5	23.5	21.5	18.5
WTR YR 1982	MEAN	12.5		MAX	26.0	MIN	.5					

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.2	9.7	12.3	12.8	11.1	9.5	7.2	---	---	9.2	4.5
2	5.3	5.0	---	12.4	12.5	10.8	10.0	7.4	---	---	7.5	.9
3	5.2	4.7	---	12.4	12.1	10.9	9.6	7.3	---	---	5.9	2.1
4	5.9	5.2	---	12.0	12.3	11.0	10.5	7.3	---	---	4.0	2.7
5	5.4	4.9	---	12.3	12.3	11.8	11.9	6.7	---	---	3.9	3.7
6	4.8	4.7	---	12.5	12.3	12.1	11.7	---	---	---	3.6	4.2
7	5.0	5.4	---	12.2	12.2	11.6	12.1	---	---	---	5.7	4.3
8	5.4	---	---	12.6	12.2	11.7	11.9	---	---	---	5.5	3.9
9	6.3	6.5	---	12.9	11.9	11.6	11.5	---	---	---	3.5	4.5
10	6.1	6.8	---	12.7	11.2	11.5	11.7	---	---	---	4.2	4.5
11	5.8	6.5	11.0	12.2	11.0	11.4	12.0	---	---	---	4.4	4.3
12	5.8	6.7	11.4	11.5	10.8	11.3	11.6	---	---	---	5.2	5.0
13	5.8	6.8	11.5	10.9	10.5	11.1	10.7	---	---	10.3	6.2	5.9
14	5.4	6.8	11.4	10.3	10.5	10.9	10.1	---	---	7.9	7.1	4.4
15	5.3	6.6	11.3	10.3	10.5	11.1	9.8	---	---	11.9	10.7	3.6
16	5.6	6.4	11.5	10.4	12.0	11.2	9.0	---	---	10.0	11.7	3.0
17	5.8	6.0	11.5	10.4	12.0	10.9	8.4	---	---	11.8	11.7	4.4
18	5.7	5.9	11.9	10.2	12.0	10.9	9.1	---	---	10.6	9.7	4.3
19	5.9	5.7	11.8	10.0	11.6	10.6	9.3	---	---	5.9	9.6	4.9
20	6.1	5.5	---	9.5	11.7	10.9	8.3	---	---	5.5	6.0	4.9
21	6.2	---	---	9.1	11.5	10.6	9.2	---	---	5.9	4.5	4.2
22	5.4	---	---	9.2	11.7	10.9	9.9	---	---	7.7	6.2	4.5
23	5.2	---	11.1	10.7	11.6	11.2	9.8	---	---	8.0	4.8	4.4
24	5.4	10.0	12.3	12.2	11.3	10.9	9.8	---	---	12.0	4.6	4.7
25	5.6	9.9	12.5	12.2	12.0	10.3	9.2	---	---	15.0	4.2	4.3
26	5.6	9.5	12.4	12.0	12.0	10.5	7.3	---	---	10.2	---	4.0
27	5.2	9.0	12.2	11.7	11.7	11.4	6.9	---	---	11.6	---	4.8
28	5.0	8.7	12.3	11.6	11.4	11.8	8.2	---	---	8.0	---	4.4
29	5.1	9.0	12.3	11.2	---	11.4	8.6	---	---	6.4	---	5.7
30	5.3	9.5	12.4	11.2	---	10.5	8.5	---	---	6.9	9.0	5.6
31	5.4	---	12.5	12.8	---	9.4	---	---	---	8.4	6.0	---
MEAN	5.5	6.8	11.7	11.4	11.7	11.1	9.9	7.2		9.2	6.5	4.2
WTR YR 1982	MEAN	8.7		MAX	15.0	MIN	.9					

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## MUSKINGUM RIVER BASIN

03117500 SANDY CREEK AT WAYNESBURG, OH

LOCATION.--Lat 40°40'21", long 81°15'36", in sec. 21, T.17 N., R.7 W., Stark County, Hydrologic Unit 05040001, on upstream side of left pier of bridge on State Highway 183 in Waynesburg, 300 ft (91 m) downstream from Little Sandy Creek, and 0.6 mi (1.0 km) upstream from Indian Run.

DRAINAGE AREA.--253 mi<sup>2</sup> (655 km<sup>2</sup>).

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

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

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft (291.084 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--44 years, 270 ft<sup>3</sup>/s (7.646 m<sup>3</sup>/s), 14.49 in/yr (368 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft<sup>3</sup>/s (425 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 10.05 ft (3.063 m), from rating curve extended above 8,000 ft<sup>3</sup>/s (227 m<sup>3</sup>/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 6.9 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Sept. 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft<sup>3</sup>/s (51.0 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Dec. 23	2130	1840 52.1	4.71 1.436	Mar. 17	0430	1810 51.3	4.66 1.420
Feb. 1	0630	*3910 111	*7.33 2.234				

Minimum discharge, 17 ft<sup>3</sup>/s (0.48 m<sup>3</sup>/s) Sept. 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	75	113	278	3590	274	558	133	82	76	36	30
2	55	74	188	276	2410	269	386	128	91	64	39	52
3	54	74	152	228	1290	249	433	122	81	193	48	86
4	51	72	132	432	1140	291	501	117	73	288	54	85
5	54	85	147	521	703	924	399	111	77	317	58	50
6	67	121	139	371	498	730	402	110	92	211	46	38
7	76	116	125	400	351	545	401	106	86	144	41	35
8	69	100	174	325	270	420	345	161	76	133	39	32
9	61	90	198	233	230	371	327	177	72	127	41	30
10	58	84	159	170	200	329	365	130	73	105	40	26
11	53	81	141	140	190	573	357	117	74	92	36	23
12	50	78	130	120	180	877	320	109	69	83	35	26
13	49	75	120	110	170	865	295	102	64	75	30	24
14	49	73	120	100	170	823	278	96	60	68	29	26
15	49	69	110	95	263	634	253	91	59	62	27	32
16	50	51	100	90	779	850	235	87	137	60	26	29
17	47	52	100	90	997	1630	230	83	353	56	26	28
18	54	58	95	85	1510	1250	245	80	248	59	24	28
19	52	82	90	80	1190	925	218	82	146	57	24	26
20	51	430	85	80	973	728	196	94	115	59	28	26
21	66	333	80	75	842	628	185	108	103	52	31	27
22	97	209	100	75	668	533	170	100	92	46	28	30
23	109	164	1080	467	543	452	157	93	84	46	27	32
24	116	142	1210	1100	524	397	150	128	76	42	28	33
25	107	130	811	791	436	359	145	96	70	39	39	34
26	101	121	522	480	337	352	152	83	65	37	40	34
27	91	117	354	280	308	334	186	77	62	39	43	66
28	86	111	298	200	289	286	178	90	62	62	34	71
29	81	104	259	180	---	270	151	104	111	53	30	57
30	79	97	212	271	---	259	138	89	96	43	23	44
31	77	---	190	1530	---	411	---	84	---	39	30	---
TOTAL	2116	3468	7734	9673	21051	17838	8356	3288	2949	2827	1080	1160
MEAN	68.3	116	249	312	752	575	279	106	98.3	91.2	34.8	38.7
MAX	116	430	1210	1530	3590	1630	558	177	353	317	58	86
MIN	47	51	80	75	170	249	138	77	59	37	23	23
CFSM	.27	.46	.98	1.23	2.97	2.27	1.10	.42	.39	.36	.14	.15
IN.	.31	.51	1.14	1.42	3.10	2.62	1.23	.48	.43	.42	.16	.17

CAL YR 1981	TOTAL	116280	MEAN 319	MAX 2910	MIN 47	CFSM 1.26	IN 17.10
WTR YR 1982	TOTAL	81540	MEAN 223	MAX 3590	MIN 23	CFSM .88	IN 11.99

## MUSKINGUM RIVER BASIN

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03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OH

LOCATION.--Lat 40°50'29", long 81°21'14" in NE 1/4 sec. 27, T.11 N., R.8 W., Stark County, Hydrologic Unit 05040001, on right bank at downstream side of bridge on Martindale Road, 2.4 mi (3.9 km) upstream from mouth, and 0.5 mi (0.8 km) northeast of Canton.

DRAINAGE AREA.--43.1 mi<sup>2</sup> (112 km<sup>2</sup>).

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,046.60 ft (319.004 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter period, which are fair. Part of municipal water supply for city of Canton is pumped from its northeast well field; a portion of pumpage is believed to be derived from creek as recharge to aquifer supplying well field. Mean pumpage for water year 1982, 11.3 ft<sup>3</sup>/s (0.32 m<sup>3</sup>/s). At times low flow regulated by small pools above station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 35.6 ft<sup>3</sup>/s (1.008 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft<sup>3</sup>/s (70.0 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 6.50 ft (1.981 m), from rating curve extended above 1,600 ft<sup>3</sup>/s (45.3 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum daily, 0.2 ft<sup>3</sup>/s (0.006 m<sup>3</sup>/s) Nov. 9, 1944, Sept. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge about 620 ft<sup>3</sup>/s (17.6 m<sup>3</sup>/s) Feb. 1, based on hydrographic comparison with nearby stations, above base of 400 ft<sup>3</sup>/s (11 m<sup>3</sup>/s); minimum daily, 3.9 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Sept. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	8.7	12	25	500	30	111	22	16	43	7.6	6.4
2	7.0	8.8	12	30	230	30	67	22	16	24	7.3	13
3	6.5	8.7	12	26	130	30	58	20	15	35	7.1	12
4	6.5	8.7	13	47	110	35	61	18	14	75	10	8.7
5	6.5	10	13	87	85	183	47	18	14	61	11	7.1
6	8.5	12	13	49	60	120	55	19	15	34	10	5.9
7	9.5	13	13	46	50	68	59	20	15	24	8.9	5.5
8	8.5	13	17	41	44	47	52	30	14	19	12	5.1
9	8.0	12	20	29	38	40	49	26	13	16	15	5.3
10	8.0	11	20	20	32	36	57	22	13	14	12	5.3
11	7.0	11	17	17	27	71	52	20	11	13	9.5	5.1
12	6.5	11	16	15	25	188	44	19	12	13	8.1	6.2
13	6.0	11	15	14	23	155	39	20	12	13	7.6	5.7
14	6.0	11	14	12	22	141	36	19	11	11	7.3	4.9
15	6.0	12	13	12	30	88	33	17	9.9	10	6.8	5.7
16	6.3	12	12	11	141	149	31	17	23	10	6.6	4.8
17	6.2	12	12	11	152	307	31	16	41	12	6.4	4.6
18	7.2	12	11	10	211	137	31	16	32	12	6.4	4.4
19	7.6	14	10	10	139	94	29	17	22	13	6.4	4.2
20	7.4	24	10	9.5	106	83	27	19	18	13	6.8	3.9
21	7.4	24	9.5	9.0	94	79	26	25	17	11	5.9	4.2
22	7.6	18	13	9.0	72	65	25	22	14	9.2	5.9	5.1
23	10	14	163	70	55	53	24	34	13	9.2	7.1	4.9
24	9.5	12	192	160	58	46	24	58	12	8.9	6.6	4.8
25	9.3	11	79	110	48	42	23	38	12	8.9	7.1	5.3
26	11	10	45	60	38	41	23	26	11	8.9	6.6	5.3
27	11	10	35	36	34	40	24	22	10	8.7	6.4	8.7
28	11	9.6	30	28	31	37	23	21	10	11	6.2	8.4
29	9.8	9.3	26	24	---	37	22	19	77	9.5	5.7	6.8
30	9.1	9.2	23	34	---	37	22	17	99	8.1	5.7	5.9
31	8.7	---	21	200	---	78	---	16	---	7.3	5.9	---
TOTAL	246.9	363.0	911.5	1261.5	2585	2587	1205	695	611.9	565.7	241.9	183.2
MEAN	7.96	12.1	29.4	40.7	92.3	83.5	40.2	22.4	20.4	18.2	7.80	6.11
MAX	11	24	192	200	500	307	111	58	99	75	15	13
MIN	6.0	8.7	9.5	9.0	22	30	22	16	9.9	7.3	5.7	3.9
CAL YR 1981	TOTAL	15416.8	MEAN	42.2	MAX	435	MIN	6.0				
WTR YR 1982	TOTAL	11457.6	MEAN	31.4	MAX	500	MIN	3.9				

## MUSKINGUM RIVER BASIN

03118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OH

LOCATION.--Lat 40°44'03", long 81°21'08", in sec. 35, T.10 N., R.8 W., Stark County, Hydrologic Unit 05040001, on left bank just downstream from railroad bridge, 1 mi (2 km) southeast of North Industry, and 3 mi (5 km) downstream from Sherrick Run.

DRAINAGE AREA.--175 mi<sup>2</sup> (453 km<sup>2</sup>).

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

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

GAGE.--Water-stage recorder. Datum of gage is 970.77 ft (295.891 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1923, nonrecording gage at site 1 mi (2 km) upstream at different datum.

REMARKS.--Records good. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1982 water year, 14.8 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s). See REMARKS for station 03124500. Water-quality data collected at this site 1964 to 1969, 1975, 1977.

AVERAGE DISCHARGE.--61 years, 184 ft<sup>3</sup>/s (5.211 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft<sup>3</sup>/s (244 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 11.29 ft (3.441 m), from rating curve extended above 6,500 ft<sup>3</sup>/s (184 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 3.6 ft<sup>3</sup>/s (0.10 m<sup>3</sup>/s) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/s), and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 1	0300	*4740 134	*8.24 2.512	May 23	1930	2020 57.2	5.17 1.576
Mar. 16	2230	2140 60.6	5.32 1.622				

Minimum daily, 65 ft<sup>3</sup>/s (1.84 m<sup>3</sup>/s) Sept. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	86	170	207	2760	190	471	145	137	157	79	90
2	99	91	121	160	656	180	319	142	119	119	103	547
3	91	92	107	145	603	180	406	140	101	596	90	398
4	90	90	117	389	651	325	327	137	101	320	196	140
5	94	179	116	311	336	894	273	140	103	262	117	111
6	192	148	101	229	256	467	380	133	135	166	101	103
7	113	108	107	266	192	322	308	128	106	140	92	101
8	103	95	211	187	170	267	283	211	103	124	101	101
9	99	99	140	150	160	250	305	147	99	115	128	99
10	91	98	127	117	150	237	311	133	103	103	103	97
11	88	96	119	100	140	538	283	133	97	99	94	94
12	94	94	110	95	140	742	256	128	90	108	97	92
13	93	90	100	90	140	727	244	122	85	94	94	92
14	92	87	95	85	140	560	225	124	88	92	94	92
15	92	86	90	80	327	386	217	115	94	92	87	157
16	91	92	90	80	726	1150	211	108	584	90	92	85
17	87	91	85	75	824	1180	220	113	353	88	94	82
18	107	90	80	75	844	530	181	117	166	87	92	79
19	99	134	80	124	566	391	199	135	128	99	92	74
20	95	508	80	170	434	399	193	184	108	99	99	70
21	92	162	80	208	403	333	187	190	152	97	99	65
22	94	126	193	241	335	294	178	130	108	97	82	79
23	177	117	1310	799	296	269	175	408	115	92	90	73
24	102	107	559	541	318	244	163	331	101	85	92	70
25	89	103	280	274	267	234	160	160	99	81	103	84
26	141	93	197	182	222	250	172	133	88	88	92	68
27	110	89	177	141	208	226	187	119	92	101	90	241
28	100	86	161	136	195	205	166	150	97	140	84	103
29	97	84	149	136	---	214	157	108	571	94	79	81
30	96	89	134	482	---	218	150	101	276	90	85	78
31	90	---	138	2250	---	638	---	94	---	84	90	---
TOTAL	3200	3510	5624	8525	12459	13040	7307	4659	4599	4099	3031	3646
MEAN	103	117	181	275	445	421	244	150	153	132	97.8	122
MAX	192	508	1310	2250	2760	1180	471	408	584	596	196	547
MIN	87	84	80	75	140	180	150	94	85	81	79	65
CAL YR 1981	TOTAL	93590	MEAN	256	MAX	3430	MIN	80				
WTR YR 1982	TOTAL	73699	MEAN	202	MAX	2760	MIN	65				

## MUSKINGUM RIVER BASIN

63

03120500 MCGUIRE CREEK BELOW LEESVILLE DAM, NEAR LEESVILLE, OH

LOCATION.--Lat 40°28'13", long 81°11'48", in E. 1/2 sec. 36, T.13 N., R.6 W., Carroll County, Hydrologic Unit 05040001, on left bank at outlet of Leesville Dam, 1.3 mi (2.1 km) upstream from mouth, and 1.4 mi (2.3 km) northeast of Leesville.

DRAINAGE AREA.--48.3 mi<sup>2</sup> (125 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 915.00 ft (278.892 m) National Geodetic Vertical Datum of 1929. Prior to May 27, 1942, nonrecording gage at site 100 ft (30 m) upstream at present datum.

REMARKS.--Records good. Flow regulated by Leesville Lake (see station 03120000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 53.8 ft<sup>3</sup>/s (1.524 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft<sup>3</sup>/s (21.0 m<sup>3</sup>/s) Mar. 4, 1940; maximum gage height, 7.88 ft (2.402 m) Mar. 4, 1940 (backwater from Conotton Creek); no flow several days during 1939-41.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 203 ft<sup>3</sup>/s (5.75 m<sup>3</sup>/s) Mar. 22, gage height, 4.14 ft (1.262 m); minimum daily, 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/s) Aug. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	6.5	112	23	17	41	96	23	15	13	5.7	3.2
2	6.7	6.5	112	23	79	35	93	22	17	11	5.6	4.9
3	6.4	6.4	112	23	4.0	31	94	19	14	24	6.1	9.0
4	6.3	6.3	111	75	3.1	30	96	18	12	31	6.6	8.7
5	6.1	6.7	110	107	3.1	64	91	18	13	31	7.9	7.9
6	7.4	7.9	110	160	3.2	83	91	17	16	26	7.4	7.4
7	7.8	8.1	110	178	92	83	94	17	15	31	7.1	6.6
8	7.5	8.0	108	61	176	83	58	28	13	72	6.6	6.1
9	7.3	8.1	108	21	181	85	31	27	13	144	6.4	5.7
10	7.1	7.9	65	21	181	83	27	21	16	155	6.1	5.3
11	7.0	7.6	29	64	181	83	44	20	17	110	5.7	4.9
12	6.7	7.4	14	50	175	83	50	20	15	67	5.1	4.7
13	6.5	7.2	14	25	169	83	54	18	13	50	4.5	4.3
14	6.3	6.9	61	45	167	83	56	17	11	39	4.0	4.0
15	5.9	6.9	59	43	166	102	56	15	9.6	28	3.4	3.9
16	5.8	7.9	25	30	166	97	54	14	16	20	3.1	3.5
17	5.6	115	15	30	104	5.9	54	12	43	17	2.8	3.0
18	5.7	117	12	26	2.3	44	54	11	37	15	2.3	2.6
19	5.6	116	12	23	68	102	50	12	28	18	2.0	2.1
20	5.4	115	12	13	107	131	47	17	20	25	1.8	2.1
21	5.1	115	12	9.9	107	179	44	20	17	22	1.9	3.4
22	5.0	115	12	10	160	201	38	19	15	17	1.6	4.0
23	6.5	115	79	11	187	199	33	20	13	14	1.5	4.0
24	6.8	115	117	11	185	195	30	18	11	12	1.4	3.7
25	6.6	115	103	79	185	185	28	15	10	10	4.5	4.1
26	6.9	113	102	115	122	169	31	12	9.3	9.0	5.6	4.3
27	7.0	113	102	162	47	158	35	11	9.0	8.4	5.3	7.4
28	7.0	113	183	189	44	155	33	15	9.6	8.7	4.7	8.7
29	7.0	113	185	188	---	117	28	16	13	7.9	4.0	8.4
30	6.8	113	83	188	---	91	24	15	16	7.1	3.4	8.2
31	6.7	---	23	12	---	91	---	15	---	6.2	3.3	---
TOTAL	201.6	1790.4	2282	2015.9	3081.7	3171.9	1614	542	476.5	1049.3	137.4	156.1
MEAN	6.50	59.7	73.6	65.0	110	102	53.8	17.5	15.9	33.8	4.43	5.20
MAX	7.8	117	185	189	187	201	96	28	43	155	7.9	9.0
MIN	5.0	6.3	12	9.9	2.3	5.9	24	11	9.0	6.2	1.4	2.1
CAL YR 1981	TOTAL	26238.2	MEAN	71.9	MAX	328	MIN	1.3				
WTR YR 1982	TOTAL	16518.8	MEAN	45.3	MAX	201	MIN	1.4				

## MUSKINGUM RIVER BASIN

03122500 TUSCARAWAS RIVER BELOW DOVER DAM, NEAR DOVER, OH

LOCATION.--Lat 40°31'47", long 81°25'48", in T.9 N., R.2 W., Tuscarawas County, Hydrologic Unit 05040001, on left bank at downstream side of bridge on State Highway 416, 2.2 mi (3.5 km) downstream from Dover Dam, 1.5 mi (2.4 km) east of Dover, and 3.4 mi (5.5 km) upstream from Sugar Creek.

DRAINAGE AREA.--1,405 mi<sup>2</sup> (3,639 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 803: 1933(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 861.51 ft (262.588 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

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 1982 water year, 14.8 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s) (see REMARKS for station 03124500). Flow regulated by four flood-control reservoirs since 1936 at points 2.2 mi (3.5 km) to 25 mi (40 km) upstream (see stations 03119500, 03120000, 03121000, and 03122000). Water quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--59 years, 1,430 ft<sup>3</sup>/s (40.50 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft<sup>3</sup>/s (748 m<sup>3</sup>/s) Jan. 26, 1937, gage height, 15.51 ft (4.727 m); minimum daily, 6.5 ft<sup>3</sup>/s (0.18 m<sup>3</sup>/s) Oct. 26, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,330 ft<sup>3</sup>/s (179 m<sup>3</sup>/s) Feb. 4, gage height, 7.72 ft (2.353 m); minimum daily, 269 ft<sup>3</sup>/s (7.62 m<sup>3</sup>/s) Sept. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	386	432	764	1100	1120	1380	3460	689	614	922	347	352
2	405	420	985	1420	3410	1330	2870	676	639	670	352	518
3	390	432	971	1200	3090	1310	2300	657	595	922	396	822
4	369	432	857	1550	4700	1330	2650	626	531	1930	401	525
5	365	464	864	3380	4480	3000	2310	608	512	1880	601	407
6	453	750	864	2910	5290	4020	2300	589	551	1420	545	342
7	605	813	821	2240	5240	3180	2300	570	576	1000	418	316
8	527	626	957	2040	5230	2730	1990	689	531	892	396	331
9	444	534	1190	1500	5350	3020	1930	944	492	915	450	331
10	411	508	1090	840	5290	2000	2180	769	492	830	450	331
11	388	489	915	600	4710	2020	2130	670	499	746	407	319
12	372	470	792	570	3720	4100	1980	626	499	664	380	309
13	380	451	743	550	3010	4150	1890	595	456	583	369	309
14	425	439	701	530	2170	4590	1760	570	423	525	347	313
15	481	426	660	510	1290	4010	1530	538	423	482	331	385
16	521	432	610	490	3260	3870	1370	512	746	450	313	445
17	502	680	567	480	4480	4720	1330	487	1580	429	319	358
18	451	736	514	470	4860	5390	1370	482	1590	434	319	316
19	457	736	490	460	5010	4760	1260	487	952	434	319	306
20	439	1430	460	440	4810	4740	1160	558	720	466	319	300
21	420	1930	440	430	4310	4940	1090	761	664	466	347	313
22	432	1270	978	420	4240	4990	1010	733	689	445	385	295
23	560	998	2610	1820	4100	4190	952	651	608	401	352	278
24	626	915	4660	4200	3570	3200	892	2130	570	390	358	269
25	553	864	3780	4520	2510	2260	830	2250	512	363	456	291
26	508	813	3120	3780	2080	2050	799	1340	471	347	434	291
27	587	785	2550	3150	1650	1940	869	837	440	369	407	440
28	553	750	2060	2830	1460	1740	907	727	450	423	369	564
29	495	715	1780	2560	---	1590	791	884	807	445	336	456
30	470	687	1430	2480	---	1520	727	769	1380	385	319	358
31	451	---	1040	3430	---	1850	---	632	---	369	331	---
TOTAL	14426	21427	40263	52900	104440	95920	48937	24056	20012	20997	11873	11190
MEAN	465	714	1299	1706	3730	3094	1631	776	667	677	383	373
MAX	626	1930	4660	4520	5350	5390	3460	2250	1590	1930	601	822
MIN	365	420	440	420	1120	1310	727	482	423	347	313	269
CAL YR 1981	TOTAL	625661	MEAN	1714	MAX	5530	MIN	365				
WTR YR 1982	TOTAL	466441	MEAN	1278	MAX	5390	MIN	269				

## 03124000 SUGAR CREEK BELOW BEACH CITY DAM, NEAR BEACH CITY, OH

LOCATION.--Lat 40°38'08", long 81°33'11", in T10 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on right bank 1,000 ft (305 m) downstream from Beach City Dam, 0.4 mi (0.6 km) downstream from South Fork, and 1.8 mi (2.9 km) southeast of Beach City.

DRAINAGE AREA.--300 mi<sup>2</sup> (777 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 953: 1941.

GAGE.--Water-stage recorder. Datum of gage is 928.00 ft (282.854 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 23, 1939, nonrecording gage at site 500 ft (152 m) downstream at datum 1 ft (0.3 m) higher. Mar. 23, 1939, to Sept. 26, 1949, water-stage recorder at site 300 ft (91 m) downstream at present datum.

REMARKS.--Records good except those for the winter period, which are fair. Flood flow regulated by Beach City Lake (see station 03123500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 277 ft<sup>3</sup>/s (7.845 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,520 ft<sup>3</sup>/s (213 m<sup>3</sup>/s) July 6, 1969, gage height, 11.26 ft (3.432 m), from floodmark in well; no flow Oct. 7-30, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,990 ft<sup>3</sup>/s (56.4 m<sup>3</sup>/s) Feb. 4, gage height, 6.41 ft (1.954 m); minimum daily, 12 ft<sup>3</sup>/s (0.34 m<sup>3</sup>/s) Aug. 20, Sept. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	32	68	234	1070	200	833	97	67	135	19	15
2	27	30	147	294	1400	180	597	94	72	69	20	30
3	26	30	120	224	1100	160	515	88	64	151	29	156
4	26	30	94	406	1490	215	801	82	50	380	33	78
5	27	35	89	912	1970	884	568	79	46	289	53	38
6	34	75	87	546	1940	1140	560	79	52	181	57	25
7	59	76	81	459	1930	698	576	75	57	111	36	19
8	48	55	102	386	836	417	445	90	50	180	30	18
9	34	44	164	220	296	336	422	126	44	145	41	17
10	31	41	130	172	190	287	485	92	45	91	46	16
11	29	37	89	120	150	474	497	76	49	68	33	18
12	27	35	93	100	130	1420	461	70	41	56	25	20
13	25	33	83	95	120	1520	399	64	35	49	23	17
14	25	31	76	90	120	1450	345	60	33	43	20	15
15	25	31	71	85	144	974	293	56	31	39	18	14
16	25	31	67	85	874	774	263	53	78	36	16	14
17	25	31	57	80	1270	1440	247	50	216	35	15	16
18	28	31	48	80	1490	1750	253	49	157	34	13	16
19	32	32	48	75	1690	1730	217	48	81	38	13	14
20	36	239	46	75	1300	1720	195	55	60	50	12	13
21	30	354	46	70	788	1420	184	170	53	49	13	12
22	27	178	46	70	610	1130	160	227	58	37	20	12
23	39	112	450	203	467	790	144	132	49	30	17	13
24	62	88	1590	952	457	589	134	256	42	28	17	13
25	47	83	956	904	391	476	129	315	35	25	43	16
26	39	76	433	932	300	439	126	147	31	23	75	20
27	49	71	296	680	260	405	131	92	30	22	36	33
28	50	66	250	270	230	339	129	78	34	23	22	54
29	42	61	206	205	---	323	112	93	83	32	18	40
30	36	56	157	201	---	307	101	73	287	27	15	28
31	33	---	136	928	---	423	---	70	---	22	13	---
TOTAL	1071	2124	6326	10153	23013	24410	10322	3136	2030	2498	841	810
MEAN	34.5	70.8	204	328	822	787	344	101	67.7	80.6	27.1	27.0
MAX	62	354	1590	952	1970	1750	833	315	287	380	75	156
MIN	25	30	46	70	120	160	101	48	30	22	12	12
CAL YR 1981	TOTAL	119714	MEAN 328	MAX 1810	MIN 25							
WTR YR 1982	TOTAL	86734	MEAN 238	MAX 1970	MIN 12							

## MUSKINGUM RIVER BASIN

## 03124500 SUGAR CREEK AT STRASBURG, OH

LOCATION.--Lat 40°35'15", long 81°31'24", in NW 1/4 sec. 1, T.9 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on left bank 150 ft (46 m) upstream from bridge on State Highway 21, 0.8 mi (1.3 km) upstream from Broad Run, and 0.1 mi (0.2 km) southeast of Strasburg.

DRAINAGE AREA.--311 mi<sup>2</sup> (805 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1305: 1932-33(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 896.24 ft (273.174 m) National Geodetic Vertical Datum of 1929. 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 (0.610 m) higher.

REMARKS.--Records fair. Flood flow regulated by Beach City Lake 5.0 mi (8.0 km) 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 mi (6.9 km) upstream; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 1982, 14.8 ft<sup>3</sup>/s (0.42 m<sup>3</sup>/s). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--25 years (1931-32, 1935-38, 1961-82), 314 ft<sup>3</sup>/s (8.949 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft<sup>3</sup>/s (558 m<sup>3</sup>/s) Aug. 7, 1935, gage height, 14.70 ft (4.48 m) (present datum), from rating curve extended above 8,400 ft<sup>3</sup>/s (238 m<sup>3</sup>/s); no flow all or part of each day Sept. 29 to Nov. 6, 1963, Sept. 20, Dec. 3, 4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,750 ft<sup>3</sup>/s (77.9 m<sup>3</sup>/s) Feb. 7, gage height, 623 ft (1.899 m); minimum daily, 13 ft<sup>3</sup>/s (0.37 m<sup>3</sup>/s) Sept. 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	42	72	285	1200	220	824	122	88	171	25	17
2	37	40	158	390	1600	200	613	118	88	92	28	32
3	36	39	138	303	1400	190	547	113	84	143	32	161
4	36	39	110	473	1590	260	789	107	67	415	39	98
5	36	43	102	1050	2150	868	588	102	62	320	53	47
6	42	80	101	683	2110	1180	580	102	65	218	66	31
7	65	95	96	556	2300	728	596	98	72	133	44	24
8	61	70	110	496	1000	465	482	109	67	195	36	22
9	45	56	176	370	359	385	457	149	60	173	40	21
10	40	51	150	260	263	337	512	118	59	112	52	21
11	38	48	105	170	190	490	524	99	64	81	39	20
12	36	44	106	120	170	1440	497	91	58	66	32	21
13	34	41	98	110	160	1570	443	84	51	60	28	21
14	33	41	87	110	150	1510	392	78	48	52	24	19
15	32	40	82	100	183	1000	338	73	46	46	22	17
16	32	40	78	100	825	794	308	71	88	43	21	16
17	32	40	66	95	1350	1480	288	66	235	40	19	17
18	34	40	55	90	1510	1820	288	65	193	37	17	18
19	37	42	55	90	1810	1790	261	64	107	40	16	17
20	43	241	50	85	1420	1790	235	70	80	51	16	16
21	38	389	50	85	809	1480	218	167	71	54	16	14
22	35	202	64	85	645	1150	195	269	75	42	20	14
23	42	131	420	248	509	794	175	159	67	33	21	13
24	70	104	1850	1200	488	613	165	264	59	30	18	13
25	61	96	1170	1100	438	512	159	366	50	28	36	15
26	50	89	552	940	323	479	153	191	46	25	85	17
27	55	83	384	600	270	446	159	119	46	23	44	31
28	60	77	327	370	240	382	159	99	47	23	27	54
29	53	70	277	290	---	363	141	113	77	30	22	43
30	47	64	213	254	---	353	126	96	317	29	19	30
31	44	---	184	1230	---	461	---	88	---	25	18	---
TOTAL	1341	2477	7486	12338	25462	25550	11212	3830	2537	2830	975	900
MEAN	43.3	82.6	241	398	909	824	374	124	84.6	91.3	31.5	30.0
MAX	70	389	1850	1230	2300	1820	824	366	317	415	85	161
MIN	32	39	50	85	150	190	126	64	46	23	16	13
CAL YR 1981	TOTAL	134659	MEAN 369	MAX 3080	MIN 32							
WTR YR 1982	TOTAL	96938	MEAN 266	MAX 2300	MIN 13							

## MUSKINGUM RIVER BASIN

67

03126000 STILLWATER CREEK AT PIEDMONT, OH

LOCATION.--Lat 40°11'41", long 81°12'56", in sec. 35, T.10 N., R.6 W., Harrison County, Hydrologic Unit 05040001, on left bank 400 ft (122 m) downstream from outlet of Piedmont Dam and Boggs Fork, and 0.7 mi (1.1 km) northwest of Piedmont.

DRAINAGE AREA.--122 mi<sup>2</sup> (316 km<sup>2</sup>).

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

REVISED RECORDS.--WRD-OH-81-1: 1980 (M) (m).

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft (265.785 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1949, at site 1,000 ft (305 m) downstream at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair. Flow regulated by Piedmont Lake (see station 03125500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 138 ft<sup>3</sup>/s (3.908 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft<sup>3</sup>/s (41.6 m<sup>3</sup>/s) Dec. 4, 1950; maximum gage height, 11.44 ft (3.487 m) Mar. 5, 1963; minimum daily discharge, 0.2 ft<sup>3</sup>/s (0.006 m<sup>3</sup>/s) Sept. 3, 4, 10, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 596 ft<sup>3</sup>/s (16.9 m<sup>3</sup>/s) Jan. 23, gage height, 6.54 ft (1.993 m); minimum daily, 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) Sept. 20, 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	154	48	452	60	228	77	92	94	24	12
2	22	103	156	38	264	60	197	74	101	82	24	23
3	21	170	134	34	178	65	198	74	81	204	24	60
4	21	179	89	165	270	115	189	71	72	292	23	41
5	21	209	38	259	440	203	179	69	80	199	23	35
6	28	241	35	252	440	157	146	67	90	285	21	32
7	27	238	32	251	444	116	78	66	83	391	20	29
8	23	233	79	195	424	187	86	97	74	397	20	27
9	22	229	124	134	267	226	97	105	69	297	24	24
10	21	231	130	80	194	221	108	93	97	111	26	21
11	21	226	87	44	155	234	122	89	85	218	30	16
12	20	222	31	28	85	272	123	86	75	215	25	14
13	20	220	30	28	65	259	121	82	70	110	20	14
14	20	219	29	26	55	241	116	76	64	72	18	13
15	19	219	29	26	103	230	185	73	60	63	16	13
16	19	218	28	26	174	264	169	70	61	60	15	13
17	19	217	25	26	251	260	107	68	76	56	14	12
18	21	216	22	97	284	187	111	66	66	53	13	11
19	23	217	19	122	302	229	105	68	61	52	12	11
20	21	247	17	103	346	285	104	111	58	55	12	10
21	20	235	88	78	371	329	101	92	56	56	12	10
22	19	226	126	45	359	408	97	81	52	53	12	14
23	33	220	266	327	201	436	95	76	52	51	12	13
24	33	218	239	303	89	424	91	104	46	48	15	11
25	28	218	165	235	70	356	90	83	42	45	31	11
26	30	216	144	151	65	197	91	71	33	43	29	13
27	34	178	143	222	60	126	92	66	33	42	22	37
28	32	123	201	277	60	120	87	94	66	53	16	35
29	30	122	226	296	---	149	83	92	89	45	14	30
30	28	119	162	307	---	164	80	91	117	40	12	26
31	27	---	86	353	---	218	---	106	---	36	12	---
TOTAL	746	5954	3134	4576	6468	6798	3676	2538	2101	3818	591	631
MEAN	24.1	198	101	148	231	219	123	81.9	70.0	123	19.1	21.0
MAX	34	247	266	353	452	436	228	111	117	397	31	60
MIN	19	25	17	26	55	60	78	66	33	36	12	10
CAL YR 1981	TOTAL	66391	MEAN 182	MAX 1360	MIN 17							
WTR YR 1982	TOTAL	41031	MEAN 112	MAX 452	MIN 10							

## MUSKINGUM RIVER BASIN

## 03127000 STILLWATER CREEK AT TIPPECANOE, OH

LOCATION.--Lat 40°16'13", long 81°17'26", in NW 1/4 sec. 22, T.12 N., R.7 W., Harrison County, Hydrologic Unit 05040001, on left bank at downstream side of highway bridge at Tippecanoe, 0.4 mi (0.6 km) downstream from Brushy Fork, 3.6 mi (5.8 km) upstream from Weaver Run, 6 mi (10 km) upstream from Laurel Creek, and 9 mi (14 km) south of Dennison.

DRAINAGE AREA.--282 mi<sup>2</sup> (730 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 849.00 ft (258.775 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1939, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow regulated by Clendenning Lake on Brushy Fork, 1.9 mi (3.1 km) upstream, and Piedmont Lake, 16 mi (26 km) upstream (see stations 03126500 and 03125500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 322 ft<sup>3</sup>/s (9.119 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft<sup>3</sup>/s (125 m<sup>3</sup>/s) Mar. 7, 1945, Mar. 5, 1963; maximum gage height, 17.29 ft (5.270 m) Mar. 5, 1963; minimum daily discharge, 1.1 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/s) Oct. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft<sup>3</sup>/s (44.7 m<sup>3</sup>/s) Jan. 24, gage height, 13.06 ft (3.981 m); minimum daily, 21 ft<sup>3</sup>/s (0.59 m<sup>3</sup>/s) Sept. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	60	333	166	1460	130	647	138	164	198	33	24
2	46	73	449	150	1400	130	528	133	178	134	28	26
3	42	221	377	140	850	140	495	127	158	336	30	79
4	41	225	326	366	686	176	519	124	128	799	30	75
5	41	245	223	711	907	711	467	117	131	759	29	58
6	46	306	204	726	1000	604	497	111	162	515	29	47
7	60	317	208	674	977	384	381	107	171	520	28	41
8	53	309	243	524	1090	412	329	133	147	545	28	38
9	49	302	335	274	942	663	319	192	133	783	29	35
10	46	309	353	190	625	686	294	158	171	495	33	32
11	45	304	327	140	389	703	322	143	199	287	33	29
12	45	295	227	110	231	851	345	135	162	371	36	25
13	45	287	201	110	155	724	367	125	138	222	32	24
14	44	283	132	100	144	641	365	115	118	134	28	23
15	43	277	88	100	157	588	365	104	100	103	26	23
16	43	357	62	95	392	677	400	93	98	87	25	23
17	44	408	44	95	681	1130	257	84	152	74	24	23
18	46	396	42	95	828	945	262	79	135	66	23	23
19	49	394	40	230	815	677	242	77	111	61	23	22
20	52	472	38	239	751	770	227	151	99	62	22	23
21	51	500	53	179	732	844	218	154	89	65	23	21
22	50	461	150	136	695	927	201	136	78	61	24	22
23	62	436	661	534	597	988	187	133	71	55	24	25
24	98	441	956	1510	264	969	178	158	65	54	26	24
25	82	451	715	1490	178	794	169	158	58	50	39	24
26	75	446	495	1000	150	523	169	125	51	46	54	25
27	82	418	448	700	142	250	180	110	44	44	40	35
28	83	304	479	500	130	213	169	125	102	48	32	57
29	76	284	440	550	---	216	153	161	107	53	27	49
30	70	275	312	723	---	246	144	146	229	44	24	44
31	65	---	220	1020	---	382	---	182	---	40	23	---
TOTAL	1722	9856	9181	13577	17368	18094	9396	4034	3749	7111	905	1020
MEAN	55.5	329	296	438	620	584	313	130	125	229	29.2	34.0
MAX	98	500	956	1510	1460	1130	647	192	229	799	54	79
MIN	41	60	38	95	130	130	144	77	44	40	22	21
CAL YR 1981	TOTAL	163635	MEAN	448	MAX	2880	MIN	38				
WTR YR 1982	TOTAL	96013	MEAN	263	MAX	1510	MIN	21				

## 03127500 STILLWATER CREEK AT UHRICHSVILLE, OH

LOCATION.--Lat 40°23'10", long 81°20'50", Tuscarawas County, Hydrologic Unit 05040001, on left bank at concrete dam of Dennison Water Supply Co. at Uhrichsville, 2.2 mi (3.5 km) upstream from Little Stillwater Creek.

DRAINAGE AREA.--367 mi<sup>2</sup> (951 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 853: Drainage area. WSP 1113: 1923-24, 1926-31, 1932(M), 1933-35.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 839.37 ft (255.840 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1936, nonrecording gage at site 1.7 mi (2.7 km) upstream at same datum. Auxiliary water-stage recorder below concrete dam at datum 10.00 ft (3.048 m) lower.

REMARKS.--Records fair. Flow regulated by Piedmont Lake, 35 mi (56 km) upstream, and Clendening Lake on Brushy Fork, 22 mi (35 km) upstream, beginning in 1938 (see stations 03125500 and 03126500). Water is diverted from Dennison water-supply dam 1.7 mi (2.7 km) upstream from station for municipal supply of cities of Dennison and Uhrichsville; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--60 years, 434 ft<sup>3</sup>/s (12.29 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,650 ft<sup>3</sup>/s (217 m<sup>3</sup>/s) Aug. 8, 9, 1935, gage height, 14.2 ft (4.33 m) at former site, 12.8 ft (3.90 m) at present site; no flow at times in 1930, 1932, 1936, 1939-40, 1953, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 17.5 ft (5.33 m) at former site, and about 15.5 ft (4.72 m) at present site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,320 ft<sup>3</sup>/s (65.7 m<sup>3</sup>/s) Feb. 1, gage height, 3.75 ft (1.143 m) affected by backwater from Tuscarawas River; minimum daily discharge, 19 ft<sup>3</sup>/s (0.54 m<sup>3</sup>/s) Aug. 19, 21, 22, Sept. 15-19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	68	355	315	2000	207	789	196	241	304	46	25
2	54	67	512	309	1800	205	774	187	227	224	39	29
3	48	107	503	274	1200	209	684	176	233	223	37	34
4	43	223	432	384	840	248	771	162	186	776	39	95
5	42	242	369	759	1020	640	653	155	161	902	38	84
6	49	279	296	854	1150	860	648	146	200	732	37	67
7	54	324	278	845	1110	726	617	147	241	567	35	51
8	68	327	304	768	1130	517	495	162	218	648	32	42
9	61	316	373	486	1130	667	474	242	184	738	34	37
10	52	315	421	263	891	785	452	258	204	866	36	35
11	50	323	413	180	588	822	451	217	264	439	39	31
12	49	313	364	170	393	940	507	194	252	397	40	27
13	48	301	285	160	268	1000	507	173	206	366	42	21
14	49	295	260	160	211	840	508	153	170	244	35	20
15	38	293	159	150	209	784	469	139	143	161	29	19
16	37	299	130	150	363	740	500	127	139	128	24	19
17	36	418	88	150	741	1000	446	115	262	112	21	19
18	38	429	67	150	1020	1400	392	100	248	113	20	19
19	39	426	59	140	1030	1100	372	95	180	110	19	19
20	42	487	55	255	988	840	342	109	150	89	20	21
21	45	579	55	258	915	960	325	204	132	88	19	25
22	45	540	81	214	872	1090	302	191	120	84	19	23
23	54	498	569	518	799	1120	276	169	107	78	21	22
24	81	482	1100	1300	584	1130	261	169	98	71	22	25
25	99	491	880	1800	337	1020	247	201	86	68	40	25
26	84	494	750	1630	262	827	241	174	77	62	71	26
27	78	486	584	862	223	503	257	141	80	57	67	39
28	84	427	553	733	213	343	255	135	101	54	48	57
29	84	353	553	788	---	307	229	176	150	61	37	72
30	78	336	465	828	---	335	209	193	189	65	29	60
31	72	---	352	1100	---	479	---	218	---	53	26	---
TOTAL	1756	10538	11665	16953	22287	22644	13453	5224	5249	8880	1061	1088
MEAN	56.6	351	376	547	796	730	448	169	175	286	34.2	36.3
MAX	99	579	1100	1800	2000	1400	789	258	264	902	71	95
MIN	36	67	55	140	209	205	209	95	77	53	19	19
(+)	2.07	1.69	1.83	1.88	1.76	1.67	1.66	1.63	1.66	1.95	1.86	1.93
CAL YR 1981 TOTAL	206114		MEAN 565	MAX 4560	MIN 36	(+) 1.86						
WTR YR 1982 TOTAL	120798		MEAN 331	MAX 2000	MIN 19	(+) 1.80						

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

## MUSKINGUM RIVER BASIN

03128500 LITTLE STILLWATER CREEK BELOW TAPPAN DAM, AT TAPPAN, OH

LOCATION.--Lat 40°21'25", long 81°13'49", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, Hydrologic Unit 05040001, on right bank 150 ft (46 m) downstream from outlet of lake at Tappan Dam, 1 mi (2 km) west of Tappan, and 2 mi (3 km) upstream from Plum Run.

DRAINAGE AREA.--71.1 mi<sup>2</sup> (184 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 861.00 ft (262.433 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 30, 1939, water-stage recorder at gate house of Tappan Dam at datum 9 ft (3 m) higher. Jan. 30 to Mar. 24, 1939, nonrecording gage and Mar. 25, 1939, to Aug. 6, 1944, water-stage recorder, at site 150 ft (46 m) downstream at present datum.

REMARKS.--Records good. Flow completely regulated by Tappan Lake (see station 03128000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 77.7 ft<sup>3</sup>/s (2.200 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft<sup>3</sup>/s (29.7 m<sup>3</sup>/s) Mar. 13, 1939, gage height, 10.00 ft (3.048 m); no flow Sept. 12-15, 18, 19, 21-29, Oct. 13-21, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 574 ft<sup>3</sup>/s (16.3 m<sup>3</sup>/s) Mar. 22, gage height, 6.42 ft (1.957 m); minimum daily, 0.77 ft<sup>3</sup>/s (0.022 m<sup>3</sup>/s) Feb. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	5.4	220	318	.85	243	3.3	37	56	14	4.2	4.0
2	6.8	5.6	189	255	.80	204	4.0	34	64	12	4.0	4.4
3	6.5	5.6	82	148	.77	208	5.9	31	58	21	4.2	4.9
4	6.5	5.6	10	64	.77	118	8.7	30	50	30	4.2	4.5
5	6.2	5.9	5.6	41	243	37	12	27	50	30	4.4	4.6
6	9.1	6.2	1.2	41	335	23	18	25	54	28	3.8	4.4
7	8.3	6.5	1.1	41	243	23	41	23	54	27	3.6	4.2
8	8.7	6.5	1.1	41	45	23	54	32	47	38	3.8	4.2
9	8.3	6.8	1.1	41	4.2	23	64	35	40	64	3.8	4.2
10	8.3	6.8	1.3	40	4.0	23	75	32	47	60	3.4	4.4
11	8.3	6.8	1.4	40	4.2	15	80	30	48	54	3.6	4.4
12	10	6.8	1.5	56	4.6	12	85	27	43	47	3.3	4.2
13	7.9	6.5	1.5	66	5.1	12	85	25	38	35	2.8	4.2
14	7.2	6.5	1.5	66	5.1	14	87	22	34	31	2.4	4.2
15	6.5	6.2	2.5	66	4.4	16	87	19	30	28	2.0	4.0
16	6.2	115	24	66	4.6	35	87	18	31	25	2.8	4.0
17	6.2	227	40	64	4.6	115	87	17	47	22	3.8	3.8
18	6.2	247	40	64	4.6	135	87	16	40	18	3.4	3.8
19	6.2	239	40	90	4.6	142	87	17	34	20	3.1	3.6
20	6.2	235	40	106	4.6	151	82	21	30	16	3.0	3.4
21	5.9	243	38	106	4.6	263	77	30	26	14	3.0	3.4
22	5.9	231	38	106	4.6	464	73	50	23	12	3.0	3.6
23	14	235	40	106	4.4	562	68	60	20	10	3.1	3.8
24	17	227	56	109	132	519	62	68	17	8.3	3.1	3.8
25	17	231	64	162	271	502	60	66	16	7.5	4.6	4.0
26	11	227	64	197	307	383	58	60	14	6.8	5.4	3.8
27	5.4	231	64	216	303	315	58	52	14	6.2	5.1	3.8
28	5.4	227	145	287	307	311	54	58	14	6.2	4.9	3.8
29	5.4	220	271	351	---	127	48	56	15	5.9	4.4	3.6
30	5.4	216	360	356	---	5.6	40	52	15	5.4	4.0	3.3
31	5.4	---	360	135	---	3.4	---	58	---	4.6	4.0	---
TOTAL	246.1	3444.7	2204.8	3845	2333.62	5027.0	1737.9	1128	1069	706.9	114.2	120.4
MEAN	7.94	115	71.1	124	83.3	162	57.9	36.4	35.6	22.8	3.68	4.01
MAX	17	247	360	356	335	562	87	68	64	64	5.4	4.9
MIN	5.4	5.4	1.1	40	.77	3.4	3.3	16	14	4.6	2.0	3.3
CAL YR 1981	TOTAL	32808.47	MEAN	89.9	MAX	437	MIN	.97				
WTR YR 1982	TOTAL	21977.62	MEAN	60.2	MAX	562	MIN	.77				

## 03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OH

LOCATION.--Lat 40°15'41", long 81°36'33", in T.5 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on right bank 150 ft (46 m) upstream from highway bridge, 0.2 mi (0.3 km) south of Newcomerstown, 2 mi (3 km) upstream from Buckhorn Creek, and 4 mi (6 km) downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 mi<sup>2</sup> (6,327 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 728: 1929(M). WSP 873: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft (237.744 m) National Geodetic Vertical Datum of 1929. 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 mi (2.4 km) upstream at datum 5.03 ft (1.533 m) higher prior to Oct. 1, 1934, and 0.03 ft (0.009 m) higher Oct. 1, 1934, to Feb. 13, 1939.

REMARKS.--Records good except those for the winter period, which are fair. Diversion from basin at Portage Lakes (see REMARKS for station 03117000). Flow regulated by eight flood-control reservoirs at points 40 mi (64 km) to 64 mi (103 km) upstream. Water-quality data collected at this site 1946 to 1949, 1955 to 1977.

AVERAGE DISCHARGE.--61 years, 2,537 ft<sup>3</sup>/s (71.85 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,800 ft<sup>3</sup>/s (1,330 m<sup>3</sup>/s) Jan. 26, 1937, gage height, 20.65 ft (6.294 m), site and datum then in use; minimum daily, 170 ft<sup>3</sup>/s (4.81 m<sup>3</sup>/s) Aug. 6, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 21.5 ft (6.55 m), at site and datum used prior to Oct. 1, 1934, discharge, 83,000 ft<sup>3</sup>/s (2,350 m<sup>3</sup>/s) computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,300 ft<sup>3</sup>/s (292 m<sup>3</sup>/s) Mar. 18, gage height, 8.00 ft (2.438 m) but may have been higher during ice period; maximum gage height 13.65 ft (4.161 m) Feb. 1 (ice jam); minimum daily, 314 ft<sup>3</sup>/s (8.89 m<sup>3</sup>/s) Sept. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	566	1690	2170	8800	2700	4940	1420	1270	1930	505	348
2	621	540	2010	2490	7800	2530	5590	1370	1280	1410	471	375
3	631	529	2100	2380	7000	2480	4540	1350	1260	1340	488	1060
4	613	633	1700	2500	6570	2420	4800	1270	1150	2660	531	1010
5	593	713	1530	4170	7080	3970	4650	1230	1070	3610	610	767
6	654	887	1440	5360	9250	6930	4240	1200	1080	3070	789	579
7	834	1200	1370	4250	9550	6430	4360	1170	1160	2280	655	486
8	870	1140	1430	3860	8700	4720	3850	1270	1140	2060	565	439
9	779	984	1770	3010	7600	4590	3560	1550	1050	2270	548	427
10	688	897	1930	1610	6000	4260	3670	1670	1070	2240	574	411
11	648	867	1710	819	4800	3570	3870	1420	1100	1800	574	398
12	620	842	1480	760	3800	5680	3740	1300	1080	1460	514	372
13	607	809	1320	730	3000	7590	3570	1230	1010	1350	480	349
14	617	783	1210	700	2600	7780	3400	1170	909	1150	452	338
15	656	761	1100	670	2300	7360	3090	1110	839	979	416	343
16	690	745	1040	650	3000	6770	2830	1050	899	879	390	443
17	690	1110	982	630	6550	9360	2720	989	2100	809	366	468
18	662	1520	858	610	8500	10100	2620	940	2740	789	366	378
19	594	1550	777	600	8790	9640	2530	919	1930	839	358	327
20	596	2050	708	590	8860	9140	2320	950	1400	799	358	314
21	583	3490	1400	580	7810	9400	2190	1110	1200	799	366	331
22	555	3010	2520	580	6880	9310	2040	1530	1160	760	366	331
23	651	2310	2960	2700	6540	8380	1900	1400	1110	702	390	348
24	808	2070	6590	5600	5980	7230	1800	1790	999	637	374	360
25	818	1980	7490	5200	5160	5800	1700	3240	919	592	548	367
26	755	1930	5560	4700	3940	4900	1650	2620	829	556	646	404
27	733	1880	4190	4300	3360	4260	1680	1690	760	548	601	531
28	728	1790	3510	3900	2920	3640	1750	1400	859	583	502	778
29	690	1670	3100	3600	---	3260	1650	1360	839	610	415	821
30	633	1580	2790	3300	---	2890	1510	1510	1820	610	362	661
31	592	---	2330	6200	---	3090	---	1310	---	548	340	---
TOTAL	20825	40836	70595	79219	173140	180180	92770	43538	36032	40669	14920	14564
MEAN	672	1361	2277	2555	6184	5812	3092	1404	1201	1312	481	485
MAX	870	3490	7490	6200	9550	10100	5590	3240	2740	3610	789	1060
MIN	555	529	708	580	2300	2420	1510	919	760	548	340	314

CAL YR 1981 TOTAL 1274463 MEAN 3492 MAX 13000 MIN 529  
WTR YR 1982 TOTAL 807288 MEAN 2212 MAX 10100 MIN 314

## MUSKINGUM RIVER BASIN

03130000 BLACK FORK BELOW CHARLES MILL DAM, NEAR MIFFLIN, OH

LOCATION.--Lat 40°44'16", long 82°21'48", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, Hydrologic Unit 05040002, on left bank 700 ft (213 m) downstream from Charles Mill Dam, 2.5 mi (4.0 km) south of Mifflin, and 4 mi (6 km) upstream from Rocky Fork.

DRAINAGE AREA.--217 mi<sup>2</sup> (562 km<sup>2</sup>).

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.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 981.56 ft (299.179 m) National Geodetic Vertical Datum of 1929. Dec. 3, 1941, to Dec. 5, 1944, water-stage recorder at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records fair. Flow regulated by Charles Mill Lake (see station 03129500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 200 ft<sup>3</sup>/s (5.664 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft<sup>3</sup>/s (79.3 m<sup>3</sup>/s) Mar. 13, 1964 from rating curve extended above 1,900 ft<sup>3</sup>/s (53.8 m<sup>3</sup>/s); maximum gage height, 8.45 ft (2.576 m) Mar. 14, 1939; minimum daily discharge, 0.9 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Apr. 21, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 11,700 ft<sup>3</sup>/s (331 m<sup>3</sup>/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,340 ft<sup>3</sup>/s (37.9 m<sup>3</sup>/s) Feb. 22-23, gage height, 5.57 ft (1.698 m); minimum daily, 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) Sept. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	153	116	263	25	649	439	67	128	198	17	20
2	25	153	116	259	17	531	541	69	92	183	16	26
3	25	150	120	269	17	454	545	67	90	214	16	32
4	24	143	124	335	15	407	529	67	65	313	51	29
5	25	139	124	478	496	490	497	65	49	406	185	26
6	45	139	124	633	1060	648	428	62	50	479	227	24
7	57	132	127	747	1030	853	388	52	49	501	195	24
8	168	128	134	743	997	953	384	70	47	431	173	22
9	208	124	139	651	902	883	384	87	47	348	188	19
10	185	117	150	513	675	734	417	90	49	291	165	18
11	168	114	150	391	567	662	470	84	42	248	142	16
12	65	104	150	316	406	761	561	98	33	132	56	15
13	22	87	148	276	311	1010	637	95	32	72	17	14
14	24	84	143	244	274	1180	671	84	23	40	17	14
15	26	82	139	220	254	1200	624	76	16	21	17	15
16	29	79	139	208	326	697	545	52	28	22	17	14
17	26	76	70	200	567	761	462	39	103	23	22	10
18	31	70	43	195	892	1260	399	28	184	25	19	13
19	33	67	42	191	986	1250	345	32	178	34	18	14
20	107	70	42	188	1020	1250	303	40	153	86	24	14
21	143	67	42	183	1030	1210	270	42	133	133	39	14
22	143	76	43	181	1220	1150	192	42	127	94	34	12
23	171	82	122	196	1330	1030	171	47	120	70	35	13
24	179	101	179	201	1320	812	160	121	60	31	34	12
25	175	121	185	209	1280	529	110	185	20	16	35	15
26	175	121	250	247	1220	428	114	201	22	17	30	16
27	171	114	384	292	1040	363	112	175	24	18	29	28
28	168	118	415	293	822	322	105	168	26	20	27	30
29	164	117	373	267	---	300	76	164	82	19	22	31
30	160	114	319	275	---	319	63	164	189	19	20	32
31	157	---	282	256	---	366	---	157	---	18	20	---
TOTAL	3120	3242	4934	9920	20099	23462	10942	2790	2261	4522	1907	582
MEAN	101	108	159	320	718	757	365	90.0	75.4	146	61.5	19.4
MAX	208	153	415	747	1330	1260	671	201	189	501	227	32
MIN	21	67	42	181	15	300	63	28	16	16	16	10
CAL YR 1981	TOTAL	88527	MEAN 243	MAX 1470	MIN 15							
WTR YR 1982	TOTAL	87781	MEAN 240	MAX 1330	MIN 10							

## MUSKINGUM RIVER BASIN

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03131500 BLACK FORK AT LOUDONVILLE, OH

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec. 1, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, on right bank at downstream side of bridge on State Highway 3 at Loudonville, 1.5 mi (2.4 km) downstream from Big Run.

DRAINAGE AREA.--349 mi<sup>2</sup> (904 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 873: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 929.16 ft (283.208 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 23, 1941, nonrecording gage at same site and datum.

REMARKS.--Records fair, except those for period of no gage-height record, Jan. 5, to Feb. 1, which are poor. Flow regulated since 1936 by Charles Mill Lake, 16 mi (26 km) upstream from 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 03133500). Water-quality data collected at this site 1958, 1968 to 1977.

AVERAGE DISCHARGE.--51 years, 350 ft<sup>3</sup>/s (9.912 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,460 ft<sup>3</sup>/s (240 m<sup>3</sup>/s) July 5, 1969, gage height, 14.11 ft (4.301 m), from rating curve extended above 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum daily, 29 ft<sup>3</sup>/s (0.82 m<sup>3</sup>/s) Aug. 7, 8, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,100 ft<sup>3</sup>/s (87.8 m<sup>3</sup>/s) Mar. 12, gage height, 10.00 ft (3.048 m); minimum daily, 84 ft<sup>3</sup>/s (2.38 m<sup>3</sup>/s) Sept. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	222	257	330	2000	847	810	190	261	281	94	108
2	99	219	254	360	370	726	860	185	239	259	90	144
3	96	212	212	430	386	618	880	182	196	887	94	176
4	94	209	205	760	416	685	850	182	172	730	650	114
5	94	216	212	1100	465	1650	800	177	145	599	396	104
6	287	229	209	1100	1290	1090	680	177	150	619	302	100
7	174	212	203	970	1300	1100	620	170	145	657	264	98
8	174	200	230	840	1220	1200	580	361	143	595	284	102
9	273	194	242	680	1130	1140	580	264	141	501	579	99
10	253	191	225	520	833	955	600	206	182	419	270	98
11	229	188	218	300	715	1590	640	201	148	348	221	96
12	188	182	218	230	568	1880	770	198	138	273	172	95
13	96	168	212	210	441	1920	930	206	136	170	102	91
14	96	160	209	200	365	1840	900	198	127	148	100	91
15	99	155	207	190	572	1690	890	188	114	110	98	99
16	103	152	201	190	1380	2220	880	172	259	108	96	97
17	103	149	179	180	1530	1840	870	153	491	112	98	91
18	103	149	116	170	1490	2010	752	136	305	116	88	89
19	121	149	100	170	1670	1870	639	141	276	170	90	88
20	134	267	95	170	1460	2190	575	230	250	188	90	84
21	209	174	95	170	1680	1980	530	177	276	209	90	88
22	200	158	110	170	1550	1740	449	160	227	185	90	85
23	235	155	973	700	1770	1520	383	190	212	155	100	89
24	247	166	607	900	1870	1280	321	190	185	134	107	93
25	235	211	451	800	1670	1060	324	247	116	96	115	101
26	264	198	485	740	1540	919	287	281	114	94	110	96
27	259	207	634	700	1370	777	250	253	116	100	104	140
28	247	197	758	620	1060	681	236	361	116	104	101	132
29	235	188	560	600	---	612	215	256	267	100	97	109
30	229	182	410	740	---	569	190	256	357	96	92	106
31	225	---	340	1000	---	730	---	270	---	96	94	---
TOTAL	5502	5659	9427	16240	32111	40929	18291	6558	6004	8659	5278	3103
MEAN	177	189	304	524	1147	1320	610	212	200	279	170	103
MAX	287	267	973	1100	2000	2220	930	361	491	887	650	176
MIN	94	149	95	170	365	569	190	136	114	94	88	84
CAL YR 1981	TOTAL	159207	MEAN 436	MAX 4080	MIN 79							
WTR YR 1982	TOTAL	157761	MEAN 432	MAX 2220	MIN 84							

## MUSKINGUM RIVER BASIN

03133500 CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYVILLE, OH

LOCATION.--Lat 40°37'13", long 82°19'28", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, on right bank 0.2 mi (0.3 km) downstream from Pleasant Hill Dam, 2.8 mi (4.5 km) south of Perryville, and 4.7 mi (7.6 km) upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 mi<sup>2</sup> (513 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 967.00 ft (294.741 m) National Geodetic Vertical Datum of 1929. Prior to May 1, 1947, water-stage recorder at site 0.5 mi (0.8 km) downstream at datum 4.88 ft (1.487 m) lower.

REMARKS.--Records good. Flow regulated by Pleasant Hill Lake (see station 03133000). Water diverted from Clear Fork Reservoir (upstream from Pleasant Hill Lake) for municipal supply of city of Mansfield since 1953; mean pumpage for 1982 water year 10 ft<sup>3</sup>/s (0.283 m<sup>3</sup>/s) returned to Rocky Fork as sewage effluent. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 199 ft<sup>3</sup>/s (5.636 m<sup>3</sup>/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft<sup>3</sup>/s (66.3 m<sup>3</sup>/s) Jan. 23, 1959, gage height, 4.89 ft (1.490 m); minimum daily, 0.6 ft<sup>3</sup>/s (0.017 m<sup>3</sup>/s) Nov. 2, 4, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 997 ft<sup>3</sup>/s (28.2 m<sup>3</sup>/s) Feb. 22, gage height 3.44 ft (1.049 m); minimum daily, 33 ft<sup>3</sup>/s (0.935 m<sup>3</sup>/s) Sept. 21-23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	40	106	99	511	225	584	135	134	133	39	36
2	38	111	115	99	542	268	391	132	152	111	38	40
3	36	123	122	99	543	230	259	128	146	189	37	49
4	35	126	122	175	560	168	321	124	126	379	57	46
5	36	130	122	361	628	230	450	121	113	352	112	40
6	48	149	122	517	668	277	483	118	106	297	94	37
7	57	157	91	535	709	280	422	115	99	239	76	35
8	57	157	79	423	618	355	380	157	91	187	72	34
9	52	157	79	283	491	395	321	192	84	148	83	34
10	48	156	66	283	720	391	271	172	86	121	75	34
11	45	154	61	319	720	399	305	153	86	108	64	35
12	42	145	67	364	430	643	470	139	81	94	55	35
13	39	141	67	341	145	807	599	126	75	85	48	34
14	37	141	67	280	148	830	584	115	68	76	43	34
15	36	140	67	273	148	807	380	106	66	69	40	36
16	37	139	67	243	334	638	256	99	84	63	38	38
17	35	139	67	236	530	673	271	93	187	59	37	36
18	40	139	67	236	608	807	274	89	254	57	36	34
19	37	139	67	233	741	802	259	90	222	62	34	34
20	37	170	67	165	725	802	236	116	177	74	36	34
21	35	203	57	83	699	813	219	118	148	68	42	33
22	36	203	54	83	870	807	203	109	127	69	38	33
23	41	157	182	84	972	785	183	101	107	66	35	33
24	39	137	322	86	954	763	168	94	89	58	34	34
25	38	137	341	169	633	736	157	87	78	53	42	34
26	41	136	339	295	253	570	150	82	70	49	40	34
27	44	136	338	377	145	438	145	79	64	47	38	38
28	44	136	369	398	148	376	139	95	61	52	35	36
29	43	135	334	395	---	315	128	97	101	48	36	35
30	43	135	176	366	---	274	124	100	147	45	34	35
31	42	---	99	187	---	430	---	126	---	42	36	---
TOTAL	1278	4268	4299	8087	15193	16334	9132	3608	3429	3500	1524	1080
MEAN	41.2	142	139	261	543	527	304	116	114	113	49.2	36.0
MAX	57	203	369	535	972	830	599	192	254	379	112	49
MIN	35	40	54	83	145	168	124	79	61	42	34	33

CAL YR 1981 TOTAL 80914 MEAN 222 MAX 1600 MIN 33  
WTR YR 1982 TOTAL 71732 MEAN 197 MAX 972 MIN 33

## 03135000 LAKE FORK BELOW MOHICANVILLE DAM, NEAR MOHICANVILLE, OH

LOCATION.--Lat 40°43'24", long 82°09'18", in sec. 3, T.20 N., R.15 W., Ashland County, Hydrologic Unit 05040002, on right bank 800 ft (244 m) downstream from Mohicanville Dam, 2 mi (3 km) east of Mohicanville, and 2.4 mi (3.9 km) downstream from the confluence of Jerome and Muddy Forks.

DRAINAGE AREA.--271 mi<sup>2</sup> (702 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 930.00 ft (283.464 m) National Geodetic Vertical Datum of 1929. Prior to July 25, 1949, water-stage recorder at site 500 ft (152 m).

REMARKS.--Records good except for period of backwater from beaver dam Sept. 8-30, which are poor. Flow regulated by Mohicanville Reservoir (see station 03134500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 238 ft<sup>3</sup>/s (6.740 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,490 ft<sup>3</sup>/s (155 m<sup>3</sup>/s) July 5, 1969, gage height, 14.32 ft (4.365 m); minimum daily, 1 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) June 10, 1947, Jan. 25, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,360 ft<sup>3</sup>/s (38.5 m<sup>3</sup>/s) Jan. 31, gage height, 8.52 ft (2.597 m); minimum daily, 17 ft<sup>3</sup>/s (0.48 m<sup>3</sup>/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	34	85	240	965	401	804	81	79	131	24	24
2	36	33	163	260	388	280	436	76	88	87	25	39
3	35	33	143	211	390	230	527	70	64	511	29	69
4	36	33	106	702	392	298	602	66	53	891	471	30
5	35	37	119	1040	633	926	385	64	49	406	838	22
6	88	62	137	1020	731	1140	346	61	60	223	404	19
7	72	47	109	822	861	1010	300	59	60	144	197	19
8	50	42	211	450	933	699	322	257	51	102	132	19
9	56	39	288	335	958	462	477	194	44	83	184	19
10	54	36	162	220	914	369	579	109	50	71	95	19
11	51	34	116	140	522	731	706	86	43	62	68	19
12	52	33	95	100	337	1120	816	72	37	58	54	19
13	51	32	80	85	242	1140	834	63	35	51	47	19
14	53	31	70	80	175	1160	514	57	31	47	41	18
15	51	31	65	80	311	1120	357	53	30	45	38	18
16	50	30	55	80	1060	1080	279	47	169	43	34	18
17	39	31	50	80	1180	895	267	44	626	40	33	18
18	32	31	48	75	1220	1000	241	43	269	46	31	18
19	35	31	44	75	1220	1060	196	45	130	75	29	18
20	33	167	42	75	1210	1150	172	85	97	88	31	18
21	32	202	42	70	1210	1150	156	400	200	49	62	18
22	32	122	60	70	1180	1170	136	136	143	40	38	18
23	38	89	613	410	1150	1160	123	561	96	40	31	18
24	43	79	1020	971	1120	1120	115	370	77	36	31	18
25	33	82	958	607	1140	1050	109	139	64	29	30	20
26	34	79	571	406	1070	846	105	95	55	27	28	53
27	49	76	378	300	855	538	106	76	50	28	26	68
28	43	68	294	202	502	408	96	211	56	28	25	43
29	40	60	225	154	---	364	86	156	307	28	22	22
30	37	54	150	350	---	313	81	99	293	26	22	17
31	35	---	120	1170	---	666	---	94	---	26	23	---
TOTAL	1359	1758	6619	10880	22869	25056	10273	3969	3406	3561	3143	757
MEAN	43.8	58.6	214	351	817	808	342	128	114	115	101	25.2
MAX	88	202	1020	1170	1220	1170	834	561	626	891	838	69
MIN	32	30	42	70	175	230	81	43	30	26	22	17
CAL YR 1981	TOTAL	100957	MEAN 277	MAX 1160	MIN 27							
WTR YR 1982	TOTAL	93650	MEAN 257	MAX 1220	MIN 17							

## MUSKINGUM RIVER BASIN

03136500 KOKOSING RIVER AT MOUNT VERNON, OH

LOCATION.--Lat 40°24'20", long 82°30'00", in sec. 2, T.6 N., R.13 W., Knox County, Hydrologic Unit 05040003, on right bank at downstream side of Tilden Avenue Bridge at Mount Vernon, 0.8 mi (1.3 km) downstream from North Branch, and 2.7 mi (4.3 km) upstream from Dry Creek.

DRAINAGE AREA.--202 mi<sup>2</sup> (523 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 2107: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 984.16 ft (299.972 m) National Geodetic Vertical Datum of 1929. (Levels by Corps of Engineers.) Prior to Apr. 3, 1953, nonrecording gage at same site and datum.

REMARKS.--Records fair. Some regulation by Knox Lake, capacity, 3,750 acre-ft (4.62 hm<sup>3</sup>), 8.2 mi (13.2 km) upstream on East Branch of North Branch Kokosing River beginning in 1954 and North Branch Kokosing River Lake 10.0 mi (16.1 km) upstream on North Branch Kokosing River, beginning in June 1972, (see station 03136300). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--29 years, (1954-82), 220 ft<sup>3</sup>/s (6.230 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft<sup>3</sup>/s (1,080 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 18.19 ft (5.544 m), from rating curve extended above 9,000 ft<sup>3</sup>/s (255 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum daily, 13 ft<sup>3</sup>/s (0.37 m<sup>3</sup>/s) Sept. 29, 30, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,800 ft<sup>3</sup>/s (164 m<sup>3</sup>/s) Jan. 31, from hydrographic comparison with nearby stations. minimum daily, 26 ft<sup>3</sup>/s (0.74 m<sup>3</sup>/s) Sept. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	105	120	260	3000	242	1070	119	155	151	52	45
2	40	105	152	200	1600	180	551	115	178	105	52	48
3	37	114	131	270	760	171	651	111	138	96	52	63
4	34	152	118	1400	500	251	672	107	107	111	52	66
5	40	90	109	800	340	1090	451	105	100	109	120	60
6	83	114	101	420	180	615	401	102	94	87	79	50
7	60	97	93	260	150	373	350	100	84	76	55	40
8	47	92	93	180	120	271	347	164	76	68	50	28
9	40	72	95	130	110	237	377	182	72	60	64	30
10	38	69	88	100	100	209	397	145	77	54	61	32
11	35	66	77	84	92	477	477	124	76	52	48	29
12	33	60	77	74	86	1120	473	113	69	48	45	27
13	33	57	74	62	82	842	401	104	64	47	44	29
14	35	50	72	54	80	662	329	96	60	46	38	35
15	39	50	69	50	120	490	275	89	55	44	35	47
16	36	48	66	45	1100	1180	245	82	155	43	34	44
17	40	48	66	44	1700	1870	242	79	192	45	32	36
18	47	48	64	43	882	971	232	74	149	47	30	32
19	41	46	58	42	760	610	209	72	111	60	29	27
20	38	138	56	40	620	937	194	76	91	79	29	29
21	38	118	56	40	667	1020	182	91	93	63	31	30
22	38	95	500	120	537	646	166	94	91	54	33	28
23	46	83	1600	1400	468	500	155	87	76	52	35	27
24	69	79	740	920	481	389	149	82	66	52	40	26
25	66	79	340	600	397	275	145	74	60	52	100	28
26	71	81	230	370	329	258	143	69	55	52	105	35
27	71	107	180	240	305	237	147	68	52	55	60	49
28	71	118	140	160	288	224	138	80	52	72	48	54
29	74	101	120	190	---	221	126	94	102	54	47	51
30	97	88	100	2500	---	219	120	98	216	52	47	44
31	105	---	92	5000	---	836	---	211	---	52	47	---
TOTAL	1583	2570	5877	16098	15854	17623	9815	3207	2966	2038	1594	1169
MEAN	51.1	85.7	190	519	566	568	327	103	98.9	65.7	51.4	39.0
MAX	105	152	1600	5000	3000	1870	1070	211	216	151	120	66
MIN	33	46	56	40	80	171	120	68	52	43	29	26
CAL YR 1981	TOTAL	84200	MEAN 231	MAX 2810	MIN 33							
WTR YR 1982	TOTAL	80394	MEAN 220	MAX 5000	MIN 26							

## MUSKINGUM RIVER BASIN

77

03138500 WALHONDING RIVER BELOW MOHAWK DAM, AT NELLIE, OH

LOCATION.--Lat 40°20'29", long 82°03'56", in T.6 N., R.8 W., Coshocton County, Hydrologic Unit 05040003, on right bank at upstream side of bridge on U.S. Highway 36 at Nellie, 0.5 mi (0.8 km) upstream from Mohawk Creek, and 1.7 mi (2.7 km) downstream from Mohawk Dam.

DRAINAGE AREA.--1,505 mi<sup>2</sup> (3,898 km<sup>2</sup>).

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.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 790.00 ft (240.792 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1925, nonrecording gage and Nov. 7, 1925, to Sept. 30, 1937, water-stage recorder at site 3.8 mi (6.1 km) upstream at datum 15.53 ft (4.734 m) higher. Oct. 1, 1937, to Sept. 30, 1938, nonrecording gage at present site at datum 2.09 ft (0.637 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated beginning 1936 by 5 flood-control reservoirs at points 1.7 mi (2.7 km) to 54 mi (87 km) upstream (see stations 03129500, 03133000, 03134500, 03136300, and 03138000). Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--61 years, 1,511 ft<sup>3</sup>/s (42.79 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge at site at Pomerene, 43,800 ft<sup>3</sup>/s (1,240 m<sup>3</sup>/s) Jan. 25, 1937; maximum discharge at present site since regulation began at Mohawk Dam, 24,000 ft<sup>3</sup>/s (680 m<sup>3</sup>/s) Jan. 25, 26, 1937, gage height, 18.8 ft (5.73 m), present datum (from floodmarks), from rating curve extended above 13,000 ft<sup>3</sup>/s (368 m<sup>3</sup>/s); minimum daily discharge, 19 ft<sup>3</sup>/s (0.54 m<sup>3</sup>/s) Feb. 27 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 26.9 ft (8.20 m), discharge, 102,000 ft<sup>3</sup>/s (2,890 m<sup>3</sup>/s), present site and datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,620 ft<sup>3</sup>/s (216 m<sup>3</sup>/s) Feb. 4, gage height, 11.48 ft (3.499 m); maximum gage height, 13.23 ft (4.033 m) Jan. 24 (ice jam); minimum daily, 253 ft<sup>3</sup>/s (7.16 m<sup>3</sup>/s) Sept. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	377	530	865	1390	3600	2430	5490	887	1000	1130	341	292
2	378	524	1150	1660	5330	2260	4000	869	936	846	322	327
3	367	599	1080	1440	5900	2050	3680	842	879	915	308	603
4	362	611	974	3080	6670	1850	4490	817	750	2470	309	501
5	362	659	916	5580	6970	4730	3580	804	673	2000	1560	391
6	395	683	899	4020	7060	4800	3490	792	645	1520	1340	341
7	687	719	875	3970	7000	3940	3080	787	634	1340	931	317
8	525	668	840	3420	6720	3530	2810	975	593	1430	716	303
9	525	642	1030	2710	5960	3170	2850	1520	653	1200	1060	300
10	577	611	951	1600	3690	2770	2920	1170	715	949	920	289
11	549	602	793	800	2800	3170	3080	1020	695	818	639	287
12	518	589	741	760	2100	6380	3440	943	575	725	541	289
13	464	562	713	720	1860	6020	3640	897	531	590	441	280
14	389	538	725	690	1520	6370	3440	851	495	502	353	271
15	382	526	859	670	1300	6560	2960	792	455	456	331	299
16	388	539	676	650	3980	5640	2500	731	640	403	311	326
17	382	720	645	630	5390	5490	2440	662	1550	393	300	309
18	371	725	599	610	6710	7120	2330	607	1580	434	302	285
19	373	736	540	600	6180	6710	2030	571	1140	536	289	271
20	376	2060	480	590	5860	6840	1870	707	935	697	283	260
21	388	1820	430	580	5590	7060	1720	1020	836	593	346	255
22	444	1390	500	580	5640	7050	1560	1020	932	538	444	253
23	462	1190	3770	2500	5370	6800	1420	778	745	495	339	256
24	507	1070	5290	6000	5460	6580	1290	1310	655	449	324	264
25	519	1020	3420	5000	5120	6020	1200	945	560	393	670	278
26	522	844	2630	4200	4210	4950	1160	805	469	339	642	288
27	574	871	2180	3600	3550	3430	1120	750	446	329	439	320
28	561	873	2050	3100	2930	2660	1070	821	438	861	371	437
29	542	814	1930	2700	---	2380	995	1050	544	512	329	392
30	524	762	1680	2300	---	2170	924	852	1360	414	303	341
31	531	---	1350	4700	---	3020	---	933	---	370	292	---
TOTAL	14321	24497	41581	70850	134470	143950	76579	27528	23059	24647	16096	9625
MEAN	462	817	1341	2285	4803	4644	2553	888	769	795	519	321
MAX	687	2060	5290	6000	7060	7120	5490	1520	1580	2470	1560	603
MIN	362	524	430	580	1300	1850	924	571	438	329	283	253

CAL YR 1981 TOTAL 664107 MEAN 1819 MAX 7390 MIN 319  
WTR YR 1982 TOTAL 607203 MEAN 1664 MAX 7120 MIN 253

## MUSKINGUM RIVER BASIN

03139000 KILLBUCK CREEK AT KILLBUCK, OH

LOCATION (REVISED).--Lat 40°28'53", long 81°59'10", Holmes County, Hydrologic Unit 05040003, on right bank at downstream side of U.S. Highway 62 bridge south of Killbuck, 1.2 mi (1.9 km) downstream from Black Creek. Prior to Oct. 5, 1976, at site 0.9 mi (1.4 km) upstream.

DRAINAGE AREA.--464 mi<sup>2</sup> (1,202 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. WRD-OH-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 788.05 ft (240.198 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1949, nonrecording gage and Oct. 1, 1949 to Oct. 5, 1976, water-stage recorder and nonrecording gage, at site 0.9 mi (1.4 km) upstream at same datum.

REMARKS.--Records poor. Water-quality data collected at this site 1962 to 1977. Sediment data collected 1962 to 1969.

AVERAGE DISCHARGE.--52 years, 414 ft<sup>3</sup>/s (11.72 m<sup>3</sup>/s), 12.17 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft<sup>3</sup>/s (1,350 m<sup>3</sup>/s) July 5, 1969, gage height, 26.40 ft (8.047 m) (from floodmarks), from rating curve extended above 11,000 ft<sup>3</sup>/s (312 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow at site then in use; minimum, 23 ft<sup>3</sup>/s (0.65 m<sup>3</sup>/s) Sept. 10-15, 28-30, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Feb. 1	1600	*4290 121	*16.18 4.932	Mar. 14	0030	2200 62.3	15.05 4.587
Feb. 4	0930	2780 78.7	15.37 4.685	Mar. 17	1200	3530 100	15.75 4.801
Feb. 19	1500	2240 63.4	15.07 4.593	Mar. 20	1600	2800 79.3	15.38 4.688

Minimum daily discharge 63 ft<sup>3</sup>/s (1.78 m<sup>3</sup>/s) Sept. 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	100	164	439	3920	567	1100	229	188	301	75	63
2	95	98	220	447	3050	522	995	224	195	199	72	107
3	94	101	200	417	2210	470	1090	219	180	333	93	221
4	98	94	186	907	2420	523	1170	211	162	488	90	160
5	101	108	178	1160	1830	1190	1020	202	156	513	308	120
6	114	196	168	1030	800	1200	1020	194	166	473	270	100
7	159	179	167	1070	540	1230	935	187	167	404	160	85
8	117	144	204	800	470	1160	832	275	155	374	112	75
9	105	127	271	440	410	994	811	353	149	274	135	70
10	97	115	258	220	380	838	825	276	154	215	110	70
11	95	106	195	200	350	1020	854	248	142	175	94	70
12	94	100	171	190	332	1740	883	218	131	157	89	70
13	95	96	159	180	307	1890	861	202	126	153	86	70
14	100	94	145	170	279	2150	816	187	127	137	79	70
15	102	92	138	170	453	1890	742	176	123	125	74	80
16	104	96	130	160	1120	2080	664	173	224	124	73	70
17	95	97	122	160	1340	3410	643	172	328	116	82	70
18	99	112	110	150	2090	2990	593	164	307	123	80	65
19	104	119	110	150	2190	2650	505	164	217	167	72	65
20	103	755	100	140	2150	2610	445	186	173	181	71	65
21	96	662	95	140	1890	2420	408	309	174	142	92	65
22	89	392	116	130	1540	1850	357	286	186	121	77	64
23	111	229	1350	804	1310	1480	316	217	160	113	75	64
24	131	194	1420	1510	1160	1280	295	377	140	118	73	73
25	111	176	1120	1180	997	1110	279	371	128	107	118	75
26	130	158	976	972	847	983	267	274	119	89	89	73
27	142	158	879	833	743	870	269	219	116	88	73	86
28	127	144	749	747	643	765	262	248	130	104	71	113
29	112	128	570	544	---	691	242	277	277	103	67	99
30	104	117	389	664	---	628	235	225	449	89	66	92
31	102	---	297	2080	---	845	---	212	---	82	65	---
TOTAL	3325	5287	11357	18204	35771	44046	19734	7275	5449	6188	3091	2570
MEAN	107	176	366	587	1278	1421	658	235	182	200	99.7	85.7
MAX	159	755	1420	2080	3920	3410	1170	377	449	513	308	221
MIN	89	92	95	130	279	470	235	164	116	82	65	63
CFSM	.23	.38	.79	1.27	2.75	3.06	1.42	.51	.39	.43	.22	.19
IN.	.27	.42	.91	1.46	2.87	3.53	1.58	.58	.44	.50	.25	.21

CAL YR 1981	TOTAL	193097	MEAN 529	MAX 4780	MIN 60	CFSM 1.14	IN 15.48
WTR YR 1982	TOTAL	162297	MEAN 445	MAX 3920	MIN 63	CFSM .96	IN 13.01

## MUSKINGUM RIVER BASIN

79

03140000 MILL CREEK NEAR COSHOCTON, OH

LOCATION.--Lat 40°21'46", long 81°51'45", Coshocton County, Hydrologic Unit 05040003, on left bank 0.5 mi (0.8 km) downstream from Little Mill Creek and 6 mi (10 km) north of Coshocton.

DRAINAGE AREA.--27.2 mi<sup>2</sup> (70.4 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1143: 1946, 1947-48(P). WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 782.00 ft (238.354 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for the winter period, which are poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--46 years, 28.9 ft<sup>3</sup>/s (0.818 m<sup>3</sup>/s), 14.43 in/yr (367 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft<sup>3</sup>/s (247 m<sup>3</sup>/s) July 5, 1969, gage height, 13.92 ft (4.243 m), from rating curve extended above 2,200 ft<sup>3</sup>/s (62.3 m<sup>3</sup>/s) 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft<sup>3</sup>/s (19.8 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge, (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 23	1630	717 20.3	8.48 2.585	Jan. 31	1945	*964 27.3	*9.56 2.914

Minimum daily discharge 1.1 ft<sup>3</sup>/s (0.03 m<sup>3</sup>/s) Sept. 19-24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.5	14	37	228	28	70	10	4.2	3.6	1.7	1.8
2	2.7	2.4	16	25	101	26	55	10	5.7	2.5	1.7	22
3	2.6	2.4	11	20	127	24	144	9.3	3.6	31	1.7	10
4	2.6	2.4	9.5	135	108	63	90	8.6	3.4	12	1.8	3.8
5	2.6	4.9	9.5	55	70	125	66	8.1	3.9	6.5	2.3	2.7
6	4.8	9.8	9.4	41	28	72	92	8.0	4.9	4.8	1.7	2.3
7	4.2	4.8	9.1	44	24	59	48	7.8	4.2	3.9	1.7	2.1
8	2.7	3.7	12	33	20	36	47	19	3.6	12	8.5	2.0
9	2.5	3.4	12	20	18	34	47	15	3.5	14	14	1.8
10	2.4	3.4	9.7	9.5	16	35	52	9.3	7.0	5.3	2.5	1.6
11	2.4	3.1	8.5	9.0	15	118	48	8.2	3.9	4.3	2.0	1.5
12	2.3	2.9	8.0	8.5	14	105	46	7.7	3.3	3.5	1.8	1.4
13	2.2	2.7	7.0	8.0	13	118	44	7.1	3.1	2.9	1.8	1.3
14	2.0	2.6	6.5	8.0	12	88	41	6.5	2.8	2.7	1.8	1.3
15	1.9	2.6	6.5	7.5	22	69	36	6.0	2.5	2.4	1.8	1.2
16	2.0	2.6	6.0	7.5	64	270	32	5.6	14	2.3	1.8	1.2
17	2.0	2.6	5.5	7.0	193	200	29	5.2	15	3.0	1.8	1.2
18	2.1	2.6	5.0	7.0	118	105	28	4.9	5.5	4.3	1.8	1.2
19	2.6	2.6	4.8	7.0	102	90	25	4.9	4.0	14	1.8	1.1
20	2.7	50	4.6	6.5	87	178	23	6.3	3.8	6.1	1.8	1.1
21	2.4	14	4.4	6.5	78	154	21	8.3	3.5	3.4	7.2	1.1
22	2.2	9.6	6.7	6.0	61	95	19	8.0	3.0	2.5	1.9	1.1
23	5.9	7.7	254	150	53	75	17	5.9	2.8	2.3	2.0	1.1
24	5.2	7.2	70	110	55	64	15	4.9	2.4	2.0	2.2	1.1
25	3.2	7.2	40	85	33	55	14	4.3	2.3	1.8	45	1.2
26	2.9	6.5	31	60	21	51	14	4.2	2.2	1.7	4.8	1.4
27	4.1	6.4	30	48	20	40	14	4.2	2.2	1.8	2.8	1.5
28	3.5	5.8	26	38	24	32	13	4.6	2.6	3.5	2.2	1.7
29	3.0	5.2	22	32	---	31	11	4.2	5.7	2.0	1.8	1.6
30	2.7	4.8	15	100	---	31	10	4.5	10	1.7	1.6	1.5
31	2.6	---	12	538	---	99	---	5.1	---	1.7	1.8	---
TOTAL	90.0	188.4	685.7	1669.0	1725	2570	1211	225.7	138.6	165.5	129.1	75.9
MEAN	2.90	6.28	22.1	53.8	61.6	82.9	40.4	7.28	4.62	5.34	4.16	2.53
MAX	5.9	50	254	538	228	270	144	19	15	31	45	22
MIN	1.9	2.4	4.4	6.0	12	24	10	4.2	2.2	1.7	1.6	1.1
CFSM	.11	.23	.81	1.98	2.27	3.05	1.49	.27	.17	.20	.15	.09
IN.	.12	.26	.94	2.28	2.36	3.51	1.66	.31	.19	.23	.18	.10

CAL YR 1981 TOTAL 13421.3 MEAN 36.8 MAX 642 MIN 1.9 CFSM 1.35 IN 18.35  
WTR YR 1982 TOTAL 8873.9 MEAN 24.3 MAX 538 MIN 1.1 CFSM .89 IN 12.14

## MUSKINGUM RIVER BASIN

03140500 MUSKINGUM RIVER NEAR COSHOCTON, OH

LOCATION.--Lat 40°14'54", long 81°52'23", in T.5 N., R.6 W., Coshocton County, Hydrologic Unit 05040004, on right bank at upstream side of highway bridge, 1 mi (2 km) southwest of Coshocton, and 2 mi (3 km) downstream from confluence of Tuscarawas and Walhonding Rivers.

DRAINAGE AREA.--4,859 mi<sup>2</sup> (12,585 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907; Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 725.00 ft (222.980 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 19, 1936, nonrecording gage and Sept. 20, 1936 to Sept. 30, 1977, water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good. Flow regulated by 13 flood-control reservoirs at points 19 mi (31 km) to 88 mi (142 km) upstream. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--46 years, 4,980 ft<sup>3</sup>/s (141.0 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,700 ft<sup>3</sup>/s (2,230 m<sup>3</sup>/s) Jan. 26, 1937, gage height, 21.98 ft (6.700 m); minimum daily, 420 ft<sup>3</sup>/s (11.9 m<sup>3</sup>/s) Sept. 13, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 28.8 ft (8.78 m), discharge, 202,000 ft<sup>3</sup>/s (5,720 m<sup>3</sup>/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,300 ft<sup>3</sup>/s (603 m<sup>3</sup>/s) Mar. 18, gage height, 15.34 ft (4.676 m); minimum daily, 765 ft<sup>3</sup>/s (21.7 m<sup>3</sup>/s) Sept. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1240	1350	2800	4160	17500	6140	10800	2950	2710	3720	1120	868
2	1220	1320	3440	4650	15300	5710	11400	2850	2610	2920	1050	961
3	1200	1350	3590	4550	17300	5420	10100	2760	2560	2680	1030	1590
4	1180	1410	3220	6110	18000	5080	10900	2670	2340	4530	1070	1970
5	1160	1570	2900	10300	16800	9150	10100	2570	2160	5890	1950	1520
6	1200	1730	2780	10700	18100	12700	9450	2490	2080	5250	2570	1230
7	1500	2060	2700	9450	17800	11900	9030	2420	2120	4350	2200	1090
8	1620	2110	2650	8450	17000	9840	8240	2600	2110	3970	1750	994
9	1480	1910	3010	7000	15200	8910	7670	3410	2050	4220	1840	952
10	1460	1780	3320	4510	12000	8310	7740	3390	2240	3670	2010	927
11	1390	1720	3020	2580	9000	7790	7980	2960	2190	3250	1580	905
12	1320	1670	2710	2400	7200	12900	8240	2690	2020	2700	1390	908
13	1260	1620	2520	2300	5900	15100	8350	2520	1900	2410	1240	882
14	1160	1570	2360	2200	5000	15900	8080	2410	1750	2110	1090	841
15	1150	1530	2410	2100	4600	16100	7300	2290	1640	1860	1020	844
16	1190	1500	2210	2100	7350	16100	6480	2180	1760	1650	958	880
17	1220	1750	2070	2000	13000	18000	6220	2060	3380	1540	919	990
18	1220	2260	1940	2000	17200	20900	5940	1970	4490	1570	906	899
19	1160	2400	1710	1900	16900	20100	5530	1900	3820	1690	883	820
20	1150	3770	1550	1900	17100	19300	5140	1980	2930	1930	862	783
21	1140	5270	1410	1900	16100	19700	4770	2510	2500	1830	941	773
22	1190	4330	1500	1800	14700	19700	4410	3040	2440	1640	1080	765
23	1280	3700	6240	5600	13700	18200	4110	2820	2330	1620	1000	771
24	1430	3380	12600	11000	13100	16300	3880	2950	2070	1440	956	780
25	1540	3260	12200	10000	11800	14100	3710	4320	1880	1320	1580	807
26	1510	3070	9580	9200	9480	11600	3590	4080	1670	1190	1820	825
27	1520	3060	7510	8200	8090	9550	3530	3170	1560	1190	1370	972
28	1560	3010	6500	7600	7030	7690	3480	2690	1550	1620	1170	1210
29	1500	2850	5740	6970	---	6810	3360	2840	1710	1490	1030	1430
30	1430	2690	5150	6500	---	6260	3120	2860	2980	1340	925	1260
31	1380	---	4370	12600	---	7000	---	2710	---	1200	880	---
TOTAL	40960	71000	125710	172730	362250	382260	202650	85060	69550	77790	40190	30447
MEAN	1321	2367	4055	5572	12940	12330	6755	2744	2318	2509	1296	1015
MAX	1620	5270	12600	12600	18100	20900	11400	4320	4490	5890	2570	1970
MIN	1140	1320	1410	1800	4600	5080	3120	1900	1550	1190	862	765
CAL YR 1981 TOTAL	2146900	MEAN	5882	MAX	21700	MIN	1140					
WTR YR 1982 TOTAL	1660597	MEAN	4550	MAX	20900	MIN	765					

## MUSKINGUM RIVER BASIN

81

03141500 SENECA FORK BELOW SENECAVILLE DAM, NEAR SENECAVILLE, OH

LOCATION.--Lat 39°55'28", long 81°26'17", Guernsey County, Hydrologic Unit 05040005, on left bank 650 ft (198 m) downstream from Senecaville Dam, and 1.5 mi (2.4 km) southeast of Senecaville.

DRAINAGE AREA.--118 mi<sup>2</sup> (306 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area. WRD-OH-81-1: (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.00 ft (243.535 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 24, 1942, at site 150 ft (46 m) downstream at same datum.

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 data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 132 ft<sup>3</sup>/s (3.738 m<sup>3</sup>/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 985 ft<sup>3</sup>/s (27.9 m<sup>3</sup>/s) revised, Aug. 24, 1980, gage height, 9.69 ft (2.954 m); maximum gage height, 10.96 ft (3.341 m) Aug. 11, 1980 (affected by backwater); no flow May 3, 4, 1939, Jan. 28, 29, Feb. 4, 5, Apr. 25, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 721 ft<sup>3</sup>/s (20.4 m<sup>3</sup>/s) Nov. 10, gage height, 8.06 ft (2.457 m); minimum daily, 0.02 ft<sup>3</sup>/s (0.001 m<sup>3</sup>/s) Jan. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.3	125	3.1	.05	83	4.2	28	188	3.3	3.8	3.6
2	2.5	309	191	3.1	.03	208	4.4	28	306	3.6	3.8	3.9
3	2.3	675	142	3.1	.05	232	4.4	125	329	3.8	3.9	3.9
4	2.3	677	3.3	3.2	.56	235	4.4	214	168	3.5	3.5	4.0
5	2.3	680	2.6	2.6	237	93	4.6	83	22	4.3	3.4	4.1
6	2.4	674	2.9	2.5	373	3.4	4.6	3.4	14	75	3.8	4.1
7	2.3	663	2.9	2.5	362	2.8	4.8	4.2	5.7	205	3.8	4.0
8	2.2	669	2.8	2.4	377	2.7	10	4.2	3.2	287	3.5	4.0
9	2.3	677	2.8	2.6	427	2.6	18	4.5	3.3	285	3.7	3.8
10	2.7	672	2.9	.96	447	3.1	23	4.8	5.5	286	3.8	3.3
11	2.8	718	2.7	.43	491	3.6	22	4.7	52	180	3.9	3.8
12	2.7	703	2.6	2.4	484	3.6	23	15	114	5.2	4.1	3.8
13	2.5	687	2.7	2.8	476	2.9	110	70	113	4.7	4.3	3.7
14	2.4	687	2.9	2.7	468	2.7	232	125	39	3.9	4.3	3.6
15	2.3	686	2.9	2.8	466	2.7	336	150	3.3	3.4	4.2	3.9
16	2.2	687	2.9	2.7	483	3.4	302	62	3.4	3.2	4.2	3.7
17	2.0	701	2.9	2.5	385	3.6	150	4.9	3.8	3.2	4.2	3.7
18	2.3	687	3.0	2.1	258	3.7	150	3.4	107	3.5	4.0	3.4
19	2.4	579	3.1	2.5	437	3.3	45	3.0	100	3.4	4.1	3.4
20	2.3	221	3.1	71	463	3.4	3.2	3.2	107	3.1	4.0	3.6
21	2.6	82	3.0	58	458	3.0	4.1	4.3	76	3.7	3.8	3.8
22	2.7	33	3.0	.02	450	3.1	4.7	4.2	4.1	4.5	3.5	3.7
23	2.9	5.5	3.1	2.9	192	262	4.8	4.6	3.7	4.5	3.6	3.5
24	3.2	5.5	2.8	.63	1.3	586	4.8	4.8	3.8	4.3	3.6	3.1
25	3.3	5.5	2.6	.47	1.0	638	4.5	3.6	3.6	4.2	3.9	3.0
26	3.1	17	2.6	82	2.3	532	4.8	3.4	3.5	4.1	4.0	3.8
27	3.2	32	2.7	195	2.2	416	5.0	3.5	3.4	4.1	3.9	4.7
28	2.8	32	2.8	340	2.1	414	4.8	20	3.4	4.2	3.7	4.8
29	2.7	32	2.8	456	---	165	5.5	30	3.7	4.0	3.5	4.8
30	2.6	75	2.9	485	---	3.4	22	30	3.6	3.8	3.4	4.8
31	2.5	---	2.9	206	---	3.6	---	30	---	3.8	3.5	---
TOTAL	79.6	12373.8	538.2	1944.01	7799.03	3924.6	1520.6	1078.7	1796.0	1415.3	118.7	115.3
MEAN	2.57	412	17.4	62.7	279	127	50.7	34.8	59.9	45.7	3.83	3.84
MAX	3.3	718	191	485	491	638	336	214	329	287	4.3	4.8
MIN	2.0	2.3	2.6	.02	.03	2.6	3.2	3.0	3.2	3.1	3.4	3.0
(+)	1.76	1.51	1.51	1.46	1.51	1.51	3.20	2.22	2.22	2.32	1.71	1.37
CAL YR 1981 TOTAL	57341.00			MEAN 157	MAX 735	MIN 1.4	(+) 1.80					
WTR YR 1982 TOTAL	32703.84			MEAN 89.6	MAX 718	MIN .02	(+) 1.86					

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

## MUSKINGUM RIVER BASIN

03142000 WILLS CREEK AT CAMBRIDGE, OH

LOCATION.--Lat 40°00'52", long 81°35'14", Guernsey County, Hydrologic Unit 05040005, on left bank at upstream side of bridge on Campbell Avenue in Cambridge, 0.9 mi (1.4 km) downstream from Leatherwood Creek.

DRAINAGE AREA.--406 mi<sup>2</sup> (1,052 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 853: 1929(M). WSP 893: 1928. WSP 973: 1942.

GAGE.--Water-stage recorder. Datum of gage is 772.34 ft (235.409 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 6, 1927, nonrecording gage at site 1.5 mi (2.4 km) 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.

REMARKS.--Records fair. Flow regulated by Senecaville Lake on Seneca Fork, 22 mi (35 km) upstream, beginning in 1937 (see station 03141000). Water is diverted 2.7 mi (4.3 km) upstream from station for municipal supply of city of Cambridge; diversion not included in figures of daily discharge. Water-quality data collected at this site 1964 to 1975, 1977.

AVERAGE DISCHARGE.--47 years, 451 ft<sup>3</sup>/s (12.77 m<sup>3</sup>/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 8,500 ft<sup>3</sup>/s (241 m<sup>3</sup>/s) June 6 or 7, 1963; maximum gage height, 24.51 ft (7.471 m) Aug. 13, 1980 (backwater from tributaries); minimum daily discharge, 0.7 ft<sup>3</sup>/s (0.020 m<sup>3</sup>/s) Oct. 6, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 8, 1935, reached a stage of 25.4 ft (7.74 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,640 ft<sup>3</sup>/s (74.8 m<sup>3</sup>/s) Feb. 2, gage height, 12.73 ft (3.880 m); minimum daily, 8.6 ft<sup>3</sup>/s (0.24 m<sup>3</sup>/s) Oct. 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	23	147	154	2210	150	685	91	212	44	24	33
2	8.6	28	376	246	2590	263	505	106	303	33	24	37
3	11	312	334	179	2080	404	388	104	373	71	27	461
4	12	633	235	446	1360	463	467	170	386	379	25	323
5	14	669	111	951	1040	1080	339	232	215	309	23	81
6	19	681	115	496	883	1030	319	132	145	136	26	50
7	21	690	96	298	722	553	366	60	122	139	28	38
8	21	678	85	224	667	406	287	71	80	288	32	32
9	24	681	87	132	630	332	285	213	61	563	36	28
10	22	690	77	90	590	298	343	126	63	448	120	27
11	19	701	61	65	570	308	355	81	86	337	115	26
12	19	715	64	57	550	815	325	72	117	212	65	27
13	20	704	62	54	530	953	285	72	153	68	57	24
14	23	692	58	53	520	768	337	118	154	44	41	20
15	28	687	57	52	520	514	402	155	88	37	33	20
16	18	687	51	51	1070	701	498	165	48	34	31	22
17	15	690	50	50	1430	1840	440	106	204	37	29	35
18	17	697	49	50	1570	2090	355	53	201	32	27	26
19	19	694	45	48	1340	1240	324	45	167	32	29	18
20	31	734	40	48	1210	808	199	50	156	37	27	16
21	41	472	37	81	1120	1150	133	106	145	48	28	16
22	39	217	38	158	1010	840	119	122	110	43	32	17
23	49	122	425	853	876	512	107	82	50	48	36	18
24	62	77	1110	2150	444	720	102	74	33	45	27	17
25	62	98	496	2200	273	899	102	83	31	43	126	17
26	42	120	227	1600	198	946	102	62	28	37	332	16
27	34	104	165	1100	160	819	107	49	26	32	83	26
28	36	111	184	760	158	660	103	90	28	30	48	51
29	40	95	173	700	---	617	88	413	32	29	43	43
30	39	83	141	800	---	350	78	459	38	28	39	29
31	27	---	99	1380	---	308	---	399	---	26	35	---
TOTAL	841.6	13585	5295	15526	26321	22837	8545	4161	3855	3689	1648	1594
MEAN	27.1	453	171	501	940	737	285	134	129	119	53.2	53.1
MAX	62	734	1110	2200	2590	2090	685	459	386	563	332	461
MIN	8.6	23	37	48	158	150	78	45	26	26	23	16
(+)	5.41	4.88	4.51	4.91	4.73	4.75	4.65	5.22	6.60	5.90	5.65	5.15
CAL YR 1981 TOTAL	177811.4			MEAN 487	MAX 3820	MIN 7.8	(+) 5.70					
WTR YR 1982 TOTAL	107897.6			MEAN 296	MAX 2590	MIN 8.6	(+) 5.20					

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

## 03143500 WILLS CREEK BELOW WILLS CREEK DAM, AT WILLS CREEK, OH

LOCATION.--Lat 40°09'34", long 81°50'51", in sec. 22, T.4 N., R.6 W., Coshocton County, Hydrologic Unit 05040005, on left bank 1,200 ft (366 m) downstream from Wills Creek Dam, 1.3 mi (2.1 km) southeast of town of Wills Creek, 2.7 mi (4.3 km) southeast of Conesville, and 6.2 mi (10.0 km) upstream from mouth.

DRAINAGE AREA.--842 mi<sup>2</sup> (2,181 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.00 ft (218.542 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1939, to Sept. 30, 1949, water-stage recorder, at site 1,500 ft (457 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Senecaville Lake on Seneca Fork, 80 mi (129 km) upstream, Salt Fork Reservoir, 43 mi (69 km) upstream, and Wills Creek Lake, 0.2 mi (0.3 km) upstream (see stations 03141000, 03142290, and 03143000). Water-quality data collected at this site 1957, 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 939 ft<sup>3</sup>/s (26.59 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,930 ft<sup>3</sup>/s (196 m<sup>3</sup>/s) Mar. 7, 1940, gage height, 17.40 ft (5.304 m); maximum gage height, 17.50 ft (5.334 m) Mar. 22, 1964 (backwater from Muskingum River); minimum daily discharge, 1.0 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) Aug. 10, Oct. 27-29, 1948, Jan. 28, 1952, July 6-9, 1969, Apr. 3, 1970, Feb. 25, 1975, Feb. 19, 1976, when gates at Wills Creek Lake were closed.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 22,300 ft<sup>3</sup>/s (632 m<sup>3</sup>/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,270 ft<sup>3</sup>/s (121 m<sup>3</sup>/s) Mar. 24, gage height, 13.95 ft (4.252 m); minimum daily, 40 ft<sup>3</sup>/s (1.13 m<sup>3</sup>/s) Sept. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	89	243	320	2160	564	1210	348	631	126	99	92
2	81	87	271	300	1650	542	1430	327	563	130	93	85
3	79	85	352	400	2200	560	1500	314	453	207	91	85
4	77	84	486	708	2490	694	1520	310	447	395	87	96
5	73	204	511	960	3110	1260	1410	306	496	565	84	275
6	76	509	443	1360	3740	1840	1330	330	508	754	79	329
7	74	686	360	1340	3910	2050	1210	368	425	649	75	243
8	73	735	320	1020	3820	1660	1120	382	347	502	71	169
9	71	752	299	808	3850	1260	1070	374	295	766	73	125
10	69	749	277	624	3810	1040	1020	349	269	1170	73	99
11	69	756	259	484	3600	956	1010	375	241	1210	73	82
12	68	760	242	400	2220	1240	1040	345	216	935	96	70
13	67	768	223	320	1410	1780	1030	295	207	728	132	62
14	66	771	207	270	1230	2170	974	259	217	550	131	58
15	64	764	198	240	1180	2070	897	238	236	406	118	56
16	64	755	188	230	1300	2010	879	242	256	318	103	53
17	61	750	183	220	1760	2880	921	264	266	264	89	48
18	63	748	176	210	2570	2990	990	275	259	248	77	45
19	69	759	168	210	2810	2400	917	252	314	239	66	42
20	68	822	158	200	2650	2480	841	218	326	222	59	42
21	66	923	150	200	2340	2550	758	203	308	195	56	46
22	63	882	150	190	2070	2560	634	194	286	172	53	46
23	76	649	305	673	1840	3090	538	238	265	189	64	43
24	81	458	832	2310	1640	3940	485	287	236	177	75	41
25	85	335	1500	2840	1340	2700	449	269	192	163	87	41
26	95	266	1370	3150	946	1820	430	245	155	154	93	40
27	111	239	937	3240	735	1650	430	223	130	147	131	51
28	120	243	714	2850	623	1500	417	218	122	152	217	59
29	115	241	540	1990	---	1290	398	211	123	138	195	60
30	105	235	450	1510	---	1140	373	276	125	123	145	67
31	95	---	370	2110	---	1100	---	487	---	109	113	---
TOTAL	2428	16104	12882	31687	63004	55786	27231	9022	8914	12103	2998	2650
MEAN	78.3	537	416	1022	2250	1800	908	291	297	390	96.7	88.3
MAX	120	923	1500	3240	3910	3940	1520	487	631	1210	217	329
MIN	61	84	150	190	623	542	373	194	122	109	53	40

CAL YR 1981 TOTAL 425297 MEAN 1165 MAX 4790 MIN 61  
WTR YR 1982 TOTAL 244809 MEAN 671 MAX 3940 MIN 40

## MUSKINGUM RIVER BASIN

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH

LOCATION.--Lat 40°07'57", long 82°08'53", in NW 1/4 sec. 13, T.3 N., R.9 W., Muskingum County, Hydrologic Unit 05040004, on right bank 2.0 mi (3.2 km) northwest of Frazeyburg, 2.0 mi (3.2 km) downstream from Fivemile Run, and 2.5 mi (4.0 km) upstream from Black Run.

DRAINAGE AREA.--140 mi<sup>2</sup> (363 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1113: 1937(M). WSP 1555: 1952(M).

GAGE.--Water-stage recorder. Datum of gage is 748.12 ft (228.027 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--46 years, 154 ft<sup>3</sup>/s (4.361 m<sup>3</sup>/s), 14.94 in/yr (379 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft<sup>3</sup>/s (476 m<sup>3</sup>/s) Sept. 14, 1979, gage height, 14.07 ft (4.289 m), from rating curve extended above 7,700 ft<sup>3</sup>/s (218 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum, 2.0 ft<sup>3</sup>/s (0.057 m<sup>3</sup>/s) Oct. 3, 1963, gage height, 0.94 ft (0.287 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft<sup>3</sup>/s (45.3 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Dec. 23	1730	1970 55.8	5.83 1.777	Mar. 17	0200	2020 57.2	5.89 1.795
Jan. 31	----	*3300 93.5	-----				

Minimum discharge, 6.1 ft<sup>3</sup>/s (0.17 m<sup>3</sup>/s) Sept. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	27	93	173	1100	130	388	72	43	35	11	9.5
2	23	27	147	157	580	132	269	70	41	26	11	11
3	22	27	103	144	460	139	590	66	37	47	10	21
4	22	26	90	615	320	167	571	63	34	66	10	14
5	22	27	90	493	200	629	355	62	37	43	12	11
6	25	56	80	291	140	362	464	60	37	33	12	9.0
7	25	46	75	269	100	285	352	59	34	29	11	8.0
8	27	36	76	190	92	225	294	107	32	28	12	8.0
9	23	31	75	140	84	190	291	101	32	27	76	8.0
10	22	31	64	100	78	164	275	73	121	25	42	7.5
11	22	29	67	86	72	307	285	67	64	23	24	7.0
12	21	27	60	80	66	749	269	63	45	21	18	7.5
13	21	25	55	76	62	581	252	59	40	19	14	7.0
14	20	24	53	72	72	468	215	54	36	18	13	7.0
15	19	24	53	70	180	344	184	50	32	16	11	7.5
16	23	24	50	66	400	744	167	47	39	15	11	7.5
17	25	24	48	66	678	1390	178	45	83	15	9.5	7.5
18	28	25	54	64	914	566	164	42	53	21	9.0	7.5
19	33	24	97	62	605	396	137	41	41	31	9.0	7.0
20	30	142	90	60	489	520	130	42	38	32	9.0	6.5
21	28	123	90	58	435	511	121	123	36	27	15	7.0
22	28	81	90	90	341	373	105	69	34	20	12	6.5
23	36	64	975	900	282	301	97	63	32	17	11	7.0
24	40	63	520	600	263	258	93	50	28	18	15	7.0
25	33	66	269	390	215	228	90	44	26	15	21	7.5
26	32	64	193	250	167	221	92	41	25	13	48	8.5
27	38	81	170	170	162	184	93	40	24	12	21	11
28	39	81	167	120	144	151	81	42	24	12	13	17
29	34	69	137	84	---	142	75	47	34	13	11	12
30	30	62	111	250	---	137	72	60	55	14	9.0	9.0
31	29	---	111	2400	---	324	---	49	---	12	9.0	---
TOTAL	846	1456	4353	8586	8701	11318	6749	1871	1237	743	519.5	271.5
MEAN	27.3	48.5	140	277	311	365	225	60.4	41.2	24.0	16.8	9.05
MAX	40	142	975	2400	1100	1390	590	123	121	66	76	21
MIN	19	24	48	58	62	130	72	40	24	12	9.0	6.5
CFSM	.20	.35	1.00	1.98	2.22	2.61	1.61	.43	.29	.17	.12	.07
IN.	.22	.39	1.16	2.28	2.31	3.01	1.79	.50	.33	.20	.14	.07

CAL YR 1981 TOTAL 72371.0 MEAN 198 MAX 3310 MIN 19 CFSM 1.41 IN 19.23  
WTR YR 1982 TOTAL 46651.0 MEAN 128 MAX 2400 MIN 6.5 CFSM .91 IN 12.40

## 03144400 SAND FORK NEAR WAKATOMIKA, OH

LOCATION.--Lat 40°13'37", long 81°59'36", Coshocton County, Hydrologic Unit 05040004, on right bank 15 ft (4.6 m) upstream from bridge on County Road 4, 3.5 mi (5.6 km) northeast of Wakatomika, and 6.8 mi (10.9 km) southwest of Coshocton.

DRAINAGE AREA.--1.34 mi<sup>2</sup> (3.47 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 851 ft (259 m), from topographic map.

REMARKS.--Records poor prior to Feb. 23, good thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 544 ft<sup>3</sup>/s (15.4 m<sup>3</sup>/s) June 13, 1981, gage height 11.87 ft (3.618 m); minimum daily 0.18 ft<sup>3</sup>/s (0.005 m<sup>3</sup>/s) Sept. 19, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 150 ft<sup>3</sup>/s (4.25 m<sup>3</sup>/s) Jan. 31, estimated by hydrographic comparison; maximum recorded discharge, 11 ft<sup>3</sup>/s (0.31 m<sup>3</sup>/s) Mar. 16, gage height, 11.05 ft (3.368 m); minimum daily, 0.18 ft<sup>3</sup>/s (0.005 m<sup>3</sup>/s) Sept. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.86	.92	1.1	5.8	.93	1.8	.66	.54	.75	.38	.45
2	.54	.82	.99	1.1	4.5	.90	1.5	.63	.52	.66	.38	.55
3	.54	.80	.99	.99	5.4	.87	2.1	.62	.52	1.1	.38	.60
4	.54	.80	.99	2.4	4.7	1.5	1.9	.58	.53	.93	.37	.57
5	.54	.80	.99	2.0	4.3	2.5	1.8	.59	.59	.85	.36	.52
6	.68	1.1	.92	2.2	3.8	1.9	2.1	.56	.59	.80	.36	.46
7	.59	1.6	.86	4.5	3.4	1.7	1.9	.56	.56	.75	.36	.41
8	.55	2.1	.92	1.7	3.0	1.4	1.7	.91	.51	.75	.53	.34
9	.55	2.0	.86	1.5	2.7	1.2	1.7	.91	.73	.71	.57	.34
10	.55	1.7	.74	1.3	2.4	1.0	1.7	.85	.98	.65	.52	.34
11	.51	1.1	.70	1.2	2.1	1.6	1.6	.85	.90	.65	.52	.34
12	.51	.86	.66	1.0	1.9	2.0	1.6	.77	.85	.63	.50	.34
13	.51	.80	.62	.90	1.7	2.0	1.4	.69	.81	.53	.45	.29
14	.47	.80	.60	.86	1.5	1.7	1.3	.65	.78	.52	.43	.22
15	.47	.80	.58	.81	1.3	1.5	1.2	.59	.75	.48	.42	.22
16	.47	.80	.57	.76	2.3	3.0	1.0	.53	.94	.45	.39	.22
17	.43	.80	.56	.72	4.4	3.1	1.0	.52	.90	.45	.35	.20
18	.51	.80	.54	.68	2.5	2.6	1.0	.49	.85	.44	.30	.19
19	1.4	.86	.53	.63	2.3	2.3	1.0	.46	.77	.54	.29	.18
20	1.3	1.2	.52	.60	2.2	2.6	.98	.48	.73	.51	.29	.20
21	1.2	1.1	.51	.56	2.1	2.4	.93	.52	.75	.48	.29	.22
22	1.1	1.1	.50	.52	2.0	2.0	.85	.54	.70	.45	.29	.20
23	.86	.92	6.4	4.5	1.9	1.8	.80	.67	.64	.45	.33	.20
24	.86	.86	4.5	2.7	1.8	1.4	.76	.69	.61	.45	.36	.20
25	.80	.86	3.3	1.9	1.4	1.3	.75	.67	.57	.48	.49	.22
26	.74	.80	2.6	1.5	1.1	1.2	.75	.58	.53	.48	.48	.25
27	.74	.80	2.2	1.3	1.1	1.2	.75	.53	.54	.47	.48	.41
28	1.1	.80	1.9	1.2	1.0	1.1	.71	.52	.61	.43	.48	.42
29	1.0	.80	1.5	1.1	---	1.1	.70	.55	.84	.42	.48	.42
30	.98	.80	1.3	1.0	---	1.0	.66	.56	.84	.42	.46	.42
31	.90	---	1.1	7.4	---	1.9	---	.56	---	.39	.42	---
TOTAL	22.56	30.24	40.87	50.63	74.6	52.70	37.94	19.29	20.98	18.07	12.71	9.94
MEAN	.73	1.01	1.32	1.63	2.66	1.70	1.26	.62	.70	.58	.41	.33
MAX	1.4	2.1	6.4	7.4	5.8	3.1	2.1	.91	.98	1.1	.57	.60
MIN	.43	.80	.50	.52	1.0	.87	.66	.46	.51	.39	.29	.18
CFSM	.55	.75	.99	1.22	1.99	1.27	.94	.46	.52	.43	.31	.25
IN.	.63	.84	1.13	1.40	2.07	1.46	1.05	.54	.58	.50	.35	.28

CAL YR 1981 TOTAL 853.40 MEAN 2.34 MAX 39 MIN .43 CFSM 1.75 IN 23.67  
WTR YR 1982 TOTAL 390.53 MEAN 1.07 MAX 7.4 MIN .18 CFSM .80 IN 10.83

## MUSKINGUM RIVER BASIN

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1981 (discontinued).

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,590 mg/L June 13, 1981 (revised); minimum daily mean, 3 mg/L Feb. 1-4, 1980, Sept. 11, 1980, Nov. 15, 1980.

SEDIMENT LOADS: Maximum daily, 1,970 tons (1,790 tonnes) June 13, 1981 (revised); minimum daily, 0.00 tons June 14, 16-20, July 8, 18, 20, 21, Aug. 20, 21, Oct. 27-Nov. 1, 1979, Jan. 22-Feb. 4, 6-11, 15, Sept. 10, 11, Nov. 13-15, 1980.

REVISIONS.-- The maximum daily sediment loads for the period of record and water years 1980, 1981 have been revised as shown in the following table. They supersede figures published in WRD-OH-1-1980, 1981.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean 3,590 mg/L June 13, 1981.

SEDIMENT LOADS: Maximum daily 1,970 tons (1,790 tonnes) June 13, 1981.

## EXTREMES FOR WATER YEAR 1980:

SEDIMENT LOADS: Maximum daily 540 tons (490 tonnes) Aug. 11.

## EXTREMES FOR WATER YEAR 1981:

SEDIMENT LOADS: Maximum daily 1,970 tons (1,790 tonnes) June 13.

Revised figures of daily sediment discharge for the water years 1979-81 are shown in the following tables. They supersede figures published in WRD-OH-1-1979-81.

Sediment Discharge (Tons/day)	Sediment Discharge (Tons/day)	Sediment Discharge (Tons/day)
Feb. 23, 1979.....4.6	Feb. 25, 1979.....2.2	Feb. 26, 1979.....52
Feb. 24, 1979.....21		
February Total 83.45		
Year Total 1652.76		
Jan. 10, 1980..... 0.46	May 12, 1980.....56	Aug. 11, 1980.....540
Jan. 11, 1980.....30	June 2, 1980.....166	Aug. 12, 1980.....80
Feb. 5, 1980.....16	June 3, 1980.....0.11	Aug. 21, 1980.....35
Apr. 14, 1980.....33	Aug. 10, 1980.....43	Sept. 4, 1980.....11
May 11, 1980.....1.4		
January Total 43.44		
February Total 20.42		
April Total 92.90		
May Total 82.49		
June Total 172.46		
August Total 708.06		
September Total 12.95		
Year Total 1280.78		
June 9, 1981.....0.45	June 14, 1981.....480	Aug. 31, 1981.....1.8
June 10, 1981.....14	June 25, 1981.....11	Sept. 3, 1981.....5.8
June 13, 1981.....1970	July 4, 1981.....2.7	
June Total 2614.45		
July Total 7.11		
August Total 2.84		
September Total 10.52		
Year Total 3054.47		

## MUSKINGUM RIVER BASIN

87

03144450 OPOSSUM RUN TRIBUTARY NEAR WAKATOMIKA, OH

LOCATION.--Lat 40°10'10", long 82°03'52", Coshocton County, Hydrologic Unit 05040004, at bridge on Washington Township Road 71, 0.1 mi (0.2 km) upstream from mouth, 1.7 mi (2.7 km) southeast of Graham Corners and 2.1 mi (3.4 km) southwest of Wakatomika.

DRAINAGE AREA.--1.27 mi<sup>2</sup> (3.29 km<sup>2</sup>).

PERIOD OF RECORD.--June 1978 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 835 ft (255 m) from topographic map.

REMARKS.--Records poor prior to Feb. 5, fair thereafter. Water-quality data collected at this site 1979 to 1981. Sediment data collected at this site 1979 to 1981.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft<sup>3</sup>/s (34.0 m<sup>3</sup>/s) Aug. 10, 1980, gage height, 17.06 ft (5.200 m); no flow July 31 to Aug. 3, Aug. 6, 7, 14-19, 21, 28-30, Sept. 10-19, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s) Jan. 31, estimated by hydrographic comparison; Maximum recorded discharge, 81 ft<sup>3</sup>/s (2.29 m<sup>3</sup>/s) Mar. 16, Gage height, 12.10 ft (3.688m); no flow July 31-Aug. 3, Aug. 6, 7, 14-19, 21, 28-30, Sept. 10-19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.20	.70	1.7	10	1.4	3.1	.56	.20	.32	.00	.13
2	.15	.20	.48	1.5	4.5	1.3	2.4	.52	.50	.26	.00	.59
3	.15	.19	.43	1.1	5.5	1.3	6.2	.48	.30	2.3	.00	.34
4	.15	.19	.39	4.4	4.5	2.6	3.4	.44	.16	.97	.04	.20
5	.15	.22	.39	2.7	3.4	4.2	2.7	.42	.25	.62	.03	.15
6	.22	.25	.39	1.8	2.6	3.4	3.9	.40	.44	.49	.00	.06
7	.17	.19	.39	2.0	2.0	2.8	2.7	.60	.25	.43	.00	.05
8	.15	.17	.39	1.5	1.8	2.6	2.4	.91	.14	.38	1.0	.03
9	.15	.22	.35	1.3	1.7	2.3	2.6	.62	1.1	.38	.23	.03
10	.15	.19	.35	1.1	1.5	2.1	2.3	.62	.91	.32	.09	.00
11	.15	.18	.33	1.0	1.4	5.8	2.8	.55	.55	.32	.11	.00
12	.13	.17	.32	.92	1.3	5.5	2.6	.46	.35	.26	.06	.00
13	.13	.16	.31	.86	1.2	5.1	2.4	.40	.25	.22	.02	.00
14	.13	.16	.30	.80	1.1	3.5	1.9	.34	.22	.22	.00	.00
15	.15	.15	.29	.76	2.8	3.2	1.5	.30	.22	.18	.00	.00
16	.15	.15	.28	.72	3.4	14	1.4	.27	.18	.18	.00	.00
17	.15	.15	.27	.69	9.8	6.7	1.4	.25	.15	.22	.00	.00
18	.19	.15	.27	.67	6.0	3.9	1.2	.22	.13	.22	.00	.00
19	.17	.25	.26	.64	5.1	3.2	1.0	.21	.11	.18	.00	.00
20	.15	.64	.26	.61	4.2	4.7	1.0	.35	.09	.11	.01	.14
21	.15	.31	.25	.58	3.7	4.2	.91	.50	.08	.09	.07	.24
22	.15	.28	.25	.56	3.0	3.5	.84	.62	.07	.08	.00	.09
23	.35	.25	6.5	10	2.6	3.0	.84	.70	.06	.17	.33	.06
24	.19	.28	3.2	8.0	2.4	2.8	.78	.55	.06	.09	.15	.02
25	.19	.28	1.7	5.0	2.2	2.2	.78	.45	.18	.06	.25	.18
26	.28	.31	1.3	3.5	1.6	2.0	.78	.32	.22	.05	.05	.18
27	.25	.35	1.1	2.5	1.5	1.8	.70	.23	.70	.06	.03	.63
28	.24	.31	1.0	2.3	1.4	1.6	.70	.50	.38	.09	.00	.34
29	.22	.28	.92	2.0	---	1.4	.62	.91	1.9	.04	.00	.24
30	.21	.31	.84	1.8	---	1.3	.59	.70	.43	.01	.00	.19
31	.20	---	.80	18	---	4.6	---	.40	---	.00	.03	---
TOTAL	5.54	7.14	25.01	81.01	92.2	108.0	56.44	14.80	10.58	9.32	2.50	3.89
MEAN	.18	.24	.81	2.61	3.29	3.48	1.88	.48	.35	.30	.081	.13
MAX	.35	.64	6.5	18	10	14	6.2	.91	1.9	2.3	1.0	.63
MIN	.13	.15	.25	.56	1.1	1.3	.59	.21	.06	.00	.00	.00
CFSM	.14	.19	.64	2.06	2.59	2.74	1.48	.38	.28	.24	.06	.10
IN.	.16	.21	.73	2.37	2.70	3.16	1.65	.43	.31	.27	.07	.11

CAL YR 1981 TOTAL 503.08 MEAN 1.38 MAX 32 MIN .10 CFSM 1.09 IN 14.72  
WTR YR 1982 TOTAL 416.43 MEAN 1.14 MAX 18 MIN .00 CFSM .90 IN 12.19

## MUSKINGUM RIVER BASIN

03144500 MUSKINGUM RIVER AT DRESDEN, OH

LOCATION.--Lat 40°07'13", long 81°59'59", Muskingum County, Hydrologic Unit 05040004, on left bank 70 ft (21 m) downstream from bridge on State Highway 208, 0.5 mi (0.8 km) east of Dresden, and 0.5 mi (0.8 km) downstream from Wakatomika Creek.

DRAINAGE AREA.--5,993 mi<sup>2</sup> (15,522 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 728: 1927(M). WSP 803: 1935. WSP 1385: 1922-23, 1928(M), 1929, 1930(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 693.15 ft (211.272 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 24, 1925, nonrecording gage at about same site and datum.

REMARKS.--Records good except those below 1,500 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s), which are fair. Flow regulated by 16 flood-control reservoirs at points 15 mi (24 km) to 105 mi (169 km) upstream. Water-quality data collected at this site 1966, 1969 to 1977, Water temperatures collected 1952-61, 1963 to 1974, Sediment data collected 1952 to 1974.

AVERAGE DISCHARGE.--61 years, 6,361 ft<sup>3</sup>/s (180.1 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft<sup>3</sup>/s (2,830 m<sup>3</sup>/s) Aug. 9, 1935, gage height, 31.6 ft (9.63 m); minimum daily, 335 ft<sup>3</sup>/s (9.49 m<sup>3</sup>/s) June 25, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 46.0 ft (14.02 m), present site and datum, from floodmark, discharge, 228,000 ft<sup>3</sup>/s (6,460 m<sup>3</sup>/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,000 ft<sup>3</sup>/s (736 m<sup>3</sup>/s) Mar. 18, gage height, 16.79 ft (5.118 m); minimum daily, 931 ft<sup>3</sup>/s (26.4 m<sup>3</sup>/s) Sept. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	1430	3190	5230	24000	7950	13100	3840	3660	4230	1550	1190
2	1360	1400	3780	5680	20600	7370	14700	3670	3540	3550	1440	1200
3	1330	1390	4130	5820	20800	7070	13600	3520	3360	3270	1390	1550
4	1310	1440	4020	6880	22900	6780	14700	3420	3140	4730	1390	2290
5	1280	1640	3690	11800	21900	10700	13700	3300	3030	6840	1780	2040
6	1290	2100	3490	13300	23100	15800	12800	3210	2930	6580	2840	1870
7	1420	2650	3300	12200	23900	16100	12200	3170	2860	5690	2680	1620
8	1770	2900	3170	10700	23100	13700	11100	3330	2790	4830	2140	1420
9	1600	2730	3350	9030	21800	11600	10300	4080	2640	5320	2150	1310
10	1550	2580	3750	6820	18600	10900	10200	4230	2900	5230	2430	1250
11	1490	2500	3570	4200	16200	9800	10400	3850	2860	5010	2000	1200
12	1420	2460	3240	3100	13600	14900	10800	3510	2620	4150	1770	1160
13	1370	2420	3000	2900	10600	18300	10800	3260	2460	3550	1650	1120
14	1290	2370	2800	2700	8760	19800	10500	3080	2320	3080	1520	1080
15	1250	2300	2770	2600	7660	19900	9530	2930	2210	2650	1400	1050
16	1260	2250	2650	2500	8960	19800	8560	2800	2230	2340	1330	1070
17	1290	2360	2470	2500	14900	23300	8340	2690	3490	2150	1250	1160
18	1300	2900	2360	2400	21800	25600	8090	2590	5100	2110	1220	1120
19	1270	3160	2140	2400	22200	24700	7540	2510	4800	2140	1200	1030
20	1240	4120	1980	2300	22200	23900	7070	2450	3790	2420	1170	968
21	1230	6390	1710	2300	21100	24300	6520	2980	3230	2370	1210	959
22	1240	6410	1730	2200	19100	24200	6020	3510	3010	2150	1330	937
23	1340	5110	4520	4700	17800	23400	5500	3610	2970	2140	1340	931
24	1440	4320	13500	13000	17000	22600	5130	3420	2680	1960	1270	936
25	1620	3960	14700	12000	15400	19900	4810	4710	2430	1820	1600	981
26	1620	3700	12700	11000	12600	15900	4610	5010	2190	1690	2190	998
27	1620	3520	9840	10000	10500	13500	4530	4040	2010	1580	1810	1120
28	1670	3490	8300	9400	9090	11000	4440	3330	1950	1840	1650	1260
29	1640	3330	7310	8600	---	9550	4320	3360	2110	2050	1500	1550
30	1550	3140	6560	8200	---	8900	4050	3540	2830	1790	1340	1460
31	1480	---	5710	14000	---	9110	---	3550	---	1660	1230	---
TOTAL	43920	90470	149430	210460	490170	490330	267960	106500	88140	100920	50770	37830
MEAN	1417	3016	4820	6789	17510	15820	8932	3435	2938	3255	1638	1261
MAX	1770	6410	14700	14000	24000	25600	14700	5010	5100	6840	2840	2290
MIN	1230	1390	1710	2200	7660	6780	4050	2450	1950	1580	1170	931
CAL YR 1981 TOTAL	2900080	MEAN	7945	MAX	27500	MIN	1230					
WTR YR 1982 TOTAL	2126900	MEAN	5827	MAX	25600	MIN	931					

## MUSKINGUM RIVER BASIN

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03145000 SOUTH FORK LICKING RIVER NEAR HEBRON, OH

LOCATION.--Lat 39°59'19", long 82°28'30", in NW 1/4 sec. 3, T.1 N., R.12 W., Licking County, Hydrologic Unit 05040006, on left bank at upstream side of bridge on county road, 800 ft (244 m) downstream from Beaver Run, 2.3 mi (3.7 km) north of Hebron, and 2.5 mi (4.0 km) upstream from Ramp Creek.

DRAINAGE AREA.--133 mi<sup>2</sup> (344 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 923: 1940. WSP 1033: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 856.08 ft (260.933 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1974 nonrecording gage at same site and datum.

REMARKS.--Records good, except those for the winter periods, which are fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 hm<sup>3</sup>), on unnamed tributary 5.6 mi (9.0 km) upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek which bypasses station. Water-quality data collected at this site 1969 to 1977.

AVERAGE DISCHARGE.--23 years, 153 ft<sup>3</sup>/s (4.333 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,120 ft<sup>3</sup>/s (117 m<sup>3</sup>/s) Mar. 6, 1945, gage height, 12.1 ft (3.69 m), from flood marks; no flow Aug. 22, 1942.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 12.4 ft (3.78 m) present datum, from floodmarks; discharge 5,880 ft<sup>3</sup>/s (167 m<sup>3</sup>/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,200 ft<sup>3</sup>/s (90.6 m<sup>3</sup>/s) Jan. 31, from hydrographic comparison with nearby stations. minimum daily, 6.6 ft<sup>3</sup>/s (0.19 m<sup>3</sup>/s) Sept. 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	21	39	104	1300	216	243	29	83	39	21	9.4
2	10	20	60	107	660	200	126	28	60	25	19	16
3	8.2	27	46	75	350	78	357	27	47	44	17	30
4	7.5	29	69	601	190	111	363	26	35	73	17	25
5	7.5	40	74	594	100	444	158	25	35	38	17	15
6	9.0	93	74	251	76	203	247	25	35	25	16	11
7	7.5	307	70	200	66	130	199	24	31	23	13	6.9
8	7.9	322	59	150	60	96	129	31	26	92	20	6.6
9	12	322	26	110	52	78	114	43	26	158	141	9.0
10	9.0	316	21	86	48	70	123	35	50	130	65	8.6
11	7.9	309	19	76	44	231	114	31	50	108	31	10
12	7.9	305	17	66	43	897	96	27	32	83	22	9.0
13	7.9	300	17	56	41	419	83	25	25	26	17	9.0
14	7.9	297	17	50	58	269	70	22	22	19	15	17
15	7.9	293	16	45	180	166	60	21	20	15	13	62
16	7.9	288	15	42	540	409	58	20	31	15	12	47
17	9.0	284	15	40	1100	973	69	20	116	14	11	29
18	19	237	15	37	1130	342	73	19	71	40	10	18
19	23	132	15	36	688	200	62	19	46	100	10	14
20	22	122	12	35	495	427	55	22	34	69	10	13
21	22	43	12	34	449	463	52	25	28	34	10	14
22	24	25	15	35	333	234	47	35	25	23	10	12
23	34	20	379	1000	276	152	42	207	21	19	11	11
24	26	21	527	640	342	115	39	111	20	17	13	9.8
25	24	24	209	390	293	96	38	55	18	15	21	10
26	32	26	141	220	247	97	37	38	17	15	15	10
27	33	35	128	130	234	86	37	30	17	17	9.4	18
28	31	33	165	80	222	71	34	29	17	316	8.2	16
29	25	26	132	74	---	65	31	166	38	83	7.9	19
30	25	21	104	500	---	64	30	580	94	40	9.0	16
31	22	---	89	2300	---	170	---	184	---	27	13	---
TOTAL	509.0	4338	2597	8164	9617	7572	3186	1979	1170	1742	624.5	501.3
MEAN	16.4	145	83.8	263	343	244	106	63.8	39.0	56.2	20.1	16.7
MAX	34	322	527	2300	1300	973	363	580	116	316	141	62
MIN	7.5	20	12	34	41	64	30	19	17	14	7.9	6.6
CAL YR 1981	TOTAL	66856.7	MEAN 183	MAX 2050	MIN 7.5							
WTR YR 1982	TOTAL	41999.8	MEAN 115	MAX 2300	MIN 6.6							

## MUSKINGUM RIVER BASIN

03146000 NORTH FORK LICKING RIVER AT UTICA, OH

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4 N., R.12 W., Licking County, Hydrologic Unit 05040006, on left bank at upstream side of bridge on State Highway 13 at south edge of Utica, 0.2 mi (0.3 km) downstream from unnamed right bank tributary, and 2.0 mi (3.2 km) upstream from Lake Fork.

DRAINAGE AREA.--116 mi<sup>2</sup> (300 km<sup>2</sup>).

PERIOD OF RECORD.--October 1939 to September 1948, October 1969 to September 1982 (discontinued).

REVISED RECORDS.--WRD Ohio 1970: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 934 ft (285 m) from topographic map. Prior to September 30, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for July-September, which are poor. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--22 years, 138 ft<sup>3</sup>/s (3.908 m<sup>3</sup>/s), 16.16 in/yr (410 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft<sup>3</sup>/s (289 m<sup>3</sup>/s) Sept. 14, 1979, gage height, 15.20 ft (4.633 m); minimum, 0.60 ft<sup>3</sup>/s (0.017 m<sup>3</sup>/s) Aug. 13, Oct. 2, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 15.8 ft (4.82 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft<sup>3</sup>/s (70.8 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	Gage (ft)	height (m)
Jan. 23	2000	2780	78.7	7.98	2.432	Mar. 16	1830	3050	86.4	8.33	2.539
Jan. 31	2330	*4670	132	*10.19	3.106						

Minimum daily discharge, 5.1 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Aug. 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	9.4	160	251	2160	76	479	34	41	30	9.8	9.0
2	7.5	9.0	183	174	579	83	212	33	31	25	9.8	13
3	7.2	8.6	107	129	330	109	613	31	27	32	9.1	16
4	7.0	8.2	85	1330	180	366	376	29	20	51	9.0	15
5	7.5	11	81	613	100	983	200	27	19	40	10	11
6	8.7	18	68	267	78	317	254	26	21	30	10	8.5
7	9.0	14	63	312	64	194	191	25	19	25	15	7.2
8	9.0	12	59	172	56	140	160	42	17	23	28	6.4
9	9.0	11	58	122	50	117	154	51	18	22	41	7.0
10	9.0	11	44	79	45	99	166	36	119	21	25	7.4
11	9.4	10	47	70	43	653	297	29	68	19	12	8.0
12	9.0	9.8	36	58	40	935	221	26	36	18	5.8	7.8
13	8.6	9.0	32	52	39	697	156	24	25	16	5.1	8.0
14	8.2	9.0	30	44	40	389	114	22	20	15	5.3	8.0
15	8.2	9.0	29	40	168	236	94	21	16	14	6.0	7.8
16	8.6	8.6	26	37	697	1450	87	20	73	13	6.9	7.8
17	8.2	9.0	26	34	1370	1110	102	18	127	16	7.2	7.8
18	12	11	25	32	673	415	92	17	69	20	8.9	7.8
19	9.0	11	26	31	534	264	76	17	40	24	9.2	7.8
20	8.2	723	23	30	360	586	70	19	30	27	11	8.0
21	8.2	272	24	29	382	744	65	31	26	24	12	8.2
22	8.2	137	37	29	254	347	57	35	25	20	11	8.2
23	11	86	1830	1450	205	210	50	27	19	17	10	8.1
24	9.8	79	801	1230	246	160	47	45	23	15	27	8.2
25	9.0	91	314	1060	156	131	45	25	15	13	87	8.4
26	12	91	189	560	104	137	44	20	15	12	45	9.0
27	15	131	156	270	92	115	45	18	15	11	23	10
28	14	94	156	140	82	93	40	18	15	11	13	14
29	11	67	119	86	---	87	36	17	17	11	10	11
30	10	53	89	376	---	85	35	19	17	13	9.0	9.0
31	9.8	---	82	3060	---	823	---	73	---	11	9.0	---
TOTAL	290.0	2022.6	5005	12167	9127	12151	4578	875	1023	639	500.1	273.4
MEAN	9.35	67.4	161	392	326	392	153	28.2	34.1	20.6	16.1	9.11
MAX	15	723	1830	3060	2160	1450	613	73	127	51	87	16
MIN	7.0	8.2	23	29	39	76	35	17	15	11	5.1	6.4
CFSM	.08	.58	1.39	3.38	2.81	3.38	1.32	.24	.29	.18	.14	.08
IN.	.09	.65	1.61	3.90	2.93	3.90	1.47	.28	.33	.20	.16	.09

CAL YR 1981	TOTAL	52212.9	MEAN 143	MAX 2430	MIN 7.0	CFSM 1.23	IN 16.74
WTR YR 1982	TOTAL	48651.1	MEAN 133	MAX 3060	MIN 5.1	CFSM 1.15	IN 15.60

## 03146500 LICKING RIVER NEAR NEWARK, OH

LOCATION.--Lat 40°03'33", long 82°20'23", in SW 1/4 T.2 N., R.11 W., Licking County, Hydrologic Unit 05040006, on right bank at downstream side of Stadden Bridge, 1.0 mi (1.6 km) downstream from Shawnee Run, 1.5 mi (2.4 km) upstream from Equality Run, and 3.5 mi (5.6 km) east of Newark.

DRAINAGE AREA.--537 mi<sup>2</sup> (1,391 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 973: 1940(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 779.02 ft (237.445 m) National Geodetic Vertical Datum of 1929. Prior to May 9, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 hm<sup>3</sup>), on South Fork 15.2 mi (24.5 km) upstream. Water-quality data collected at this site 1962 to 1980.

AVERAGE DISCHARGE.--43 years, 588 ft<sup>3</sup>/s (16.65 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft<sup>3</sup>/s (1,270 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 20.3 ft (6.19 m) (from high-water mark), from rating curve extended above 24,000 ft<sup>3</sup>/s (680 m<sup>3</sup>/s) on basis of flood-routing studies from station at Toboso; minimum daily, 28 ft<sup>3</sup>/s (0.79 m<sup>3</sup>/s) Sept. 27, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft<sup>3</sup>/s (184 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage (ft)	Gage (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage (ft)	Gage (m)
Jan. 23	2030	7,850	222	10.92	3.328	Feb. 1	0030	*10,400	295	*12.60	3.840

Minimum daily discharge, 61 ft<sup>3</sup>/s (1.73 m<sup>3</sup>/s) Sept. 25, 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	84	257	674	7110	661	1590	228	684	163	98	74
2	95	85	453	658	3000	658	911	218	469	125	85	118
3	93	84	316	501	1990	611	1890	209	330	190	83	111
4	92	84	285	2800	1500	800	1800	203	250	230	84	101
5	88	102	288	2150	1000	2550	1030	196	208	159	85	79
6	109	108	276	1020	760	1250	1250	194	184	127	84	75
7	91	321	257	967	580	908	1040	191	169	134	79	70
8	90	362	243	738	470	728	846	301	156	188	251	67
9	92	375	197	565	400	634	810	301	151	309	615	67
10	89	369	168	413	380	572	833	263	517	255	255	71
11	84	363	148	350	350	1360	947	223	350	211	147	69
12	85	357	146	280	340	3300	862	200	220	197	114	66
13	84	352	138	230	320	2050	717	184	176	122	98	66
14	86	349	134	180	320	1540	617	168	152	107	86	79
15	86	344	129	160	550	1050	535	155	138	105	81	162
16	85	340	124	150	2140	2780	512	143	234	102	78	158
17	81	339	124	150	4240	4130	584	135	478	105	78	108
18	100	329	122	140	3360	1830	564	130	345	145	75	81
19	84	239	113	130	2330	1250	475	125	224	221	73	68
20	83	694	107	130	1790	1990	432	229	177	400	71	68
21	81	571	103	130	1680	2180	401	395	160	325	71	73
22	85	304	128	151	1320	1440	361	266	148	255	73	66
23	115	222	2730	4430	1100	1030	331	653	137	213	90	64
24	91	207	2230	3790	1160	862	309	515	126	135	80	63
25	86	206	976	1820	996	764	296	353	116	92	104	61
26	110	218	657	1170	798	763	293	251	109	91	159	61
27	108	247	580	787	743	700	290	195	107	89	110	85
28	105	259	646	699	694	608	273	173	122	373	87	74
29	94	206	540	594	---	562	250	429	330	219	75	69
30	88	174	423	1130	---	542	238	1160	268	133	75	66
31	87	---	390	7150	---	1220	---	949	---	110	78	---
TOTAL	2848	8294	13428	34237	41421	41323	21287	9335	7235	5630	3622	2440
MEAN	91.9	276	433	1104	1479	1333	710	301	241	182	117	81.3
MAX	115	694	2730	7150	7110	4130	1890	1160	684	400	615	162
MIN	81	84	103	130	320	542	238	125	107	89	71	61

CAL YR 1981 TOTAL 264453 MEAN 725 MAX 9190 MIN 81  
WTR YR 1982 TOTAL 191100 MEAN 524 MAX 7150 MIN 61

## MUSKINGUM RIVER BASIN

03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OH

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., Muskingum County, Hydrologic Unit 05040006, on left bank 500 ft (152 m) downstream from Dillon Dam, 2.0 mi (3.2 km) northwest of Dillon Falls, and 5.8 mi (9.3 km) upstream from mouth.

DRAINAGE AREA.--742 mi<sup>2</sup> (1,922 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 2107: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.0 ft (213.36 m) Corps of Engineers bench mark. Prior to Oct. 27, 1940, water-stage recorder at site 2.3 mi (3.7 km) downstream at different datum. Oct. 27, 1940, to Sept. 30, 1962, water-stage recorder at site 2.6 mi (4.2 km) downstream at datum 16.3 ft (4.97 m) lower.

REMARKS.--Records good. Flow regulated by Dillon Lake since December 1960 (see station 03147300). Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1961 to 1975.

AVERAGE DISCHARGE.--21 years(water years 1940-60), 760 ft<sup>3</sup>/s (21.52 m<sup>3</sup>/s); 22 years (water years 1961-82); 884 ft<sup>3</sup>/s (25.03 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,000 ft<sup>3</sup>/s (1,330 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 32.46 ft (9.894 m); minimum daily, 19 ft<sup>3</sup>/s (0.54 m<sup>3</sup>/s) Dec. 22, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 37.0 ft (11.28 m) site and datum in use 1940-62, from floodmark, backwater from Muskingum River.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,070 ft<sup>3</sup>/s (115 m<sup>3</sup>/s) Mar. 18, gage height, 9.10 ft (2.774 m); minimum daily, 70 ft<sup>3</sup>/s (1.98 m<sup>3</sup>/s) Sept. 8-14, 16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	149	248	571	158	876	1230	324	859	366	155	72
2	155	228	546	893	864	824	1540	324	551	251	117	75
3	179	294	581	774	2750	802	1270	324	494	238	91	214
4	149	272	350	1700	3630	808	1800	324	370	301	80	269
5	106	262	383	3060	3730	1990	2510	324	320	383	80	218
6	106	255	408	2870	3730	2350	1750	287	320	339	80	218
7	134	251	350	1440	3760	2030	1780	269	298	234	80	120
8	146	294	324	1210	3740	1280	1370	301	262	208	83	70
9	146	596	324	864	3710	836	1170	358	241	262	725	70
10	146	601	287	462	3750	899	1170	489	280	324	888	70
11	146	417	201	360	3730	836	1170	417	480	320	276	70
12	146	439	143	330	3750	2000	1260	224	417	320	146	70
13	146	471	182	420	3690	2770	1240	241	272	262	114	70
14	146	485	305	470	3640	2770	853	208	269	176	114	70
15	221	494	276	415	3640	2710	662	269	251	140	114	72
16	251	494	158	358	3660	2480	667	269	298	122	114	70
17	248	494	170	362	3750	1660	791	248	621	122	117	72
18	245	489	198	320	3760	4020	859	234	513	122	117	108
19	276	471	198	269	3660	3920	808	218	347	272	94	140
20	320	662	195	269	3640	3820	662	211	366	408	83	140
21	265	1030	182	301	3640	3750	631	343	283	272	80	137
22	158	626	164	354	3720	3660	518	354	228	176	83	140
23	140	238	1720	426	3720	3220	430	518	208	149	83	117
24	152	328	2330	426	2700	1810	400	747	208	149	108	103
25	152	362	1790	636	1460	1250	404	601	179	131	152	103
26	149	265	1750	977	1210	1290	426	391	155	114	167	103
27	149	316	1450	802	1000	1090	457	320	155	114	167	103
28	149	370	824	923	929	830	457	269	155	164	167	103
29	149	339	720	2530	---	731	417	276	305	339	167	103
30	149	269	672	2860	---	693	350	747	494	265	114	106
31	149	---	513	1650	---	704	---	1080	---	182	72	---
TOTAL	5276	12261	17942	29302	85121	58709	29052	11509	10199	7225	5028	3396
MEAN	170	409	579	945	3040	1894	968	371	340	233	162	113
MAX	320	1030	2330	3060	3760	4020	2510	1080	859	408	888	269
MIN	103	149	143	269	158	693	350	208	155	114	72	70
CAL YR 1981	TOTAL	392850	MEAN	1076	MAX	4030	MIN	45				
WTR YR 1982	TOTAL	275020	MEAN	753	MAX	4020	MIN	70				

## MUSKINGUM RIVER BASIN

93

03150000 MUSKINGUM RIVER AT MCCONNELLSVILLE, OH

(National stream quality accounting network station)

LOCATION.--Lat 39°38'42", long 81°51'00", in SE 1/4 sec. 11, T.10 N., R.12 W., Morgan County, Hydrologic Unit 05040004, on left bank just upstream from Dam 7, at McConnelsville, and 3.5 mi (5.6 km) downstream from Oilspring Run.

DRAINAGE AREA.--7,422 mi<sup>2</sup> (19,223 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 783: 1913(M). WSP 853: 1933(M). WSP 1173: 1922-24, 1928(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 650.31 ft (198.214 m) National Geodetic Vertical Datum of 1929. Prior to July 27, 1922, nonrecording gage at site 0.5 mi (0.8 km) 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 mi (0.8 km) upstream at same datum.

REMARKS.--Records good. Flow regulated by 17 flood-control reservoirs 36.6 mi (58.9 km) to 148 mi (238 km) upstream from station. Some regulation at low flow by powerplant 19 mi (31 km) upstream from station.

AVERAGE DISCHARGE.--61 years, 7,579 ft<sup>3</sup>/s (214.6 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126,000 ft<sup>3</sup>/s (3,570 m<sup>3</sup>/s) Jan. 26, 1937, gage height, 21.14 ft (6.443 m); minimum daily, 325 ft<sup>3</sup>/s (9.20 m<sup>3</sup>/s) Oct. 12, 1930, may have been lower during August 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913 reached a stage of 33.5 ft (10.21 m), discharge, 270,000 ft<sup>3</sup>/s (7,650 m<sup>3</sup>/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,300 ft<sup>3</sup>/s (858 m<sup>3</sup>/s) Mar. 18, gage height, 9.12 ft (2.780 m); minimum daily, 1,220 ft<sup>3</sup>/s (34.6 m<sup>3</sup>/s) Aug. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1750	1920	4120	6790	27500	10100	14000	4710	5130	4720	1780	1310
2	1720	1900	4650	7010	24200	9320	17000	4500	4610	4540	1620	1740
3	1730	1990	5000	7570	23400	8990	16500	4280	4320	4140	1500	2140
4	1710	2010	4520	8970	27600	8840	17600	4150	3920	5180	1400	2650
5	1680	2080	4400	14300	26100	12500	17800	3730	3930	7940	1430	2780
6	1650	2440	4100	16800	26200	18100	16000	2640	3810	7850	2420	2550
7	1640	2860	4000	15500	26800	19300	15600	2490	3560	6950	2910	2310
8	1940	3350	4100	13300	26500	17300	14300	1930	3370	6480	2590	1910
9	2060	3550	4550	11800	25800	14100	13100	1960	3220	6310	4520	1720
10	1990	3770	4410	8340	23300	13300	12800	2130	3440	6300	4910	1620
11	1950	3400	4350	4460	20400	12300	12700	2820	3750	6100	3160	1550
12	1890	3310	3960	3450	18700	16400	12800	3220	3670	5400	2440	1490
13	1840	3280	3650	4290	15800	21900	13100	4020	3180	4520	2060	1420
14	1750	3250	3470	5350	13600	23400	12700	3740	3030	3820	1870	1380
15	1620	3200	3390	5520	12500	23300	11500	3590	2860	3210	1690	1490
16	1740	3100	3260	5060	12900	24400	10600	3450	3200	2810	1580	1880
17	1740	3050	2990	4310	19100	26700	10100	3340	4510	2510	1430	1600
18	1790	3400	2910	3970	25800	29500	10200	3180	6040	2410	1380	1550
19	1800	4000	2700	3960	27100	29400	9680	3010	6110	2610	1300	1550
20	1780	5100	2470	3860	26600	29500	8890	3050	5100	3310	1220	1460
21	1780	7000	2200	3900	25800	29900	8100	3730	4200	3030	1250	1440
22	1700	8700	2010	4000	24000	28600	7520	4140	3700	2580	1240	1440
23	1770	9000	4620	11000	22500	27300	6750	4540	3560	2470	1400	1440
24	1800	6800	14700	17300	21100	25200	6330	4550	3340	2390	1430	1440
25	1930	5220	16000	16100	18100	22900	5970	5190	3050	2170	3310	1440
26	2070	5000	14700	15400	15800	19500	5790	5920	2750	1960	2550	1450
27	2090	4600	12100	15000	13100	16600	5680	5170	2510	1820	2460	1650
28	2130	4400	9690	14200	11500	13700	5470	4490	2390	1810	2110	1840
29	2150	4000	8790	14500	---	11900	5340	4230	2550	2290	1900	2020
30	2100	3800	8270	13600	---	10800	5010	5170	3110	2270	1690	1800
31	1980	---	7360	19700	---	11100	---	5300	---	1980	1360	---
TOTAL	57270	119480	177440	299310	601800	586150	328930	118370	111920	121880	63910	52060
MEAN	1847	3983	5724	9655	21490	18910	10960	3818	3731	3932	2062	1735
MAX	2150	9000	16000	19700	27600	29900	17800	5920	6110	7940	4910	2780
MIN	1620	1900	2010	3450	11500	8840	5010	1930	2390	1810	1220	1310
CAL YR 1981 TOTAL	3626410		MEAN	9935	MAX	44100	MIN	1620				
WTR YR 1982 TOTAL	2638520		MEAN	7229	MAX	29900	MIN	1220				

## 03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1950 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: November 1978 to current year.

REMARKS.--Samples collected each month as part of the National Stream Quality Accounting Network. Water-quality monitor data collected at site, 1.0 mi (1.6 km) upstream from discharge station, from 1973 to 1980.

COOPERATION.--Pesticide analyses furnished by Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,710 mg/L Aug. 11, 1980; minimum daily mean 3 mg/L Feb. 15-17, 1979, Dec. 29, 1980.

SEDIMENT LOADS: Maximum daily 167,000 tons (152,000 tonnes) Aug. 11, 1980; minimum daily, 35 tons (32 tonnes) Feb. 10, 1980.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 296 mg/L Feb. 1; minimum daily mean, 4 mg/L Dec. 9, 11.

SEDIMENT LOADS: Maximum daily, 22,000 tons (20,000 tonnes) Feb. 1; minimum daily, 47 tons (43 tonnes) Dec. 11, 14.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)
OCT 07...	1200	1700	895	8.3	14.0	9.5	10.3	99	42
DEC 10...	1030	4380	660	7.7	3.5	5.5	12.7	95	<10
FEB 24...	1430	21500	375	7.7	5.0	35	12.8	100	92
MAY 14...	0900	3750	700	8.6	20.5	4.8	11.0	120	--
JUN 22...	0900	3720	710	7.8	20.5	<1.0	8.8	97	--
AUG 12...	0930	2500	585	8.0	22.0	24	7.3	83	--

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOC- CI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 07...	K50	K10	310	86	23	50	5.0	150	91
DEC 10...	800	220	270	70	22	36	3.9	140	56
FEB 24...	2000	480	150	42	12	16	3.1	70	28
MAY 14...	18	14	260	66	22	34	3.5	150	63
JUN 22...	100	24	250	69	19	45	4.5	130	77
AUG 12...	330	60	200	52	18	31	4.8	160	58

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 07...	.3	3.4	549	499	.050	.60	1.6	.090
DEC 10...	.2	5.2	440	406	.210	.78	1.6	.120
FEB 24...	.1	6.8	252	219	.160	.56	1.7	.160
MAY 14...	.2	.0	435	--	.020	.85	.60	.190
JUN 22...	.3	5.8	502	417	.080	1.10	2.6	.140
AUG 12...	.3	1.9	444	383	.110	1.40	.52	.120

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 07...	1200	3	3	60	60	1	1	10	<10
DEC 10...	1030	1	0	100	49	<1	<1	20	10
MAY 14...	0900	1	1	100	57	<1	<1	20	10
JUN 22...	0900	1	1	100	68	1	<1	20	10

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 07...	3	3	12	4	920	<3	25	1	320
DEC 10...	3	<1	10	3	620	38	1	1	420
MAY 14...	3	2	12	12	410	7	6	1	250
JUN 22...	6	<1	19	5	1700	6	11	3	450

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 07...	190	.3	<.1	<1	<1	1	<1	80	7
DEC 10...	380	.1	.1	<1	<1	<1	<1	50	9
MAY 14...	5	<.1	<.1	<1	<1	<1	<1	50	3
JUN 22...	180	.3	.1	<1	<1	<1	<1	100	<4

DATE	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)
OCT 07...	--	--	<.1	--	<.1	--	--	<.1	--	<.1	--
FEB 24...	<.01	<.01	--	<.01	--	<.01	<.01	--	<.01	--	<.01
MAY 14...	.01	<.01	3.6	<.01	<.1	<.01	<.01	<.1	<.01	<.1	<.01

DATE	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT 07...	<.1	--	--	--	--	--	<1.0	--	--	--	--
FEB 24...	--	<.01	<.01	<.01	<.01	--	--	<.01	.01	<.01	<.01
MAY 14...	<.1	<.01	<.01	<.01	<.01	<1	<10	<.01	.12	<.01	<.01

## MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 07...	1200	--	<.1	--	<1.0	--	<.1	--	<.1	--	<.1
FEB 24...	1430	<.01	--	<.10	--	<.01	--	<.01	--	<.01	--
MAY 14...	0900	<.01	<.1	<.10	28	<.01	<.1	<.01	<.1	<.01	<.1

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 07...	1200	1700	14.0	46	211
DEC 10...	1030	4380	3.5	9	106
FEB 24...	1430	21500	5.0	1210	70200
MAY 14...	0900	3750	20.5	35	354
JUN 22...	0900	3720	20.5	43	432
AUG 12...	0930	2500	22.0	35	236

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	1750	33	156	1920	20	104	4120	10	111
2	1720	35	163	1900	22	113	4650	15	188
3	1730	40	187	1990	20	107	5000	8	108
4	1710	35	162	2010	24	130	4520	12	146
5	1680	34	154	2080	18	101	4400	12	143
6	1650	32	143	2440	19	125	4100	8	89
7	1640	46	204	2860	24	185	4000	15	162
8	1940	102	534	3350	23	208	4100	14	155
9	2060	116	645	3550	34	326	4550	4	49
10	1990	114	613	3770	26	265	4410	9	107
11	1950	114	600	3400	20	184	4350	4	47
12	1890	112	572	3310	28	250	3960	6	64
13	1840	127	631	3280	17	151	3650	6	59
14	1750	102	482	3250	16	140	3470	5	47
15	1620	120	525	3200	18	156	3390	68	622
16	1740	102	479	3100	17	142	3260	66	581
17	1740	100	470	3050	19	156	2990	72	581
18	1790	114	551	3400	16	147	2910	74	581
19	1800	19	92	4000	18	194	2700	74	539
20	1780	24	115	5100	13	179	2470	76	507
21	1780	16	77	7000	11	208	2200	72	428
22	1700	15	69	8700	6	141	2010	75	407
23	1770	14	67	9000	10	243	4620	14	175
24	1800	14	68	6800	12	220	14700	83	3290
25	1930	14	73	5220	8	113	16000	97	4190
26	2070	15	84	5000	10	135	14700	83	3290
27	2090	15	85	4600	12	149	12100	61	1990
28	2130	16	92	4400	16	190	9690	72	1880
29	2150	14	81	4000	14	151	8790	12	285
30	2100	64	363	3800	13	133	8270	12	268
31	1980	20	107	---	---	---	7360	10	199
TOTAL	57270	---	8644	119480	---	5046	177440	---	21288
JANUARY			FEBRUARY			MARCH			
1	6790	13	238	27500	296	22000	10100	143	3900
2	7010	12	227	24200	150	9800	9320	140	3520
3	7570	14	286	23400	98	6190	8990	148	3590
4	8970	36	872	27600	89	6630	8840	100	2390
5	14300	78	3010	26100	78	5500	12500	62	2090
6	16800	101	4580	26200	90	6370	18100	123	6010
7	15500	91	3810	26800	94	6800	19300	138	7190
8	13300	70	2510	26500	64	4580	17300	130	6070
9	11800	14	446	25800	103	7170	14100	120	4570
10	8340	24	540	23300	104	6540	13300	110	3950
11	4460	78	939	20400	87	4790	12300	60	1990
12	3450	44	410	18700	64	3230	16400	95	4210
13	4290	40	463	15800	84	3580	21900	169	9990
14	5350	40	578	13600	62	2280	23400	206	13000
15	5520	35	522	12500	56	1890	23300	198	12500
16	5060	35	478	12900	63	2190	24400	170	11200
17	4310	35	407	19100	136	7010	26700	150	10800
18	3970	30	322	25800	244	17000	29500	100	7960
19	3960	30	321	27100	287	21000	29400	75	5950
20	3860	30	313	26600	265	19000	29500	57	4540
21	3900	30	316	25800	244	17000	29900	58	4680
22	4000	35	378	24000	216	14000	28600	222	17100
23	11000	51	1510	22500	181	11000	27300	208	15300
24	17300	111	5180	21100	172	9800	25200	145	9870
25	16100	97	4220	18100	122	5960	22900	238	14700
26	15400	91	3780	15800	140	5970	19500	255	13400
27	15000	86	3480	13100	150	5310	16600	202	9050
28	14200	78	2990	11500	152	4720	13700	252	9320
29	14500	82	3210	---	---	---	11900	150	4820
30	13600	71	2610	---	---	---	10800	162	4720
31	19700	143	7610	---	---	---	11100	215	6440
TOTAL	299310	---	56556	601800	---	237310	586150	---	234820

## MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	14000	122	4610	4710	40	509	5130	43	596
2	17000	131	6010	4500	44	535	4610	38	473
3	16500	113	5030	4280	239	2760	4320	40	467
4	17600	33	1570	4150	122	1370	3920	30	318
5	17800	68	3270	3730	142	1430	3930	34	361
6	16000	64	2760	2640	109	777	3810	29	298
7	15600	64	2700	2490	112	753	3560	22	211
8	14300	64	2470	1930	78	406	3370	28	255
9	13100	64	2260	1960	100	529	3220	32	278
10	12800	56	1940	2130	108	621	3440	28	260
11	12700	60	2060	2820	94	716	3750	31	314
12	12800	36	1240	3220	96	835	3670	25	248
13	13100	36	1270	4020	34	369	3180	26	223
14	12700	114	3910	3740	34	343	3030	26	213
15	11500	116	3600	3590	40	388	2860	26	201
16	10600	116	3320	3450	36	335	3200	34	294
17	10100	117	3190	3340	36	325	4510	28	341
18	10200	109	3000	3180	39	335	6040	31	506
19	9680	101	2640	3010	40	325	6110	30	495
20	8890	112	2690	3050	39	321	5100	30	413
21	8100	102	2230	3730	40	403	4200	31	352
22	7520	44	893	4140	43	481	3700	43	430
23	6750	46	838	4540	50	613	3560	30	288
24	6330	40	684	4550	52	639	3340	24	216
25	5970	32	516	5190	50	701	3050	28	231
26	5790	100	1560	5920	43	687	2750	30	223
27	5680	100	1530	5170	36	503	2510	28	190
28	5470	39	576	4490	46	558	2390	24	155
29	5340	29	418	4230	39	445	2550	30	207
30	5010	44	595	5170	39	544	3110	26	218
31	---	---	---	5300	36	515	---	---	---
TOTAL	328930	---	69380	118370	---	20071	111920	---	9275
JULY			AUGUST			SEPTEMBER			
1	4720	33	421	1780	26	125	1310	64	226
2	4540	34	417	1620	28	122	1740	67	315
3	4140	32	358	1500	30	121	2140	62	358
4	5180	50	699	1400	35	132	2650	108	773
5	7940	45	965	1430	39	151	2780	94	706
6	7850	28	593	2420	67	438	2550	130	895
7	6950	32	600	2910	31	244	2310	116	723
8	6480	35	612	2590	36	252	1910	30	155
9	6310	31	528	4520	44	537	1720	21	98
10	6300	36	612	4910	36	477	1620	29	127
11	6100	32	527	3160	37	316	1550	31	130
12	5400	30	437	2440	35	231	1490	38	153
13	4520	34	415	2060	22	122	1420	46	176
14	3820	33	340	1870	24	121	1380	26	97
15	3210	33	286	1690	38	173	1490	27	109
16	2810	32	243	1580	50	213	1880	26	132
17	2510	32	217	1430	52	201	1600	36	156
18	2410	34	221	1380	48	179	1550	30	126
19	2610	41	289	1300	50	175	1550	37	155
20	3310	30	268	1220	39	128	1460	28	110
21	3030	33	270	1250	34	115	1440	31	121
22	2580	39	272	1240	48	161	1440	44	171
23	2470	54	360	1400	38	144	1440	40	156
24	2390	52	336	1430	42	162	1440	33	128
25	2170	46	270	3310	101	903	1440	50	194
26	1960	45	238	2550	142	978	1450	38	149
27	1820	33	162	2460	97	644	1650	52	232
28	1810	30	147	2110	84	479	1840	49	243
29	2290	20	124	1900	71	364	2020	40	218
30	2270	24	147	1690	79	360	1800	48	233
31	1980	30	160	1360	71	261	---	---	---
TOTAL	121880	---	11534	63910	---	9029	52060	---	7565
YEAR	2638520		690518						

## RESERVOIRS IN MUSKINGUM RIVER BASIN, OH

- 03119500 BOLIVAR RESERVOIR NEAR BOLIVAR.--Lat 40°38'56", long 81°25'57", Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Sandy Creek, 1.1 mi (1.8 km) east of Bolivar. DRAINAGE AREA, 504 mi<sup>2</sup> (1,305 km<sup>2</sup>). PERIOD OF RECORD, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 895.0 ft (272.80 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Reservoir is formed by earthfill dam completed Nov. 15, 1937. Usable capacity 149,500 acre-ft (184 hm<sup>3</sup>) between elevations 895.0 ft (272.80 m) (lowest outlet), and 962.0 ft (293.22 m) (crest of spillway). Dead storage below elevation 895.0 ft (272.80 m), 113 acre-ft (139,000 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 66,440 acre-ft (81.9 hm<sup>3</sup>) Mar. 8, 1979, elevation, 944.90 ft (288.006 m); minimum, 62 acre-ft (76,400 m<sup>3</sup>) Oct. 9, 1933, elevation, 896.30 ft (273.192 m).
- EXTREMES FOR CURRENT YEAR.--Maximum contents, 35,760 acre-ft (44.1 hm<sup>3</sup>) Feb. 7, elevation, 934.24 ft (284.756 m); minimum, 99 acre-ft (122,000 m<sup>3</sup>) Oct. 17, elevation, 896.90 ft (273.375 m).
- 03120000 LEESVILLE LAKE NEAR LEESVILLE.--Lat 40°28'15", long 81°11'40", in E 1/2 sec. 36, T.13 N., R.6 W., Carroll County, Hydrologic Unit 05040001, in gate house of dam on McGuire Creek, 1.4 mi (2.3 km) northeast of Leesville. DRAINAGE AREA, 48.3 mi<sup>2</sup> (125 km<sup>2</sup>). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Leesville Reservoir. Month-end contents prior to September 1939, published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 928.0 ft (282.85 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Lake is formed by earthfill dam completed Oct. 22, 1937. Usable capacity 37,070 acre-ft (45.7 hm<sup>3</sup>) between elevations 928.0 ft (282.85 m) (lowest outlet), and 977.5 ft (297.94 m) (crest of spillway), of which 19,170 acre-ft (23.6 hm<sup>3</sup>) is in the conservation pool. Dead storage below elevation 928.0 ft (282.85 m), 329 acre-ft (406,000 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 26,430 acre-ft (32.6 hm<sup>3</sup>) Apr. 17, 1948, elevation, 969.59 ft (295.531 m); minimum, 41 acre-ft (50,600 m<sup>3</sup>) Oct. 9-25, 1939, elevation, 928.38 ft (282.970 m), but may have been less during period Sept. 18-24, 1940.
- EXTREMES FOR CURRENT YEAR.--Maximum contents, 19,920 acre-ft (24.6 hm<sup>3</sup>) Mar. 22, elevation, 963.75 ft (293.751 m); minimum, 13,690 acre-ft (16.9 hm<sup>3</sup>) Jan. 19, 20, 957.02 ft (291.700 m).
- 03121000 ATWOOD LAKE NEAR NEW CUMBERLAND.--Lat 40°31'34", long 81°17'09", in SE 1/4 sec. 28, T.15 N., R.7 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Indian Fork, 1.5 mi (2.4 km) southeast of New Cumberland. DRAINAGE AREA, 69.9 mi<sup>2</sup> (181 km<sup>2</sup>). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Atwood Reservoir. Month end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 890.0 ft (271.27 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Oct. 11, 1938, nonrecording gage at same site and datum.
- Lake is formed by earthfill dam completed Sept. 23, 1937. Usable capacity 49,690 acre-ft (61.3 hm<sup>3</sup>) between elevations 890.0 ft (271.27 m) (lowest outlet), and 941.0 ft (286.82 m) (crest of spillway), of which 23,590 acre-ft (29.1 hm<sup>3</sup>) is in the conservation pool. Dead storage below elevation 890.0 ft (271.27 m), 8 acre-ft (9,860 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 35,210 acre-ft (43.4 hm<sup>3</sup>) Feb. 8, 1952, elevation, 934.51 ft (284.839 m); minimum, 2.2 acre-ft (2,710 m<sup>3</sup>) Jan. 8, 9, 1940, elevation, 890.36 ft (271.382 m).
- EXTREMES FOR CURRENT YEAR.--Maximum contents, 25,270 acre-ft (31.2 hm<sup>3</sup>) Mar. 21, 22, elevation, 922.50 ft (281.178 m); minimum, 15,990 acre-ft (19.7 hm<sup>3</sup>) Jan. 20, 21, 22, elevation, 922.50 ft (281.178 m).
- 03122000 DOVER LAKE NEAR DOVER.--Lat 40°33'29", long 81°24'46", in SW 1/4 sec. 6, T.9 N., R.1 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Tuscarawas River, 4.2 mi (6.8 km) northeast of Dover. DRAINAGE AREA, 1,404 mi<sup>2</sup> (3,636 km<sup>2</sup>). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Dover Reservoir. Month end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 858.0 ft (261.52 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to Sept. 22, 1938, nonrecording gage at same site and datum.
- Lake is formed by concrete dam completed Nov. 29, 1937. Usable capacity 203,000 acre-ft (250 hm<sup>3</sup>) between elevations 862.0 ft (262.74 m) (lowest outlet), and 916.0 ft (279.20 m) (crest of spillway), of which 1,000 acre-ft (1.23 hm<sup>3</sup>) 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.
- EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 109,000 acre-ft (134 hm<sup>3</sup>) July 12, 1969, elevation, 905.00 ft (275.844 m); no contents several days during most years.
- EXTREMES FOR CURRENT YEAR.--Maximum contents, 34,500 acre-ft (42.5 hm<sup>3</sup>) Feb. 4, elevation, 891.82 ft (271.827 m); no contents many days in Aug. and Sept.
- 03123500 BEACH CITY LAKE NEAR BEACH CITY.--Lat 40°38'06", long 81°33'30", in T.10 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Sugar Creek, 1.6 mi (2.6 km) southeast of Beach City. DRAINAGE AREA, 300 mi<sup>2</sup> (777 km<sup>2</sup>). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Beach City Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 931.0 ft (283.77 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to Feb. 4, 1939, nonrecording gage at same site and datum.
- Lake is formed by earthfill dam completed Aug. 13, 1937. Usable capacity 71,650 acre-ft (88.3 hm<sup>3</sup>) between elevations 931.0 ft (283.77 m) (lowest outlet), and 976.5 ft (297.64 m) (crest of spillway), of which 1,700 acre-ft (2.10 hm<sup>3</sup>) 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 70,120 acre-ft (86.5 hm<sup>3</sup>) July 6, 1969, elevation, 976.25 ft (297.561 m); minimum, 1.1 acre-ft (1,360 m<sup>3</sup>) several days in September and October 1939, elevation, 931.60 ft (283.952 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 17,600 acre-ft (21.7 hm<sup>3</sup>) Feb. 2, 3, elevation, 962.38 ft (293.333 m); minimum, 1,850 acre-ft (2.28 hm<sup>3</sup>) Sept. 20-25, elevation, 948.33 ft (289.051 m).

## MUSKINGUM RIVER BASIN

## RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

03125500 PIEDMONT LAKE AT PIEDMONT.--Lat 40°11'31", long 81°12'57", in SE 1/4 sec. 35, T.10 N., R.6 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Stillwater Creek, 0.4 mi (0.6 km) west of Piedmont. DRAINAGE AREA, 85.9 mi<sup>2</sup> (222 km<sup>2</sup>). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Piedmont Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 881.75 ft (268.757 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed May 22, 1937. Usable capacity 64,990 acre-ft (80.1 hm<sup>3</sup>) between elevations 881.75 ft (lowest outlet), and 924.6 ft (281.82 m) (crest of spillway), of which 33,500 acre-ft (41.3 hm<sup>3</sup>) is in the conservation pool. Dead storage below elevation 881.75 ft (268.757 m), 71 acre-ft (87,500 m<sup>3</sup>). 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.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 55,660 acre-ft (68.6 hm<sup>3</sup>) Aug. 25, 1980 elevation, 921.55 ft (280.888 m); minimum, 26 acre-ft (32,100 m<sup>3</sup>) Sept. 18-25, 1939, elevation, 882.25 ft (268.910 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 35,900 acre-ft (44.3 hm<sup>3</sup>) July 6, elevation, 914.04 ft (278.599 m); minimum, 23,160 acre-ft (28.6 hm<sup>3</sup>) Dec. 31, elevation, 908.03 ft (276.768 m).

03126500 CLENDENING LAKE NEAR TIPPECANOE.--Lat 40°16'10", long 81°16'43", in NW 1/4 sec. 16, T.12 N., R.7 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Brushy Fork, 0.6 mi (1.0 km) east of Tippecanoe. DRAINAGE AREA, 69.3 mi<sup>2</sup> (179 km<sup>2</sup>). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Clendenning Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 862.00 ft (262.738 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to July 11, 1938, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed Nov. 1, 1937. Usable capacity 53,970 acre-ft (66.5 hm<sup>3</sup>) between elevations 862.0 ft (262.74 m) (lowest outlet), and 910.5 ft (277.52 m) (crest of spillway), of which 26,470 acre-ft (32.6 hm<sup>3</sup>) is in the conservation pool. Dead storage below elevation 862.0 ft (262.74 m) 27 acre-ft (33,300 m<sup>3</sup>). 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.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 50,050 acre-ft (61.7 hm<sup>3</sup>) Aug. 23, 1980, elevation, 908.99 ft (277.060 m); minimum, 5.9 acre-ft (7,270 m<sup>3</sup>) Nov. 4, 1938, elevation, 862.33 ft (262.838 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 26,740 acre-ft (33.0 hm<sup>3</sup>) Apr. 13, elevation, 898.14 ft (273.753 m); minimum, 18,470 acre-ft (22.8 hm<sup>3</sup>) Dec. 16, elevation, 893.00 ft (272.186 m).

03128000 TAPPAN LAKE NEAR TAPPAN.--Lat 40°21'24", long 81°13'38", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Little Stillwater Creek, 0.9 mi (1.4 km) west of Tappan. DRAINAGE AREA.--71.1 mi<sup>2</sup> (184 km<sup>2</sup>). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Tappan Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 870.0 ft (265.18 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Oct. 24, 1936. Usable capacity 61,500 acre-ft (75.8 hm<sup>3</sup>) between elevations 870.0 ft (265.18 m) (lowest outlet), and 909.0 ft (277.06 m) (crest of spillway), of which 35,070 acre-ft (43.2 hm<sup>3</sup>) is in conservation pool. Dead storage below elevation 870.0 ft (265.18 m), 46 acre-ft (56,700 m<sup>3</sup>). 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.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 51,290 acre-ft (63.2 hm<sup>3</sup>) Aug. 23, 1980, elevation, 905.55 ft (276.012 m); no contents Sept. 29, 1939.

EXTREMES FOR CURRENT YEAR: Maximum contents, 36,230 acre-ft (44.7 hm<sup>3</sup>) Mar. 22, 23, elevation, 899.78 ft (274.253 m); minimum, 23,440 acre-ft (28.9 hm<sup>3</sup>) Dec. 5, elevation, 893.89 ft (272.458 m).

03129500 CHARLES MILL LAKE NEAR MIFFLIN.--Lat 40°44'26", long 82°21'47", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Black Fork, 2.5 mi (4.0 km) south of Mifflin. DRAINAGE AREA, 215 mi<sup>2</sup> (557 km<sup>2</sup>). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Charles Mill Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 987.0 ft (300.84 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Aug. 17, 1936. Usable capacity 87,690 acre-ft (108 hm<sup>3</sup>) between elevations 987.0 ft (300.84 m) (lowest outlet), and 1,020.0 ft (310.90 m) (crest of spillway), of which 7,090 acre-ft (8.74 hm<sup>3</sup>) is in the conservation pool. Dead storage below elevation 987.0 ft (300.84 m), 310 acre-ft (382,000 m<sup>3</sup>). 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.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 53,480 acre-ft (65.9 hm<sup>3</sup>) Jan. 25, 1959, elevation, 1,013.53 ft (308.924 m); minimum, 733 acre-ft (904,000 m<sup>3</sup>) Dec. 24, 1965, elevation, 989.89 ft (301.718 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 16,960 acre-ft (20.9 hm<sup>3</sup>) Feb. 5, elevation, 1,002.76 ft (305.641 m); minimum, 2,740 acre-ft (3.38 hm<sup>3</sup>) Nov. 19, elevation, 993.17 ft (302.718 m).

## RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

- 03133000 PLEASANT HILL LAKE NEAR PERRYVILLE.--Lat 40°37'26", long 82°19'33", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Clear Fork, 2.5 mi (4.0 km) south of Perryville. DRAINAGE AREA, 197 mi<sup>2</sup> (510 km<sup>2</sup>). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Pleasant Hill Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 971.75 ft (296.189 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Lake is formed by earthfill dam completed Feb. 1, 1938. Usable capacity 87,640 acre-ft (108 hm<sup>3</sup>) between elevations 971.75 ft (296.189 m) (lowest outlet), and 1,065.0 ft (324.61 m) (crest of spillway), of which 13,510 acre-ft (16.7 hm<sup>3</sup>) is in the conservation pool. Dead storage below elevation 971.75 ft (296.189 m), 12 acre-ft (14,800 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 43,530 acre-ft (53.7 hm<sup>3</sup>) Jan. 23, 1959, elevation, 1,044.01 ft (318.214 m); minimum, 74 acre-ft (91,200 m<sup>3</sup>) May 8, 1938, elevation, 976.63 ft (297.677 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 18,620 acre-ft (23.0 hm<sup>3</sup>) Mar. 21, elevation, 1,025.48 ft (312.566 m); minimum, 7,890 acre-ft (9.73 hm<sup>3</sup>) Dec. 7, elevation, 1,012.26 ft (308.537 m).
- 03134500 MOHICANVILLE RESERVOIR NEAR MOHICANVILLE.--Lat 40°43'28", long 82°09'08", in SE 1/4 sec. 34, T.21 N., R.15 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Lake Fork, 2 mi (3 km) east of Mohicanville. DRAINAGE AREA, 271 mi<sup>2</sup> (702 km<sup>2</sup>). PERIOD OF RECORD, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 932.0 ft (284.07 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Reservoir is formed by earthfill dam completed Dec. 24, 1936. Usable capacity 102,000 acre-ft (126 hm<sup>3</sup>) between elevations 932.0 ft (284.07 m) (lowest outlet), and 963.0 ft (293.52 m) (crest of spillway). Dead storage below elevation 932.0 ft (284.07 m), 18 acre-ft (22,200 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 96,330 acre-ft (119 hm<sup>3</sup>) July 7, 1969, elevation, 962.35 ft (293.324 m); minimum, 9.9 acre-ft (12,200 m<sup>3</sup>) several days in 1941, 1944, 1945; minimum elevation, 932.38 ft (284.189 m) several days in August, September, October, 1941.
- EXTREMES FOR CURRENT YEAR: Maximum contents, 12,720 acre-ft (15.7 hm<sup>3</sup>) Mar. 18, elevation, 947.84 ft (288.902 m); minimum, 31 acre-ft (38,220 m<sup>3</sup>) Aug. 30-Sept. 1, elevation, 933.14 ft (284.421 m).
- 03136300 NORTH BRANCH KOKOSING RIVER LAKE NEAR FREDERICKTOWN.--Lat 40°30'24", long 82°34'36", in SW 1/4 sec. 19, T.8 N., R.14 W., Knox County, Hydrologic Unit 05040003, at dam on North Branch Kokosing River, 2.5 mi (4.0 km) northwest of Fredericktown, and 3.0 mi (4.8 km) upstream from East Branch Kokosing River. DRAINAGE AREA, 44.5 mi<sup>2</sup> (115 km<sup>2</sup>). PERIOD OF RECORD, July 1973 to current year. GAGE, Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).
- Lake is formed by earthfill dam, with uncontrolled saddle spillway; storage began June 1972. Usable capacity, 940 acre-ft (1.16 hm<sup>3</sup>) between elevation, 1,108.0 ft (337.72 m) (invert of lowest outlet) and 1,121.0 ft (341.68 m) (uncontrolled entrance to outlet works). Dead storage below elevation 1,108.0 ft (337.72 m), 103 acre-ft (127,000 m<sup>3</sup>). Additional flood retention capacity 13,840 acre-ft (17.1 hm<sup>3</sup>) between 1,121.0 ft (341.68 m) and 1,146.0 ft (349.30 m) (crest of spillway). Figures given herein represent usable contents. Reservoir is used for flood control, recreation, and conservation. Lowest outlet is normally closed to maintain a pool elevation of 1,121.0 ft (341.68 m). Capacity table furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 5,620 acre-ft (6.93 hm<sup>3</sup>) Feb. 24, 1975, elevation, 1,134.98 ft (345.942 m); minimum, 761 acre-ft (0.94 hm<sup>3</sup>) Mar. 28, 1978, elevation, 1,119.72 ft (341.291 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 2,750 acre-ft (3.39 hm<sup>3</sup>) Feb. 1, elevation, 1,128.50 ft (343.967 m); minimum, 878 acre-ft (1.08 hm<sup>3</sup>) Oct. 6, elevation, 1,120.57 ft (341.550 m).
- 03138000 MOHAWK RESERVOIR NEAR NELLIE.--Lat 40°21'12", long 82°05'12", in SW 1/4 sec. 6, T.6 N., R.8 W., Coshocton County, Hydrologic Unit 05040003, in gate house of dam on Walhonding River, 1.5 mi (2.4 km) northwest of Nellie. DRAINAGE AREA, 1,504 mi<sup>2</sup> (3,895 km<sup>2</sup>). PERIOD OF RECORD, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 799.2 ft (243.60 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Reservoir is formed by earthfill dam completed Sept. 22, 1937. Usable capacity 284,900 acre-ft (351 hm<sup>3</sup>) between elevations 799.2 ft (243.60 m) (lowest outlet) and 890.0 ft (271.27 m) (crest of spillway). Dead storage below elevation 799.2 ft (243.60 m), 59 acre-ft (72,700 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 176,000 acre-ft (217 hm<sup>3</sup>) Jan. 25, 1959, elevation, 873.94 ft (266.377 m); minimum, 44 acre-ft (54,300 m<sup>3</sup>) Sept. 21, Oct. 4, 1955; minimum elevation, 800.35 ft (243.947 m) Oct. 4, 1955, from graph based on gage readings.
- EXTREMES FOR CURRENT YEAR: Maximum contents, 43,440 acre-ft (53.6 hm<sup>3</sup>) Feb. 2, elevation, 843.46 ft (257.087 m); minimum, 81 acre-ft (99,870 m<sup>3</sup>) Sept. 21, 22, elevation, 801.14 ft (244.187 m).

## RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

- 03141000 SENECAVILLE LAKE NEAR SENECAVILLE.--Lat 39°55'31", long 81°26'06", Guernsey County, Hydrologic Unit 05040005, in gate house of dam on Seneca Fork, 1.5 mi (2.4 km) southeast of Senecaville. DRAINAGE AREA, 118 mi<sup>2</sup> (306 km<sup>2</sup>). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Senecaville Reservoir. Month-end contents prior to September 1939 published in WSP 1305. REVISED RECORDS, WRD OH-79-1: 1978 (change-in-contents). GAGE, water-stage recorder. Datum of gage is 812.05 ft (247.513 m) National Geodetic Vertical Datum 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.
- Lake is formed by earthfill dam completed May 14, 1937. Usable capacity 86,340 acre-ft (106 hm<sup>3</sup>) between elevations 812.05 ft (247.513 m) (lowest outlet), and 842.5 ft (256.79 m) (top of taintor gates), of which 41,300 acre-ft (50.9 hm<sup>3</sup>) is in conservation pool. Usable capacity at elevation 831.0 ft (253.29 m) (crest of spillway), 37,180 acre-ft (45.8 hm<sup>3</sup>). Dead storage below elevation 812.05 ft (247.513 m), 1,950 acre-ft (2.40 hm<sup>3</sup>). Figures given herein represent usable contents. Taintor gates normally remain closed to maintain conservation pool at elevation 832.2 ft (253.65 m) 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 65,530 acre-ft (80.8 hm<sup>3</sup>) Aug. 15, 16, 1980, elevation, 838.20 ft (255.483 m); minimum, 360 acre-ft (444,000 m<sup>3</sup>) Oct. 22, 23, 1939, elevation, 812.53 ft (247.659 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 43,020 acre-ft (53.0 hm<sup>3</sup>) June 1, elevation, 832.68 ft (253.801 m); minimum, 18,170 acre-ft (22.4 hm<sup>3</sup>) Nov. 22, 23, elevation, 824.24 ft (251.228 m).
- 03142290 SALT FORK LAKE NEAR CAMBRIDGE.--Lat 40°06'15", long 81°33'15", in T.3 N., R.3 W., Guernsey County, Hydrologic Unit 05040005, at outlet works near left end of dam on Salt Fork, 0.8 mi (1.3 km) upstream from mouth, 5.0 mi (8.0 km) north of Cambridge, and 3.5 mi (5.6 km) south of Kimbolton. DRAINAGE AREA, 159 mi<sup>2</sup> (412 km<sup>2</sup>). PERIOD OF RECORD, September 1968 to current year. GAGE, water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.
- 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 (51.7 hm<sup>3</sup>) between elevations 772.5 ft (235.46 m) (invert of lowest outlet) and 800.0 ft (243.84 m) (crest of morning-glory spillway). Dead storage below elevation 772.5 ft (235.46 m), 1,250 acre-ft (1.54 hm<sup>3</sup>). Additional flood-retention capacity, 28,600 acre-ft (35.3 hm<sup>3</sup>) between elevations 800.0 ft (243.84 m) and 808.0 ft (246.28 m) (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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 72,570 acre-ft (89.5 hm<sup>3</sup>) Aug. 13, 1980, elevation, 808.48 ft (246.425 m); minimum, 12,200 acre-ft (15.0 hm<sup>3</sup>) Oct. 17, 1968, elevation, 786.53 ft (239.734 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 52,940 acre-ft (65.3 hm<sup>3</sup>) Feb. 2, 3, elevation, 803.37 ft (244.867 m); minimum, 41,830 acre-ft (51.9 hm<sup>3</sup>) Sept. 23, 24, 26, elevation, 799.96 ft (243.828 m).
- 03143000 WILLS CREEK LAKE NEAR WILLS CREEK.--Lat 40°09'25", long 81°51'00", in SE 1/4 sec. 23, T.4 N., R.6 W., Coshocton County, Hydrologic Unit 05040005, in gate house of dam on Wills Creek, 1.3 mi (2.1 km) south of village of Wills Creek, and 4.0 mi (6.4 km) southwest of Conesville. DRAINAGE AREA, 842 mi<sup>2</sup> (2,181 km<sup>2</sup>). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Wills Creek Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 733.0 ft (223.42 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Lake is formed by earthfill dam completed Oct. 13, 1937. Usable capacity, 194,400 acre-ft (240 hm<sup>3</sup>) between elevations 733.0 ft (223.42 m) (lowest outlet), and 779.0 ft (237.44 m) (crest of spillway), of which 4,420 acre-ft (5.45 hm<sup>3</sup>) is in conservation pool. Dead storage below elevation 733.0 ft (223.42 m), 1,580 acre-ft (1.95 hm<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 169,700 acre-ft (209 hm<sup>3</sup>) Mar. 15, 1964, elevation, 776.73 ft (236.747 m); minimum, 300 acre-ft (370,000 m<sup>3</sup>) Oct. 22, 23, 1939, elevation, 734.10 ft (223.754 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 39,560 acre-ft (48.8 hm<sup>3</sup>) Feb. 5, elevation, 757.55 ft (230.901 m); minimum, 3,920 acre-ft (4.83 hm<sup>3</sup>) Sept. 24, elevation, 741.40 ft (225.979 m).
- 03147300 DILLON LAKE NEAR DILLON FALLS.--Lat 39°59'32", long 82°04'57", in T.1 N., R.8 W., Muskingum County, Hydrologic Unit 05040006, in outlet works of control tower at dam on Licking River, 2 mi (3 km) northwest of Dillon Falls, and 5.8 mi (9.3 km) upstream from mouth at Zanesville. DRAINAGE AREA, 742 mi<sup>2</sup> (1,922 km<sup>2</sup>). PERIOD OF RECORD, January 1961 to current year. Prior to October 1971 published as Dillon Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.
- 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 (338 hm<sup>3</sup>) between elevations 704.0 ft (214.58 m) (lowest outlet) and 790.0 ft (240.79 m) (crest of spillway) of which 13,170 acre-ft (16.2 hm<sup>3</sup>) is in conservation pool. Dead storage below elevation 704.0 ft (214.58 m), 30 acre-ft (37,000 m<sup>3</sup>). 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. Capacity curve furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 142,600 acre-ft (176 hm<sup>3</sup>) Mar. 13, 1964, elevation, 772.88 ft (235.574 m); minimum observed, 208 acre-ft (256,000 m<sup>3</sup>) Mar. 31, 1961, elevation, 710.94 ft (216.694 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 83,280 acre-ft (103 hm<sup>3</sup>) Feb. 3, 4, elevation, 759.98 ft (231.642 m); minimum, 13,070 acre-ft (16.1 hm<sup>3</sup>) Mar. 28; elevation, 733.96 ft (223.711 m).

## RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03119500 BOLIVAR RESERVOIR				03120000 LEESVILLE LAKE			03121000 ATWOOD LAKE		
Sept. 30.....	897.88	176	--	962.66	18,830	--	927.75	23,220	--
Oct. 31.....	897.18	120	-56	962.64	18,810	-20	927.61	23,010	-210
Nov. 30.....	897.88	176	+56	959.29	15,680	-3,130	924.94	19,110	-3,900
Dec. 31.....	899.43	346	+170	957.20	13,840	-1,840	922.58	16,090	-3,020
CAL YR 1981	--	--	+142	--	--	+20	--	--	+50
Jan. 31.....	915.60	7,790	+7,444	959.77	16,110	+2,270	924.47	18,500	+2,410
Feb. 28.....	901.30	635	-7,155	960.33	16,620	+510	925.58	20,000	+1,500
Mar. 31.....	903.55	1,120	+485	962.77	18,940	+2,320	928.22	23,940	+3,940
Apr. 30.....	899.05	297	-823	962.77	18,940	0	927.86	23,380	-560
May 31.....	898.30	218	-79	962.72	18,890	-50	927.80	23,290	-90
June 30.....	899.05	297	+79	962.73	18,900	+10	927.83	23,340	+50
July 31.....	897.73	164	-133	962.62	18,790	-110	927.72	23,170	-170
Aug. 31.....	897.70	162	-2.0	962.53	18,700	-90	927.57	22,950	-220
Sept. 30.....	897.68	160	-2.0	962.65	18,820	+120	927.71	23,160	+210
WTR YR 1982	--	--	-16	--	--	-10	--	--	-60
03122000 DOVER LAKE				03123500 BEACH CITY LAKE			03125500 PIEDMONT LAKE		
Sept. 30.....	865.19	1.0	--	948.46	1,910	--	912.80	33,060	--
Oct. 31.....	865.24	1.2	+0.2	948.51	1,930	+20	912.82	33,100	+40
Nov. 30.....	866.34	12	+10.8	948.57	1,960	+30	908.14	23,370	-9,730
Dec. 31.....	867.63	51	+39	949.04	2,180	+220	908.08	23,260	-110
CAL YR 1981	--	--	+41.8	--	--	-30	--	--	-2,050
Jan. 31.....	882.91	9,540	+9,489	955.21	6,990	+4,810	910.21	27,460	+4,200
Feb. 28.....	868.25	76	-9,464	949.40	2,380	-4,610	911.04	29,170	+1,710
Mar. 31.....	872.09	483	+407	950.63	3,100	+720	912.57	32,550	+3,380
Apr. 30.....	866.86	24	-459	948.91	2,120	-980	913.05	33,620	+1,070
May 31.....	866.50	16	-8	948.78	2,060	-60	913.09	33,710	+90
June 30.....	867.72	54	+38	949.37	2,360	+300	913.18	33,920	+210
July 31.....	865.10	0.5	-53.5	948.46	1,910	-450	912.86	33,190	-730
Aug. 31.....	865.00	0	-0.5	948.35	1,860	-50	912.79	33,040	-150
Sept. 30.....	865.05	0.2	+0.2	948.42	1,890	+30	912.84	33,150	+110
WTR YR 1982	--	--	-0.8	--	--	-20	--	--	+90
03126500 CLENDENING LAKE				03128000 TAPPAN LAKE			03129500 CHARLES MILL LAKE		
Sept. 30.....	897.70	25,960	--	898.94	34,220	--	997.10	7,230	--
Oct. 30.....	897.70	25,960	0	898.87	34,060	-160	995.50	5,180	-2,050
Nov. 30.....	895.21	21,810	-4,150	894.69	25,030	-9,030	993.98	3,480	-1,700
Dec. 31.....	893.15	18,680	-3,130	894.63	24,910	-120	997.33	7,550	+4,070
CAL YR 1981	--	--	-170	--	--	+1,270	--	--	+3,270
Jan. 31.....	895.86	22,850	+4,170	894.77	25,190	+280	998.10	8,640	+1,090
Feb. 28.....	895.96	23,010	+160	897.84	31,700	+6,510	998.68	9,510	+870
Mar. 31.....	897.54	25,690	+2,680	898.26	32,650	+950	997.57	7,890	-1,620
Apr. 30.....	897.88	26,270	+580	899.29	35,050	+2,400	997.14	7,290	-600
May 31.....	897.90	26,300	+30	899.22	34,880	-170	997.17	7,330	+40
June 30.....	897.80	26,130	-170	899.11	34,620	-260	997.37	7,610	+280
July 31.....	897.60	25,790	-340	898.93	34,190	-430	997.05	7,160	-450
Aug. 31.....	897.56	25,720	-70	898.70	33,660	-530	997.05	7,160	0
Sept. 30.....	897.56	25,720	0	898.56	33,340	-320	997.14	7,290	+130
WTR YR 1982	--	--	-240	--	--	-880	--	--	+60
03133000 PLEASANT HILL LAKE				03134500 MOHICANVILLE RESERVOIR			03136300 KOKOSING RIVER LAKE		
Sept. 30... 1,019.40	13,020	--		933.28	37	--	1,121.24	980	--
Oct. 31... 1,019.41	13,030	+10		933.41	42	+5	1,121.30	990	+10
Nov. 30... 1,012.60	8,100	-4,930		933.56	48	+6	1,121.49	1,020	+30
Dec. 31... 1,012.60	8,100	0		934.77	107	+59	1,121.59	1,040	+20
CAL YR 1981	--	--	+140	--	--	+51	--	--	+20
Jan. 31... 1,020.31	13,790	+5,690		943.67	3,480	+3,373	1,128.23	2,660	+1,620
Feb. 28... 1,014.94	9,640	-4,150		937.23	286	-3,194	1,121.82	1,080	-1,580
Mar. 31... 1,020.82	14,250	+4,610		940.52	798	+512	1,123.33	1,360	+280
Apr. 30... 1,019.73	13,290	-960		934.23	78	-720	1,121.52	1,030	-330
May 31... 1,019.76	13,320	+30		934.06	68	-10	1,121.50	1,020	-10
June 30... 1,019.85	13,390	+70		934.73	105	+37	1,121.60	1,040	+20
July 31... 1,019.36	12,980	-410		933.18	33	-72	1,121.05	948	-92
Aug. 31... 1,019.25	12,890	-90		933.14	31	-2	1,121.06	950	+2
Sept. 30... 1,019.23	12,880	-10		933.44	43	+12	1,121.10	956	+6
WTR YR 1982	---	--	-140	--	--	+6	--	--	-24

## MUSKINGUM RIVER BASIN

## RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

## MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03138000 MOWHAWK RESERVOIR				03141000 SENECAVILLE LAKE			03142290 SALT FORK RESERVOIR		
Sept. 30.....	801.56	104	--	832.19	41,260	--	800.30	42,880	--
Oct. 31.....	802.14	139	+35	832.15	41,120	-140	800.21	42,600	-280
Nov. 30.....	803.16	210	+71	824.36	18,480	-22,640	800.46	43,380	+780
Dec. 31.....	805.52	428	+218	826.18	22,910	+4,430	801.22	45,750	+2,370
CAL YR 1981	--	--	+186	--	--	-5,870	--	--	+1,170
Jan. 31.....	832.69	19,780	+19,352	829.66	32,840	+9,930	802.87	51,210	+5,460
Feb. 28.....	807.59	679	-19,101	828.19	28,460	-4,380	801.12	45,430	-5,780
Mar. 31.....	811.14	1,290	+611	831.49	38,850	+10,390	801.72	47,350	+1,920
Apr. 30.....	803.40	230	-1,060	832.32	41,730	+2,880	800.80	44,430	-2,920
May 31.....	803.94	274	+44	832.67	42,990	+1,260	800.59	43,780	-650
June 30.....	804.49	325	+51	832.11	40,970	-2,020	800.43	43,280	-500
July 31.....	801.57	105	-220	832.87	40,140	-830	800.45	43,340	+60
Aug. 31.....	801.29	89	-16	832.03	40,690	+550	800.19	42,540	-800
Sept. 30.....	801.50	101	+12	832.26	41,510	+820	800.03	42,040	-500
WTR YR 1982	--	--	-3	--	--	+250	--	--	-840
03143000 WILLS CREEK LAKE				03147300 DILLON LAKE					
Sept. 30.....	741.66	4,130	--	738.04	19,130	--			
Oct. 31.....	741.67	4,140	+10	737.16	17,720	-1,410			
Nov. 30.....	742.28	4,690	+550	734.07	13,220	-4,500			
Dec. 31.....	743.05	5,460	+770	734.11	13,270	+50			
CAL YR 1981	--	--	+610	--	--	+4,460			
Jan. 31.....	747.04	11,090	+5,630	752.58	55,760	+42,490			
Feb. 28.....	743.22	5,660	-5,430	734.10	13,260	-42,500			
Mar. 31.....	744.21	6,840	+1,180	734.92	14,380	+1,120			
Apr. 30.....	742.64	5,050	-1,790	739.09	20,910	+6,530			
May 31.....	743.20	5,630	+580	737.97	19,010	-1,900			
June 30.....	741.84	4,290	-1,340	737.32	17,970	-1,040			
July 31.....	741.75	4,210	-80	737.08	17,590	-380			
Aug. 31.....	741.73	4,190	-20	737.09	17,600	+10			
Sept. 30.....	741.62	4,100	-90	737.18	17,750	+150			
WTR YR 1982	--	--	-130	--	--	-1,380			

## HOCKING RIVER BASIN

105

03157000 CLEAR CREEK NEAR ROCKBRIDGE, OH

LOCATION.--Lat 39°35'18", long 82°34'43", in NE 1/4 sec. 20, T.13 N., R.18 W., Hocking County, Hydrologic Unit 05030204, on left bank at upstream side of county road bridge, 400 ft (122 m) downstream from unnamed right bank tributary, 2.0 mi (3.2 km) upstream from mouth, and 3 mi (5 km) west of Rockbridge.

DRAINAGE AREA.--89.0 mi<sup>2</sup> (231 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1305: 1940(M), 1943(M), 1945(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.13 ft (231.688 m) National Geodetic Vertical Datum of 1929. Prior to May 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for the winter periods, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 89.0 ft<sup>3</sup>/s (2.520 m<sup>3</sup>/s), 13.58 in/yr (345 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft<sup>3</sup>/s (453 m<sup>3</sup>/s) July 22, 1948, gage height, 17.68 ft (5.389 m) (from high-water mark in well), from rating curve extended above 4,300 ft<sup>3</sup>/s (122 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum, 3.0 ft<sup>3</sup>/s (0.085 m<sup>3</sup>/s) Dec. 29, 1947, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,520 ft<sup>3</sup>/s (43.0 m<sup>3</sup>/s) Jan. 31, gage height, 6.91 ft (2.106 m) no peak above base of 1,900 ft<sup>3</sup>/s (53.8 m<sup>3</sup>/s); minimum 13 ft<sup>3</sup>/s (0.37 m<sup>3</sup>/s) Sept. 12, 13, 17-20, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	22	35	38	473	59	149	38	58	30	16	17
2	16	20	33	34	195	59	110	38	52	27	16	39
3	15	23	27	36	140	61	342	38	44	28	16	27
4	16	26	28	107	100	78	194	38	39	57	52	19
5	17	28	27	73	80	141	142	36	63	50	36	16
6	19	30	25	52	68	96	146	35	50	33	22	15
7	16	28	25	46	62	84	107	35	41	37	31	15
8	18	26	24	36	56	71	98	57	40	35	120	15
9	18	29	23	34	54	65	100	43	43	43	54	15
10	17	32	23	33	50	60	86	36	85	32	30	15
11	17	30	24	33	48	165	82	34	48	30	31	14
12	18	27	23	32	47	295	73	33	43	26	26	13
13	19	25	23	32	45	282	70	33	43	25	21	13
14	18	24	23	31	45	188	62	30	40	25	19	14
15	17	22	23	31	90	172	59	29	35	23	18	14
16	18	21	23	31	246	240	56	28	145	22	17	15
17	18	20	24	30	362	217	83	27	124	21	16	13
18	19	20	23	30	285	151	74	26	70	23	17	13
19	19	24	25	30	274	128	63	27	55	54	16	13
20	21	78	24	30	205	578	59	109	48	26	15	14
21	20	35	24	30	179	456	55	52	43	23	17	14
22	19	27	28	34	138	240	52	268	38	21	15	14
23	29	23	147	400	114	176	47	95	35	21	15	15
24	29	35	65	255	106	143	46	66	32	20	17	15
25	25	32	43	143	83	124	46	54	30	19	45	17
26	23	30	35	204	69	117	45	47	31	19	21	20
27	25	26	35	370	67	99	46	44	30	19	17	22
28	29	24	35	322	62	84	43	67	33	21	16	21
29	27	23	32	237	---	79	40	57	39	19	15	20
30	24	22	28	282	---	77	38	120	37	17	14	18
31	23	---	30	1120	---	186	---	67	---	17	16	---
TOTAL	627	832	1007	4196	3743	4971	2613	1707	1514	863	797	505
MEAN	20.2	27.7	32.5	135	134	160	87.1	55.1	50.5	27.8	25.7	16.8
MAX	29	78	147	1120	473	578	342	268	145	57	120	39
MIN	15	20	23	30	45	59	38	26	30	17	14	13
CFSM	.23	.31	.37	1.52	1.51	1.80	.98	.62	.57	.31	.29	.19
IN.	.26	.35	.42	1.75	1.56	2.08	1.09	.71	.63	.36	.33	.21
CAL YR 1981	TOTAL	35909	MEAN 98.4	MAX 1030	MIN 15	CFSM 1.11	IN 15.01					
WTR YR 1982	TOTAL	23375	MEAN 64.0	MAX 1120	MIN 13	CFSM .72	IN 9.77					

## HOCKING RIVER BASIN

03157500 HOCKING RIVER AT ENTERPRISE, OH

LOCATION.--Lat 39°33'54", long 82°28'30", in NW 1/4 sec. 5, T.14 N., R.17 W., Hocking County, Hydrologic Unit 05030204, at right bank at upstream side of bridge at Enterprise, 4.0 mi (6.4 km) downstream from Buck Run, and 4.3 mi (6.9 km) upstream from Scott Creek.

DRAINAGE AREA.--459 mi<sup>2</sup> (1,189 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 873: 1938. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 723.58 ft (220.547 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except for the winter period, which are fair. Flood flow affected by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm<sup>3</sup>) constructed between 1955 and 1961 upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--52 years, 459 ft<sup>3</sup>/s (13.00 m<sup>3</sup>/s), 13.58 in/yr (345 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,000 ft<sup>3</sup>/s (736 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 21.31 ft (6.495 m), from rating curve extended above 17,000 ft<sup>3</sup>/s (481 m<sup>3</sup>/s) on basis of contracted-opening and slope-area measurement of peak flow; minimum daily, 23 ft<sup>3</sup>/s (0.65 m<sup>3</sup>/s) Aug. 12, 13, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1907, reached a stage of 22.0 ft (6.71 m), from floodmark, discharge, 36,000 ft<sup>3</sup>/s (1,020 m<sup>3</sup>/s), from reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft<sup>3</sup>/s (99.1 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 23	1530	3820 108	9.48 2.890	Feb. 1	0030	*4380 124	*10.41 3.173

Minimum daily discharge, 63 ft<sup>3</sup>/s (1.78 m<sup>3</sup>/s) Aug. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	91	159	205	3860	315	1080	205	256	149	72	83
2	73	90	221	203	2660	306	714	200	235	124	69	161
3	72	97	167	195	1330	330	1280	190	195	124	69	309
4	72	108	149	512	640	383	1320	183	176	306	81	151
5	72	122	147	633	500	1090	812	179	270	304	114	116
6	83	124	139	361	420	761	809	172	289	183	76	99
7	85	116	128	295	350	586	661	169	213	153	88	85
8	80	112	122	233	320	475	558	262	188	161	256	78
9	80	120	116	179	300	409	543	276	183	292	262	73
10	78	141	108	170	280	367	508	205	339	167	238	66
11	78	135	96	170	260	531	475	186	259	145	161	67
12	76	120	94	160	240	1810	440	172	195	126	141	72
13	76	112	91	160	230	1590	409	165	181	114	110	64
14	76	108	90	160	220	1400	370	157	167	106	93	64
15	76	106	89	150	240	1010	342	149	155	99	81	327
16	78	108	88	150	1000	1250	324	141	416	96	75	200
17	80	100	87	150	1590	1710	399	137	690	91	72	133
18	85	93	87	150	1810	1130	483	131	354	126	69	96
19	93	91	87	150	1490	820	396	128	256	137	66	83
20	88	315	87	140	1200	2400	361	436	213	114	63	78
21	86	270	87	140	995	2750	342	342	186	116	70	73
22	86	159	110	170	783	1830	309	736	167	94	66	70
23	118	128	483	2490	621	1140	287	413	165	90	64	73
24	118	153	645	1700	550	846	270	304	147	86	67	72
25	106	176	330	820	465	698	259	235	135	80	483	78
26	104	161	233	800	377	653	256	203	145	75	256	88
27	104	135	211	1400	358	554	262	183	174	75	128	99
28	114	122	213	1800	333	465	241	250	131	78	97	118
29	106	112	203	1400	---	426	221	281	157	78	81	104
30	99	104	167	1700	---	406	211	447	186	75	73	94
31	94	---	149	3120	---	779	---	321	---	73	78	---
TOTAL	2711	3929	5183	20066	23422	29220	14942	7558	6823	4037	3719	3274
MEAN	87.5	131	167	647	837	943	498	244	227	130	120	109
MAX	118	315	645	3120	3860	2750	1320	736	690	306	483	327
MIN	72	90	87	140	220	306	211	128	131	73	63	64
CFSM	.19	.29	.36	1.41	1.82	2.05	1.09	.53	.50	.28	.26	.24
IN.	.22	.32	.42	1.63	1.90	2.37	1.21	.61	.55	.33	.30	.27

CAL YR 1981	TOTAL	195936	MEAN 537	MAX 5720	MIN 69	CFSM 1.17	IN 15.88
WTR YR 1982	TOTAL	124884	MEAN 342	MAX 3860	MIN 63	CFSM .75	IN 10.12

## 03158500 BURR OAK RESERVOIR AT BURR OAK, OH

LOCATION.--Lat 39°32'30", long 82°03'27", near center of sec. 6, T.11 N., R.14 W., Athens County, Hydrologic Unit 05030204, in control house of Tom Jenkins Dam on East Branch Sunday Creek, 0.2 mi (0.3 km) upstream from mouth, 0.4 mi (0.6 km) southeast of Burr Oak, and 3.0 mi (4.8 km) northeast of Glouster.

DRAINAGE AREA.--33.1 mi<sup>2</sup> (85.7 km<sup>2</sup>).

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth dam with emergency spillway; storage began Feb. 2, 1952. Capacity at spillway level, elevation, 740 ft (226 m), 26,900 acre-ft (33.2 hm<sup>3</sup>); of which 9,220 acre-ft (11.4 hm<sup>3</sup>) is in water supply pool. Dead storage, 35 acre-ft (43,200 m<sup>3</sup>). Figures given herein represent usable contents. Reservoir is used for flood control, although water supply pool is operated for increased low flow for recreation and conservation of fish and wildlife. Outflow is controlled by operation of gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,820 acre-ft (22.0 hm<sup>3</sup>) May 31, 1968, elevation, 731.53 ft (222.970 m); minimum, 3,450 acre-ft (4.25 hm<sup>3</sup>) Nov. 20, 1953, elevation, 709.89 ft (216.374 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 11,550 acre-ft (14.2 hm<sup>3</sup>) Mar. 22 elevation, 724.25 ft (220.751 m); minimum, 9,010 acre-ft (11.1 hm<sup>3</sup>) Nov. 19, 20, elevation, 720.67 ft (219.660 m).

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

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	720.90	9160	
Oct. 31.....	720.73	9050	-110
Nov. 30.....	720.69	9020	-30
Dec. 31.....	721.23	9380	+360
CAL YR 1981.....	--	--	+30
Jan. 31.....	721.86	9810	+430
Feb. 28.....	721.06	9270	-540
Mar. 31.....	721.39	9490	+220
Apr. 30.....	721.07	9270	-220
May 31.....	722.54	10290	+1020
June 30.....	721.42	9510	-780
July 31.....	721.12	9310	-200
Aug. 31.....	720.99	9220	-90
Sept. 30.....	721.52	9580	+360
WTR YR 1982.....	--	--	+420

## HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH

## NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION

LOCATION.--Lat 39°19'39", long 82°00'18", Athens County, Hydrologic Unit 05030204, at downstream side of Harmony Lane Bridge, 3.5 mi (5.6 km) east of Athens, 1.1 mi (1.8 km) downstream from Strouds Run, and 2.8 mi (4.5 km) upstream from Scott Creek.

DRAINAGE AREA.--957 mi<sup>2</sup> (2,479 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1931, nonrecording gage at site 5.3 mi (8.5 km) upstream at datum 11.26 ft (3.432 m) higher, Aug. 18, 1931 to June 18, 1970, at datum 14.81 ft (4.514 m) higher, and Oct. 1, 1971 to Sept. 30, 1976, at datum 11.26 ft (3.432 m) higher.

REMARKS.--Records good except those for the winter period, which are fair. Some regulation by Burr Oak Reservoir on East Branch Sunday Creek 34.3 mi (55.2 km) upstream beginning 1952 (see station 03158500); by Hocking Lake, capacity 3,080 acre-ft (3.80 hm<sup>3</sup>), on Clear Fork 44.7 mi (71.9 km) upstream beginning in 1949; by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm<sup>3</sup>), constructed between 1955 and 1961 upstream from Lancaster, and Dow Lake capacity 1,884 acre-ft (2.3 hm<sup>3</sup>), on Strouds Run, 1.1 mi (1.8 km) upstream.

AVERAGE DISCHARGE.--6 years, 1,189 ft<sup>3</sup>/s (33.67 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft<sup>3</sup>/s (725 m<sup>3</sup>/s) Feb. 27, 1979, gage height, 25.45 ft (7.757 m); minimum daily, 81 ft<sup>3</sup>/s (2.29 m<sup>3</sup>/s) Aug. 9, 1977.

EXTREMES OUTSIDE PERIOD RECORD.--Flood of Mar. 11, 1964 reached a stage of 24.18 ft (7.370 m) at site and datum then in use, discharge, 32,900 ft<sup>3</sup>/s (932 m<sup>3</sup>/s). Flood in March 1907 reached a stage of 27 ft (8 m), site and datum then in use, discharge 50,000 ft<sup>3</sup>/s (1,420 m<sup>3</sup>/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,240 ft<sup>3</sup>/s (233 m<sup>3</sup>/s) Mar. 22, gage height, 20.91 ft (6.373 m); minimum daily, 89 ft<sup>3</sup>/s (2.52 m<sup>3</sup>/s) Oct. 4, 5, 14-17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	112	167	264	5830	650	2500	422	1450	461	138	134
2	92	114	208	305	5770	614	1980	413	1190	344	134	140
3	91	146	274	305	3330	625	2100	397	814	534	130	524
4	89	148	234	580	1500	682	3010	373	611	718	130	593
5	89	154	203	1060	1000	1520	2140	353	1130	1120	130	284
6	96	163	199	943	840	2070	1830	335	1770	818	180	209
7	96	178	192	643	720	1530	1710	318	1080	538	143	178
8	98	174	181	498	660	1300	1430	344	784	480	167	158
9	96	172	172	380	600	1080	1320	650	614	988	367	141
10	94	178	167	340	560	937	1260	558	1440	1150	409	132
11	93	194	154	310	520	898	1160	422	1490	650	370	124
12	93	196	148	300	500	2330	1090	370	886	467	287	118
13	93	187	139	280	480	3360	1010	335	674	367	246	120
14	89	174	130	270	460	3600	933	310	597	312	195	120
15	89	159	128	260	450	2690	844	290	477	284	167	152
16	89	128	122	250	1050	3140	795	271	643	263	154	376
17	89	124	120	250	2510	5770	795	253	3670	246	141	315
18	94	124	118	250	3870	3490	960	241	2190	231	130	212
19	94	116	117	240	3090	2380	984	231	1340	284	124	160
20	98	116	115	240	2510	4240	863	290	882	335	122	141
21	98	256	115	240	1990	8000	803	1350	650	263	122	126
22	94	303	133	280	1700	7830	725	2020	524	243	114	118
23	116	210	282	3070	1390	4200	650	2090	444	219	118	114
24	114	187	700	6320	1190	2830	600	1120	403	200	112	110
25	128	187	745	3640	1050	2080	569	703	353	183	122	108
26	137	220	471	1900	890	1710	558	524	332	174	494	110
27	124	213	372	3200	773	1510	555	438	844	165	332	141
28	122	185	331	3900	710	1290	534	758	534	160	200	158
29	118	165	326	2400	---	1150	487	1400	400	160	158	167
30	124	150	303	2340	---	1070	448	3660	507	132	136	163
31	116	---	279	2460	---	1380	---	2390	---	145	124	---
TOTAL	3146	5133	7345	37718	45943	75956	34643	23629	28723	12634	5896	5646
MEAN	101	171	237	1217	1641	2450	1155	762	957	408	190	188
MAX	137	303	745	6320	5830	8000	3010	3660	3670	1150	494	593
MIN	89	112	115	240	450	614	448	231	332	132	112	108
CAL YR 1981	TOTAL	418464	MEAN	1146	MAX	8860	MIN	89				
WTR YR 1982	TOTAL	286412	MEAN	785	MAX	8000	MIN	89				

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: November 1978 to September 1982 (discontinued).

REMARKS.--Water-quality monitor data collected at this site 1966 to 1980.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,290 mg/L Feb. 24, 1979; minimum daily mean, 2 mg/L several days during 1981.

SEDIMENT LOADS: Maximum daily, 52,200 tons (47,400 tonnes) Feb. 24, 1979; minimum daily 0.67 tons (0.61 tonnes) Nov. 18, 1981.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,080 mg/L Feb. 1; minimum daily mean 2 mg/L several days during the year.

SEDIMENT LOADS: Maximum daily 17,000 tons (15,400 tonnes) Feb. 1; minimum daily 0.67 ton (0.61 tonne) Nov. 18.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)
OCT 14...	1030	87	1090	7.9	14.5	3.0	8.5	82	34
DEC 15...	1000	139	955	7.3	2.5	2.6	12.1	88	16
FEB 24...	1000	1200	430	7.4	6.0	30	12.0	96	53
MAY 14...	1300	310	730	7.9	20.5	4.4	9.3	100	--
JUN 22...	1300	531	645	7.5	20.5	13	8.7	96	--
AUG 11...	1000	394	630	7.7	20.0	21	7.1	79	--

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOC- CI, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 14...	1400	120	360	88	34	90	4.4	230	130
DEC 15...	3000	420	330	84	30	62	3.4	180	110
FEB 24...	1700	360	180	46	16	20	2.4	90	39
MAY 14...	180	40	270	67	25	34	2.8	190	61
JUN 22...	360	170	230	60	20	33	2.7	150	59
AUG 11...	2200	850	220	55	19	36	10	150	58

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 14...	.3	3.7	722	659	.660	.91	.99	.180
DEC 15...	.3	6.4	638	550	.350	.77	1.3	.110
FEB 24...	.2	8.0	311	262	.130	.97	2.1	.120
MAY 14...	.2	5.3	459	439	.030	.36	.44	.110
JUN 22...	.2	9.7	460	381	.040	.70	<1.1	.070
AUG 11...	.3	7.9	373	379	.330	.80	1.0	.100

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 14...	1030	3	3	<50	50	2	2	10	<10
DEC 15...	1000	1	0	100	52	1	1	20	10
MAY 14...	1300	1	1	100	58	1	1	20	10
JUN 22...	1300	1	1	100	62	1	1	20	10

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 14...	4	3	7	5	530	<3	21	1	380
DEC 15...	10	6	6	4	510	19	<1	1	1400
MAY 14...	5	5	10	10	1100	5	3	2	430
JUN 22...	7	1	7	5	2000	8	7	4	340

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 14...	380	.2	.2	<1	<1	<1	<1	50	<4
DEC 15...	1400	.1	.1	<1	<1	<1	<1	50	11
MAY 14...	360	<.1	<.1	<1	<1	<1	<1	30	5
JUN 22...	230	.3	.1	<1	<1	<1	<1	50	4

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 14...	1030	87	14.5	7	1.6
DEC 15...	1000	139	2.5	5	1.9
FEB 24...	1000	1200	6.0	85	275
MAY 14...	1300	310	20.5	16	13
JUN 22...	1300	531	20.5	30	43
AUG 11...	1000	394	20.0	40	43

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 14...	1030	--	<.1	--	4.0	--	.5	--	<.1	--	.1
FEB 24...	1000	<.01	--	<.10	--	<.01	--	<.01	--	<.01	--
MAY 14...	1300	<.01	<.1	<.10	<1.0	<.01	<.1	<.01	<.1	<.01	<.1

DATE	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)
OCT 14...	--	--	.2	--	<.1	--	--	<.1	--	<.1
FEB 24...	<.01	<.01	--	<.01	--	<.01	<.01	--	<.01	<.01
MAY 14...	.01	<.01	<.1	<.01	<.1	<.01	<.01	<.1	<.01	<.01

DATE	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT 14...	<.1	--	--	--	--	--	<1.0	--	--	--	--
FEB 24...	--	<.01	<.01	<.01	<.01	<0	--	<.01	<.01	<.01	<.01
MAY 14...	<.1	<.01	<.01	<.01	<.01	<1	<10	<.01	.01	.02	<.01

## HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	93	10	2.5	112	6	1.8	167	10	4.5
2	92	6	1.5	114	36	11	208	10	5.6
3	91	4	.98	146	22	8.6	274	17	13
4	89	7	1.7	148	16	6.4	234	8	5.1
5	89	7	1.7	154	24	10	203	6	3.3
6	96	7	1.8	163	8	3.5	199	6	3.2
7	96	8	2.1	178	6	2.9	192	6	3.1
8	98	5	1.3	174	14	6.6	181	5	2.4
9	96	4	1.0	172	12	5.6	172	20	9.3
10	94	6	1.5	178	24	12	167	2	.90
11	93	7	1.7	194	8	4.2	154	3	1.2
12	93	6	1.5	196	8	4.2	148	2	.80
13	93	6	1.5	187	6	3.0	139	3	1.1
14	89	4	.96	174	6	2.8	130	5	1.8
15	89	19	4.6	159	6	2.6	128	4	1.4
16	89	6	1.4	128	2	.69	122	4	1.3
17	89	6	1.4	124	4	1.3	120	4	1.3
18	94	6	1.5	124	2	.67	118	4	1.3
19	94	4	1.0	116	32	10	117	4	1.3
20	98	4	1.1	116	10	3.1	115	4	1.2
21	98	13	3.4	256	22	15	115	4	1.2
22	94	17	4.3	303	8	6.5	133	2	.72
23	116	10	3.1	210	2	1.1	282	10	7.6
24	114	12	3.7	187	3	1.5	700	195	453
25	128	13	4.5	187	4	2.0	745	173	366
26	137	9	3.3	220	8	4.7	471	38	48
27	124	11	3.7	213	10	5.7	372	16	16
28	122	12	4.0	185	3	1.5	331	15	13
29	118	11	3.5	165	2	.89	326	20	18
30	124	10	3.4	150	4	1.6	303	22	18
31	116	8	2.5	---	---	---	279	16	12
TOTAL	3146	---	72.14	5133	---	141.45	7345	---	1016.62
JANUARY				FEBRUARY			MARCH		
1	264	20	14	5830	1080	17000	650	31	54
2	305	28	23	5770	520	8100	614	34	56
3	305	27	22	3330	370	3330	625	29	49
4	580	151	288	1500	290	1170	682	35	64
5	1060	224	640	1000	180	486	1520	184	955
6	943	129	328	840	110	249	2070	468	2610
7	643	75	130	720	58	113	1530	145	600
8	498	28	38	660	47	84	1300	56	196
9	380	25	26	600	42	68	1080	49	144
10	340	23	21	560	35	53	937	46	116
11	310	19	16	520	40	56	898	62	150
12	300	14	11	500	50	67	2330	568	3730
13	280	7	5.3	480	38	49	3360	452	4100
14	270	8	5.8	460	40	50	3600	625	6080
15	260	10	7.0	450	45	55	2690	225	1630
16	250	10	6.8	1050	143	452	3140	303	3070
17	250	10	6.8	2510	440	2900	5770	730	11400
18	250	9	6.1	3870	190	1980	3490	270	2550
19	240	10	6.5	3090	150	1250	2380	170	1090
20	240	12	7.8	2510	125	848	4240	465	6450
21	240	15	9.7	1990	100	537	8000	740	16000
22	280	80	60	1700	75	343	7830	390	8240
23	3070	908	9540	1390	70	263	4200	235	2670
24	6320	855	14600	1190	68	218	2830	210	1600
25	3640	210	2060	1050	51	144	2080	124	695
26	1900	140	718	890	40	96	1710	92	425
27	3200	42	363	773	32	67	1510	88	360
28	3900	34	358	710	28	54	1290	62	217
29	2400	38	246	---	---	---	1150	50	156
30	2340	117	738	---	---	---	1070	57	165
31	2460	383	3310	---	---	---	1380	190	892
TOTAL	37718	---	33611.8	45943	---	40082	75956	---	76514

## HOCKING RIVER BASIN

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03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

## SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	2500	378	2550	422	14	16	1450	135	529
2	1980	175	935	413	15	17	1190	88	283
3	2100	283	1750	397	16	17	814	52	114
4	3010	660	5370	373	15	15	611	36	59
5	2140	235	1360	353	14	13	1130	676	2720
6	1830	85	419	335	13	12	1770	480	2530
7	1710	60	278	318	14	12	1080	66	192
8	1430	50	193	344	13	12	784	45	95
9	1320	44	156	650	54	95	614	44	73
10	1260	46	157	558	22	33	1440	438	2280
11	1160	64	201	422	20	23	1490	210	843
12	1090	44	129	370	12	12	886	62	148
13	1010	60	163	335	10	9.1	674	38	69
14	933	47	118	310	14	12	597	32	52
15	844	38	87	290	22	17	477	18	23
16	795	38	82	271	24	18	643	270	786
17	795	45	97	253	14	9.6	3670	965	9300
18	960	62	161	241	16	10	2190	245	1450
19	984	48	128	231	19	12	1340	99	359
20	863	38	89	290	60	47	882	50	119
21	803	29	63	1350	723	2660	650	31	54
22	725	28	55	2020	665	4600	524	26	37
23	650	37	65	2090	663	4220	444	22	26
24	600	24	39	1120	130	392	403	15	16
25	569	23	35	703	50	95	353	10	9.5
26	558	18	27	524	25	35	332	16	14
27	555	20	30	438	19	22	844	440	1130
28	534	22	32	758	134	560	534	22	32
29	487	22	29	1400	475	2000	400	26	28
30	448	21	25	3660	737	7910	507	26	36
31	---	---	---	2390	260	1680	---	---	---
TOTAL	34643	---	14823	23629	---	24585.7	28723	---	23406.5
JULY			AUGUST			SEPTEMBER			
1	461	18	22	138	17	6.3	134	24	8.7
2	344	16	15	134	16	5.8	140	20	7.6
3	534	319	727	130	17	6.0	524	200	283
4	718	355	734	130	22	7.7	593	114	183
5	1120	373	1120	130	18	6.3	284	36	28
6	818	95	210	180	15	7.3	209	17	9.6
7	538	26	38	143	20	7.7	178	16	7.7
8	480	62	80	167	28	13	158	14	6.0
9	988	333	1180	367	30	30	141	12	4.6
10	1150	210	650	409	26	29	132	18	6.4
11	650	46	81	370	24	24	124	24	8.0
12	467	28	35	287	14	11	118	16	5.1
13	367	24	24	246	18	12	120	19	6.2
14	312	22	19	195	16	8.4	120	22	7.1
15	284	25	19	167	13	5.9	152	28	11
16	263	20	14	154	13	5.4	376	43	44
17	246	18	12	141	16	6.1	315	21	18
18	231	18	11	130	18	6.3	212	16	9.1
19	284	66	51	124	19	6.4	160	14	6.1
20	335	22	20	122	22	7.2	141	29	11
21	263	15	11	122	16	5.3	126	16	5.4
22	243	24	16	114	17	5.2	118	13	4.1
23	219	20	12	118	18	5.7	114	12	3.7
24	200	15	8.1	112	18	5.4	110	10	3.0
25	183	15	7.4	122	16	5.3	108	14	4.1
26	174	22	10	494	50	67	110	16	4.8
27	165	16	7.1	332	9	8.1	141	20	7.6
28	160	21	9.1	200	8	4.3	158	18	7.7
29	160	16	6.9	158	10	4.3	167	16	7.2
30	132	18	6.4	136	12	4.4	163	20	8.8
31	145	18	7.0	124	14	4.7	---	---	---
TOTAL	12634	---	5163.0	5896	---	331.5	5646	---	726.6
YEAR	286412		220474.31						

## SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OH

LOCATION.--Lat 39°03'49", long 81°52'55", in NE 1/4 sec. 10, T.3N., R.12 W., Meigs County, Hydrologic Unit 05030202, on right bank at downstream side of bridge on Oak Hill Road, 200 ft (61 m) upstream from Sugar Run, 2.8 mi (4.5 km) southeast of Chester, and 8.5 mi (13.7 km) northeast of Pomeroy.

DRAINAGE AREA.--156 mi<sup>2</sup> (404 km<sup>2</sup>), includes that of Sugar Run.

PERIOD OF RECORD.--Water years 1956, 1962-64 (Occasional low-flow measurements), June 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 576.91 ft (175.842 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Water-quality data collected at this site 1965-77, 1979-81. Sediment data collected 1970-74.

AVERAGE DISCHARGE.--17 years, 176 ft<sup>3</sup>/s (4.984 m<sup>3</sup>/s), 15.32 in/yr (389 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft<sup>3</sup>/s (231 m<sup>3</sup>/s) May 25, 1968, gage height, 27.39 ft (8.348 m); minimum, 0.30 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Sept. 7, 8, 9, 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,780 ft<sup>3</sup>/s (78.7 m<sup>3</sup>/s) June 4, gage height 18.17 ft (5.538 m) above base of 2,400 ft<sup>3</sup>/s (68.0 m<sup>3</sup>/s); minimum, 1.0 ft<sup>3</sup>/s (0.028 m<sup>3</sup>/s) Oct. 16, 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	4.5	12	62	888	71	369	43	86	78	8.0	8.4
2	2.4	3.6	16	65	308	67	202	42	62	41	6.9	8.8
3	2.2	3.1	24	65	245	65	313	38	581	35	6.5	12
4	2.0	2.9	24	299	180	66	473	35	2440	683	5.5	26
5	2.0	4.5	20	335	140	109	223	34	550	934	5.5	17
6	2.2	26	17	160	110	123	233	32	189	198	12	10
7	2.4	12	14	117	94	125	234	35	123	107	12	7.2
8	2.9	11	12	74	76	143	174	42	146	609	73	6.1
9	4.5	9.1	10	48	66	180	169	33	342	635	74	4.8
10	3.9	8.2	9.5	31	58	175	163	28	184	213	80	4.5
11	3.4	7.1	8.2	21	52	263	137	25	106	118	47	4.5
12	2.4	6.7	7.5	18	49	1130	119	22	86	89	37	4.2
13	1.8	6.7	6.7	16	47	594	109	20	71	65	29	3.9
14	1.6	6.4	7.1	15	46	568	96	18	59	52	21	4.2
15	1.3	5.7	7.1	15	45	543	80	16	600	43	16	42
16	1.1	6.0	7.1	14	170	744	74	14	800	38	12	27
17	1.0	6.7	7.9	14	785	1730	103	12	450	32	11	13
18	1.5	5.7	8.2	14	678	804	137	12	153	28	9.7	11
19	1.3	5.7	7.1	14	469	343	109	19	89	28	8.4	8.0
20	2.4	7.1	6.7	17	340	1080	89	41	70	38	7.2	5.8
21	4.7	8.2	5.7	32	275	1800	79	63	60	56	7.6	5.5
22	4.5	9.1	9.5	182	214	798	73	47	49	43	9.2	5.1
23	7.5	8.2	143	1720	163	351	68	67	42	28	8.0	3.9
24	14	11	210	1480	137	242	65	36	38	22	5.8	4.2
25	12	19	105	360	113	190	61	25	33	18	8.0	3.7
26	8.6	24	94	372	89	238	58	180	28	14	9.2	5.1
27	9.5	17	44	265	79	216	55	194	35	12	15	16
28	11	14	38	178	78	163	61	905	35	11	24	23
29	9.9	12	45	150	---	139	50	1580	32	11	17	18
30	7.5	9.5	37	131	---	124	45	259	61	12	9.7	12
31	5.7	---	37	249	---	186	---	128	---	9.7	7.6	---
TOTAL	139.0	280.7	1000.3	6533	5994	13370	4221	4045	7600	4300.7	602.8	324.9
MEAN	4.48	9.36	32.3	211	214	431	141	130	253	139	19.4	10.8
MAX	14	26	210	1720	888	1800	473	1580	2440	934	80	42
MIN	1.0	2.9	5.7	14	45	65	45	12	28	9.7	5.5	3.7
CFSM	.03	.06	.21	1.35	1.37	2.76	.90	.83	1.62	.89	.12	.07
IN.	.03	.07	.24	1.56	1.43	3.19	1.01	.96	1.81	1.03	.14	.08

CAL YR 1981 TOTAL 56630.8 MEAN 155 MAX 2930 MIN 1.0 CFSM .99 IN 13.50  
WTR YR 1982 TOTAL 48411.4 MEAN 133 MAX 2440 MIN 1.0 CFSM .85 IN 11.54

RACCOON CREEK BASIN

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03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'48", long 82°18'51", in NE 1/4 SE 1/4 sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank 200 ft (61 m) upstream from State Route 278 crossing, 300 ft (91 m) upstream from Sandy Run, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--1.01 mi<sup>2</sup> (2.62 km<sup>2</sup>).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with concrete weir and 6-inch Parshall flume. Datum of gage is 756.04 ft (230.44 m), National Geodetic Vertical Datum of 1929. Prior to October 1, 1978, at datum 20.00 ft (6.096 m) higher.

REMARKS.--Records fair..

AVERAGE DISCHARGE.--12 years, 1.14 ft<sup>3</sup>/s (0.032 m<sup>3</sup>/s), 15.33 in/yr (389 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft<sup>3</sup>/s (34.0 m<sup>3</sup>/s) June 22, 1974, gage height, 24.72 ft (7.535 m) on basis of culvert and flow-over road measurement; no flow July 30 to Aug. 3, 1975, Sept. 8-14, 27-30, 1977, July 17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53.9 ft<sup>3</sup>/s (1.53 m<sup>3</sup>/s) Mar. 20, gage height, 22.52 ft (6.864 m); minimum, 0.02 ft<sup>3</sup>/s (0.0006 m<sup>3</sup>/s) Aug. 1-4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.05	.27	.10	3.5	.31	2.5	.22	.75	.17	.03	.10
2	.07	.06	.15	.18	1.3	.33	1.8	.22	.54	.12	.02	.20
3	.07	.06	.12	.19	.70	.36	5.8	.20	.37	4.6	.02	.15
4	.07	.05	.11	2.6	.44	1.6	3.4	.19	.32	1.4	.30	.10
5	.08	.05	.11	.61	.36	2.5	2.0	.18	5.0	.90	.13	.09
6	.19	.11	.10	.32	.34	1.3	2.1	.18	1.5	.61	.08	.09
7	.19	.05	.10	.23	.28	.98	1.5	.17	.78	.59	.06	.08
8	.12	.06	.09	.15	.24	.72	1.6	.80	.54	1.0	.30	.08
9	.08	.11	.08	.13	.22	.75	5.4	.50	.41	.93	.82	.08
10	.03	.11	.07	.12	.21	.69	1.8	.36	.62	.54	.33	.08
11	.03	.08	.07	.11	.20	2.1	1.6	.30	.37	.39	.22	.09
12	.03	.07	.06	.10	.19	2.9	.89	.26	.28	.29	.19	.09
13	.03	.06	.06	.10	.18	7.9	.83	.23	.24	.23	.13	.09
14	.03	.06	.06	.09	.20	3.3	.68	.20	.20	.17	.10	.10
15	.03	.06	.05	.09	.68	5.2	.62	.17	.16	.12	.09	.12
16	.03	.05	.05	.09	3.4	15	.67	.14	6.1	.10	.08	.11
17	.03	.05	.05	.08	4.8	7.9	.72	.13	3.3	.08	.07	.11
18	.15	.05	.05	.08	3.4	3.6	.65	.12	1.0	.09	.07	.11
19	.15	.05	.05	.08	2.2	2.3	.58	.11	.62	.10	.05	.11
20	.05	.07	.04	.08	1.8	19	.53	.24	.45	.20	.05	.11
21	.03	.07	.04	.09	1.5	11	.40	.20	.33	.15	.08	.11
22	.03	.06	.09	.91	.90	3.6	.33	.40	.26	.11	.06	.11
23	.13	.05	.96	21	.70	2.1	.32	.20	.22	.09	.06	.11
24	.05	.10	.38	2.5	.65	1.5	.30	.16	.18	.07	.07	.10
25	.08	.10	.19	.84	.49	1.3	.29	.14	.15	.06	.11	.09
26	.08	.08	.14	.47	.36	1.3	.30	.12	.13	.06	.07	.09
27	.07	.08	.13	.35	.38	1.2	.31	.11	.13	.06	.06	.19
28	.09	.07	.12	.33	.34	.98	.26	.15	.13	.07	.07	.21
29	.08	.07	.11	.29	---	.82	.24	7.9	.15	.05	.06	.17
30	.08	.05	.11	.33	---	.76	.22	9.4	.32	.04	.06	.15
31	.07	---	.11	5.1	---	5.0	---	1.6	---	.03	.06	---
TOTAL	2.33	2.04	4.12	37.74	29.96	108.30	38.64	25.30	25.55	13.42	3.90	3.42
MEAN	.075	.068	.13	1.22	1.07	3.49	1.29	.82	.85	.43	.13	.11
MAX	.19	.11	.96	.21	4.8	.19	5.8	9.4	6.1	4.6	.82	.21
MIN	.03	.05	.04	.08	.18	.31	.22	.11	.13	.03	.02	.08
CFSM	.07	.07	.13	1.21	1.06	3.46	1.28	.81	.84	.43	.13	.11
IN.	.09	.08	.15	1.39	1.10	3.98	1.42	.93	.94	.49	.14	.13

CAL YR 1981 TOTAL 469.29 MEAN 1.29 MAX 43 MIN .03 CFSM 1.28 IN 17.27  
WTR YR 1982 TOTAL 294.72 MEAN .81 MAX 21 MIN .02 CFSM .80 IN 10.84

## RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to 1974, 1975 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1971 to current year.

pH: January 1971 to current year.

WATER TEMPERATURES: January 1971 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1978 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

Sediment samples collected daily and on events by observer.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,530 micromhos Sept. 13, 1973; minimum, 72 micromhos Oct. 17, 1975.

pH: Maximum, 7.7 units June 6, 1981; minimum, 2.1 units on several days during October and December 1971, February and March 1972, December 1973.

WATER TEMPERATURES: Maximum, 34.5°C Aug. 12, 1973; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,240 mg/L Aug. 21, 1979; minimum daily mean, 0.0 mg/L many days during previous years.

SEDIMENT LOADS: Maximum daily, 170 tons (69.9 tonnes) June 6, 1981; minimum daily, 0.0 tons many days during previous years.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,030 micromhos Oct. 4; minimum, 138 micromhos Mar. 20.

pH: Maximum recorded, 5.9 units June 16; minimum, 2.4 units Oct. 3, 4.

WATER TEMPERATURES: Maximum, 30.0°C July 16; minimum 0.5°C Dec. 23

SEDIMENT CONCENTRATIONS: Maximum daily mean, 152 mg/L Mar. 20; minimum daily mean, 2.0 mg/L on May 1, Sept. 4.

SEDIMENT LOADS: Maximum daily, 10 tons (9.07 tonnes) Mar. 20; minimum daily, 0.0 tons many days throughout the year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 13...	1400	.04	2700	3.0	14.0	48	1000	1000	17	844	210	120
NOV 16...	1200	.50	2000	2.9	4.5	--	750	750	16	794	165	81
DEC 17...	1000	.50	2020	2.9	1.0	--	720	720	12	596	160	79
JAN 21...	1100	.10	1500	2.8	.5	25	510	510	9.8	487	112	55
FEB 24...	1200	.66	600	3.8	6.5	--	190	190	2.8	139	43	19
MAR 23...	1100	2.0	335	4.2	6.5	--	110	110	1.1	55	26	11
APR 20...	1100	.46	715	3.7	11.0	--	200	200	3.4	169	45	22
MAY 19...	1330	.10	1400	3.5	19.5	--	430	430	8.6	427	95	46
JUN 16...	1200	1.6	480	4.3	17.5	--	170	170	2.0	99	39	17
JUL 14...	1215	.16	1200	3.5	21.0	100	350	350	6.4	102	79	38
AUG 12...	1000	.20	1100	3.2	15.0	--	340	340	4.4	70	77	37
SEP 07...	1100	.07	2200	3.2	17.0	--	630	630	9.6	153	140	68

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)	ALKA- LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT 13...	12	2	.2	5.0	0	0	0	.0	1700	26	2720
NOV 16...	9.8	3	.2	3.5	0	0	0	.0	1300	3.8	1990
DEC 17...	10	3	.2	3.4	0	0	0	.0	1500	2.1	1810
JAN 21...	9.8	4	.2	2.8	0	0	0	.0	840	3.0	1190
FEB 24...	5.2	6	.2	2.1	--	--	0	--	260	7.0	411
MAR 23...	3.3	6	.2	1.6	--	--	0	--	140	2.6	215
APR 20...	5.6	6	.2	1.9	0	0	0	.0	340	3.0	463
MAY 19...	7.8	4	.2	3.0	0	0	0	.0	700	.8	1160
JUN 16...	6.0	7	.2	2.2	0	--	0	.0	190	3.3	357
JUL 14...	8.1	5	.2	2.3	0	0	0	.0	500	7.0	857
AUG 12...	7.8	5	.2	2.5	0	0	0	.0	520	3.4	844
SEP 07...	10	3	.2	3.4	0	0	0	.0	910	7.5	1610

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS PO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 13...	3.7	.13	.80	.93	4.1	.010	.03	34000	100000	0	100000
NOV 16...	2.7	--	--	--	--	--	--	--	78000	0	78000
DEC 17...	2.5	--	--	--	--	--	--	--	78000	0	78000
JAN 21...	1.6	.29	.45	.74	3.3	.030	.09	7600	36000	1000	35000
FEB 24...	.56	--	--	--	--	--	--	--	14000	2000	12000
MAR 23...	.29	--	--	--	--	--	--	--	7200	1600	5600
APR 20...	.63	<.10	.21	--	--	<.010	--	67000	22000	5000	17000
MAY 19...	1.6	--	--	--	--	--	--	--	49000	4000	45000
JUN 16...	.49	--	--	--	--	--	--	--	8900	2400	6500
JUL 14...	1.2	<.10	1.30	--	--	.010	.03	11000	37000	4000	33000
AUG 12...	1.2	--	--	--	--	--	--	--	35000	2000	33000
SEP 07...	2.2	--	--	--	--	--	--	--	63000	0	63000

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
OCT 13...	100	37000	0	37000	.1	200	100	1300	1400	.7	.2
NOV 16...	3	24000	0	24000	--	--	--	1100	--	--	--
DEC 17...	<1	23000	0	23000	--	--	--	900	--	--	--
JAN 21...	12	17000	1000	16000	--	--	80	550	630	.9	--
FEB 24...	2	5000	0	5000	--	--	--	160	--	--	--
MAR 23...	11	2500	100	2400	--	--	--	84	--	--	--
APR 20...	8	4800	200	4600	<.1	97	10	200	210	2.2	.2
MAY 19...	5	13000	2000	11000	--	--	--	560	--	--	--
JUN 16...	7	3100	300	2800	--	--	--	130	--	--	--
JUL 14...	10	9300	400	8900	--	--	0	400	400	4.1	.3
AUG 12...	11	9700	1000	8700	--	--	--	390	--	--	--
SEP 07...	13	20000	1000	19000	--	--	--	820	--	--	--

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	2940	2920	2930	---	---	---	2050	1400	1580	1120	1040	1080
2	2970	2930	2940	---	---	---	1700	1580	1650	1210	1120	1170
3	---	---	---	2480	2440	2460	1760	1700	1730	1240	1210	1220
4	---	---	---	2480	2440	2460	1770	1690	1730	1100	414	614
5	---	---	---	2470	2410	2440	1750	1700	1720	969	741	868
6	---	---	---	2410	2280	2350	1790	1750	1770	1110	972	1050
7	---	---	---	2380	2320	2340	1830	1780	1800	1160	1090	1120
8	---	---	---	2420	2330	2370	1850	1830	1850	1280	1170	1240
9	2760	2710	2730	2420	1880	2230	1860	1820	1840	1380	1280	1320
10	2790	2740	2760	2060	1880	1970	1870	1850	1860	1620	1380	1510
11	2810	2760	2780	2150	2060	2100	1920	1860	1900	1730	1630	1680
12	2810	2760	2790	2180	2070	2140	1880	1850	1870	1770	1660	1720
13	2810	2690	2790	2200	2150	2170	1940	1890	1910	1700	1610	1650
14	2820	2770	2800	2220	2180	2190	1970	1940	1950	1610	1590	1600
15	2820	2800	2810	2240	2190	2220	1980	1960	1970	1600	1590	1600
16	2840	2800	2820	2270	2180	2240	2020	1980	2000	1590	1560	1580
17	2840	2220	2610	2300	2260	2280	2030	2010	2020	1640	1570	1610
18	---	---	---	2320	2290	2310	2030	1930	1980	1650	1640	1640
19	---	---	---	2330	2290	2310	2110	2030	2080	1640	1640	1640
20	---	---	---	2300	2100	2190	2220	2120	2160	1650	1640	1640
21	---	---	---	2110	2090	2100	2360	2230	2330	1650	1470	1550
22	---	---	---	2160	2110	2130	2330	1700	2130	1470	222	1230
23	---	---	---	2180	2120	2160	1630	768	993	282	180	213
24	---	---	---	2130	1800	1930	1210	981	1100	570	291	419
25	---	---	---	1920	1790	1860	1390	1220	1320	615	558	581
26	---	---	---	2010	1910	1950	1480	1400	1450	777	627	705
27	---	---	---	2060	2020	2040	1510	1310	1440	867	786	834
28	---	---	---	2070	2050	2060	1340	1220	1300	864	810	851
29	---	---	---	2220	2060	2110	1270	1210	1240	---	---	---
30	---	---	---	2130	2080	2100	1450	1290	1360	---	---	---
31	---	---	---	---	---	---	1450	1130	1370	---	---	---
MONTH	2970	2220	2800	2480	1790	2190	2360	768	1720	1770	180	1210
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	384	363	372	858	762	814	357	285	308	1040	1010	1020
2	480	387	438	864	822	838	---	---	---	1080	1020	1050
3	543	366	471	831	738	793	432	228	346	1130	1030	1080
4	456	366	412	843	297	649	360	294	329	1170	1090	1120
5	510	456	488	420	306	373	402	363	386	1200	1120	1160
6	729	504	572	456	420	440	393	330	360	1220	1150	1180
7	720	636	673	504	450	477	420	381	404	1220	1180	1190
8	771	672	719	579	495	533	453	420	437	645	498	570
9	786	678	711	540	486	516	450	429	439	789	651	729
10	843	729	795	546	531	540	471	432	455	885	792	840
11	894	846	870	585	270	477	504	468	485	972	882	925
12	972	900	934	354	276	321	543	498	521	972	969	970
13	---	---	---	369	183	261	582	534	557	---	---	---
14	---	---	---	339	264	303	630	585	608	---	---	---
15	---	---	---	357	219	268	666	627	646	1310	1220	1280
16	---	---	---	312	153	215	705	666	680	1380	1280	1310
17	321	291	302	264	177	229	690	618	658	1450	1340	1380
18	351	300	321	327	267	298	681	624	655	1510	1410	1450
19	381	354	367	396	258	349	711	672	692	1570	1460	1500
20	420	378	400	534	138	204	729	705	715	1450	1060	1180
21	465	417	439	258	159	224	777	714	745	1340	948	1250
22	528	468	500	315	258	290	825	768	793	1080	789	935
23	564	528	546	357	315	335	870	801	833	1260	1100	1170
24	606	558	580	411	360	386	894	825	860	1360	1260	1290
25	720	609	655	471	405	419	915	858	887	1450	1350	1380
26	765	708	735	441	417	425	900	822	859	1520	1430	1460
27	771	714	745	456	420	439	879	849	865	1560	1370	1490
28	831	720	776	495	456	481	963	873	914	1420	1190	1310
29	---	---	---	519	489	508	1010	924	963	1420	159	977
30	---	---	---	555	519	536	1040	972	1000	354	147	248
31	---	---	---	630	216	311	---	---	---	537	360	437
MONTH	972	291	576	864	138	427	1040	228	634	1570	147	1100

## RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	606	540	565	1410	1180	1270	2070	2010	2030	2010	1730	1870
2	726	585	651	1520	1390	1420	2120	2030	2080	1960	1130	1610
3	849	732	788	1520	189	673	2140	1770	2090	1690	1310	1500
4	927	711	873	642	498	549	2150	891	1600	1810	1700	1740
5	720	201	352	756	570	659	1650	1310	1570	1900	1800	1840
6	483	339	402	921	762	835	1770	1650	1690	1920	1860	1900
7	600	486	533	1040	504	921	1830	1770	1800	1960	1910	1940
8	705	603	647	765	387	588	1860	807	1370	2000	1970	1980
9	789	705	742	609	456	520	1260	348	935	2040	1990	2020
10	732	549	654	774	615	686	1130	669	930	2100	2030	2060
11	873	735	802	903	777	831	1140	999	1050	2160	2090	2120
12	954	876	909	1060	906	963	1340	1090	1200	2200	2140	2160
13	1050	957	995	1180	1050	1100	1510	1340	1390	2240	2190	2200
14	1170	1040	1090	1390	1160	1230	1620	1470	1520	2240	2140	2220
15	1260	1150	1190	1470	1350	1400	1690	1560	1620	2200	2080	2120
16	1230	174	460	1560	1430	1490	1750	1670	1700	2180	2100	2140
17	438	243	334	1580	1400	1480	1770	1430	1690	2260	2150	2200
18	588	441	502	1450	1400	1430	1810	1610	1730	2290	2120	2230
19	669	591	625	1520	1450	1490	1890	1750	1830	2320	2250	2280
20	801	672	730	1540	921	1350	1950	1590	1860	2340	2290	2310
21	942	804	854	1470	1080	1290	1900	1570	1730	2360	2310	2340
22	1000	933	958	1520	1440	1480	2000	1890	1940	2380	2330	2360
23	1110	999	1040	1630	1500	1550	2020	1930	1990	2390	2290	2360
24	1230	1100	1140	1700	1570	1630	2040	1670	1970	2400	2330	2370
25	1310	1190	1230	1780	1650	1710	1870	1540	1710	2400	2340	2370
26	1370	1270	1300	1840	1750	1810	1970	1840	1900	2390	2190	2320
27	1380	1220	1290	1850	1780	1820	1990	1750	1870	2160	1690	1890
28	1450	1350	1390	1790	1550	1680	1940	1810	1870	1890	1670	1780
29	1450	1200	1330	1860	1520	1720	2050	1900	1990	1970	1880	1910
30	1320	711	1090	1950	1850	1880	2060	1950	2030	2040	1970	2000
31	---	---	---	2010	1960	1980	2000	1890	1960	---	---	---
MONTH	1450	174	849	2010	189	1270	2150	348	1700	2400	1130	2070
YEAR	2970	138	1310									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2.7	2.5	2.6	---	---	---	---	---	---	3.2	3.1	3.2
2	2.6	2.5	2.6	---	---	---	---	---	---	3.2	3.0	3.1
3	2.6	2.4	2.5	2.9	2.8	2.9	---	---	---	3.1	3.0	3.0
4	3.1	2.4	2.7	3.0	2.9	3.0	---	---	---	4.1	3.2	3.7
5	---	---	---	3.0	3.0	3.0	---	---	---	3.5	3.2	3.4
6	---	---	---	3.0	2.9	3.0	---	---	---	3.3	3.0	3.2
7	---	---	---	3.1	3.0	3.0	---	---	---	3.2	3.1	3.1
8	---	---	---	3.1	3.0	3.1	---	---	---	3.2	3.0	3.2
9	3.0	2.9	3.0	3.2	3.0	3.1	---	---	---	3.1	3.0	3.0
10	3.1	3.0	3.0	2.9	2.6	2.8	---	---	---	3.0	2.9	3.0
11	3.0	3.0	3.0	---	---	---	---	---	---	3.0	2.9	2.9
12	3.1	3.0	3.0	---	---	---	---	---	---	3.0	2.9	2.9
13	3.1	3.0	3.0	---	---	---	---	---	---	2.9	2.9	2.9
14	3.1	3.0	3.0	---	---	---	---	---	---	3.0	2.9	2.9
15	3.0	3.0	3.0	---	---	---	---	---	---	3.0	2.9	2.9
16	3.0	2.9	3.0	---	---	---	---	---	---	3.0	2.9	2.9
17	3.0	2.9	2.9	---	---	---	---	---	---	3.0	2.9	3.0
18	---	---	---	---	---	---	---	---	---	2.9	2.9	2.9
19	---	---	---	---	---	---	---	---	---	2.9	2.8	2.9
20	---	---	---	---	---	---	3.0	2.8	2.9	2.9	2.8	2.9
21	---	---	---	---	---	---	3.0	2.8	2.9	3.0	2.8	2.9
22	---	---	---	---	---	---	2.9	2.8	2.8	4.9	2.9	3.2
23	---	---	---	---	---	---	3.3	2.8	3.2	5.0	4.4	4.7
24	---	---	---	---	---	---	3.2	3.0	3.1	4.4	3.7	4.0
25	---	---	---	---	---	---	3.1	2.9	3.0	3.7	3.6	3.7
26	---	---	---	---	---	---	3.1	3.0	3.0	3.6	3.4	3.5
27	---	---	---	---	---	---	3.1	3.0	3.0	3.4	3.3	3.4
28	---	---	---	---	---	---	3.1	3.0	3.1	3.4	3.3	3.3
29	---	---	---	---	---	---	3.1	3.1	3.1	---	---	---
30	---	---	---	---	---	---	3.1	3.0	3.1	---	---	---
31	---	---	---	---	---	---	3.1	3.0	3.0	---	---	---
MONTH	3.1	2.4	2.9	3.2	2.6	3.0	3.3	2.8	3.0	5.0	2.8	3.2

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.2	4.1	4.1	3.5	3.3	3.3	4.2	4.1	4.2	3.1	3.0	3.1
2	4.1	3.9	4.0	3.3	3.2	3.3	---	---	---	3.1	3.0	3.1
3	4.2	3.7	3.9	3.4	3.2	3.3	4.7	3.4	4.0	3.1	3.0	3.0
4	4.2	3.9	4.0	4.8	3.2	3.6	4.2	3.9	4.1	3.1	2.9	3.0
5	3.9	3.7	3.8	4.4	3.9	4.1	4.0	3.9	3.9	3.0	2.8	3.0
6	3.7	3.4	3.6	4.0	3.8	3.9	4.1	3.9	4.0	3.0	2.9	2.9
7	3.6	3.4	3.5	3.9	3.7	3.8	4.0	3.8	3.9	3.0	2.9	2.9
8	3.5	3.4	3.4	3.8	3.6	3.7	3.8	3.7	3.8	3.6	2.6	3.5
9	3.5	3.4	3.4	3.8	3.6	3.7	3.8	3.7	3.7	3.4	3.2	3.3
10	3.4	3.3	3.3	3.7	3.6	3.7	3.8	3.7	3.8	3.2	3.1	3.2
11	3.3	3.2	3.3	5.0	3.6	4.0	3.7	3.6	3.7	3.2	3.0	3.1
12	3.2	3.2	3.2	4.6	4.1	4.3	3.7	3.5	3.6	---	---	---
13	---	---	---	5.1	3.9	4.5	3.6	3.4	3.5	---	---	---
14	---	---	---	4.4	4.1	4.3	3.5	3.4	3.4	---	---	---
15	---	---	---	5.2	4.0	4.6	3.5	3.3	3.4	2.9	2.8	2.9
16	---	---	---	5.5	4.3	4.9	3.4	3.2	3.3	2.9	2.8	2.9
17	4.4	4.3	4.4	4.9	4.4	4.6	3.4	3.3	3.3	2.9	2.7	2.8
18	4.6	4.3	4.5	4.4	4.1	4.3	3.4	3.3	3.4	2.9	2.7	2.8
19	4.3	4.2	4.3	5.1	4.0	4.1	3.4	3.2	3.3	2.9	2.8	2.8
20	4.2	4.0	4.1	5.6	3.3	5.1	3.4	3.2	3.3	3.1	2.9	3.0
21	4.1	3.9	4.0	5.3	4.4	4.7	3.4	3.3	3.3	3.1	2.9	3.0
22	3.9	3.7	3.8	4.4	4.1	4.3	---	---	---	3.2	3.0	3.1
23	3.8	3.6	3.7	4.2	4.0	4.1	---	---	---	3.0	2.9	3.0
24	3.7	3.6	3.7	4.0	3.7	3.9	---	---	---	2.9	2.9	2.9
25	3.6	3.5	3.6	3.9	3.6	3.8	---	---	---	2.9	2.8	2.9
26	3.6	3.4	3.5	3.8	3.8	3.8	---	---	---	2.9	2.8	2.9
27	3.5	3.4	3.5	3.9	3.8	3.8	3.2	3.2	3.2	2.9	2.8	2.9
28	3.5	3.3	3.4	3.8	3.6	3.7	3.2	3.1	3.2	3.0	2.9	3.0
29	---	---	---	3.7	3.6	3.7	3.2	3.1	3.2	5.7	2.9	3.5
30	---	---	---	3.6	3.5	3.6	3.2	3.1	3.1	---	---	---
31	---	---	---	5.3	3.3	4.4	---	---	---	3.8	3.7	3.7
MONTH	4.6	3.2	3.8	5.6	3.2	4.0	4.7	3.1	3.6	5.7	2.6	3.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	3.7	3.5	3.6	3.0	2.8	2.9	2.8	2.7	2.8	2.9	2.9	2.9
2	3.6	3.3	3.4	2.9	2.8	2.9	2.8	2.7	2.8	3.1	2.9	3.0
3	3.3	3.2	3.3	4.8	2.8	3.8	2.8	2.7	2.7	3.1	3.0	3.0
4	3.3	3.1	3.2	3.8	3.5	3.7	3.2	2.7	2.9	3.0	2.9	3.0
5	5.7	3.3	4.7	3.6	3.3	3.5	2.9	2.7	2.8	3.0	2.9	3.0
6	4.5	3.8	4.1	3.3	3.1	3.2	3.0	2.8	2.9	3.0	2.9	2.9
7	3.8	3.5	3.7	3.6	3.0	3.1	3.0	3.0	3.0	3.0	2.9	2.9
8	3.5	3.4	3.5	3.9	3.2	3.5	3.5	3.0	3.2	3.0	2.9	3.0
9	3.4	3.3	3.3	3.8	3.5	3.7	4.9	3.2	3.6	3.0	2.9	3.0
10	3.6	3.3	3.5	3.5	3.2	3.3	3.8	3.3	3.5	3.0	2.9	3.0
11	3.4	3.2	3.3	3.2	3.0	3.1	3.4	3.3	3.4	3.0	2.9	2.9
12	3.2	3.1	3.2	3.1	2.9	3.0	3.3	3.2	3.3	3.0	2.8	2.9
13	3.2	3.0	3.1	3.0	2.9	3.0	3.3	3.1	3.2	2.9	2.8	2.9
14	3.1	3.0	3.1	3.0	2.9	2.9	3.2	3.1	3.2	2.9	2.8	2.9
15	3.1	2.9	3.0	2.9	2.8	2.9	3.2	3.0	3.1	2.9	2.8	2.9
16	5.9	3.0	4.4	2.9	2.8	2.9	3.1	3.0	3.1	2.9	2.8	2.9
17	5.5	4.1	4.8	2.9	2.8	2.8	3.1	3.0	3.1	2.9	2.8	2.9
18	4.1	3.7	3.9	2.9	2.8	2.9	3.1	3.0	3.1	2.9	2.8	2.9
19	3.6	3.5	3.6	2.9	2.9	2.9	3.1	3.0	3.0	2.9	2.8	2.9
20	3.5	3.3	3.4	3.2	2.9	3.0	3.1	3.0	3.0	2.9	2.8	2.9
21	3.3	3.2	3.3	3.1	2.9	3.0	3.1	3.0	3.1	2.9	2.9	2.9
22	3.2	3.1	3.2	3.0	2.9	2.9	3.1	3.0	3.1	3.0	2.9	2.9
23	3.2	3.0	3.1	2.9	2.8	2.9	3.0	3.0	3.0	3.0	2.8	2.9
24	3.1	2.9	3.0	2.9	2.8	2.9	3.0	2.9	3.0	3.0	2.8	2.9
25	3.0	2.9	3.0	2.9	2.8	2.8	3.1	3.0	3.0	2.9	2.8	2.9
26	3.0	2.9	2.9	2.8	2.7	2.8	3.0	2.9	3.0	2.9	2.8	2.9
27	---	---	---	2.8	2.7	2.7	3.0	2.9	3.0	3.0	2.9	3.0
28	---	---	---	2.8	2.7	2.7	3.0	2.9	2.9	3.1	2.9	3.0
29	2.9	2.9	2.9	2.8	2.7	2.7	3.0	2.9	3.0	3.0	2.8	2.9
30	3.3	2.9	3.0	2.8	2.7	2.7	3.0	2.8	2.9	3.0	2.8	2.9
31	---	---	---	2.8	2.7	2.8	2.9	2.8	2.9	---	---	---
MONTH	5.9	2.9	3.5	4.8	2.7	3.0	4.9	2.7	3.1	3.1	2.8	2.9
YEAR	5.9	2.4	3.3									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MTN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.5	11.0	12.0	---	---	---	7.5	3.0	5.5	2.0	1.0	1.5
2	16.0	8.0	11.0	---	---	---	6.0	4.5	5.0	1.5	1.0	1.0
3	16.5	8.0	11.0	15.5	11.5	14.0	6.5	4.0	5.0	4.0	1.5	3.0
4	13.5	8.0	11.0	15.0	9.0	11.5	6.0	4.5	5.5	6.5	2.5	4.5
5	---	---	---	14.0	11.5	12.5	4.5	3.5	4.0	5.0	1.0	2.5
6	---	---	---	12.0	7.5	10.0	5.0	1.5	3.0	4.5	1.0	3.0
7	---	---	---	10.5	5.5	7.5	6.0	2.0	4.0	4.5	1.5	3.0
8	---	---	---	10.0	4.0	6.5	5.5	2.5	4.5	1.5	1.0	1.0
9	14.5	10.5	12.5	8.0	7.0	7.5	2.5	1.5	1.5	1.0	1.0	1.0
10	14.0	9.0	11.5	7.5	5.0	6.5	2.0	1.0	1.0	1.0	1.0	1.0
11	16.5	11.5	13.0	9.5	4.5	6.5	1.5	1.0	1.0	1.0	1.0	1.0
12	16.0	9.0	12.0	8.5	3.0	5.0	2.0	1.0	1.5	1.0	1.0	1.0
13	16.0	8.5	11.5	7.5	2.0	4.5	4.0	1.5	2.5	1.0	1.0	1.0
14	14.5	7.0	10.5	7.5	2.0	4.5	2.0	1.0	1.5	1.0	1.0	1.0
15	12.5	9.5	11.0	8.5	2.5	5.0	2.5	1.5	2.0	1.0	1.0	1.0
16	16.5	11.5	13.0	8.0	2.5	5.5	3.5	1.0	2.0	1.0	1.0	1.0
17	15.0	7.5	11.0	9.0	4.5	6.5	1.0	1.0	1.0	1.0	1.0	1.0
18	---	---	---	9.0	5.5	6.5	1.0	1.0	1.0	1.0	1.0	1.0
19	---	---	---	9.5	4.5	6.5	1.0	1.0	1.0	1.0	1.0	1.0
20	---	---	---	9.5	3.5	6.5	1.0	1.0	1.0	1.0	1.0	1.0
21	---	---	---	3.5	3.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0
22	---	---	---	3.5	1.5	3.0	1.0	1.0	1.0	1.0	1.0	1.0
23	---	---	---	3.5	1.0	2.0	1.0	.5	1.0	4.5	1.0	3.0
24	---	---	---	4.5	3.0	4.0	2.0	1.0	1.5	2.0	1.0	1.0
25	---	---	---	5.5	2.0	3.5	3.0	1.0	1.5	1.0	1.0	1.0
26	---	---	---	8.5	2.0	5.0	2.5	1.0	1.5	1.0	1.0	1.0
27	---	---	---	8.5	5.0	7.5	4.0	1.0	2.0	1.0	1.0	1.0
28	---	---	---	5.0	4.0	4.5	2.5	1.0	1.5	1.5	1.0	1.0
29	---	---	---	6.5	2.5	4.0	2.5	1.0	2.0	---	---	---
30	---	---	---	3.0	1.0	2.0	1.5	1.0	1.0	---	---	---
31	---	---	---	---	---	---	1.5	1.0	1.0	---	---	---
MONTH	16.5	7.0	11.5	15.5	1.0	6.0	7.5	.5	2.0	6.5	1.0	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	1.0	1.5	9.0	1.0	4.0	14.0	5.0	7.5	17.0	9.5	12.5
2	2.5	1.0	1.5	8.5	3.0	5.5	22.5	9.5	15.5	20.0	9.0	13.5
3	4.5	2.5	3.5	5.0	2.0	3.0	20.0	6.5	13.0	21.5	7.5	13.5
4	3.0	2.0	2.5	7.0	2.5	5.0	11.0	5.0	7.0	23.0	8.5	14.5
5	4.5	1.5	2.5	6.0	3.5	4.5	7.5	4.0	5.5	23.5	9.5	15.0
6	3.0	1.0	1.5	4.0	2.5	3.5	6.0	2.5	4.5	24.0	10.5	16.0
7	1.5	1.0	1.0	5.0	2.0	3.0	10.0	1.0	4.5	20.0	12.5	15.0
8	1.0	1.0	1.0	8.0	1.0	3.5	9.5	2.5	5.5	20.0	12.5	16.0
9	1.0	1.0	1.0	8.0	1.5	4.0	6.0	3.5	4.5	21.5	10.5	15.0
10	1.0	1.0	1.0	8.0	1.5	4.5	7.5	2.0	4.0	21.0	9.5	14.5
11	1.0	1.0	1.0	7.0	4.0	5.5	11.5	3.0	6.5	24.5	10.5	16.0
12	1.0	1.0	1.0	11.0	4.0	7.0	13.5	2.5	7.5	---	---	---
13	---	---	---	10.0	5.5	8.0	17.0	7.5	11.0	---	---	---
14	---	---	---	10.5	4.5	7.0	17.0	5.0	9.5	---	---	---
15	---	---	---	6.5	5.5	6.0	19.0	5.0	11.0	26.0	17.0	22.5
16	---	---	---	9.0	2.0	7.0	19.5	9.0	13.5	26.0	15.0	19.5
17	5.0	4.5	5.0	11.0	6.0	8.0	14.5	9.0	12.5	26.5	14.5	19.5
18	5.5	4.5	5.0	12.5	5.0	8.0	19.0	6.5	11.0	25.5	14.5	19.0
19	5.0	4.0	4.5	8.0	6.5	7.5	19.0	6.5	11.5	25.5	16.5	20.0
20	7.5	4.0	5.0	12.0	7.0	8.0	14.0	10.0	11.5	24.5	16.5	19.0
21	5.0	4.5	4.5	12.5	6.0	8.5	18.0	7.0	11.0	21.5	15.5	18.0
22	5.5	3.0	4.0	7.0	4.0	6.0	16.5	5.5	9.0	24.0	16.0	19.0
23	10.0	1.5	4.0	10.0	3.5	6.0	18.5	4.0	10.0	24.0	16.5	19.5
24	7.5	3.5	5.0	13.0	3.5	7.5	20.0	5.5	11.0	22.0	16.5	19.0
25	7.5	1.5	3.0	10.0	5.0	6.5	18.0	6.5	11.5	23.0	15.5	18.5
26	4.0	1.5	2.0	7.5	3.5	5.0	14.0	11.0	12.0	24.0	14.5	19.0
27	5.0	1.0	2.5	8.0	2.0	4.0	12.0	7.5	10.5	24.5	17.0	19.5
28	7.5	1.0	3.0	10.0	1.0	3.5	19.0	5.5	10.5	27.0	17.0	21.0
29	---	---	---	12.5	1.0	6.0	19.5	6.0	11.5	22.5	15.5	18.0
30	---	---	---	15.0	5.0	9.5	18.0	8.0	12.0	17.5	15.0	16.0
31	---	---	---	13.0	7.0	10.0	---	---	---	21.5	15.0	17.5
MONTH	10.0	1.0	3.0	15.0	1.0	6.0	22.5	1.0	9.5	27.0	7.5	17.5



## RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	.08	34	.00	.05	26	.00	.27	47	.04
2	.07	40	.00	.06	28	.00	.15	37	.01
3	.07	45	.00	.06	33	.00	.12	38	.01
4	.07	50	.00	.05	36	.00	.11	37	.01
5	.08	55	.01	.05	33	.00	.11	32	.00
6	.19	78	.04	.11	58	.02	.10	38	.01
7	.19	42	.02	.05	28	.00	.10	40	.01
8	.12	35	.01	.06	25	.00	.09	36	.00
9	.08	32	.00	.11	41	.01	.08	39	.00
10	.03	32	.00	.11	34	.01	.07	42	.00
11	.03	30	.00	.08	35	.00	.07	63	.01
12	.03	30	.00	.07	43	.00	.06	42	.00
13	.03	28	.00	.06	46	.00	.06	36	.00
14	.03	30	.00	.06	43	.00	.06	31	.00
15	.03	47	.00	.06	41	.00	.05	40	.00
16	.03	41	.00	.05	42	.00	.05	45	.00
17	.03	36	.00	.05	49	.00	.05	35	.00
18	.15	159	.08	.05	58	.00	.05	31	.00
19	.15	70	.03	.05	69	.00	.05	38	.00
20	.05	42	.00	.07	54	.01	.04	36	.00
21	.03	30	.00	.07	54	.01	.04	48	.00
22	.03	30	.00	.06	56	.00	.09	59	.01
23	.13	43	.02	.05	65	.00	.96	44	.14
24	.05	15	.00	.10	64	.02	.38	18	.02
25	.08	34	.01	.10	50	.01	.19	17	.00
26	.08	49	.01	.08	57	.01	.14	25	.00
27	.07	29	.00	.08	39	.00	.13	22	.00
28	.09	28	.00	.07	43	.00	.12	17	.00
29	.08	29	.00	.07	47	.00	.11	18	.00
30	.08	28	.00	.05	45	.00	.11	26	.00
31	.07	27	.00	---	---	---	.11	29	.00
TOTAL	2.33	---	0.23	2.04	---	0.10	4.12	---	0.27
JANUARY				FEBRUARY			MARCH		
1	.10	18	.00	3.5	54	.51	.31	20	.02
2	.18	19	.00	1.3	27	.09	.33	19	.02
3	.19	28	.01	.70	20	.04	.36	17	.02
4	2.6	65	.40	.44	20	.02	1.6	54	.50
5	.61	16	.03	.36	20	.02	2.5	45	.30
6	.32	18	.02	.34	21	.02	1.3	42	.15
7	.23	13	.00	.28	21	.02	.98	39	.10
8	.15	14	.00	.24	20	.01	.72	25	.05
9	.13	14	.00	.22	20	.01	.75	22	.04
10	.12	13	.00	.21	19	.01	.69	20	.04
11	.11	12	.00	.20	18	.00	2.1	33	.31
12	.10	11	.00	.19	15	.00	2.9	29	.23
13	.10	17	.00	.18	9	.00	7.9	79	2.1
14	.09	16	.00	.20	10	.00	3.3	53	.47
15	.09	9	.00	.68	30	.06	5.2	68	1.0
16	.09	12	.00	3.4	43	.45	15	106	5.5
17	.08	4	.00	4.8	36	.47	7.9	34	.73
18	.08	6	.00	3.4	28	.26	3.6	6	.06
19	.08	7	.00	2.2	21	.12	2.3	17	.11
20	.08	9	.00	1.8	43	.21	19	152	10
21	.09	8	.00	1.5	19	.08	11	51	1.6
22	.91	18	.07	.90	18	.04	3.6	14	.14
23	21	99	5.7	.70	19	.04	2.1	15	.09
24	2.5	19	.13	.65	19	.03	1.5	33	.13
25	.84	16	.04	.49	19	.03	1.3	30	.11
26	.47	16	.02	.36	19	.02	1.3	17	.06
27	.35	19	.02	.38	23	.02	1.2	16	.05
28	.33	19	.02	.34	24	.02	.98	14	.04
29	.29	16	.01	---	---	---	.82	16	.04
30	.33	14	.01	---	---	---	.76	25	.05
31	5.1	75	2.0	---	---	---	5.0	76	1.2
TOTAL	37.74	---	8.48	29.96	---	2.60	108.30	---	25.26

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY				JUNE	
1	2.5	17	.11	.22	2	.00	.75	32	.06
2	1.8	17	.08	.22	4	.00	.54	22	.03
3	5.8	79	1.3	.20	7	.00	.37	19	.02
4	3.4	16	.15	.19	8	.00	.32	19	.02
5	2.0	13	.07	.18	7	.00	5.0	114	1.7
6	2.1	19	.11	.18	7	.00	1.5	34	.14
7	1.5	19	.08	.17	7	.00	.78	25	.05
8	1.6	18	.08	.80	25	.05	.54	22	.03
9	5.4	16	.23	.50	8	.01	.41	21	.02
10	1.8	22	.11	.36	7	.00	.62	35	.06
11	1.6	17	.07	.30	6	.00	.37	14	.01
12	.89	19	.05	.26	9	.00	.28	14	.01
13	.83	20	.04	.23	12	.00	.24	14	.00
14	.68	25	.05	.20	11	.00	.20	13	.00
15	.62	20	.03	.17	11	.00	.16	12	.00
16	.67	21	.04	.14	16	.00	6.1	107	1.9
17	.72	22	.04	.13	18	.00	3.3	32	.29
18	.65	24	.04	.12	18	.00	1.0	18	.05
19	.58	20	.03	.11	17	.00	.62	18	.03
20	.53	19	.03	.24	12	.00	.45	17	.02
21	.40	20	.02	.20	7	.00	.33	16	.01
22	.33	19	.02	.40	19	.02	.26	9	.00
23	.32	17	.01	.20	8	.00	.22	4	.00
24	.30	13	.01	.16	15	.00	.18	5	.00
25	.29	12	.00	.14	24	.00	.15	6	.00
26	.30	12	.00	.12	22	.00	.13	4	.00
27	.31	8	.00	.11	14	.00	.13	5	.00
28	.26	3	.00	.15	10	.00	.13	5	.00
29	.24	5	.00	7.9	86	4.5	.15	5	.00
30	.22	4	.00	9.4	92	3.5	.32	19	.02
31	---	---	---	1.6	42	.18	---	---	---
TOTAL	38.64	---	2.80	25.30	---	8.26	25.55	---	4.47
JULY				AUGUST				SEPTEMBER	
1	.17	8	.00	.03	9	.00	.10	7	.00
2	.12	7	.00	.02	7	.00	.20	16	.00
3	4.6	79	2.0	.02	6	.00	.15	3	.00
4	1.4	42	.16	.30	36	.03	.10	2	.00
5	.90	28	.07	.13	20	.00	.09	3	.00
6	.61	23	.04	.08	9	.00	.09	5	.00
7	.59	28	.04	.06	5	.00	.08	7	.00
8	1.0	35	.09	.30	16	.01	.08	9	.00
9	.93	26	.07	.82	36	.15	.08	7	.00
10	.54	22	.03	.33	15	.01	.08	12	.00
11	.39	20	.02	.22	11	.00	.09	11	.00
12	.29	31	.02	.19	8	.00	.09	10	.00
13	.23	27	.02	.13	8	.00	.09	8	.00
14	.17	19	.00	.10	5	.00	.10	14	.00
15	.12	9	.00	.09	6	.00	.12	7	.00
16	.10	11	.00	.08	7	.00	.11	11	.00
17	.08	11	.00	.07	8	.00	.11	11	.00
18	.09	11	.00	.07	8	.00	.11	7	.00
19	.10	9	.00	.05	8	.00	.11	7	.00
20	.20	49	.03	.05	8	.00	.11	19	.00
21	.15	28	.01	.08	14	.00	.11	12	.00
22	.11	9	.00	.06	9	.00	.11	10	.00
23	.09	8	.00	.06	8	.00	.11	11	.00
24	.07	9	.00	.07	6	.00	.10	12	.00
25	.06	10	.00	.11	5	.00	.09	13	.00
26	.06	12	.00	.07	4	.00	.09	14	.00
27	.06	15	.00	.06	15	.00	.19	13	.00
28	.07	17	.00	.07	16	.00	.21	9	.00
29	.05	14	.00	.06	7	.00	.17	18	.00
30	.04	11	.00	.06	6	.00	.15	7	.00
31	.03	10	.00	.06	6	.00	---	---	---
TOTAL	13.42	---	2.60	3.90	---	0.20	3.42	---	0.00
YEAR	294.72		55.27						

## RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH

LOCATION.--Lat 38°52'25", long 82°21'22", in SE 1/4 sec. 26, T.6N., R.16W., Gallia County, Hydrologic Unit 05090101, on left bank at downstream side of U.S. Highway 35 bridge at Adamsville, 1.3 mi (2.1 km) upstream from Ryan Run, and 1.4 mi (2.3 km) downstream from Indian Creek.

DRAINAGE AREA.--585 mi<sup>2</sup> (1,515 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to December 1935, October 1938 to current year. Monthly discharge only for December 1935, published in WSP 1305.

REVISED RECORDS.--WSP 873: 1916-18, 1920, 1922, 1924, 1926-27, 1931, 1933, 1935(M). WSP 1908: Drainage area. WSP 2108: 1968-70(M).

GAGE.--Water-stage recorder. Datum of gage is 570.04 ft (173.748 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1940, nonrecording gage, June 13, 1940 to Oct. 27, 1970 water-stage recorder 480 ft (146 m) upstream at same datum.

REMARKS.--Records good. Sediment data collected at this site 1969 to 1974.

AVERAGE DISCHARGE.--64 years, 650 ft<sup>3</sup>/s (18.41 m<sup>3</sup>/s), 15.09 in/yr (383 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft<sup>3</sup>/s (566 m<sup>3</sup>/s) May 28, 1968, gage height 28.69 ft (8.745 m), from rating curve extended above 13,000 ft<sup>3</sup>/s (368 m<sup>3</sup>/s) on basis of slope-conveyance estimate of peak flow; minimum, 1.1 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/s) Oct. 17-19, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 25.2 ft (7.68 m), from floodmark, discharge, 16,000 ft<sup>3</sup>/s (453 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3090 ft<sup>3</sup>/s (87.5 m<sup>3</sup>/s) Mar. 21, gage height, 13.85 ft (4.221 m) above base of 3,000 ft<sup>3</sup>/s (85.0 m<sup>3</sup>/s); minimum, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s) Oct. 2,3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	45	40	129	1090	271	1090	232	1250	188	63	45
2	21	45	40	141	1280	249	1320	223	1170	260	60	44
3	21	42	47	151	1240	231	1470	215	978	276	57	42
4	21	41	59	340	1070	227	1580	201	506	198	58	39
5	27	39	70	681	959	274	1700	190	1930	345	61	47
6	29	37	62	685	790	360	1420	180	1870	783	64	52
7	30	32	52	513	581	542	1090	167	1270	712	84	45
8	31	28	47	345	417	536	967	173	829	453	132	43
9	29	29	43	263	330	506	850	196	562	347	159	42
10	28	28	40	171	290	460	785	215	624	436	128	38
11	27	29	38	110	260	504	737	239	577	497	109	35
12	27	26	36	88	240	1130	661	206	552	372	164	32
13	26	27	35	80	220	1500	589	173	486	261	138	30
14	26	33	35	76	210	1600	530	155	347	200	105	29
15	26	33	35	70	220	1880	478	141	278	162	89	33
16	27	31	34	68	481	2160	436	128	271	137	78	38
17	28	31	35	68	1180	2600	443	115	696	119	68	53
18	28	30	35	66	1680	2570	482	106	1350	105	62	51
19	30	29	35	64	1760	2800	509	98	1380	97	55	43
20	30	29	33	62	1490	2960	537	99	1170	132	52	43
21	28	28	31	80	1150	3050	493	243	718	138	47	38
22	27	28	32	273	917	3020	428	478	428	137	46	33
23	33	28	67	2080	734	3010	381	383	337	116	43	30
24	43	32	210	2480	595	2840	340	328	268	98	45	27
25	48	38	580	2520	490	2270	313	271	218	83	44	26
26	42	43	500	1800	407	1320	306	188	184	76	47	28
27	44	51	290	1200	344	924	306	177	180	69	51	32
28	48	49	190	780	300	781	301	213	149	66	56	32
29	51	47	115	600	---	675	283	192	225	64	55	37
30	47	43	99	523	---	594	256	1380	220	66	48	38
31	44	---	120	574	---	806	---	1580	---	64	45	---
TOTAL	989	1051	3085	17081	20725	42650	21081	8885	21023	7057	2313	1145
MEAN	31.9	35.0	99.5	551	740	1376	703	287	701	228	74.6	38.2
MAX	51	51	580	2520	1760	3050	1700	1580	1930	783	164	53
MIN	21	26	31	62	210	227	256	98	149	64	43	26
CFSM	.06	.06	.17	.94	1.27	2.35	1.20	.49	1.20	.39	.13	.07
IN.	.06	.07	.20	1.09	1.32	2.71	1.34	.56	1.34	.45	.15	.07

CAL YR 1981 TOTAL 199682 MEAN 547 MAX 3690 MIN 21 CFSM .94 IN 12.70  
WTR YR 1982 TOTAL 147085 MEAN 403 MAX 3050 MIN 21 CFSM .69 IN 9.35

RACCOON CREEK BASIN

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03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951-54, 1964 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1967 to current year.

pH: May 1967 to current year.

WATER TEMPERATURES: October 1951 to September 1954, October 1964 to current year.

DISSOLVED OXYGEN: May 1967 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,930 micromhos Nov. 20, 1964; minimum, 81 micromhos July 9, 1980.

pH: Maximum, 8.8 units Feb. 16, 1972; minimum, 2.0 units May 6, 1972.

WATER TEMPERATURES: Maximum, 29.0°C June 16, 1952; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.7 mg/L Mar. 4, 1980; minimum recorded, 2.5 mg/L May 6, 1972.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1050 micromhos Mar. 27; minimum, 114 micromhos June 5.

pH: Maximum, 7.3 units Dec. 7; minimum, 3.3 units Mar. 26, 27.

WATER TEMPERATURES: Maximum, 27.0°C July 17, 18, 26; minimum, 0.0°C many days during the winter period.

DISSOLVED OXYGEN: Maximum, 14.8 mg/L Mar. 9, 10; minimum, 4.8 mg/L Aug. 7.

## RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	618	594	608	483	459	469	---	---	---	795	768	780
2	636	612	619	489	459	474	---	---	---	843	795	818
3	675	624	649	498	480	487	---	---	---	801	738	758
4	717	687	702	480	471	477	---	---	---	753	588	639
5	819	726	783	477	447	470	---	---	---	573	495	529
6	798	750	772	486	450	473	---	---	---	570	477	519
7	777	696	735	492	483	486	819	807	814	630	516	572
8	699	663	679	555	477	496	807	798	804	540	492	472
9	690	648	677	531	486	516	792	747	763	561	516	547
10	699	684	691	576	534	549	750	744	748	---	---	---
11	693	630	666	588	552	563	759	744	750	---	---	---
12	627	591	605	615	591	603	795	759	781	---	---	---
13	666	600	624	615	585	606	801	789	796	---	---	---
14	696	672	684	606	582	595	792	777	784	---	---	---
15	---	---	---	630	606	617	774	762	766	---	---	---
16	---	---	---	693	645	673	768	759	763	---	---	---
17	582	564	573	690	600	673	783	762	769	---	---	---
18	570	546	560	675	663	668	762	756	759	---	---	---
19	564	531	550	678	669	674	783	753	772	---	---	---
20	549	528	536	678	657	663	825	774	801	594	585	589
21	540	528	532	738	645	663	840	813	830	588	510	563
22	534	507	524	645	621	633	825	801	815	519	255	472
23	534	507	520	621	612	616	795	636	703	267	183	222
24	507	459	487	633	612	622	711	588	675	288	234	263
25	465	438	453	---	---	---	771	546	627	282	246	256
26	468	465	467	---	---	---	933	780	879	252	243	246
27	480	468	473	---	---	---	927	840	876	282	252	267
28	486	462	481	---	---	---	1040	939	1000	291	282	285
29	495	465	484	---	---	---	999	771	894	312	294	303
30	522	483	506	---	---	---	810	765	788	336	312	328
31	516	486	497	---	---	---	831	768	797	351	285	334
MONTH	819	438	591	738	447	574	1040	546	790	843	183	465

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	357	273	299	360	348	355	315	252	287	366	354	359
2	390	321	358	363	354	358	321	267	296	375	363	368
3	357	300	336	366	360	363	---	---	---	372	366	369
4	306	294	298	375	366	372	---	---	---	381	372	377
5	315	303	309	372	369	371	234	225	232	381	372	376
6	342	312	325	396	366	380	246	222	235	390	381	385
7	351	333	340	438	390	404	249	249	249	396	387	393
8	357	345	353	435	381	408	261	249	255	402	381	390
9	351	336	343	429	366	399	258	255	258	408	390	399
10	378	351	368	366	351	361	279	258	269	408	402	405
11	381	372	375	351	297	342	282	279	281	435	405	422
12	396	384	391	294	255	275	315	285	303	432	417	425
13	402	381	393	303	252	280	312	192	264	441	417	429
14	402	384	394	294	273	284	321	189	259	462	444	455
15	405	381	397	288	228	260	324	204	255	453	444	450
16	375	309	346	243	210	234	327	210	244	---	---	---
17	336	306	319	228	210	222	240	213	220	---	---	---
18	336	297	313	228	198	212	327	237	284	---	---	---
19	312	291	300	204	201	202	348	273	332	468	465	467
20	294	279	286	219	204	213	354	339	344	471	441	458
21	288	279	284	222	210	216	354	345	349	447	228	382
22	306	288	297	213	201	206	375	351	367	318	240	284
23	312	300	305	207	198	202	375	342	352	447	306	363
24	324	309	313	216	207	211	357	345	348	441	384	410
25	333	321	326	234	219	229	360	303	329	399	375	385
26	333	327	331	1040	234	459	321	285	303	444	402	429
27	339	330	336	1050	339	613	333	318	322	432	417	427
28	348	339	343	333	309	315	339	330	332	414	396	407
29	---	---	---	312	309	309	351	342	347	405	351	379
30	---	---	---	318	315	316	357	348	353	339	177	224
31	---	---	---	318	231	285	---	---	---	288	246	271
MONTH	405	273	335	1050	198	311	375	189	295	471	177	389

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	396	252	336	393	357	374	429	420	424	567	546	558
2	240	219	225	417	387	395	465	429	449	552	540	544
3	255	228	244	396	294	332	477	468	472	558	534	548
4	273	258	268	423	393	412	483	441	473	537	519	528
5	267	114	175	498	381	414	462	417	450	561	534	551
6	219	189	203	534	273	377	465	462	463	555	531	546
7	324	201	261	285	249	265	477	345	458	531	528	528
8	279	240	267	279	249	272	399	276	368	525	495	507
9	303	270	287	324	270	289	447	360	404	519	495	504
10	300	210	264	339	294	308	519	453	496	540	519	531
11	309	255	279	351	294	323	636	501	531	588	540	563
12	327	294	308	342	312	323	627	495	541	612	576	597
13	375	315	351	321	306	314	519	459	488	609	585	595
14	366	333	348	333	318	325	546	459	515	594	567	582
15	390	366	378	321	315	317	546	534	539	588	516	552
16	492	360	425	333	315	327	588	540	565	570	519	536
17	429	273	360	351	333	338	594	588	591	594	504	543
18	420	234	328	351	342	346	588	573	582	504	489	495
19	291	210	241	357	348	353	573	564	567	507	489	497
20	240	216	227	351	336	342	591	567	576	537	495	518
21	267	240	254	348	288	327	645	594	620	564	540	551
22	279	267	276	351	315	337	669	648	662	591	567	578
23	294	279	285	372	339	360	687	669	675	621	585	595
24	303	291	296	393	369	385	672	663	668	639	603	620
25	315	303	309	405	390	398	672	654	662	651	627	639
26	321	315	319	411	405	406	660	636	651	654	609	632
27	327	324	325	411	405	408	645	591	615	609	579	593
28	333	306	320	414	396	407	591	555	568	585	567	578
29	339	306	321	414	396	404	576	567	571	591	570	584
30	564	342	394	417	405	411	579	573	577	600	567	582
31	---	---	---	423	411	419	573	567	571	---	---	---
MONTH	564	114	296	534	249	355	687	276	542	654	489	559
YEAR	1050	114	453									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.8	6.7	6.8	6.8	6.7	6.8	---	---	---	5.4	5.4	5.4
2	6.8	6.7	6.8	6.8	6.7	6.7	---	---	---	5.5	5.4	5.4
3	6.8	6.6	6.7	6.8	6.6	6.7	---	---	---	5.7	5.5	5.6
4	7.0	6.5	6.8	6.8	6.7	6.7	---	---	---	6.7	5.7	6.3
5	6.8	6.6	6.7	6.7	6.6	6.7	---	---	---	6.3	5.4	5.8
6	6.7	6.6	6.6	6.8	6.6	6.7	---	---	---	6.5	5.5	6.1
7	6.6	6.4	6.5	6.9	6.8	6.8	7.3	7.0	7.0	6.5	6.4	6.5
8	6.5	6.3	6.4	6.9	6.7	6.8	7.2	7.0	7.1	6.4	6.1	6.2
9	6.6	6.4	6.5	6.9	6.8	6.9	7.2	7.1	7.1	6.0	5.9	5.9
10	6.6	6.5	6.6	7.0	6.8	6.9	7.1	6.9	7.0	---	---	---
11	6.7	6.6	6.6	7.0	6.9	7.0	6.9	6.8	6.9	---	---	---
12	6.8	6.7	6.7	7.0	6.9	7.0	6.8	6.7	6.8	---	---	---
13	6.8	6.7	6.7	7.2	6.9	7.0	6.8	6.7	6.7	---	---	---
14	6.7	6.6	6.7	7.1	7.0	7.0	6.8	6.7	6.8	---	---	---
15	---	---	---	7.1	6.9	7.0	6.9	6.8	6.9	---	---	---
16	---	---	---	7.0	6.9	6.9	6.9	6.9	6.9	---	---	---
17	6.5	6.3	6.4	7.0	6.8	6.9	6.9	6.8	6.8	---	---	---
18	6.5	6.4	6.4	6.9	6.8	6.9	6.8	6.8	6.8	---	---	---
19	6.6	6.4	6.5	6.9	6.8	6.8	6.8	6.6	6.7	---	---	---
20	6.7	6.6	6.6	6.9	6.8	6.8	6.6	6.5	6.5	6.1	5.8	6.0
21	6.7	6.5	6.6	6.9	6.9	6.9	6.5	6.4	6.4	6.2	5.9	6.0
22	6.6	6.5	6.6	6.9	6.8	6.9	6.4	6.3	6.4	6.7	6.1	6.3
23	6.8	6.6	6.7	6.8	6.8	6.8	7.0	6.5	6.8	6.6	5.9	6.3
24	7.2	6.8	6.9	6.8	6.7	6.8	6.8	6.6	6.7	6.4	5.9	6.2
25	7.1	6.7	6.8	---	---	---	6.6	5.7	6.3	6.4	6.0	6.0
26	6.7	6.7	6.7	---	---	---	5.7	5.4	5.5	6.3	6.0	6.1
27	6.7	6.7	6.7	---	---	---	6.3	5.4	6.0	6.4	5.9	6.1
28	6.7	6.6	6.7	---	---	---	6.1	5.8	5.9	6.0	5.6	5.8
29	6.8	6.6	6.7	---	---	---	6.0	5.7	5.8	6.3	6.0	6.1
30	6.8	6.7	6.7	---	---	---	5.8	5.5	5.7	6.2	5.6	5.8
31	6.8	6.7	6.8	---	---	---	5.4	5.3	5.3	6.5	5.7	6.1
MONTH	7.2	6.3	6.7	7.2	6.6	6.9	7.3	5.3	6.5	6.7	5.4	6.0

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	6.5	5.9	6.3	6.8	6.4	6.6	6.5	5.2	5.9	6.2	6.1	6.2
2	6.2	5.7	6.0	6.5	6.4	6.5	6.1	5.6	5.9	6.3	6.1	6.2
3	6.2	5.9	6.0	6.6	6.5	6.6	6.6	6.0	6.3	6.4	6.1	6.1
4	6.3	6.1	6.2	6.6	6.5	6.6	6.4	5.8	6.1	6.1	6.0	6.1
5	6.2	6.0	6.1	6.6	6.6	6.6	6.4	6.2	6.3	6.2	6.0	6.1
6	6.4	6.2	6.3	6.6	6.4	6.5	6.5	6.2	6.3	6.1	6.0	6.0
7	6.3	6.2	6.3	6.7	6.4	6.5	6.4	5.9	6.1	6.1	6.0	6.0
8	6.4	6.3	6.3	6.7	6.4	6.5	6.9	6.1	6.4	6.1	6.0	6.1
9	6.3	6.2	6.3	6.5	6.4	6.5	6.2	6.1	6.2	6.1	6.1	6.1
10	6.3	6.3	6.3	6.6	6.6	6.6	6.2	5.9	6.1	6.3	6.0	6.2
11	6.4	6.0	6.2	6.9	6.6	6.6	6.1	6.0	6.0	6.3	5.9	6.1
12	6.3	6.2	6.2	7.0	6.4	6.7	6.3	6.1	6.2	6.3	6.0	6.1
13	6.3	6.2	6.2	6.6	6.0	6.4	---	---	---	6.4	6.3	6.4
14	6.4	6.0	6.2	6.6	6.3	6.4	---	---	---	6.4	6.3	6.3
15	6.4	6.0	6.2	6.7	6.3	6.5	---	---	---	6.3	6.3	6.3
16	6.7	6.3	6.5	6.8	6.3	6.5	---	---	---	---	---	---
17	7.0	6.4	6.6	6.7	6.2	6.4	---	---	---	---	---	---
18	6.5	6.3	6.4	6.3	6.2	6.2	---	---	---	---	---	---
19	6.3	6.3	6.3	6.2	6.1	6.1	---	---	---	6.3	6.3	6.3
20	6.6	6.3	6.4	6.4	6.2	6.3	---	---	---	6.6	6.3	6.4
21	6.4	6.4	6.4	6.4	6.3	6.4	---	---	---	6.9	6.5	6.7
22	6.4	6.3	6.4	6.6	6.2	6.3	---	---	---	7.0	6.8	6.9
23	6.8	6.3	6.4	6.5	6.1	6.2	---	---	---	6.9	5.8	6.5
24	6.4	6.3	6.4	6.1	6.0	6.1	---	---	---	6.0	5.1	5.5
25	6.7	6.3	6.6	6.2	6.0	6.1	---	---	---	6.3	5.6	6.1
26	6.7	6.3	6.6	6.2	3.3	4.5	6.2	6.1	6.2	6.3	6.2	6.3
27	6.8	6.7	6.7	4.8	3.3	3.8	6.2	6.1	6.2	6.5	6.2	6.3
28	6.9	6.5	6.6	5.9	4.9	5.4	6.5	6.1	6.2	6.7	6.5	6.6
29	---	---	---	5.8	5.7	5.8	6.2	6.1	6.1	6.8	6.6	6.7
30	---	---	---	5.9	5.8	5.9	6.3	6.1	6.2	7.0	6.1	6.6
31	---	---	---	6.8	5.8	6.3	---	---	---	6.2	5.5	5.8
MONTH	7.0	5.7	6.3	7.0	3.3	6.2	6.9	5.2	6.2	7.0	5.1	6.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	6.1	5.8	6.0	6.7	6.4	6.5	6.8	6.7	6.8	6.4	6.2	6.2
2	6.1	5.9	6.0	6.4	6.3	6.4	6.7	6.7	6.7	6.3	6.3	6.3
3	6.1	5.9	6.0	6.7	6.3	6.5	6.7	6.7	6.7	6.4	6.3	6.4
4	6.4	6.1	6.2	6.8	6.6	6.7	6.8	6.7	6.7	6.4	6.3	6.3
5	6.9	6.5	6.6	6.8	6.3	6.6	6.8	6.6	6.7	6.4	6.4	6.4
6	6.4	5.9	6.1	6.5	6.1	6.4	6.					

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.0	15.0	16.0	13.0	10.5	12.0	---	---	---	.5	.5	.5
2	16.0	13.0	14.5	14.0	11.0	12.5	---	---	---	1.0	.5	.5
3	13.5	11.5	12.5	15.0	12.5	13.5	---	---	---	1.5	.5	1.0
4	13.5	10.5	12.0	15.0	12.5	13.5	---	---	---	3.5	1.5	2.5
5	16.0	12.5	14.0	15.0	13.5	14.5	---	---	---	3.5	3.0	3.0
6	16.5	15.0	15.5	14.5	12.0	13.5	---	---	---	3.0	2.5	3.0
7	15.0	13.0	14.0	11.5	10.0	11.0	4.0	3.5	3.5	3.0	2.5	2.5
8	13.5	11.5	12.5	11.0	8.5	9.5	4.0	3.5	4.0	2.0	1.0	1.5
9	13.0	11.0	12.0	10.0	9.5	9.5	3.5	2.5	3.0	1.5	.5	1.0
10	13.5	12.0	12.5	9.5	9.0	9.5	2.5	1.0	2.0	---	---	---
11	14.0	12.5	13.0	10.0	8.0	9.0	1.5	.5	1.0	---	---	---
12	14.0	12.0	13.0	8.5	7.0	7.5	1.5	1.0	1.0	---	---	---
13	15.0	11.5	12.5	7.5	5.5	6.5	2.0	1.0	1.5	---	---	---
14	13.5	12.5	13.0	7.5	4.5	6.0	1.5	1.0	1.5	---	---	---
15	---	---	---	7.0	5.0	6.0	2.0	1.5	1.5	---	---	---
16	---	---	---	6.5	4.5	5.5	1.5	1.0	1.0	---	---	---
17	15.5	15.0	15.0	7.0	5.5	6.0	1.0	.0	.5	---	---	---
18	16.0	14.5	15.5	7.5	5.5	6.5	.5	.0	.5	---	---	---
19	---	---	---	8.5	5.5	6.5	.5	.5	.5	---	---	---
20	13.0	10.5	11.5	9.0	7.0	8.0	1.0	.5	.5	2.0	.5	1.5
21	13.0	10.0	11.5	7.0	5.5	6.0	.5	.0	.5	2.0	1.5	2.0
22	13.0	11.5	12.5	5.5	5.0	5.5	.0	.0	.0	2.0	1.5	1.5
23	13.0	11.5	12.5	5.5	3.5	4.0	.0	.0	.0	3.0	1.5	2.0
24	11.0	9.0	10.0	4.5	3.5	4.5	.5	.0	.0	2.0	1.0	1.5
25	10.0	7.5	9.0	---	---	---	.5	.0	.0	1.5	1.0	1.0
26	11.5	10.0	10.5	---	---	---	.5	.0	.0	1.0	1.0	1.0
27	12.0	11.5	11.5	---	---	---	.5	.0	.5	1.5	.5	1.0
28	13.5	11.0	12.0	---	---	---	.5	.0	.5	3.0	1.0	1.5
29	13.5	10.5	12.0	---	---	---	1.0	.5	.5	2.5	.5	1.5
30	14.0	11.0	12.0	---	---	---	.5	.0	.5	2.5	1.5	2.0
31	13.5	10.5	12.0	---	---	---	.5	.0	.5	3.0	1.5	2.0
MONTH	17.0	7.5	12.5	15.0	3.5	8.5	4.0	.0	1.0	3.5	.5	1.5

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

## RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued  
 TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.0	20.0	20.5	23.0	21.5	22.0	24.5	22.5	23.5	21.0	20.0	20.5
2	20.5	19.5	20.0	22.5	21.0	22.0	24.0	22.5	23.5	21.5	20.5	21.0
3	20.5	20.0	20.0	22.5	21.5	22.0	25.0	22.5	24.0	22.0	20.5	21.0
4	20.0	19.5	19.5	23.0	22.5	22.5	25.0	23.5	24.0	21.0	19.0	20.0
5	19.5	17.0	18.0	23.5	22.5	23.0	24.5	23.0	24.0	20.5	18.0	19.0
6	17.5	17.0	17.0	23.0	22.5	23.0	25.5	23.5	24.5	20.5	18.0	19.0
7	18.0	17.0	17.5	23.5	22.5	23.0	25.0	23.5	24.5	20.5	19.0	19.5
8	19.0	18.0	18.5	24.0	22.5	23.5	24.5	23.5	24.0	20.5	19.5	20.0
9	20.0	18.5	19.5	24.0	23.0	23.5	24.5	23.5	24.0	20.5	19.0	19.5
10	20.0	19.5	20.0	24.5	23.5	24.0	24.0	23.0	23.5	21.5	19.5	20.5
11	20.0	19.0	19.5	25.0	24.0	24.5	23.5	21.5	22.0	22.0	20.0	21.0
12	20.0	19.0	19.5	25.0	24.0	24.5	22.0	20.5	21.0	22.5	20.5	21.5
13	20.5	19.5	20.0	24.5	23.5	24.0	21.5	20.0	21.0	22.5	21.5	22.0
14	21.0	19.0	20.0	25.0	23.5	24.0	22.0	19.5	20.5	22.5	22.0	22.5
15	21.0	19.5	20.5	25.5	23.5	24.5	22.5	19.5	21.0	23.5	22.0	22.5
16	21.0	21.0	21.0	26.5	24.0	25.0	22.5	20.5	21.5	23.0	22.5	22.5
17	21.0	20.0	20.5	27.0	24.5	26.0	23.5	21.5	22.5	21.5	19.5	20.5
18	20.0	19.5	19.5	27.0	25.5	26.0	24.0	21.5	22.5	20.5	19.5	20.0
19	19.5	18.5	19.0	26.5	25.5	26.0	23.0	20.5	22.0	19.5	17.5	18.5
20	19.5	18.0	19.0	26.5	25.0	25.5	22.5	21.0	22.0	19.0	17.5	18.5
21	20.0	19.0	19.5	26.0	24.5	25.0	23.5	21.5	22.5	18.5	17.0	17.5
22	20.0	19.0	19.5	25.5	24.0	24.5	22.5	20.0	21.0	17.0	15.0	16.0
23	20.0	18.5	19.5	26.0	24.0	25.0	21.5	20.5	21.0	15.5	14.5	15.0
24	20.0	18.5	19.5	26.5	24.0	25.0	22.5	21.0	21.5	15.0	14.0	14.5
25	20.5	19.0	20.0	26.5	24.5	25.5	23.0	22.0	22.5	16.0	15.0	15.5
26	21.0	19.5	20.5	27.0	25.0	26.0	23.0	20.5	21.5	16.0	15.5	16.0
27	22.0	20.0	21.0	26.5	25.5	26.0	22.5	21.0	21.5	15.5	15.5	15.5
28	23.0	21.0	22.0	26.0	25.0	25.5	22.0	20.5	21.0	16.5	15.5	16.0
29	23.5	22.0	22.5	25.5	23.0	24.5	21.0	19.0	20.0	17.0	15.0	16.0
30	23.5	22.5	23.0	24.5	23.5	24.0	20.5	19.0	19.5	17.0	15.5	16.0
31	---	---	---	24.5	23.0	23.5	20.5	19.5	20.0	---	---	---
MONTH	23.5	17.0	20.0	27.0	21.0	24.5	25.5	19.0	22.0	23.5	14.0	19.0
YEAR	27.0	.0	13.0									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.7	6.8	7.2	8.7	7.8	8.2	---	---	---	13.3	13.2	13.2
2	7.5	6.8	7.1	8.5	7.8	8.1	---	---	---	13.4	11.4	13.2
3	7.8	7.0	7.3	8.7	7.4	8.0	---	---	---	13.3	12.9	13.1
4	8.1	7.5	7.7	8.5	7.7	8.0	---	---	---	12.9	12.2	12.4
5	8.3	7.6	8.0	8.0	7.3	7.6	---	---	---	12.1	11.9	12.0
6	8.1	7.4	7.7	8.1	6.8	7.4	---	---	---	12.3	12.0	12.2
7	8.3	7.2	7.7	8.5	7.2	7.8	12.1	11.2	11.9	13.0	11.6	12.9
8	8.6	7.8	8.2	8.7	7.5	8.0	11.9	11.6	11.7	13.2	13.0	13.1
9	8.8	8.0	8.4	9.9	7.8	8.8	12.1	11.5	11.7	13.2	12.6	13.2
10	8.6	8.0	8.3	11.0	9.0	9.9	12.3	11.6	11.9	---	---	---
11	8.1	7.5	7.8	11.3	10.1	10.7	12.5	11.8	12.1	---	---	---
12	7.9	7.0	7.4	11.5	10.3	10.9	12.4	12.1	12.2	---	---	---
13	8.1	7.0	7.5	11.8	10.7	11.2	12.5	12.0	12.2	---	---	---
14	7.7	7.4	7.6	12.1	11.1	11.6	12.2	11.9	12.0	---	---	---
15	---	---	---	12.3	11.6	11.8	12.2	11.8	12.0	---	---	---
16	---	---	---	12.7	11.5	11.9	12.3	11.8	12.0	---	---	---
17	8.0	7.2	7.6	12.2	11.5	11.8	12.1	11.8	11.9	---	---	---
18	7.5	6.9	7.2	12.2	11.2	11.7	12.3	11.9	12.1	---	---	---
19	7.2	6.4	6.8	11.8	11.1	11.5	12.2	12.0	12.1	---	---	---
20	7.4	6.5	6.9	11.8	11.2	11.5	12.2	11.8	12.0	12.7	12.1	12.4
21	7.6	6.7	7.1	11.8	11.0	11.2	11.9	11.6	11.8	12.4	12.0	12.1
22	7.2	6.7	7.0	11.9	11.2	11.4	11.6	11.1	11.3	13.4	12.3	12.8
23	7.1	6.8	7.0	12.1	11.4	11.7	11.6	10.6	11.1	13.3	12.5	13.0
24	7.9	6.5	7.2	12.1	11.3	11.9	12.1	11.6	12.0	13.4	12.9	13.2
25	8.6	7.8	8.2	---	---	---	12.3	12.1	12.2	13.8	13.4	13.7
26	8.4	8.1	8.2	---	---	---	12.3	12.2	12.3	13.9	13.7	13.8
27	8.2	7.8	8.0	---	---	---	12.3	12.0	12.1	14.0	13.7	13.8
28	8.4	7.8	8.0	---	---	---	12.1	12.0	12.1	13.7	12.9	13.4
29	8.6	7.9	8.1	---	---	---	12.3	12.0	12.2	14.2	13.1	13.9
30	8.6	7.9	8.1	---	---	---	14.5	12.2	13.0	14.1	13.8	13.9
31	8.6	7.9	8.2	---	---	---	13.6	13.3	13.5	14.2	13.7	14.0
MONTH	8.8	6.4	7.6	12.7	6.8	10.1	14.5	10.6	12.1	14.2	11.4	13.1

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	14.2	12.7	13.4	13.7	13.4	13.5	10.8	10.5	10.7	---	---	---
2	12.8	12.7	12.8	13.4	13.0	13.2	10.6	10.4	10.5	---	---	---
3	12.8	12.6	12.7	13.2	13.0	13.0	10.4	10.0	9.8	---	---	---
4	12.7	12.6	12.6	13.0	12.8	13.0	10.6	10.0	9.6	---	---	---
5	12.9	12.7	12.8	12.9	12.7	12.8	10.8	10.6	10.7	---	---	---
6	13.1	12.8	13.0	13.3	13.0	13.1	11.2	10.6	10.8	---	---	---
7	13.2	13.0	13.1	13.7	13.3	13.5	11.5	11.2	11.4	---	---	---
8	13.4	12.5	13.2	14.1	13.7	13.9	11.6	11.5	11.6	---	---	---
9	13.3	13.0	13.2	14.8	14.0	14.4	11.6	11.4	11.5	---	---	---
10	13.6	13.3	13.4	14.8	14.2	14.7	11.8	11.5	11.8	---	---	---
11	13.5	13.1	13.3	---	---	---	11.8	11.6	11.6	8.9	8.5	8.6
12	13.4	13.2	13.3	---	---	---	11.6	11.5	11.6	8.7	8.2	8.5
13	13.3	13.1	13.2	---	---	---	11.5	10.9	11.3	8.3	7.9	8.2
14	13.4	13.0	13.2	---	---	---	10.9	10.8	10.9	8.2	7.8	8.0
15	13.2	13.0	13.1	12.9	11.2	12.4	10.8	10.5	10.7	8.1	7.8	7.9
16	13.5	13.0	13.2	11.6	9.3	10.7	10.5	10.0	10.2	---	---	---
17	13.5	13.0	13.2	11.4	11.2	11.3	10.0	9.9	9.9	---	---	---
18	13.2	13.0	13.1	11.2	10.6	10.9	10.1	10.0	10.1	---	---	---
19	13.2	13.0	13.1	10.8	10.5	10.7	10.2	10.1	10.1	8.5	7.7	8.2
20	13.0	12.8	12.9	10.7	10.5	10.6	10.2	10.0	10.1	8.0	7.4	7.6
21	12.8	12.5	12.6	10.7	10.5	10.6	10.5	10.1	10.4	7.9	6.5	7.3
22	13.2	12.6	13.0	10.9	10.6	10.7	10.5	10.4	10.5	7.8	7.2	7.6
23	13.3	13.2	13.2	11.0	10.7	10.8	10.7	10.5	10.6	7.7	7.6	7.6
24	13.3	12.9	13.1	11.0	10.9	11.0	10.7	9.9	10.3	7.7	7.5	7.6
25	13.1	12.9	13.0	11.2	10.7	11.0	10.3	10.0	10.2	7.7	7.6	7.7
26	13.9	13.1	13.5	11.4	10.7	10.9	10.0	9.7	9.9	7.8	7.5	7.6
27	13.9	13.6	13.7	12.0	11.4	11.7	---	---	---	8.1	7.4	7.8
28	13.7	13.5	13.6	12.2	11.9	12.1	---	---	---	7.8	7.5	7.7
29	---	---	---	12.3	12.1	12.2	---	---	---	7.7	7.4	7.5
30	---	---	---	11.6	11.2	11.4	---	---	---	7.7	7.3	7.5
31	---	---	---	11.1	9.9	10.7	---	---	---	7.7	7.4	7.6
MONTH	14.2	12.5	13.1	14.8	9.3	12.0	11.8	9.7	10.7	8.9	6.5	7.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	7.8	7.6	7.7	7.7	7.4	7.5	7.6	6.4	6.9	8.3	6.9	7.5
2	7.9	7.6	7.8	7.8	7.4	7.7	7.4	6.5	6.9	7.8	7.1	7.4
3	7.9	7.7	7.8	7.6	7.4	7.5	7.6	6.3	6.9	8.0	6.9	7.4
4	8.1	7.9	8.0	7.4	7.2	7.3	7.1	6.3	6.7	8.2	7.3	7.7
5	8.1	7.5	7.8	7.5	7.2	7.3	6.7	5.0	6.0	8.2	7.4	7.8
6	8.0	7.6	7.9	7.4	7.2	7.3	7.3	6.1	6.6	8.1	7.5	7.8
7	8.1	7.8	8.0	7.4	7.2	7.3	6.8	4.8	6.3	7.6	7.1	7.3
8	8.2	7.9	8.1	7.3	6.9	7.2	6.4	5.1	6.1	8.3	6.6	7.5
9	8.0	7.7	8.0	7.3	7.0	7.1	6.3	5.6	6.1	8.5	7.7	8.1
10	7.9	7.4	7.7	7.3	7.2	7.3	6.7	6.3	6.4	8.3	7.5	7.9
11	8.0	7.8	7.9	7.3	6.8	7.2	6.6	6.1	6.4	8.0	7.3	7.6
12	8.0	7.7	7.9	7.2	7.0	7.1	7.0	6.7	6.8	7.9	6.8	7.4
13	8.0	7.8	7.9	7.2	6.8	7.1	7.1	6.8	6.9	7.8	6.9	7.4
14	7.9	7.8	7.8	7.1	7.0	7.1	7.1	6.7	6.9	7.4	6.7	7.1
15	7.8	7.4	7.7	7.1	6.8	7.0	7.1	6.7	6.9	7.1	6.0	6.5
16	7.6	7.3	7.4	7.0	6.7	6.8	7.1	6.6	6.8	7.3	5.5	6.4
17	7.7	7.1	7.5	7.0	6.5	6.7	6.7	6.2	6.6	8.0	7.0	7.4
18	7.7	7.3	7.5	6.9	6.4	6.6	7.7	6.0	6.8	8.1	7.3	7.7
19	7.7	7.1	7.5	6.9	6.3	6.6	8.0	7.2	7.4	8.3	7.4	7.8
20	7.8	7.4	7.7	6.9	6.0	6.5	8.0	7.2	7.5	8.9	7.6	8.2
21	8.2	7.3	7.8	6.9	6.0	6.5	8.0	7.2	7.5	8.7	7.9	8.3
22	8.1	7.7	8.0	7.0	6.3	6.6	8.1	7.2	7.6	9.2	8.2	8.7
23	8.1	7.7	8.0	7.2	6.5	6.8	7.8	6.9	7.4	9.4	8.4	8.9
24	8.0	7.8	7.9	7.3	6.6	6.8	7.8	6.8	7.2	9.7	8.4	9.1
25	7.9	7.8	7.8	7.3	6.4	6.8	7.7	6.5	7.1	9.3	8.4	8.9
26	7.8	7.4	7.7	7.4	6.2	6.7	8.0	6.9	7.4	9.0	8.0	8.3
27	7.7	7.5	7.6	7.0	6.2	6.6	7.6	7.0	7.3	8.4	7.7	8.0
28	7.5	7.1	7.4	7.0	6.1	6.5	7.9	6.8	7.3	9.1	7.6	8.3
29	7.4	6.8	7.2	7.3	6.2	6.7	8.7	7.3	8.0	9.6	7.9	8.7
30	7.5	7.2	7.3	7.4	6.3	6.8	8.3	7.7	8.0	9.8	8.4	9.0
31	---	---	---	7.6	6.4	7.0	8.4	7.4	7.8	---	---	---
MONTH	8.2	6.8	7.7	7.8	6.0	7.0	8.7	4.8	7.0	9.8	5.5	7.9
YEAR	14.8	4.8	9.5									

## RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	608	467	---	773	291	354	287	360	333	374	423	558
2	617	474	---	816	359	357	300	369	225	390	449	543
3	645	486	---	750	339	363	---	369	246	324	471	549
4	702	477	---	611	297	372	---	378	270	414	480	530
5	786	470	---	527	309	372	234	375	152	413	456	555
6	771	477	---	513	324	381	234	384	203	371	462	548
7	723	486	813	566	339	396	249	393	249	260	462	528
8	681	492	804	516	354	411	255	390	270	276	381	504
9	678	516	758	549	342	404	258	398	287	282	411	501
10	693	546	747	---	369	360	267	405	278	306	506	531
11	671	560	749	---	375	348	282	423	276	318	509	563
12	602	602	782	---	390	278	308	426	309	320	528	600
13	626	611	795	---	395	285	303	431	351	315	489	593
14	682	597	783	---	393	284	239	456	345	326	522	582
15	---	615	765	---	399	261	222	450	378	318	537	542
16	---	681	762	---	354	237	225	---	444	327	564	550
17	573	678	768	---	321	225	216	---	368	339	591	542
18	561	669	759	---	312	215	303	---	336	345	581	495
19	552	672	774	---	300	201	333	468	233	354	567	498
20	534	672	807	589	285	215	342	464	228	342	573	518
21	531	663	833	573	285	216	348	423	254	338	620	552
22	525	633	816	510	297	204	372	291	276	336	662	576
23	519	615	677	218	303	201	347	351	284	363	675	591
24	489	621	686	260	312	210	345	408	297	386	669	620
25	453	---	602	252	327	231	320	384	309	399	662	639
26	467	---	903	246	330	470	290	432	321	405	651	632
27	474	---	869	267	336	569	321	429	324	408	614	590
28	483	---	999	285	342	312	333	408	318	410	567	579
29	486	---	897	303	---	309	348	380	321	402	570	585
30	510	---	791	330	---	315	354	209	362	10	576	578
31	495	---	795	---	---	303	---	272	---	420	573	---
MEAN	591	574	789	473	335	312	294	390	295	355	542	559
WTR YR 1982	MEAN	453	MAX	999	MIN	152						

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	6.8	---	5.4	6.4	6.5	6.0	6.2	6.0	6.6	6.8	6.2
2	6.8	6.7	---	5.4	6.1	6.5	6.0	6.2	6.0	6.4	6.7	6.3
3	6.7	6.7	---	5.5	6.0	6.6	6.4	6.1	6.0	6.4	6.7	6.4
4	6.8	6.7	---	6.4	6.2	6.6	6.1	6.1	6.2	6.7	6.7	6.3
5	6.7	6.7	---	5.7	6.1	6.6	6.4	6.1	6.6	6.6	6.7	6.4
6	6.6	6.7	---	6.2	6.3	6.5	6.4	6.0	6.1	6.4	6.7	5.9
7	6.5	6.8	7.0	6.4	6.3	6.5	6.1	6.0	6.3	6.4	6.6	6.0
8	6.4	6.8	7.1	6.1	6.3	6.4	6.6	6.1	6.4	6.3	6.7	6.2
9	6.5	6.9	7.1	5.9	6.3	6.5	6.2	6.1	6.5	6.5	6.8	6.2
10	6.6	6.9	7.0	---	6.3	6.6	6.2	6.2	6.7	6.5	6.3	6.2
11	6.6	7.0	6.9	---	6.3	6.6	6.0	6.1	6.7	6.5	6.4	6.2
12	6.7	7.0	6.8	---	6.2	6.8	6.1	6.1	---	6.3	6.6	6.1
13	6.7	7.0	6.7	---	6.2	6.5	---	6.4	---	6.3	6.7	6.1
14	6.7	7.0	6.8	---	6.3	6.5	---	6.4	---	6.4	6.7	6.1
15	---	7.0	6.9	---	6.3	6.6	---	6.3	---	6.4	6.5	6.3
16	---	7.0	6.9	---	6.4	6.5	---	---	---	6.5	6.4	6.8
17	6.4	6.9	6.8	---	6.6	6.4	---	---	---	6.4	6.3	6.3
18	6.4	6.8	6.8	---	6.4	6.2	---	---	---	6.4	6.3	6.4
19	6.6	6.8	6.7	---	6.3	6.1	---	6.3	---	6.5	6.3	6.5
20	6.6	6.8	6.5	6.0	6.3	6.3	---	6.4	---	6.6	6.3	6.6
21	6.6	6.9	6.4	6.0	6.4	6.4	---	6.7	---	6.8	6.3	6.6
22	6.6	6.9	6.4	6.2	6.4	6.2	---	6.9	---	6.7	6.3	6.7
23	6.6	6.8	6.9	6.3	6.4	6.2	---	6.7	6.5	6.8	6.3	6.7
24	6.9	6.8	6.7	6.4	6.4	6.1	---	5.5	6.6	6.7	6.2	6.6
25	6.8	---	6.4	6.0	6.7	6.1	---	6.3	6.6	6.6	6.3	6.5
26	6.7	---	5.4	6.0	6.7	3.8	6.2	6.3	6.6	6.6	6.3	6.5
27	6.7	---	6.1	6.0	6.7	3.7	6.2	6.3	6.6	6.5	6.3	6.7
28	6.7	---	5.9	5.9	6.5	5.5	6.2	6.6	6.6	6.6	6.5	6.6
29	6.7	---	5.8	5.1	---	5.8	6.1	6.7	6.6	6.6	6.3	6.6
30	6.7	---	5.7	5.8	---	5.9	6.2	6.7	6.6	6.7	6.3	6.5
31	6.8	---	5.4	---	---	6.3	---	5.8	---	6.7	6.2	---
MEAN	6.7	6.9	6.5	6.0	6.4	6.2	6.2	6.3	6.4	6.5	6.5	6.4
WTR YR 1982	MEAN	6.4	MAX	7.1	MIN	3.7						

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	12.0	---	.5	2.0	3.0	11.0	14.5	20.5	22.0	23.5	20.5
2	14.0	12.5	---	.5	1.5	4.0	12.0	15.5	20.0	21.5	23.5	21.0
3	12.5	13.5	---	1.0	2.0	5.0	13.0	16.0	20.0	22.0	23.5	21.0
4	12.0	13.5	---	3.0	2.5	5.0	11.5	16.5	19.5	22.5	24.0	20.0
5	14.0	14.5	---	3.0	2.5	6.0	10.0	17.5	17.5	22.5	23.5	19.5
6	15.5	13.5	---	3.0	2.5	5.0	9.0	18.5	17.0	23.0	24.0	19.5
7	14.0	11.0	4.0	2.5	1.0	4.0	7.5	19.0	17.5	23.0	24.5	19.5
8	12.5	9.5	4.0	1.5	1.0	4.5	7.5	18.5	18.5	23.0	23.5	20.0
9	12.0	9.5	2.5	1.0	.5	4.5	7.0	18.5	19.0	23.5	24.0	19.5
10	12.0	9.5	2.0	---	.5	5.0	7.0	17.5	20.0	24.0	23.5	20.5
11	13.0	9.0	1.0	---	.5	6.0	7.5	17.5	19.5	24.5	22.0	21.0
12	12.5	7.5	1.0	---	.5	6.5	7.5	18.5	19.5	24.5	21.0	21.0
13	12.0	6.5	1.5	---	.5	8.0	8.5	19.5	20.0	24.0	21.0	22.0
14	13.0	6.0	1.5	---	.5	9.0	9.5	20.5	20.0	24.0	20.5	22.0
15	---	6.0	1.5	---	1.0	9.0	11.0	20.5	20.0	24.5	21.0	22.5
16	---	6.0	1.0	---	1.0	9.0	13.5	---	21.0	25.0	21.5	22.5
17	15.0	6.0	.5	---	1.0	9.0	14.0	---	20.5	25.5	22.5	21.0
18	15.5	6.5	.5	---	1.5	9.5	13.5	---	19.5	26.0	22.5	20.0
19	---	6.0	.5	---	2.0	10.5	13.5	23.0	19.0	26.0	22.0	19.0
20	11.5	8.0	.5	1.5	2.5	10.0	14.0	22.5	19.0	25.5	22.0	18.5
21	11.5	6.5	.5	2.0	3.5	11.0	13.5	21.0	19.5	25.0	22.0	17.5
22	12.5	5.5	.0	1.5	3.5	10.0	13.0	20.0	19.5	24.5	21.5	15.5
23	12.5	4.5	.0	2.0	3.0	9.0	12.5	20.5	19.5	24.5	21.0	15.0
24	10.0	4.5	.0	1.5	3.5	8.5	12.5	21.0	19.5	25.0	21.5	14.5
25	9.0	---	.0	1.0	4.0	8.5	13.0	21.0	19.5	25.5	22.5	15.5
26	10.0	---	.0	1.0	3.0	8.0	14.0	21.0	20.5	26.0	21.5	16.0
27	11.5	---	.5	1.0	2.5	6.5	14.0	21.5	21.0	26.0	21.5	15.5
28	11.5	---	.5	1.5	3.0	6.0	13.5	21.5	22.0	25.5	21.5	15.5
29	12.0	---	.5	1.0	---	---	14.0	22.0	22.5	24.5	20.5	16.0
30	12.0	---	.5	2.0	---	---	14.5	19.0	23.0	24.0	19.5	16.0
31	12.5	---	.5	---	---	10.5	---	19.5	---	23.5	19.5	---
MEAN	12.5	8.5	1.0	1.5	2.0	7.5	11.5	19.5	20.0	24.0	22.0	19.0
WTR YR 1982	MEAN	13.0	MAX	26.0	MIN	.0						

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	8.1	---	13.2	13.4	13.6	10.7	---	7.7	7.6	6.8	7.5
2	7.1	8.0	---	13.3	12.8	13.2	10.5	---	7.8	7.7	6.8	7.4
3	7.3	7.8	---	13.1	12.7	13.0	9.7	---	7.8	7.5	6.9	7.3
4	7.7	7.9	---	12.3	12.6	13.0	9.5	---	8.0	7.3	6.6	7.6
5	8.0	7.6	---	12.0	12.8	12.8	10.7	---	7.8	7.3	6.1	7.7
6	7.8	7.3	---	12.1	13.0	13.2	10.8	---	8.0	7.3	6.5	7.7
7	7.8	7.7	11.9	12.9	13.1	13.5	11.4	---	8.0	7.3	6.3	7.3
8	8.0	7.8	11.6	13.2	13.3	13.9	11.6	---	8.1	7.3	6.1	7.4
9	8.3	8.3	11.7	13.2	13.2	14.2	11.5	---	8.0	7.1	6.1	8.1
10	8.3	9.7	11.9	---	13.4	14.6	11.8	---	7.7	7.3	6.4	7.9
11	7.9	10.6	12.2	---	13.3	---	11.6	8.6	7.8	7.2	6.4	7.5
12	7.4	10.8	12.2	---	13.3	---	11.6	8.5	7.9	7.1	6.9	7.4
13	7.4	11.0	12.2	---	13.2	---	11.3	8.2	7.9	7.1	6.9	7.4
14	7.6	11.5	12.0	---	13.2	---	10.9	8.0	7.8	7.1	6.9	7.2
15	---	11.8	11.9	---	13.0	12.4	10.7	7.8	7.7	7.0	6.8	6.6
16	---	11.9	12.0	---	13.1	10.4	10.2	---	7.4	6.8	6.7	6.3
17	7.7	11.8	11.9	---	13.3	11.3	9.9	---	7.5	6.7	6.5	7.5
18	7.3	11.7	12.1	---	13.1	11.0	10.1	---	7.4	6.6	6.8	7.7
19	6.8	11.5	12.1	---	13.1	10.7	10.2	8.4	7.5	6.5	7.3	7.7
20	6.8	11.5	12.0	12.4	12.9	10.6	10.1	7.6	7.7	6.5	7.5	8.0
21	7.0	11.2	11.9	12.1	12.6	10.6	10.4	7.3	7.8	6.5	7.5	8.2
22	7.0	11.4	11.3	12.7	13.1	10.7	10.5	7.7	8.0	6.6	7.5	8.6
23	7.0	11.6	11.0	13.1	13.2	10.8	10.6	7.6	8.0	6.7	7.4	8.8
24	7.0	11.8	12.0	13.3	13.1	11.0	10.3	7.6	7.9	6.7	7.2	9.1
25	8.1	---	12.2	13.7	13.0	11.0	10.2	7.7	7.8	6.6	7.0	8.9
26	8.2	---	12.3	13.8	13.8	10.9	10.0	7.6	7.7	6.7	7.3	8.3
27	8.0	---	12.1	13.8	13.7	11.7	---	7.8	7.6	6.5	7.2	8.1
28	8.0	---	12.1	13.4	13.7	12.1	---	7.7	7.4	6.4	7.3	8.2
29	8.1	---	12.3	14.0	---	---	---	7.5	7.2	6.5	8.0	8.5
30	8.0	---	12.5	13.9	---	11.4	---	7.5	7.3	6.8	8.0	8.8
31	8.1	---	13.5	14.0	---	10.8	---	7.6	---	6.9	7.8	---
MEAN	7.6	10.0	12.0	13.1	13.1	12.0	10.7	7.8	7.7	6.9	7.0	7.8
WTR YR 1982	MEAN	9.5	MAX	14.6	MIN	6.1						

## 03219500 SCIOTO RIVER NEAR PROSPECT, OH

LOCATION.--Lat 40°25'10", long 83°11'50", Delaware County, Hydrologic Unit 05060001, on downstream side of pier of Hoskins Bridge, 1.5 mi (2.4 km) upstream from Ottawa Creek, 2.0 mi (3.2 km) south of Prospect, and 2.5 mi (4.0 km) downstream from Patton Run.

DRAINAGE AREA.--567 mi<sup>2</sup> (1,469 km<sup>2</sup>).

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.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 886.9 ft (270.33 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). July 24, 1925, to Oct. 31, 1932, nonrecording gage at site 2.5 mi (4.0 km) upstream at datum 4.8 ft (1.46 m) higher. Oct. 16 to Dec. 5, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for period of no gage height record, Dec. 20 to Mar. 8, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1951 to 1953.

AVERAGE DISCHARGE.--50 years, 457 ft<sup>3</sup>/s (12.94 m<sup>3</sup>/s), 10.95 in/yr (278 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft<sup>3</sup>/s (286 m<sup>3</sup>/s) Mar. 22, 1927, gage-height, 15.0 ft (4.57 m), from graph based on gage readings at site and datum then in use, and Jan. 21, 1959, gage height, 15.30 ft (4.663 m); minimum, 3.5 ft<sup>3</sup>/s (0.099 m<sup>3</sup>/s) Sept. 13, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913, reached a stage of 21.1 ft (6.43 m), discharge, 27,000 ft<sup>3</sup>/s (765 m<sup>3</sup>/s), computed by Franklin County Conservancy District, at site and datum used 1925-32.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,600 ft<sup>3</sup>/s (102 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	Gage height (ft)	(m)
Jan. 31	----	4500	127	----	----	Mar. 5	----	4500	127	----	----
Feb. 16	----	3800	108	----	----	Mar. 14	0400	*5100	144	*10.61	3.324
Feb. 21	----	3800	108	----	----	Mar. 18	1800	4810	136	10.25	3.124

Minimum discharge, 12 ft<sup>3</sup>/s (0.34 m<sup>3</sup>/s) Sept. 22-24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	278	275	540	3100	820	1600	144	1210	130	21	17
2	37	205	422	900	2000	1200	2030	137	678	106	20	19
3	34	158	508	1500	1400	1900	1450	132	412	92	20	32
4	34	130	379	2900	900	3000	1170	126	294	155	22	27
5	34	113	283	2100	620	4200	1130	119	230	205	32	19
6	85	104	244	1400	400	3000	785	114	183	131	24	17
7	278	96	222	900	350	2300	600	111	157	93	23	16
8	212	86	212	580	300	1800	551	123	140	75	23	15
9	138	82	210	360	270	1150	656	130	134	67	52	15
10	103	74	197	300	240	749	919	130	255	61	50	15
11	77	67	160	280	210	1070	1310	124	931	59	31	15
12	64	60	140	250	190	2800	1780	110	1420	53	24	15
13	57	57	133	230	160	4670	2270	101	888	45	22	15
14	47	54	123	210	450	5060	2140	94	367	42	21	17
15	41	51	112	190	1400	4580	1460	90	241	37	19	38
16	36	50	104	170	3500	3750	817	84	498	34	18	41
17	34	50	99	150	3400	4020	608	78	1210	33	16	28
18	33	48	88	140	2700	4710	656	76	1330	30	16	20
19	34	48	99	130	2100	4030	647	80	958	32	15	16
20	35	136	90	130	1600	2850	497	110	494	49	16	14
21	34	376	240	140	3500	2760	398	149	371	37	57	13
22	29	336	680	400	2700	2900	324	176	357	33	45	12
23	29	267	1800	1200	2000	1880	272	170	297	36	28	12
24	31	217	1600	1000	1500	1110	239	275	204	35	27	12
25	31	208	1200	780	1100	801	217	224	155	36	40	15
26	48	234	940	560	840	697	205	166	131	47	35	15
27	63	280	740	430	640	665	195	155	114	43	25	16
28	104	392	600	330	540	587	195	273	102	36	23	27
29	613	422	450	748	---	478	165	1110	103	28	20	20
30	801	289	360	1800	---	439	153	1980	113	26	16	17
31	489	---	440	4300	---	838	---	1760	---	23	16	---
TOTAL	3729	4968	13150	25048	38110	70814	25439	8651	13977	1909	817	570
MEAN	120	166	424	808	1361	2284	848	279	466	61.6	26.4	19.0
MAX	801	422	1800	4300	3500	5060	2270	1980	1420	205	57	41
MIN	29	48	88	130	160	439	153	76	102	23	15	12
CFSM	.21	.29	.75	1.43	2.40	4.03	1.50	.49	.82	.11	.05	.03
IN.	.24	.33	.86	1.64	2.50	4.65	1.67	.57	.92	.13	.05	.04
CAL YR 1981	TOTAL	147729	MEAN 405	MAX 5330	MIN 18	CFSM .71	IN 9.69					
WTR YR 1982	TOTAL	207182	MEAN 568	MAX 5060	MIN 12	CFSM 1.00	IN 13.59					

## 03219590 BOKES CREEK NEAR WARRENSBURG, OH

LOCATION.--Lat 40°19'20", long 83°10'30", Delaware County, Hydrologic Unit 05060001, on right bank at downstream side of bridge on State Highway 257, 3.4 mi (5.5 km) downstream from Fulton Creek, 0.7 mi (1.1 km) upstream from Moors Run, and 1.2 mi (1.9 km) north of Warrensburg.

DRAINAGE AREA.--83.2 mi<sup>2</sup> (215 km<sup>2</sup>).

PERIOD OF RECORD.--May 1982 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 870 ft (265 m) from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 269 ft<sup>3</sup>/s (7.62 m<sup>3</sup>/s) June 17, 1982, gage height 7.82 ft (2.384 m); minimum, no flow many days during 1982.

EXTREMES FOR PERIOD MAY 1982 TO SEPTEMBER 1982.--Maximum discharge, 269 ft<sup>3</sup>/s (7.62 m<sup>3</sup>/s) June 17, gage height 7.82 ft (2.384 m); minimum, no flow many days during the year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	42	4.6	.00	.00
2								---	30	4.2	.00	.00
3								---	21	3.9	.00	.00
4								---	15	3.9	.00	.00
5								---	18	3.2	.00	.00
6								---	24	2.7	.00	.00
7								---	14	2.3	.00	.00
8								---	10	2.5	.00	.00
9								---	8.0	2.3	.00	.00
10								---	14	1.8	.00	.00
11								---	19	1.8	.00	.00
12								---	16	1.4	.00	.00
13								---	11	1.1	.00	.00
14								---	7.1	1.0	.00	.00
15								---	7.1	.89	.00	.00
16								---	61	.89	.00	.00
17								---	182	.70	.00	.00
18								---	175	.58	.00	.00
19								---	73	.53	.00	.00
20								7.5	44	.48	.00	.00
21								40	32	.40	.00	.00
22								77	23	.32	.00	.00
23								48	16	.36	.00	.00
24								35	13	.28	.00	.00
25								24	10	.10	.00	.00
26								16	9.0	.07	.10	.00
27								12	8.0	.05	.07	.00
28								16	7.1	.02	.02	.00
29								41	6.2	.01	.00	.00
30								58	5.5	.00	.00	.00
31								40	---	.00	.00	---
TOTAL								---	921.0	42.38	.19	.00
MEAN								---	30.7	1.37	.006	.000
MAX								---	182	4.6	.10	.00
MIN								---	5.5	.00	.00	.00
CFSM								---	.37	.02	.000	.000
IN.								---	.41	.02	.00	.00

## 03220000 MILL CREEK NEAR BELLEPOINT, OH

LOCATION.--Lat 40°14'54", long 83°10'26", Delaware County, Hydrologic Unit 05060001, on left bank at upstream side of county road bridge, 1.2 mi (1.9 km) west of Bellepoint, 1.5 mi (2.4 km) upstream from mouth, and 2.3 mi (3.7 km) downstream from Blues Creek.

DRAINAGE AREA.--178 mi<sup>2</sup> (461 km<sup>2</sup>).

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.14 ft (263.695 m) National Geodetic Vertical Datum of 1929 (levels by students of Ohio State University, City of Columbus bench mark). Prior to Jan. 1, 1948, nonrecording gage, at same site and datum.

REMARKS.--Records good. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 154 ft<sup>3</sup>/s (4.361 m<sup>3</sup>/s) 11.75 in/yr (298 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft<sup>3</sup>/s (575 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 13.85 ft (4.221 m), from rating curve extended above 14,000 ft<sup>3</sup>/s (396 m<sup>3</sup>/s); no flow Sept. 25, 26, 1944, Sept. 19, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 18.0 ft (5.49 m) occurred in March 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft<sup>3</sup>/s (70.8 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 31	1845	*4880 138	*8.44 2.573	Mar. 16	1415	3340 94.6	7.26 2.213

Minimum daily discharge, 1.6 ft<sup>3</sup>/s (0.045 m<sup>3</sup>/s) Sept. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	10	111	265	2640	84	933	27	65	11	4.2	3.6
2	4.6	8.0	285	217	1250	98	282	25	41	10	4.0	5.8
3	4.8	6.7	162	162	651	138	599	24	28	11	3.0	12
4	5.0	6.7	88	1300	540	475	693	26	21	12	4.5	7.2
5	4.6	7.1	70	1720	302	1470	229	25	23	10	5.2	3.6
6	4.9	7.0	58	513	150	725	234	25	50	11	6.6	3.4
7	3.7	6.9	44	260	110	264	214	26	29	7.8	5.0	3.5
8	4.3	6.9	37	162	90	166	193	42	20	7.2	5.0	2.6
9	7.2	6.3	31	134	78	127	249	39	22	7.2	6.6	1.8
10	6.1	5.6	25	110	70	107	486	31	81	6.0	5.5	2.2
11	6.1	6.1	20	90	64	552	536	28	71	5.7	3.8	2.4
12	6.2	6.3	19	80	58	1510	397	24	29	5.5	4.0	3.0
13	5.5	6.1	18	66	52	1020	236	22	16	6.3	4.2	2.6
14	4.8	6.0	16	60	48	954	160	20	12	5.0	3.8	2.4
15	5.4	5.9	15	58	226	371	106	19	19	5.2	3.4	1.9
16	7.3	5.7	15	54	1300	1760	87	17	290	5.7	3.0	2.1
17	7.3	5.3	15	50	2230	2200	83	15	561	5.0	2.8	2.8
18	7.8	5.8	15	47	1710	629	99	15	282	4.5	2.6	2.8
19	8.0	7.3	14	44	933	336	84	15	101	4.2	2.6	3.0
20	8.1	7.4	13	40	603	1030	69	16	55	4.0	3.6	2.4
21	7.2	30	12	38	906	1070	60	16	38	4.2	3.4	1.9
22	7.2	37	17	38	770	397	50	53	29	5.0	3.2	1.8
23	9.6	17	912	716	490	209	44	37	20	5.2	3.8	1.6
24	12	15	1200	922	656	152	39	26	16	4.7	10	2.8
25	9.6	17	435	442	302	123	37	20	13	5.0	3.4	3.2
26	10	17	205	182	146	127	35	18	12	4.5	14	3.6
27	19	67	148	128	113	130	38	28	10	3.6	5.2	5.2
28	21	122	148	120	91	99	34	152	14	3.2	5.5	6.3
29	32	62	113	91	---	81	32	78	19	4.0	5.0	5.0
30	27	31	80	394	---	76	29	93	15	5.0	3.6	4.2
31	15	---	69	3280	---	460	---	70	---	5.0	3.0	---
TOTAL	286.0	614.7	4410	11783	16579	16940	6367	1072	2002	193.7	174.1	106.7
MEAN	9.23	20.5	142	380	592	546	212	34.6	66.7	6.25	5.62	3.56
MAX	32	122	1200	3280	2640	2200	933	152	561	12	34	12
MIN	3.7	5.3	12	38	48	76	29	15	10	3.2	2.6	1.6
CFSM	.05	.12	.80	2.14	3.33	3.07	1.19	.19	.38	.04	.03	.02
IN.	.06	.13	.92	2.46	3.46	3.54	1.33	.22	.42	.04	.04	.02
CAL YR 1981	TOTAL	63836.1	MEAN 175	MAX 3720	MIN 3.7	CFSM .98	IN 13.34					
WTR YR 1982	TOTAL	60528.2	MEAN 166	MAX 3280	MIN 1.6	CFSM .93	IN 12.65					

## 03221000 SCIOTO RIVER BELOW O'SHAUGHNESSY DAM, NEAR DUBLIN, OH

LOCATION.--Lat 40°08'36", long 83°07'14", Delaware County, Hydrologic Unit 05060001, on left bank, 0.2 mi (0.3 km) north of county line, 0.8 mi (1.3 km) downstream from O'Shaughnessy Dam, and 3.0 mi (4.8 km) north of Dublin.

DRAINAGE AREA.--980 mi<sup>2</sup> (2,538 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 803: 1924-35. WSP 1725: 1924. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 775.00 ft (236.220 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1921, nonrecording gage at site 0.8 mi (1.3 km) upstream at same datum. Aug. 26, 1921, to Oct. 13, 1924, nonrecording gage at site 100 ft (30 m) downstream at same datum.

REMARKS.--Records good. Flow regulated since 1924 by O'Shaughnessy Reservoir 0.8 mi (1.3 km) upstream (see station 03220500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--61 years, 791 ft<sup>3</sup>/s (22.40 m<sup>3</sup>/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft<sup>3</sup>/s (1,560 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 22.04 ft (6.718 m), from floodmark; minimum daily, 0.4 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) Nov. 8, 1924.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 24.6 ft (7.50 m), discharge, 74,500 ft<sup>3</sup>/s (2,110 m<sup>3</sup>/s) at Griggs Dam, 9 mi (4 km) downstream from gage, computed by C.E. Sherman, Ohio State University.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,000 ft<sup>3</sup>/s (368 m<sup>3</sup>/s) Jan. 31, gage height, 11.46 ft (3.493 m); minimum daily, 27 ft<sup>3</sup>/s (0.76 m<sup>3</sup>/s) Aug. 1, Sept. 27-29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	436	491	874	7660	1320	3470	263	1640	155	27	32
2	86	306	770	1080	5000	1360	2900	245	1040	163	28	33
3	54	241	858	1070	3870	1570	2760	232	642	167	28	32
4	50	197	702	3050	3030	1940	2710	224	449	147	32	32
5	54	184	503	5190	1840	4650	1880	219	406	224	40	32
6	68	171	407	4690	1140	4730	1520	212	344	224	56	32
7	118	136	363	3950	763	4430	1190	212	278	167	70	29
8	282	121	347	2510	665	3230	1060	259	245	125	68	28
9	219	151	311	1360	555	1830	1200	249	234	105	63	28
10	167	86	292	568	407	1220	1850	223	501	81	56	30
11	143	98	250	380	402	1750	2350	222	801	78	56	30
12	98	95	219	340	352	5470	2780	204	1440	75	56	30
13	86	86	206	310	316	6890	2940	182	1280	70	56	30
14	81	83	175	280	287	7440	2780	162	626	61	56	30
15	75	81	193	250	503	5820	2090	151	381	56	56	30
16	98	75	282	240	3080	7390	1320	147	1010	50	56	31
17	54	75	163	220	7240	8770	959	126	2140	46	56	30
18	61	73	159	210	7000	6730	908	117	2230	50	48	30
19	63	105	30	200	6250	5230	942	122	1540	61	37	29
20	54	268	63	190	5550	5040	794	136	875	58	37	29
21	56	337	105	190	6030	5110	644	237	601	48	37	28
22	65	460	163	210	6400	4040	535	354	494	46	35	28
23	68	396	1630	1260	5860	2880	448	370	455	54	37	28
24	48	368	3440	2270	6180	1830	407	335	346	42	38	28
25	56	287	2820	1950	5050	1310	374	364	268	38	38	28
26	86	301	2650	1480	3830	1120	358	284	224	40	37	28
27	114	402	2020	1070	2630	1060	374	343	188	44	36	27
28	125	497	1290	763	1710	950	296	837	175	63	34	27
29	292	616	950	561	---	802	277	925	202	33	33	27
30	818	484	755	818	---	710	268	2060	184	32	33	28
31	732	---	609	7480	---	1470	---	2130	---	33	32	---
TOTAL	4446	7216	23216	45014	93600	108092	42384	12146	21239	2636	1372	884
MEAN	143	241	749	1452	3343	3487	1413	392	708	85.0	44.3	29.5
MAX	818	616	3440	7480	7660	8770	3470	2130	2230	224	70	33
MIN	48	73	30	190	287	710	268	117	175	32	27	27
CAL YR 1981	TOTAL	352877	MEAN	967	MAX	10300	MIN	30				
WTR YR 1982	TOTAL	362245	MEAN	992	MAX	8770	MIN	27				

## 03223000 OLENTANGY RIVER AT CLARIDON, OH

LOCATION.--Lat 40°34'58", long 82°59'20", in NW 1/4 sec. 26, T.5 S., R.16 E., Marion County, Hydrologic Unit 05060001, on left bank 900 ft (274 m) downstream from bridge on State Highway 95, 0.5 mi (0.8 km) east of Claridon, 0.8 mi (1.3 km) downstream from Otter Creek, and 1.4 mi (2.3 km) upstream from Beaver Run.

DRAINAGE AREA.--157 mi<sup>2</sup> (407 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1235: 1947, 1948(P). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 961.72 ft (293.132 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to Aug. 18, 1969 water-stage recorder at site 1,000 ft (305 m) upstream at same datum.

REMARKS.--Records good except those for periods of no gage-height record, Oct. 18 to Dec. 10, Feb. 23 to Mar. 2, winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--36 years, 153 ft<sup>3</sup>/s (4.333 m<sup>3</sup>/s), 13.23 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft<sup>3</sup>/s (422 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 16.77 ft (5.111 m), from rating curve extended above 4,700 ft<sup>3</sup>/s (133 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; no flow Oct. 2-26, 1953, Sept. 14-22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 23	2130	1790 50.7	9.10 2.774	Mar. 17	1300	1770 50.1	9.06 2.761
Feb. 18	0100	*2120 60.0	*9.72 2.963				

Minimum daily discharge, 4.3 ft<sup>3</sup>/s (0.12 m<sup>3</sup>/s) Sept. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	140	120	266	1740	220	415	44	119	139	8.3	7.1
2	17	100	210	317	1500	160	219	43	69	68	8.1	12
3	16	88	250	197	722	121	224	41	57	401	7.8	19
4	16	72	160	916	523	196	310	39	41	935	11	14
5	16	64	130	1230	388	1250	193	38	35	550	28	11
6	97	60	110	589	238	1260	168	38	33	176	22	8.5
7	214	56	95	291	182	488	134	37	30	98	13	7.1
8	106	51	84	211	129	230	147	51	28	71	15	6.0
9	60	45	74	130	115	174	209	71	26	56	72	5.1
10	42	43	66	96	98	145	341	53	145	42	57	5.7
11	35	40	62	78	83	472	587	41	163	34	20	6.1
12	31	35	58	64	72	1320	670	37	65	29	14	5.8
13	28	33	52	56	60	1310	521	33	43	24	12	5.5
14	25	31	47	48	56	971	300	33	34	21	12	8.9
15	24	29	42	42	112	448	181	29	30	19	11	15
16	24	28	38	38	1140	659	147	28	568	17	10	7.9
17	30	28	35	34	1850	1670	135	26	1060	16	9.5	5.1
18	35	28	34	32	1950	1370	150	25	506	16	8.3	6.3
19	31	35	34	31	1640	465	126	25	179	28	7.6	5.2
20	26	70	34	30	1190	985	109	182	103	45	9.2	4.8
21	23	230	31	29	820	1140	92	218	107	39	13	4.7
22	25	180	40	35	600	475	76	97	84	21	7.7	4.3
23	27	145	793	68	450	266	63	94	56	17	9.0	4.9
24	29	130	1200	1110	400	205	61	92	42	15	8.0	6.4
25	33	125	788	787	380	168	61	58	35	14	27	11
26	39	150	283	353	430	164	55	45	30	12	17	8.7
27	100	180	194	243	350	159	55	39	27	11	16	16
28	240	210	165	166	280	136	52	60	29	10	10	26
29	370	230	135	116	---	134	51	67	453	10	7.7	27
30	280	180	103	325	---	131	47	51	353	9.8	7.8	14
31	210	---	100	1610	---	326	---	77	---	9.6	7.5	---
TOTAL	2266	2836	5567	9538	17498	17218	5899	1812	4550	2953.4	486.5	289.1
MEAN	73.1	94.5	180	308	625	555	197	58.5	152	95.3	15.7	9.64
MAX	370	230	1200	1610	1950	1670	670	218	1060	935	72	27
MIN	16	28	31	29	56	121	47	25	26	9.6	7.5	4.3
CFSM	.47	.60	1.15	1.96	3.98	3.54	1.26	.37	.97	.61	.10	.06
IN.	.54	.67	1.32	2.26	4.15	4.08	1.40	.43	1.08	.70	.12	.07
CAL YR 1981	TOTAL	73103.1	MEAN 200	MAX 6550	MIN 6.8	CFSM 1.27	IN 17.32					
WTR YR 1982	TOTAL	70913.0	MEAN 194	MAX 1950	MIN 4.3	CFSM 1.24	IN 16.80					

## 03225500 OLENTANGY RIVER NEAR DELAWARE, OH

LOCATION.--Lat 40°21'18", long 83°04'02", in NE 1/4 T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, on left bank 500 ft (152 m) upstream from highway bridge, 1,000 ft (305 m) downstream from Delaware Dam, 1,300 ft (396 m) upstream from Norfolk and Western Railway bridge, and 4.0 mi (6.4 km) north of Delaware.

DRAINAGE AREA.--393 mi<sup>2</sup> (1,018 km<sup>2</sup>).

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 (243.712 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1950, water-stage recorder at site 500 ft (152 m) downstream at datum 76.7 ft (23.38 m) higher.

REMARKS.--Records good. Flow completely regulated by Delaware Lake since 1951 (see station 03225000). Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1946 to 1961.

AVERAGE DISCHARGE.--55 years, 352 ft<sup>3</sup>/s (9.969 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft<sup>3</sup>/s (399 m<sup>3</sup>/s) Mar. 21, 1927, gage height, 16.9 ft (5.15 m), site and datum then in use; minimum daily, 0.1 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Sept. 14-29, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,290 ft<sup>3</sup>/s (93.2 m<sup>3</sup>/s) Jan. 4, gage height, 85.48 ft (26.054 m); minimum daily, 20 ft<sup>3</sup>/s (0.57 m<sup>3</sup>/s) Oct. 1, 10-13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	26	448	105	406	601	674	69	455	677	36	33
2	21	123	499	100	2000	593	336	69	466	223	36	28
3	21	203	507	101	3010	366	135	69	205	68	36	26
4	21	188	390	1840	2980	351	128	69	71	435	36	25
5	21	181	318	2970	2990	1740	691	69	46	1040	36	25
6	21	181	311	1890	2520	2630	807	69	45	725	36	25
7	21	180	235	984	793	2180	434	69	45	225	36	25
8	187	178	158	461	391	316	367	71	45	114	33	25
9	98	177	130	257	339	460	484	71	46	67	34	25
10	20	152	169	257	185	507	515	108	47	68	36	25
11	20	138	157	256	132	514	686	126	108	69	36	25
12	20	138	151	251	116	2030	1090	126	129	44	36	25
13	20	138	151	251	116	2960	1020	126	129	26	36	25
14	22	145	123	167	116	2740	1010	71	129	22	36	25
15	260	145	66	129	148	1720	996	45	130	21	37	25
16	254	145	46	129	1230	890	452	45	268	21	37	25
17	22	145	46	129	2730	432	415	45	1260	21	37	25
18	22	145	46	94	3160	1700	414	45	1610	21	37	25
19	22	129	46	45	3140	3020	394	33	1140	21	37	25
20	22	120	46	89	2930	3000	264	24	285	21	37	26
21	22	120	68	125	2520	3020	126	56	129	56	37	26
22	23	120	119	128	2330	2850	126	132	214	85	37	26
23	23	148	777	169	1490	1670	126	132	251	62	37	26
24	22	205	2280	533	1400	731	126	235	163	53	37	26
25	22	230	2160	1230	931	720	126	205	86	53	103	26
26	23	230	1160	1490	299	408	126	126	69	42	158	26
27	23	311	643	852	225	248	126	71	69	37	141	26
28	24	375	368	360	225	247	126	129	68	36	112	26
29	28	375	367	194	---	487	87	138	69	36	44	26
30	77	375	250	155	---	490	69	138	634	36	44	26
31	293	---	118	661	---	286	---	132	---	36	36	---
TOTAL	1715	5466	12353	16402	38852	39907	12476	2913	8411	4461	1507	773
MEAN	55.3	182	398	529	1388	1287	416	94.0	280	144	48.6	25.8
MAX	293	375	2280	2970	3160	3020	1090	235	1610	1040	158	33
MIN	20	26	46	45	116	247	69	24	45	21	33	25
CAL YR 1981	TOTAL	146111.7	MEAN	400	MAX	4000	MIN	8.7				
WTR YR 1982	TOTAL	145236.0	MEAN	398	MAX	3160	MIN	20				

## SCIOTO RIVER BASIN

03226800 OLENTANGY RIVER NEAR WORTHINGTON, OH

LOCATION.--Lat 40°06'37", long 83°01'55", in NW 1/4 T.2N., R.18W., Franklin County, Hydrologic Unit 05060001, on left bank 350 ft (107 m) downstream from Interstate Highway 270 bridge, 1.5 mi (2.4 km) northwest of Worthington and 2.8 mi (4.5 km) upstream from Rush Run.

DRAINAGE AREA.--497 mi<sup>2</sup> (1,287 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1625: 1952(M). WSP 1908: Drainage area. WRD Ohio 1972: 1971(M). WRD-OH-80-1: 1976 (M), 1978 (M).

GAGE.--Water-stage recorder. Datum of gage is 743.20 ft (226.527 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by Delaware Lake 21 mi (34 km) upstream (see station 03225000). Water-quality data collected at this site 1965 to 1977. Water-temperature records collected 1955 to 1968. Daily suspended sediment data collected 1978 to 1981.

AVERAGE DISCHARGE.--27 years, 456 ft<sup>3</sup>/s (12.91 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft<sup>3</sup>/s (467 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 15.68 ft (4.779 m), from high-water mark in well; minimum daily, 8.5 ft<sup>3</sup>/s (0.24 m<sup>3</sup>/s) Sept. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1952 reached a stage of 15.3 ft (4.66 m), discharge, 15,100 ft<sup>3</sup>/s (428 m<sup>3</sup>/s), from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,100 ft<sup>3</sup>/s (116 m<sup>3</sup>/s) Mar. 16, gage height 6.92 ft (2.109 m); Maximum gage height 10.84 ft (3.304 m) Jan. 31 (ice jam); minimum daily 10 ft<sup>3</sup>/s (0.28 m<sup>3</sup>/s) Oct. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	132	436	150	620	363	754	99	288	746	34	40
2	12	44	486	135	1520	600	708	99	586	505	33	58
3	10	167	486	135	3110	538	505	99	353	110	34	47
4	14	196	431	1220	2860	635	353	102	160	92	43	28
5	15	192	307	2950	2700	1590	436	102	107	723	115	25
6	19	192	302	2020	2510	2430	991	104	89	991	44	24
7	21	188	266	1070	1140	2280	635	107	76	342	40	25
8	23	188	211	593	436	538	461	151	68	252	38	24
9	207	188	138	450	350	461	505	118	89	104	60	24
10	54	185	129	370	260	524	614	107	656	78	40	25
11	24	154	167	360	210	826	642	157	151	76	41	23
12	20	151	144	350	180	1700	876	157	178	76	40	23
13	21	147	144	320	180	2980	928	157	167	60	40	24
14	22	147	141	240	200	2740	937	151	157	37	37	38
15	154	147	104	190	379	1830	928	78	154	25	37	28
16	244	151	60	170	1170	2250	868	64	621	23	37	31
17	115	151	51	147	3080	928	473	58	1100	22	40	26
18	34	151	51	130	3140	1160	448	58	1480	22	38	25
19	26	157	44	80	3010	2800	442	56	1290	46	35	25
20	25	288	44	66	2870	3080	419	38	579	28	38	26
21	25	151	35	100	2340	3110	312	35	227	14	37	25
22	26	135	115	170	2270	2750	171	118	181	49	35	25
23	29	135	937	330	1500	2000	167	181	288	92	46	25
24	30	199	1860	600	1270	746	167	192	270	74	58	26
25	30	256	2140	1500	1120	723	167	332	154	56	147	31
26	41	256	1200	2100	461	621	167	147	97	53	154	29
27	56	283	810	880	297	332	164	317	89	49	167	53
28	47	358	407	400	288	312	160	635	87	40	135	43
29	38	358	374	250	---	374	151	327	144	37	78	30
30	35	353	337	210	---	621	102	353	178	34	47	28
31	252	---	190	900	---	716	---	270	---	34	47	---
TOTAL	1683	5800	12547	18586	39471	42558	14651	4969	10064	4890	1815	904
MEAN	54.3	193	405	600	1410	1373	488	160	335	158	58.5	30.1
MAX	252	358	2140	2950	3140	3110	991	635	1480	991	167	58
MIN	10	44	35	66	180	312	102	35	68	14	33	23
CAL YR 1981	TOTAL	163356	MEAN	448	MAX	4660	MIN	10				
WTR YR 1982	TOTAL	157938	MEAN	433	MAX	3140	MIN	10				

## REVISION OF RECORDS FOR DISCONTINUED STATION

03226865 RUSH RUN AT WORTHINGTON, OH

LOCATION.--Lat 40°05'06", long 83°00'34", Franklin County, Hydrologic Unit 05060001, on right bank, northwest corner of culvert entrance, 0.2 mi (0.3 km) north of Colonial Hills School in Worthington, 0.5 mi (0.8 km) southeast of Rts 161 and 23 intersection and 1.6 mi (2.6 km) upstream of confluence with Olentangy River.

DRAINAGE AREA.--1.65 mi<sup>2</sup> (4.27 km<sup>2</sup>).

## WATER-DISCHARGE RECORD

PERIOD OF RECORD.--October 1978 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 850 ft (259 m) from topographic map.

REMARKS.--Daily suspended sediment data October 1978 to September 1981.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 443 ft<sup>3</sup>/s (12.5 m<sup>3</sup>/s) Sept. 14, 1979; gage height, 42.88 ft (13.070 m); minimum daily 0.01 ft<sup>3</sup>/s (0.0003 m<sup>3</sup>/s) several days in 1981 water year.

REVISIONS.--Revised figures of discharge for the water years 1979,1980 superceding those published in WRD-OH-1979,1980,1981 Volume 1 are given herein.

Date	Discharge (ft <sup>3</sup> /s)	Date	Discharge (ft <sup>3</sup> /s)
Feb. 20, 1979	5.8	June 25, 1979	0.36
22	20	26	.32
May 13	.75	27	.28
14	.59	29	4.1
15	.84	30	9.3

Month	Total	Mean	Max.	Min.	CFSM	IN
Feb. 1979	170.5	6.09	29	1.3	3.69	3.84
May 1979	32.70	1.05	5.2	.25	.64	.74
June 1979	60.49	2.02	9.3	.28	1.22	1.36
Wtr Yr 1979	1697.48	4.65	107	.17	2.82	38.25

Date	Discharge (ft <sup>3</sup> /s)	Date	Discharge (ft <sup>3</sup> /s)
Aug. 1, 1980	0.97	Aug. 4, 1980	1.7
2	1.2	5	6.2
3	5.3	6	2.7

Month	Total	Mean	Max.	Min.	CFSM	IN
Aug. 1980	279.58	9.02	54	0.41	5.47	6.30
Cal Yr 1979	1418.14	3.89	107	.17	2.36	31.95
Wtr Yr 1980	1174.54	3.21	54	.08	1.95	26.46
Cal yr 1980	1004.83	2.75	54	.01	1.67	22.64

## REVISION OF RECORD FOR DISCONTINUED STATION.

03226875 BETHEL ROAD CREEK AT COLUMBUS, OHIO

LOCATION.--Lat 40°03'54", long 83°02'21", Franklin County, Hydrologic Unit 05060001 on left bank, northwest corner of culvert entrance, 0.1 mi (0.2 km) north of Bethel Rd. and Old 315 Hwy. intersection.

DRAINAGE AREA.--0.22 mi<sup>2</sup> (0.57 km<sup>2</sup>).

## WATER-DISCHARGE RECORD

PERIOD OF RECORD.--October 1978 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 770 ft (235 m), from topographic map.

REMARKS.--Daily suspended sediment data collected October 1978 to September 1981

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 199 ft<sup>3</sup>/s (5.636 m<sup>3</sup>/s) June 13, 1981, gage height 47.49 ft (14.475 m); no flow July 31, Aug. 1-4, 23-26, Sept. 16, 17, 19-26, 1981.

REVISIONS.--Revised figures of discharge for the water years 1979-81 superseding those published in WRD-OH-1979, 1980, 1981 Volume 1 are given herein.

	Date	Discharge (ft <sup>3</sup> /s)		Date	Discharge (ft <sup>3</sup> /s)	
	Feb. 20, 1979	0.83		Aug. 29, 1979	1.2	
	Aug. 26	.90		30	.94	
	27	.82		31	.84	
	28	3.5				
	Total	Mean	Max.	Min.	CFSM	IN
Feb. 1979	32.91	1.18	7.3	0.07	5.36	5.54
Aug. 1979	26.99	.87	3.5	.34	3.96	4.54
Wtr Yr 1979	301.06	.82	39	0.00	3.73	50.68

Date			Discharge (ft <sup>3</sup> /s)	Date			Discharge (ft <sup>3</sup> /s)
Apr.	11,1980	----	0.07	Apr.	14,1980	----	1.5
	12	----	.22		15	----	.09
	13	----	.10	May	13	----	.55

Month	Total	Mean	Max.	Min.	CFSM	IN
Apr. 1980	6.79	0.23	1.5	0.05	1.05	1.14
May 1980	15.02	.48	2.6	.02	2.18	2.53
Cal Tr 1979	325.85	.89	39	.02	4.05	54.85
Wtr Yr 1980	152.16	.42	4.3	.00	1.91	25.61

Date			Discharge (ft <sup>3</sup> /s)	Date			Discharge (ft <sup>3</sup> /s)
May	1,1981	----	2.0	May	14,1981	----	1.4
	2	----	.21		15	----	.25
	3	----	.09	July	13	----	.62
	4	----	.05		14	----	.02
	5	----	.83	Sept.	30	----	.07
	6	----	1.1				

Month	Total	Mean	Max.	Min.	CFSM	In
May 1981	20.91	0.67	4.4	0.02	3.05	3.52
July 1981	4.08	.13	1.2	.00	.59	.69
Sept. 1981	4.86	.16	1.6	.00	.74	.82
Cal Yr 1980	106.67	.29	3.9	.00	1.32	17.96
Wtr Yr 1981	149.16	.41	22	.00	1.86	25.11

## REVISION OF RECORD FOR DISCONTINUED STATION

03226885 OLENTANGY RIVER AT HENDERSON ROAD AT COLUMBUS, OH

LOCATION.--Lat 40°03'06", long 83°01'50", Franklin County, Hydrologic Unit 05060001, on left bank, southeast corner of Henderson Road bridge on west side of Whetstone High School, and 6.7 mi (10.8 km) upstream from mouth.

## WATER-DISCHARGE RECORDS

DRAINAGE AREA.--518 mi<sup>2</sup> (1342 km<sup>2</sup>).

PERIOD OF RECORD.--October 1978 to September 1981 (discontinued).

GAGE.--Water-stage recorder, altitude of gage is 740 ft (226 m) from topographic map.

REMARKS.--Polw regulated by Delaware Dam 25.6 mi (41.0 km) upstream (see station 03225000). Daily suspended-sediment data collected 1978 to September 1981.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 13,500 ft<sup>3</sup>/s (381 m<sup>3</sup>/s) June 13, 1981, gage height, 76.27 ft (23.247 m); minimum daily, 21 ft<sup>3</sup>/s (0.59 m<sup>3</sup>/s) Oct 1-10, 1978.

REVISIONS.--Revised figures of discharge for the water years 1979, 1980 superseding those published in WRD-OH-1979, 1980, 1981 Volume 1 are given herein.

Date		Discharge					
Sept. 14, 1979		6810					
Wtr Yr	1979	Total	Mean	Max.	Min.	CFSM	In
		226,309	620	6,810	21	1.20	16.25

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
Mar. 22, 1980	1830	Apr. 3, 1980	152	Apr. 15, 1980	1610	May 18, 1980	580
23	3280	4	983	16	3320	19	548
24	2060	5	2670	8	112	20	1320
25	1400	6	3060	9	114	21	713
26	1610	7	1760	10	117	22	255
27	1500	8	853	11	119	23	202
28	841	9	1040	12	343	24	161
29	937	10	1360	13	391	25	130
30	803	11	1450	14	167	26	395
31	1920	12	1350	15	166	27	1010
Apr. 1	1790	13	1060	16	212	28	366
2	346	14	1680	17	277		

		Total	Mean	Max	Min.	CFSM	IN
March	1980	44008	1420	4670	200	2.74	3.16
April	1980	30493	1016	3320	152	1.96	2.19
May	1980	9199	297	1320	108	.57	.66
Cal Yr	1979	283172	776	6810	43	1.50	20.34
Wtr Yr	1980	265972	727	4670	29	1.40	19.10
Cal Yr	1980	211301	549	5680	24	1.11	15.15

## SCIOTO RIVER BASIN

03227500 SCIOTO RIVER AT COLUMBUS, OH

LOCATION.--Lat 39°54'34", long 83°00'33", Franklin County, Hydrologic Unit 05060001, on right bank at sewage-treatment plant of city of Columbus, 0.4 mi (0.6 km) downstream from bridge on Frank Road, 2.8 mi (4.5 km) upstream from Scioto Big Run, and 5 mi (8 km) downstream from Olentangy River.

DRAINAGE AREA.--1,629 mi<sup>2</sup> (4,219 km<sup>2</sup>).

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 743: 1927(M). WSP 803: 1922-24, 1926-30, 1932-33. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft (207.264 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Records good. Flow regulated by Griggs Reservoir 10.4 mi (16.7 km) upstream (see station 03221500), O'Shaughnessy Reservoir 20.4 mi (32.8 km) upstream (see station 03220500), and Delaware Lake 35 mi (56 km) upstream from station (see station 03225000). Records include sewage return flow from Frank Road Treatment Plant. Shadeville Treatment Plant flow enters downstream. Water supply for city of Columbus is obtained from Scioto River downstream from Griggs Dam and Big Walnut Creek downstream from Central College. For statement on diversions from Big Walnut Creek, see REMARKS for station 03229500. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--62 years, 1,396 ft<sup>3</sup>/s (39.53 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,200 ft<sup>3</sup>/s (1,930 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 27.22 ft (8.297 m), from high-water mark in well, from rating curve extended above 46,000 ft<sup>3</sup>/s (1,300 m<sup>3</sup>/s); minimum daily, 47 ft<sup>3</sup>/s (1.33 m<sup>3</sup>/s) Sept. 6, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 25.9 ft (7.89 m), discharge, 138,000 ft<sup>3</sup>/s (3,910 m<sup>3</sup>/s), estimated by Franklin County Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,100 ft<sup>3</sup>/s (569 m<sup>3</sup>/s) Jan. 31, gage height, 20.04 ft (6.108 m); minimum daily, 127 ft<sup>3</sup>/s (3.60 m<sup>3</sup>/s) Aug. 1, 15, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	919	1220	1120	12700	1920	4170	453	2010	917	127	173
2	172	482	1260	1420	7110	1950	3790	437	1880	802	137	344
3	166	414	1400	1380	7520	2270	3870	410	1290	595	142	386
4	144	477	1250	3510	7490	2300	3410	393	827	425	281	160
5	152	447	950	8380	5370	4630	2620	374	753	814	301	136
6	186	442	800	7240	4370	7270	3060	355	583	1290	167	133
7	163	399	700	5290	2590	7070	2270	377	476	846	140	142
8	249	363	620	3490	1460	3900	1800	677	416	614	140	143
9	446	404	540	2090	1330	2180	1890	494	385	363	170	142
10	391	365	480	1110	955	2300	2380	418	1310	243	159	144
11	255	316	450	641	777	5560	2880	431	916	228	150	141
12	221	297	400	540	721	9440	3440	442	1400	225	142	135
13	182	286	370	490	677	10700	3900	409	1620	204	140	144
14	173	278	330	555	612	9130	3800	390	1090	167	135	176
15	167	282	310	420	786	8380	3310	329	698	148	127	228
16	352	279	290	383	3400	12400	2610	286	1590	140	137	151
17	378	275	270	355	10400	8970	1840	271	2520	132	140	144
18	211	275	260	335	11600	8260	1530	276	3750	145	176	135
19	174	421	250	318	10200	9000	1540	306	3110	192	140	130
20	163	974	240	315	9220	9410	1470	271	1880	156	145	152
21	153	520	240	318	8680	8560	1210	308	1120	135	145	171
22	151	642	260	350	9070	6850	927	711	790	130	127	143
23	219	628	1500	2860	7900	4630	775	1150	827	188	173	140
24	164	854	5000	3350	7320	2760	716	628	760	179	162	143
25	132	702	5200	2910	6830	2380	673	824	577	148	239	148
26	277	666	3700	3020	4720	2000	657	613	429	159	239	160
27	283	726	2600	2710	3500	1620	662	492	372	176	269	295
28	239	924	2000	1710	2470	1490	575	1500	344	167	250	232
29	223	886	1600	1210	---	1400	534	1780	577	145	218	160
30	642	1010	1320	1190	---	1630	483	2210	440	142	176	149
31	928	---	1090	10200	---	2520	---	2500	---	132	182	---
TOTAL	7940	15953	36900	69210	149778	162880	62792	20515	34740	10347	5376	5180
MEAN	256	532	1190	2233	5349	5254	2093	662	1158	334	173	173
MAX	928	1010	5200	10200	12700	12400	4170	2500	3750	1290	301	386
MIN	132	275	240	315	612	1400	483	271	344	130	127	130
CAL YR 1981	TOTAL	518389	MEAN	1420	MAX	17000	MIN	132				
WTR YR 1982	TOTAL	581611	MEAN	1593	MAX	12700	MIN	127				

## 1477

LOCATION.--Lat 40°06'13", long 82°53'03", T.2 N., R.17 W., Franklin County, Hydrologic Unit 05060001, on right bank at upstream side of county road bridge, 0.2 mi (0.3 km) east of Central College, 0.4 mi (0.6 km) downstream from Hoover Dam, and 3 mi (5 km) southeast of Westerville.

REMARKS.--Records good except those for the winter period, which are fair. Flow completely regulated by Hoover Reservoir since September 1954. (see station 03228400). Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft<sup>3</sup>/s (674 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 19.75 ft (6.020 m), from rating curve extended above 7,200 ft<sup>3</sup>/s (204 m<sup>3</sup>/s) on basis of computation of peak flow over Hoover Dam; no flow for many days in 1944 and 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,620 ft<sup>3</sup>/s (74.2 m<sup>3</sup>/s) Mar. 13, gage height, 8.83 ft (2.691 m); minimum daily, 99 ft<sup>3</sup>/s (2.80 m<sup>3</sup>/s) Nov. 28.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	191	104	115	188	166	177	134	137	129	193	123
2	143	190	116	111	158	142	170	135	141	139	160	131
3	143	189	120	111	164	141	204	158	130	144	165	126
4	143	165	114	170	160	149	206	138	129	130	168	114
5	143	145	101	143	164	186	186	142	129	142	149	113
6	149	145	116	126	161	185	172	153	126	162	169	118
7	158	143	140	117	148	185	167	135	141	171	158	142
8	160	143	134	120	140	183	166	129	136	161	163	125
9	160	143	116	123	137	159	167	120	149	161	163	144
10	160	145	116	130	136	141	168	132	130	162	160	126
11	160	144	117	130	132	167	165	139	129	140	139	146
12	160	143	117	130	131	1620	170	154	128	163	145	154
13	160	143	116	130	131	1890	162	163	128	164	146	151
14	162	143	116	120	131	1250	152	161	129	165	175	159
15	193	143	116	120	135	1440	139	166	137	178	167	128
16	193	124	116	120	346	1030	130	168	124	188	165	121
17	193	109	115	120	791	1120	130	169	122	174	165	123
18	194	121	106	120	607	1150	132	165	133	164	162	125
19	193	135	111	120	572	1170	131	117	120	138	152	121
20	193	160	121	120	598	1220	133	143	133	158	153	125
21	193	120	117	118	595	1250	131	118	127	154	137	122
22	192	112	125	105	542	1160	130	136	128	149	142	116
23	192	117	158	178	459	652	130	134	126	162	137	124
24	191	128	135	143	446	380	140	136	123	184	142	118
25	177	112	120	140	390	291	138	135	143	185	125	119
26	193	119	109	140	297	239	129	124	141	195	138	109
27	193	113	110	140	254	244	139	134	147	165	134	111
28	191	99	109	133	228	156	123	138	148	139	131	113
29	191	124	114	130	---	156	139	125	136	167	134	126
30	191	123	119	142	---	147	149	116	132	167	135	122
31	191	---	119	234	---	154	---	112	---	173	131	---
TOTAL	5399	4131	3663	4099	8341	18523	4575	4329	3982	4973	4703	3795
MEAN	174	138	118	132	298	598	153	140	133	160	152	127
MAX	194	191	158	234	791	1890	206	169	149	195	193	159
MIN	143	99	101	105	131	141	123	112	120	129	125	109
CAL YR 1981	TOTAL 81744		MEAN 224	MAX 2000	MIN 99							
WTR YR 1982	TOTAL 70513		MEAN 193	MAX 1890	MIN 99							

## SCIOTO RIVER BASIN

03228805 ALUM CREEK AT AFRICA, OH

LOCATION.--Lat 40°11'00", long 82°57'47", in SE 1/4 sec. 1, T.3 N., R.18 W., Delaware County, Hydrologic Unit 05060001, on right bank 400 ft (122 m) upstream of bridge on Lewis Center Road, 1,200 ft (366 m) downstream from outlet of Alum Creek dam, 0.3 mi (0.5 km) west of Africa, 2.8 mi (4.5 km) upstream from Westerville Reservoir outlet, and 4.2 mi (6.8 km) northwest of Westerville.

**DRAINAGE AREA.**--122 mi<sup>2</sup> (316 km<sup>2</sup>).

PERIOD OF RECORD.--Water year 1962 (occasional low-flow measurements) June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft (243.840 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Oct. 17, 1973 to July 9, 1974 nonrecording gage at bridge 400 ft (121.920 m) downstream at same datum. Prior to Oct. 17, 1973 water-stage recorder 600 ft (182.880 m) downstream at datum 17.37 ft (5.294 m) higher.

REMARKS.--Records good. Flow regulated by Alum Creek Lake since August 1973. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--9 years (water years 1964-72), 115 ft<sup>3</sup>/s (3.257 m<sup>3</sup>/s), 9 years (water years 1974-82), 107 ft<sup>3</sup>/s (3.030 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,160 ft<sup>3</sup>/s (174 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 13.95 ft (4.252 m), from graph based on gage readings, site and datum then in use; no flow at times 1963-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 5, 1963 reached a stage of 14.2 ft (4.33 m), from floodmarks, discharge, 6,460 ft<sup>3</sup>/s (183 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft<sup>3</sup>/s (44.7 m<sup>3</sup>/s) Feb. 4, gage height, 27.17 ft (8.281 m); minimum daily, 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/s) July 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	23	106	16	12	25	22	3.2	396	14	5.6	5.9
2	3.2	24	65	16	430	25	5.3	3.0	383	15	5.9	6.7
3	3.2	32	67	16	994	43	6.2	3.0	171	4.4	5.6	7.1
4	3.0	47	64	67	1260	73	5.6	3.0	62	5.3	6.3	7.1
5	2.4	65	58	137	1570	420	4.6	4.3	20	5.0	6.3	7.1
6	2.5	88	58	233	1540	630	5.1	3.6	18	5.0	5.6	7.1
7	3.2	106	28	271	1280	551	4.3	3.4	18	4.7	5.6	7.1
8	3.2	108	14	271	211	199	3.6	5.6	17	4.7	5.6	5.9
9	3.4	140	14	271	45	90	3.6	5.3	18	5.0	5.6	5.0
10	3.0	154	14	267	45	57	3.6	4.1	203	5.3	5.9	4.4
11	2.7	154	13	150	45	55	3.6	4.1	221	5.3	6.3	5.3
12	3.0	154	13	64	45	257	3.6	5.3	75	5.3	6.3	5.6
13	3.0	156	13	25	45	351	3.9	5.3	75	5.3	6.3	5.9
14	3.2	147	13	20	45	351	3.6	5.3	68	5.3	6.3	6.3
15	2.9	114	13	19	46	557	3.6	5.3	48	5.3	6.3	7.1
16	3.4	98	13	18	396	611	3.2	5.3	152	3.0	5.9	6.7
17	4.1	94	13	17	669	15	3.2	3.9	278	1.4	6.3	6.7
18	3.6	78	12	17	377	250	3.2	2.9	292	2.6	6.3	6.7
19	185	68	12	16	425	593	3.0	3.9	292	2.1	6.3	6.7
20	98	67	12	16	968	16	2.9	4.3	243	3.6	7.1	6.7
21	246	67	9.8	15	730	13	4.6	4.8	91	5.3	7.1	7.1
22	240	67	8.2	15	271	396	5.6	5.1	75	5.3	6.7	7.1
23	33	106	34	15	159	656	4.6	5.1	21	4.1	6.3	6.7
24	6.8	133	26	15	159	649	4.1	5.1	12	3.6	6.3	6.3
25	6.8	147	19	161	159	649	3.9	4.6	4.7	3.9	5.0	6.3
26	6.8	147	19	264	86	533	3.4	4.3	4.4	3.9	3.9	6.3
27	5.1	147	19	264	25	391	2.9	4.3	4.4	3.9	3.6	7.1
28	6.5	147	233	257	25	406	2.9	38	3.9	3.9	4.1	6.3
29	8.2	147	355	196	---	401	3.2	54	3.9	4.1	4.4	6.7
30	16	147	289	90	---	199	3.2	54	3.2	4.1	4.4	31
31	23	---	79	74	---	46	---	147	---	5.3	5.0	---
TOTAL	937.4	3172	1706.0	3293	12062	9508	136.1	410.4	3273.5	155.0	178.2	218.0
MEAN	30.2	106	55.0	106	431	307	4.54	13.2	109	5.00	5.75	7.27
MAX	246	156	355	271	1570	656	22	147	396	15	7.1	31
MIN	2.4	23	8.2	15	12	13	2.9	2.9	3.2	1.4	3.6	4.4
CAL YR 1981	TOTAL	17289.9	MEAN	47.4	MAX	878	MIN	1.8				
WTR YR 1982	TOTAL	35049.6	MEAN	96.0	MAX	1570	MIN	1.4				

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DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	39	263	86	457	69	167	29	363	6.6	8.0	4.4
2	14	39	96	49	414	72	69	31	483	9.4	12	93
3	12	38	75	47	552	98	339	31	247	36	4.9	51
4	11	56	92	340	1000	295	156	29	127	16	79	12
5	12	83	67	211	1300	552	98	28	77	8.7	34	8.0
6	16	105	60	265	2000	825	202	27	36	5.4	11	7.3
7	14	143	58	363	1300	789	90	28	31	28	8.7	7.3
8	15	143	26	348	900	426	64	117	31	22	7.3	6.6
9	20	160	20	366	600	167	92	37	34	22	8.7	6.6
10	18	206	19	255	350	149	93	26	220	8.0	10	7.3
11	18	201	18	465	250	358	81	24	345	5.4	9.4	8.7
12	18	200	19	332	200	444	65	21	100	4.9	10	8.0
13	18	201	18	102	160	565	55	19	82	4.4	8.0	6.0
14	17	200	18	90	130	497	46	18	79	3.6	6.0	74
15	19	137	18	76	120	598	40	16	83	4.0	4.9	93
16	22	125	17	48	300	1540	41	15	228	4.4	4.0	14
17	24	105	19	71	1400	504	39	14	347	6.0	3.6	8.7
18	30	103	19	60	877	192	34	16	360	13	6.6	6.0
19	124	111	16	48	368	835	29	19	364	15	6.0	5.4
20	138	275	15	40	1200	534	29	20	362	7.3	5.4	6.0
21	259	89	16	35	1150	322	28	31	158	6.0	8.7	10
22	276	82	67	30	505	328	27	103	104	6.6	7.3	8.0
23	153	89	593	45	299	803	26	105	55	13	12	5.4
24	28	215	173	35	297	787	27	25	31	14	15	5.4
25	19	195	217	150	270	793	27	19	24	9.4	23	6.6
26	59	181	204	451	233	755	29	18	16	7.3	14	9.4
27	42	180	243	473	84	493	30	17	15	8.7	7.3	69
28	25	173	274	408	72	513	27	28	31	23	5.4	32
29	18	173	443	402	---	512	26	229	47	18	4.0	13
30	21	172	425	418	---	391	27	126	12	14	1.5	8.0
31	29	---	226	548	---	266	---	88	---	9.4	5.4	---
TOTAL	1510	4219	3834	6657	16788	15472	2103	1354	4492	359.5	351.1	600.1
MEAN	48.7	141	124	215	600	499	70.1	43.7	150	11.6	11.3	20.0
MAX	276	275	593	548	2000	1540	339	229	483	36	79	93
MIN	11	38	15	30	72	69	26	14	12	3.6	1.5	4.4
CAL YR 1981	TOTAL	53072.3	MEAN	145	MAX	3910	MIN	8.9				
WTR YR 1982	TOTAL	57739.7	MEAN	158	MAX	2000	MIN	1.5				

## SCIOTO RIVER BASIN

03229500 BIG WALNUT CREEK AT REES, OH

LOCATION.--Lat 39°51'24", long 82°57'26", in NE 1/4 sec. 26, T.4 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on right bank at downstream side of bridge on Reese Road, 0.5 mi (0.8 km) southwest of Rees, 4.2 mi (6.8 km) downstream from Alum Creek, and 10.5 mi (16.9 km) upstream from mouth.

DRAINAGE AREA.--544 mi<sup>2</sup> (1,409 km<sup>2</sup>).

PERIOD OF RECORD.--August 1921 to December 1935, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1053: 1929, 1933(M), 1945. WSP 1305: 1923(M), 1925-26(M).

GAGE.--Water-stage recorder. Datum of gage is 698.20 ft (212.811 m) National Geodetic Vertical Datum of 1929. Aug. 18, 1921, to Oct. 23, 1927, nonrecording gage at site 0.3 mi (0.5 km) upstream at datum 2.00 ft (0.610 m) higher prior to Oct. 1, 1924, at present datum thereafter.

REMARKS.--Records poor. Flow regulated by Hoover Reservoir 26 mi (42 km) upstream (see station 03228400) and Alum Creek Lake 30 mi (48 km) upstream (see station 03228804) since August 1973. Beginning June 15, 1956, diversion at Morse Road Treatment Plant, 21 mi (34 km) upstream from station, for municipal water supply for the city of Columbus. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--58 years, 521 ft<sup>3</sup>/s (14.75 m<sup>3</sup>/s) (adjusted for diversion).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,800 ft<sup>3</sup>/s (1,690 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 22.03 ft (6.715 m) (from high-water mark in well), from rating curve extended above 13,000 ft<sup>3</sup>/s (368 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum, 5 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Sept. 4, 5, 10-12, 1925; minimum daily since 1956, 9.4 ft<sup>3</sup>/s (0.266 m<sup>3</sup>/s) Sept. 13, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 20.5 ft (6.25 m), present datum, at site 0.3 mi (0.5 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,800 ft<sup>3</sup>/s (193 m<sup>3</sup>/s) June 14, From hydrographic comparison with nearby stations. minimum daily, 28 ft<sup>3</sup>/s (0.79 m<sup>3</sup>/s) Aug. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	120	1000	350	5600	290	544	82	399	96	50	44
2	60	130	900	250	1600	237	335	62	518	74	48	130
3	46	120	700	160	1900	259	1140	80	381	226	52	349
4	58	110	250	400	2400	464	794	70	231	187	136	77
5	49	150	270	800	3500	1210	425	60	231	123	178	47
6	100	190	200	1300	3900	1200	756	90	155	92	78	39
7	70	170	150	1800	2000	1100	440	150	119	106	54	36
8	60	160	110	2500	800	761	332	250	110	254	56	37
9	64	150	90	1660	370	356	332	200	108	777	117	36
10	74	150	70	1100	197	312	381	100	302	147	83	37
11	70	150	60	700	202	881	250	80	429	94	61	36
12	78	160	60	500	197	2100	200	70	231	83	59	36
13	74	150	60	350	185	3120	160	62	155	67	45	36
14	62	140	62	200	175	1990	140	58	142	61	42	106
15	60	130	70	160	286	2120	120	52	134	54	38	580
16	66	180	58	140	1110	3260	110	50	370	52	47	155
17	70	250	64	130	3270	2900	100	47	594	52	38	101
18	100	400	74	120	2210	1750	96	50	452	68	39	71
19	200	660	64	110	1360	2030	88	60	402	142	38	58
20	350	900	140	100	2020	2580	82	70	399	72	46	56
21	600	400	270	98	2030	2050	78	100	280	54	47	105
22	800	300	620	94	1330	1680	76	220	178	45	48	64
23	350	320	1400	90	914	1810	74	300	151	44	64	64
24	150	640	1000	88	821	1360	72	130	96	50	61	56
25	160	620	600	88	740	1190	80	80	84	44	147	54
26	170	600	600	200	589	1190	74	84	68	44	64	67
27	160	580	640	860	381	821	68	81	64	69	43	160
28	110	540	800	740	312	756	66	114	80	594	36	164
29	70	600	1000	800	---	684	70	655	257	99	33	84
30	74	800	800	520	---	621	90	881	185	63	28	63
31	110	---	500	3000	---	626	---	293	---	56	32	---
TOTAL	4529	9970	12682	19408	40399	41708	7573	4681	7305	3989	1908	2948
MEAN	146	332	409	626	1443	1345	252	151	244	129	61.5	98.3
MAX	800	900	1400	3000	5600	3260	1140	881	594	777	178	580
MIN	46	110	58	88	175	237	66	47	64	44	28	36
(+)	114	111	108	113	112	101	104	119	113	134	126	115
CAL YR 1981 TOTAL	177759											
WTR YR 1982 TOTAL	157100											
MEAN 487												
MAX 10700												
MIN 46												
MEAN 430												
MAX 5600												
MIN 28												

+ Diversion, equivalent in cubic feet per second, for city of Columbus,

## 03230500 BIG DARBY CREEK AT DARBYVILLE, OH

LOCATION.--Lat 39°42'02", long 83°06'37", Pickaway County, Hydrologic Unit 05060001, on right bank on downstream side of bridge on State Highway 316, 0.4 mi (0.6 km) northeast of Darbyville, 0.4 mi (0.6 km) upstream from Lizzard Run, and 3.0 mi (4.8 km) downstream from Greenbrier Creek.

DRAINAGE AREA.--534 mi<sup>2</sup> (1,383 km<sup>2</sup>).

PERIOD OF RECORD.--October 1921 to December 1935, January 1938 to current year. Prior to October 1959, published as Darby Creek at Darbyville.

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Datum of gage is 713.69 ft (217.533 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 17, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for the winter period, which are poor. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--58 years, 454 ft<sup>3</sup>/s (12.86 m<sup>3</sup>/s), 11.55 in/yr (293 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,000 ft<sup>3</sup>/s (1,390 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 17.94 ft (5.468 m) from rating curve extended above 22,000 ft<sup>3</sup>/s (623 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum observed, 1.4 ft<sup>3</sup>/s (0.040 m<sup>3</sup>/s) Sept. 17, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,500 ft<sup>3</sup>/s (127 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)
Jan. 31	----	5200 147	----	-----	Mar. 17	1900	*5320 151	*9.67	2.947
Feb. 17	----	4600 130	----	-----					

Minimum discharge, 16 ft<sup>3</sup>/s (0.45 m<sup>3</sup>/s) Sept. 26, 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	78	215	275	1550	493	1210	172	621	143	37	30
2	39	69	245	578	1620	448	1010	166	438	120	35	29
3	38	63	245	491	1620	496	1180	162	332	111	35	48
4	39	58	230	834	1100	579	1800	155	269	116	38	38
5	40	55	210	2790	880	1790	1150	149	238	109	45	36
6	39	53	195	1670	620	1970	986	145	218	95	44	43
7	41	54	180	847	480	1160	912	145	221	90	42	36
8	42	53	158	614	370	820	803	155	192	94	42	31
9	41	54	148	500	300	648	761	164	172	274	42	28
10	42	54	150	330	208	557	761	157	199	113	42	26
11	43	52	138	215	200	720	912	145	465	86	39	24
12	44	50	128	190	195	2460	890	135	327	73	36	23
13	43	50	113	180	192	2270	728	129	233	66	35	22
14	45	50	93	152	200	2100	579	122	186	62	34	22
15	44	50	91	148	218	1420	468	118	159	59	33	22
16	44	48	88	135	3800	1610	422	113	190	55	31	21
17	45	48	88	128	4400	4710	399	107	1060	53	29	20
18	45	48	84	118	3400	3480	368	104	1170	54	28	20
19	45	48	85	110	2600	1740	350	109	668	54	27	19
20	44	60	78	107	2280	2770	327	107	432	51	27	19
21	44	100	70	143	1800	3520	301	107	315	60	31	20
22	44	86	94	202	1500	2370	266	153	263	56	29	20
23	46	60	226	680	1260	1470	245	704	230	51	26	20
24	46	90	2290	880	1300	1130	233	680	188	49	32	20
25	46	80	1430	780	1230	917	225	384	164	49	86	18
26	47	72	790	680	799	816	223	269	145	48	36	16
27	51	96	507	700	636	736	221	223	137	46	31	16
28	59	118	439	660	553	613	206	403	127	48	28	20
29	73	142	402	420	---	528	186	1300	179	39	30	22
30	115	175	314	1200	---	486	177	1300	181	39	30	26
31	94	---	262	4750	---	640	---	981	---	38	30	---
TOTAL	1507	2114	9786	21507	35311	45467	18299	9263	9719	2401	1110	755
MEAN	48.6	70.5	316	694	1261	1467	610	299	324	77.5	35.8	25.2
MAX	115	175	2290	4750	4400	4710	1800	1300	1170	274	86	48
MIN	38	48	70	107	192	448	177	104	127	38	26	16
CFSM	.09	.13	.59	1.30	2.36	2.75	1.14	.56	.61	.15	.07	.05
IN.	.10	.15	.68	1.50	2.46	3.17	1.27	.65	.68	.17	.08	.05

CAL YR 1981	TOTAL	170871	MEAN 468	MAX 5780	MIN 38	CFSM .88	IN 11.90
WTR YR 1982	TOTAL	157239	MEAN 431	MAX 4750	MIN 16	CFSM .81	IN 10.95

## SCIOTO RIVER BASIN

03230900 DEER CREEK NEAR PANCOASTBURG, OH

LOCATION.--Lat 39°37'14", long 83°12'47", Pickaway County, Hydrologic Unit 05060002, on left bank 200 ft (61 m) downstream from bridge on Crownover Mill Road, 1,200 ft (366 m) downstream from Deer Creek Dam, and 2.8 mi (4.5 km) east of Pancoastburg.

DRAINAGE AREA.--277 mi<sup>2</sup> (717 km<sup>2</sup>).

PERIOD OF RECORD.--Water years 1964-66 (Occasional low-flow measurements and annual maximums), July 1966 to current year.

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) Corps of Engineers bench mark. Oct. 23, 1963, to June 30, 1966, crest-stage gage at site 200 ft (61 m) upstream at datum 59.84 ft (18.239 m) higher.

REMARKS.--Records good. Flow regulated by Deer Creek Lake (see station 03230890). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--16 years 272 ft<sup>3</sup>/s (7.703 m<sup>3</sup>/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft<sup>3</sup>/s (552 m<sup>3</sup>/s) (estimated) Mar. 10, 1964, gage height, 80.93 ft (24.667 m), present datum; no flow May 25-27, 1968, result of dam closure.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,370 ft<sup>3</sup>/s (67.1 m<sup>3</sup>/s) Feb. 5, gage height, 74.53 ft (22.717 m); minimum daily, 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Oct. 2-4, July 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	170	67	152	40	210	98	44	547	70	24	22
2	14	170	69	152	145	202	26	44	294	70	24	22
3	14	170	69	152	1320	232	29	44	170	58	24	22
4	14	170	92	219	1920	253	29	44	120	14	25	21
5	142	170	114	472	2180	338	31	57	100	18	25	21
6	222	165	114	469	2300	378	31	70	98	62	25	21
7	183	165	98	449	2280	381	31	69	98	132	25	21
8	145	165	69	297	2280	479	31	65	98	130	25	21
9	145	210	47	200	2290	435	32	65	100	130	25	21
10	145	247	19	183	2210	326	32	78	181	86	24	21
11	142	247	18	140	922	255	32	90	240	26	25	21
12	140	207	18	84	309	659	33	90	237	26	25	21
13	140	165	18	70	217	1070	33	88	234	26	25	21
14	140	165	18	68	217	1060	34	86	142	26	25	21
15	152	165	32	66	217	786	34	86	69	26	25	21
16	170	165	55	64	629	534	34	86	69	22	25	21
17	175	150	55	64	1230	607	34	69	130	26	25	21
18	175	132	55	62	1410	629	34	54	152	26	25	21
19	173	132	55	62	1400	1490	34	48	152	26	25	21
20	173	132	55	60	1910	802	35	48	155	26	25	21
21	173	130	55	60	2160	29	34	49	86	26	25	21
22	173	127	55	62	1590	593	35	49	54	26	25	21
23	173	175	55	94	633	1470	29	48	54	26	22	22
24	173	214	74	192	459	1420	22	306	54	26	19	22
25	173	212	106	790	459	1360	22	449	54	27	22	22
26	173	210	106	1200	362	782	24	288	54	27	22	22
27	173	170	106	1200	323	350	26	160	88	26	22	22
28	170	127	255	735	323	350	26	160	165	24	22	22
29	170	118	442	329	---	611	25	160	120	24	22	22
30	170	69	222	329	---	554	39	365	72	24	22	22
31	170	---	155	274	---	258	---	554	---	24	22	---
TOTAL	4510	5014	2768	8750	31735	18903	989	3913	4187	1306	741	641
MEAN	145	167	89.3	282	1133	610	33.0	126	140	42.1	23.9	21.4
MAX	222	247	442	1200	2300	1490	98	554	547	132	25	22
MIN	14	69	18	60	40	29	22	44	54	14	19	21
CAL YR 1981	TOTAL	91731	MEAN	251	MAX	1570	MIN	11				
WTR YR 1982	TOTAL	83457	MEAN	229	MAX	2300	MIN	14				

## SCIOTO RIVER BASIN

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03231000 DEER CREEK AT WILLIAMSPORT, OH

LOCATION.--Lat 39°35'09", long 83°07'22", Pickaway County, Hydrologic Unit 05060002, on left bank at downstream side of bridge on U.S. Highway 22 at west edge of Williamsport, 2.0 mi (3.2 km) downstream from Dry Run, and 7.6 mi (12.2 km) upstream from Hay Run.

DRAINAGE AREA.--333 m<sup>2</sup> (862 km<sup>2</sup>).

PERIOD OF RECORD.--August 1926 to December 1935, January 1938 to September 1956, water years 1959, 1961-62, annual maximum. July 1962 to current year.

REVISED RECORDS.--WSP 1083: 1929. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 718.66 ft (219.048 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 29, 1940, nonrecording gage, and Feb. 29, 1940, to Aug. 24, 1954, water-stage recorder, same site at datum 3.00 ft (0.914 m) 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 (37 m) downstream at same datum.

REMARKS.--Records fair except those for Jan. 9 to Apr. 2, which are poor. Flow regulated by Deer Creek Lake 9.0 mi (14.5 km) upstream beginning in 1968. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--47 years (1926-35, 1938-56, 1962-82), 301 ft<sup>3</sup>/s (8.524 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft<sup>3</sup>/s (1,120 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 17.6 ft (5.36 m) (from floodmarks), from rating curve extended above 25,000 ft<sup>3</sup>/s (708 m<sup>3</sup>/s) on basis of contracted-opening measurement of peak flow; minimum daily, 1.8 ft<sup>3</sup>/s (0.051 m<sup>3</sup>/s) July 25, 1934, Oct. 1-4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,000 ft<sup>3</sup>/s (85.0 m<sup>3</sup>/s) Feb. 5, from hydrographic comparison with nearby stations; minimum daily, 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Oct. 1-4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	176	76	169	78	290	150	49	738	195	25	25
2	14	175	77	168	120	260	62	49	462	142	25	25
3	14	175	77	171	1600	270	163	49	185	89	25	24
4	14	172	93	349	2200	300	118	49	146	89	41	23
5	73	173	125	660	2800	450	87	53	120	84	44	23
6	226	171	126	633	2900	500	99	77	111	80	33	23
7	214	170	113	603	2900	520	77	75	109	33	29	22
8	154	168	80	475	2900	640	72	77	109	28	28	22
9	149	205	68	230	2900	660	70	72	113	109	28	22
10	148	270	27	200	2500	430	65	73	218	144	28	24
11	148	270	30	150	1100	320	62	95	270	148	28	24
12	148	230	24	96	500	920	57	93	253	135	28	23
13	144	166	24	84	300	1200	61	95	244	99	25	23
14	138	166	24	82	290	1300	48	39	190	30	26	27
15	145	166	29	78	310	1100	48	89	82	27	27	29
16	162	166	59	76	680	820	50	37	122	26	26	31
17	175	157	65	76	1300	840	52	72	180	25	25	32
18	179	134	70	74	1600	860	46	61	190	25	25	31
19	179	136	99	72	1800	1800	45	53	178	25	25	30
20	180	142	130	70	2100	880	45	65	170	22	26	29
21	179	139	129	70	2600	500	42	67	127	25	27	29
22	178	133	131	74	2000	960	40	131	68	26	26	29
23	179	165	122	86	1000	1700	40	80	61	26	26	25
24	173	218	125	230	700	1700	33	264	61	25	24	29
25	173	218	146	920	580	1600	30	559	61	25	54	31
26	182	218	132	1400	480	880	31	389	62	25	37	30
27	185	184	126	1500	430	600	36	163	67	27	30	30
28	185	135	316	1100	390	450	33	211	166	33	27	30
29	185	129	627	480	---	840	33	236	218	29	26	30
30	184	73	272	430	---	740	38	483	244	26	25	30
31	183	---	182	350	---	350	---	771	---	25	25	---
TOTAL	4604	5200	3724	11156	39058	24680	1833	4726	5325	1847	894	809
MEAN	149	173	120	360	1395	796	61.1	152	178	59.6	28.8	27.0
MAX	226	270	627	1500	2900	1800	163	771	738	195	54	32
MIN	14	73	24	70	78	260	30	37	61	22	24	22
CAL YR 1981	TOTAL	110483	MEAN	303	MAX	2630	MIN	13				
WTR YR 1982	TOTAL	103856	MEAN	285	MAX	2900	MIN	14				

## 03231500 SCIOTO RIVER AT CHILLICOTHE, OH

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, Hydrologic Unit 05060002, on right bank at north end of Chillicothe, 1,400 ft (427 m) downstream from Bridge Street bridge, 7.4 mi (11.9 km) upstream from Paint Creek, and 15.4 mi (24.8 km) downstream from Deer Creek.

DRAINAGE AREA.--3,849 mi<sup>2</sup> (9,969 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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 the National Weather Service.

REVISED RECORDS.--WSP 803: 1929(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft (181.066 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft (396 m) upstream of different datum. Apr. 1, 1921, to Aug. 6, 1930, nonrecording gage, at site 1,400 ft (427 m) upstream at present datum. Aug. 7, 1930, to Sept. 30, 1969, water-stage recorder 900 ft (274 m) upstream at same datum.

REMARKS.--Records good. Flow regulated by 6 reservoirs 36 mi (58km) to 91 mi (146 km) upstream from station (see stations 03220500, 03221500, 03225000, 03228400, 03228850, 03230890).

AVERAGE DISCHARGE.--62 years, 3,444 ft<sup>3</sup>/s (97.5 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 144,000 ft<sup>3</sup>/s (4,080 m<sup>3</sup>/s) Jan. 23, 1959, gage height, 32.5 ft (9.906 m), (from high-water mark in well); minimum daily, 166 ft<sup>3</sup>/s (4.70 m<sup>3</sup>/s) Sept. 27, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 39.8 ft (12.13 m), discharge, 260,000 ft<sup>3</sup>/s (7,360 m<sup>3</sup>/s) (estimated by Franklin County Conservancy District).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,200 ft<sup>3</sup>/s (827 m<sup>3</sup>/s) Feb. 2, gage height, 13.30 ft (4.054 m); minimum daily, 389 ft<sup>3</sup>/s (11.0 m<sup>3</sup>/s) Sept. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	535	1350	1750	2320	19900	4510	5840	1290	5250	1620	546	471
2	526	1420	1930	2250	26800	3730	7360	1250	4390	1640	515	503
3	499	1110	2080	2680	23900	3950	7280	1220	3640	1490	505	686
4	500	955	2270	2730	17100	4250	9330	1170	2670	1680	542	1200
5	504	967	2160	6640	16000	6400	7500	1130	2170	1690	744	664
6	573	974	1850	12100	12700	11300	5730	1100	2050	1670	939	507
7	685	962	1540	10900	10400	11800	6110	1060	1700	1930	669	448
8	710	977	1400	8200	8100	10800	4790	1130	1490	1820	570	432
9	630	985	1270	5690	6150	7630	4080	1520	1380	2740	538	425
10	767	1040	1130	3880	5020	5030	4160	1380	2750	3120	576	425
11	882	1110	1010	1800	4080	4270	4740	1180	2920	1530	626	434
12	742	1060	939	1600	2580	9060	5240	1150	2630	1170	574	415
13	682	976	899	1500	2310	14900	5680	1150	2770	1020	522	402
14	671	907	875	1500	2060	16700	5740	1110	2690	873	494	394
15	650	896	840	1500	2040	17400	5410	1080	1950	763	481	470
16	627	898	808	1400	5150	15700	4720	1060	2060	717	458	1440
17	714	860	786	1400	13300	16400	4050	995	3990	672	447	736
18	885	836	832	1400	19900	21000	3260	935	5590	671	458	542
19	795	807	742	1400	23400	17900	2870	891	5820	776	456	467
20	729	881	727	1400	20200	18300	2780	1200	4630	882	459	414
21	772	1700	713	1500	18000	21200	2600	1330	3160	740	445	389
22	757	1480	710	1600	16900	18700	2270	2720	2190	646	462	471
23	906	1330	747	7010	15200	15900	1940	2580	1750	612	441	458
24	990	1320	4600	12800	12700	12300	1760	3830	1700	579	451	418
25	860	1500	8110	10100	11700	8640	1670	2740	1520	607	653	412
26	735	1610	7880	7540	10300	7420	1630	2380	1310	575	1120	429
27	780	1460	6060	6920	7530	5890	1570	1770	1180	559	740	441
28	948	1410	4840	5640	5730	4790	1540	1630	1080	569	608	570
29	889	1590	3990	3760	---	4360	1440	3100	1230	1140	574	692
30	806	1790	3400	3080	---	4520	1350	6540	1790	719	529	526
31	936	---	2770	10200	---	4470	---	6610	---	592	503	---
TOTAL	22685	35161	69658	142440	339150	329220	124440	58231	79450	35812	17645	16281
MEAN	732	1172	2247	4595	12110	10620	4148	1878	2648	1155	569	543
MAX	990	1790	8110	12800	26800	21200	9330	6610	5820	3120	1120	1440
MIN	499	807	710	1400	2040	3730	1350	891	1080	559	441	389

CAL YR 1981 TOTAL 1333005 MEAN 3652 MAX 29800 MIN 499  
WTR YR 1982 TOTAL 1270173 MEAN 3480 MAX 26800 MIN 389

## 03232470 PAINT CREEK BELOW PAINT CREEK DAM, NEAR BAINBRIDGE, OH

LOCATION.--Lat 39°15'08", long 83°20'58", Highland County, Hydrologic Unit 05060003, on right bank, 400 ft (122 m) downstream from Paint Creek dam, 700 ft (213 m) upstream from Cliff Creek, and 4.5 mi (7.2 km) northwest of Bainbridge.

DRAINAGE AREA.--570 mi<sup>2</sup> (1,476 km<sup>2</sup>).

PERIOD OF RECORD.--Water years 1962-67, (occasional low-flow measurements), water years 1963-67 (annual maximums). Published as "at damsite near Bainbridge" 1963-67, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to May 3, 1968, water-stage recorder and crest-stage gage at partial-record site 1,000 ft (305 m) downstream at datum 42.96 ft (13.094 m) higher.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by Paint Creek Lake (see station 03232460). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--15 years, 582 ft<sup>3</sup>/s (16.48 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 45,000 ft<sup>3</sup>/s (1,270 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 27.3 ft (8.32 m), site and datum then in use; minimum daily, 4.7 ft<sup>3</sup>/s (0.13 m<sup>3</sup>/s) Sept. 1, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,990 ft<sup>3</sup>/s (198 m<sup>3</sup>/s) Feb. 5, gage height, 54.64 ft (16.654 m); minimum daily, 14 ft<sup>3</sup>/s (0.40 m<sup>3</sup>/s) Oct.1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	102	121	240	2800	517	1200	144	654	729	18	17
2	16	329	152	337	2000	487	270	130	396	795	18	17
3	16	435	196	489	3900	457	1680	79	254	389	18	32
4	15	180	211	805	4900	517	1140	79	204	156	19	30
5	16	87	154	1330	6600	1110	167	79	224	106	19	35
6	17	89	92	1110	6800	1060	167	79	219	98	19	35
7	17	104	72	937	3000	1030	178	79	212	113	19	39
8	17	127	100	685	1300	790	231	78	210	127	19	43
9	17	233	97	494	740	670	367	76	159	75	18	36
10	18	382	76	267	660	450	344	76	279	72	19	29
11	18	285	70	120	90	600	231	74	816	125	19	30
12	19	246	48	110	220	2400	295	72	335	72	19	30
13	19	240	34	110	350	3200	348	70	217	68	19	32
14	19	196	56	100	310	3100	221	72	259	68	19	37
15	20	196	69	96	210	2800	205	74	258	68	19	34
16	21	193	69	92	180	1200	202	76	838	68	19	31
17	21	193	69	90	4000	2300	199	79	736	67	20	34
18	26	208	69	90	4080	1930	199	79	282	67	20	36
19	27	214	56	90	3930	1440	199	94	183	32	25	36
20	27	297	46	96	2410	3460	199	176	176	17	32	34
21	28	342	46	100	1280	4630	199	337	172	17	28	36
22	28	285	46	223	1550	4500	199	230	172	17	35	31
23	29	223	420	2300	1260	2620	187	302	172	17	35	39
24	29	223	949	4780	991	954	142	180	98	16	29	31
25	29	223	955	4620	985	796	142	302	76	16	31	33
26	28	240	656	2690	899	779	144	235	76	17	32	32
27	29	282	478	955	633	758	144	158	76	17	34	29
28	57	282	396	937	536	600	144	229	76	17	36	34
29	86	196	396	880	---	740	144	404	76	17	43	36
30	100	121	401	540	---	740	144	1080	633	17	36	39
31	104	---	289	700	---	350	---	895	---	17	23	---
TOTAL	927	6753	6889	26413	56614	46985	9631	6117	8538	3497	759	987
MEAN	29.9	225	222	852	2022	1516	321	197	285	113	24.5	32.9
MAX	104	435	955	4780	6800	4630	1680	1080	838	795	43	43
MIN	14	87	34	90	90	350	142	70	76	16	18	17

CAL YR 1981 TOTAL 172648.8 MEAN 473 MAX 4100 MIN 8.0  
WTR YR 1982 TOTAL 174110.0 MEAN 477 MAX 6800 MIN 14

## 03232500 ROCKY FORK NEAR BARRETTS MILLS, OH

LOCATION.--Lat 39°13'06", long 83°23'08", Highland County, Hydrologic Unit 05060003, on left bank at downstream side of highway bridge, 1.1 mi (1.8 km) north of Barretts Mills, 2 mi (3 km) east of Rainsboro, 2.8 mi (4.5 km) upstream from mouth, and 6 mi (10 km) downstream from Rocky Fork Lake.

DRAINAGE AREA.--140 mi<sup>2</sup> (363 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 770.8 ft (234.94 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Some diurnal fluctuation caused by mill 6 mi (10 km) upstream from station. Flow regulated by Rocky Fork Lake 6 mi (10 km) upstream, since 1952, capacity, 34,100 acre-ft (42.0 hm<sup>3</sup>). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 154 ft<sup>3</sup>/s (4.36 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft<sup>3</sup>/s (379 m<sup>3</sup>/s) Mar. 10, 1964 from rating curve extended above 8,800 ft<sup>3</sup>/s (249 m<sup>3</sup>/s) on basis of velocity-area studies; maximum gage height, 15.56 ft (4.743 m) Mar. 6, 1945; minimum daily discharge, 0.90 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,190 ft<sup>3</sup>/s (62.0 m<sup>3</sup>/s) Mar. 21, gage height, 6.72 ft (2.048 m); minimum daily, 3.7 ft<sup>3</sup>/s (0.10 m<sup>3</sup>/s) Oct. 13, 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	10	121	70	1520	185	351	65	239	43	10	11
2	19	10	112	38	705	185	281	66	174	37	10	11
3	20	10	108	43	580	179	642	62	136	45	10	11
4	20	10	108	105	405	195	550	60	108	47	12	10
5	20	10	108	66	320	241	403	57	150	57	30	10
6	23	10	108	48	259	145	361	56	106	54	27	10
7	22	10	108	48	239	42	295	56	86	49	46	11
8	21	9.5	108	46	182	39	244	65	78	43	57	11
9	21	12	108	42	181	37	229	62	90	40	47	10
10	21	14	87	71	184	36	212	56	108	37	34	10
11	16	11	87	70	169	204	183	51	70	32	32	10
12	6.1	11	87	70	167	453	165	47	57	30	29	10
13	3.7	9.5	87	60	168	466	146	34	51	27	23	10
14	3.7	9.5	87	60	170	435	136	32	46	20	18	11
15	6.8	9.5	87	54	187	581	121	30	40	18	15	11
16	7.6	17	87	50	241	760	113	29	354	17	13	10
17	7.6	98	87	48	340	734	132	28	262	16	12	9.5
18	7.9	27	87	48	348	539	130	27	185	15	12	11
19	9.1	25	83	48	326	463	121	34	140	14	11	10
20	12	51	90	48	310	782	113	39	110	13	11	7.9
21	8.3	117	121	50	278	1660	115	41	84	12	10	8.3
22	7.9	117	90	200	253	1370	101	61	71	12	10	22
23	5.1	117	150	1280	219	638	93	54	78	12	9.5	254
24	7.9	117	98	876	201	380	83	47	66	11	9.5	11
25	8.3	113	90	515	183	318	80	39	55	11	11	6.1
26	9.1	110	90	361	183	284	78	35	48	10	10	5.4
27	11	110	92	294	185	214	78	50	45	11	11	6.8
28	11	148	93	221	185	174	77	167	39	12	11	6.1
29	11	119	90	191	---	154	66	163	57	11	10	5.4
30	11	106	86	186	---	146	64	470	55	11	11	5.1
31	10	---	89	882	---	330	---	339	---	10	11	---
TOTAL	388.1	1548.0	3034	6189	8688	12369	5763	2422	3188	777	573.0	535.6
MEAN	12.5	51.6	97.9	200	310	399	192	78.1	106	25.1	18.5	17.9
MAX	23	148	150	1280	1520	1660	642	470	354	57	57	254
MIN	3.7	9.5	83	38	167	36	64	27	39	10	9.5	5.1
CAL YR 1981	TOTAL	46976.1	MEAN 129	MAX 1680	MIN 3.7							
WTR YR 1982	TOTAL	45474.7	MEAN 125	MAX 1660	MIN 3.7							

## SCIOTO RIVER BASIN

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03234000 PAINT CREEK NEAR BOURNEVILLE, OH

LOCATION.--Lat 39°15'49", long 83°10'01", Ross County, Hydrologic Unit 05060003, on upstream side of left abutment of highway bridge, 0.2 mi (0.3 km) downstream from Sulfur Lick, 1.2 mi (1.9 km) southwest of Bourneville, and 1.2 mi (1.9 km) upstream from Upper Twin Creek.

DRAINAGE AREA.--807 mi<sup>2</sup> (2,090 km<sup>2</sup>).

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.

REVISED RECORDS.--WRD Ohio 1972. 1971.

GAGE.--Water-stage recorder. Datum of gage is 665.56 ft (202.863 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to May 3, 1939.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by Paint Creek Lake 17 mi (27.4 km) upstream since 1971, capacity 145,000 acre-ft (179 hm<sup>3</sup>) and Rocky Fork Lake 23 mi (37 km) upstream since 1952, capacity, 34,100 acre-ft (42.0 hm<sup>3</sup>). Water-quality data collected at this site 1965 to 1977. Sediment data 1956 to 1962.

AVERAGE DISCHARGE.--59 years (1921-36, 1939-82), 804 ft<sup>3</sup>/s (22.8 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,900 ft<sup>3</sup>/s (1,610 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 20.50 ft (6.248 m), from rating curve extended above 30,000 ft<sup>3</sup>/s (850 m<sup>3</sup>/s) on basis of contracted-opening measurement at gage height 20.08 ft (6.120 m); minimum daily, 5 ft<sup>3</sup>/s (0.1 m<sup>3</sup>/s) Oct. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,690 ft<sup>3</sup>/s (218 m<sup>3</sup>/s) Feb. 5, gage height, 9.38 ft (2.859 m); minimum daily, 28 ft<sup>3</sup>/s (0.79 m<sup>3</sup>/s) Oct. 15, 16, 20, 21, 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	104	260	279	4140	677	1690	291	1040	690	43	46
2	43	138	260	291	3830	654	735	278	718	862	51	40
3	43	444	297	418	5410	631	2310	245	470	535	41	38
4	43	307	327	711	6450	674	3510	239	352	317	43	51
5	43	120	304	1270	7540	1330	1880	236	371	196	55	49
6	46	111	231	1320	7280	1170	1260	232	355	189	58	53
7	46	109	184	964	3860	1170	1080	229	320	176	56	53
8	44	130	191	717	1640	839	889	242	297	186	87	56
9	43	165	223	552	994	687	716	236	272	179	84	60
10	43	363	179	354	814	489	604	230	334	142	69	52
11	43	327	160	240	778	806	573	215	574	149	66	45
12	42	257	153	190	498	2860	548	175	684	162	62	45
13	35	254	124	170	544	3720	484	165	294	124	56	45
14	30	226	126	160	477	3560	396	156	281	118	51	50
15	28	212	156	150	437	3420	374	153	291	115	46	55
16	28	209	156	150	1320	3000	375	151	706	113	44	52
17	29	254	160	140	3830	2800	518	147	1360	111	44	47
18	30	257	158	140	5170	3300	583	144	684	109	41	50
19	29	242	167	140	4910	3010	497	156	398	107	39	52
20	28	291	149	140	3600	3510	417	215	324	69	43	52
21	28	419	149	150	1970	3390	473	313	285	56	50	50
22	30	415	156	211	1870	2270	449	340	263	52	49	52
23	33	344	355	2940	1710	5870	358	300	257	52	53	147
24	32	341	1020	5400	1310	5630	338	315	237	49	53	160
25	28	338	1130	5900	1180	4790	328	259	167	47	51	61
26	29	341	723	5900	1130	2250	322	321	156	46	51	57
27	32	371	569	5900	863	1180	316	250	149	45	52	57
28	34	402	437	5880	704	1060	306	390	145	45	53	57
29	65	378	429	5510	---	990	297	393	151	49	53	55
30	93	254	424	3140	---	878	292	1290	301	45	57	55
31	104	---	393	2400	---	1450	---	1480	---	44	60	---
TOTAL	1269	8123	9750	51827	74259	68065	22918	9786	12236	5179	1661	1742
MEAN	40.9	271	315	1672	2652	2196	764	316	408	167	53.6	58.1
MAX	104	444	1130	5900	7540	5870	3510	1480	1360	862	87	160
MIN	28	104	124	140	437	489	292	144	145	44	39	38
CAL YR 1981	TOTAL	256639	MEAN 703	MAX 5080	MIN 28							
WTR YR 1982	TOTAL	266815	MEAN 731	MAX 7540	MIN 28							

## SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH  
(National stream quality accounting network station)

LOCATION.--Lat 39°12'44", long 82°51'50", in sec. 6, T.7 N., R.20 W., Ross County, Hydrologic Unit 05060002, on left bank at downstream side of highway bridge, 0.8 mi (1.3 km) downstream from Walnut Creek, 1.2 mi (1.9 km) north of Higby, 3 mi (5 km) northwest of Richmondale and 5.0 mi (8.0 km) upstream from Salt Creek.

DRAINAGE AREA.--5,131 mi<sup>2</sup> (13,289 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 893: 1937(M). WSP 1908. Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 567.28 ft (172.907 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow slightly regulated by 8 reservoirs 45 mi (72 km) to 105 mi (169 km) upstream from station. See stations 03220500, 03221500, 03225000, 03228400, 03228804, 03230890, 03232460, and since 1952 by Rocky Fork Lake 51 mi (82 km) upstream, capacity, 34,100 acre-ft (42.0 hm<sup>3</sup>).

AVERAGE DISCHARGE.--52 years, 4,593 ft<sup>3</sup>/s (130 m<sup>3</sup>/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177,000 ft<sup>3</sup>/s (5,010 m<sup>3</sup>/s) Jan. 23, 1937, from rating curve extended above 112,000 ft<sup>3</sup>/s (3,170 m<sup>3</sup>/s); maximum gage height, 26.4 ft (8.05 m) Jan. 23, 1937, from floodmarks, and Jan. 23, 1959; minimum daily discharge, 244 ft<sup>3</sup>/s (6.91 m<sup>3</sup>/s) Oct. 23, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 31.6 ft (9.63 m) occurred Mar. 26, 1913, and has not been exceeded since.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,600 ft<sup>3</sup>/s (923 m<sup>3</sup>/s) Feb. 3, gage height, 15.67 ft (4.776 m); minimum daily, 605 ft<sup>3</sup>/s (17.1 m<sup>3</sup>/s) Sept. 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	725	1300	2070	2960	28700	5730	8230	2010	6590	2700	887	752
2	700	1560	2340	2810	28200	4870	8560	1940	5360	2560	844	735
3	688	1580	2570	3370	30800	4820	10300	1880	4480	2530	796	763
4	665	1520	2770	3740	23900	5090	13600	1830	3480	2330	885	1530
5	665	1440	2650	7780	23000	7330	10500	1790	3270	2540	1090	1070
6	697	1310	2280	12700	19600	12000	7630	1770	2900	2140	1330	822
7	847	1240	1990	11200	15200	12900	7790	1750	2490	2350	1100	687
8	894	1220	1920	8610	10500	11800	6340	1790	2220	2310	965	655
9	808	1220	1820	6230	7870	9050	5410	2000	2270	3550	930	653
10	859	1290	1690	4040	6420	6180	5200	2030	3900	3700	890	653
11	1060	1440	1530	2100	5250	5380	5550	1820	3710	2220	961	653
12	982	1570	1450	1840	3730	11200	5980	1740	3710	1800	950	646
13	869	1480	1390	1730	3420	18400	6350	1720	3320	1570	862	610
14	842	1380	1340	1690	3080	20700	6390	1640	3290	1420	813	605
15	817	1310	1310	1650	2930	22000	6050	1620	2690	1270	769	672
16	788	1280	1300	1640	6390	21400	5450	1600	3220	1210	744	1500
17	769	1270	1290	1640	17300	22800	5030	1540	5520	1140	880	1180
18	974	1230	1340	1630	24800	24700	4500	1500	6120	1110	759	873
19	1050	1210	1190	1620	28300	23000	3910	1440	6360	1150	716	766
20	909	1280	1170	1620	26200	22200	3660	1630	5240	1320	710	680
21	876	2190	991	1610	21200	22000	3470	1930	3910	1210	719	625
22	962	1930	1090	1760	18800	21900	3220	3050	2930	1040	710	655
23	980	1780	1400	11500	17500	21800	2790	2790	2380	985	703	719
24	1120	1750	5720	19900	14500	18600	2540	4260	2270	928	680	854
25	1170	1900	8790	15800	12800	14300	2420	3240	2100	923	800	737
26	972	2010	8100	11800	11800	10900	2340	2950	1890	921	1390	692
27	874	1890	6350	8430	8970	8100	2270	2460	1740	894	1190	686
28	1020	1860	5220	7140	7040	6550	2240	2260	1630	1030	968	757
29	1120	2040	4490	5420	---	5920	2170	3270	1790	1430	907	986
30	1030	2140	4010	4260	---	5870	2070	6800	2060	1180	837	848
31	995	---	3460	12700	---	6690	---	8490	---	973	810	---
TOTAL	27727	46620	85031	180920	428200	414180	161960	76540	102840	52434	27595	24064
MEAN	894	1554	2743	5836	15290	13360	5399	2469	3428	1691	890	802
MAX	1170	2190	8790	19900	30800	24700	13600	8490	6590	3700	1390	1530
MIN	665	1210	991	1610	2930	4820	2070	1440	1630	894	680	605

CAL YR 1981 TOTAL 1690279 MEAN 4631 MAX 28300 MIN 665  
WTR YR 1982 TOTAL 1628111 MEAN 4461 MAX 30800 MIN 605

## 03234500 SCIOTO RIVER AT HIGBY, OH--Continued

## WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1967 to current year.

pH: March 1967 to current year.

WATER TEMPERATURES: October 1953 to current year.

DISSOLVED OXYGEN: March 1967 to current year.

SUSPENDED SEDIMENT DISCHARGE: Water years 1954-74, January 1979 to 1982 (discontinued).

INSTRUMENTATION.--Water-quality monitor since March 1967.

REMARKS.--Samples were collected each month as part of the National Stream Quality Accounting Network. Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,060 micromhos Feb. 10, 1977; minimum, 113 micromhos Sept. 16, 1975.

pH: Maximum, 9.3 units July 21, 1982; minimum, 5.9 units Mar. 8, 1980.

WATER TEMPERATURES: Maximum, 34.0°C June 29, 1966; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L May 3,4, 1982; minimum, 0.0 mg/L on many days during 1968, Sept. 13, 1969.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,520 mg/L June 23, 1954; minimum daily mean, 1 mg/L on several days during 1955-56, and 1980-81.

SEDIMENT LOADS: Maximum daily, 550,000 tons (499,000 tonnes) Jan. 23, 1959; minimum daily, 0.82 ton (0.74 tonne) Sept. 8, 1955.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 848 micromhos Dec. 24, Sept. 24; minimum, 256 micromhos Jan. 23, Aug. 5-9, Sept. 15.

pH: Maximum, 9.1 units Mar. 29, 30, 31; minimum 7.5 units Apr. 5.

WATER TEMPERATURES: Maximum, 29.0°C July 17, 18; minimum, 0.0°C several days during winter periods.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L May 3,4,20; minimum, 3.2 mg/L Sept. 13.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1240 mg/L Jan. 23; minimum daily mean, 5 mg/L Dec. 10.

SEDIMENT LOADS: Maximum daily, 51,700 tons (46,900 tonnes) Mar. 13; minimum daily, 19 tons (17 tonnes) Dec. 21.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 09...	0930	4	4	100	80	1	<1	20	10
DEC 09...	1300	2	1	100	71	1	1	20	10
MAY 13...	1430	2	2	100	93	3	<3	20	10
JUL 08...	0830	3	3	100	79	1	<1	20	10

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 09...	3	3	13	6	720	35	5	1	70
DEC 09...	4	<1	8	5	260	44	2	2	50
MAY 13...	3	3	11	11	350	15	7	7	80
JUL 08...	6	6	10	9	1700	78	8	3	80

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 09...	16	.3	.1	<1	<1	7	<1	50	11
DEC 09...	34	.1	.1	<1	<1	<1	<1	50	14
MAY 13...	15	.8	.8	<1	<1	<1	<1	30	<12
JUL 08...	9	.2	<.1	<1	<1	<1	<1	70	11

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)
OCT 09...	0930	815	810	8.1	14.0	14	9.0	86	77
DEC 09...	1300	1800	735	7.7	4.0	11	11.0	84	20
FEB 25...	1500	12800	365	7.9	5.0	50	12.0	94	42
MAY 13...	1430	1710	730	8.4	23.0	4.0	12.0	140	--
JUL 08...	0830	2210	615	8.1	25.0	32	7.0	83	--
AUG 24...	1030	676	805	8.2	22.0	23	8.1	92	--

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 09...	190	55	280	71	24	43	5.1	97	54
DEC 09...	3900	400	290	75	25	41	4.6	110	46
FEB 25...	1100	1000	170	44	14	9.9	2.6	44	19
MAY 13...	340	33	290	72	27	37	3.5	91	47
JUL 08...	500	130	250	65	22	29	3.7	78	36
AUG 24...	140	45	290	74	25	56	5.3	110	62

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 09...	.7	4.8	493	438	.040	.90	3.0	.760
DEC 09...	.5	3.4	481	432	.110	1.20	3.1	.490
FEB 25...	.2	4.9	248	205	.160	.48	3.0	.230
MAY 13...	<.1	1.5	434	411	.020	1.30	2.1	.350
JUL 08...	.4	5.1	443	343	.040	.80	5.3	.670
AUG 24...	.7	3.7	525	462	.050	.60	3.0	1.20

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 09...	0930	815	14.0	22	48
DEC 09...	1300	1800	4.0	11	53
FEB 25...	1500	12800	5.0	86	2970
MAY 13...	1430	1710	23.0	16	74
JUL 08...	0830	2210	25.0	62	370
AUG 24...	1030	676	22.0	60	110

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	716	698	704	706	696	701	630	614	625
2	---	---	---	732	714	723	704	700	703	640	628	636
3	---	---	---	716	662	696	706	678	699	650	640	647
4	---	---	---	666	656	660	676	674	676	646	630	637
5	830	824	826	680	666	669	704	676	689	636	598	626
6	842	828	835	708	682	696	724	704	716	594	560	574
7	842	816	833	726	710	720	726	722	724	606	572	593
8	816	768	789	726	716	722	728	720	723	584	534	555
9	778	768	772	728	724	727	734	730	731	534	526	529
10	786	780	782	730	698	721	740	730	734	578	530	551
11	782	778	780	696	686	689	758	738	748	628	582	607
12	790	778	784	688	682	684	770	754	760	644	630	637
13	798	790	793	682	672	675	780	770	776	650	638	645
14	790	772	778	680	666	674	792	780	787	660	642	651
15	798	774	786	686	662	677	812	792	803	646	640	641
16	802	798	801	694	684	688	808	794	799	668	646	655
17	800	778	791	702	694	699	808	792	801	692	668	677
18	774	758	762	700	684	691	790	772	779	710	694	703
19	790	762	773	708	690	702	808	782	794	732	712	724
20	800	792	797	706	682	695	818	800	807	728	720	725
21	800	780	794	682	660	671	832	804	818	732	718	727
22	778	772	776	698	628	674	826	778	796	730	722	725
23	772	736	757	626	594	607	806	746	776	650	256	367
24	746	720	735	652	628	644	848	748	767	486	338	440
25	766	722	750	652	632	646	816	624	700	444	396	409
26	756	734	740	656	630	638	662	626	643	444	412	428
27	738	732	735	658	650	655	672	644	665	540	450	508
28	756	730	738	660	648	651	642	598	619	540	536	539
29	768	758	762	696	660	680	598	590	594	542	524	532
30	784	764	775	708	694	700	614	596	604	572	542	558
31	758	712	735	---	---	---	620	616	618	588	324	477
MONTH	842	712	777	732	594	683	848	590	727	732	256	592

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	322	310	314	494	464	482	534	514	527	682	670	676
2	314	304	307	522	494	509	548	526	535	674	664	669
3	306	300	302	534	518	526	552	438	485	672	652	664
4	324	302	315	534	518	527	500	440	483	688	654	670
5	314	306	308	562	476	511	516	490	503	696	686	691
6	338	310	324	594	498	561	518	504	510	694	680	688
7	366	340	355	496	482	486	520	510	514	700	688	696
8	408	366	388	496	468	484	544	520	530	700	690	696
9	434	408	422	480	462	468	560	542	551	702	690	696
10	440	434	438	514	480	499	576	562	568	716	696	704
11	---	---	---	532	442	513	592	576	584	722	702	713
12	---	---	---	462	424	445	588	574	582	714	702	708
13	---	---	---	470	428	447	574	562	566	722	712	719
14	---	---	---	456	426	438	582	568	575	742	722	727
15	---	---	---	456	402	430	---	---	---	748	744	746
16	532	464	496	402	332	373	---	---	---	764	744	754
17	452	400	431	402	332	381	---	---	---	760	714	732
18	396	372	381	394	378	384	---	---	---	756	720	745
19	378	352	364	412	388	402	---	---	---	744	706	726
20	352	332	339	412	342	376	---	---	---	716	694	705
21	338	332	334	360	302	328	---	---	---	692	632	660
22	358	338	349	398	352	378	622	610	616	698	508	629
23	364	354	358	424	400	416	642	622	634	570	490	528
24	390	366	379	432	422	427	644	640	642	674	576	628
25	390	382	386	446	426	434	650	640	645	578	556	567
26	396	380	384	482	448	468	660	650	655	604	578	591
27	426	398	414	516	484	503	662	658	660	636	604	619
28	462	426	446	538	518	526	668	662	665	648	626	640
29	---	---	---	554	538	549	676	666	670	654	644	649
30	---	---	---	556	552	554	674	666	671	646	492	561
31	---	---	---	552	460	504	---	---	---	498	456	470
MONTH	532	300	371	594	302	462	676	438	581	764	456	667

## SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	586	502	549	662	614	632	756	684	728	778	742	762
2	602	588	595	636	610	623	692	686	689	790	742	780
3	628	602	616	612	540	592	738	694	713	784	726	745
4	628	618	621	604	528	578	746	694	735	744	684	703
5	616	452	519	582	488	547	740	650	686	724	706	717
6	602	534	569	580	554	564	730	706	717	702	654	672
7	644	604	625	596	568	577	766	732	751	680	618	660
8	656	642	648	610	456	592	784	754	773	614	570	587
9	684	656	665	524	382	480	760	736	750	666	572	616
10	654	448	519	496	436	467	744	732	738	702	670	691
11	634	436	531	454	450	452	740	712	717	786	706	764
12	638	620	630	554	538	544	744	712	726	810	734	784
13	644	614	636	600	554	578	760	744	754	818	810	813
14	614	594	601	640	606	624	768	760	764	814	794	807
15	644	618	633	656	620	646	784	768	777	816	798	808
16	646	468	570	666	616	649	802	786	795	818	740	784
17	588	466	505	686	668	679	840	690	789	800	710	771
18	598	562	586	690	674	683	768	690	740	706	660	674
19	572	538	557	696	684	692	780	750	767	684	674	682
20	580	566	574	706	690	697	792	766	784	686	676	679
21	592	580	585	716	688	703	804	776	791	726	684	705
22	606	600	603	714	696	704	790	774	782	734	725	729
23	634	608	622	710	686	700	790	782	785	754	728	740
24	656	636	643	712	690	701	818	788	798	848	734	779
25	672	658	663	716	696	707	806	770	790	758	718	737
26	688	672	679	728	706	720	790	752	769	784	754	772
27	692	672	684	748	718	736	790	712	748	774	766	770
28	704	614	682	790	706	750	710	652	674	782	764	774
29	678	630	667	730	704	715	674	652	660	786	774	782
30	658	630	646	744	718	736	724	676	701	822	788	806
31	---	---	---	768	744	758	758	728	748	---	---	---
MONTH	704	436	607	790	382	640	840	650	746	848	570	736
YEAR	848	256	638									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	8.0	7.8	7.9	8.2	8.1	8.1	8.1	8.1	8.1
2	---	---	---	7.9	7.8	7.8	8.2	8.1	8.1	8.1	8.1	8.1
3	---	---	---	7.9	7.8	7.8	8.1	8.1	8.1	8.1	8.1	8.1
4	---	---	---	8.0	7.9	7.9	8.1	8.0	8.1	8.1	8.1	8.1
5	8.3	8.2	8.3	8.0	7.9	8.0	8.1	8.1	8.1	8.1	8.0	8.1
6	8.4	8.2	8.2	8.0	7.9	7.9	8.2	8.1	8.1	8.1	8.0	8.2
7	8.3	8.2	8.2	8.0	7.9	8.0	8.2	8.1	8.1	8.1	8.1	8.2
8	8.4	8.2	8.3	8.0	8.0	8.0	8.2	8.1	8.1	8.1	8.1	8.1
9	8.2	8.1	8.1	8.0	7.9	8.0	8.2	8.1	8.1	8.1	8.1	8.1
10	8.2	8.1	8.1	8.1	7.9	7.9	8.2	8.1	8.1	8.1	8.0	8.0
11	8.2	8.1	8.2	8.1	8.0	8.1	8.2	8.1	8.1	8.0	7.9	7.9
12	8.2	8.1	8.1	8.1	8.0	8.1	8.2	8.1	8.1	8.0	7.9	8.0
13	8.1	8.0	8.0	8.2	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.9
14	8.2	8.0	8.1	8.1	8.0	8.1	8.1	8.1	8.1	7.9	7.8	7.9
15	8.1	7.9	8.0	8.1	8.0	8.1	8.1	8.0	8.1	8.0	7.9	7.9
16	8.0	7.9	7.9	8.1	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.9
17	8.0	7.9	8.0	8.1	8.0	8.0	8.2	8.1	8.1	7.9	7.9	7.9
18	8.1	8.0	8.1	8.1	8.0	8.1	8.1	8.1	8.1	7.9	7.9	7.9
19	8.1	8.0	8.1	8.1	8.0	8.1	8.2	8.1	8.2	8.0	7.9	7.9
20	8.0	8.0	8.0	8.1	8.0	8.0	8.2	8.1	8.1	8.0	7.8	7.9
21	8.0	7.9	8.0	8.1	8.1	8.1	8.2	8.1	8.1	7.9	7.8	7.9
22	8.0	7.9	8.0	8.1	7.9	8.0	8.1	8.0	8.1	7.9	7.8	7.8
23	8.0	7.9	7.9	8.1	8.0	8.0	8.1	8.0	8.0	7.9	7.8	7.8
24	8.0	8.0	8.0	8.1	8.0	8.1	8.1	7.8	8.0	7.9	7.9	7.9
25	8.1	7.9	8.0	8.1	8.0	8.1	8.1	8.0	8.0	7.9	7.9	7.9
26	8.0	7.8	7.9	8.1	8.0	8.1	8.2	8.1	8.1	7.9	7.9	7.9
27	7.8	7.8	7.8	8.1	7.9	8.0	8.2	8.2	8.2	8.0	7.9	8.0
28	7.8	7.8	7.8	8.1	8.0	8.1	8.2	8.1	8.1	8.0	8.0	8.0
29	7.8	7.7	7.8	8.2	8.1	8.1	8.1	8.1	8.1	8.0	8.0	8.0
30	7.8	7.7	7.8	8.2	8.1	8.2	8.1	8.1	8.1	8.0	8.0	8.0
31	7.9	7.8	7.8	---	---	---	8.1	8.1	8.1	8.1	7.9	8.0
MONTH	8.4	7.7	8.0	8.2	7.8	8.0	8.2	7.8	8.1	8.1	7.8	8.0

## PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.7	8.5	8.6
2	7.9	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9	8.9	8.5	8.7
3	7.8	7.8	7.8	8.3	7.9	7.9	8.0	7.9	7.9	9.0	8.7	8.8
4	7.8	7.8	7.8	7.9	7.9	7.9	8.0	7.9	7.9	9.0	8.7	8.8
5	7.8	7.8	7.8	8.0	7.9	7.9	8.0	7.9	7.9	8.7	8.4	8.6
6	7.9	7.8	7.8	8.0	7.9	7.9	8.0	7.9	8.0	8.8	8.5	8.6
7	7.9	7.9	7.9	8.0	7.9	8.0	8.0	7.9	7.9	8.8	8.4	8.5
8	7.9	7.9	7.9	8.1	8.0	8.0	7.9	7.8	7.9	8.4	8.2	8.3
9	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.8	7.8	8.4	8.1	8.2
10	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	8.3	8.0	8.1
11	---	---	---	7.9	7.9	7.9	7.9	7.8	7.9	8.4	8.0	8.2
12	---	---	---	7.9	7.8	7.9	8.0	7.8	7.9	8.4	8.1	8.3
13	---	---	---	7.9	7.8	7.9	8.0	7.8	7.9	8.5	8.2	8.4
14	---	---	---	7.9	7.8	7.9	8.1	7.9	8.0	8.4	8.3	8.4
15	---	---	---	7.9	7.9	7.9	---	---	---	8.3	8.1	8.2
16	8.0	7.9	8.0	7.9	7.8	7.8	---	---	---	8.2	8.0	8.1
17	7.9	7.9	7.9	7.8	7.8	7.8	---	---	---	8.2	7.9	8.0
18	7.8	7.8	7.8	7.8	7.7	7.8	---	---	---	8.3	8.0	8.1
19	7.8	7.8	7.8	7.8	7.8	7.8	---	---	---	8.5	8.1	8.2
20	7.8	7.8	7.8	7.8	7.7	7.8	---	---	---	8.4	8.2	8.3
21	7.8	7.8	7.8	7.8	7.7	7.7	---	---	---	8.3	7.8	8.0
22	7.9	7.8	7.8	7.8	7.8	7.8	8.0	7.9	7.9	7.8	7.6	7.7
23	7.9	7.8	7.8	7.9	7.8	7.8	8.0	7.9	7.9	7.7	7.6	7.7
24	7.9	7.8	7.9	---	---	---	8.1	7.9	8.0	7.7	7.7	7.7
25	7.9	7.9	7.9	---	---	---	8.2	8.0	8.1	7.8	7.7	7.7
26	7.9	7.9	7.9	---	---	---	8.1	7.9	8.0	7.9	7.8	7.8
27	7.9	7.9	7.9	---	---	---	8.3	8.1	8.2	7.8	7.8	7.8
28	7.9	7.9	7.9	---	---	---	8.5	8.2	8.3	7.9	7.8	7.8
29	---	---	---	---	---	---	8.6	8.3	8.4	7.9	7.8	7.9
30	---	---	---	---	---	---	8.7	8.4	8.6	7.8	7.6	7.7
31	---	---	---	---	---	---	---	---	---	7.7	7.5	7.6
MONTH	8.0	7.8	7.9	8.3	7.7	7.9	8.7	7.8	8.0	9.0	7.5	8.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.9	7.7	7.8	8.2	7.9	8.0	8.5	8.1	8.3	7.9	7.7	7.8
2	7.9	7.8	7.9	8.1	7.8	8.0	8.1	7.9	8.0	7.9	7.8	7.8
3	7.9	7.9	7.9	8.2	7.8	8.0	8.2	7.7	7.9	7.9	7.7	7.8
4	7.9	7.9	7.9	8.0	7.7	7.9	8.0	7.7	7.9	7.9	7.8	7.9
5	7.9	7.8	7.9	7.8	7.6	7.7	7.7	7.5	7.6	8.0	7.8	7.9
6	7.9	7.9	7.9	8.0	7.6	7.7	7.6	7.5	7.5	7.9	7.7	7.8
7	7.9	7.9	7.9	8.0	7.7	7.8	7.5	7.5	7.5	8.1	7.8	7.9
8	7.9	7.9	7.9	8.0	7.6	7.8	7.5	7.5	7.5	8.0	7.8	7.9
9	8.1	7.9	7.9	7.9	7.6	7.8	8.2	7.5	7.9	7.9	7.8	7.8
10	8.1	7.7	7.9	7.8	7.7	7.7	8.2	7.9	8.0	7.8	7.7	7.7
11	7.9	7.6	7.7	7.7	7.7	7.7	8.0	7.9	7.9	7.8	7.7	7.7
12	8.0	7.8	7.9	7.9	7.8	7.9	8.4	7.9	8.1	7.9	7.7	7.8
13	8.0	7.9	7.9	8.0	7.9	7.9	8.6	8.1	8.4	7.8	7.6	7.7
14	7.9	7.8	7.9	8.4	8.0	8.2	8.7	8.3	8.5	7.6	7.6	7.6
15	8.0	7.9	7.9	8.8	8.3	8.5	8.6	8.2	8.4	7.6	7.5	7.5
16	8.0	7.9	7.9	8.9	8.6	8.7	8.5	8.1	8.3	7.9	7.7	7.8
17	8.0	7.8	7.9	8.9	8.5	8.7	8.2	7.8	8.0	7.9	7.8	7.8
18	7.9	7.8	7.9	9.1	8.7	8.9	8.3	7.8	8.0	7.8	7.7	7.8
19	7.9	7.9	7.9	9.1	8.8	9.0	8.3	8.0	8.1	7.8	7.7	7.8
20	7.9	7.9	7.9	9.2	8.8	9.0	8.1	7.9	8.0	7.7	7.7	7.7
21	8.0	7.9	7.9	9.3	8.9	9.1	8.0	7.8	7.9	7.8	7.7	7.7
22	8.0	7.9	8.0	9.1	8.8	8.9	8.0	7.7	7.9	7.8	7.8	7.8
23	8.0	7.9	7.9	9.2	8.7	8.9	8.3	7.8	8.1	7.8	7.8	7.8
24	8.0	7.9	7.9	9.2	8.9	9.1	8.2	7.9	8.1	7.8	7.8	7.8
25	8.0	7.9	7.9	9.2	9.0	9.1	8.1	7.9	8.0	7.8	7.8	7.8
26	8.0	7.9	8.0	9.2	9.0	9.1	8.1	7.9	8.0	7.8	7.7	7.7
27	8.2	7.9	8.0	9.1	8.9	9.0	7.9	7.8	7.8	7.8	7.7	7.7
28	8.1	7.9	8.0	8.9	8.7	8.8	7.9	7.7	7.8	7.8	7.7	7.7
29	8.1	8.0	8.1	9.0	8.7	8.8	8.0	7.7	7.8	7.8	7.8	7.8
30	8.2	8.0	8.1	8.8	8.5	8.6	7.9	7.7	7.8	7.8	7.8	7.8
31	---	---	---	8.5	8.1	8.3	7.8	7.7	7.7	---	---	---
MONTH	8.2	7.6	7.9	9.3	7.6	8.4	8.7	7.5	8.0	8.1	7.5	7.8
YEAR	9.3	7.5	8.0									

## SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	15.0	13.5	14.0	7.0	5.5	6.0	2.5	2.5	2.5
2	---	---	---	15.5	14.5	15.0	7.0	6.5	6.5	3.0	2.0	2.5
3	---	---	---	15.5	14.0	15.0	7.0	6.5	7.0	4.0	3.0	3.5
4	---	---	---	15.5	14.5	15.0	7.0	6.0	6.5	5.5	4.0	4.5
5	18.0	17.5	18.0	15.5	15.0	15.0	6.5	5.5	6.0	4.5	3.5	4.0
6	19.0	17.5	18.0	15.0	12.5	14.0	5.5	5.0	5.5	3.5	2.5	3.0
7	17.5	16.5	17.0	12.5	11.0	11.5	6.0	5.0	5.5	2.5	2.5	2.5
8	16.5	14.5	15.5	11.5	10.0	11.0	6.0	5.0	5.5	2.5	1.5	2.0
9	16.0	14.0	15.0	11.5	11.0	11.5	5.0	4.0	4.5	1.5	.0	1.0
10	16.0	14.5	15.5	11.0	10.0	10.5	4.0	3.0	3.5	.5	.0	.0
11	16.5	15.5	16.0	10.5	9.5	10.0	3.5	2.5	3.0	.5	.0	.0
12	17.0	15.0	16.0	10.5	9.5	10.0	3.5	3.0	3.5	.5	.0	.5
13	17.0	15.0	16.0	9.5	8.5	9.0	4.5	3.5	4.0	.5	.5	.5
14	16.0	14.5	15.5	9.5	8.0	8.5	4.0	4.0	4.0	1.0	.0	.5
15	15.5	15.0	15.0	9.0	8.0	8.5	4.0	4.0	4.0	1.0	.0	.5
16	17.0	15.0	15.5	9.0	8.0	8.5	4.0	3.5	4.0	1.0	.0	.5
17	16.0	14.5	15.5	9.5	8.5	9.0	4.0	3.0	3.0	.5	.0	.0
18	16.5	15.0	15.5	9.5	9.0	9.0	3.0	2.0	2.5	.5	.0	.5
19	15.0	13.0	14.0	10.0	9.0	9.5	2.0	1.0	1.5	1.0	.5	1.0
20	13.5	11.5	12.5	10.0	8.0	9.5	1.0	.5	1.0	2.0	1.0	1.5
21	13.5	12.0	12.5	8.0	7.0	7.0	1.0	.5	.5	1.5	1.0	1.5
22	13.5	13.0	13.0	7.0	6.0	6.5	2.5	1.0	1.5	1.0	1.0	1.0
23	13.5	12.0	13.0	5.5	4.5	5.5	2.5	2.5	2.5	1.5	.5	1.0
24	12.0	11.0	11.5	6.0	5.5	6.0	4.0	1.5	2.5	1.0	.0	.5
25	11.5	10.0	11.0	6.0	5.0	5.5	1.5	1.0	1.5	.0	.0	.0
26	12.5	11.5	12.0	8.0	5.5	6.5	2.0	1.5	1.5	.5	.0	.0
27	13.0	12.5	13.0	8.5	7.5	8.0	2.5	2.0	2.5	.5	.0	.0
28	13.5	12.0	13.0	7.5	7.0	7.5	2.5	2.0	2.0	1.0	.0	.5
29	13.5	12.0	13.0	7.5	6.5	7.0	3.0	2.0	2.0	1.5	.5	1.0
30	14.5	13.0	13.5	6.5	5.5	6.0	2.0	1.0	2.0	2.5	1.0	2.0
31	15.0	13.5	14.0	---	---	---	2.0	1.5	2.0	2.5	1.5	2.0
MONTH	19.0	10.0	14.5	15.5	4.5	9.5	7.0	.5	3.5	5.5	.0	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.5	1.0	1.0	5.5	3.5	4.0	13.0	11.5	12.5	16.5	15.0	15.5
2	.5	.5	.5	6.0	5.0	5.5	14.0	11.0	12.5	18.0	15.5	16.5
3	1.0	.5	.5	5.5	5.0	5.0	13.0	10.5	12.0	18.5	16.0	17.0
4	1.0	1.0	1.0	6.0	4.5	5.0	11.0	9.5	10.5	19.0	16.5	18.0
5	1.0	1.0	1.0	6.0	4.5	5.0	10.0	9.0	9.5	20.0	17.5	18.5
6	1.0	.5	1.0	4.5	3.5	4.0	9.5	7.0	8.0	20.5	18.5	19.5
7	1.0	.0	.5	3.5	3.0	3.0	8.0	6.0	7.0	20.0	19.0	19.5
8	1.0	.0	.5	3.5	2.5	3.0	8.0	6.5	7.5	20.0	18.0	19.0
9	1.0	.5	1.0	4.5	3.0	3.5	7.5	7.0	7.0	20.5	18.5	19.5
10	.5	.0	.5	4.5	3.5	4.0	8.5	6.5	7.5	20.5	18.5	19.5
11	---	---	---	6.0	4.5	5.0	9.5	7.0	8.0	21.5	18.5	20.0
12	---	---	---	6.5	5.0	6.0	10.0	8.0	9.0	22.5	20.0	21.0
13	---	---	---	8.0	6.5	7.0	12.0	9.5	10.5	23.5	20.5	22.0
14	---	---	---	7.5	6.5	7.0	12.0	10.0	11.0	24.0	21.5	22.5
15	---	---	---	7.5	6.5	7.0	---	---	---	24.0	22.0	23.0
16	3.5	3.0	3.5	8.5	6.5	7.5	---	---	---	25.0	22.5	23.5
17	3.0	2.5	3.0	9.0	8.0	8.5	---	---	---	25.0	22.5	23.5
18	2.5	2.0	2.5	18.0	8.5	11.0	---	---	---	24.5	22.5	23.5
19	2.5	2.0	2.5	14.5	12.0	13.0	---	---	---	24.5	22.5	23.5
20	3.0	2.0	2.5	16.5	11.5	14.0	---	---	---	23.5	22.5	23.0
21	3.0	2.5	3.0	17.0	12.0	14.5	---	---	---	22.5	21.5	22.0
22	3.0	2.5	2.5	12.0	10.5	11.5	14.5	12.5	13.5	22.5	21.0	21.5
23	3.5	2.5	3.0	11.5	7.5	9.5	15.0	12.0	13.5	23.0	21.0	22.0
24	4.0	3.0	3.5	10.5	8.5	9.5	15.5	13.0	14.5	22.5	21.5	22.0
25	3.5	2.5	3.0	10.5	9.5	10.0	15.5	14.0	15.0	23.0	20.5	21.5
26	3.0	2.0	2.5	10.0	9.0	9.5	15.5	15.0	15.5	22.0	20.5	21.5
27	3.5	2.0	2.5	9.0	8.0	8.5	15.5	14.5	15.0	22.0	20.5	21.5
28	4.0	2.5	3.5	9.5	7.0	8.0	15.5	13.0	14.5	23.5	21.0	22.0
29	---	---	---	10.0	7.5	8.5	15.5	13.5	15.0	23.5	22.0	22.5
30	---	---	---	10.5	8.5	9.5	16.0	14.5	15.0	22.0	20.5	21.0
31	---	---	---	12.5	10.5	11.5	---	---	---	22.0	20.0	21.0
MONTH	4.0	.0	2.0	18.0	2.5	7.5	16.0	6.0	11.5	25.0	15.0	21.0

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.0	21.0	21.5	25.0	22.5	24.0	26.5	24.0	25.5	23.5	22.0	22.5
2	22.5	20.0	21.0	24.5	22.0	23.5	25.5	24.0	25.0	23.5	22.5	23.0
3	22.5	20.5	21.5	24.5	23.0	24.0	26.5	24.0	25.5	23.5	21.5	22.5
4	21.5	20.5	21.0	24.5	23.5	24.0	26.5	25.0	25.5	22.5	20.5	21.5
5	21.0	18.5	19.5	25.5	22.0	23.5	26.0	24.0	25.0	23.0	21.0	22.0
6	20.5	18.0	19.5	26.5	24.0	25.0	27.0	25.0	26.0	23.0	21.0	22.0
7	21.5	19.0	20.5	27.5	25.0	26.5	26.5	25.5	26.0	23.0	21.0	22.0
8	22.5	20.5	21.5	27.0	25.5	26.0	26.0	25.0	25.5	22.5	21.0	21.5
9	23.0	21.0	22.0	26.5	24.0	25.0	26.5	24.5	25.0	23.0	20.5	21.5
10	23.0	21.0	22.0	26.0	24.5	25.0	25.5	24.0	24.5	24.0	21.5	23.0
11	23.0	20.0	21.5	25.5	24.0	24.5	24.0	22.0	22.5	25.0	22.0	23.5
12	23.0	21.0	21.5	26.5	25.0	26.0	24.0	21.0	22.5	25.5	22.5	24.0
13	22.5	20.5	21.5	26.5	24.5	25.5	24.5	21.5	23.0	24.5	23.0	24.0
14	23.0	20.0	21.5	27.0	24.5	26.0	25.0	22.0	23.5	25.5	23.5	24.5
15	23.5	21.0	22.0	27.5	25.0	26.5	25.5	22.5	24.0	26.0	24.0	25.0
16	23.0	20.5	21.5	28.0	25.5	26.5	26.0	23.0	24.5	25.0	23.5	24.0
17	22.0	20.0	20.5	29.0	26.0	27.5	27.0	24.0	25.5	23.5	22.0	23.0
18	23.0	20.5	21.5	29.0	27.0	28.0	26.5	23.5	25.0	23.0	21.5	22.0
19	22.0	20.5	21.0	28.5	27.0	27.5	26.5	23.0	25.0	21.5	20.0	21.0
20	22.0	20.0	20.5	27.5	26.5	27.0	25.0	23.5	24.0	21.0	19.5	20.5
21	21.5	20.0	20.5	28.0	25.0	26.5	25.0	22.5	24.0	20.0	18.5	19.0
22	22.0	20.5	21.0	27.0	25.5	26.0	24.0	21.5	23.0	18.5	17.0	17.5
23	22.5	19.5	21.0	27.0	25.0	26.0	23.5	22.5	23.0	18.0	16.5	17.0
24	23.0	20.0	21.5	28.0	25.0	26.5	24.0	22.0	23.0	17.5	16.0	17.0
25	23.0	20.5	21.5	28.5	25.5	27.0	23.5	23.0	23.5	17.5	16.5	17.0
26	24.0	21.5	22.5	28.5	26.5	27.5	24.0	22.5	23.0	17.5	17.0	17.5
27	25.0	22.0	23.5	28.0	26.5	27.0	23.5	22.5	23.0	17.0	15.5	17.0
28	25.0	23.5	24.5	26.5	25.5	26.0	24.0	22.0	23.0	18.0	16.5	17.0
29	25.0	23.5	24.0	26.5	24.0	25.0	23.0	21.0	22.0	19.5	17.0	18.0
30	25.5	23.5	24.5	26.0	24.5	25.5	22.0	20.5	21.0	20.0	17.5	19.0
31	---	---	---	26.0	24.0	25.0	22.0	20.5	21.5	---	---	---
MONTH	25.5	18.0	21.5	29.0	22.0	26.0	27.0	20.5	24.0	26.0	15.5	21.0
YEAR	29.0	.0	14.0									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	9.3	8.3	8.7	12.4	11.7	12.0	12.5	12.3	12.3
2	---	---	---	8.9	7.7	8.2	12.2	11.4	11.5	12.3	12.2	12.3
3	---	---	---	8.9	8.0	8.4	11.5	11.2	11.4	12.3	12.0	12.2
4	---	---	---	9.3	8.5	8.9	11.5	11.0	11.2	12.2	11.7	11.9
5	12.7	11.2	12.1	9.3	8.6	9.0	11.7	11.2	11.4	11.9	11.5	11.8
6	11.1	9.5	10.2	8.8	8.2	8.5	12.4	11.5	11.8	12.6	11.7	12.2
7	11.4	9.0	10.1	9.8	8.7	9.3	12.3	11.6	11.9	12.6	12.5	12.5
8	11.7	9.2	10.4	10.5	9.5	10.0	12.0	11.4	11.6	12.6	12.4	12.5
9	10.7	9.2	9.8	10.3	9.3	9.8	12.2	11.4	11.6	12.6	12.5	12.5
10	10.5	9.2	9.8	10.9	9.6	9.9	12.5	11.9	12.1	12.7	12.3	12.6
11	10.3	9.1	9.7	11.1	10.4	10.7	12.6	12.2	12.4	12.3	11.5	11.9
12	10.7	9.1	9.8	11.3	10.5	10.9	12.7	12.2	12.4	11.9	11.7	11.8
13	10.6	8.5	9.6	11.5	10.9	11.2	12.5	12.2	12.3	12.0	11.7	11.8
14	11.0	9.2	10.1	11.7	11.2	11.4	12.7	12.2	12.4	11.7	11.6	11.6
15	10.2	8.2	9.1	11.8	11.2	11.5	12.3	11.8	12.1	11.6	11.5	11.6
16	8.8	8.0	8.3	11.8	11.1	11.4	12.2	12.0	12.1	11.5	11.4	11.5
17	9.5	8.4	9.0	11.6	11.0	11.2	12.7	12.0	12.3	11.4	11.2	11.3
18	9.4	8.7	9.1	11.4	10.8	11.1	12.8	12.3	12.5	11.2	11.1	11.1
19	10.0	8.7	9.3	11.5	10.9	11.2	13.2	12.6	12.9	11.1	11.1	11.1
20	10.1	9.2	9.6	10.9	10.1	10.5	13.3	12.9	13.0	11.9	11.0	11.3
21	9.8	9.2	9.5	10.9	10.6	10.8	13.0	12.3	12.7	11.7	11.4	11.5
22	10.0	9.0	9.4	11.0	10.1	10.5	12.4	12.2	12.4	11.4	11.3	11.3
23	9.5	8.7	9.1	11.9	10.6	11.1	12.3	12.0	12.1	12.7	11.9	12.4
24	10.0	9.1	9.5	12.0	11.3	11.5	12.6	10.6	11.8	12.7	12.0	12.5
25	10.2	9.8	10.0	12.2	11.2	11.6	12.8	11.9	12.5	13.2	12.7	13.0
26	10.0	8.8	9.4	12.1	11.4	11.7	13.0	12.8	12.9	13.4	13.1	13.3
27	8.8	7.9	8.4	11.8	10.5	11.0	12.9	12.7	12.8	13.4	13.1	13.2
28	8.0	7.6	7.8	11.6	10.8	11.2	12.7	12.6	12.6	13.1	12.8	13.0
29	8.1	7.7	7.9	12.1	11.1	11.6	12.7	12.5	12.6	12.9	12.7	12.8
30	8.5	7.8	8.2	12.4	11.5	11.9	12.8	12.6	12.7	12.7	12.4	12.5
31	9.1	8.3	8.6	---	---	---	12.7	12.4	12.6	12.6	12.3	12.5
MONTH	12.7	7.6	9.4	12.4	7.7	10.5	13.3	10.6	12.2	13.4	11.0	12.1



03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	702	700	628	314	483	530	676	553	624	736	763
2	---	722	702	636	304	511	535	669	595	624	688	784
3	---	697	704	648	302	525	455	667	615	605	716	743
4	---	660	676	636	320	528	495	670	620	584	740	696
5	826	667	687	632	308	503	505	691	495	557	671	718
6	837	697	717	568	325	569	510	687	572	564	719	667
7	834	721	724	598	359	484	514	697	623	573	751	664
8	786	724	723	551	390	485	529	696	648	600	776	585
9	772	726	730	528	423	466	550	696	664	500	751	616
10	782	722	736	551	438	499	566	705	519	466	738	694
11	780	688	747	608	---	515	584	715	529	452	715	779
12	785	684	759	640	---	447	581	709	631	542	726	792
13	790	674	777	645	---	448	565	720	638	579	754	812
14	775	674	786	649	---	433	578	725	600	628	764	808
15	785	681	802	640	---	430	---	746	634	648	778	808
16	800	686	799	654	488	372	---	752	594	655	796	788
17	791	698	802	675	435	386	---	731	485	678	806	782
18	760	688	780	702	382	384	---	746	588	684	754	668
19	771	705	795	726	363	403	---	728	562	692	769	682
20	798	698	806	726	337	372	---	704	574	696	787	678
21	795	671	820	727	334	325	---	656	589	704	791	705
22	776	685	792	718	348	379	616	631	604	703	784	728
23	761	606	784	332	357	420	634	534	623	702	785	741
24	737	646	784	441	379	426	642	631	641	701	798	771
25	757	648	678	407	384	433	645	566	661	706	794	738
26	739	636	640	434	381	471	654	590	678	720	771	774
27	734	656	668	517	415	505	660	617	686	737	744	770
28	733	650	618	539	447	524	664	642	686	761	668	774
29	762	685	596	530	---	551	669	649	671	712	658	782
30	775	698	602	558	---	554	670	564	646	738	702	807
31	734	---	618	487	---	---	---	464	---	757	750	---
MEAN	777	683	727	591	371	461	580	667	607	642	748	737
WTR YR 1982	MEAN	638	MAX	837	MIN	302						

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.9	8.1	8.1	7.9	7.9	7.9	8.6	7.8	8.0	8.3	7.8
2	---	7.8	8.1	8.1	7.9	7.9	7.9	8.7	7.9	8.0	8.0	7.8
3	---	7.8	8.1	8.1	7.8	7.9	7.9	8.8	7.9	8.1	7.9	7.8
4	---	7.9	8.1	8.1	7.8	7.9	7.9	8.8	7.9	7.9	7.9	7.9
5	8.3	8.0	8.1	8.1	7.8	7.9	7.9	8.6	7.9	7.8	7.6	7.8
6	8.2	7.9	8.1	8.0	7.8	7.9	8.0	8.6	7.9	7.7	7.5	7.8
7	8.3	8.0	8.1	8.1	7.9	8.0	7.9	8.5	7.9	7.8	7.5	7.9
8	8.3	8.0	8.1	8.1	7.9	8.0	7.9	8.3	7.9	7.9	7.5	7.9
9	8.1	8.0	8.1	8.1	7.9	7.9	7.8	8.2	7.9	7.8	7.9	7.8
10	8.1	7.9	8.1	8.0	7.9	7.9	7.9	8.1	7.9	7.7	8.0	7.7
11	8.2	8.1	8.1	7.9	---	7.9	7.9	8.2	7.8	7.7	7.9	7.7
12	8.1	8.1	8.1	8.0	---	7.9	7.9	8.3	7.9	7.9	8.0	7.8
13	8.0	8.1	8.1	7.9	---	7.9	7.9	8.4	7.9	7.9	8.3	7.7
14	8.1	8.1	8.1	7.9	---	7.9	8.0	8.4	7.9	8.1	8.5	7.6
15	8.1	8.1	8.1	7.9	---	7.9	---	8.2	7.9	8.5	8.4	7.5
16	7.9	8.1	8.1	7.9	8.0	7.8	---	8.1	7.9	8.7	8.3	7.8
17	8.0	8.0	8.1	7.9	7.9	7.8	---	7.9	7.9	8.7	8.1	7.8
18	8.1	8.1	8.1	7.9	7.8	7.8	---	8.1	7.9	8.8	8.0	7.8
19	8.1	8.1	8.2	7.9	7.8	7.8	---	8.2	7.9	9.0	8.1	7.8
20	8.0	8.0	8.1	7.9	7.8	7.8	---	8.3	7.9	9.0	8.0	7.7
21	8.0	8.1	8.1	7.9	7.8	7.7	---	7.9	7.9	9.1	7.9	7.7
22	8.0	8.0	8.1	7.9	7.8	7.8	7.9	7.8	8.0	8.9	7.8	7.8
23	7.9	8.0	8.0	7.8	7.8	7.8	7.9	7.7	7.9	8.9	8.2	7.8
24	8.0	8.1	8.0	7.9	7.9	---	8.0	7.7	7.9	9.1	8.1	7.8
25	8.0	8.1	8.1	7.9	7.9	---	8.1	7.7	7.9	9.1	8.0	7.8
26	7.9	8.1	8.1	7.9	7.9	---	8.0	7.8	8.0	9.1	8.0	7.7
27	7.8	8.0	8.2	8.0	7.9	---	8.1	7.8	8.0	9.0	7.8	7.7
28	7.8	8.1	8.1	8.0	7.9	---	8.3	7.8	8.0	8.8	7.8	7.7
29	7.8	8.1	8.1	8.0	---	---	8.4	7.9	8.1	8.8	7.8	7.8
30	7.8	8.2	8.1	8.0	---	---	8.5	7.8	8.1	8.6	7.8	7.8
31	7.8	---	8.1	8.0	---	---	---	7.6	---	8.4	7.7	---
MEAN	8.0	8.0	8.1	8.0	7.9	7.9	8.0	8.2	7.9	8.4	8.0	7.8
WTR YR 1982	MEAN	8.0	MAX	9.1	MIN	7.5						

## SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.5	6.0	2.5	.5	4.0	12.5	15.5	21.5	24.0	25.5	22.5
2	---	15.0	6.5	2.5	.5	5.5	12.5	16.0	20.5	23.5	25.0	22.5
3	---	15.0	7.0	3.5	.5	5.0	12.5	17.0	21.0	24.0	25.0	22.5
4	---	15.0	6.5	4.5	1.0	4.5	10.0	18.0	21.0	24.0	25.5	21.5
5	18.0	15.0	6.0	4.0	1.0	5.0	9.5	18.5	19.0	24.0	24.5	22.0
6	18.0	14.0	5.5	3.0	1.0	4.0	8.0	19.5	19.0	25.0	25.5	22.0
7	17.0	11.5	5.5	2.5	.5	3.0	7.0	19.5	20.0	26.0	26.0	22.0
8	15.5	11.0	6.0	2.0	.5	3.0	7.5	19.0	21.5	26.0	25.5	21.5
9	15.0	11.5	4.5	1.0	1.0	3.5	7.0	19.5	22.0	24.0	25.0	21.5
10	15.0	10.0	3.5	.0	.5	4.0	7.5	20.0	22.0	25.0	24.5	22.5
11	16.0	10.0	3.0	.0	---	5.0	8.0	20.0	21.5	24.5	23.5	23.0
12	16.0	10.0	3.5	.5	---	5.5	8.5	21.0	21.5	26.0	22.0	23.5
13	16.0	9.5	4.0	.5	---	7.0	10.5	21.5	21.0	25.5	23.0	24.0
14	15.5	9.0	4.0	.5	---	7.0	11.0	22.5	21.5	25.5	23.0	24.0
15	15.5	8.5	4.0	.5	---	7.0	---	23.0	22.0	26.0	24.0	24.5
16	15.5	8.5	4.0	.5	3.5	7.0	---	23.5	21.0	26.5	24.5	24.0
17	15.5	9.0	3.0	.0	2.5	8.5	---	23.5	20.5	27.0	25.0	23.0
18	15.5	9.0	2.5	.5	2.5	8.5	---	23.5	21.5	28.0	25.0	22.0
19	14.0	9.5	1.5	1.0	2.5	13.0	---	23.0	21.0	27.5	25.0	21.0
20	13.0	9.5	1.0	1.5	2.5	13.5	---	23.0	20.5	27.0	24.0	20.5
21	12.5	7.0	.5	1.5	3.0	14.5	---	21.5	20.5	26.5	24.0	19.0
22	13.5	6.5	1.5	1.0	2.5	11.5	14.0	21.5	21.0	26.0	23.0	17.5
23	13.0	5.5	2.5	1.0	2.5	9.0	13.5	21.5	20.5	25.5	23.0	17.0
24	11.5	6.0	2.5	.5	3.5	9.5	14.5	22.0	21.5	26.0	23.0	17.0
25	11.0	6.0	1.5	.0	3.0	10.0	15.0	21.5	22.0	27.0	23.5	16.5
26	12.0	6.0	1.5	.0	2.5	9.5	15.5	21.5	22.5	27.5	23.0	17.5
27	13.0	8.0	2.0	.0	2.5	8.5	15.0	21.5	23.5	27.0	23.0	17.0
28	13.0	7.5	2.0	.5	3.0	8.5	14.0	22.0	24.5	26.0	23.0	16.5
29	13.0	7.0	2.0	1.0	---	8.5	15.0	22.5	24.0	25.0	22.0	17.5
30	13.5	5.5	2.0	1.5	---	9.5	15.0	21.0	24.5	25.5	21.0	18.5
31	14.0	---	2.0	1.5	---	---	---	20.5	---	25.0	21.5	---
MEAN	14.5	9.5	3.5	1.5	2.0	7.5	11.5	21.0	21.5	25.5	24.0	21.0
WTR YR 1982	MEAN	14.0		MAX	28.0	MIN	.0					

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	8.7	12.0	12.3	12.5	12.9	8.5	14.1	7.2	8.0	9.6	8.7
2	---	8.2	11.5	12.3	12.9	12.4	7.2	14.6	7.4	8.3	8.1	8.2
3	---	8.4	11.4	12.1	12.9	12.5	8.1	15.4	7.4	8.4	8.4	8.2
4	---	8.9	11.2	11.8	13.0	12.8	9.0	15.8	7.4	7.9	8.0	8.8
5	12.2	9.0	11.4	11.8	13.1	12.8	9.1	13.9	7.9	7.6	6.9	8.5
6	10.2	8.6	11.7	12.3	13.1	13.0	9.3	13.6	7.9	7.1	7.2	8.8
7	9.9	9.2	11.9	12.6	13.0	13.4	9.6	12.1	7.8	7.8	7.0	8.8
8	10.4	9.9	11.6	12.5	12.8	13.6	9.3	10.8	7.7	7.0	6.8	7.1
9	9.8	9.9	11.5	12.5	---	13.4	9.1	11.0	7.6	6.8	7.2	7.6
10	9.6	9.8	12.1	12.6	---	12.8	9.0	10.2	7.4	6.3	8.2	6.8
11	9.8	10.7	12.4	11.9	---	12.5	9.0	---	7.0	6.2	7.8	6.6
12	9.8	10.9	12.3	11.8	---	12.4	9.1	11.8	7.1	6.5	7.8	6.4
13	9.7	11.2	12.3	11.8	---	12.2	8.9	11.2	7.5	6.8	---	6.3
14	10.0	11.5	12.3	11.6	---	13.5	8.8	11.2	7.4	7.8	---	6.0
15	9.2	11.5	12.0	11.6	---	12.2	---	10.1	7.6	9.5	---	4.9
16	8.3	11.4	12.1	11.5	13.2	12.3	---	9.3	7.6	11.3	---	5.8
17	9.1	11.2	12.3	11.4	13.3	11.6	---	8.6	7.7	10.7	---	6.3
18	9.2	11.2	12.5	11.2	13.4	11.3	---	9.2	7.1	11.0	---	6.2
19	9.2	11.1	12.9	11.1	13.5	10.9	---	10.0	7.5	11.3	---	6.3
20	9.6	10.5	13.0	11.2	13.4	10.2	---	10.5	7.7	11.1	---	6.3
21	9.5	10.8	12.8	11.5	13.3	9.5	---	7.8	7.7	12.3	---	6.4
22	9.4	10.5	12.4	11.4	13.4	9.9	8.0	7.0	7.7	11.8	---	7.0
23	9.0	11.1	12.1	12.4	13.7	10.3	8.2	7.1	7.6	11.6	---	7.0
24	9.5	11.4	11.8	12.5	13.4	9.8	8.3	6.6	7.7	12.4	---	6.6
25	9.9	11.4	12.5	13.1	13.4	8.9	8.7	7.0	7.6	11.3	---	6.9
26	9.5	11.7	12.9	13.3	13.8	6.9	9.7	7.5	6.3	10.9	---	5.4
27	8.6	11.0	12.8	13.3	13.5	7.7	10.3	7.3	7.3	9.3	---	7.0
28	7.8	11.3	12.6	13.0	13.3	7.7	11.7	7.3	7.4	8.4	---	7.0
29	7.8	11.6	12.6	12.8	---	8.5	12.7	7.3	7.3	10.7	---	7.3
30	8.2	12.0	12.7	12.5	---	9.0	13.4	7.2	7.5	10.4	---	6.3
31	8.6	---	12.6	12.5	---	---	---	6.7	---	9.6	7.9	---
MEAN	9.4	10.5	12.2	12.1	13.2	11.2	9.4	10.1	7.5	9.2	7.8	7.0
WTR YR 1982	MEAN	10.0		MAX	15.8	MIN	4.9					

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

## SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	725	25	49	1300	12	42	2070	20	112
2	700	25	47	1560	13	55	2340	24	152
3	688	25	46	1580	13	55	2570	28	194
4	665	25	45	1520	13	53	2770	24	179
5	665	24	43	1440	13	51	2650	20	143
6	697	24	45	1310	14	50	2280	14	86
7	847	23	53	1240	14	47	1990	20	107
8	894	23	56	1220	14	46	1920	12	62
9	808	22	48	1220	15	49	1820	10	49
10	859	22	51	1290	15	52	1690	5	23
11	1060	25	72	1440	15	58	1530	37	153
12	982	25	66	1570	15	64	1450	6	23
13	869	25	59	1480	15	60	1390	7	26
14	842	20	45	1380	14	52	1340	15	54
15	817	20	44	1310	14	50	1310	10	35
16	788	20	43	1280	14	48	1300	14	49
17	769	20	42	1270	14	48	1290	8	28
18	974	20	53	1230	14	46	1340	7	25
19	1050	20	57	1210	14	46	1190	8	26
20	909	15	37	1280	13	45	1170	12	38
21	876	15	35	2190	13	77	991	7	19
22	962	15	39	1930	13	68	1090	10	29
23	980	15	40	1780	13	62	1400	15	57
24	1120	14	42	1750	13	61	5720	231	3900
25	1170	13	41	1900	13	67	8790	365	8660
26	972	12	31	2010	13	71	8100	252	5510
27	874	12	28	1890	13	66	6350	150	2570
28	1020	12	33	1860	13	65	5220	100	1410
29	1120	12	36	2040	13	72	4490	60	727
30	1030	12	33	2140	13	75	4010	50	541
31	995	12	32	---	---	---	3460	45	420
TOTAL	27727	---	1391	46620	---	1701	85031	---	25407
JANUARY			FEBRUARY			MARCH			
1	2960	40	320	28700	640	49600	5730	70	1080
2	2810	35	266	28200	328	25000	4870	65	855
3	3370	30	273	30800	520	43200	4820	60	781
4	3740	25	252	23900	200	12900	5090	50	687
5	7780	138	2900	23000	175	10900	7330	135	2830
6	12700	292	10000	19600	150	7940	12000	178	5770
7	11200	231	6990	15200	125	5130	12900	80	2790
8	8610	150	3490	10500	117	3320	11800	94	2990
9	6230	100	1680	7870	100	2120	9050	86	2100
10	4040	75	818	6420	85	1470	6180	55	918
11	2100	50	283	5250	74	1050	5380	100	1450
12	1840	30	149	3730	70	705	11200	1090	34700
13	1730	25	117	3420	65	600	18400	1040	51700
14	1690	20	91	3080	60	499	20700	630	35200
15	1650	17	76	2930	50	396	22000	400	23800
16	1640	15	66	6390	368	7380	21400	430	24800
17	1640	13	58	17300	1040	48600	22800	520	32000
18	1630	13	57	24800	450	30100	24700	470	31300
19	1620	13	57	28300	250	19100	23000	315	19600
20	1620	12	52	26200	210	14900	22200	320	19200
21	1610	12	52	21200	180	10300	22000	290	17200
22	1760	10	48	18800	150	7610	21900	270	16000
23	11500	1240	47700	17500	140	6610	21800	233	13700
24	19900	880	47300	14500	84	3290	18600	134	6730
25	15800	300	12800	12800	90	3110	14300	142	5480
26	11800	195	6210	11800	85	2710	10900	125	3680
27	8430	140	3190	8970	80	1940	8100	100	2190
28	7140	130	2510	7040	75	1430	6550	100	1770
29	5420	100	1460	---	---	---	5920	95	1520
30	4260	75	863	---	---	---	5870	95	1510
31	12700	623	27400	---	---	---	6690	90	1630
TOTAL	180920	---	177528	428200	---	321910	414180	---	365961

## SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	8230	90	2000	2010	25	136	6590	240	4270
2	8560	90	2080	1940	31	162	5360	124	1790
3	10300	100	2780	1880	26	132	4480	149	1800
4	13600	125	4590	1830	25	124	3480	112	1050
5	10500	95	2690	1790	24	116	3270	110	971
6	7630	90	1850	1770	37	177	2900	110	861
7	7790	94	1980	1750	22	104	2490	100	672
8	6340	76	1300	1790	22	106	2220	100	599
9	5410	148	2160	2000	25	135	2270	95	582
10	5200	126	1770	2030	30	164	3900	90	948
11	5550	96	1440	1820	28	138	3710	85	851
12	5980	72	1160	1740	30	141	3710	80	801
13	6350	80	1370	1720	26	121	3320	116	1040
14	6390	85	1470	1640	38	168	3290	110	977
15	6050	136	2220	1620	42	184	2690	115	835
16	5450	72	1060	1600	38	164	3220	160	1390
17	5030	65	883	1540	37	154	5520	480	7150
18	4500	75	911	1500	32	130	6120	360	5950
19	3910	65	686	1440	26	101	6360	185	3180
20	3660	53	524	1630	30	132	5240	140	1980
21	3470	50	468	1930	44	229	3910	116	1220
22	3220	45	391	3050	88	725	2930	110	870
23	2790	41	309	2790	284	2140	2380	63	405
24	2540	38	261	4260	242	2780	2270	71	435
25	2420	70	457	3240	140	1220	2100	77	437
26	2340	28	177	2950	97	773	1890	75	383
27	2270	28	172	2460	108	717	1740	75	352
28	2240	28	169	2260	98	598	1630	70	308
29	2170	25	146	3270	190	1680	1790	70	338
30	2070	25	140	6800	524	10700	2060	70	389
31	---	---	---	8490	600	13800	---	---	---
TOTAL	161960	---	37614	76540	---	38151	102840	---	42834
JULY			AUGUST			SEPTEMBER			
1	2700	65	474	887	46	110	752	65	132
2	2560	65	449	844	67	153	735	58	115
3	2530	62	424	796	95	204	763	55	113
4	2330	56	352	885	74	177	1530	85	351
5	2540	55	377	1090	75	221	1070	58	168
6	2140	55	318	1330	70	251	822	60	133
7	2350	50	317	1100	70	208	687	60	111
8	2310	50	312	965	70	182	655	62	110
9	3550	85	815	930	76	191	653	62	109
10	3700	90	899	890	50	120	653	63	111
11	2220	90	539	961	65	169	653	63	111
12	1800	77	374	950	74	190	646	64	112
13	1570	70	297	862	56	130	610	64	105
14	1420	68	261	813	60	132	605	45	74
15	1270	65	223	769	65	135	672	68	123
16	1210	65	212	744	72	145	1500	54	219
17	1140	60	185	880	77	183	1180	48	153
18	1110	60	180	759	94	193	873	48	113
19	1150	56	174	716	133	257	766	49	101
20	1320	38	135	710	87	167	680	50	92
21	1210	36	118	719	88	171	625	52	88
22	1040	39	110	710	80	153	655	54	95
23	985	34	90	703	80	152	719	45	87
24	928	27	68	680	80	147	854	49	113
25	923	28	70	800	75	162	737	45	90
26	921	38	94	1390	75	281	692	45	84
27	894	46	111	1190	74	238	686	40	74
28	1030	21	58	968	90	235	757	40	82
29	1430	24	93	907	75	184	986	45	120
30	1180	32	102	837	58	131	848	45	103
31	973	45	118	810	68	149	---	---	---
TOTAL	52434	---	8349	27595	---	5521	24064	---	3592
YEAR	1628111		1029959						

## RESERVOIRS IN SCIOTO RIVER BASIN

- 03220500 O'SHAUGHNESSY RESERVOIR NEAR DUBLIN.--Lat 40°09'14", long 83°07'33", Delaware County, Hydrologic Unit 05060001, in gate house of dam on Scioto River, 4.0 mi (6.4 km) north of Dublin. DRAINAGE AREA, 979 mi<sup>2</sup> (2,536 km<sup>2</sup>). PERIOD OF RECORD, October 1924 to current year. GAGE, water-stage recorder. Monthend contents only for some periods published in WSP 1305. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum.
- Reservoir is formed by concrete dam; dam completed and storage began in 1924. Usable capacity, 14,500 acre-ft (5.55 hm<sup>3</sup>), between elevations, 789.5 ft (240.64 m) (sill of outlet gate), and 845 ft (258 m) (crest of spillway), based on survey made in 1942. Flashboards installed May 8, 1945, additional capacity, 2,480 acre-ft (3.06 hm<sup>3</sup>), between elevations 845 ft (258 m) (crest of spillway), and 847.9 ft (258.44 m) (crest of flashboards). Dead storage below elevation 789.5 ft (240.64 m), 55 acre-ft (67,800 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 24,240 acre-ft (29.9 hm<sup>3</sup>) Jan. 22, 1959, elevation, 854.40 ft (260.421 m); minimum, 43 acre-ft (53,000 m<sup>3</sup>) Feb. 11, 1945, elevation, 791.97 ft (241.392 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 19,830 acre-ft (24.4 hm<sup>3</sup>) Feb. 1, elevation, 850.67 ft (259.284 m); minimum, 15,910 acre-ft (19.6 hm<sup>3</sup>) Sept. 26, elevation, 846.73 ft (258.083 m).
- 03221500 GRIGGS RESERVOIR NEAR COLUMBUS.--Lat 40°00'54", long 83°05'38", Franklin County, Hydrologic Unit 05060001, on left abutment of dam on Scioto River, 6.2 mi (10.0 km) northwest of State Capitol building in Columbus, and 6.5 mi (10.5 km) upstream from Olentangy River. DRAINAGE AREA, 1,044 mi<sup>2</sup> (2,704 km<sup>2</sup>). PERIOD OF RECORD, January 1921 to current year. GAGE, water-stage recorder. Monthend 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 (207.380 m) National Geodetic Vertical Datum, adjustment of 1929 (levels by city of Columbus). Prior to Oct. 4, 1940 nonrecording gage at same site and datum.
- Reservoir formed by concrete dam; dam completed and storage began in 1905. Usable capacity, 3,700 acre-ft (4.56 hm<sup>3</sup>) between elevations, 735.4 ft (224.15 m) (lowest outlets), and 753.4 ft (229.64 m) (crest of spillway), based on survey made in 1935. Flashboards installed July 28, 1945, additional capacity, 750 acre-ft (925,000 m<sup>3</sup>), between elevations, 753.4 ft (229.64 m) (crest of spillway) and 755.6 ft (230.31 m) (crest of flashboards). Dead storage below elevation, 735.4 ft (224.15 m), 239 acre-ft (295,000 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 7,490 acre-ft (9.24 hm<sup>3</sup>) Jan. 22, 1959, elevation, 763.91 ft (232.840 m); minimum, 38 acre-ft (46,900 m<sup>3</sup>) Jan. 24, 1945, elevation, 735.78 ft (224.266 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 5,760 acre-ft (6.86 hm<sup>3</sup>) Mar. 16, elevation, 758.69 ft (231.249 m); minimum, 3,760 acre-ft (4.64 hm<sup>3</sup>) Sept. 16, 25, elevation, 753.58 ft (229.691 m).
- 03225000 DELAWARE LAKE NEAR DELAWARE.--Lat 40°21'31", long 83°04'10", in T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, in gate house of dam on Olentangy River, 4.0 mi (6.4 km) north of Delaware. DRAINAGE AREA, 386 mi<sup>2</sup> (1,000 km<sup>2</sup>). PERIOD OF RECORD, March 1951 to current year. Prior to October 1971 published as Delaware Reservoir. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum (levels by Corps of Engineers).
- Lake is formed by earthfill dam with concrete spillway; storage began Mar. 20, 1951. Usable capacity 24,500 acre-ft (30.2 hm<sup>3</sup>) between elevation, 884.0 ft (269.44 m) (lowest outlet) and 922.0 ft (281.03 m) (crest of spillway). Additional flood-control storage above elevation 922.0 ft (281.03 m) by taintor gates on spillway, 107,500 acre-ft (133 hm<sup>3</sup>). Normal conservation pool storage 8,400 acre-ft (10.4 hm<sup>3</sup>), elevation, 910.0 ft (277.37 m) winter, and 14,000 acre-ft (17.3 hm<sup>3</sup>), elevation, 915.0 ft (278.89 m) 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, 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. Capacity curve furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 113,000 acre-ft (139 hm<sup>3</sup>) Jan. 25, 1959, elevation, 944.75 ft (287.960 m); minimum, 2,070 acre-ft (2.55 hm<sup>3</sup>) Feb. 13, 1970, elevation, 899.43 ft (274.146 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 26,590 acre-ft (32.78 hm<sup>3</sup>) Feb. 2, elevation, 923.10 ft (281.361 m); minimum, 8,040 acre-ft (9.91 hm<sup>3</sup>) Mar. 30, elevation, 909.60 ft (277.246 m).
- 03228400 HOOVER RESERVOIR AT CENTRAL COLLEGE.--Lat 40°06'30", long 82°52'59", in T.2 N., R.17 W., Franklin County, Hydrologic Unit 05060001, in gate house of dam on Big Walnut Creek, 0.5 mi (0.8 km) northeast of Central College, and 12 mi (19 km) northeast of Columbus. DRAINAGE AREA, 190 mi<sup>2</sup> (492 km<sup>2</sup>). PERIOD OF RECORD, March 1955 to current year. REVISED RECORDS, WRD OH-78-1: 1975 (M). GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1956, nonrecording gage at same site and datum.
- Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began in March 1955. Usable capacity, 60,130 acre-ft (74.1 hm<sup>3</sup>) between elevations 830.0 ft (252.98 m) (lowest outlet), and 890.0 ft (271.27 m) (crest of spillway). Additional flood-control storage above elevation 890.0 ft (271.27 m) by bascule gates installed in May 1970, 25,750 acre-ft (31.7 hm<sup>3</sup>). Dead storage below elevation 830.0 ft (252.98 m), 214 acre-ft (264,000 m<sup>3</sup>). 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.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 83,258 acre-ft (103 km<sup>3</sup>), revised, Feb. 24, 1975, elevation, 897.26 ft (273.485 m); minimum, 19,010 acre-ft (23.4 hm<sup>3</sup>) Mar. 1, 1964, elevation, 868.58 ft (264.743 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 69,950 acre-ft (86.2 hm<sup>3</sup>) Mar. 12, elevation, 893.40 ft (272.308 m); minimum, 25,940 acre-ft (32.0 hm<sup>3</sup>) Dec. 22, elevation, 874.10 ft (266.426 m).

## RESERVOIRS IN SCIOTO RIVER BASIN--Continued

03228804 ALUM CREEK LAKE NEAR WORTHINGTON.--Lat 40°11'03", long 82°57'50", Delaware County, Hydrologic Unit 05060001, in outlet structure of dam on Alum Creek, 180 ft (54.9 m) upstream from Lewis Center Road, 0.3 mi (0.48 km) west of Africa, 4.2 mi (6.84 km) northwest of Westerville, and 7.0 mi (11.3 km) north of Worthington. DRAINAGE AREA, 122 mi<sup>2</sup> (316 km<sup>2</sup>). PERIOD OF RECORD, January 1975 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake formed by earthfill dam with concrete gravity channel section; dam completed and storage began in 1974, station established Jan. 16, 1975. Usable capacity, 48,940 acre-ft (60.3 hm<sup>3</sup>) between elevation 835.0 ft (254.51 m) (lowest outlet) and 878.0 ft (267.61 m) (crest of spillway). Additional flood-control storage above 878.0 ft (267.61 m) by taintor gates on spillway 85,000 acre-ft (104.8 hm<sup>3</sup>). Normal conservation pool storage 71,120 acre-ft (87.7 hm<sup>3</sup>) elevation 885.0 ft (269.75 m) winter, and 80,860 acre-ft (99.7 hm<sup>3</sup>) elevation 888.0 ft (270.66 m) summer. Dead storage 879 acre-ft (1.08 hm<sup>3</sup>) below 835.0 ft (254.51 m). Figures given herewith represent usable contents. Lake is used for flood control, recreation, water supply, and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceway through dam, but above spillway level, taintor gates can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 96,750 acre-ft (119 hm<sup>3</sup>) Sept. 17, 1979, elevation, 892.40 ft (272.004 m); minimum, 5,860 acre-ft (7.23 hm<sup>3</sup>) Jan. 25, 1975, elevation, 849.59 ft (258.955 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 82,980 acre-ft (102 hm<sup>3</sup>) June 17, elevation, 888.62 ft (270.851 m); minimum, 70,910 acre ft (87.4 hm<sup>3</sup>) Dec. 21, elevation, 884.93 ft (269.727 m).

03230890 DEER CREEK LAKE NEAR PANCOASTBURG.--Lat 39°37'20", long 83°12'58", Pickaway County, Hydrologic Unit 05060002, in outlet tower of dam on Deer Creek, 1,000 ft (305 m) upstream from Crownover Mill Road, and 2.8 mi (4.5 km) east of Pancoastburg. DRAINAGE AREA, 277 mi<sup>2</sup> (717 km<sup>2</sup>). PERIOD OF RECORD, April 1968 to current year. Prior to October 1971 published as Deer Creek Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake formed by earthfill dam with concrete spillway; dam completed in 1968 and storage began April 1, 1968. Usable capacity 26,440 acre-ft (32.6 hm<sup>3</sup>) between elevation 772.0 ft (235.31 m) (lowest outlet) and 814.0 ft (248.11 m) crest of spillway. Additional flood control storage above 814.0 ft (248.11 m) by taintor gates on spillway 76,100 acre-ft (93.8 hm<sup>3</sup>). Normal conservation pool storage 6,420 acre-ft (7.92 hm<sup>3</sup>), elevation, 796.0 ft (242.62 m) winter, and 21,030 acre-ft (25.9 hm<sup>3</sup>), elevation, 810.0 ft (246.89 m) summer. Dead storage 2 acre-ft (2,470 m<sup>3</sup>) below 772.0 ft (235.31 m). 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, 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. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 71,830 acre-ft (88.6 hm<sup>3</sup>) May 31, 1968, elevation, 835.25 ft (254.584 m); minimum, 1,140 acre-ft (1.41 hm<sup>3</sup>) Jan. 8, 1970, elevation, 784.75 ft (239.192 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 29,930 acre-ft (36.9 hm<sup>3</sup>) Feb. 3, elevation, 816.34 ft (248.820 m); minimum, 6,280 acre-ft (7.74 hm<sup>3</sup>) Mar. 1, elevation, 795.80 ft (242.560 m).

03232460 PAINT CREEK LAKE NEAR BAINBRIDGE.--Lat 39°15'09", long 83°20'59", Highland County, Hydrologic Unit 05060003, in outlet structure of dam on Paint Creek, 1.9 mi (3.1 km) upstream from Rocky Fork, and 4.5 mi (7.2 km) northwest of Bainbridge. DRAINAGE AREA, 570 mi<sup>2</sup> (1,476 km<sup>2</sup>). PERIOD OF RECORD, April 1974 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earth and rock embankment dam with concrete spillway. Dam completed in 1974 and storage began April 8, 1974. Usable capacity 37,420 acre-ft (46.1 hm<sup>3</sup>) between elevation 750.0 ft (228.60 m) (lowest outlet), and 810.0 ft (246.89 m) (crest of spillway). Additional flood control storage above elevation 810.0 ft (246.89 m) by three taintor gates on spillway, 107,600 acre-ft (132.67 hm<sup>3</sup>). Seasonal pool storage 20,310 acre-ft (25.0 hm<sup>3</sup>) elevation, 798.0 ft (243.23 m). Dead storage 5 acre-ft (6,170 m<sup>3</sup>) below elevation 750.0 ft (228.60 m). Figures given herein represent usable contents. Lake is used primarily for flood control although seasonal pool is used for water quality control, water supply, recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceway through dam but above spillway level taintor gates on spillway can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 111,900 acre-ft (138 hm<sup>3</sup>) Feb. 28, 1979, elevation, 837.37 ft (255.230 m); minimum since initial filling was completed on May 6, 1974, 8,930 acre-ft (11.0 hm<sup>3</sup>) Mar. 28, 1975, elevation, 786.03 ft (239.582 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 43,980 acre-ft (54.2 hm<sup>3</sup>) Feb. 2, elevation, 813.60 ft (247.985 m); minimum, 9,980 acre-ft (12.3 hm<sup>3</sup>) Jan. 11, elevation, 787.45 ft (240.015 m).

## RESERVOIRS IN SCIOTO RIVER BASIN--Continued

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03220500 O'SHAUGNESSY RESERVOIR				03221500 GRIGGS RESERVOIR			0322500 DELAWARE LAKE		
Sept. 30.....	848.06	17,120	--	755.46	4,400	--	914.96	13,950	--
Oct. 31.....	848.35	17,410	+290	755.85	4,530	+130	914.81	13,750	-200
Nov. 30.....	848.27	17,330	-80	755.79	4,510	-20	911.14	9,540	-4,210
Dec. 31.....	848.33	17,390	+60	756.09	4,610	+100	910.21	8,610	-930
CAL YR 1981	--	--	+220	--	--	+180	--	--	+90
Jan. 31.....	849.85	18,940	+1,550	756.50	4,750	+140	917.05	16,760	+8,150
Feb. 28.....	848.20	17,260	-1,680	756.34	4,700	-50	910.90	9,300	-7,460
Mar. 31.....	849.11	18,170	+910	756.69	4,820	+120	911.79	10,190	+890
Apr. 30.....	848.22	17,280	-890	755.63	4,460	-360	915.06	14,080	+3,890
May 31.....	848.90	17,960	+680	756.56	4,780	+320	915.79	15,030	+950
June 30.....	848.13	17,190	-770	755.56	4,430	-350	915.60	14,780	-250
July 31.....	847.98	17,050	-140	754.62	4,110	-320	914.80	13,740	-1,040
Aug. 31.....	847.43	16,540	-510	754.24	3,980	-130	915.08	14,100	+360
Sept. 30.....	846.79	15,960	-580	753.75	3,820	-160	915.38	14,490	+390
WTR YR 1982	--	--	-1,160	--	--	-580	--	--	+540
03228400 HOOVER RESERVOIR				03228804 ALUM CREEK LAKE			03230890 DEER CREEK LAKE		
Sept. 30.....	883.52	43,570	--	887.63	79,620	--	810.01	21,040	--
Oct. 31.....	878.38	33,160	-10,410	886.97	77,420	-2,200	803.46	13,350	-7,690
Nov. 30.....	875.74	28,560	-4,600	885.13	71,530	-5,890	796.33	6,670	-6,680
Dec. 31.....	877.82	32,150	+3,590	885.15	71,590	+60	796.25	6,610	-60
CAL YR 1981	--	--	-7,020	--	--	+37,600	--	--	+100
Jan. 31.....	877.35	31,320	-830	887.47	79,090	+7,500	804.56	14,550	+7,940
Feb. 28.....	891.24	63,530	+32,210	885.06	71,310	-7,780	795.86	6,320	-8,230
Mar. 31.....	890.70	62,040	-1,490	885.77	73,550	+2,240	796.45	6,760	+400
Apr. 30.....	891.64	64,660	+2,620	887.75	80,020	+6,470	810.12	21,180	+14,420
May 31.....	889.58	59,000	-5,660	888.56	82,780	+2,760	810.91	22,200	+1,020
June 30.....	888.60	56,380	-2,620	888.21	81,580	-1,200	810.30	21,420	-780
July 31.....	884.57	46,060	-10,320	887.86	80,390	-1,190	809.97	20,990	-430
Aug. 31.....	881.42	38,980	-7,080	887.85	80,350	-40	809.66	20,600	-390
Sept. 30.....	876.70	30,180	-8,800	887.71	79,890	-460	808.95	19,710	-890
WTR YR 1982	--	--	-13,390	--	--	+270	--	--	-1,370
03232460 PAINT CREEK LAKE									
Sept. 30.....	798.20	20,550	--						
Oct. 31.....	798.20	20,550	0						
Nov. 30.....	787.88	10,310	-10,240						
Dec. 31.....	787.69	10,170	-140						
CAL YR 1981	--	--	-60						
Jan. 31.....	798.20	20,550	+10,380						
Feb. 28.....	787.81	10,260	-10,290						
Mar. 31.....	788.86	11,100	+840						
Apr. 30.....	798.36	20,740	+9,640						
May 31.....	799.06	21,590	+850						
June 30.....	798.74	21,200	-390						
July 31.....	798.24	20,600	-600						
Aug. 31.....	797.86	20,140	-460						
Sept. 30.....	796.29	18,330	-1,810						
WTR YR 1982	--	--	-2,220						

## UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH

(HYDROLOGIC BENCH-MARK STATION)

LOCATION.--Lat 38°38'37", long 83°12'57", Scioto County, Hydrologic Unit 05090201, on right bank, 0.3 mi (0.5 km) downstream from Brown Run, 0.3 mi (0.5 km) upstream from Tucker Run, 0.7 mi (1.1 km) upstream from bridge on U.S. Highway 52 at McGaw, 2.7 mi (4.3 km) northeast of Buena Vista, and 3.2 mi (5.1 km) upstream from mouth.

DRAINAGE AREA.-- 12.2 mi<sup>2</sup> (31.6 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 543.41 ft (165.631 m) National Geodetic Vertical Datum of 1929. Ohio Department of Highways bench mark. Prior to July 21, 1972 at site 0.7 mi (1.1 km) downstream at datum 23.41 ft (7.135 m) lower.

REMARKS.--Records fair except those for winter period and below 0.5 ft /s which are poor.

AVERAGE DISCHARGE.--19 years, 13.7 ft<sup>3</sup> /s (0.390 m<sup>3</sup> /s), 15.25 in/yr (387) mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft<sup>3</sup> /s (99.1 m<sup>3</sup> /s) Mar. 4, 1964, gage height, 9.7 ft (2.96 m), in gage well, 10.2 ft (3.11 m), from outside highwater mark from rating curve extended above 300 ft<sup>3</sup> /s on basis of slope-area measurement of peak flow; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 3, 1960 reached a stage of 11.62 ft (3.542 m), discharge, 7,230 ft<sup>3</sup> /s (205 m<sup>3</sup> /s), on basis of contracted-opening and flow over road measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft<sup>3</sup> /s (12.7 m<sup>3</sup> /s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
Jan. 22	2300	767	21.7	3.80	1.158	June 9	2345	*2010	56.9	*5.41	1.649
May 30	0330	490	13.9	3.25	0.991						

Minimum discharge, 0.01 ft<sup>3</sup> /s (0.000 m<sup>3</sup> /s) Oct. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.22	.11	1.6	34	4.1	28	3.9	13	.82	.33	.41
2	.06	.21	1.0	1.9	20	3.9	22	3.9	11	.70	.26	.39
3	.06	.19	.24	5.0	16	3.9	84	3.5	7.0	.66	.22	.33
4	.06	.19	.17	29	13	4.9	46	3.1	4.4	.65	.34	.30
5	.06	.15	.15	6.6	11	20	30	2.9	14	.62	.80	.26
6	.15	.14	.14	5.6	9.3	15	24	2.6	9.7	.59	.53	.24
7	.15	.12	.13	4.8	6.6	14	17	2.4	6.6	.56	.44	.22
8	.11	.12	.12	3.8	6.3	12	14	2.6	4.6	.59	.40	.21
9	.08	.12	.12	3.0	7.7	12	16	2.4	120	.56	.35	.19
10	.06	.11	.12	2.5	5.4	11	16	2.0	80	.55	.30	.19
11	.06	.10	.14	2.0	5.4	47	16	1.8	7.0	.54	.26	.19
12	.06	.09	.12	1.3	4.4	66	14	1.7	4.6	.51	.26	.19
13	.06	.08	.09	1.2	4.6	61	13	1.5	4.0	.51	.23	.19
14	.06	.07	.08	1.1	4.1	43	10	1.4	7.2	.45	.22	.19
15	.06	.06	.08	1.0	6.3	63	9.7	1.2	48	.45	.19	.19
16	.06	.06	11	.98	28	69	8.9	1.1	21	.45	.20	.19
17	.06	.06	9.3	.94	68	54	28	.97	10	.45	.20	.16
18	.12	.07	1.2	.92	39	33	32	.91	6.0	.45	.19	.18
19	.11	.08	.50	.92	26	27	22	1.5	3.3	.45	.17	.19
20	.08	.07	.28	.91	20	38	20	2.6	2.0	.45	.16	.19
21	.01	.08	.25	3.3	17	33	16	2.4	1.6	.45	.16	.16
22	.02	.10	1.6	.99	12	24	13	11	1.3	.56	.14	.16
23	.16	.08	24	.89	10	18	11	3.9	1.1	.49	.12	.16
24	.12	.12	42	.37	9.3	14	8.9	2.3	.99	.51	.12	.12
25	.08	.23	9.0	16	7.0	12	8.1	1.7	.89	.51	.12	.12
26	.09	.15	4.4	8.9	5.4	14	7.7	1.4	.81	.51	.12	.18
27	.16	.11	2.1	5.4	5.1	12	7.3	1.2	.74	5.0	.37	.16
28	.14	.09	2.2	6.0	4.9	10	6.0	1.9	.87	1.2	.75	.14
29	.17	.08	2.6	4.9	---	8.9	5.1	4.1	1.1	.72	.56	.14
30	.22	.08	1.8	4.6	---	8.5	4.6	92	.99	.53	.49	.12
31	.24	---	1.5	22	---	28	---	20	---	.42	.45	---
TOTAL	3.00	3.43	116.54	471.17	405.8	784.2	558.3	185.88	393.79	21.91	9.45	6.06
MEAN	.097	.11	3.76	15.2	14.5	25.3	18.6	6.00	13.1	.71	.30	.20
MAX	.24	.23	.42	.189	.68	.69	.84	.92	120	5.0	.80	.41
MIN	.01	.06	.08	.91	4.1	3.9	4.6	.91	.74	.42	.12	.12
CFSM	.008	.009	.31	1.25	1.19	2.07	1.53	.49	1.07	.06	.03	.02
IN.	.01	.01	.36	1.44	1.24	2.39	1.70	.57	1.20	.07	.03	.02

CAL YR 1981	TOTAL	2941.09	MEAN 8.06	MAX 120	MIN .01	CFSM .66	IN 8.97
WTR YR 1982	TOTAL	2959.53	MEAN 8.11	MAX 189	MIN .01	CFSM .67	IN 9.02

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF RECORD.--

WATER TEMPERATURES: Water years 1963-66, 1967-70, July 1972 to current year.

SUSPENDED SEDIMENT DISCHARGE: Water years 1964-69 (periodic), 1969 to 1973 (daily), 1974 to current year (periodic).

INSTRUMENTATION.--Water temperature recorder since July 1972.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 36.0°C July 20, 21, 1977; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 29.5°C May 17,18; minimum, 0.0°C many days during winter period.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 21...	1215	.02	140	6.9	14.0	9.0	87	22	1000	55	9.2	7.8
NOV 16...	1130	.06	135	6.6	.5	10.6	74	20	80	52	8.6	7.4
DEC 09...	1000	.12	125	6.6	.5	12.0	83	60	32	47	7.9	6.7
JAN 06...	1115	5.1	110	6.9	5.0	14.8	120	67	130	38	6.3	5.5
FEB 25...	1130	7.4	70	7.1	5.5	12.4	98	4	22	29	5.0	4.1
MAR 23...	1100	17	81	6.9	8.0	11.3	95	4	11	25	4.1	3.7
APR 14...	1400	10	80	7.1	15.0	10.2	100	5	5	30	4.9	4.4
MAY 13...	1130	1.6	110	7.2	21.0	9.0	100	11	32	36	6.0	5.0
JUN 09...	1400	5.5	90	7.1	21.0	9.0	100	77	88	33	5.6	4.6
JUL 08...	1430	.60	110	7.2	27.5	8.4	100	470	260	42	7.1	6.0
AUG 25...	1030	.12	125	6.8	22.0	8.4	95	7	28	47	8.2	6.4
SEP 09...	1200	.20	115	7.0	20.5	8.5	93	E1	16	45	7.8	6.1

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CYANIDE TOTAL (MG/L AS CN)
OCT 21...	5.0	2.2	26	39	4.2	<.1	9.8	102	93	.20	<.010	--
NOV 16...	4.4	1.6	18	39	4.4	<.1	8.4	82	85	.20	.020	--
DEC 09...	5.0	1.5	20	40	4.8	<.1	6.1	81	84	.31	.010	--
JAN 06...	3.3	1.4	15	25	2.4	<.1	9.1	64	62	1.1	<.010	--
FEB 25...	2.5	1.7	6.0	23	1.5	<.1	8.4	62	50	.39	.030	--
MAR 23...	2.2	1.5	8.0	22	1.4	<.1	8.6	52	48	.39	.020	--
APR 14...	2.8	1.7	9.0	24	1.3	<.1	10	54	55	.18	<.010	<.01
MAY 13...	3.2	2.3	13	33	2.3	<.1	9.3	81	69	.16	.010	--
JUN 09...	3.2	1.9	15	24	1.3	<.1	10	64	60	.10	<.010	--
JUL 08...	4.1	2.2	17	31	2.6	.1	11	107	74	.28	.030	--
AUG 25...	4.3	2.1	21	32	2.9	<.1	10	87	79	.26	.050	--
SEP 09...	3.9	2.2	21	30	2.7	<.1	9.7	85	75	.20	<.010	--

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

[illegible][illegible]



## UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT							
21...	1215	.02	--	--	--	--	--
NOV							
16...	1130	.06	<1	<.1	<1.0	<.1	.2
DEC							
09...	1000	.12	--	--	--	--	--
JAN							
06...	1115	5.1	--	--	--	--	--
FEB							
25...	1130	7.4	--	--	--	--	--
MAR							
23...	1100	17	--	--	--	--	--
APR							
14...	1400	10	--	--	--	--	--
MAY							
13...	1130	1.6	--	--	--	--	--
JUN							
09...	1400	5.5	--	--	--	--	--
JUL							
08...	1430	.60	--	--	--	--	--
AUG							
25...	1030	.12	--	--	--	--	--
SEP							
09...	1200	.20	--	--	--	--	--

DATE	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT						
21...	--	--	--	--	--	--
NOV						
16...	.2	<.1	<.1	<.1	<.1	<.1
DEC						
09...	--	--	--	--	--	--
JAN						
06...	--	--	--	--	--	--
FEB						
25...	--	--	--	--	--	--
MAR						
23...	--	--	--	--	--	--
APR						
14...	--	--	--	--	--	--
MAY						
13...	--	--	--	--	--	--
JUN						
09...	--	--	--	--	--	--
JUL						
08...	--	--	--	--	--	--
AUG						
25...	--	--	--	--	--	--
SEP						
09...	--	--	--	--	--	--

## UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)
OCT 21...	1215	.02	--	--	--	--	--	--	--
NOV 16...	1130	.06	--	--	--	--	--	--	--
DEC 09...	1000	.12	--	--	--	--	--	--	--
JAN 06...	1115	5.1	--	--	--	--	--	--	--
FEB 25...	1130	7.4	--	--	--	--	--	--	--
MAR 23...	1100	17	--	--	--	--	--	--	--
APR 14...	1400	10	<1.2	<.4	1.8	<.4	1.8	<.4	.06
MAY 13...	1130	1.6	--	--	--	--	--	--	--
JUN 09...	1400	5.5	--	--	--	--	--	--	--
JUL 08...	1430	.60	--	--	--	--	--	--	--
AUG 25...	1030	.12	--	--	--	--	--	--	--
SEP 09...	1200	.20	--	--	--	--	--	--	--

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 21...	1215	.02	14.0	6	.00
NOV 16...	1130	.06	.5	1	.00
DEC 09...	1000	.12	.5	4	.00
JAN 06...	1115	5.1	5.0	2	.03
FEB 25...	1130	7.4	5.5	11	.22
MAR 23...	1100	17	8.0	3	.14
APR 14...	1400	10	15.0	1	.03
MAY 13...	1130	1.6	21.0	1	.00
JUN 09...	1400	5.5	21.0	4	.06
JUL 08...	1430	.60	27.5	5	.01
AUG 25...	1030	.12	22.0	3	.00
SEP 09...	1200	.20	20.5	2	.00

## UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.0	13.5	16.5	16.0	8.0	11.5	11.0	.0	5.5	4.5	3.5	4.0
2	13.0	8.5	11.0	17.5	9.5	13.0	5.5	4.0	4.5	4.5	2.5	3.5
3	13.5	5.0	9.0	17.0	9.5	12.5	6.5	2.0	4.0	5.5	4.0	5.0
4	17.0	5.5	10.5	17.0	9.5	12.5	6.0	4.0	4.5	7.5	5.5	6.5
5	20.5	12.0	16.5	16.5	12.0	13.5	4.0	.5	3.0	6.0	4.5	5.0
6	21.0	13.0	17.0	11.5	7.5	9.5	.5	.0	.0	7.0	4.5	6.0
7	15.0	8.5	11.5	7.0	2.5	5.0	7.0	.0	3.0	7.0	4.0	6.0
8	14.5	6.5	10.0	8.5	1.0	5.0	7.5	2.0	4.5	4.0	2.5	3.0
9	13.5	5.5	10.0	10.5	7.0	8.0	2.0	.0	.5	3.0	1.5	2.5
10	16.5	8.5	12.5	9.5	6.5	8.0	1.0	.0	.5	1.5	1.0	1.5
11	18.5	11.5	14.0	7.5	2.5	6.0	.0	---	---	2.0	1.5	1.5
12	16.0	8.0	11.5	5.0	1.0	2.5	.0	---	---	2.5	1.5	2.0
13	15.0	7.0	10.5	2.5	.0	1.0	.0	---	---	2.0	1.5	1.5
14	13.5	4.5	9.5	.5	.0	.5	.0	.0	.0	2.0	1.0	1.0
15	14.5	10.5	12.5	.5	.0	.5	1.0	.0	.5	2.0	1.0	1.5
16	15.5	8.0	13.0	6.5	.0	2.5	.0	.0	.0	1.5	1.0	1.0
17	15.5	6.0	11.0	7.5	.5	4.0	1.0	.0	.5	1.0	1.0	1.0
18	15.0	8.5	13.0	5.5	.0	2.5	1.0	.5	1.0	1.5	1.0	1.0
19	10.5	3.5	7.5	12.5	1.0	6.5	1.0	.5	1.0	1.5	1.0	1.0
20	11.0	1.5	6.0	11.0	1.5	5.0	1.5	.0	1.0	2.0	1.0	1.5
21	14.5	3.0	8.5	2.5	.5	1.0	1.5	.0	1.0	1.0	1.0	1.0
22	15.5	7.5	11.5	2.0	.0	.5	3.0	1.5	2.0	3.5	1.0	1.5
23	12.0	5.5	10.0	.0	.0	.0	6.0	1.5	4.5	9.0	3.5	7.0
24	6.5	1.0	3.5	5.0	.0	2.0	4.5	3.0	3.5	6.5	4.0	5.5
25	12.0	.5	6.5	2.0	.0	.5	5.0	3.0	3.5	4.5	3.5	4.0
26	16.5	9.5	12.5	11.0	.0	5.0	5.5	3.0	4.5	5.5	3.5	4.0
27	13.5	10.5	12.0	10.0	1.0	6.5	6.5	4.0	5.0	4.5	3.5	4.0
28	13.0	7.5	10.5	6.0	.0	2.0	5.0	4.0	4.5	7.0	3.5	5.0
29	13.0	6.5	9.5	1.0	.0	.5	5.0	2.5	4.0	5.5	3.5	4.0
30	15.0	7.5	11.0	.0	.0	.0	3.5	1.5	2.5	7.0	4.5	6.0
31	14.5	7.5	11.0	---	---	---	4.0	2.0	3.0	6.0	5.5	6.0
MONTH	21.0	.5	11.0	17.5	.0	5.0	11.0	.0	2.5	9.0	1.0	3.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.5	5.0	5.0	11.5	6.0	8.5	14.5	9.5	12.0	19.5	14.0	15.5
2	5.5	4.0	5.0	11.0	7.0	9.0	15.0	10.0	12.5	19.5	14.5	16.0
3	7.0	5.5	6.5	9.0	7.0	7.5	13.5	10.0	12.0	20.0	13.0	16.0
4	6.5	5.5	6.0	11.0	7.0	8.5	13.0	9.0	10.5	21.0	13.5	17.0
5	7.0	5.0	5.5	9.0	7.0	8.0	10.0	9.0	10.0	22.5	14.5	17.5
6	5.0	2.0	3.5	7.0	6.5	7.0	10.0	8.0	9.0	21.5	15.5	18.0
7	3.0	2.0	2.0	7.5	6.0	6.5	12.0	6.5	9.0	20.5	16.5	18.0
8	3.0	1.5	2.5	9.5	5.5	7.0	10.0	8.0	9.0	22.5	16.0	18.5
9	2.5	1.5	2.0	10.0	6.0	7.5	9.0	8.0	8.5	22.0	15.0	18.5
10	3.0	1.5	2.0	9.5	6.5	8.0	11.5	7.5	9.0	24.0	15.0	19.0
11	4.0	2.0	2.5	10.0	8.0	9.0	13.0	8.0	10.0	25.0	15.5	19.5
12	3.0	2.0	2.5	11.5	8.0	9.5	14.5	9.0	11.0	26.5	16.5	20.5
13	4.0	2.0	2.5	12.5	9.5	11.0	16.5	12.0	14.0	27.0	17.5	21.5
14	5.0	2.0	3.0	11.0	8.5	9.5	17.0	11.0	13.5	27.0	17.5	21.5
15	4.0	2.0	3.0	10.0	9.5	9.5	17.5	11.0	14.0	27.0	18.0	21.5
16	3.5	2.5	3.0	12.0	9.5	10.5	18.0	13.5	15.5	28.5	18.0	22.5
17	7.5	4.0	6.5	13.5	10.0	11.5	15.5	13.0	14.5	29.5	18.5	23.0
18	8.0	7.5	7.5	13.5	9.5	11.5	16.0	11.0	13.5	29.5	18.0	22.5
19	8.0	7.5	7.5	12.0	10.5	11.5	16.5	11.5	13.5	27.5	19.5	22.0
20	10.0	7.5	8.5	13.5	10.5	12.0	14.0	13.0	13.5	25.0	18.5	21.0
21	8.5	7.5	8.0	15.0	11.0	13.0	16.5	11.5	13.5	24.0	18.5	20.5
22	9.5	7.0	8.0	11.0	9.5	10.5	16.0	11.0	13.5	22.5	18.0	20.0
23	11.0	6.0	8.0	12.5	8.5	10.0	17.0	10.0	13.0	23.5	18.5	21.0
24	11.0	7.5	9.0	14.0	8.5	10.5	17.5	10.5	13.5	24.0	19.5	21.0
25	10.0	6.5	8.0	12.0	9.0	10.0	16.0	11.5	14.0	24.5	19.0	21.5
26	8.0	5.0	6.5	10.5	8.5	9.0	15.5	14.0	14.5	25.0	18.5	20.5
27	7.5	6.0	6.5	10.5	7.0	8.5	15.5	12.5	14.0	26.0	18.5	21.0
28	11.0	6.0	8.0	11.5	6.0	8.0	18.0	11.0	14.0	26.0	19.5	22.0
29	---	---	---	13.0	6.0	9.0	16.0	11.5	14.0	25.5	20.0	21.5
30	---	---	---	15.0	9.5	12.0	18.5	12.0	15.0	20.0	16.0	17.5
31	---	---	---	14.5	11.5	13.0	---	---	---	21.0	16.5	18.0
MONTH	11.0	1.5	5.5	15.0	5.5	9.5	18.5	6.5	12.5	29.5	13.0	20.0

## UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.0	17.5	18.5									
2	21.5	16.5	18.5									
3	22.0	16.5	18.5									
4	21.0	17.0	18.5									
5	19.5	17.5	18.5									
6	20.5	16.0	18.5									
7	22.5	17.0	19.5									
8	22.5	18.5	20.0									
9	21.5	18.5	19.0									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	22.5	16.0	19.0									
YEAR	29.5	.0	9.0									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OH

LOCATION.--Lat 38°48'13", long 83°25'16", Adams County, Hydrologic Unit 05090201, on right bank at downstream side of bridge on State Highway 348, 0.3 mi (0.5 km) downstream from Cedar Run, 7.0 mi (11.3 km) east of West Union, and 7.1 mi (11.4 km) upstream from Beasley Fork.

DRAINAGE AREA.--387 mi<sup>2</sup> (1,002 km<sup>2</sup>).

PERIOD OF RECORD.--August 1926 to November 1935, September 1940 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 510.6 ft (155.63 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality data collected at this site 1965 to 1977; Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--51 years, 456 ft<sup>3</sup>/s (12.91 m<sup>3</sup>/s), 16.00 in/yr (406 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,200 ft<sup>3</sup>/s (1,680 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 27.91 ft (8.507 m), from rating curve extended above 22,000 ft<sup>3</sup>/s (623 m<sup>3</sup>/s) on basis of slope-area measurement at gage heights 22.70 ft (6.919 m), 26.5 ft (8.077 m), and 27.91 ft (8.507 m); no flow Sept. 13-23, 27, 28, 1955 and for part of each day Sept. 17, 18, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft<sup>3</sup>/s (312 m<sup>3</sup>/s) and maximums (\*)

Date	Time	Discharge (ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	Gage height (ft)	(m)
Jan. 23	1500	*21800	617	*18.68	5.694	May 30	0845	17300	490	16.91	5.154
Jan. 31	2115	11700	331	14.13	4.307						

Minimum discharge, 10 ft<sup>3</sup>/s (0.03 m<sup>3</sup>/s) Oct. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	18	28	98	2800	145	943	67	574	109	24	30
2	1.8	15	131	142	847	139	438	67	372	76	19	57
3	1.4	14	94	241	600	139	2940	65	223	53	15	128
4	3.3	12	49	2350	987	145	1290	60	160	43	13	125
5	3.0	11	34	863	524	794	611	53	488	281	43	70
6	3.6	9.8	27	349	397	454	750	49	285	197	43	40
7	2.7	8.9	26	267	233	335	548	46	163	113	58	27
8	2.5	8.0	22	226	204	273	387	50	367	80	402	21
9	3.9	8.0	18	154	150	213	392	55	908	60	382	19
10	4.2	8.0	17	78	130	182	454	55	1390	43	117	16
11	3.9	8.0	17	60	110	600	349	45	427	36	63	13
12	3.3	9.3	15	54	100	2750	277	38	200	34	52	11
13	3.6	17	14	52	96	1820	237	34	141	28	43	9.7
14	5.9	15	13	50	113	1110	200	30	111	25	34	9.3
15	6.5	14	13	48	188	3290	168	27	88	22	25	8.4
16	6.5	12	12	46	1380	3720	155	25	3620	19	19	7.9
17	5.6	11	12	45	3020	2080	223	23	1960	16	17	7.4
18	6.9	9.8	12	44	1490	908	363	21	600	14	12	6.5
19	7.6	9.8	12	44	1020	1030	220	20	305	14	11	6.1
20	5.9	14	12	47	788	2240	177	26	207	15	9.7	8.4
21	6.5	13	11	112	667	1940	155	340	153	14	8.4	8.8
22	7.6	14	13	1560	471	1050	134	226	121	14	6.5	8.4
23	12	21	1260	15400	349	587	117	194	125	113	6.5	8.4
24	12	24	627	1970	297	427	107	96	128	58	6.5	7.4
25	15	22	219	616	244	344	102	60	88	33	6.1	6.5
26	18	22	132	387	188	358	100	42	68	23	6.1	6.1
27	18	26	111	358	166	305	100	46	63	30	194	6.1
28	17	24	141	285	160	240	93	1910	58	148	180	5.7
29	26	21	162	269	---	207	80	1800	277	95	63	5.7
30	26	17	106	247	---	191	72	10400	188	50	34	5.7
31	22	---	81	3870	---	887	---	1120	---	34	30	---
TOTAL	265.5	436.6	3441	30332	17719	28903	12182	17090	13858	1890	1942.8	689.5
MEAN	8.56	14.6	111	978	633	932	406	551	462	61.0	62.7	23.0
MAX	26	26	1260	15400	3020	3720	2940	10400	3620	281	402	128
MIN	1.4	8.0	11	44	96	139	72	20	58	14	6.1	5.7
CFSM	.02	.04	.29	2.53	1.64	2.41	1.05	1.42	1.19	.16	.16	.06
IN.	.03	.04	.33	2.92	1.70	2.78	1.17	1.64	1.33	.18	.19	.07

CAL YR 1981	TOTAL	136897.7	MEAN 375	MAX 7210	MIN 1.4	CFSM .97	IN 13.16
WTR YR 1982	TOTAL	128749.4	MEAN 353	MAX 15400	MIN 1.4	CFSM .91	IN 12.38

## WHITEOAK CREEK BASIN

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03238500 WHITEOAK CREEK NEAR GEORGETOWN, OH

LOCATION.--Lat 38°51'29", long 83°55'43", Brown County, Hydrologic Unit 05090201, on left bank 150 ft (46 m) upstream from diversion dam for Georgetown water treatment plant, 0.7 mi (1.1 km) upstream from Town Run, 1.4 mi (2.3 km) southwest of Georgetown, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--218 mi<sup>2</sup> (565 km<sup>2</sup>).

PERIOD OF RECORD.--October 1923 to November 1935, October 1939 to current year.

REVISED RECORDS.--WSP 728: 1924-31. WSP 758: 1933. WSP 1908: Drainage area. WRD OH-74-1: 1973 (P)

GAGE.--Water-stage recorder. Datum of gage is 604.20 ft (184.160 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972 nonrecording gage at a site 1.0 mi (1.6 km) downstream at datum 35.24 ft (10.741 m) lower. See WSP 2108 for history of changes prior to Dec. 8, 1940.

REMARKS.--Records fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--55 years, 259 ft<sup>3</sup>/s (7.335 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft<sup>3</sup>/s (634 m<sup>3</sup>/s) Mar. 10, 1964; maximum gage height, 20.87 ft (6.361 m), May 14, 1933, site and datum then in use; no flow at times in 1930, 1940-41, 1943, 1948, 1951-53, 1959, 1969, 1970, 1976, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft<sup>3</sup>/s (156 m<sup>3</sup>/s), and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)
Jan. 24	Unknown	*14000 396	*8.34	2.542	May 30	1100	8220 233	7.34	2.237

Minimum daily, 0.06 ft<sup>3</sup>/s (0.002 m<sup>3</sup>/s) Oct. 15.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	11	116	155	2100	76	543	44	520	44	7.9	20
2	5.2	9.0	152	210	980	70	187	44	286	29	3.6	50
3	3.7	5.2	113	220	340	68	2910	43	118	24	2.2	35
4	.29	5.7	62	1480	680	70	641	41	81	50	3.1	46
5	9.6	7.0	35	640	360	580	216	38	68	132	21	26
6	7.0	5.2	34	206	230	360	252	37	52	92	60	17
7	16	2.8	28	164	130	250	210	38	47	55	35	8.7
8	11	2.8	16	120	100	150	133	35	114	33	57	5.7
9	21	6.9	14	100	90	100	132	29	246	24	44	4.0
10	5.2	9.6	13	64	80	76	163	26	230	24	31	3.2
11	11	4.6	11	50	70	400	136	19	135	19	13	5.8
12	5.2	6.2	9.8	40	62	1800	101	16	63	42	18	7.2
13	8.9	5.5	8.0	38	58	1360	85	13	47	27	11	3.4
14	8.3	4.8	6.8	35	64	630	76	11	37	17	8.1	3.4
15	.06	4.6	6.0	34	200	2390	64	7.9	27	14	6.1	4.0
16	16	5.6	5.6	31	660	2480	52	6.5	178	7.8	3.8	4.2
17	20	8.1	5.6	30	2200	1170	68	4.1	909	14	4.3	4.3
18	14	7.8	5.4	30	920	326	134	3.8	226	25	2.7	2.5
19	18	8.7	5.0	30	560	478	90	24	99	7.6	2.1	1.2
20	3.7	30	4.8	32	370	1580	70	60	61	9.7	2.3	5.5
21	21	71	4.5	100	300	1360	59	159	43	6.2	21	3.1
22	16	42	45	1600	240	394	52	269	33	29	8.6	1.9
23	16	31	1190	11000	190	205	50	107	27	19	5.2	1.3
24	13	26	540	3000	150	147	42	55	23	6.4	4.3	1.3
25	12	27	193	800	120	107	41	40	26	4.7	7.9	1.6
26	21	26	132	200	100	106	45	29	22	2.3	3.7	4.6
27	51	30	144	170	86	101	47	27	23	1.4	80	3.4
28	26	28	168	150	80	78	46	710	19	441	45	7.1
29	21	19	164	140	---	67	43	866	146	86	25	6.7
30	19	22	104	130	---	66	41	4940	86	34	38	8.2
31	9.6	---	99	2600	---	1060	---	475	---	17	38	---
TOTAL	416.75	473.1	3436.5	23599	11520	18105	6729	8217.3	3992	1337.1	612.9	296.3
MEAN	13.4	15.8	111	761	411	584	224	265	133	43.1	19.8	9.88
MAX	51	71	1190	11000	2200	2480	2910	4940	909	441	80	50
MIN	.06	2.8	4.5	30	58	66	41	3.8	19	1.4	2.1	1.2

CAL YR 1981 TOTAL 76936.55 MEAN 211 MAX 7570 MIN .06  
WTR YR 1982 TOTAL 78734.95 MEAN 216 MAX 11000 MIN .06

## LITTLE MIAMI RIVER BASIN

03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OH

LOCATION.--Lat 39°44'54", long 83°55'53", in sec. 34, R.7, T.4, Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on U.S. Highway 68, 0.8 mi (1.3 km) downstream from Conner Branch, 0.9 mi (1.4 km) upstream from Massies Creek, 1.3 mi (2.1 km) northeast of Oldtown, and at mile 82.25 (132.3 km).

DRAINAGE AREA.--129 mi<sup>2</sup> (334 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft (248.887 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--30 years, 118 ft<sup>3</sup>/s (3.342 m<sup>3</sup>/s), 12.42 in/yr (315 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft<sup>3</sup>/s (419 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 12.20 ft (3.719 m), from rating curve extended above 4,400 ft<sup>3</sup>/s (125 m<sup>3</sup>/s) on basis of slope area measurements of peak flow; minimum, 5.4 ft<sup>3</sup>/s (0.15 m<sup>3</sup>/s) July 29, 1954, result of temporary storage at rock dam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft<sup>3</sup>/s (22.7 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 23	----	1500 42.5	Ice Jam	Mar. 16	2400	1240 35.1	5.23 1.594
Feb. 1	0130	* 5260 149	*10.22 3.115	Mar. 20	1615	1480 41.9	5.69 1.734
Feb. 4	0200	855 24.2	4.40 1.341	June 30	0900	1680 47.6	6.06 1.847
Feb. 17	1100	2090 59.2	6.75 2.057				

Minimum discharge, 16 ft<sup>3</sup>/s (0.45 m<sup>3</sup>/s) Sept. 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	53	123	133	2720	141	354	91	166	156	29	31
2	31	50	116	124	636	141	248	89	130	110	29	30
3	32	45	90	119	568	141	437	86	109	95	29	29
4	29	44	79	480	585	177	346	84	99	86	31	27
5	29	42	71	360	327	322	248	83	94	78	46	25
6	32	42	65	209	248	229	268	81	86	71	35	24
7	33	39	63	172	211	191	220	81	78	67	32	24
8	30	38	60	134	177	162	200	89	77	68	45	23
9	27	40	55	121	130	152	198	80	341	64	37	22
10	30	36	52	85	120	145	191	75	196	60	32	22
11	28	37	49	74	110	260	185	74	126	59	31	21
12	26	35	49	68	100	550	172	73	100	54	28	20
13	28	34	48	64	96	502	162	70	87	51	26	20
14	28	35	47	62	96	391	148	68	78	49	25	19
15	27	33	45	60	150	306	141	66	78	46	24	19
16	29	35	44	60	666	760	137	86	170	45	23	18
17	25	33	42	60	1520	830	137	71	150	43	22	18
18	29	33	39	60	540	406	126	66	109	45	21	17
19	29	48	38	60	380	322	122	64	92	49	20	17
20	29	99	38	60	322	1200	117	64	83	44	22	18
21	24	74	39	60	327	709	114	81	77	41	25	19
22	28	58	45	70	255	403	109	124	73	44	21	19
23	30	54	415	1100	236	311	107	128	70	44	20	20
24	29	87	314	658	246	263	105	110	63	38	85	21
25	24	94	170	332	202	236	104	86	61	36	253	23
26	41	79	128	197	168	229	104	78	61	34	72	22
27	117	77	121	160	158	207	102	75	56	39	47	26
28	179	67	126	138	148	183	95	241	114	39	39	24
29	101	61	107	118	---	174	92	352	349	35	33	21
30	73	58	92	586	---	166	91	418	522	32	32	19
31	60	---	87	3580	---	397	---	222	---	31	32	---
TOTAL	1288	1560	2857	9564	11442	10606	5180	3456	3895	1753	1246	658
MEAN	41.5	52.0	92.2	309	409	342	173	111	130	56.5	40.2	21.9
MAX	179	99	415	3580	2720	1200	437	418	522	156	253	31
MIN	24	33	38	60	96	141	91	64	56	31	20	17
CFSM	.32	.40	.72	2.40	3.17	2.65	1.34	.86	1.01	.44	.31	.17
IN.	.37	.45	.82	2.76	3.30	3.06	1.49	1.00	1.12	.51	.36	.19

CAL YR 1981	TOTAL	52515	MEAN 144	MAX 5390	MIN 24	CFSM 1.12	IN 15.14
WTR YR 1982	TOTAL	53505	MEAN 147	MAX 3580	MIN 17	CFSM 1.14	IN 15.43

## 03241500 MASSIE CREEK AT WILBERFORCE, OH

LOCATION.--Lat 39°43'22", long 83°52'58", Greene County, Hydrologic Unit 05090202, on left bank at bridge on Wilberforce-Clifton Road, 0.5 mi (0.8 km) northwest 200 ft of Wilberforce, 0.6 mi (1.0 km) downstream from unnamed right bank tributary and 1.7 mi (2.7 km) upstream from Clark Run.

DRAINAGE AREA.--63.2 mi<sup>2</sup> (164 km<sup>2</sup>).

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce.

REVISIONS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.15 ft (263.698 m) National Geodetic Vertical Datum of 1929, Aug. 4, 1972 to Sept. 30, 1979 at sight 150 ft (46 m) downstream at same datum.

REMARKS.--Records good except those for the winter period, and period of missing record Feb. 18 to Apr. 7 which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--30 years, 63.0 ft<sup>3</sup>/s (1.783 m<sup>3</sup>/s), 13.54 in/yr (344 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft<sup>3</sup>/s (207 m<sup>3</sup>/s) Jan. 21, 1959, Mar. 4, 1963, gage height, 11.25 ft (3.429 m), from rating curve extended above 3,100 ft<sup>3</sup>/s (87.8 m<sup>3</sup>/s); minimum, 0.3 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Sept. 3-7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft<sup>3</sup>/s (17.0 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage (ft)	height (m)
Jan. 24	0030	731	20.7	5.21	1.588	Mar. 20	----	700	19.8	unknown	
Jan. 31	2300	*2590	73.3	*8.34	2.542	Aug. 24	2230	631	17.9	4.95	1.509
Feb. 17	0830	819	23.2	5.42	1.652						

Minimum, 3.9 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Sept. 18-19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	16	55	73	1000	82	190	29	63	287	6.1	7.7
2	8.0	14	60	71	350	82	150	28	46	108	6.1	7.4
3	8.0	15	45	67	300	82	350	26	38	78	6.1	7.0
4	7.6	15	39	248	320	90	180	26	33	67	9.6	6.4
5	8.0	15	32	207	220	170	150	26	32	53	10	6.1
6	11	15	28	137	120	140	160	25	28	41	7.7	5.8
7	9.6	14	28	112	110	120	110	25	26	33	7.4	5.8
8	8.8	14	27	87	90	100	94	28	25	29	7.0	5.5
9	8.8	14	23	75	70	90	91	25	24	27	10	5.2
10	8.8	14	23	68	64	80	85	24	26	23	6.4	4.9
11	8.4	13	22	62	54	120	80	23	22	21	6.4	4.7
12	8.4	13	23	58	52	300	72	22	21	19	5.5	4.7
13	8.0	13	19	54	50	270	68	21	21	17	5.2	4.7
14	8.0	13	18	52	50	230	58	20	19	16	5.8	4.7
15	8.0	13	18	50	110	180	64	20	18	14	5.5	4.7
16	7.6	13	17	50	355	350	62	22	26	13	5.2	4.7
17	8.0	12	18	50	764	400	62	20	28	13	4.9	4.2
18	7.6	12	18	50	300	250	58	18	22	12	4.7	4.2
19	7.6	15	18	50	250	200	54	19	20	13	4.4	4.7
20	7.2	30	18	50	190	600	52	18	18	12	4.4	4.9
21	7.2	27	18	52	180	450	50	26	17	10	4.9	4.9
22	7.2	20	25	60	160	250	47	34	15	12	4.4	4.7
23	8.0	18	212	704	140	180	47	29	15	12	4.9	4.9
24	7.6	35	164	489	150	150	46	25	15	10	79	5.2
25	6.8	44	106	277	130	140	45	24	15	9.2	149	6.1
26	13	38	81	203	100	130	43	22	14	8.5	24	5.8
27	58	33	74	166	90	120	42	22	14	8.8	13	7.0
28	47	26	74	100	84	110	40	54	72	9.2	10	7.0
29	23	23	62	85	---	100	29	100	300	8.1	8.8	5.5
30	15	23	51	364	---	96	29	176	331	7.0	7.4	4.7
31	16	---	50	1970	---	200	---	89	---	6.4	7.7	---
TOTAL	374.0	580	1466	6141	5853	5862	2608	1066	1364	997.2	441.5	163.8
MEAN	12.1	19.3	47.3	198	209	189	86.9	34.4	45.5	32.2	14.2	5.46
MAX	58	44	212	1970	1000	600	350	176	331	287	149	7.7
MIN	6.8	12	17	50	50	80	29	18	14	6.4	4.4	4.2
CFSM	.19	.31	.75	3.13	3.31	2.99	1.38	.54	.72	.51	.23	.09
IN.	.22	.34	.86	3.61	3.45	3.45	1.54	.63	.80	.59	.26	.10

CAL YR 1981	TOTAL	26441.6	MEAN 72.4	MAX 2860	MIN 6.8	CFSM 1.15	IN 15.56
WTR YR 1982	TOTAL	26916.5	MEAN 73.7	MAX 1970	MIN 4.2	CFSM 1.17	IN 15.84

## LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH

LOCATION.--Lat 39°35'00", long 84°01'49", Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on New Burlington Road, 0.3 mi (0.5 km) upstream from unnamed right bank tributary, 2.2 mi (3.5 km) southwest of Spring Valley, 2.8 mi (4.5 km) downstream from Gladly Run, and at mile 61.95 (99.68 km).

DRAINAGE AREA.--366 mi<sup>2</sup> (948 km<sup>2</sup>).

PERIOD OF RECORD.--September 1925 to December 1935 and October 1939 to December 1951 (published as "at Spring Valley"), July 1968 to current year.

REVISED RECORDS.--WSP 893: 1932(M). WSP 1053: 1929. WSP 2108: 1969.

GAGE.--Water-stage recorder. Datum of gage is 729.29 ft (222.288 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 12, 1939, nonrecording gage and Dec. 13, 1939 to Dec. 31, 1951, water-stage recorder at site 2.5 mi (4.0 km) upstream at datum 8.6 ft (2.62 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1968 to 1980.

AVERAGE DISCHARGE.--36 years (1925-35, 1939-51, 1969-82), 393 ft<sup>3</sup>/s (11.13 m<sup>3</sup>/s), 14.58 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft<sup>3</sup>/s (521 m<sup>3</sup>/s) Feb. 26, 1929, gage height, 16.8 ft (5.12 m) site and datum then in use; minimum, 23 ft<sup>3</sup>/s (0.65 m<sup>3</sup>/s) July 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.1 ft (5.52 m) at present site and datum, discharge, 36,400 ft<sup>3</sup>/s (1,030 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 9,000 ft<sup>3</sup>/s (255 m<sup>3</sup>/s) Jan. 31, gage height about 14.0 ft (4.27 m), above base of 3,600 ft<sup>3</sup>/s (102 m<sup>3</sup>/s); minimum discharge 82 ft<sup>3</sup>/s (2.32 m<sup>3</sup>/s) Sept. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	190	547	500	6800	416	1020	271	503	629	113	127
2	125	179	449	442	3160	410	709	267	380	424	111	126
3	123	175	344	461	1640	433	1500	258	315	288	123	121
4	122	169	302	1240	1790	566	1110	256	282	263	140	112
5	122	162	266	838	987	790	741	252	282	228	226	105
6	185	162	241	706	745	644	766	248	254	210	145	102
7	138	155	230	596	583	549	622	246	230	199	130	105
8	128	148	225	477	559	466	594	280	273	265	133	107
9	123	152	211	427	519	451	590	260	361	232	149	105
10	120	166	202	360	436	424	573	240	460	195	130	103
11	119	152	192	350	390	922	549	230	304	219	128	100
12	113	146	187	320	360	1230	510	230	256	204	125	97
13	117	145	183	300	330	1510	488	220	234	190	117	96
14	117	138	181	270	330	1100	451	210	213	180	111	96
15	116	136	179	250	450	954	422	210	204	170	105	96
16	114	135	170	200	1470	1620	407	270	390	160	103	94
17	116	140	160	180	3120	1840	407	230	385	160	106	93
18	114	140	150	190	1970	1030	385	210	286	160	102	88
19	114	145	140	210	1060	829	369	200	246	180	99	85
20	117	506	140	220	899	2810	361	230	230	160	99	83
21	114	293	150	220	855	2150	350	250	206	150	125	92
22	113	225	160	250	733	1110	332	377	199	160	101	90
23	125	202	969	2000	663	837	320	313	195	160	96	93
24	123	305	652	533	648	713	315	302	186	150	155	93
25	114	308	520	470	587	655	308	256	180	140	1060	112
26	175	271	471	450	500	652	306	232	176	130	303	100
27	474	288	467	420	466	590	306	224	172	140	187	108
28	596	239	474	400	436	523	291	366	204	140	156	120
29	347	215	418	380	---	500	282	542	597	127	135	105
30	254	204	347	1500	---	481	277	987	766	118	126	99
31	213	---	336	8000	---	1110	---	559	---	116	131	---
TOTAL	5122	5991	9663	23160	32486	28315	15661	9226	8969	6247	5070	3053
MEAN	165	200	312	747	1160	913	522	298	299	202	164	102
MAX	596	506	969	8000	6800	2810	1500	987	766	629	1060	127
MIN	113	135	140	180	330	410	277	200	172	116	96	83
CFSM	.45	.55	.85	2.04	3.17	2.50	1.43	.81	.82	.55	.45	.28
IN.	.52	.61	.98	2.35	3.30	2.88	1.59	.94	.91	.63	.52	.31
CAL YR 1981	TOTAL	163570	MEAN 448	MAX 7450	MIN 113	CFSM 1.22	IN 16.63					
WTR YR 1982	TOTAL	152963	MEAN 419	MAX 8000	MIN 83	CFSM 1.15	IN 15.55					

## 03242150 CAESAR CREEK NEAR XENIA, OH

LOCATION.--Lat 39°37'25", long 83°54'09", Greene County, Hydrologic Unit 05090202, on left bank at downstream side of bridge on Winchester Road, 0.2 mi (0.3 km) downstream from unnamed left bank tributary, 4.5 mi (7.2 km) south of Xenia, 7.4 mi (11.9 km) upstream from Anderson Fork, and at mile 22.1 (35.6 km).

DRAINAGE AREA.--71.4 mi<sup>2</sup> (185 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 894.18 ft (272.546 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Since 1964, some regulation by seasonal changes in storage in Lake Shawnee, 7.2 mi (11.6 km) upstream, drainage area 10.9 mi<sup>2</sup> (28.2 km<sup>2</sup>). Summer storage is about 1,100 acre-ft (1.36 hm<sup>3</sup>) more than winter. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--14 years, 80.0 ft<sup>3</sup>/s (2.266 m<sup>3</sup>/s) 15.22 in/yr (387 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,170 ft<sup>3</sup>/s (146 m<sup>3</sup>/s) July 4, 1975, gage height, 13.47 ft (4.106 m); maximum gage-height 13.56 ft (4.133 m) June 28, 1980; minimum daily, 0.42 ft<sup>3</sup>/s (0.012 m<sup>3</sup>/s) July 20, 21, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 24, 1968, reached a stage of 15.9 ft (4.846 m) outside, from flood mark; discharge, 12,500 ft<sup>3</sup>/s (354 m<sup>3</sup>/s) result of contracted opening estimate.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 23	0800	1810 51.3	9.32 2.841	Mar. 20	0400	1910 54.1	9.51 2.899
Jan. 31	1500	*3510 99.4	*12.09 3.685				

Minimum daily, 0.45 ft<sup>3</sup>/s (0.013 m<sup>3</sup>/s) Aug. 17-19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	2.8	38	69	632	53	113	17	39	51	1.5	1.8
2	.80	35	38	57	289	52	77	17	29	30	1.4	2.9
3	.80	98	30	57	485	53	490	16	23	20	1.4	1.9
4	.86	71	27	328	309	145	212	16	19	16	4.0	1.4
5	.95	59	24	164	186	201	103	15	18	14	9.0	1.1
6	1.9	49	22	109	136	129	142	15	16	11	4.2	.96
7	1.9	40	21	94	80	96	75	15	14	8.6	3.7	.94
8	2.1	35	21	75	60	77	67	17	15	41	3.9	.77
9	2.6	31	20	66	50	71	66	16	31	34	2.2	.92
10	2.8	28	18	50	45	63	66	13	51	18	1.7	.76
11	2.8	25	20	35	38	282	63	13	24	14	1.3	.75
12	2.8	22	18	25	32	309	71	12	18	11	1.4	.59
13	2.8	20	17	23	32	361	73	11	15	9.1	1.3	.59
14	3.0	19	17	22	32	177	40	11	13	7.6	.97	.59
15	3.2	17	17	20	188	175	37	10	10	6.6	.66	.59
16	3.6	16	16	20	372	323	36	12	37	5.3	.59	.59
17	4.0	15	16	20	517	217	36	11	39	5.3	.45	.59
18	4.5	14	17	20	238	123	32	9.7	24	7.1	.45	.59
19	4.9	14	17	21	199	101	31	8.6	19	26	.45	.62
20	4.9	41	17	23	169	877	31	11	15	8.6	.46	.75
21	4.9	28	20	25	167	398	28	26	13	5.2	.74	.94
22	4.9	22	25	45	125	203	25	42	11	4.4	.59	1.1
23	5.4	20	259	1220	116	142	24	28	9.1	4.8	.55	1.8
24	5.4	28	130	249	123	113	24	19	8.1	3.7	61	1.6
25	5.1	30	74	148	89	96	24	15	7.6	3.1	116	1.6
26	7.0	27	55	90	70	101	24	13	7.1	2.7	12	1.6
27	18	24	55	71	65	98	23	13	6.1	2.2	5.6	1.8
28	18	21	56	54	57	81	20	36	13	2.1	3.6	2.2
29	6.2	20	47	46	---	69	19	120	17	2.0	2.0	2.3
30	4.1	18	40	551	---	52	19	95	33	1.6	1.8	1.8
31	3.3	---	41	2520	---	151	---	48	---	1.6	1.8	---
TOTAL	134.41	889.8	1233	6317	4901	5389	2091	721.3	594.0	377.6	246.71	36.44
MEAN	4.34	29.7	39.8	204	175	174	69.7	23.3	19.8	12.2	7.96	1.21
MAX	18	98	259	2520	632	877	490	120	51	51	116	2.9
MIN	.80	2.8	16	20	32	52	19	8.6	6.1	1.6	.45	.59
CFSM	.06	.42	.56	2.86	2.45	2.44	.98	.33	.28	.17	.11	.02
IN.	.07	.46	.64	3.29	2.55	2.81	1.09	.38	.31	.20	.13	.02
CAL YR 1981	TOTAL	20920.91	MEAN	57.3	MAX	2870	MIN	.80	CFSM	.80	IN	10.90
WTR YR 1982	TOTAL	22931.26	MEAN	62.8	MAX	2520	MIN	.45	CFSM	.88	IN	11.95

03242200 ANDERSON FORK NEAR NEW BURLINGTON, OH

LOCATION.--Lat 39°33'59", long 83°54'10", Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on Old Winchester Trail, 1.0 mi (1.6 km) downstream from Painters Run, 3.4 mi (5.5 km) east of New Burlington, 5.0 mi (8.0 km) upstream from mouth, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--77.8 mi<sup>2</sup> (202 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 883.67 ft (269.343 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--14 years, 84.5 ft<sup>3</sup>/s (2.393 m<sup>3</sup>/s), 14.75 in/yr (375 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,510 ft<sup>3</sup>/s (156 m<sup>3</sup>/s) Feb. 24, 1975, gage height, 12.76 ft (3.889 m); minimum, 0.08 ft<sup>3</sup>/s (0.002 m<sup>3</sup>/s) Sept. 24, 25, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 24, 1968 reached a stage of 15.7 ft (4.785 m), present datum, from floodmarks, discharge about 9,400 ft<sup>3</sup>/s (266 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 23	0830	2370	67.1	Mar. 20	0430	1470	8.38
Jan. 31	2100	*4290	121			41.6	2.554
			*11.80				

Minimum daily discharge, 0.30 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Aug. 18-20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	2.3	37	71	1370	41	117	17	46	17	.81	.60
2	.37	2.1	45	70	341	43	82	17	34	13	.64	4.5
3	.37	1.8	28	67	418	47	472	15	26	11	.64	4.3
4	.37	1.7	22	395	333	129	219	15	23	19	9.0	2.0
5	.37	2.1	19	222	146	263	121	15	22	11	8.5	1.1
6	.48	2.3	15	127	89	134	117	15	20	8.5	2.5	.81
7	.54	2.3	14	102	73	92	88	15	17	7.6	.90	.64
8	.54	2.3	13	70	56	70	72	18	18	7.6	.64	.56
9	.54	3.0	11	64	45	57	68	16	27	7.6	.90	.49
10	.54	4.4	8.5	50	40	53	60	14	96	9.4	.64	.49
11	.54	4.4	8.4	35	34	249	59	13	57	9.4	.78	.49
12	.54	4.2	8.0	25	31	418	54	12	34	8.5	.84	.49
13	.54	3.9	7.4	22	29	478	49	12	28	7.2	.78	.49
14	.54	3.7	7.0	21	25	251	41	11	23	4.6	.52	.49
15	.54	3.5	6.6	20	109	214	39	11	19	3.5	.42	.42
16	.54	3.5	6.2	20	491	362	40	11	42	2.8	.40	.42
17	.54	3.5	6.0	20	579	336	41	11	43	2.8	.32	.42
18	.60	3.5	6.0	20	272	169	40	10	29	2.8	.30	.42
19	.60	11	6.0	20	219	146	31	10	19	5.0	.30	.42
20	.60	86	6.0	21	177	934	30	11	16	2.3	.30	.42
21	.60	35	7.0	22	169	552	23	22	14	1.7	.35	.56
22	.60	17	11	60	115	263	21	39	12	1.7	.34	.49
23	.74	13	314	1690	106	151	20	35	10	1.7	.32	.42
24	.74	27	157	636	115	108	20	23	9.2	1.5	1.0	.36
25	.74	34	87	236	85	83	21	19	8.6	1.3	3.0	.42
26	1.7	22	66	129	60	79	23	17	8.2	1.1	2.5	.42
27	14	17	62	98	50	75	23	17	7.8	.90	1.8	.64
28	13	13	62	79	44	65	20	16	20	.90	1.2	.72
29	5.6	10	52	70	---	62	19	41	35	.90	.80	.64
30	3.9	9.8	42	469	---	55	18	131	31	.81	.72	.64
31	3.0	---	42	3180	---	128	---	67	---	.90	.66	---
TOTAL	54.69	349.3	1182.1	8131	5621	6107	2048	696	794.8	174.01	42.82	25.28
MEAN	1.76	11.6	38.1	262	201	197	68.3	22.5	26.5	5.61	1.38	.84
MAX	14	86	314	3180	1370	934	472	131	96	19	9.0	4.5
MIN	.37	1.7	6.0	20	25	41	18	10	7.8	.81	.30	.36
CFSM	.02	.15	.49	3.37	2.58	2.53	.88	.29	.34	.07	.02	.01
IN.	.03	.17	.57	3.89	2.69	2.92	.98	.33	.38	.08	.02	.01

CAL YR 1981 TOTAL 19056.92 MEAN 52.2 MAX 522 MIN .37 CFSM .67 IN 9.11  
WTR YR 1982 TOTAL 25226.00 MEAN 69.1 MAX 3180 MIN .30 CFSM .89 IN 12.06

03245500 LITTLE MIAMI RIVER AT MILFORD, OH

## NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION

LOCATION.--Lat 39°10'17", long 84°17'53", Clermont County, Hydrologic Unit 05090202, on right bank 500 ft (152 m) downstream from Wooster Pike Bridge on U.S. Highway 50 in Milford, 1.2 mi (1.9 km) upstream from East Fork, 6.4 mi (10.3 km) downstream from North Branch Creek, and at mile 12.9 (20.8 km).

DRAINAGE AREA.--1,203 mi<sup>2</sup> (3,116 km<sup>2</sup>).

## WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WSP 728: 1931. WSP 743: 1932. WSP 873: 1925-36. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 494.35 ft (150.678 m) National Geodetic Vertical Datum, adjustment of 1929. June 22, 1915, to May 14, 1920, nonrecording gage at site 4 mi (6 km) upstream at different datum. Mar. 11, 1925, to Aug. 16, 1928, nonrecording gage at bridge 500 ft (152 m) upstream at datum 5.72 ft (1.743 m) higher. Aug. 17, 1928 to Sept. 30, 1977 water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good. Some regulation since 1948 by Cowan Lake, capacity 12,000 acre-ft (14.8 hm<sup>3</sup>), 45 mi (72 km) upstream on Cowan Creek, tributary to Todd Fork, and Caesar Creek Lake capacity 242,200 acre-ft (298.6 hm<sup>3</sup>) 41.3 mi (66.4 km) upstream on Caesar Creek.

AVERAGE DISCHARGE.--57 years, (1915-17, 1925-36, 1938-82), 1,244 ft<sup>3</sup>/s (35.23 m<sup>3</sup>/s), 14.04 in/yr (357 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,100 ft<sup>3</sup>/s (2,380 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 27.30 ft (8.321 m) present datum, from rating curve extended above 60,000 ft<sup>3</sup>/s (1,700 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; minimum observed, 27 ft<sup>3</sup>/s (0.76 m<sup>3</sup>/s) Sept. 18, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 30.5 ft (9.30 m), present datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft<sup>3</sup>/s (425 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
Jan. 23	0900	27,800	787	17.21	5.246	Mar. 20	2400	21,300	603	14.80	4.535
Jan. 31	1500	*34,000	963	*18.09	5.514						

Minimum daily discharge, 110 ft<sup>3</sup>/s (3.12 m<sup>3</sup>/s) Sept. 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	313	1390	1300	15300	899	2730	445	1910	1040	138	152
2	189	288	1390	1280	9050	892	1960	435	1260	779	134	141
3	182	263	1000	1440	5910	854	7230	420	784	537	127	159
4	172	255	849	5430	6290	1130	4000	406	626	415	142	156
5	166	296	636	3420	4920	2770	3010	392	565	430	504	134
6	172	362	520	2440	4150	2460	3180	378	520	474	481	122
7	172	372	475	2060	3610	2130	2080	373	456	363	392	113
8	203	372	442	1840	3400	1590	1510	450	911	310	272	110
9	175	358	410	1420	1720	1120	1340	487	637	407	215	111
10	182	410	386	805	1600	1000	1330	406	763	437	194	118
11	185	390	367	447	1500	2710	1180	369	868	346	218	144
12	185	317	353	390	1400	4960	1070	351	714	297	192	208
13	179	296	344	370	1290	5090	985	342	645	264	176	209
14	175	283	339	360	1180	3800	892	325	436	234	155	237
15	172	275	331	350	1490	3900	811	313	356	216	143	269
16	172	304	317	350	4080	5610	755	317	527	206	131	270
17	166	335	304	340	7550	6250	762	317	982	197	124	411
18	179	326	300	340	6000	3760	832	309	748	239	118	463
19	175	416	271	330	5340	3610	748	289	534	264	116	460
20	169	1610	243	380	3920	7350	662	476	455	227	117	455
21	166	1040	221	497	2680	12400	631	3420	401	236	136	455
22	162	702	288	1710	2340	4130	594	2110	343	269	125	477
23	162	592	4160	19500	2290	3770	553	1240	383	263	126	478
24	162	755	2920	6470	1920	3270	531	811	359	230	119	415
25	159	882	1820	3360	1650	2980	525	658	305	185	130	390
26	210	778	1410	3250	1310	2300	519	563	284	164	530	372
27	562	755	1350	2800	1080	1620	519	519	274	174	340	332
28	1040	717	1510	2640	922	1360	498	531	301	291	224	322
29	1000	556	1460	2020	---	1120	460	916	483	205	180	347
30	649	509	1040	4130	---	1080	450	2920	902	166	158	336
31	416	---	907	25500	---	2680	---	2210	---	149	148	---
TOTAL	8237	15127	27753	96969	103892	98595	42347	23498	18732	10014	6305	8366
MEAN	266	504	895	3128	3710	3180	1412	758	624	323	203	279
MAX	1040	1610	4160	25500	15300	12400	7230	3420	1910	1040	530	478
MIN	159	255	221	330	922	854	450	289	274	149	116	110
CFSM	.22	.42	.74	2.60	3.08	2.64	1.17	.63	.52	.27	.17	.23
IN.	.25	.47	.86	3.00	3.21	3.05	1.31	.73	.58	.31	.19	.26
CAL YR 1981 TOTAL	422575			1158	9300	159		.96		13.07		
WTR YR 1982 TOTAL	459835			1260	25500	110		1.05		14.22		

LITTLE MIAMI RIVER BASIN  
03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1975 to current year.  
pH: May 1975 to current year.  
WATER TEMPERATURES: May 1975 to current year.  
DISSOLVED OXYGEN: May 1975 to current year.  
SUSPENDED SEDIMENT DISCHARGE: January 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1975. Prior to May 1975, sampling site was 4.2 mi (6.76 km) upstream.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,200 micromhos Feb. 12, 1977, Dec. 23, 1981; minimum, 194 micromhos July 10, 1980.  
pH: Maximum, 9.3 units June 10, 1977; minimum, 6.6 units Mar. 5, 1980.  
WATER TEMPERATURES: Maximum, 33.0°C July 8, 18, 20, 1977; minimum, 0.0°C on many days during winter periods.  
DISSOLVED OXYGEN: Maximum, 20.0 mg/L July 18, 19, 1978; minimum 3.3 mg/L May 20, 1982.  
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,730 mg/L July 10, 1980; minimum daily mean, 1.0 mg/L several days in 1979, 1980, 1982.  
SEDIMENT LOADS: Maximum daily, 185,000 tons (168,000 tonnes) Sept. 14, 1979; minimum daily, 1.2 tons (1.1 tonnes) Feb. 13, 14, 1980.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,200 micromhos Dec. 23; minimum, 214 micromhos Jan. 31.  
pH: Maximum, 9.1 units Oct. 11-14, 23-26, Dec. 18-20, July 13; minimum, 7.6 units May 21, 22, Aug. 7, 8.  
WATER TEMPERATURES: Maximum, 30.0°C July 17; minimum, 0.0°C Jan. 16-19, Feb. 7, 10.  
DISSOLVED OXYGEN: Maximum, 19.2 mg/L July 25; minimum, 3.3 mg/L May 20.  
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,970 mg/L May 21; minimum daily mean, 1.0 mg/L Dec. 16.  
SEDIMENT LOADS: Maximum daily, 116,000 tons (105,200 tonnes) Jan. 31; minimum daily, 0.86 tons (0.78 tonnes) Dec. 16.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)
OCT 08...	1500	196	805	8.8	16.0	8.5	13.0	130	25
DEC 08...	1445	437	710	8.0	5.0	17	12.4	97	14
FEB 26...	1530	1300	565	8.2	4.0	12	14.4	110	18
MAY 05...	1800	401	730	8.7	21.5	3.5	12.2	140	--
JUN 23...	1330	373	650	8.3	22.0	32	9.6	110	--

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 08...	55	40	320	82	29	38	3.6	51	73
DEC 08...	4600	1100	320	80	28	27	3.0	53	50
FEB 26...	670	300	270	70	24	16	2.5	56	34
MAY 05...	40	27	310	76	30	28	2.6	53	51
JUN 23...	130	250	280	71	24	23	3.3	38	48

## LITTLE MIAMI RIVER BASIN

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03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 08...	.3	.8	488	446	.070	.45	2.5	.560
DEC 08...	.3	3.9	431	402	.130	.80	2.9	.380
FEB 26...	.2	6.1	374	341	.190	.78	3.8	.180
MAY 05...	.3	.1	434	397	.030	1.00	2.2	.330
JUN 23...	.3	6.1	422	351	.090	.80	3.7	.600

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 08...	1500	4	4	100	70	2	2	30	20
DEC 08...	1445	1	1	100	77	1	<1	20	10
MAY 05...	1800	2	2	<100	88	1	<1	10	<10
JUN 23...	1330	2	2	100	77	1	<1	20	10

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 08...	4	3	15	5	760	31	10	<1	50
DEC 08...	4	<1	12	1	590	22	<1	<1	30
MAY 05...	1	<1	9	9	190	<3	4	2	60
JUN 23...	4	1	6	6	2100	10	8	5	100

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 08...	7	.1	.1	<1	<1	<1	1	40	<4
DEC 08...	30	.1	.1	<1	<1	<1	<1	60	<4
MAY 05...	15	.1	.1	<1	<1	<1	<1	20	<3
JUN 23...	15	.3	.1	<1	<1	<1	<1	50	<4

## LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	872	816	831	654	598	616	656	488	559	692	646	669
2	850	812	831	670	642	655	626	532	568	670	640	651
3	848	804	825	748	680	718	642	528	573	672	606	644
4	840	788	816	774	736	760	622	564	594	590	414	457
5	838	780	809	798	772	785	646	622	631	508	446	474
6	832	796	812	808	796	801	670	634	642	552	512	534
7	838	794	816	808	742	777	714	676	696	582	548	565
8	838	800	815	750	692	716	724	710	716	600	578	587
9	862	808	839	708	668	687	740	716	729	616	584	593
10	872	824	847	680	628	654	756	728	739	678	620	642
11	880	848	862	750	670	694	766	736	752	730	666	691
12	884	826	855	770	700	742	778	744	759	738	708	725
13	864	788	823	706	680	693	784	750	762	754	692	722
14	816	782	799	744	706	732	786	748	763	776	738	757
15	828	804	814	772	734	749	782	756	767	742	700	721
16	830	810	820	762	740	750	788	746	768	756	694	708
17	842	810	824	760	744	751	792	752	767	768	742	752
18	826	790	812	760	716	736	782	756	768	774	752	761
19	840	798	812	736	660	707	812	778	794	782	756	764
20	850	820	832	622	472	516	844	808	829	812	754	777
21	860	824	842	646	464	543	860	822	845	844	802	819
22	858	818	840	648	520	583	944	854	869	848	450	755
23	854	820	836	582	522	546	1200	438	627	---	---	---
24	854	818	835	618	580	602	646	488	555	---	---	---
25	856	826	842	638	608	621	558	526	541	---	---	---
26	846	754	814	654	618	638	598	554	574	---	---	---
27	770	596	685	662	616	634	632	598	612	---	---	---
28	768	692	733	644	630	637	632	616	622	562	544	551
29	720	558	603	660	642	650	640	620	630	584	560	571
30	582	532	549	664	638	648	636	612	621	646	326	542
31	596	550	565	---	---	---	642	622	632	304	214	252
MONTH	884	532	795	808	464	678	1200	438	687	848	214	642

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	688	652	673	536	480	510	742	720	734
2	---	---	---	682	656	666	542	518	527	756	714	729
3	---	---	---	672	656	662	546	316	396	754	716	733
4	434	416	426	722	664	694	472	348	419	762	714	736
5	478	432	451	674	540	589	502	474	487	752	718	740
6	516	482	506	670	556	595	514	496	501	760	724	741
7	524	510	516	556	548	553	556	510	536	764	724	744
8	534	512	520	580	548	561	612	558	578	742	710	730
9	580	528	543	618	574	585	634	610	620	754	728	739
10	584	532	560	668	620	634	652	636	643	768	732	749
11	534	516	521	670	450	596	668	646	655	772	742	755
12	532	520	524	462	392	432	680	662	671	772	718	742
13	560	528	538	498	424	462	676	658	666	768	730	743
14	654	566	617	512	440	478	676	656	665	790	754	772
15	644	586	612	530	476	500	680	662	673	806	778	793
16	566	440	486	490	412	463	682	666	673	792	774	785
17	466	344	366	450	418	438	686	666	673	794	776	786
18	376	364	369	494	446	466	684	662	670	818	778	797
19	464	382	438	520	454	501	682	632	656	822	788	806
20	508	468	488	458	266	410	672	644	655	822	680	768
21	528	504	516	366	228	294	684	658	669	736	300	434
22	552	526	542	496	376	440	692	668	680	476	328	435
23	554	542	549	512	490	503	694	680	688	548	478	517
24	582	552	567	522	510	515	710	692	698	548	504	521
25	600	576	587	524	516	520	724	696	707	632	590	612
26	614	590	602	558	520	538	730	706	715	672	632	655
27	636	606	614	604	554	574	738	712	720	680	658	666
28	652	630	637	632	604	617	738	712	721	696	660	674
29	---	---	---	642	624	630	740	712	724	706	528	635
30	---	---	---	678	640	658	742	714	724	594	420	489
31	---	---	---	664	504	567	---	---	---	456	432	441
MONTH	654	344	524	722	228	542	742	316	631	822	300	684

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	488	428	460	712	434	569	782	742	767	660	582	618
2	532	474	497	474	418	451	772	744	757	700	642	674
3	622	536	582	470	416	441	764	736	751	778	718	750
4	652	602	620	532	460	489	742	612	706	816	770	791
5	698	648	660	634	542	584	728	430	584	818	782	803
6	706	686	691	698	644	670	798	612	723	832	792	813
7	730	698	706	662	596	627	604	486	538	840	804	824
8	730	348	552	702	642	669	612	420	515	864	814	835
9	712	340	597	722	684	702	644	592	625	878	834	855
10	722	632	681	752	724	737	714	632	650	868	836	851
11	724	692	707	736	690	705	666	630	644	876	834	853
12	682	488	544	690	618	650	714	648	673	872	828	851
13	570	520	544	624	572	599	792	720	763	866	830	845
14	608	566	590	620	574	595	808	792	801	852	716	792
15	646	608	624	612	588	603	832	772	798	722	664	691
16	684	626	648	624	592	610	784	742	761	700	654	671
17	720	598	663	616	600	607	790	766	779	664	618	634
18	710	584	644	644	620	634	808	760	784	628	554	600
19	600	566	580	680	612	640	788	742	773	554	532	541
20	630	592	610	722	660	681	782	748	771	552	530	538
21	656	620	637	740	638	698	768	734	749	558	526	537
22	708	662	686	700	586	669	776	730	756	550	518	532
23	732	670	700	722	576	673	782	736	758	558	524	533
24	748	724	732	722	668	696	812	772	788	558	528	542
25	764	714	736	744	614	691	832	762	793	560	528	539
26	780	734	754	674	618	638	832	474	688	578	540	564
27	788	756	772	698	612	657	466	374	405	592	574	581
28	794	762	777	748	646	690	428	398	408	614	588	600
29	774	634	714	758	702	729	480	410	449	634	600	610
30	740	640	712	716	666	692	532	472	512	632	596	610
31	---	---	---	756	714	734	590	542	569	---	---	---
MONTH	794	340	647	758	416	640	832	374	679	878	518	683
YEAR	1200	214	655									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.7	8.5	8.7	8.8	8.5	8.6	8.5	8.3	8.4	8.5	8.5	8.5
2	8.8	8.5	8.7	8.7	8.5	8.6	8.3	8.2	8.3	8.5	8.5	8.5
3	8.9	8.6	8.8	8.8	8.5	8.6	8.3	8.2	8.2	8.5	8.4	8.4
4	8.9	8.7	8.8	8.7	8.4	8.5	8.3	8.2	8.3	8.4	8.1	8.2
5	9.0	8.7	8.8	8.4	8.2	8.3	8.5	8.3	8.4	8.2	8.1	8.1
6	9.0	8.7	8.8	8.4	8.3	8.4	8.7	8.4	8.6	8.3	8.2	8.2
7	9.0	8.7	8.8	8.6	8.4	8.5	8.8	8.6	8.7	8.3	8.3	8.3
8	9.0	8.7	8.8	8.7	8.5	8.6	8.8	8.5	8.7	8.4	8.3	8.4
9	9.0	8.8	8.9	8.5	8.4	8.5	8.9	8.7	8.8	8.5	8.4	8.5
10	9.0	8.8	8.9	8.6	8.3	8.5	8.8	8.6	8.7	8.6	8.6	8.6
11	9.1	8.8	8.9	8.7	8.5	8.5	9.0	8.6	8.8	8.6	8.4	8.5
12	9.1	8.8	8.9	8.8	8.5	8.6	8.9	8.8	8.9	8.4	8.3	8.4
13	9.1	8.9	9.0	8.8	8.5	8.7	8.9	8.7	8.8	8.2	8.2	8.2
14	9.1	8.9	9.0	8.9	8.6	8.7	8.9	8.7	8.8	8.2	8.2	8.2
15	9.0	8.8	8.9	8.9	8.7	8.8	8.7	8.6	8.7	8.3	8.2	8.2
16	9.0	8.8	8.9	9.0	8.7	8.8	8.8	8.6	8.7	8.3	8.2	8.3
17	8.9	8.7	8.8	8.9	8.7	8.8	9.0	8.6	8.8	8.3	8.2	8.2
18	8.8	8.7	8.8	9.0	8.7	8.8	9.1	8.8	9.0	8.3	8.2	8.2
19	8.8	8.6	8.7	8.8	8.5	8.7	9.1	8.8	9.0	8.2	8.2	8.2
20	8.9	8.7	8.8	8.5	8.2	8.4	9.1	8.8	9.0	8.2	8.2	8.2
21	8.9	8.7	8.8	8.4	8.2	8.3	9.0	8.8	9.0	8.2	8.2	8.2
22	8.9	8.8	8.8	8.5	8.3	8.4	8.9	8.7	8.8	8.2	7.9	8.1
23	9.1	8.8	9.0	8.7	8.3	8.5	8.7	8.2	8.4	---	---	---
24	9.1	9.0	9.1	8.7	8.5	8.6	8.4	8.3	8.4	---	---	---
25	9.1	9.1	9.1	8.4	8.3	8.4	8.6	8.4	8.5	---	---	---
26	9.1	8.8	9.0	8.5	8.3	8.4	8.6	8.5	8.5	---	---	---
27	8.8	8.6	8.7	8.5	8.3	8.4	8.5	8.5	8.5	---	---	---
28	8.7	8.5	8.6	8.5	8.3	8.4	8.6	8.5	8.5	8.2	8.1	8.2
29	8.5	8.4	8.5	8.6	8.4	8.5	8.7	8.6	8.7	8.2	8.2	8.2
30	8.7	8.4	8.5	8.5	8.5	8.5	8.8	8.7	8.8	8.2	8.0	8.2
31	8.7	8.5	8.6	---	---	---	8.8	8.7	8.8	8.1	7.9	7.9
MONTH	9.1	8.4	8.8	9.0	8.2	8.5	9.1	8.2	8.7	8.6	7.9	8.3

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	8.2	8.2	8.2	8.0	7.9	8.0	8.5	8.4	8.5
2	---	---	---	8.2	8.2	8.2	8.0	8.0	8.0	8.5	8.4	8.5
3	---	---	---	8.3	8.2	8.2	8.0	7.8	7.9	8.5	8.4	8.5
4	8.0	8.0	8.0	8.3	8.2	8.2	8.0	7.9	8.0	8.6	8.4	8.5
5	8.1	8.0	8.0	8.2	8.1	8.1	8.1	8.1	8.1	8.6	8.4	8.5
6	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.6	8.4	8.5
7	8.1	8.1	8.1	8.2	8.2	8.2	8.1	8.1	8.1	8.5	8.3	8.4
8	8.2	8.1	8.1	8.2	8.2	8.2	8.2	8.1	8.1	8.4	8.2	8.3
9	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.1	8.1	8.3	8.1	8.2
10	8.2	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.2	8.4	8.1	8.2
11	8.2	8.1	8.1	8.2	7.9	8.1	8.2	8.2	8.2	8.4	8.1	8.2
12	8.2	8.1	8.2	8.0	7.9	7.9	8.3	8.2	8.2	8.3	8.0	8.2
13	8.2	8.1	8.1	8.0	7.9	8.0	8.3	8.1	8.2	8.3	7.9	8.1
14	8.2	8.1	8.2	8.0	7.9	8.0	8.4	8.2	8.3	8.3	8.0	8.1
15	8.2	8.1	8.2	8.1	8.0	8.0	8.5	8.2	8.4	8.2	7.9	8.1
16	8.1	8.0	8.1	8.1	7.9	8.0	8.5	8.3	8.4	8.3	7.9	8.1
17	8.0	7.9	7.9	7.9	7.9	7.9	8.5	8.2	8.4	8.3	7.9	8.1
18	8.0	7.9	7.9	8.0	7.9	7.9	8.6	8.3	8.4	8.3	7.9	8.1
19	8.1	8.0	8.0	8.0	8.0	8.0	8.6	8.3	8.5	8.4	7.9	8.2
20	8.1	8.1	8.1	8.0	7.7	8.0	8.5	8.3	8.5	8.3	8.0	8.1
21	8.1	8.1	8.1	7.8	7.7	7.7	8.6	8.4	8.5	8.0	7.6	7.7
22	8.1	8.1	8.1	8.0	7.8	7.9	8.6	8.4	8.5	7.8	7.6	7.7
23	8.1	8.1	8.1	8.1	8.0	8.1	8.7	8.5	8.6	7.8	7.7	7.8
24	8.1	8.1	8.1	8.1	8.0	8.0	8.6	8.5	8.6	7.8	7.8	7.8
25	8.1	8.1	8.1	8.1	8.0	8.1	8.5	8.5	8.5	7.9	7.9	7.9
26	8.2	8.1	8.2	8.1	8.1	8.1	8.5	8.4	8.5	8.0	7.9	7.9
27	8.2	8.2	8.2	8.1	8.1	8.1	8.5	8.4	8.4	8.0	7.9	8.0
28	8.2	8.1	8.2	8.2	8.1	8.2	8.5	8.4	8.5	8.0	7.9	8.0
29	---	---	---	8.2	8.1	8.1	8.5	8.4	8.5	8.0	7.8	7.9
30	---	---	---	8.1	8.1	8.1	8.5	8.4	8.5	7.9	7.7	7.8
31	---	---	---	8.1	7.9	8.0	---	---	---	7.8	7.7	7.7
MONTH	8.2	7.9	8.1	8.3	7.7	8.1	8.7	7.8	8.3	8.6	7.6	8.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.9	7.8	7.9	8.2	7.9	8.0	8.8	8.6	8.7	7.9	7.8	7.8
2	7.9	7.9	7.9	7.9	7.8	7.9	8.8	8.5	8.7	8.0	7.9	7.9
3	8.0	7.9	8.0	7.9	7.8	7.8	8.8	8.4	8.7	8.2	8.0	8.1
4	8.0	7.9	8.0	7.9	7.8	7.9	8.9	8.5	8.7	8.2	8.2	8.2
5	8.1	8.0	8.1	8.0	7.9	8.0	8.5	7.9	8.2	8.3	8.2	8.2
6	8.1	8.1	8.1	8.1	8.0	8.1	8.4	7.9	8.2	8.3	8.2	8.3
7	8.2	8.1	8.1	8.1	8.0	8.0	7.9	7.6	7.7	8.4	8.3	8.3
8	8.1	7.7	7.9	8.1	8.0	8.1	7.8	7.6	7.7	8.4	8.3	8.4
9	8.1	7.8	8.0	8.2	8.1	8.1	8.0	7.8	7.9	8.6	8.4	8.5
10	8.1	7.9	8.0	8.3	8.2	8.2	8.0	7.8	7.9	8.6	8.4	8.5
11	8.1	8.1	8.1	8.3	8.2	8.2	8.2	8.0	8.1	8.7	8.5	8.6
12	8.1	7.9	7.9	8.5	8.2	8.3	8.5	8.1	8.3	8.7	8.5	8.6
13	8.0	7.9	8.0	9.1	8.4	8.7	8.6	8.3	8.5	8.6	8.4	8.5
14	8.1	8.0	8.0	9.0	8.8	8.9	8.6	8.3	8.5	8.4	8.3	8.3
15	8.1	8.0	8.0	8.9	8.7	8.8	8.7	8.4	8.5	8.3	8.1	8.2
16	8.1	8.0	8.0	8.8	8.5	8.7	8.7	8.5	8.6	8.3	8.1	8.2
17	8.1	8.0	8.1	8.7	8.3	8.5	8.8	8.5	8.7	8.3	8.1	8.2
18	8.1	8.0	8.1	8.5	8.1	8.4	9.0	8.7	8.9	8.2	8.2	8.2
19	8.1	8.0	8.0	8.4	8.1	8.2	8.9	8.6	8.8	8.3	8.1	8.2
20	8.2	8.0	8.1	8.6	8.2	8.4	8.8	8.5	8.7	8.2	8.2	8.2
21	8.2	8.1	8.2	8.8	8.5	8.6	8.8	8.3	8.6	8.3	8.2	8.2
22	8.3	8.1	8.2	8.8	8.3	8.6	8.9	8.7	8.8	8.2	8.2	8.2
23	8.3	8.2	8.2	8.9	8.2	8.6	8.8	8.6	8.7	8.3	8.2	8.2
24	8.4	8.2	8.3	9.0	8.5	8.7	8.9	8.5	8.7	8.2	8.1	8.2
25	8.5	8.1	8.3	9.0	8.5	8.7	8.9	8.4	8.7	8.2	8.1	8.1
26	8.4	8.2	8.3	8.9	8.5	8.7	8.3	7.8	8.1	8.2	8.1	8.1
27	8.4	8.1	8.3	8.9	8.4	8.7	7.8	7.7	7.7	8.2	8.1	8.1
28	8.4	8.2	8.3	8.7	8.1	8.5	7.8	7.7	7.7	8.2	8.1	8.2
29	8.6	8.1	8.4	8.8	8.4	8.6	7.9	7.7	7.8	8.2	8.1	8.2
30	8.4	8.1	8.2	8.5	8.1	8.3	7.8	7.8	7.8	8.3	8.1	8.2
31	---	---	---	8.6	8.2	8.4	7.9	7.8	7.8	---	---	---
MONTH	8.6	7.7	8.1	9.1	7.8	8.4	9.0	7.6	8.3	8.7	7.8	8.2
YEAR	9.1	7.6	8.3									

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.0	18.0	19.0	14.5	12.5	13.5	6.5	5.0	5.5	2.5	2.5	2.5
2	18.0	16.0	16.5	14.5	13.5	14.0	6.5	6.0	6.0	2.5	2.0	2.0
3	16.0	14.0	15.5	15.5	13.5	14.5	6.5	5.5	6.0	4.0	2.5	3.0
4	16.0	14.0	15.0	16.0	14.0	15.0	6.5	6.0	6.0	6.0	4.5	5.5
5	18.5	16.0	17.0	15.5	14.5	15.0	6.0	5.0	5.5	5.0	4.0	4.5
6	19.0	18.0	18.5	14.5	12.0	13.5	5.0	4.0	4.5	4.5	3.5	4.0
7	18.0	16.0	17.0	12.0	10.5	11.5	5.0	4.0	4.5	4.0	3.0	4.0
8	16.5	14.5	15.5	11.0	9.5	10.5	5.0	4.5	4.5	3.0	1.5	2.0
9	16.0	14.0	15.0	10.5	9.5	10.0	4.5	3.5	4.0	1.5	.5	1.0
10	16.5	14.5	15.5	9.5	8.5	9.0	3.5	2.5	3.0	.5	.5	.5
11	17.0	15.5	16.5	9.5	8.0	8.5	2.5	2.0	2.0	.5	.5	.5
12	16.5	15.0	16.0	9.0	7.5	8.0	2.0	1.5	1.5	.5	.5	.5
13	16.5	14.5	16.0	8.5	7.0	8.0	2.5	1.5	2.0	.5	.5	.5
14	16.0	14.5	15.5	8.5	7.0	7.5	3.0	2.0	2.5	.5	.5	.5
15	16.0	15.5	15.5	8.0	6.5	7.5	2.5	2.0	2.5	.5	.5	.5
16	17.0	15.0	16.0	8.0	6.5	7.0	2.5	1.5	2.0	.5	.0	.5
17	16.5	14.5	15.5	7.5	6.5	7.0	2.0	1.0	1.5	.5	.0	.5
18	16.5	14.5	15.5	7.5	6.0	7.0	1.0	.5	1.0	.5	.0	.5
19	14.0	12.5	13.5	8.5	6.5	7.5	.5	.5	.5	.5	.0	.5
20	13.0	11.5	12.5	9.5	7.5	8.5	.5	.5	.5	.5	.5	.5
21	13.5	12.0	13.0	7.5	5.5	6.5	.5	.5	.5	.5	.5	.5
22	13.5	12.5	13.0	5.5	5.0	5.5	.5	.5	.5	.5	.5	.5
23	12.5	10.5	12.0	5.0	4.0	4.5	.5	.5	.5	---	---	---
24	11.0	9.0	10.0	5.5	5.0	5.0	1.5	.5	1.0	---	---	---
25	10.5	8.5	9.5	6.0	4.5	5.5	2.0	1.0	1.5	---	---	---
26	12.0	10.5	11.0	7.5	5.5	6.5	3.0	1.5	2.0	---	---	---
27	12.5	11.5	12.0	8.5	7.5	8.0	4.0	3.0	3.5	---	---	---
28	12.5	11.0	11.5	8.0	7.0	7.5	3.5	3.5	3.5	2.0	1.5	2.0
29	13.0	11.0	12.0	7.0	6.0	6.5	3.5	2.5	3.0	1.5	1.0	1.5
30	13.5	11.5	12.5	5.5	5.0	5.0	2.5	1.5	2.0	2.5	1.5	2.0
31	14.0	12.5	13.0	---	---	---	2.0	1.5	2.0	2.0	1.5	2.0
MONTH	19.0	8.5	14.5	16.0	4.0	9.0	6.5	.5	3.0	6.0	.0	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	6.0	4.0	5.0	12.5	11.0	12.0	17.5	15.0	16.0
2	---	---	---	6.5	5.0	6.0	12.5	11.5	12.0	19.0	16.0	17.5
3	---	---	---	6.0	4.5	5.0	12.0	9.5	11.0	20.0	16.5	18.0
4	2.0	2.0	2.0	5.5	4.0	5.0	9.5	8.0	8.5	20.5	17.0	19.0
5	2.0	1.5	2.0	5.0	4.0	4.5	8.5	7.0	7.5	21.5	18.0	19.5
6	2.0	1.0	1.5	4.0	3.5	3.5	7.0	5.5	6.0	22.0	19.0	20.5
7	1.0	.0	1.0	3.5	3.0	3.0	6.5	5.0	6.0	21.0	19.5	20.5
8	1.5	1.0	1.0	4.0	2.5	3.5	6.5	6.0	6.0	21.5	18.5	20.0
9	1.5	.5	1.0	5.0	3.5	4.5	6.5	6.0	6.0	22.0	19.0	20.5
10	.5	.0	.5	5.0	4.0	5.0	7.5	5.5	6.5	22.5	19.5	21.0
11	1.5	.5	1.0	6.5	5.0	6.0	10.0	7.0	8.5	23.5	19.5	21.5
12	1.5	.5	1.0	8.0	6.0	7.0	11.0	8.5	9.5	24.0	20.5	22.5
13	2.0	1.0	1.5	9.0	8.0	8.5	13.5	10.5	12.0	25.0	21.0	23.0
14	2.5	1.0	1.5	9.0	8.0	8.5	14.5	11.5	13.0	24.5	22.0	23.5
15	3.5	2.0	2.5	8.5	7.0	7.5	15.5	12.0	13.5	25.0	22.0	23.5
16	3.0	2.5	2.5	9.0	6.5	7.5	16.0	14.0	15.0	26.0	22.5	24.5
17	3.0	2.0	2.5	10.0	9.0	9.0	15.5	14.5	15.5	26.0	23.0	24.5
18	3.0	2.5	2.5	10.0	8.5	9.5	16.0	13.5	15.0	25.5	23.0	24.5
19	3.0	2.5	3.0	9.5	8.5	9.0	16.0	14.0	15.0	25.5	22.5	24.5
20	4.0	3.0	3.5	11.0	8.0	9.0	15.5	14.0	15.0	24.5	22.5	23.5
21	4.0	4.0	4.0	11.5	10.0	11.0	15.5	13.0	14.0	23.0	19.0	20.0
22	4.5	3.5	4.0	10.0	7.5	9.0	15.0	13.0	14.0	21.0	19.0	20.0
23	5.0	4.0	4.5	7.5	6.5	7.0	15.5	12.5	14.0	22.0	20.5	21.0
24	5.5	4.5	5.0	8.0	6.0	7.0	16.0	13.0	14.5	22.0	20.5	21.0
25	4.5	3.5	4.5	8.0	7.0	7.5	15.0	14.0	14.5	23.0	21.5	22.5
26	4.0	3.0	3.5	7.0	6.0	6.5	16.0	14.5	15.0	22.5	21.0	21.5
27	4.5	3.0	3.5	7.0	5.5	6.0	16.0	14.5	15.0	23.0	21.5	22.0
28	5.5	3.5	4.5	7.5	5.0	6.0	16.0	13.5	15.0	24.0	22.0	23.0
29	---	---	---	8.5	5.5	7.0	14.5	14.0	14.5	23.5	21.5	22.5
30	---	---	---	11.0	8.0	9.5	16.0	14.0	15.0	21.5	20.5	21.0
31	---	---	---	13.0	11.0	12.0	---	---	---	21.0	20.0	20.5
MONTH	5.5	.0	2.5	13.0	2.5	7.0	16.0	5.0	12.0	26.0	15.0	21.5

## LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.0	19.5	20.0	24.5	22.0	23.5	27.5	25.0	26.5	23.5	23.0	23.0
2	21.5	19.0	20.0	24.0	21.5	23.0	27.5	25.0	26.0	24.5	23.0	23.5
3	22.0	20.0	21.0	25.0	22.5	23.5	28.5	25.5	27.0	24.0	22.0	23.0
4	21.5	20.0	20.5	26.5	23.5	25.0	29.0	26.5	27.5	23.5	21.0	22.5
5	21.0	19.0	20.0	28.0	24.5	26.0	28.0	25.0	26.5	23.5	20.5	22.0
6	22.5	19.5	21.0	28.5	25.5	27.0	28.5	26.0	27.0	23.5	20.5	22.0
7	22.0	20.5	21.5	29.0	27.0	28.0	27.5	26.0	27.0	24.0	21.5	22.5
8	21.5	20.0	21.0	28.0	26.5	27.5	27.0	25.0	26.0	24.5	21.5	23.0
9	23.5	20.5	22.0	28.5	26.0	27.0	28.0	25.5	27.0	25.0	22.0	23.5
10	24.0	22.0	23.0	27.5	26.0	27.0	27.0	24.5	25.5	25.5	22.5	24.0
11	24.0	21.0	22.5	27.5	25.5	26.5	24.5	22.5	23.5	25.5	22.5	24.0
12	23.0	21.0	21.5	28.0	25.0	26.5	24.0	21.0	23.0	25.0	23.5	24.0
13	23.0	20.5	21.5	27.5	25.0	26.5	24.5	22.0	23.5	24.5	23.0	24.0
14	23.5	20.5	22.0	28.0	25.0	26.5	25.0	22.0	23.5	26.0	23.5	24.5
15	24.0	21.5	22.5	29.0	25.5	27.5	26.0	23.0	24.5	26.5	24.0	25.5
16	23.0	21.5	22.0	29.5	26.5	28.0	26.0	23.5	25.0	25.0	23.5	24.5
17	22.5	20.5	21.5	30.0	27.5	29.0	27.5	24.0	26.0	23.5	21.5	22.5
18	23.5	20.5	22.0	29.5	27.5	28.5	27.0	24.0	25.5	23.0	21.5	22.0
19	22.5	21.0	22.0	28.5	26.0	27.5	27.0	23.5	25.5	22.0	20.5	21.0
20	22.5	20.5	21.5	28.5	26.5	27.5	25.0	24.0	24.5	21.0	19.5	20.0
21	23.5	21.0	22.0	29.0	25.5	27.5	25.0	22.5	24.0	19.5	18.0	19.0
22	23.0	21.0	22.0	27.5	25.5	26.5	24.5	21.5	23.5	18.5	17.5	18.0
23	23.5	20.0	22.0	27.0	24.5	26.0	24.0	23.0	23.5	18.5	16.5	17.5
24	24.0	20.5	22.0	28.5	25.0	26.5	25.0	22.5	23.5	17.5	17.0	17.5
25	25.0	21.0	23.0	29.0	26.0	27.5	25.5	23.0	24.0	18.0	17.0	17.5
26	25.0	22.5	24.0	29.5	26.5	28.0	23.5	21.5	22.5	18.5	17.5	18.0
27	26.0	23.0	24.5	29.0	27.5	28.5	23.0	22.0	22.5	18.0	17.5	18.0
28	26.0	24.0	25.0	28.0	26.0	27.0	24.0	21.5	22.5	19.5	17.0	18.0
29	26.0	23.5	25.0	28.0	25.0	26.5	23.0	20.5	22.0	20.0	17.5	18.5
30	25.0	24.0	24.5	27.5	25.0	26.5	22.0	21.0	21.5	20.5	18.0	19.0
31	---	---	---	27.5	25.0	26.5	23.5	21.5	22.5	---	---	---
MONTH	26.0	19.0	22.0	30.0	21.5	26.5	29.0	20.5	24.5	26.5	16.5	21.5
YEAR	30.0	.0	14.0									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.4	7.8	9.5	11.0	9.2	9.9	12.4	11.0	11.7	13.2	12.7	12.9
2	12.5	8.3	10.1	10.8	9.0	9.7	11.2	10.8	11.0	13.7	12.8	13.1
3	13.3	9.0	10.9	11.1	8.6	9.6	11.9	11.0	11.4	13.0	12.2	12.6
4	13.0	9.1	10.8	11.5	8.4	9.6	11.8	11.3	11.6	12.0	10.9	11.2
5	13.5	8.7	10.7	10.6	8.5	9.5	12.7	11.5	12.0	11.8	11.1	11.4
6	11.9	7.8	9.5	10.6	8.9	9.7	14.2	12.2	13.0	12.3	11.9	12.1
7	12.4	7.8	9.9	12.1	9.5	10.7	13.9	12.6	13.1	12.6	11.4	12.1
8	13.1	8.5	10.5	12.7	10.3	11.3	12.8	12.2	12.5	13.2	12.6	12.9
9	13.3	8.6	10.7	11.3	10.2	10.8	14.2	12.0	12.9	13.4	12.9	13.1
10	12.9	8.8	10.5	11.9	10.0	10.9	14.7	12.5	13.5	14.1	13.3	13.7
11	12.9	8.6	10.5	13.3	11.1	12.0	15.5	13.0	14.2	14.1	13.6	13.9
12	12.7	8.6	10.3	13.9	11.3	12.4	14.9	13.7	14.2	14.1	13.4	13.7
13	12.5	8.5	10.3	14.2	11.1	12.5	16.0	13.5	14.6	13.5	13.1	13.4
14	12.1	8.7	10.1	14.4	11.4	12.7	15.4	13.7	14.3	13.4	13.0	13.2
15	9.6	8.2	8.9	14.8	11.4	12.8	14.8	13.0	13.8	13.5	12.9	13.2
16	10.8	8.0	9.3	14.6	11.4	12.9	16.0	13.0	14.3	13.6	13.0	13.3
17	10.9	8.3	9.4	13.9	11.7	12.5	14.9	13.3	14.0	13.9	13.4	13.6
18	9.7	7.9	8.9	14.8	11.5	12.9	15.8	13.2	14.4	14.0	13.3	13.6
19	11.2	8.4	9.7	13.5	10.6	12.0	16.4	13.9	15.0	13.5	13.0	13.3
20	11.8	9.2	10.3	10.6	9.8	10.0	16.6	14.2	15.3	13.6	13.0	13.2
21	12.2	9.3	10.5	11.0	10.1	10.6	15.3	14.0	14.6	13.5	12.9	13.1
22	11.1	9.1	9.9	11.9	11.0	11.4	14.2	13.3	13.7	13.2	12.8	13.0
23	11.8	9.1	10.3	13.2	11.5	12.2	13.0	12.4	12.7	---	---	---
24	13.0	9.8	11.2	12.5	11.7	12.1	13.1	12.6	12.9	---	---	---
25	13.5	10.4	11.6	13.1	11.9	12.4	13.2	13.1	13.2	---	---	---
26	11.4	9.5	10.5	12.8	11.6	12.1	13.3	12.8	13.1	---	---	---
27	9.8	8.6	9.4	12.3	10.9	11.5	12.9	12.4	12.7	---	---	---
28	10.3	9.4	9.9	12.6	11.0	11.7	12.5	12.3	12.4	13.3	12.2	13.2
29	10.0	9.6	9.8	13.7	11.5	12.4	12.8	12.3	12.6	13.4	13.2	13.3
30	10.7	9.6	10.0	13.6	12.1	12.7	13.8	12.8	13.2	13.4	12.8	13.1
31	10.9	9.5	10.1	---	---	---	13.2	13.0	13.1	13.4	12.0	13.0
MONTH	13.5	7.8	10.1	14.8	8.4	11.5	16.6	10.8	13.3	14.1	10.9	13.0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	14.4	13.9	14.2	12.1	11.2	11.7	13.7	10.7	12.0
2	---	---	---	13.9	13.5	13.8	12.2	11.0	11.9	14.2	9.9	11.7
3	---	---	---	14.1	12.7	13.7	12.1	10.6	11.8	14.2	9.4	11.7
4	15.5	14.1	14.9	14.2	13.8	14.0	13.1	12.0	12.7	13.9	9.5	11.6
5	15.7	15.5	15.6	14.0	13.5	13.8	13.4	12.8	13.2	14.0	9.2	11.3
6	15.7	15.4	15.6	14.6	14.1	14.4	14.1	13.2	13.7	14.9	8.5	11.1
7	16.0	15.7	15.8	14.9	14.2	14.7	14.5	14.0	14.2	10.7	7.3	8.9
8	15.9	14.4	15.7	15.3	14.8	15.0	14.1	13.6	13.9	10.9	5.8	8.5
9	15.5	15.2	15.4	15.2	14.5	14.8	14.0	13.4	13.7	11.4	7.2	8.9
10	15.9	15.2	15.6	14.6	14.1	14.4	14.4	13.5	14.0	11.2	6.8	8.7
11	16.0	15.7	15.8	14.0	13.1	13.6	14.0	12.5	13.5	10.0	6.2	7.8
12	16.0	14.4	15.6	13.4	12.9	13.2	14.0	12.7	13.3	9.6	5.9	7.4
13	15.6	15.3	15.5	13.0	12.6	12.8	14.1	11.8	12.8	9.3	4.8	6.9
14	15.3	14.5	15.2	12.9	12.6	12.8	14.9	11.1	13.1	8.9	4.5	6.7
15	15.0	14.6	14.8	13.3	12.5	13.1	16.1	11.7	13.6	8.6	4.8	6.4
16	14.9	14.7	14.8	13.6	12.6	13.2	15.0	11.2	13.2	8.9	4.7	6.6
17	14.9	14.4	14.6	12.7	12.5	12.6	14.9	10.6	12.6	9.3	4.4	6.6
18	14.7	14.5	14.6	12.8	12.6	12.7	17.2	11.2	14.1	9.1	3.6	6.3
19	14.9	14.6	14.8	12.8	12.4	12.6	17.1	11.3	14.1	9.5	3.5	6.4
20	14.8	14.2	14.6	13.0	11.9	12.8	14.4	11.2	12.6	8.1	3.3	5.5
21	14.2	13.4	14.0	12.2	11.6	11.9	17.4	11.6	14.3	6.4	4.4	5.5
22	14.3	14.0	14.1	13.1	12.1	12.6	17.1	12.2	14.4	6.4	4.9	6.0
23	14.4	14.0	14.2	13.8	13.0	13.5	17.2	12.0	14.4	6.1	5.6	5.8
24	14.0	13.6	13.8	13.8	13.4	13.7	16.3	12.1	13.9	6.1	4.9	5.8
25	14.6	13.9	14.3	13.5	13.2	13.4	14.1	11.5	12.6	---	---	---
26	14.9	14.4	14.7	13.7	13.3	13.5	13.6	10.5	11.9	---	---	---
27	14.9	14.5	14.7	14.1	13.7	13.9	13.9	10.4	11.7	---	---	---
28	14.7	14.3	14.5	14.5	13.9	14.1	14.7	11.0	12.6	---	---	---
29	---	---	---	14.3	13.6	14.0	13.9	11.1	12.4	---	---	---
30	---	---	---	13.6	12.5	13.2	14.9	10.5	12.5	---	---	---
31	---	---	---	12.5	11.0	11.7	---	---	---	---	---	---
MONTH	16.0	13.4	14.9	15.3	11.0	13.5	17.4	10.4	13.2	14.9	3.3	8.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	7.1	6.4	6.7	12.8	6.4	9.6	6.0	5.2	5.5
2	---	---	---	6.8	6.5	6.7	12.7	6.5	9.4	6.7	5.0	5.8
3	---	---	---	6.6	6.1	6.4	12.8	6.1	9.4	6.8	5.6	6.1
4	---	---	---	6.5	5.8	6.2	11.4	6.0	8.3	7.7	5.8	6.6
5	---	---	---	6.8	5.8	6.2	8.2	5.7	6.7	7.9	6.1	6.8
6	---	---	---	7.2	6.0	6.5	7.1	5.8	6.4	7.8	5.9	6.7
7	---	---	---	6.8	5.5	6.2	5.7	5.2	5.5	8.2	5.7	6.8
8	---	---	---	7.0	5.0	6.1	6.0	5.4	5.7	8.4	5.5	6.9
9	---	---	---	7.1	5.7	6.4	6.6	5.6	6.1	9.9	5.5	7.4
10	---	---	---	8.1	6.0	6.9	6.9	5.8	6.3	11.4	5.6	8.5
11	---	---	---	8.1	5.8	6.8	8.1	6.3	7.0	11.9	5.8	8.8
12	---	---	---	9.6	6.1	7.5	10.1	7.3	8.5	9.9	5.6	7.7
13	---	---	---	16.2	6.6	10.8	10.9	7.4	8.9	8.1	5.3	6.7
14	---	---	---	16.1	8.0	12.0	10.6	7.2	9.0	7.7	5.4	6.4
15	---	---	---	13.0	6.2	9.9	11.2	7.1	9.2	7.0	5.0	5.9
16	---	---	---	12.0	5.4	8.7	10.3	6.8	8.7	7.9	5.0	6.3
17	---	---	---	11.6	4.3	7.8	12.6	6.6	9.4	8.2	6.2	7.2
18	---	---	---	9.8	3.5	5.3	15.3	7.2	11.0	8.8	7.2	7.9
19	---	---	---	7.8	5.9	6.4	15.8	7.0	11.1	9.0	7.6	8.2
20	---	---	---	11.4	4.9	7.4	10.7	5.5	8.0	9.1	8.2	8.6
21	---	---	---	13.0	5.2	9.2	12.6	4.5	8.6	9.6	8.6	9.0
22	---	---	---	12.3	5.3	8.0	11.9	5.9	9.1	9.4	8.7	9.0
23	---	---	---	17.4	5.1	9.9	12.7	4.9	8.7	9.8	8.6	9.2
24	---	---	---	18.6	5.7	11.5	14.3	6.5	10.1	9.2	8.6	8.9
25	---	---	---	19.2	5.8	12.1	15.2	6.5	10.2	9.4	8.4	8.9
26	---	---	---	19.0	5.7	12.3	7.0	5.9	6.5	9.4	8.6	9.0
27	---	---	---	17.6	6.1	11.2	6.0	5.6	5.9	9.0	8.5	8.7
28	---	---	---	10.3	5.0	7.5	6.0	5.6	5.8	9.7	8.5	9.0
29	---	---	---	11.6	6.3	8.7	6.6	5.6	6.0	10.0	8.6	9.1
30	8.7	7.3	8.1	8.9	6.0	7.4	6.0	5.6	5.8	10.0	8.5	9.1
31	---	---	---	10.7	6.0	8.2	6.4	5.5	5.8	---	---	---
MONTH	8.7	7.3	8.1	19.2	3.5	8.2	15.8	4.5	8.0	11.9	5.0	7.7
YEAR	19.2	3.3	11.0									

## 03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	848	616	545	667	---	675	510	734	465	568	770	615
2	830	655	558	646	---	664	524	729	495	452	756	678
3	824	720	565	645	---	662	353	736	589	442	751	742
4	818	761	592	434	426	695	413	738	613	490	711	790
5	812	784	628	465	448	578	485	741	654	574	626	804
6	812	802	640	536	511	575	500	741	690	669	742	816
7	813	780	697	568	514	552	546	745	704	622	544	826
8	811	709	716	586	519	559	569	732	534	668	520	833
9	839	685	732	590	534	580	619	738	646	701	624	853
10	847	656	739	636	574	631	642	753	684	737	647	850
11	858	683	752	686	520	645	654	756	706	700	639	853
12	861	753	758	724	524	442	670	736	515	647	668	852
13	818	693	761	720	534	459	667	738	542	606	764	842
14	801	732	760	759	626	479	666	772	587	591	801	808
15	815	747	766	718	609	497	673	794	624	603	797	691
16	820	750	770	702	476	479	672	784	644	611	755	666
17	822	750	764	750	354	442	672	786	672	606	779	628
18	812	733	768	759	370	464	671	798	650	634	786	601
19	811	711	795	763	446	509	654	807	579	634	776	540
20	830	521	828	771	489	415	654	803	609	677	774	538
21	841	537	846	819	520	287	668	374	638	712	748	537
22	842	587	864	760	544	445	680	455	685	674	759	530
23	836	545	533	---	550	504	688	523	700	683	758	527
24	838	602	538	---	568	515	696	520	731	698	787	541
25	843	622	540	---	589	520	708	614	733	712	788	535
26	820	642	572	---	600	533	714	656	755	635	757	564
27	688	629	608	---	612	571	720	664	770	653	396	582
28	731	635	622	552	636	615	720	672	778	689	407	600
29	588	650	630	568	---	629	724	678	726	726	451	608
30	547	646	619	584	---	656	720	464	730	690	521	607
31	562	---	---	252	---	555	---	438	---	738	567	---
MEAN	795	678	684	641	524	543	628	684	648	640	683	682
WTR YR 1982	MEAN	655	MAX	864	MIN	252						

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	8.6	8.4	8.5	---	8.2	8.0	8.5	7.9	8.0	8.7	7.8
2	8.7	8.6	8.3	8.5	---	8.2	8.0	8.5	7.9	7.9	8.7	7.9
3	8.8	8.7	8.2	8.4	---	8.2	7.8	8.5	8.0	7.8	8.7	8.1
4	8.8	8.5	8.3	8.1	8.0	8.2	8.0	8.5	8.0	7.9	8.7	8.2
5	8.8	8.3	8.4	8.1	8.0	8.1	8.1	8.5	8.1	8.0	8.2	8.2
6	8.8	8.4	8.6	8.2	8.1	8.1	8.1	8.5	8.1	8.1	8.2	8.3
7	8.9	8.5	8.7	8.3	8.1	8.2	8.1	8.4	8.1	8.0	7.8	8.3
8	8.8	8.7	8.6	8.4	8.1	8.2	8.1	8.2	7.9	8.1	7.7	8.4
9	8.9	8.5	8.8	8.5	8.1	8.2	8.1	8.2	8.0	8.1	7.9	8.5
10	8.9	8.5	8.7	8.6	8.2	8.2	8.2	8.2	8.0	8.2	7.9	8.5
11	8.9	8.5	8.9	8.6	8.2	8.2	8.2	8.2	8.1	8.2	8.0	8.7
12	8.9	8.7	8.9	8.4	8.2	7.9	8.2	8.2	7.9	8.4	8.3	8.6
13	9.0	8.7	8.8	8.2	8.1	8.0	8.2	8.2	8.0	8.8	8.5	8.5
14	9.0	8.8	8.7	8.2	8.2	8.0	8.3	8.1	8.0	8.9	8.5	8.3
15	8.9	8.8	8.7	8.2	8.2	8.0	8.4	8.1	8.0	8.8	8.5	8.2
16	8.9	8.8	8.7	8.3	8.1	8.0	8.4	8.1	8.0	8.7	8.6	8.2
17	8.8	8.8	8.8	8.2	7.9	7.9	8.4	8.1	8.1	8.6	8.7	8.2
18	8.8	8.8	9.0	8.2	7.9	7.9	8.5	8.1	8.1	8.4	8.9	8.2
19	8.7	8.7	9.0	8.2	8.0	8.0	8.5	8.2	8.0	8.3	8.8	8.2
20	8.8	8.4	9.0	8.2	8.1	8.0	8.5	8.1	8.1	8.4	8.7	8.2
21	8.9	8.3	9.0	8.2	8.1	7.7	8.5	7.6	8.2	8.7	8.6	8.2
22	8.8	8.4	8.8	8.2	8.1	8.0	8.5	7.7	8.2	8.6	8.8	8.2
23	8.9	8.5	8.4	---	8.1	8.1	8.6	7.8	8.2	8.7	8.7	8.2
24	9.0	8.6	8.4	---	8.1	8.0	8.6	7.8	8.3	8.7	8.7	8.2
25	9.1	8.4	8.5	---	8.1	8.1	8.5	7.9	8.3	8.7	8.7	8.1
26	9.0	8.4	8.5	---	8.2	8.1	8.5	7.9	8.3	8.7	8.1	8.1
27	8.7	8.4	8.5	---	8.2	8.1	8.4	8.0	8.3	8.7	7.7	8.1
28	8.6	8.4	8.5	8.2	8.2	8.2	8.5	8.0	8.3	8.6	7.7	8.2
29	8.5	8.4	8.7	8.2	---	8.1	8.5	7.9	8.5	8.6	7.8	8.2
30	8.5	8.5	8.8	8.2	---	8.1	8.5	7.8	8.2	8.4	7.8	8.2
31	8.6	---	---	7.9	---	8.0	---	7.7	---	8.4	7.8	---
MEAN	8.8	8.6	8.7	8.3	8.1	8.1	8.3	8.1	8.1	8.4	8.3	8.2
WTR YR 1982	MEAN	8.3	MAX	9.1	MIN	7.6						

## 03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	14.0	5.5	2.5	---	5.0	12.0	16.5	20.0	23.5	26.5	23.0
2	16.5	14.0	6.0	2.5	---	6.0	12.0	17.5	20.0	23.0	26.0	23.0
3	15.5	15.0	6.0	3.0	---	5.0	11.5	18.0	21.0	23.0	27.0	23.0
4	15.5	15.5	6.0	5.5	2.0	5.0	8.5	19.0	20.5	24.5	27.5	22.5
5	17.0	15.0	5.5	4.5	2.0	4.5	7.5	20.0	20.0	26.0	26.5	22.0
6	18.5	13.5	4.5	4.0	1.5	3.5	6.0	20.5	20.5	27.0	27.5	22.0
7	17.0	11.5	4.5	4.0	1.0	3.0	6.0	20.5	21.5	28.0	27.0	22.5
8	15.5	10.5	5.0	2.0	1.0	3.5	6.0	20.0	21.5	27.5	26.5	23.0
9	15.0	10.5	4.0	1.5	1.0	4.5	6.0	20.5	21.5	27.0	26.5	23.5
10	15.5	9.0	3.0	.5	.5	5.0	6.0	21.0	23.0	27.0	25.0	24.0
11	16.5	8.5	2.0	.5	1.0	5.5	8.0	21.5	22.5	26.5	23.5	24.5
12	16.0	8.5	1.5	.5	1.0	7.0	9.0	22.5	21.5	26.0	22.5	24.5
13	16.0	8.0	2.0	.5	1.5	8.5	11.5	23.5	21.5	26.5	23.5	24.0
14	15.5	7.5	2.5	.5	1.5	8.5	13.0	23.5	22.0	26.5	24.0	24.5
15	15.5	7.5	2.5	.5	3.0	7.5	13.5	23.5	23.0	27.5	24.5	25.0
16	16.0	7.0	2.0	.5	2.5	7.5	15.5	24.5	22.0	28.0	25.0	24.5
17	16.0	7.0	1.5	.5	2.5	9.0	15.5	24.5	21.0	29.0	26.0	22.5
18	16.0	7.0	1.0	.5	2.5	9.5	15.0	24.5	21.5	28.5	25.5	22.0
19	13.5	7.5	.5	.5	3.0	9.0	15.5	24.5	22.0	27.5	25.5	21.0
20	12.5	8.5	.5	.5	3.5	8.5	15.0	23.5	21.5	27.5	24.5	20.0
21	13.5	6.5	.5	.5	4.0	11.0	14.0	19.5	22.0	27.5	23.5	19.0
22	13.0	5.5	.5	.5	4.0	9.0	14.0	20.0	21.5	26.0	23.5	18.0
23	12.0	4.5	.5	---	4.5	7.0	14.0	21.0	21.5	25.5	23.5	17.5
24	10.0	5.0	1.0	---	5.0	7.0	14.5	21.0	22.0	26.5	24.0	17.5
25	10.0	5.5	1.5	---	4.5	7.5	15.0	21.5	22.5	27.5	24.0	17.5
26	11.0	6.0	2.0	---	3.5	6.5	15.5	21.5	23.5	28.0	22.5	17.5
27	12.0	7.5	3.5	---	4.0	6.0	15.0	22.0	24.5	28.5	22.0	18.0
28	11.5	7.5	3.5	2.0	4.5	6.0	15.0	23.0	25.0	27.0	22.5	18.0
29	12.5	6.5	3.0	1.5	---	7.0	14.5	22.5	25.0	26.5	22.5	18.5
30	12.5	5.0	2.0	2.0	---	9.0	15.0	21.0	24.5	26.5	21.5	19.0
31	13.5	---	---	2.0	---	12.0	---	20.5	---	26.5	22.5	---
MEAN	14.5	9.0	3.0	1.5	2.5	7.0	12.0	21.5	22.0	26.5	24.5	21.5
WTR YR 1982	MEAN	14.0		MAX	29.0		MIN	.5				

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	9.8	11.7	12.9	---	14.2	11.7	11.6	---	6.7	9.6	5.5
2	10.2	9.5	11.1	13.1	---	13.8	12.0	11.7	---	6.7	9.1	5.7
3	10.6	9.4	11.4	12.7	---	13.9	11.8	11.3	---	6.4	9.6	6.2
4	10.4	9.7	11.6	11.2	15.0	14.0	12.9	11.1	---	6.1	7.9	6.6
5	10.1	9.5	11.8	11.4	15.6	13.8	13.3	10.7	---	6.2	6.7	6.6
6	9.2	9.9	12.9	12.1	15.7	14.5	13.8	10.7	---	6.5	6.3	6.6
7	9.9	10.7	12.9	12.4	15.8	14.8	14.2	8.6	---	6.2	5.5	6.7
8	10.2	11.2	12.5	13.0	15.8	15.0	13.9	8.4	---	6.1	5.8	6.7
9	10.3	10.7	12.8	13.2	15.4	14.8	13.7	8.6	---	6.5	6.1	7.3
10	10.1	11.1	13.6	13.8	15.7	14.5	14.0	8.0	---	6.8	6.4	8.1
11	10.0	11.9	14.3	13.8	15.8	13.8	13.6	7.5	---	6.6	7.1	9.1
12	9.9	12.3	14.0	13.7	15.8	13.3	13.1	7.1	---	7.2	8.5	7.7
13	10.0	12.4	14.5	13.4	15.5	12.9	12.6	7.2	---	11.0	8.7	6.6
14	9.9	12.6	14.1	13.2	15.2	12.8	13.1	6.7	---	11.7	9.0	6.2
15	8.9	12.7	13.8	13.2	14.9	13.1	13.6	6.2	---	9.7	9.1	5.8
16	9.1	12.7	14.4	13.5	14.8	13.4	13.0	6.3	---	8.3	8.7	6.5
17	9.1	12.4	14.0	13.6	14.7	12.6	12.4	6.4	---	7.5	9.3	7.5
18	8.9	12.9	14.7	13.6	14.6	12.7	14.0	6.0	---	6.3	10.9	7.9
19	9.8	11.9	15.2	13.3	14.8	12.6	13.6	6.0	---	6.4	10.7	8.4
20	10.2	10.0	15.5	13.1	14.5	12.9	12.6	5.3	---	6.7	7.8	8.6
21	10.3	10.6	14.6	13.1	14.0	11.9	14.3	5.9	---	9.5	9.3	9.1
22	9.7	11.4	13.8	13.0	14.2	12.7	14.4	6.1	---	7.4	8.9	9.0
23	10.3	12.3	12.7	---	14.2	13.7	14.3	5.9	---	9.2	8.9	9.0
24	11.2	12.2	12.9	---	13.8	13.7	13.6	5.9	---	11.4	9.6	8.8
25	11.2	12.3	13.1	---	14.4	13.4	12.5	---	---	11.7	8.8	8.9
26	10.4	12.1	13.1	---	14.7	13.6	11.7	---	---	12.3	6.4	8.9
27	9.4	11.5	12.6	---	14.8	14.0	11.4	---	---	10.7	5.9	8.7
28	10.0	11.8	12.4	13.2	14.5	14.1	12.6	---	---	7.5	5.8	8.9
29	9.8	12.4	12.6	13.4	---	13.9	12.4	---	---	8.5	6.0	9.0
30	9.9	12.6	13.2	13.1	---	13.2	12.3	---	8.1	7.4	5.8	8.9
31	9.9	---	---	13.0	---	11.6	---	---	---	8.4	5.8	---
MEAN	9.9	11.4	13.3	13.0	15.0	13.5	13.1	7.9	8.1	8.1	7.9	7.7
WTR YR 1982	MEAN	10.9		MAX	15.8		MIN	5.3				

## LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	179	23	11	313	22	19	1390	105	394
2	189	20	10	288	25	19	1390	76	285
3	182	18	8.8	263	27	19	1000	38	103
4	172	18	8.4	255	24	17	849	33	76
5	166	16	7.2	296	23	18	636	14	24
6	172	23	11	362	28	27	520	12	17
7	172	17	7.9	372	18	18	475	3	3.8
8	203	24	13	372	16	16	442	5	6.0
9	175	14	6.6	358	18	17	410	4	4.4
10	182	22	11	410	30	33	386	4	4.2
11	185	18	9.0	390	24	25	367	2	2.0
12	185	16	8.0	317	14	12	353	2	1.9
13	179	21	10	296	10	8.0	344	2	1.9
14	175	28	13	283	8	6.1	339	3	2.7
15	172	20	9.3	275	10	7.4	331	2	1.8
16	172	25	12	304	8	6.6	317	1	.86
17	166	23	10	335	8	7.2	304	4	3.3
18	179	22	11	326	10	8.8	300	4	3.2
19	175	22	10	416	32	36	271	5	3.7
20	169	32	15	1610	208	904	243	5	3.3
21	166	21	9.4	1040	80	225	221	5	3.0
22	162	20	8.7	702	35	66	288	25	19
23	162	19	8.3	592	16	26	4160	413	5070
24	162	12	5.2	755	16	33	2920	240	1890
25	159	16	6.9	882	12	29	1820	70	344
26	210	12	6.8	778	14	29	1410	23	88
27	562	60	91	755	20	41	1350	16	58
28	1040	80	225	717	18	35	1510	16	65
29	1000	51	138	556	20	30	1460	13	51
30	649	36	63	509	4	5.5	1040	8	22
31	416	18	20	---	---	---	907	3	7.3
TOTAL	8237	---	784.5	15127	---	1743.6	27753	---	8559.36
JANUARY			FEBRUARY			MARCH			
1	1300	13	46	15300	1180	50500	899	8	19
2	1280	10	35	9050	340	8310	892	10	24
3	1440	20	78	5910	220	3510	854	6	14
4	5430	482	7330	6290	200	3400	1130	65	198
5	3420	206	1900	4920	125	1660	2770	160	1200
6	2440	96	632	4150	60	672	2460	65	432
7	2060	60	334	3610	45	439	2130	24	138
8	1840	53	263	3400	46	422	1590	15	64
9	1420	48	184	1720	52	241	1120	12	36
10	805	43	93	1600	43	186	1000	10	27
11	447	32	39	1500	32	130	2710	333	3980
12	390	34	36	1400	27	102	4960	604	8090
13	370	37	37	1290	22	77	5090	350	4810
14	360	37	36	1180	18	57	3800	378	3880
15	350	35	33	1490	105	422	3900	206	2170
16	350	34	32	4080	246	2710	5610	310	4700
17	340	34	31	7550	410	8360	6250	450	7590
18	340	32	29	6000	200	3240	3760	250	2540
19	330	25	22	5340	108	1560	3610	200	1950
20	380	22	23	3920	52	550	7350	613	16200
21	497	20	27	2680	38	275	12400	1300	48500
22	1710	104	1110	2340	30	190	4130	280	3120
23	19500	1870	99500	2290	26	161	3770	105	1070
24	6470	600	10500	1920	23	119	3270	52	459
25	3360	138	1250	1650	18	80	2980	44	354
26	3250	64	562	1310	10	35	2300	39	242
27	2800	42	318	1080	12	35	1620	34	149
28	2640	40	285	922	8	20	1360	42	154
29	2020	26	142	---	---	---	1120	14	42
30	4130	110	2340	---	---	---	1080	22	64
31	25500	1550	116000	---	---	---	2680	205	1480
TOTAL	96969	---	243247	103892	---	87463	98595	---	113696

## LITTLE MIAMI RIVER BASIN

201

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	2730	180	1330	445	12	14	1910	410	2110
2	1960	130	688	435	10	12	1260	260	885
3	7230	1210	24600	420	11	12	784	160	339
4	4000	550	5940	406	11	12	626	128	216
5	3010	165	1340	392	9	9.5	565	115	175
6	3180	70	601	378	10	10	520	102	143
7	2080	50	281	373	11	11	456	84	103
8	1510	30	122	450	16	19	911	318	782
9	1340	16	58	487	14	18	637	144	248
10	1330	14	50	406	10	11	763	100	205
11	1180	17	54	369	8	8.0	868	147	345
12	1070	24	69	351	7	6.6	714	242	467
13	985	17	45	342	13	12	645	196	341
14	892	18	43	325	11	9.7	436	177	208
15	811	20	44	313	16	14	356	86	83
16	755	22	45	317	16	14	527	110	157
17	762	16	33	317	14	12	982	158	419
18	832	9	20	309	9	7.5	748	132	267
19	748	10	20	289	9	7.0	534	96	138
20	662	10	18	476	86	154	455	88	108
21	631	15	26	3420	1970	17400	401	68	74
22	594	13	21	2110	800	4560	343	54	50
23	553	12	18	1240	300	1000	383	56	58
24	531	12	17	811	160	350	359	46	45
25	525	10	14	658	134	238	305	44	36
26	519	10	14	563	117	178	284	43	33
27	519	10	14	519	100	140	274	43	32
28	498	12	16	531	96	138	301	44	36
29	460	18	22	916	142	351	483	75	98
30	450	10	12	2920	833	6710	902	115	280
31	---	---	---	2210	800	4770	---	---	---
TOTAL	42347	---	35575	23498	---	36208.3	18732	---	8482
JULY			AUGUST			SEPTEMBER			
1	1040	160	449	138	42	16	152	78	32
2	779	168	353	134	74	27	141	70	27
3	537	138	200	127	64	22	159	65	28
4	415	112	125	142	55	21	156	74	31
5	430	97	113	504	106	144	134	72	26
6	474	96	123	481	113	147	122	66	22
7	363	83	81	392	118	125	113	58	18
8	310	72	60	272	118	87	110	60	18
9	407	73	80	215	104	60	111	60	18
10	437	91	107	194	80	42	118	59	19
11	346	74	69	218	85	50	144	73	28
12	297	58	47	192	88	46	208	87	49
13	264	37	26	176	82	39	209	78	44
14	234	25	16	155	84	35	237	68	44
15	216	28	16	143	67	26	269	86	62
16	206	28	16	131	63	22	270	78	57
17	197	35	19	124	64	21	411	86	95
18	239	36	23	118	47	15	463	95	119
19	264	40	29	116	56	18	460	49	61
20	227	34	21	117	54	17	455	79	97
21	236	35	22	136	70	26	455	71	87
22	269	36	26	125	66	22	477	64	82
23	263	70	50	126	66	22	478	63	81
24	230	60	37	119	77	25	415	58	65
25	185	54	27	130	70	25	390	60	63
26	164	32	14	530	152	218	372	53	53
27	174	28	13	340	182	167	332	56	50
28	291	86	68	224	172	104	322	53	46
29	205	58	32	180	105	51	347	54	51
30	166	51	23	158	113	48	336	51	46
31	149	102	41	148	90	36	---	---	---
TOTAL	10014	---	2326	6305	---	1724	8366	---	1519
YEAR	459835		541327.76						

## LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 08...	1500	196	16.0	19	10
DEC 08...	1445	437	5.0	24	28
FEB 26...	1530	1300	4.0	12	42
MAY 05...	1800	401	21.5	15	16
JUN 23...	1330	373	22.0	61	61
AUG 19...	1630	116	26.0	77	24

03246200 EAST FORK LITTLE MIAMI RIVER NEAR MARATHON, OH

LOCATION.--Lat 39°06'52", long 84°01'29", Clermont County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on Blue Sky Park Road, 500 ft (152 m) upstream from Fivemile Creek, 1.0 mi (1.6 km) downstream from Sixmile Creek, 2.3 mi (3.7 km) southwest of Marathon, and at mile 44.2 (77.1 km).

DRAINAGE AREA.--195 mi<sup>2</sup> (505 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 842.32 ft (256.739 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--14 years, 247 ft<sup>3</sup>/s (7.00 m<sup>3</sup>/s), 17.20 in/yr (437 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,800 ft<sup>3</sup>/s (362 m<sup>3</sup>/s) July 10, 1980; gage height, 19.54 ft (5.956 m); minimum discharge, 0.50 ft<sup>3</sup>/s (0.014 m<sup>3</sup>/s) Oct. 15, 16, 17, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft<sup>3</sup>/s (85.0 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 23	2130	*7660 217	*15.76 4.804	Mar. 21	1300	5420 153	13.79 4.203
Jan. 31	1730	7350 208	15.59 4.752	Apr. 3	1530	3570 101	11.81 3.600
Mar. 12	0130	3040 86.1	11.16 3.402	May 29	1930	6790 192	15.10 4.602

Minimum daily 0.88 ft<sup>3</sup>/s (0.025 m<sup>3</sup>/s) Oct. 13-16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.4	110	130	3250	76	522	49	537	63	6.2	3.3
2	2.3	4.7	97	145	393	73	247	26	281	32	5.4	3.3
3	1.9	5.2	53	184	505	82	2210	25	133	26	5.4	3.8
4	1.4	18	26	1230	850	103	592	24	80	30	5.2	14
5	1.1	16	18	515	324	332	264	21	60	114	101	7.2
6	1.6	14	14	194	237	196	308	19	51	93	152	5.4
7	1.5	12	12	180	159	150	247	18	43	35	57	5.0
8	1.0	11	9.8	147	176	123	176	21	92	32	90	4.7
9	.92	76	8.8	82	154	90	174	22	188	20	90	4.6
10	.90	70	8.5	64	123	75	194	23	142	19	27	4.4
11	.90	40	7.6	45	123	817	161	21	73	45	16	4.3
12	.90	36	7.1	32	100	1470	135	17	42	86	12	4.1
13	.88	33	6.5	25	91	881	108	14	34	28	8.8	3.9
14	.88	31	6.5	23	84	502	88	13	27	16	8.2	3.7
15	.88	30	6.5	21	137	712	70	13	23	11	7.2	3.6
16	.88	30	6.3	21	1170	920	61	13	904	8.6	5.6	3.5
17	.90	29	7.1	21	1530	720	65	12	538	7.0	5.2	3.3
18	1.1	29	7.1	20	685	311	74	13	199	45	5.0	3.0
19	1.3	28	6.5	20	630	529	67	18	97	189	4.7	2.5
20	1.3	150	6.3	21	491	1320	51	119	58	58	4.5	2.0
21	1.4	56	6.0	28	478	4050	48	295	40	22	4.4	1.7
22	1.6	34	13	393	342	569	42	198	29	13	4.1	1.6
23	5.2	29	1030	6840	269	297	33	114	33	12	3.9	1.5
24	5.6	22	436	2290	266	217	29	59	63	9.8	3.7	1.6
25	5.8	16	174	292	228	182	27	39	28	9.4	3.7	1.7
26	6.6	16	114	176	145	221	28	29	18	7.0	3.6	1.7
27	44	15	119	170	97	202	34	198	15	110	3.6	1.7
28	13	12	138	140	86	152	34	326	13	108	3.6	1.7
29	12	9.6	133	123	---	123	35	2230	344	30	3.4	1.8
30	9.2	8.2	87	353	---	109	49	2290	144	15	3.3	2.6
31	7.2	---	55	5970	---	1080	---	387	---	9.2	3.3	---
TOTAL	137.14	886.1	2729.6	19895	13123	16684	6173	6666	4329	1303.0	657.0	107.2
MEAN	4.42	29.5	88.1	642	469	538	206	215	144	42.0	21.2	3.57
MAX	44	150	1030	6840	3250	4050	2210	2290	904	189	152	14
MIN	.88	4.7	6.0	20	84	73	27	12	13	7.0	3.3	1.5
CFSM	.02	.15	.45	3.29	2.41	2.76	1.06	1.10	.74	.22	.11	.02
IN.	.03	.17	.52	3.80	2.50	3.18	1.18	1.27	.83	.25	.13	.02

CAL YR 1981	TOTAL	66007.74	MEAN 181	MAX 3460	MIN .88	CFSM .93	IN 12.59
WTR YR 1982	TOTAL	72690.04	MEAN 199	MAX 6840	MIN .88	CFSM 1.02	IN 13.87

## LITTLE MIAMI RIVER BASIN

03247050 EAST FORK LITTLE MIAMI RIVER NEAR BATAVIA, OH

LOCATION.--Lat 39°03'36", long 84°10'32", Clermont County, Hydrologic Unit 05090202, on right bank on Elk Lick Road, 230 ft (70 m) upstream from unnamed right bank tributary, 1,400 ft (427 m) upstream from Lucy Run, 1.3 mi (2.1 km) south of Batavia, and at mile 15.7 (25.3 km).

DRAINAGE AREA.--352 mi<sup>2</sup> (912 km<sup>2</sup>), includes that of unnamed tributary.

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

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft (174.248 m) National Geodetic Vertical Datum of 1929. Prior to July 17, 1968, nonrecording gage 1,100 ft (335 m) downstream at same datum.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by William H. Harsha reservoir, formerly East Fork Lake, since 1977. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--11 years (water years 1966-76), 432 ft<sup>3</sup>/s (12.23 m<sup>3</sup>/s), 6 years (water years 1977-82) 450 ft<sup>3</sup>/s (12.74 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft<sup>3</sup>/s (813 m<sup>3</sup>/s) Apr. 2, 1970, gage height, 20.31 ft (6.190 m); minimum daily, 0.14 ft<sup>3</sup>/s (0.004 m<sup>3</sup>/s) Sept. 23, 27, 1967. Maximum discharge since start of construction of East Fork Dam 31,000 ft<sup>3</sup>/s (878 m<sup>3</sup>/s) Aug. 30, 1974, gage height, 20.80 ft (6.400 m) in gage well, 21.8 ft (6.645 m) from floodmarks, result of failure of cofferdam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 21.46 ft (6.541 m) at site 1,100 ft (335 m) downstream from information by local resident, discharge, about 32,000 ft<sup>3</sup>/s (906 m<sup>3</sup>/s), from flood study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,850 ft<sup>3</sup>/s (109 m<sup>3</sup>/s) Feb. 4, gage height, 11.50 ft (3.505 m); minimum daily, 9.2 ft<sup>3</sup>/s (0.26 m<sup>3</sup>/s) Sept. 24, 28-30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	48	146	438	140	102	579	24	1560	197	70	74
2	106	48	222	433	567	157	573	24	2720	135	60	160
3	106	48	222	443	1010	193	698	23	2660	140	45	160
4	106	48	222	484	2750	106	1240	23	2610	121	50	96
5	106	48	219	573	3760	160	1930	23	2410	48	62	28
6	108	48	174	854	3680	226	1920	23	1570	62	52	28
7	106	48	45	847	3630	226	1390	23	869	81	46	28
8	106	48	45	839	3560	222	511	26	732	81	26	27
9	106	64	45	705	3500	222	229	23	335	81	117	27
10	98	106	45	424	3470	222	226	23	373	60	190	27
11	45	104	37	203	3420	304	226	21	597	26	31	27
12	46	104	23	28	3000	463	154	21	527	25	31	26
13	48	104	23	31	1460	1010	52	21	267	24	50	26
14	48	104	18	31	264	973	50	23	48	24	75	26
15	48	104	17	30	133	1030	48	23	28	24	68	21
16	50	91	17	30	102	1530	32	23	448	24	53	23
17	50	45	20	30	603	2510	53	23	1480	24	20	14
18	52	53	36	29	1030	2970	85	23	2610	25	20	23
19	52	68	36	29	1030	2300	68	23	1530	25	20	12
20	52	85	33	30	1020	1470	31	24	395	28	24	12
21	52	104	16	74	1020	1930	31	26	282	39	20	10
22	52	104	34	233	1520	2160	29	26	79	43	20	10
23	52	157	285	335	1480	2370	28	24	33	53	21	10
24	52	222	443	233	633	2340	29	24	32	66	21	9.2
25	52	190	443	847	633	1860	29	23	32	66	21	10
26	55	102	438	1820	527	603	29	23	32	68	20	10
27	135	102	443	2580	226	222	29	40	31	77	27	10
28	226	102	438	2530	102	181	26	916	36	114	21	9.2
29	181	102	438	2480	---	138	24	1360	123	206	20	9.2
30	46	93	438	1490	---	138	24	424	219	108	21	9.2
31	46	---	438	356	---	378	---	659	---	70	21	---
TOTAL	2494	2694	5499	19489	44270	28716	10373	4005	24668	2165	1343	961.8
MEAN	80.5	89.8	177	629	1581	926	346	129	822	69.8	43.3	32.1
MAX	226	222	443	2580	3760	2970	1930	1360	2720	206	190	160
MIN	45	45	16	28	102	102	24	21	28	24	20	9.2
CAL YR 1981	TOTAL	129105.0	MEAN	354	MAX	3580	MIN	16				
WTR YR 1982	TOTAL	146677.8	MEAN	402	MAX	3760	MIN	9.2				

## LITTLE MIAMI RIVER BASIN

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03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OH

LOCATION.--Lat 39°08'14", long 84°14'17", Clermont County, Hydrologic Unit 05090202, on right bank at upstream wingwall of highway bridge at Perintown, 0.2 mi (0.3 km) downstream from Sugarcamp Run, 5 mi (8 km) upstream from mouth, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--476 mi<sup>2</sup> (1,233 km<sup>2</sup>).

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 (154.543 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by Stonelick Lake 14 mi (23 km) upstream. Surface area at spillway level, 171 acres (69 hm<sup>2</sup>). Flow regulated by William H. Harsha Reservoir, formerly East Fork Lake, since 1977. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--59 years (1915-17, 1925-82), 550 ft<sup>3</sup>/s (15.58 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft<sup>3</sup>/s (1,200 m<sup>3</sup>/s) Mar. 10, 1964, gage height, 23.84 ft (7.266 m); minimum daily, 0.4 ft<sup>3</sup>/s (0.011 m<sup>3</sup>/s) July 24, 1930, Sept. 11, 12, 23, 1939; minimum gage height, -0.18 ft (-0.055 m) Oct. 3-7, 1917. Maximum discharge since start of construction of East Fork Dam 23,200 ft<sup>3</sup>/s (657 m<sup>3</sup>/s) Aug. 30, 1974, gage height, 19.52 ft (5.950 m), result of failure of cofferdam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft<sup>3</sup>/s (309 m<sup>3</sup>/s) Jan. 23, gage height, 13.29 ft (4.051 m); minimum daily, 17 ft<sup>3</sup>/s (0.48 m<sup>3</sup>/s) Sept. 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	51	422	665	1180	173	1000	48	2610	242	77	32
2	101	50	391	603	797	191	905	47	4100	166	73	161
3	99	71	343	781	1240	272	2460	44	4000	175	57	166
4	99	81	329	1700	2590	197	1550	42	3800	173	53	141
5	101	80	318	921	3090	270	2110	41	3500	89	146	41
6	104	56	308	1160	3020	361	2180	40	2800	73	133	35
7	104	47	131	1150	2950	361	1780	39	1400	91	163	36
8	99	45	78	1110	2920	344	868	52	1100	94	74	33
9	99	69	63	1010	2890	338	416	46	810	94	80	33
10	99	143	61	577	2860	336	411	37	571	89	214	33
11	58	119	58	200	2840	1230	384	37	818	50	76	33
12	43	108	44	107	2660	1100	325	38	719	40	57	33
13	44	104	38	50	1770	1870	165	36	455	40	49	33
14	44	102	37	45	483	1520	140	34	115	38	74	33
15	44	102	34	45	234	1960	133	33	88	38	78	29
16	44	101	32	45	741	2200	117	32	1940	37	69	26
17	44	59	35	44	1600	2590	119	31	1680	36	42	26
18	53	46	40	43	1620	2850	142	31	2390	36	29	22
19	48	61	47	41	1600	2860	141	31	1750	141	27	26
20	46	129	46	41	1530	2230	97	313	518	69	29	19
21	47	127	40	100	1480	3420	78	841	430	52	40	20
22	48	115	56	1240	1730	2350	65	238	137	78	30	17
23	50	133	1410	5740	1920	2440	61	86	92	89	30	19
24	47	257	746	712	937	2410	57	57	80	84	29	19
25	46	254	612	938	911	2170	58	45	74	80	32	22
26	55	125	584	1850	830	1010	58	38	70	77	29	20
27	166	117	623	2450	372	384	56	70	69	190	39	19
28	260	111	630	2440	184	322	53	755	67	157	42	19
29	242	106	622	2400	---	241	49	2440	106	222	30	19
30	74	104	570	2390	---	237	49	1360	245	133	29	18
31	52	---	570	4990	---	1320	---	963	---	81	32	---
TOTAL	2557	3073	9318	35588	46979	39557	16027	7945	36534	3054	1962	1183
MEAN	82.5	102	301	1148	1678	1276	534	256	1218	98.5	63.3	39.4
MAX	260	257	1410	5740	3090	3420	2460	2440	4100	242	214	166
MIN	43	45	32	41	184	173	49	31	67	36	27	17

CAL YR 1981 TOTAL 174972 MEAN 479 MAX 4000 MIN 30  
WTR YR 1982 TOTAL 203777 MEAN 558 MAX 5740 MIN 17

## LITTLE MIAMI RIVER BASIN

## RESERVOIRS IN LITTLE MIAMI RIVER BASIN

03242340 CAESAR CREEK LAKE NEAR WELLMAN.--Lat 39°29'10", long 84°03'38", Warren County, Hydrologic Unit 05090202, in outlet structure of dam on Caesar Creek, 1.3 mi (2.1 km) west of Wellman, 3 mi (4.8 km) southwest of Harveysburg, and 3.1 mi (5.0 km) upstream from confluence with Little Miami River. DRAINAGE AREA, 237 mi<sup>2</sup> (613.8 km<sup>2</sup>). PERIOD OF RECORD, October 1978 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers.)

Lake is formed by an earth and rockfill dam with open cut spillway. Dam completed and storage began in January 1978. Usable capacity 242,200 acre-ft (298.63 hm<sup>3</sup>) between elevation 739.0 ft (225.25 m) (lowest outlet) and 883.0 ft (269.14 m) (crest of spillway) of which 102,000 acre-ft (125.77 hm<sup>3</sup>) is in conservation pool. Dead storage below elevation 739.0 ft (225.25 m) is 8 acre-ft (9864 m<sup>3</sup>). Figures given herein represent usable contents. There are no gates on the spillway and all regulation is done by gates in conduit through dam. Reservoir is used for flood control, wild life conservation, water supply, pollution abatement, and recreation. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 132,300 acre-ft (163 hm<sup>3</sup>) Mar. 3, 1979, elevation 859.90 ft (262.098 m), minimum 68,040 acre-ft (83.9 hm<sup>3</sup>) Jan. 15, 1979, elevation 835.88 ft (254.776 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents 123,100 acre-ft (152 hm<sup>3</sup>) Feb. 4, elevation 856.07 ft (260.930 m); minimum, 88,530 acre-ft (109 hm<sup>3</sup>) Sept. 30, elevation 844.08 ft (257.276 m).

03247040 WILLIAM H. HARSHA LAKE NEAR BANTAM.--Lat 39°01'20", long 84°09'08", Clermont County, Hydrologic Unit 05090202, in outlet structure of dam on East Fork Little Miami River, 1.7 mi (2.74 km) north of Bantam, 4.2 mi (6.76 km) south of Batavia, and 20.3 mi (32.66 km) upstream from confluence with Little Miami River. DRAINAGE AREA, 342 mi<sup>2</sup> (886 km<sup>2</sup>). PERIOD OF RECORD, October 1978 to current year (Prior to October 1980 published as East Fork Lake near Bantam). GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earthfill dam with open cut spillway. Dam was completed and storage began Feb. 6, 1978. Usable capacity 284,500 acre-ft (350 hm<sup>3</sup>) between elevation 623.0 ft (189.89 m) (lowest outlet) and 795.0 ft (242.32 m) (crest of spillway). Seasonal pool storage 90,390 acre-ft (111 hm<sup>3</sup>) elevation 733.0 ft (223.42 m). Dead storage 4 acre-ft (4,930 m<sup>3</sup>) below 623.0 ft (189.89 m). Figures given herein represent usable contents. Lake is used primarily for flood control although seasonal pool is used for water supply, water quality control, recreation, and wildlife conservation purposes. Outflow is controlled by operation of gates in conduit through dam. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 163,100 acre-ft (201 hm<sup>3</sup>) Mar. 2, 1979, elevation 761.64 ft (232.148 m); minimum, 24,820 acre-ft (30.6 hm<sup>3</sup>) Oct. 26, 1978, elevation 690.09 ft (210.339 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 134,100 acre-ft (165 hm<sup>3</sup>) Feb. 4, elevation 751.33 ft (229.005 m); minimum, 82,060 acre-ft (104 hm<sup>3</sup>) Jan. 11, elevation 728.95 ft (222.184 m).

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

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03242340 CAESAR CREEK LAKE				03247040 WM. H. HARSHA LAKE		
Sept. 30.....	848.08	99,440	--	732.01	88,310	--
Oct. 31.....	847.06	96,600	-2,840	730.09	84,360	-3,950
Nov. 30.....	846.07	93,880	-2,720	729.08	82,320	-2,040
Dec. 31.....	846.10	93,970	+90	729.95	84,070	+1,750
CAL YR 1981	--	--	+880	--	--	+2,110
Jan. 31.....	853.29	114,500	+20,530	746.46	121,500	37,430
Feb. 28.....	845.94	93,530	-20,970	729.10	82,360	-39,140
Mar. 31.....	846.34	94,620	+1,090	730.40	84,990	+2,630
Apr. 30.....	848.29	100,000	+5,380	731.63	87,520	+2,530
May 31.....	849.07	102,200	+2,200	743.49	114,200	+26,680
June 30.....	849.14	102,400	+200	733.40	91,250	-22,950
July 31.....	848.94	101,900	-500	733.04	90,480	-770
Aug. 31.....	848.90	101,700	-200	733.47	91,400	+920
Sept. 30.....	844.08	88,530	-13,170	732.34	89,010	-2,390
WTR YR 1982	--	--	-10,910	--	--	+700

03255500 MILL CREEK AT READING, OH

LOCATION.--Lat 39°13'14", long 84°26'49", in sec. 32, R.1, T.4, Hamilton County, Hydrologic Unit 05090203, on right bank at upstream side of Koehler Street Bridge at Reading, 1.0 mi (1.6 km) upstream from West Fork Mill Creek, and 13.0 mi (20.9 km) upstream from mouth.

DRAINAGE AREA.--73.0 mi<sup>2</sup> (189 km<sup>2</sup>).

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft (160.630 m) Ohio River datum. Prior to Oct. 1, 1951, water-stage recorder or nonrecording gage at same site at datum 4.00 ft (1.219 m) higher. Oct. 1, 1951, to Apr. 25, 1954, nonrecording gage at present site and datum.

REMARKS.--Records good except those for the winter periods, which are 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 data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,780 ft<sup>3</sup>/s (164 m<sup>3</sup>/s) Mar. 6, 1945, gage height, 20.00 ft (6.096 m) present datum; no flow for many days in 1940-41, 1944, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft<sup>3</sup>/s (48.1 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 23	0330	3620 103	13.28 4.048	Apr. 3	0700	2170 65.1	10.37 3.161
Jan. 31	1130	4090 116	14.51 4.423	May 21	1730	2090 59.2	10.24 3.121
Mar. 26	0030	*4740 134	*16.52 5.035	June 8	1830	3360 95.2	12.71 3.874

Minimum daily 5.9 ft<sup>3</sup>/s (0.17 m<sup>3</sup>/s) Sept. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	13	376	93	768	37	109	26	170	21	8.7	14
2	15	14	59	52	191	38	79	23	46	17	11	14
3	12	15	36	130	359	56	853	25	30	25	13	15
4	10	17	30	495	191	145	153	25	32	15	66	9.0
5	14	17	23	92	116	106	131	24	32	12	241	7.2
6	30	16	19	65	70	64	163	23	21	12	139	8.8
7	13	13	22	40	45	52	87	48	20	28	192	12
8	11	12	23	27	33	46	77	125	1290	47	42	13
9	11	105	20	20	28	43	103	31	509	23	23	12
10	9.3	39	19	15	25	40	72	25	163	15	16	12
11	8.7	19	18	12	23	556	62	22	75	12	70	9.6
12	11	15	16	12	21	232	56	22	63	13	22	8.5
13	12	14	14	12	20	324	53	20	44	15	16	11
14	13	11	17	14	35	122	45	19	34	13	12	11
15	12	11	19	13	147	285	44	16	34	13	10	11
16	13	12	17	12	249	339	43	11	149	13	12	10
17	10	13	18	12	454	190	67	17	62	12	13	8.8
18	24	14	21	12	180	110	40	15	35	27	12	12
19	14	249	15	12	150	428	40	14	26	24	12	8.0
20	14	131	11	12	104	676	42	41	22	16	21	8.9
21	14	31	12	40	88	1140	37	770	23	13	24	9.5
22	15	21	128	674	71	167	36	206	47	146	9.9	12
23	27	29	534	1640	63	112	34	104	58	26	11	10
24	13	86	95	167	58	90	31	49	25	13	18	28
25	11	30	48	78	47	105	29	36	23	10	29	9.6
26	120	24	41	53	42	98	38	31	20	13	12	5.9
27	183	39	75	40	40	70	31	30	18	61	20	15
28	47	20	72	49	39	58	28	31	112	21	12	9.6
29	20	15	61	43	---	56	27	123	64	12	9.6	8.1
30	16	24	35	753	---	53	26	80	28	12	19	8.1
31	15	---	71	3000	---	424	---	33	---	12	18	---
TOTAL	754.0	1069	1965	7689	3657	6262	2636	2065	3275	712	1134.2	331.6
MEAN	24.3	35.6	63.4	248	131	202	87.9	66.6	109	23.0	36.6	11.1
MAX	183	249	534	3000	768	1140	853	770	1290	146	241	28
MIN	8.7	11	11	12	20	37	26	11	18	10	8.7	5.9
CAL YR 1981	TOTAL	25774.4	MEAN 70.6	MAX 1290	MIN 6.0							
WTR YR 1982	TOTAL	31549.8	MEAN 86.4	MAX 3000	MIN 5.9							

## MILL CREEK CREEK BASIN

03256500 WEST FORK MILL CREEK LAKE NEAR GREENHILLS, OH

LOCATION.--Lat 39°15'34", long 84°29'41", in SE 1/4 sec.17, T.3, R.1, Hamilton County, Hydrologic Unit 05090203, in gate house of dam on West Fork Mill Creek, 1.2 mi (1.9 km) east of Greenhills.

DRAINAGE AREA.--29.9 mi<sup>2</sup> (77.4 km<sup>2</sup>).

PERIOD OF RECORD.--April 1953 to current year. Prior to October 1971, published as West Fork Mill Creek Reservoir near Greenhills, Ohio.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers); gage readings have been reduced to elevations above National Geodetic Vertical Datum.

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 (13.9 hm<sup>3</sup>) between elevations 655.0 ft (199.64 m), lowest outlet, and 702.0 ft (213.97 m), crest of spillway, of which 1,470 acre-ft (1.81 hm<sup>3</sup>) is in conservation pool. Dead storage below elevation 655.0 ft (199.64 m), 65 acre-ft (80,100 m<sup>3</sup>). Figures given herein represent usable 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.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,680 acre-ft (11.9 hm<sup>3</sup>) Jan. 22, 1959, elevation, 698.95 ft (213.040 m); minimum, 714 acre-ft (0.88 hm<sup>3</sup>) Jan. 18, 1979, elevation, 669.86 ft (204.173 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,440 acre-ft (6.71 hm<sup>3</sup>) Feb. 1, elevation, 689.22 ft (210.074 m); minimum, 748 acre-ft (0.92 hm<sup>3</sup>) Dec. 5, elevation, 670.16 ft (204.265 m).

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

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	675.02	1470	--
Oct. 31.....	675.10	1490	+20
Nov. 30.....	675.18	1500	+10
Dec. 31.....	673.65	1230	-270
CAL YR 1981.....	--	--	+478
Jan. 31.....	689.02	5370	+4140
Feb. 28.....	673.31	1180	-4190
Mar. 31.....	675.79	1620	+440
Apr. 30.....	675.11	1490	-130
May 31.....	675.19	1500	+10
June 30.....	675.26	1520	+20
July 31.....	675.07	1480	-40
Aug. 31.....	675.23	1510	+30
Sept. 30.....	675.13	1490	-20
WTR YR 1982.....	--	--	+20

## 03257500 WEST FORK MILL CREEK AT WOODLAWN, OH

LOCATION.--Lat 39°15'14", long 84°28'13", in NE 1/4 sec.10, R.1, T.3, Hamilton County, Hydrologic Unit 05090203, on left bank at upstream side of Riddle Road Bridge in Woodlawn, 0.5 mi (0.8 km) upstream from small left bank tributary, 1.9 mi (3.1 km) downstream from West Fork Mill Creek Dam, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--32.2 mi<sup>2</sup> (83.4 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 570.00 ft (173.736 m) Corps of Engineers bench mark.

REMARKS.--Records good except those for winter periods, and those below 5.0 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s), which are fair. Flow regulated by West Fork Mill Creek Reservoir 1.9 mi (3.1 km) upstream beginning 1953 (see station 03256500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--29 years (1953-82), 32.7 ft<sup>3</sup>/s (0.926 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft<sup>3</sup>/s (56.6 m<sup>3</sup>/s) Apr. 4, 1956, gage height, 6.82 ft (2.079 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,120 ft<sup>3</sup>/s (31.7 m<sup>3</sup>/s) Feb. 2, gage height, 6.32 ft (1.926 m); minimum daily, 0.01 ft<sup>3</sup>/s (0.0003 m<sup>3</sup>/s) Sept. 8-23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.31	211	8.8	440	4.6	80	2.2	124	10	.07	5.9
2	.04	.26	345	38	832	1.2	28	3.6	17	1.5	.07	5.9
3	.03	.26	37	43	226	1.5	357	7.3	5.2	2.2	.07	3.6
4	.03	.26	12	179	655	5.9	231	4.6	5.9	5.2	.18	.13
5	.03	.26	7.8	190	605	10	35	4.6	6.3	4.6	70	.05
6	.04	1.2	.99	8.4	15	21	96	4.6	6.3	2.6	10	.04
7	.05	2.2	.67	27	13	23	43	15	5.2	.99	8.8	.02
8	.06	1.2	.55	12	10	17	33	42	219	11	8.4	.01
9	.06	17	.55	6.3	8.0	5.2	31	29	359	10	5.2	.01
10	.05	37	.55	3.5	6.0	6.3	34	8.4	242	.99	.18	.01
11	.05	20	.55	2.5	5.8	94	22	4.1	12	.82	9.8	.01
12	.04	1.8	.55	1.5	5.6	382	10	4.1	17	.67	16	.01
13	.03	1.2	.55	1.5	5.4	198	11	3.6	12	.55	5.2	.01
14	.03	1.2	.55	2.5	5.0	122	10	1.5	7.3	.21	.18	.01
15	.02	1.2	.55	1.5	6.0	176	9.8	1.5	1.5	.13	.07	.01
16	.02	1.2	.55	1.5	33	138	9.8	1.2	25	.10	.05	.01
17	.02	1.2	.55	1.5	179	49	27	1.2	51	.18	.05	.01
18	.04	1.2	.67	1.5	138	43	19	1.2	10	.21	.05	.01
19	.17	12	.67	1.5	42	96	8.8	.99	7.8	.37	.04	.01
20	.52	246	.55	1.5	48	212	5.2	.99	1.2	6.3	.05	.01
21	.56	39	.31	1.5	23	634	6.3	206	1.2	9.3	1.8	.01
22	.68	33	.45	10	23	625	5.2	352	.99	16	5.2	.01
23	1.1	8.8	49	295	12	98	4.1	187	.99	38	3.2	.01
24	1.6	34	187	755	12	39	2.2	10	.99	14	.18	.04
25	1.6	6.8	52	325	5.2	27	3.2	6.3	.99	.18	6.3	.26
26	3.3	9.3	19	45	6.3	50	9.3	4.1	.99	.10	5.9	3.6
27	117	14	11	41	6.3	18	9.8	4.1	.99	1.2	.13	23
28	21	9.3	34	15	6.3	10	4.1	4.1	9.8	45	.55	16
29	1.5	9.3	23	14	---	6.8	2.2	5.2	163	14	.99	.67
30	.67	1.5	27	8.4	---	7.3	2.2	68	34	.67	1.2	.55
31	.45	---	3.6	108	---	231	---	8.4	---	.18	3.6	---
TOTAL	150.84	511.95	1028.21	2150.9	3371.9	3351.8	1149.2	996.88	1348.64	197.25	163.51	59.92
MEAN	4.87	17.1	33.2	69.4	120	108	38.3	32.2	45.0	6.36	5.27	2.00
MAX	117	246	345	755	832	634	357	352	359	45	70	23
MIN	.02	.26	.31	1.5	5.0	1.2	2.2	.99	.99	.10	.04	.01

CAL YR 1981 TOTAL 10160.06 MEAN 27.8 MAX 448 MIN .02  
WTR YR 1982 TOTAL 14481.00 MEAN 39.7 MAX 832 MIN .01

## 03259000 MILL CREEK AT CARTHAGE, OH

LOCATION.--Lat 39°12'07", long 84°28'16", in SW 1/4 sec. 1, R.1, T.3, Hamilton County, Hydrologic Unit 05090203, on right bank 100 ft (30 m) downstream from Anthony Wayne Bridge in Carthage, 1.0 mi (1.6 km) downstream from West Fork Mill Creek, and 11.0 mi (17.7 km) upstream from mouth.

DRAINAGE AREA.--115 mi<sup>2</sup> (298 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 507.00 ft (157.582 m) revised Ohio River datum. Prior to Oct. 1, 1954 at site 100 ft (30 m) upstream at datum 5.00 ft (1.524 m) higher. Oct. 1, 1954 to Sept. 30, 1977 at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good except those for winter periods and periods of doubtful record, Mar. 3 to Apr. 14, and, Sept. 6-30, 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 Creek Reservoir, 6.9 mi (11.1 km) upstream, beginning 1953 (see station 03256500). Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,030 ft<sup>3</sup>/s (256 m<sup>3</sup>/s) Sept. 14, 1979, gage height, 21.82 ft (6.651 m) present datum, from rating curve extended above 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,890 ft<sup>3</sup>/s (167 m<sup>3</sup>/s) Mar. 21, gage height 18.53 ft (5.648 m); minimum daily, 1.8 ft<sup>3</sup>/s (0.051 m<sup>3</sup>/s) Jan. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	611	133	1140	53	300	28	317	47	11	22
2	13	14	305	94	802	46	150	26	90	18	11	22
3	10	16	69	184	730	60	1200	27	35	30	14	24
4	9.1	17	39	686	771	150	493	32	34	22	79	17
5	12	19	26	100	558	263	230	26	41	18	414	9.8
6	31	17	17	66	129	150	250	25	21	16	201	12
7	15	14	17	47	66	100	150	50	20	39	319	15
8	12	13	18	35	50	70	130	214	1310	76	164	18
9	13	128	16	26	40	60	170	88	812	47	40	17
10	9.5	84	16	22	32	50	130	34	473	18	23	17
11	8.4	44	15	18	29	700	110	25	115	14	50	13
12	11	17	14	16	27	598	90	24	103	14	65	10
13	12	14	14	15	26	552	70	23	73	17	35	14
14	12	13	14	17	40	300	62	21	55	15	20	14
15	12	12	16	16	178	519	61	19	36	14	15	14
16	13	12	15	13	395	525	58	16	218	14	12	13
17	10	13	16	7.5	711	300	113	18	164	11	12	12
18	25	13	18	5.6	360	200	85	16	59	35	13	15
19	13	272	16	4.2	225	549	54	16	41	29	13	13
20	12	338	13	3.1	201	785	45	58	25	20	14	14
21	13	70	12	1.8	140	1780	47	940	25	27	32	15
22	14	51	112	623	139	800	41	522	50	209	21	16
23	28	35	663	1890	101	300	36	397	79	83	20	13
24	14	132	230	706	91	180	32	209	24	49	17	40
25	12	33	93	324	86	150	28	144	22	14	30	15
26	118	29	50	81	73	170	45	113	18	14	28	12
27	334	51	96	63	64	100	49	95	16	90	25	35
28	108	25	119	51	57	92	35	82	137	83	20	27
29	24	22	86	52	---	80	29	146	250	47	13	10
30	18	21	56	677	---	80	27	240	80	17	13	10
31	15	---	71	2960	---	652	---	46	---	16	22	---
TOTAL	964.0	1553	2873	8937.2	7261	10414	4320	3720	4743	1163	1766	498.8
MEAN	31.1	51.8	92.7	288	259	336	144	120	158	37.5	57.0	16.6
MAX	334	338	663	2960	1140	1780	1200	940	1310	209	414	40
MIN	8.4	12	12	1.8	26	46	27	16	16	11	11	9.8
CAL YR 1981	TOTAL	37158.6	MEAN	102	MAX	1320	MIN	7.8				
WTR YR 1982	TOTAL	48213.0	MEAN	132	MAX	2960	MIN	1.8				

## 03260700 BOKENGEHALAS CREEK NEAR DE GRAFF, OH

LOCATION.--Lat 40°20'50", long 83°53'28", in E. 1/2 sec. 3, R.14, T.2, Logan County, Hydrologic Unit 05080001, on right bank at downstream side of county road bridge, 2 mi (3 km) downstream from Bluejacket Creek, 2.8 mi (4.5 km) northeast of De Graff, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--36.3 mi<sup>2</sup> (94.0 km<sup>2</sup>).

PERIOD OF RECORD>--October 1957 to current year. Prior to October 1962, published as Buckongahelas Creek near Degraff.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,008.76 ft (307.470 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for the winter period, which are poor. Diurnal fluctuation caused by municipal plant operation in Bellefontaine, 9.8 mi (15.8 km) upstream; since storage capacity is small, daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--25 years, 33.1 ft<sup>3</sup>/s (0.937 m<sup>3</sup>/s), 12.38 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft<sup>3</sup>/s (50.4 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 6.83 ft (2.082 m); minimum daily, 2.2 ft<sup>3</sup>/s (0.062 m<sup>3</sup>/s) Sept. 29, 30, Oct. 7, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft<sup>3</sup>/s (8.50 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 4	1130	425 12.0	4.63 1.411	Mar. 4	2330	427 12.1	4.53 1.381
Jan. 23	1330	* 828 23.4	*5.62 1.713	Mar. 11	1630	331 9.37	3.97 1.210
Jan. 31	0015	482 13.7	4.88 1.487	Mar. 13	1215	300 8.50	3.73 1.137
Feb. 17	0930	788 22.3	5.56 1.695	Mar. 16	1700	467 13.2	4.69 1.430
Feb. 20	2200	465 13.2	4.68 1.426				

Minimum daily discharge, 6.9 ft<sup>3</sup>/s (0.20 m<sup>3</sup>/s) Oct. 2, 4.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	15	47	20	181	56	89	32	37	29	9.8	11
2	6.9	13	35	24	95	65	67	31	32	27	10	38
3	7.2	12	25	30	70	59	113	30	30	24	11	23
4	6.9	12	24	307	58	174	78	30	29	20	17	13
5	7.2	11	21	117	48	207	65	29	28	20	15	11
6	9.8	12	17	73	44	95	71	28	26	19	12	10
7	8.0	10	16	56	41	69	63	27	23	19	11	9.8
8	8.0	9.2	15	34	37	56	63	42	22	19	12	10
9	8.0	8.9	14	28	33	51	74	31	20	16	14	9.4
10	8.0	8.9	13	26	30	48	77	29	28	17	11	9.0
11	8.0	8.6	12	24	28	183	96	27	20	19	11	8.6
12	8.3	8.3	11	22	26	146	86	26	19	16	11	7.6
13	8.3	8.3	10	20	25	214	72	24	18	15	11	8.0
14	8.3	8.0	9.6	19	24	122	59	22	17	14	9.8	15
15	8.3	7.7	9.2	18	35	98	53	22	19	14	9.0	12
16	9.2	7.7	8.8	17	246	280	53	21	77	14	9.4	9.4
17	8.3	8.0	8.6	16	550	199	64	20	67	14	9.4	8.3
18	8.6	8.3	8.4	15	212	122	53	20	36	14	9.4	8.0
19	9.5	8.6	9.0	14	188	107	48	20	31	14	9.0	7.3
20	9.2	60	10	13	238	155	46	26	30	14	12	7.6
21	9.2	24	11	13	241	113	44	32	34	13	13	8.0
22	9.2	17	11	15	150	83	41	25	27	13	9.0	7.6
23	10	15	191	421	173	71	40	22	21	17	12	7.3
24	9.2	23	95	201	147	64	39	21	20	13	11	9.0
25	8.9	28	53	141	81	63	37	20	19	11	34	8.0
26	28	26	36	102	66	66	38	19	19	11	13	7.3
27	77	42	32	82	60	59	37	34	18	11	11	22
28	109	26	27	66	55	53	35	134	29	11	9.8	11
29	39	20	23	46	---	52	34	50	67	11	9.4	9.0
30	25	17	20	186	---	50	32	60	34	11	9.8	8.3
31	19	---	19	268	---	159	---	43	---	10	10	---
TOTAL	506.7	483.5	841.6	2434	3182	3339	1767	997	897	490	365.8	333.5
MEAN	16.3	16.1	27.1	78.5	114	108	58.9	32.2	29.9	15.8	11.8	11.1
MAX	109	60	191	421	550	280	113	134	77	29	34	38
MIN	6.9	7.7	8.4	13	24	48	32	19	17	10	9.0	7.3
CFSM	.45	.44	.75	2.16	3.14	2.98	1.62	.89	.82	.44	.33	.31
IN.	.52	.50	.86	2.49	3.26	3.42	1.81	1.02	.92	.50	.37	.34
CAL YR 1981 TOTAL	12293.2			MEAN 33.7	MAX 1030	MIN 5.0	CFSM .93	IN 12.60				
WTR YR 1982 TOTAL	15637.1			MEAN 42.8	MAX 550	MIN 6.9	CFSM 1.18	IN 16.02				

## 03261500 GREAT MIAMI RIVER AT SIDNEY, OH

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, Hydrologic Unit 05080001, on right bank 50 ft (15 m) upstream from North Street Bridge in Sidney, and 0.5 mi (0.8 km) downstream from Tawawa Creek.

DRAINAGE AREA.--541 mi<sup>2</sup> (1,401 km<sup>2</sup>).

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

REVISED RECORDS.--WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft (281.849 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft (15 m) downstream at datum 1.76 ft (0.536 m) higher. Sept. 18, 1919, to August, 1925, nonrecording gage at site 50 ft (15 m) downstream at present datum.

REMARKS.--Records good except those for the winter period, which are fair. Water supply for city of Sidney is pumped from the Great Miami River 1,200 ft (366 m) upstream and from wells adjacent to Great Miami River upstream from station. The pumpage averaged 4.3 ft<sup>3</sup>/s (0.12 m<sup>3</sup>/s) in 1982 and is returned as sewage 1.2 mi (1.9 km) downstream from the station. Some regulation by Indian Lake, 28 mi (45 km) upstream, capacity, 45,900 acre-ft (56.6 hm<sup>3</sup>); water diverted into Miami and Erie Canal at Port Jefferson, 2.8 mi (4.5 km) upstream, prior to 1926; amount of diversion not published. Sediment data collected at this site 1967 to 1975.

COOPERATION.--Gage-height tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--57 years (1925-82) 479 ft<sup>3</sup>/s (13.57 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft<sup>3</sup>/s (586 m<sup>3</sup>/s) Mar. 20, 1927, gage height 14.4 ft (4.39 m), from rating curve extended above 8,700 ft<sup>3</sup>/s (246 m<sup>3</sup>/s) on basis of velocity-area studies; maximum gage height, 15.91 ft (4.849 m) Jan. 21, 1959; minimum discharge, 1.5 ft<sup>3</sup>/s (0.041 m<sup>3</sup>/s) Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 ft<sup>3</sup>/s (0.23 m<sup>3</sup>/s) Sept. 23, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 19.6 ft (5.97 m), present datum, discharge, 44,000 ft<sup>3</sup>/s (1,250 m<sup>3</sup>/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
Jan. 4	1630	4,370	124	7.65	2.332	Feb. 23	2130	4,780	135	7.95	2.423
Jan. 31	----	4,700	133	-----	-----	Mar. 13	1200	4,190	119	7.40	2.256
Feb. 17-18	----	* 7,200	204	-----	-----	Mar. 16	1600	4,950	140	8.11	2.472
Feb. 20	2300	5,370	152	8.47	2.582	May 28	0130	5,870	166	8.89	2.710

Minimum daily discharge, 40 ft<sup>3</sup>/s (1.13 m<sup>3</sup>/s) Sept. 21, 22.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	194	461	530	2500	1080	2860	204	1360	270	65	55
2	56	158	616	576	1600	1400	2020	202	935	185	68	66
3	57	139	461	589	1100	1410	1990	199	623	160	69	125
4	62	126	391	3700	800	1920	1740	182	504	173	67	101
5	57	117	369	3270	580	3350	1280	179	401	188	96	77
6	58	115	343	2200	480	2710	1050	174	360	166	95	66
7	58	128	326	1610	390	2080	922	182	282	136	85	59
8	65	124	312	1030	350	1440	750	247	214	128	78	55
9	64	101	287	674	310	950	883	264	254	87	79	53
10	60	104	265	600	270	700	1120	218	638	135	77	52
11	57	98	241	520	240	1960	1630	188	621	152	72	51
12	55	87	230	470	220	3290	1720	172	465	130	67	50
13	55	85	210	420	210	3880	1570	153	350	117	63	46
14	54	83	190	380	200	3580	1260	162	304	104	59	49
15	55	81	160	350	200	2820	883	155	320	97	60	54
16	53	80	120	330	1600	3810	671	169	1530	93	54	55
17	54	116	110	310	6200	4190	632	175	2330	91	52	49
18	63	192	110	290	5200	3310	703	157	1460	92	50	46
19	58	206	110	280	4120	2580	559	152	854	98	49	44
20	57	440	120	270	3880	3300	464	298	570	94	51	42
21	59	408	130	260	4590	2580	485	696	615	88	55	40
22	58	315	148	260	3840	1860	387	378	451	90	63	40
23	57	273	2000	2100	4030	1310	338	311	332	92	65	41
24	58	359	2400	3200	3930	939	298	264	262	121	72	42
25	62	617	1470	1400	2930	794	279	208	191	109	110	47
26	88	515	772	600	2100	884	273	168	185	93	113	50
27	252	537	545	420	1510	873	282	1170	179	85	82	68
28	1110	518	523	360	1090	634	348	4470	221	77	68	89
29	726	392	535	320	---	512	272	2810	392	77	61	75
30	373	334	472	1700	---	489	218	2720	342	80	59	60
31	250	---	445	3800	---	2510	---	1980	---	70	55	---
TOTAL	4250	7042	14872	32819	54470	63145	27887	19007	17545	3678	2159	1747
MEAN	137	235	480	1059	1945	2037	930	613	585	119	69.6	58.2
MAX	1110	617	2400	3800	6200	4190	2860	4470	2330	270	113	125
MIN	53	80	110	260	200	489	218	152	179	70	49	40
CAL YR 1981	TOTAL	158511	MEAN 434	MAX 8410	MIN 43							
WTR YR 1982	TOTAL	248621	MEAN 681	MAX 6200	MIN 40							

## 03261950 LORAMIE CREEK NEAR NEWPORT, OH

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec, 24, T.11 N., R.4 E., Shelby County, Hydrologic Unit 05080001, right bank at downstream side of bridge on Cardo Roman Road, 1.1 mi (1.8 km) northwest of Newport, 3 mi (5 km) south of Fort Loramie, 3 mi (5 km) downstream from Mile Creek, and at mile 16.5 (26.6 km).

DRAINAGE AREA.--152 mi<sup>2</sup> (394 km<sup>2</sup>).

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

REVISED RECORDS.--WRD Ohio 1971: 1966(M).

GAGE.--Water-stage recorder. Datum of gage is 926.57 ft (282.419 m) National Geodetic Vertical Datum of 1929. October 1, 1964 to September 30, 1980 Water-stage recorder at same site at datum 0.43 ft (0.131 m) higher.

REMARKS.--Records fair except those for the winter period, which are poor. Some regulation by Lake Loramie 5 mi (8 km) upstream, capacity, 13,000 acre-ft (16.0 hm<sup>3</sup>). Sediment data collected at this site 1967 to 1975.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--18 years, 133 ft<sup>3</sup>/s (3.767 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,600 ft<sup>3</sup>/s (102 m<sup>3</sup>/s) June 14, 1981, maximum gage height, 14.08 ft (4.292 m) Feb. 24, 1975; minimum daily, 0.10 ft<sup>3</sup>/s (0.003 m<sup>3</sup>/s) Aug. 15, 16, 1965, Sept. 10-12, 14, 15, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 17.0 ft (5.18 m) and flood of Jan. 21, 1959 a stage of 14.2 ft (4.33 m), from flood profile furnished by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1500 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 5	0130	1600 45.3	10.92 3.328	Mar. 12	0530	1640 46.4	11.01 3.356
Jan. 31	1500	1670 47.3	11.05 3.368	Mar. 17	0530	1890 53.5	11.45 3.490
Feb. 18	0830	*2420 68.5	*12.27 3.740	May 28	2100	1600 45.3	10.93 3.331
Feb. 24	0700	1680 47.6	11.07 3.374				

Minimum daily discharge 0.69 ft<sup>3</sup>/s (0.020 m<sup>3</sup>/s) Nov. 11,12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.1	7.4	85	999	411	1130	17	476	28	3.7	1.8
2	1.7	.81	7.8	104	324	766	542	18	282	16	5.1	2.2
3	1.4	.85	9.7	190	174	653	423	17	161	14	10	3.3
4	1.2	.75	12	1140	100	551	416	16	100	16	8.1	2.9
5	1.3	.75	11	1380	60	1400	262	15	72	13	13	2.8
6	1.7	.86	7.1	648	47	955	182	15	49	8.8	7.1	2.5
7	2.5	.97	5.5	277	41	396	155	22	36	7.4	5.1	2.2
8	2.4	.91	5.3	165	35	203	162	197	31	7.4	4.3	2.0
9	2.0	.83	4.7	110	32	148	207	136	28	7.1	6.2	2.0
10	1.9	.80	4.4	66	30	152	319	86	29	6.2	5.6	1.9
11	1.9	.69	3.8	46	29	899	671	76	24	8.8	4.3	1.8
12	1.9	.69	3.3	39	29	1560	635	26	20	6.5	3.5	1.7
13	1.9	.78	2.8	35	28	1550	436	22	16	5.1	2.9	1.5
14	1.9	1.2	2.6	32	28	1280	255	21	13	4.3	2.5	1.2
15	1.9	1.2	2.5	29	27	736	163	20	14	3.9	2.5	1.5
16	2.0	1.3	2.3	27	149	1110	155	24	176	3.3	2.2	1.5
17	2.0	2.8	2.5	26	1480	1750	190	19	325	3.1	1.9	1.4
18	3.6	1.9	5.3	25	2360	1030	199	16	198	4.6	1.9	1.3
19	4.9	.80	6.1	24	1950	544	154	16	108	5.3	1.7	1.2
20	3.8	2.0	5.0	23	1380	1120	55	22	63	5.6	1.5	1.1
21	3.4	3.1	4.5	22	1570	920	47	41	100	5.1	2.3	1.1
22	3.3	3.9	9.3	22	1370	435	44	44	78	5.6	2.0	.97
23	3.7	2.7	527	570	1320	246	38	42	47	12	2.0	.89
24	4.0	4.4	670	1020	1570	175	35	33	29	9.2	3.5	.82
25	3.7	6.7	297	442	917	144	35	26	21	7.4	11	.75
26	4.4	6.3	146	197	375	166	34	20	17	5.9	5.3	.89
27	16	6.5	97	109	234	160	36	260	15	5.3	3.7	4.1
28	34	5.4	101	66	231	115	28	1330	13	5.3	2.8	2.8
29	12	4.8	78	46	---	98	21	1410	149	5.9	2.2	1.4
30	3.6	4.4	55	361	---	85	18	1270	73	5.3	1.7	.97
31	1.7	---	49	1520	---	1010	---	821	---	4.6	1.7	---
TOTAL	133.4	70.19	2144.9	8846	16889	20768	7047	6098	2763	246.0	131.3	52.49
MEAN	4.30	2.34	69.2	285	603	670	235	197	92.1	7.94	4.24	1.75
MAX	34	6.7	670	1520	2360	1750	1130	1410	476	28	13	4.1
MIN	1.2	.69	2.3	22	27	85	18	15	13	3.1	1.5	.75

CAL YR 1981 TOTAL 42680.46 MEAN 117 MAX 3340 MIN .69  
WTR YR 1982 TOTAL 65189.28 MEAN 179 MAX 2360 MIN .69

## GREAT MIAMI RIVER BASIN

03262000 LORAMIE CREEK AT LOCKINGTON, OH

LOCATION.--Lat 40°12'35", long 84°14'32", in NE 1/4 sec. 30, T.7 N., R.6 E., Shelby County, Hydrologic Unit 05080001, on left bank at downstream side of county road bridge, 1,300 ft (396 m) downstream from Lockington Dam, 0.5 mi (0.8 km) northwest of Lockington, and at mile 1.9 (3.1 km).

DRAINAGE AREA.--257 mi<sup>2</sup> (666 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 923. 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 800.03 ft (243.849 m) National Geodetic Vertical Datum of 1929. Prior to July 3, 1924, nonrecording gage at same site at datum 75.96 ft (23.153 m) 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 (22.848 m) higher.

REMARKS.--Records fair. Slight regulation by Lake Loramie 18 mi (29 km) upstream, capacity, 13,000 acre-ft (16.0 hm<sup>3</sup>). Flood flow regulated by Lockington retarding basin beginning in 1921.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--67 years, 209 ft<sup>3</sup>/s (5.919 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft<sup>3</sup>/s (295 m<sup>3</sup>/s) May 7, 1916, gage height, 86.4 ft (26.33 m), present datum, from rating curve extended above 5,400 ft<sup>3</sup>/s (153 m<sup>3</sup>/s); minimum daily, 1.7 ft<sup>3</sup>/s (0.048 m<sup>3</sup>/s) Sept. 4, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 91.6 ft (27.92 m), present datum, discharge, 25,600 ft<sup>3</sup>/s (725 m<sup>3</sup>/s), at site upstream from Turtle Creek, drainage area, 211 mi<sup>2</sup> (546 km<sup>2</sup>), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,180 ft<sup>3</sup>/s (118 m<sup>3</sup>/s) Feb. 17, gage height, 83.15 ft (25.344 m); minimum daily, 2.8 ft<sup>3</sup>/s (0.08 m<sup>3</sup>/s) Sept. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	14	20	179	1210	769	1200	56	776	53	12	6.2
2	7.6	12	32	186	639	1180	1000	55	479	34	13	6.9
3	7.7	10	24	329	294	1020	900	54	265	28	14	7.0
4	8.0	9.3	21	2240	193	1210	660	52	178	26	16	6.9
5	8.5	9.1	21	1590	140	1860	420	49	131	25	14	6.7
6	8.1	8.4	20	989	100	1330	360	47	103	21	24	6.3
7	7.7	7.8	18	421	84	687	300	50	84	18	18	5.8
8	7.7	7.6	17	223	68	330	310	233	73	16	16	5.5
9	8.5	7.7	15	140	60	238	450	242	76	15	14	5.3
10	8.2	7.5	14	68	56	207	1300	144	105	17	10	5.1
11	9.0	7.4	13	54	52	1500	1100	145	69	18	12	5.0
12	8.9	7.3	13	48	50	1900	840	82	56	15	13	4.8
13	8.7	7.1	12	44	48	1930	480	62	49	13	11	4.5
14	4.7	7.0	11	41	47	1220	360	57	44	10	10	4.4
15	5.3	6.9	11	39	46	1560	300	53	66	11	9.2	4.3
16	7.8	6.7	10	38	220	2290	270	53	955	11	8.6	4.1
17	9.6	6.8	11	37	2920	1710	380	55	838	10	8.4	4.1
18	14	6.9	11	36	3290	939	280	45	382	10	8.2	4.0
19	20	7.7	10	35	2560	1790	180	42	210	11	8.0	3.9
20	15	14	11	34	2040	1480	120	62	140	10	7.6	4.2
21	12	12	10	33	2300	889	96	119	160	10	11	4.1
22	10	10	13	33	1950	459	86	93	145	10	10	4.4
23	11	9.8	1120	1070	2110	314	83	83	98	11	10	3.9
24	12	15	1120	1020	2280	244	77	74	74	13	11	2.8
25	11	24	507	765	1340	285	86	62	58	12	27	2.9
26	14	23	248	305	656	284	84	54	48	11	22	2.9
27	23	19	181	165	401	216	82	469	42	9.7	17	5.1
28	108	17	192	134	442	180	77	3050	44	9.1	13	8.3
29	57	15	148	91	---	164	67	1600	88	8.8	12	7.7
30	30	13	105	563	---	1380	59	1800	108	10	11	5.2
31	18	---	92	1630	---	1490	---	1210	---	13	6.9	---
TOTAL	489.7	329.0	4051	12580	25596	31055	12007	10252	5944	489.6	397.9	152.3
MEAN	15.8	11.0	131	406	914	1002	400	331	198	15.8	12.8	5.08
MAX	108	24	1120	2240	3290	2290	1300	3050	955	53	27	8.3
MIN	4.7	6.7	10	33	46	164	59	42	42	8.8	6.9	2.8
CAL YR 1981	TOTAL	73530.0	MEAN	201	MAX	4010	MIN	4.7				
WTR YR 1982	TOTAL	103343.5	MEAN	283	MAX	3290	MIN	2.8				

## 03262700 GREAT MIAMI RIVER AT TROY, OH

LOCATION.--Lat 40°02'25", long 84°11'52", Miami County, Hydrologic Unit 05080001, 400 ft (122 m) downstream from B. and O. Railroad bridge, 1,300 ft (396 m) downstream from bridge on State Highway 55 at Troy, 1.2 mi (1.9 km) upstream from small left bank tributary, 2.3 mi (3.7 km) downstream from Spring Creek, and at mile 105 (169 km).

DRAINAGE AREA.--926 mi<sup>2</sup> (2,398 km<sup>2</sup>).

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 (247.092 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flood flow regulated by retarding basin on Loramie Creek, 18 mi (29 km) upstream. Low and medium flow slightly regulated by Indian Lake; capacity, 45,900 acre-ft (56.6 hm<sup>3</sup>), 54 mi (87 km) upstream. Water supply for city of Troy is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 4.5 ft<sup>3</sup>/s (0.13 m<sup>3</sup>/s) in 1982 and is returned as sewage 1 mi (2 km) downstream from the station. Water quality data collected at this site 1965 to 1974. Sediment data collected 1970 to 1974.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--20 years, 812 ft<sup>3</sup>/s (23.00 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft<sup>3</sup>/s (490 m<sup>3</sup>/s) Mar. 6, 1963, gage height, 14.66 ft (4.468 m); minimum, 0.50 ft<sup>3</sup>/s (0.014 m<sup>3</sup>/s) July 12, 13, 1963, result of temporary storage during repair of dam upstream; minimum daily discharge, 4.3 ft<sup>3</sup>/s (0.122 m<sup>3</sup>/s) July 17, 1977 result of dam closure upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 11, 1958 reached a stage of 16.4 ft (5.00 m), discharge, 21,000 ft<sup>3</sup>/s (595 m<sup>3</sup>/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,300 ft<sup>3</sup>/s (405 m<sup>3</sup>/s) Feb. 17, gage height, 13.17 ft (4.014 m); minimum daily, 53 ft<sup>3</sup>/s (1.50 m<sup>3</sup>/s) Sept. 21-23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	281	402	814	4860	1780	4910	368	2800	456	87	78
2	87	244	599	989	3400	2690	3490	362	1930	336	83	72
3	73	210	528	941	2170	2880	3400	357	1170	281	103	90
4	63	191	444	5700	1390	2870	2910	352	867	257	129	142
5	83	183	408	5720	922	5900	2010	336	682	271	138	105
6	90	179	385	4050	643	4640	1510	325	599	266	135	81
7	90	161	368	2730	535	3230	1400	341	515	235	138	74
8	85	191	346	1760	470	2060	1170	501	495	202	129	77
9	85	183	325	1080	400	1380	1300	659	508	198	108	76
10	87	161	305	501	370	989	1730	515	960	165	108	84
11	80	169	285	460	350	3020	2750	475	840	214	106	79
12	78	151	290	440	340	5590	2910	408	690	223	100	76
13	76	148	295	420	330	6390	2490	374	549	187	95	74
14	73	135	276	390	330	5980	1820	341	463	179	95	73
15	73	135	295	380	360	4590	1310	230	426	151	87	69
16	71	135	227	370	1560	5830	969	295	2390	145	87	66
17	73	135	198	360	10800	7130	941	300	4040	141	65	71
18	73	194	190	350	10100	5420	1010	290	2580	138	64	60
19	76	248	180	340	7250	3990	876	262	1510	135	54	59
20	73	379	210	340	6430	5730	714	300	904	138	78	57
21	78	488	190	330	8020	4800	621	913	894	132	76	53
22	73	374	450	370	6360	3190	613	643	780	129	70	53
23	73	325	2000	2710	6600	2060	556	501	535	141	82	53
24	65	341	4210	5450	7300	1490	591	456	444	135	91	56
25	67	535	2760	3770	4970	1220	542	379	357	165	153	66
26	114	563	1510	1330	3270	1330	521	325	285	148	158	67
27	231	495	979	780	2250	1300	456	556	281	117	146	102
28	960	549	922	730	1690	1030	508	8840	368	111	112	118
29	1010	444	849	556	---	788	444	5060	606	100	95	132
30	535	374	738	1450	---	755	408	5100	621	95	86	114
31	368	---	682	5880	---	3750	---	4070	---	98	83	---
TOTAL	5146	8301	21846	51491	93470	103802	44880	34234	30089	5689	3141	2377
MEAN	166	277	705	1661	3338	3348	1496	1104	1003	184	101	79.2
MAX	1010	563	4210	5880	10800	7130	4910	8840	4040	456	158	142
MIN	63	135	180	330	330	755	408	230	281	95	54	53
CAL YR 1981	TOTAL	276084	MEAN	756	MAX	13500	MIN	63				
WTR YR 1982	TOTAL	404466	MEAN	1108	MAX	10800	MIN	53				

## GREAT MIAMI RIVER BASIN

03263000 GREAT MIAMI RIVER AT TAYLORSVILLE, OH

LOCATION.--Lat 39°52'27", long 84°09'45", in SW 1/4 sec. 36, R.8, T.2, Montgomery County, Hydrologic Unit 05080001, on right upstream face of Taylorsville Dam, 0.8 mi (1.3 km) north of Taylorsville, 2.1 mi (3.4 km) east of Vandalia, 9.5 mi (15.3 km) upstream from Stillwater River, and at mile 90.9 (146.3 km).

DRAINAGE AREA.--1,149 mi<sup>2</sup> (2,976 km<sup>2</sup>).

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.

REVISED RECORDS.--WSP 743. 1924(M). WSP 853. 1930, 1937. WSP 923. 1922-24. WSP 1385. 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.00 ft (231.648 m) National Geodetic Vertical Datum of 1929 Prior to October 1921, nonrecording gage at site 1.7 mi (2.7 km) upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 50 ft (15.2 m) downstream at outlet works of Taylorsville Dam at datum 59.92 ft (18.264 m) lower, October 1921 to September 1978 at site 650 ft (198 m) downstream at datum 59.92 ft (18.264 m) lower.

REMARKS.--Records good except those for the winter period, which are fair. Flood flow regulated by retarding basins on Great Miami River, just downstream from station and on Loramie Creek 28 mi (45 km) upstream from station beginning in 1921. Low and medium flow slightly regulated by Indian Lake 64 mi (103 km) upstream from station, and by Lake Loramie 47 mi (76 km) upstream from station on Loramie Creek; combined capacity, 58,900 acre-ft (72.6 hm<sup>3</sup>).

COOPERATION.--Base data furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--64 years, 1002 ft<sup>3</sup>/s (28.38 m<sup>3</sup>/s), 11.84 in/yr (301 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft<sup>3</sup>/s (889 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 75.44 ft (22.994 m) at site and datum then in use, minimum daily, 25 ft<sup>3</sup>/s (0.71 m<sup>3</sup>/s) July 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 25.4 ft (7.74 m) at site at Tadmor, discharge, 127,000 ft<sup>3</sup>/s (3,600 m<sup>3</sup>/s) computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,600 ft<sup>3</sup>/s (442 m<sup>3</sup>/s) Feb. 18, gage height, 18.95 ft (5.776 m); minimum daily, 92 ft<sup>3</sup>/s (2.61 m<sup>3</sup>/s) Sept. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	398	787	1080	9670	1950	5550	461	2980	846	125	134
2	150	337	934	1230	4450	2580	3920	440	2160	609	116	124
3	150	290	876	1190	2990	2980	3680	422	1470	484	128	145
4	132	257	706	5660	2130	2550	3470	416	1130	427	146	174
5	145	245	616	7660	1400	6770	2460	387	898	409	211	173
6	171	239	557	4700	950	5300	1990	386	759	392	153	137
7	158	220	549	2970	800	3670	1810	383	663	355	228	117
8	155	217	521	2010	720	2430	1550	475	606	313	199	115
9	147	245	471	1430	640	1800	1600	713	888	287	148	114
10	153	210	429	1100	580	1370	1970	602	1080	281	142	115
11	150	206	392	960	540	2490	2650	499	1040	313	147	120
12	152	202	375	840	520	6770	2980	463	882	305	140	121
13	154	186	396	750	500	7040	2710	371	716	274	124	123
14	150	182	361	700	490	7470	2160	340	585	240	125	121
15	150	171	359	650	600	5330	1670	336	525	218	124	107
16	146	175	303	610	2450	5860	1320	292	1930	209	113	103
17	145	170	254	580	10500	9670	1230	345	4790	199	106	107
18	145	190	235	560	14700	7170	1270	343	2840	193	98	105
19	151	386	220	540	9830	4760	1190	333	1810	197	96	99
20	154	700	290	520	7310	7840	1010	315	1210	203	120	112
21	151	721	236	520	9020	6630	836	822	1080	187	138	108
22	158	565	303	520	7440	4080	837	857	1040	180	116	93
23	158	469	3280	4040	7100	2710	709	915	780	191	123	92
24	145	532	5000	4430	8130	2030	671	658	630	177	202	98
25	144	722	3080	2610	5860	1680	637	525	533	190	253	121
26	227	844	1850	1660	3700	1750	633	432	431	182	231	110
27	417	750	1290	1040	2550	1700	606	421	422	153	234	141
28	1210	784	1180	953	2020	1470	588	7170	753	140	190	170
29	1380	677	1070	750	---	1180	580	6950	2170	129	164	170
30	822	542	943	1910	---	1100	512	5870	1330	126	141	175
31	536	---	861	10200	---	3110	---	4580	---	127	136	---
TOTAL	8354	11832	28724	64373	117590	123240	52799	37522	38131	8536	4717	3744
MEAN	269	394	927	2077	4200	3975	1760	1210	1271	275	152	125
MAX	1380	844	5000	10200	14700	9670	5550	7170	4790	846	253	175
MIN	132	170	220	520	490	1100	512	292	422	126	96	92
CFSM	.23	.34	.81	1.81	3.66	3.46	1.53	1.05	1.11	.24	.13	.11
IN.	.27	.38	.93	2.08	3.81	3.99	1.71	1.21	1.23	.28	.15	.12

CAL YR 1981 TOTAL 352852 MEAN 967 MAX 14200 MIN 120 CFSM .84 IN 11.42  
WTR YR 1982 TOTAL 499562 MEAN 1369 MAX 14700 MIN 92 CFSM 1.19 IN 16.17

03264000 GREENVILLE CREEK NEAR BRADFORD, OH

LOCATION --Lat 40°06'08", long 84°25'48", in SW 1/4 NW 1/4 sec. 34, T.9 N., R.4 E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on State Highway 721, 0.8 mi (1.3 km) downstream from small left bank tributary, 1.8 mi (2.9 km) south of Bradford, and 6 mi (10 km) upstream from mouth.

DRAINAGE AREA.--193 mi<sup>2</sup> (500 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 803. 1933(M). WSP 1235. 1936, 1937(M). WSP 1908. Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 948.9 ft (289.22 m) National Geodetic Vertical Datum of 1929. 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 (61 m) downstream at same datum.

REMARKS.--Records good except those for the winter period, which are fair. Some diurnal fluctuation caused by mill 8 mi (13 km) upstream from station; daily flows are not affected appreciably. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--52 years, 173 ft<sup>3</sup>/s (4.899 m<sup>3</sup>/s), 12.17 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,320 ft<sup>3</sup>/s (264 m<sup>3</sup>/s) May 14, 1933, gage height, 9.2 ft (2.80 m), maximum gage height, 10.31 ft (3.142 m) Mar. 5, 1963, from high-water mark in well (ice jam); minimum discharge, 4.8 ft<sup>3</sup>/s (0.14 m<sup>3</sup>/s) Sept. 17, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 12.1 ft (3.69 m), discharge, 18,200 ft<sup>3</sup>/s (515 m<sup>3</sup>/s), at site with drainage area of 213 mi<sup>2</sup> (552 km<sup>2</sup>), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1500 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s) and Maximums (\*).

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	(ft)	(m)			(ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	(ft)	(m)
Jan.31	1900	1540	43.6	5.22	1.591	Mar. 17	0530	1500	42.5	5.16	1.573
Feb.17	1430	*3800	108	*8.03	2.448	Mar. 20	2230	1780	50.4	5.58	1.701
Feb.21	1630	1970	55.8	5.86	1.786						

Minimum daily discharge, 17 ft /s (0.48 m /s) Sept. 19-21.

REVISIONS.--The peak discharges, annual maximums (\*) and minimum daily discharges for the 1980 Water Year have been revised as shown in the following table. They supercede figures published in WRD-OH-1980-1

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	(ft)	(m)			(ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	(ft)	(m)
Nov. 26	1700	1740	49.3	5.59	1.704	Mar. 22	0130	2040	57.8	6.01	1.832
Feb. 22	1700	1660	47.0	5.48	1.670	June 3	1700	*3650	103	*7.89	2.405
Mar. 9	0030	2020	57.2	5.99	1.826	June 29	----	3000	85.0	----	----

Minimum daily discharge, 30 ft /s (0.85 m /s) Sept. 27,28.

## 03264000 GREENVILLE CREEK NEAR BRADFORD, OH--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	54	64	142	1060	404	701	114	498	116	36	29
2	28	49	75	147	576	539	422	114	430	88	36	38
3	27	49	64	189	329	477	595	114	267	79	37	43
4	26	47	59	1120	271	546	554	114	201	75	37	27
5	28	49	55	1060	200	1080	356	109	172	70	42	24
6	35	46	52	481	170	550	346	112	143	60	38	23
7	31	41	50	322	150	343	339	123	126	58	37	22
8	28	41	49	200	140	261	339	302	130	57	46	23
9	28	40	43	110	130	232	364	261	128	53	42	24
10	31	38	40	95	120	215	442	183	112	53	37	26
11	34	34	38	88	110	775	535	158	97	57	33	26
12	34	34	35	80	100	1300	411	138	86	57	33	23
13	37	37	34	74	98	1170	336	123	83	49	33	24
14	44	38	33	70	96	949	280	107	77	42	32	23
15	28	37	33	66	94	625	238	107	72	42	29	21
16	26	34	32	64	332	958	223	103	434	39	28	19
17	31	34	32	62	2760	1260	249	99	721	38	28	19
18	38	32	31	60	2640	669	255	99	364	39	28	19
19	41	35	31	60	1470	554	223	90	229	42	26	17
20	41	60	33	60	1110	1490	204	85	169	95	26	17
21	40	54	36	60	1910	1230	178	107	156	118	42	17
22	41	46	42	100	1240	653	161	107	130	70	30	21
23	40	43	694	809	1370	481	150	212	112	101	33	21
24	38	54	568	1200	1580	389	145	164	97	68	33	21
25	38	60	294	717	741	336	140	121	88	53	36	21
26	59	60	205	485	473	396	140	105	83	46	33	22
27	131	60	171	367	374	339	138	235	77	43	32	36
28	221	54	166	277	356	277	121	856	75	42	29	41
29	111	47	142	229	---	252	116	517	204	43	28	30
30	77	46	115	465	---	238	114	754	180	41	29	23
31	62	---	107	1470	---	713	---	473	---	37	29	---
TOTAL	1501	1353	3423	10729	20000	19701	8815	6306	5741	1871	1038	740
MEAN	48.4	45.1	110	346	714	636	294	203	191	60.4	33.5	24.7
MAX	221	60	694	1470	2760	1490	701	856	721	118	46	43
MIN	26	32	31	60	94	215	114	85	72	37	26	17
CFSM	.25	.23	.57	1.79	3.70	3.30	1.52	1.05	.99	.31	.17	.13
IN.	.29	.26	.66	2.07	3.85	3.80	1.70	1.22	1.11	.36	.20	.14
CAL YR 1981	TOTAL	54110	MEAN 148	MAX 2320	MIN 20	CFSM .77	IN 10.43					
WTR YR 1982	TOTAL	81218	MEAN 223	MAX 2760	MIN 17	CFSM 1.16	IN 15.65					

## 03265000 STILLWATER RIVER AT PLEASANT HILL, OH

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec. 18, T.7 N., R.5 E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on Laurer Road, 0.8 mi (1.3 km) northwest of Pleasant Hill, 2 mi (3 km) downstream from Painter Creek, 2 mi (3 km) upstream from Canyon Run, and at mile 28.35 (45.62 km).

DRAINAGE AREA.--503 mi<sup>2</sup> (1,303 km<sup>2</sup>).

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.

REVISED RECORDS.--WSP 523: 1917. WSP 1305: 1920(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 846.73 ft (258.083 m) National Geodetic Vertical Datum of 1912. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1963 to 1975.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--60 years, 446 ft<sup>3</sup>/s (12.63 m<sup>3</sup>/s), 12.04 in/yr (306 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft<sup>3</sup>/s (748 m<sup>3</sup>/s) Jan. 14, 1937, from rating curve extended above 14,500 ft<sup>3</sup>/s (411 m<sup>3</sup>/s) on basis of velocity-area study; maximum gage height, 18.46 ft (5.627 m) June 29, 1980; minimum discharge observed, 4 ft<sup>3</sup>/s (0.11 m<sup>3</sup>/s) Oct. 17, 1920, July 12, 22, Aug. 30, 1921.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 17.5 ft (5.33 m). Discharge, at site about 3 mi (5 km) upstream, 51,400 ft<sup>3</sup>/s (1,460 m<sup>3</sup>/s), computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft<sup>3</sup>/s (142 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 4	1800	5800 164	9.53 2.905	Feb. 24	0330	5640 160	9.37 2.856
Jan.23	1430	5850 166	9.59 2.923	Mar. 12	0030	5040 143	8.72 2.658
Jan.30	2200	6470 183	10.21 3.112	Mar. 17	0200	5600 159	9.32 2.841
Feb.17	1700	*13400 379	*14.99 4.569	Mar. 20	1130	5320 151	9.02 2.749
Feb.21	0200	6240 177	9.99 3.045				

Minimum discharge 16 ft<sup>3</sup>/s (0.453 m<sup>3</sup>/s) Sept. 17,18.

DAY	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982, MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	97	119	409	2320	1250	1890	203	1160	250	54	33
2	43	86	166	414	1160	1880	1030	203	1080	179	54	39
3	47	80	141	539	773	1480	1600	196	604	159	60	57
4	43	76	123	4620	530	1580	1400	196	432	153	60	38
5	42	78	108	3520	421	3650	842	189	352	136	65	33
6	42	75	99	1370	342	1490	780	189	293	120	65	30
7	53	70	96	833	260	892	760	196	245	110	62	27
8	47	66	96	500	230	648	807	648	303	103	69	27
9	45	65	87	240	210	550	892	655	415	101	72	27
10	44	62	81	160	190	492	1250	383	367	103	58	28
11	48	57	74	150	190	2670	1650	303	245	101	56	28
12	53	56	74	140	180	4080	1200	258	196	103	54	25
13	52	58	72	130	180	3980	892	233	179	90	53	23
14	58	60	69	130	192	2830	640	207	159	80	49	24
15	58	58	69	120	203	1700	523	199	150	74	46	23
16	41	56	67	120	951	3510	480	185	1440	69	41	19
17	42	55	68	120	9990	4460	523	179	2440	67	38	18
18	51	55	67	110	7770	1890	604	203	1040	65	38	19
19	56	64	52	110	4190	1410	468	172	590	69	34	25
20	59	154	54	110	3650	4740	415	159	410	84	39	23
21	59	113	56	110	5400	3150	357	182	404	192	56	24
22	58	90	84	134	3490	1570	307	250	342	125	51	28
23	61	81	2740	2670	4050	1120	284	347	250	144	52	29
24	56	98	2250	2520	4680	885	271	289	207	123	50	32
25	54	127	931	1200	1900	753	267	203	182	90	58	36
26	86	134	554	767	1140	966	262	179	169	78	59	35
27	196	125	442	470	921	856	254	342	156	71	50	45
28	608	109	469	340	929	655	229	2830	162	67	42	64
29	260	97	365	250	---	577	210	1370	648	67	35	54
30	155	89	276	1610	---	536	207	2400	450	64	33	41
31	117	---	256	4690	---	2390	---	1310	---	60	32	---
TOTAL	2677	2491	10205	28606	56442	58640	21294	14858	15070	3297	1585	954
MEAN	86.4	83.0	329	923	2016	1892	710	479	502	106	51.1	31.8
MAX	608	154	2740	4690	9990	4740	1890	2830	2440	250	72	64
MIN	41	55	52	110	180	492	207	159	150	60	32	18
CFSM	.17	.17	.65	1.84	4.01	3.76	1.41	.95	1.00	.21	.10	.06
IN.	.20	.18	.75	2.12	4.17	4.34	1.57	1.10	1.11	.24	.12	.07
CAL YR 1981	TOTAL	147990	MEAN 405	MAX 5850	MIN 28	CFSM .81	IN 10.94					
WTR YR 1982	TOTAL	216119	MEAN 592	MAX 9990	MIN 18	CFSM 1.18	IN 15.98					

## 03266000 STILLWATER RIVER AT ENGLEWOOD, OH

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec. 23, T.5 N., R.5 E., Montgomery County, Hydrologic Unit 05080001, on right bank 1,000 ft (305 m) downstream from Englewood Dam, 1 mi (1.6 km) southeast of Englewood, and at mile 8.9 (14.3 km).

DRAINAGE AREA.--650 mi<sup>2</sup> (1,684 km<sup>2</sup>).

PERIOD OF RECORD.--October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 699.97 ft (213.351 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter period, which are fair. Flood flow regulated by Englewood retarding basin.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--57 years, 582 ft<sup>3</sup>/s (16.48 m<sup>3</sup>/s), 12.16 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,980 ft<sup>3</sup>/s (283 m<sup>3</sup>/s) June 15, 1958, gage height, 80.88 ft (24.652 m); minimum, 3.7 ft<sup>3</sup>/s (0.10 m<sup>3</sup>/s) Sept. 30, Oct. 1, 1944, gage height, 71.36 ft (21.751 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 85,400 ft<sup>3</sup>/s (2,420 m<sup>3</sup>/s) at site 1 mi (1.6 km) downstream, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,820 ft<sup>3</sup>/s (193 m<sup>3</sup>/s) Feb. 18, gage height, 78.95 ft (24.064 m); minimum, 36 ft<sup>3</sup>/s (1.02 m<sup>3</sup>/s) Sept. 18, gage height, 71.91 ft (21.918 m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	164	194	645	5220	1390	3060	264	1440	392	76	58
2	72	148	239	795	3890	2060	1570	264	1670	269	79	58
3	66	139	219	802	1810	2050	1870	259	880	231	79	59
4	67	130	192	3130	1210	1480	2270	253	555	219	86	70
5	69	126	170	4740	660	3470	1280	248	436	207	117	58
6	75	125	153	3670	500	3100	1120	243	361	188	90	56
7	69	115	148	1590	420	1420	1040	249	313	177	114	54
8	71	107	146	994	370	934	1040	389	303	169	162	51
9	69	107	138	702	340	743	1130	868	950	159	127	49
10	67	102	128	520	320	624	1490	483	624	157	105	49
11	64	98	112	440	290	1710	2050	364	390	164	86	49
12	67	95	118	380	280	4260	1740	315	292	150	78	47
13	70	92	112	350	270	4300	1240	286	256	145	73	45
14	69	90	112	330	260	4440	902	263	235	133	69	45
15	72	90	110	310	300	3390	674	248	225	122	65	44
16	72	91	107	290	1180	2890	594	237	1110	115	64	42
17	61	86	110	270	4330	4580	611	221	3260	108	59	39
18	59	84	106	260	6590	4340	708	235	2040	104	55	38
19	64	111	91	250	6660	2600	588	282	923	111	53	38
20	66	184	81	240	6150	3850	511	249	569	109	67	41
21	75	186	87	230	6000	4870	443	256	456	147	128	41
22	72	149	126	230	5730	3980	384	271	455	187	85	38
23	76	132	2180	2080	5210	1970	347	383	340	158	79	38
24	71	150	3770	3570	5170	1390	329	384	288	168	139	42
25	69	162	2020	2130	4770	1130	323	286	258	140	211	55
26	101	173	1090	973	2650	1260	326	247	242	120	132	48
27	216	182	815	596	1310	1260	313	298	252	108	96	58
28	780	165	793	500	1190	942	294	2460	279	103	80	63
29	488	150	676	420	---	780	272	2310	450	94	68	76
30	267	139	499	898	---	698	266	2800	788	89	62	69
31	199	---	438	4380	---	1670	---	2260	---	81	61	---
TOTAL	3781	3872	15280	36715	73080	73581	28785	18175	20640	4824	2845	1518
MEAN	122	129	493	1184	2610	2374	960	586	688	156	91.8	50.6
MAX	780	186	3770	4740	6660	4870	3060	2800	3260	392	211	76
MIN	59	84	81	230	260	624	266	221	225	81	53	38
CFSM	.19	.20	.76	1.82	4.02	3.65	1.48	.90	1.06	.24	.14	.08
IN.	.22	.22	.87	2.10	4.18	4.21	1.65	1.04	1.18	.28	.16	.09
CAL YR 1981	TOTAL	204507	MEAN 560	MAX 6240	MIN 59	CFSM .86	IN 11.70					
WTR YR 1982	TOTAL	283096	MEAN 776	MAX 6660	MIN 38	CFSM 1.19	IN 16.20					

## 03267000 MAD RIVER NEAR URBANA, OH

LOCATION.--Lat 40°06'27", long 83°47'57", on west line of sec. 35, T.5 E., R.11 N., Champaign County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on U.S. Highway 36, 1.8 mi (2.9 km) upstream from Dugan Run, 1.8 mi (2.9 km) downstream from Muddy Creek, 2.5 mi (4.0 km) west of Urbana, and at mile 39.7 (63.9 km).

DRAINAGE AREA.--162 mi<sup>2</sup> (420 km<sup>2</sup>).

PERIOD OF RECORD.--September 1925 to September 1931, August 1939 to current year.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft (300.295 m) National Geodetic Vertical Datum of 1929. 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 (183 m) downstream at datum 0.36 ft (0.110 m) lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District<sup>TM</sup>.

AVERAGE DISCHARGE.--49 years, 145 ft<sup>3</sup>/s (4.106 m<sup>3</sup>/s), 12.16 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft<sup>3</sup>/s (227 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 12.05 ft (3.673 m), from rating curve extended above 4,000 ft<sup>3</sup>/s (113 m<sup>3</sup>/s) on basis of estimate of peak flow based on contracted-opening measurement at site 3 mi (5 km) downstream with drainage area of 235 mi<sup>2</sup> (609 km<sup>2</sup>) adjusted to gage site by 0.8 power of the drainage-area ratio; minimum, 2.1 ft<sup>3</sup>/s (0.059 m<sup>3</sup>/s) Jan. 21, 1963, gage height, 2.33 ft (0.710 m), result of freezeup; minimum daily, 24 ft<sup>3</sup>/s (0.68 m<sup>3</sup>/s) Feb. 2, 3, 1945, Jan. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft<sup>3</sup>/s (39.6 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage (ft)	height (m)
Jan. 31	2400	* 2360 66.8	* 6.82	2.079	Mar. 16	1600	1830 51.8	6.09	1.856
Feb. 17	1000	1960 55.5	6.28	1.914					

Minimum discharge 61 ft<sup>3</sup>/s (1.73 m<sup>3</sup>/s) Oct. 16, 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	110	174	141	1150	252	410	171	150	123	71	73
2	84	104	173	132	555	252	312	164	138	120	71	93
3	84	102	134	138	479	252	491	164	132	126	71	100
4	87	97	124	874	427	438	372	160	129	123	84	89
5	87	97	118	404	331	627	312	157	126	118	97	82
6	92	94	110	270	284	362	307	157	123	115	80	81
7	92	87	108	230	248	288	279	153	120	115	80	78
8	92	87	101	180	235	256	279	160	120	115	78	80
9	80	87	95	150	226	243	302	153	120	112	78	80
10	67	87	93	130	202	235	307	150	141	102	73	80
11	65	87	88	120	194	580	351	147	123	104	73	80
12	63	84	87	110	179	534	326	144	120	97	73	80
13	63	82	87	110	186	643	298	138	118	99	75	76
14	65	82	87	110	186	461	261	135	115	99	75	77
15	67	80	87	100	331	383	248	132	115	99	73	82
16	65	78	81	100	1020	910	248	132	194	97	73	83
17	67	78	80	98	1520	681	252	132	307	97	75	82
18	71	78	80	96	633	485	243	129	171	102	75	83
19	67	80	74	94	580	415	235	126	147	99	76	82
20	69	102	74	94	575	686	226	147	138	99	80	81
21	71	94	73	92	633	534	214	182	160	92	81	80
22	71	84	81	92	444	421	210	150	135	87	80	80
23	71	80	540	659	444	377	206	141	129	89	82	76
24	63	90	321	326	467	351	198	132	126	87	81	78
25	65	94	206	218	336	326	190	129	126	82	98	78
26	80	100	175	171	293	326	190	126	129	80	80	74
27	141	153	160	150	279	307	186	129	126	78	71	80
28	284	123	150	147	261	284	179	222	135	78	71	83
29	157	107	138	135	---	274	175	153	171	75	69	82
30	132	99	129	697	---	270	175	194	135	73	69	77
31	118	---	126	1740	---	485	---	168	---	153	70	---
TOTAL	2772	2807	4154	8108	12698	12938	7982	4677	4219	3135	2383	2430
MEAN	89.4	93.6	134	262	454	417	266	151	141	101	76.9	81.0
MAX	284	153	540	1740	1520	910	491	222	307	153	98	100
MIN	63	78	73	92	179	235	175	126	115	73	69	73
CFSM	.55	.58	.83	1.62	2.80	2.57	1.64	.93	.87	.62	.48	.50
IN.	.64	.64	.95	1.86	2.92	2.97	1.83	1.07	.97	.72	.55	.56

CAL YR 1981	TOTAL	60036	MEAN 164	MAX 2700	MIN 63	CFSM 1.01	IN 13.79
WTR YR 1982	TOTAL	68303	MEAN 187	MAX 1740	MIN 63	CFSM 1.15	IN 15.68

## GREAT MIAMI RIVER BASIN

03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OH

LOCATION.--Lat 39°57'51", long 83°49'54", in W 1/2 sec. 1, R. 10, T.4, Clark County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on St. Paris Pike, 0.8 mi (1.3 km) southeast of Eagle City, 1.1 mi (1.8 km) downstream from Moore Run, 3.1 mi (5.0 km) upstream from Buck Creek, 3.3 mi (5.3 km) south of Tremont City, and at mile 29.5 (47.5 km).

DRAINAGE AREA.--310 mi<sup>2</sup> (803 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft (275.740 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for the winter period, which are poor. 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 infiltration from Mad River and Moore Run. Pumpage, averaging 23.6 ft<sup>3</sup>/s (0.67 m<sup>3</sup>/s) in 1982, is returned as sewage 1.4 mi (2.3 km) upstream from gaging station near Springfield (station 03269500). Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--17 years, 315 ft<sup>3</sup>/s (8.921 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft<sup>3</sup>/s (275 m<sup>3</sup>/s) June 26, 1971, gage height, 16.00 ft (4.877 m), from rating curve extended above 3,060 ft<sup>3</sup>/s (86.7 m<sup>3</sup>/s); minimum daily, 60 ft<sup>3</sup>/s (1.70 m<sup>3</sup>/s) Jan. 27, 28, 1977 (result of freezeup).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.8 ft (6.04 m), from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959 reached a stage of 15.7 ft (4.79 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2500 ft<sup>3</sup>/s (70.8 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)
Jan. 4	1030	2710 76.7	9.73 2.966	Feb. 16	2400	4490 127	11.79 3.594
Jan. 23	1230	2590 73.3	9.57 2.917	Mar. 16	1730	2980 84.4	10.07 3.069
Jan. 31	2130	*6680 189	*13.85 4.221				

Minimum daily discharge, 130 ft<sup>3</sup>/s (3.68 m<sup>3</sup>/s) July 30-31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	226	510	367	2220	399	620	288	330	236	132	152
2	163	216	397	301	963	400	494	283	296	217	135	177
3	161	206	307	337	922	389	845	279	269	216	133	181
4	161	200	287	1880	762	573	683	274	256	210	166	159
5	161	197	265	779	593	953	561	270	254	201	142	156
6	166	195	251	523	511	547	561	266	237	195	137	155
7	164	188	247	447	456	459	518	269	231	191	141	158
8	162	184	236	365	434	410	520	296	227	189	140	157
9	160	182	222	280	417	391	538	273	235	183	136	157
10	158	179	216	250	378	378	542	264	288	184	137	156
11	157	177	209	260	362	850	609	258	234	182	136	153
12	158	175	205	280	346	900	548	253	220	178	134	152
13	157	173	201	300	336	987	501	246	214	180	134	156
14	156	170	200	280	327	736	454	242	206	170	135	157
15	157	167	196	250	592	614	431	236	209	180	137	158
16	157	168	192	250	1770	1710	411	245	688	170	136	157
17	155	167	194	250	3130	1190	415	237	759	170	135	160
18	158	164	190	240	1070	803	400	229	385	180	133	155
19	159	246	180	240	900	717	382	227	316	170	136	159
20	157	340	174	240	796	1370	371	241	281	160	148	156
21	156	231	178	251	942	996	356	315	299	160	145	156
22	156	206	232	249	657	734	342	286	256	180	141	151
23	158	197	1290	1760	637	631	333	305	239	170	150	159
24	155	269	695	694	686	575	327	260	228	160	150	156
25	156	280	431	456	510	550	323	246	220	160	177	153
26	190	259	352	374	454	554	327	241	211	150	155	149
27	487	319	332	337	432	505	317	239	209	150	151	182
28	622	268	317	326	408	470	305	515	397	150	149	164
29	342	239	282	305	---	457	297	340	488	140	150	155
30	274	226	259	1770	---	441	293	411	287	130	150	153
31	243	---	260	4800	---	655	---	344	---	130	151	---
TOTAL	6130	6414	9507	19441	22011	21344	13624	8678	8969	5442	4432	4749
MEAN	198	214	307	627	786	689	454	280	299	176	143	158
MAX	622	340	1290	4800	3130	1710	845	515	759	236	177	182
MIN	155	164	174	240	327	378	293	227	206	130	132	149
CAL YR 1981	TOTAL	127260	MEAN	349	MAX	4340	MIN	147				
WTR YR 1982	TOTAL	130741	MEAN	358	MAX	4800	MIN	130				

## 03268090 CLARENCE J. BROWN RESERVOIR NEAR SPRINGFIELD, OH

LOCATION.--Lat 39°57'01", long 83°44'51", in SE 1/4 sec. 13, R.10, T.5, Clark County, Hydrologic Unit 05080001, in gatehouse of dam on Buck Creek, 1.3 mi (2.1 km) upstream from Beaver Creek, and 4.0 mi (6.4 km) northeast of city hall in Springfield.

DRAINAGE AREA.--82.0 mi<sup>2</sup> (212 km<sup>2</sup>).

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

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

REMARKS.--Reservoir is formed by rolled rock-fill dam having an impervious core with sand and gravel shell, and an open-cut spillway. Storage began in January 1974, recorder was installed and records began April 16, 1974. Usable capacity 63,690 acre-ft (78.5 hm<sup>3</sup>) between elevations 968.0 ft (295.05 m), lowest outlet, and 1,023.0 ft (311.81 m), crest of spillway. Dead storage below elevation 968.0 ft (295.05 m) 6 acre-ft (7,400 m<sup>3</sup>). Figures given herein represent usable contents. Reservoir is used for flood control, low-flow augmentation and recreation. There are no gates on spillway and all regulation is done by gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 42,630 acre-ft (52.6 hm<sup>3</sup>) Feb. 28, 1975, elevation, 1,014.60 ft (309.250 m); minimum, 7,160 acre-ft (8.83 hm<sup>3</sup>) Oct. 25, 1979, elevation, 991.93 ft (302.340 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 38,100 acre-ft (47.0 hm<sup>3</sup>) June 10, elevation, 1,012.55 ft (308.625 m); minimum, 28,820 acre-ft (35.5 hm<sup>3</sup>) Mar. 23, elevation, 1,007.94 ft (307.220 m).

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

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1011.18	35210	--
Oct. 31.....	1010.25	33320	-1890
Nov. 30.....	1008.98	30800	-2520
Dec. 31.....	1009.06	30960	+160
CAL YR 1981.....	--	--	-80
Jan. 31.....	1011.46	35800	+4820
Feb. 28.....	1009.00	30840	-4960
Mar. 31.....	1008.32	29540	-1300
Apr. 30.....	1011.06	34960	+5420
May 31.....	1012.35	37680	+2720
June 30.....	1012.28	37530	-150
July 31.....	1012.12	37180	-350
Aug. 31.....	1012.31	37590	+410
Sept. 30.....	1011.46	35800	-1790
WTR YR 1982.....	--	--	+570

## GREAT MIAMI RIVER BASIN

03269500 MAD RIVER NEAR SPRINGFIELD, OH

LOCATION.--Lat 39°55'23", long 83°52'13", in NW 1/4 sec. 16, R.9, T.4, Clark County, Hydrologic Unit 05080001, on right bank 150 ft (46 m) downstream from Rock Run, 300 ft (91 m) downstream from bridge on Lower Valley Pike, 2 mi (3 km) downstream from Buck Creek, 3 mi (5 km) west of Springfield, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--490 mi<sup>2</sup> (1,269 km<sup>2</sup>).

PERIOD OF RECORD.--January 1904 to March 1906 (fragmentary), February 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--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.

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft (268.657 m) National Geodetic Vertical Datum of 1929. Jan. 1, 1904 to Mar. 31, 1906, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum. Feb. 1, 1914, to Feb. 29, 1924, nonrecording gage at site 1.8 mi (2.9 km) upstream at datum 6.39 ft (1.948 m) higher. Mar. 1, 1924, to July 31, 1925, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records fair. Some regulation by C.J. Brown Reservoir, 8.3 mi (13.4 km) upstream on Buck Creek, since 1972. Occasional low-flow regulation by powerplant 2.3 mi (3.7 km) upstream; daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

COOPERATION.--Gage height charts, tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--69 years, (1904-05, 1914-82), 492 ft<sup>3</sup>/s (13.93 m<sup>3</sup>/s), 13.64 in/yr (346 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,500 ft<sup>3</sup>/s (864 m<sup>3</sup>/s) Jan. 21, 1959, gage height, 15.76 ft (4,804 m), from rating curve extended above 14,000 ft<sup>3</sup>/s (396 m<sup>3</sup>/s) on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft<sup>3</sup>/s (0.85 m<sup>3</sup>/s) Sept. 15, 1904.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 16.9 ft (5.15 m), present datum, discharge, 55,400 ft<sup>3</sup>/s (1,570 m<sup>3</sup>/s) computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,000 ft<sup>3</sup>/s (283 m<sup>3</sup>/s) Jan. 31, gage height, 10.99 ft (3.350 m); minimum daily, 186 ft<sup>3</sup>/s (5.27 m<sup>3</sup>/s) Sept. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	421	912	697	3600	659	1200	426	611	437	229	203
2	272	421	705	592	1900	667	820	416	538	354	221	221
3	267	405	574	637	1500	659	1300	416	480	359	217	233
4	267	382	532	2520	1300	948	1100	410	442	365	300	226
5	267	388	492	1200	1100	1490	880	405	447	371	259	221
6	290	388	447	957	950	948	900	400	390	365	221	219
7	272	371	410	1040	780	809	800	400	390	354	233	224
8	267	359	394	784	680	728	750	447	410	290	233	214
9	272	343	371	626	640	682	780	400	720	281	225	186
10	276	337	359	580	600	652	750	388	560	295	217	193
11	272	332	348	540	580	920	780	376	480	272	217	218
12	281	332	343	500	560	1500	740	365	440	281	213	215
13	281	326	332	460	540	1800	700	365	420	316	209	218
14	276	321	332	430	540	1600	660	354	400	300	213	222
15	276	316	337	400	984	1400	620	348	437	310	198	215
16	276	321	332	380	2670	2200	600	394	921	300	205	225
17	276	316	332	360	4630	2500	580	354	1120	285	202	221
18	276	316	326	350	1740	2000	560	348	630	310	205	215
19	276	538	310	340	1790	1400	540	337	568	267	192	212
20	276	744	300	330	1670	2800	532	376	509	254	240	249
21	276	480	310	330	1630	2100	515	475	538	250	204	235
22	305	421	480	400	1090	1600	497	515	469	285	193	254
23	332	405	2000	3180	1050	1300	486	760	421	272	201	250
24	316	556	1240	1240	1100	1100	475	520	376	259	259	275
25	321	544	817	939	868	940	469	469	365	254	273	287
26	426	532	674	939	776	880	480	426	348	254	213	340
27	1050	652	620	834	736	820	464	431	343	250	200	360
28	1130	720	580	776	674	780	447	993	736	254	194	297
29	826	674	540	630	---	720	437	894	817	246	190	284
30	538	538	500	2370	---	680	431	801	532	241	245	283
31	492	---	480	8200	---	1300	---	611	---	237	206	---
TOTAL	11504	13199	16729	33561	36678	38582	20293	14620	15858	9168	6827	7215
MEAN	371	440	540	1083	1310	1245	676	472	529	296	220	241
MAX	1130	744	2000	8200	4630	2800	1300	993	1120	437	300	360
MIN	267	316	300	330	540	652	431	337	343	237	190	186
CFSM	.76	.90	1.10	2.21	2.67	2.54	1.38	.96	1.08	.60	.45	.49
IN.	.87	1.00	1.27	2.55	2.78	2.93	1.54	1.11	1.20	.70	.52	.55
CAL YR 1981	TOTAL	219036	MEAN 600	MAX 5810	MIN 227	CFSM 1.22	IN 16.63					
WTR YR 1982	TOTAL	224234	MEAN 614	MAX 8200	MIN 186	CFSM 1.25	IN 17.02					

## 03270000 MAD RIVER NEAR DAYTON, OH

LOCATION.--Lat 39°47'50". long 84°05'19", in SW 1/4 sec. 7, R. 8, T.2, Green County, Hydrologic Unit 05080001, on left bank in retarding basin 300 ft (91 m) upstream from Huffman Dam, 2.3 mi (3.7 km) downstream from Mud Run, 6.2 mi (10.0 km) northeast of Dayton and at mile 6.1 (9.8 km). Water-quality sampling site was on left bank 900 ft (274 m) downstream.

DRAINAGE AREA.--635 mi<sup>2</sup> (1,645 km<sup>2</sup>).

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

REVISED RECORDS.--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M) 1930-32(M). drainage area.

GAGE.--Water-stage recorder. Datum of gage is 777.06 ft (236.848 m) National Geodetic Vertical Datum of 1929. Jan. 21, 1959 to Dec. 14, 1967, at site 900 ft (274 m) downstream, at datum 77.01 ft (23.473 m) lower. See WSP 1725 for history of changes prior to Jan. 21, 1959. Water-quality data collected at this site 1947-1948, 1962-1963, 1966-1980.

REMARKS.--Records good except those for the winter period, which are fair. Flood flows affected by backwater from Huffman retarding dam beginning in 1921, some regulation by C.J. Brown Reservoir 26 mi (42.0 km) upstream on Buck Creek since 1972. Also see REMARKS for station 03269500.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--68 years, 631 ft<sup>3</sup>/s (17.87 m<sup>3</sup>/s), 13.50 in/yr (343 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft<sup>3</sup>/s (600 m<sup>3</sup>/s) Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft (26.79 m) Feb. 26, 1929 at site and datum then in use; minimum daily discharge, 94 ft<sup>3</sup>/s (2.66 m<sup>3</sup>/s) Aug. 6, 1934, but may have been less during period 1921- 24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 14.0 ft (4.27 m), original site and datum, discharge 75,700 ft<sup>3</sup>/s (2,140 m<sup>3</sup>/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,200 ft<sup>3</sup>/s (289 m<sup>3</sup>/s) Feb. 1, gage height, 17.71 ft (5.398 m); minimum daily, 233 ft<sup>3</sup>/s (6.60 m<sup>3</sup>/s) Sept. 10.

REVISIONS:-- The maximum and minimum daily discharges for the water year 1980 have been revised to 9,640 ft<sup>3</sup>/s (273m<sup>3</sup>/s) June 29, 1980, gage height 17.08 ft (5.206 m) and 415 ft<sup>3</sup>/s (11.8 m<sup>3</sup>/s) Feb. 18, 1980. They supersede figures published in WRD-OH-81-1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	343	515	1100	928	8420	811	1540	532	926	822	326	271
2	339	482	973	789	2560	806	1100	519	806	579	314	267
3	332	477	739	820	2000	816	1770	519	675	528	318	294
4	332	453	659	2970	1700	1010	1530	510	587	516	330	283
5	328	437	606	1970	1400	1940	1150	506	573	521	467	279
6	345	447	557	1230	1200	1240	1210	506	532	501	338	273
7	335	435	518	1270	1000	1030	1050	510	506	491	344	273
8	328	423	491	1030	900	905	997	591	541	472	411	273
9	328	409	467	820	850	855	1030	523	972	422	378	249
10	328	401	451	740	780	806	1020	497	723	412	332	233
11	332	398	437	660	740	1310	1060	484	642	414	324	247
12	332	393	432	620	720	2380	992	475	569	388	322	257
13	336	387	422	600	700	2440	921	471	541	411	318	257
14	334	383	416	560	680	2190	835	462	519	416	325	259
15	336	379	415	540	780	1830	786	457	510	408	313	258
16	334	377	409	520	2860	2920	752	506	961	410	304	254
17	332	375	405	500	5770	3410	762	462	1470	426	295	257
18	332	373	405	470	2400	2210	742	462	885	443	308	250
19	332	422	387	450	2600	1820	694	453	742	468	302	247
20	330	1200	385	440	2400	3830	680	479	652	377	348	244
21	328	656	382	430	2200	2520	657	685	661	359	361	284
22	338	540	460	480	1400	2000	624	642	596	384	291	267
23	378	496	2710	3910	1310	1900	610	956	541	401	285	284
24	369	674	1880	2390	1360	1300	591	675	478	372	533	302
25	364	706	1100	1190	1120	1200	578	591	450	356	800	331
26	456	634	869	1000	977	1200	582	523	439	349	342	301
27	997	688	790	920	916	1090	582	523	517	346	299	347
28	1630	793	700	840	845	982	560	1110	786	347	279	354
29	1020	737	660	760	---	941	550	1120	1860	346	265	321
30	691	675	640	1920	---	910	537	1400	1400	338	296	320
31	593	---	640	7940	---	1720	---	905	---	332	300	---
TOTAL	13832	15765	21505	39707	50588	50322	26492	19054	22060	13355	10768	8336
MEAN	446	526	694	1281	1807	1623	883	615	735	431	347	278
MAX	1630	1200	2710	7940	8420	3830	1770	1400	1860	822	800	354
MIN	328	373	382	430	680	806	537	453	439	332	265	233
CFSM	.70	.83	1.09	2.02	2.85	2.56	1.39	.97	1.16	.68	.55	.44
IN.	.81	.92	1.26	2.33	2.96	2.95	1.55	1.12	1.29	.78	.63	.49

CAL YR 1981 TOTAL 279887 MEAN 767 MAX 8000 MIN 290 CFSM 1.21 IN 16.40  
WTR YR 1982 TOTAL 291784 MEAN 799 MAX 8420 MIN 233 CFSM 1.26 IN 17.09

## 03270500 GREAT MIAMI RIVER AT DAYTON, OH

LOCATION.--Lat 39°45'55", long 84°11'51", in sec. 10, R.7, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 1,000 ft (305 m) downstream from Main Street Bridge in Dayton, 0.7 mi (1.1 km) upstream from Wolf Creek, 0.8 mi (1.3 km) downstream from Mad River, and at mile 80.0 (128.7 km).

DRAINAGE AREA.--2,511 mi<sup>2</sup> (6,503 km<sup>2</sup>).

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.

REVISED RECORDS.--WSP 1385: 1917. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum adjustment of 1912 as requested by cooperator (699.71 ft (213.272 m) adjustment of 1929). Prior to Oct. 1, 1921, nonrecording gage at Main Street Bridge at datum 23.73 ft (7.233 m) higher. Oct. 1, 1921, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft (6.401 m) higher.

REMARKS.--Records good except those for the winter period and those below 250 ft<sup>3</sup>/s (7.08 m<sup>3</sup>/s), which are fair. Flood flow regulated by four retarding basins upstream from station beginning in 1920 on Mad River 6.5 mi (10.5 km) upstream, on Stillwater River 10.5 mi (16.9 km) upstream, on Great Miami River 11.5 mi (18.5 km) upstream, and on Loramie Creek 40 mi (64 km) upstream. Also see REMARKS for stations 03261500, 03261950 and 03269500. Water is diverted 6 mi (10 km) upstream from station for use in Dayton; most of return flow from diversions bypasses station in Dayton sewer systems. Sediment data collected at this site 1951 to 1953.

COOPERATION.--Gage-height charts, tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--53 years (1929-82). 2,160 ft<sup>3</sup>/s (61.17 m<sup>3</sup>/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,900 ft<sup>3</sup>/s (1,720 m<sup>3</sup>/s) Jan. 22, 1959, gage height, 35.45 ft (10.805 m) in gage well, from graph based on gage readings; 36.0 ft (10.97 m), from outside floodmarks; minimum daily, 109 ft<sup>3</sup>/s (3.09 m<sup>3</sup>/s) Aug. 8, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 29.0 ft (8.84 m), site and datum then in use, discharge, 250,000 ft<sup>3</sup>/s (7,080 m<sup>3</sup>/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,000 ft<sup>3</sup>/s (736 m<sup>3</sup>/s) Jan. 31, gage height 31.08 ft (9.473 m); minimum daily, 328 ft<sup>3</sup>/s (9.29 m<sup>3</sup>/s) Sept. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	577	1170	2240	2820	22900	4520	10800	1510	6160	2520	510	469
2	575	1020	2230	3050	12000	5820	7410	1460	5390	1780	486	437
3	550	945	1950	3090	7820	6370	7820	1430	3540	1430	492	455
4	531	849	1590	11400	6000	5530	8080	1420	2730	1340	580	478
5	534	780	1400	14500	3800	12100	5620	1380	2290	1280	831	515
6	630	768	1260	10300	2500	10500	4910	1380	1980	1200	579	469
7	571	747	1180	6310	2000	6950	4640	1440	1740	1140	790	421
8	547	686	1110	4440	1800	5000	4090	1710	1630	1130	940	402
9	501	704	1020	3250	1600	4000	4210	2380	2990	975	828	378
10	476	661	940	1670	1400	3280	4820	1980	2670	970	622	361
11	485	623	885	1460	1300	5200	6080	1670	2460	996	594	367
12	479	617	837	1400	1300	13400	6340	1570	2060	961	535	374
13	469	603	826	1300	1200	13900	5540	1420	1770	947	476	374
14	476	595	818	1200	1200	14500	4560	1290	1570	927	471	379
15	482	568	776	1100	1500	11400	3550	1200	1460	876	466	362
16	469	535	753	1000	6620	11700	3070	1160	3570	833	459	347
17	445	520	698	950	18900	17200	3070	1120	9750	754	454	335
18	460	519	669	900	22700	14300	3050	1070	6640	823	429	329
19	438	969	593	880	19200	9990	2950	1210	4050	892	400	328
20	454	2190	505	880	16100	15400	2570	1410	2900	795	516	342
21	481	1580	538	900	17100	14800	2300	2110	2540	718	718	411
22	536	1270	928	1200	15500	11100	2160	2070	2510	861	460	368
23	564	1070	7410	9960	14300	7400	1980	2350	2000	800	437	351
24	511	1330	11200	11300	14900	5310	1890	2040	1660	768	1410	402
25	488	1470	6920	6520	12900	4570	1800	1690	1460	740	2090	472
26	776	1590	4230	4180	8470	4600	1830	1410	1300	716	837	424
27	1730	1610	3240	2930	5530	4510	1750	1840	1360	670	720	494
28	3520	1690	2990	2830	4640	3890	1670	9460	1810	626	624	556
29	3260	1570	2910	2400	---	3350	1650	10200	4960	577	531	519
30	2070	1350	2350	5410	---	3130	1560	10300	3880	533	482	518
31	1490	---	2160	23000	---	6520	---	8400	---	518	514	---
TOTAL	25575	30599	67156	142530	245180	260240	121770	81080	90830	30096	20281	12437
MEAN	825	1020	2166	4598	8756	8395	4059	2615	3028	971	654	415
MAX	3520	2190	11200	23000	22900	17200	10800	10300	9750	2520	2090	556
MIN	438	519	505	880	1200	3130	1560	1070	1300	518	400	328
CAL YR 1981	TOTAL	865095	MEAN	2370	MAX	20800	MIN	438				
WTR YR 1982	TOTAL	1127774	MEAN	3090	MAX	23000	MIN	328				

03270800 WOLF CREEK AT TROTWOOD, OH

LOCATION.--Lat 39°47'39", long 84°18'36", Montgomery County, Hydrologic Unit 05080002, on right bank 350 ft (107 m) downstream from Union Road Bridge, 700 ft (213 m) downstream from unnamed right bank tributary, 0.2 mi (0.3 km) south of Trotwood, and 0.3 mi (0.5 km) upstream from North Branch.

DRAINAGE AREA.--22.7 mi<sup>2</sup> (58.8 km<sup>2</sup>).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 826.28 ft (251.850 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those the winter period, which are poor.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--20 years, 22.6 ft<sup>3</sup>/s (0.640 m<sup>3</sup>/s), 13.52 in/yr (343 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,970 ft<sup>3</sup>/s (84.1 m<sup>3</sup>/s) May 24, 1968, gage height, 6.47 ft (1.972 m), from rating curve extended above 1,000 ft<sup>3</sup>/s (28.3 m<sup>3</sup>/s); no flow all or part of each day Sept. 8-17, Oct. 3, 1964, Sept. 16-19, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during flood in January 1959, about 3,900 ft<sup>3</sup>/s (110 m<sup>3</sup>/s), gage height, 8.0 ft (2.44 m), computed by Miami Conservancy District on basis of estimate of peak flow based on contracted-opening measurement at site 1.1 mi (1.8 km) downstream with drainage area of 48.2 mi<sup>2</sup> (125 km<sup>2</sup>), adjusted to gage site by 0.8 power of the drainage-area ratio. Flood in March 1913 reached a stage of 9.4 ft (2.87 m), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft<sup>3</sup>/s (19.8 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s).	(m <sup>3</sup> /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	(m <sup>3</sup> /s)	Gage (ft)	height (m)
Dec. 23	0200	804	22.8	3.26	0.994	Jan. 31	1130	1380	39.1	4.21	1.283
Jan. 4	0245	966	27.4	3.55	1.082	Feb. 16	2115	1310	37.1	4.10	1.250
Jan. 23	0500 *	1420	40.2	4.27	1.301	Aug. 24	2230	1020	28.9	3.64	1.109

Minimum discharge, 0.30 ft<sup>3</sup>/s (0.008 m<sup>3</sup>/s) Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	5.4	96	96	181	14	48	9.9	109	6.8	2.7	2.1
2	.60	4.7	38	40	67	14	32	9.9	46	6.1	3.9	1.7
3	.78	4.2	23	138	104	16	205	9.2	28	6.4	5.5	1.5
4	.97	3.9	19	382	44	99	56	8.5	22	6.3	3.9	1.4
5	.97	3.7	15	85	26	72	42	8.5	18	5.5	7.6	1.1
6	1.9	4.2	13	46	19	36	67	7.8	15	5.3	3.8	.97
7	1.6	3.4	13	36	16	28	40	11	13	5.4	6.8	1.1
8	.97	3.1	11	28	14	23	32	25	17	7.8	13	.92
9	.97	3.1	9.0	23	13	20	36	15	23	6.7	5.3	.89
10	.97	2.8	7.8	21	12	20	39	11	22	6.7	4.0	.90
11	.78	2.8	7.2	20	11	177	34	9.9	13	6.3	3.3	.89
12	.60	2.8	6.6	19	11	99	27	9.2	11	5.8	2.6	.64
13	.78	2.6	6.4	18	10	134	24	8.5	9.9	5.8	2.2	.73
14	.78	2.6	6.2	17	10	56	21	7.8	9.2	5.9	2.1	.95
15	.78	2.7	6.2	17	65	60	20	7.2	9.2	6.3	1.9	.72
16	.97	2.8	7.3	16	360	253	22	7.2	85	6.5	1.6	.70
17	.78	2.8	9.5	16	260	91	46	6.6	56	6.3	1.6	.73
18	1.2	2.6	7.2	16	72	46	26	53	25	6.1	1.4	.79
19	1.6	20	8.6	16	50	56	21	79	21	6.9	1.3	.65
20	1.6	80	12	16	38	324	19	36	17	6.0	2.0	.85
21	1.9	24	20	16	31	125	16	63	13	4.3	3.5	2.3
22	2.2	15	86	30	27	55	15	35	16	7.5	1.8	.82
23	2.9	12	418	522	24	38	13	20	12	6.4	1.6	.69
24	2.5	35	113	75	22	30	13	15	9.6	3.7	40	.96
25	2.2	21	51	43	20	31	12	12	8.5	3.1	81	4.9
26	6.0	17	34	27	18	42	16	11	7.8	2.8	13	1.3
27	46	22	28	20	16	30	12	197	7.6	3.0	6.4	3.1
28	49	15	25	16	14	25	11	85	9.3	3.2	3.9	1.8
29	16	12	23	23	---	23	9.9	154	11	2.9	2.4	.68
30	9.7	11	21	358	---	21	9.9	139	9.2	2.6	2.0	.41
31	6.7	---	27	944	---	149	---	51	---	2.6	2.4	---
TOTAL	165.48	344.2	1168.0	3140	1555	2207	984.8	1122.2	673.3	167.0	234.5	37.19
MEAN	5.34	11.5	37.7	101	55.5	71.2	32.8	36.2	22.4	5.39	7.56	1.24
MAX	49	80	418	944	360	324	205	197	109	7.8	81	4.9
MIN	.60	2.6	6.2	16	10	14	9.9	6.6	7.6	2.6	1.3	.41
CFSM	.24	.51	1.66	4.45	2.45	3.14	1.45	1.60	.99	.24	.33	.06
IN.	.27	.56	1.91	5.15	2.55	3.62	1.61	1.84	1.10	.27	.38	.06
CAL YR 1981	TOTAL	8533.25	MEAN 23.4	MAX 418	MIN .51	CFSM 1.03	IN 13.98					
WTR YR 1982	TOTAL	11798.67	MEAN 32.3	MAX 944	MIN .41	CFSM 1.42	IN 19.33					

## GREAT MIAMI RIVER BASIN

03271500 GREAT MIAMI RIVER AT MIAMISBURG, OH

LOCATION.--Lat 39°38'40", long 84°17'23", in sec. 31, R.6, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 600 ft (183 m) downstream from bridge on State Highway 725 at Miamisburg, 0.3 mi (0.5 km) downstream from Bear Creek, 3.2 mi (5.1 km) upstream from Crains Run, and at mile 66.4 (106.8 km).

DRAINAGE AREA.--2,711 mi<sup>2</sup> (7,021 km<sup>2</sup>).

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.

REVISED RECORDS.--WSP 743: 1929(M). WSP 1385: 1926. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 678.60 ft (206.837 m) National Geodetic Vertical Datum of 1929. Mar. 16, 1916 to Sept. 30, 1920, nonrecording gage at site 6.7 mi (10.8 km) 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 mi (3.5 km) downstream at datum 677.06 ft (206.368 m) National Geodetic Vertical Datum.

REMARKS.--Records good except those for the winter period, which are fair. Diurnal fluctuation caused by powerplant 0.4 mi (0.6 km) upstream from station. Flood flow regulated by retarding dams beginning in 1920 on Mad River 19 mi (31 km) upstream, on Stillwater River 23 mi (37 km) upstream, on Great Miami River 23 mi (37 km) upstream and on Loramie Creek 52 mi (84 km) upstream. Also see REMARKS for stations 03261500 and 03269500.

COOPERATION.--Gage-height charts, tapes, and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--45 years, 2,436 ft<sup>3</sup>/s (68.99 m<sup>3</sup>/s), 12.20 in/yr (310 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 ft<sup>3</sup>/s (1,750 m<sup>3</sup>/s) Jan. 21, 22, 1959, gage height, 20.65 ft (6.294 m), in gage well, from graph based on gage readings; 21.3 ft (6.49 m), from outside flood-marks; minimum daily, 148 ft<sup>3</sup>/s (4.19 m<sup>3</sup>/s) Sept. 7, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1913 reached a discharge of 257,000 ft<sup>3</sup>/s (7,280 m<sup>3</sup>/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,400 ft<sup>3</sup>/s (918 m<sup>3</sup>/s) Jan. 31, gage height, 15.32 ft (4.670 m); minimum daily, 458 ft<sup>3</sup>/s (13.0 m<sup>3</sup>/s) Sept. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	691	1390	2860	3070	25100	4160	10000	1630	6120	2550	666	662
2	672	1230	2630	3120	12900	5040	7220	1550	4960	1900	647	633
3	644	1170	2320	3320	7760	5800	7860	1530	3590	1550	676	591
4	622	1090	1950	10100	6760	5420	7930	1510	2820	1460	816	571
5	633	1030	1710	14500	4730	10400	5540	1470	2440	1400	1180	605
6	777	1010	1550	10300	4200	9910	4990	1440	2130	1300	801	573
7	699	966	1480	6290	3550	6670	4310	1460	1930	1270	811	599
8	641	908	1410	4450	2970	4830	3980	1910	2010	1420	1150	596
9	642	955	1300	3370	2750	3900	4050	2190	2840	1170	996	589
10	598	889	1210	2500	2370	3320	4460	2130	2710	1150	826	560
11	592	863	1160	1900	2250	4920	5340	2000 <sup>a</sup>	2560	1150	778	510
12	603	851	1100	2100	2160	12200	5830	1800	2180	1120	731	520
13	609	814	1100	2400	2100	13200	5180	1700	1920	1100	661	531
14	620	787	1080	2180	2000	13700	4370	1600	1730	1060	630	551
15	606	757	1050	1970	2330	11000	3640	1500	1620	975	625	534
16	623	763	1030	1860	6170	11300	3210	1400	3000	953	621	487
17	584	768	962	1600	17600	16600	3130	1400	8140	904	650	496
18	616	753	947	1500	22400	14000	3110	1400	6220	950	602	474
19	585	1060	874	1500	19300	9700	3020	1600	3820	1030	585	458
20	626	2880	818	1580	15500	15300	2730	2200	2900	998	583	466
21	653	1920	817	1620	15800	15000	2450	5800	2500	868	848	548
22	678	1600	1130	1800	14800	10800	2300	4000	2500	1060	608	506
23	754	1380	7080	10800	13200	7320	2150	2700	2130	977	586	510
24	682	1710	10700	11500	13600	5180	2020	2400	1700	902	1050	581
25	670	1780	6860	6500	12300	4480	1940	2200	1600	855	3170	626
26	991	1890	4180	4290	8220	4460	2000	2000	1460	839	1040	593
27	2190	1940	3340	3030	5210	4410	1880	2200	1360	929	895	665
28	3420	1910	3110	2840	4370	3880	1800	7810	1890	808	788	713
29	3360	1840	2980	2540	---	3410	1790	11800	4160	765	700	641
30	2410	1650	2540	4940	---	3220	1690	9780	3430	710	649	656
31	1740	---	2380	25900	---	5940	---	8070	---	688	677	---
TOTAL	30231	38554	73658	155370	252400	249470	119920	92180	88370	34811	26046	17045
MEAN	975	1285	2376	5012	9014	8047	3997	2974	2946	1123	840	568
MAX	3420	2880	10700	25900	25100	16600	10000	11800	8140	2550	3170	713
MIN	584	753	817	1500	2000	3220	1690	1400	1360	688	583	458
CFSM	.36	.47	.88	1.85	3.33	2.97	1.47	1.10	1.09	.41	.31	.21
IN.	.41	.53	1.01	2.13	3.46	3.42	1.65	1.26	1.21	.48	.36	.23
CAL YR 1981	TOTAL	914843	MEAN	2506	MAX	21300	MIN	580	CFSM	.92	IN	12.55
WTR YR 1982	TOTAL	1178055	MEAN	3228	MAX	25900	MIN	458	CFSM	1.19	IN	16.17

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

LOCATION.--Lat 39°38'14", long 84°17'33", Montgomery County, Hydrologic Unit 05080002, on left bank at Miamisburg, 1.0 mi (1.6 km) downstream from Bear Creek, 0.6 mi (1.0 km) downstream from discharge station at Miamisburg, 0.65 mi (1.05 km) downstream from discharge station at Miamisburg, and at mile 65.75 (105.79 km).

DRAINAGE AREA.--2,713 mi<sup>2</sup> (7.027 km<sup>2</sup>).

PERIOD OF RECORD.--June 1978 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1978 to current year.

pH: June 1978 to current year.

WATER TEMPERATURES: June 1978 to current year.

DISSOLVED OXYGEN: June 1978 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Prior to June 1978, records published as 03271600, Great Miami River near Miamisburg, Ohio. See records of discharge for gaging station at Miamisburg (station 03271500).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,270 micromhos Feb. 22, 1979; minimum 206 micromhos Feb. 18, 1982.

pH: Maximum, 9.1 units July 7, 1979; minimum, 7.0 units July 30, Aug. 30, 1979.

WATER TEMPERATURES: Maximum, 33.0°C July 20, 22, 1978; minimum, 0.0°C Jan. 3, 4, 7-9, 15, Feb. 25, 26, 1979, Mar. 1, 2, 1980, Jan. 12, 18, 1982.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L July 12, 1978, Aug. 15, 16, 1982; minimum, 0.4 mg/L Aug. 27, 1981, Aug. 2, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 1,070 micromhos Sept. 7; minimum, 206 micromhos Feb. 18.

pH: Maximum, 8.9 units July 21, 25; minimum, 7.5 units Oct. 22, May 28-29.

WATER TEMPERATURES: Maximum, 28.5°C July 17, 21, Aug. 6; minimum, 0.0°C Jan. 12, 18.

DISSOLVED OXYGEN: Maximum >20.0 mg/L Aug. 15, 16; minimum, 0.4 mg/L Aug. 2.

## GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	880	842	866	764	736	748	672	580	612	758	716	735
2	894	844	871	802	748	771	666	598	627	716	692	705
3	894	830	863	822	788	802	718	670	695	714	640	700
4	852	826	844	836	740	802	744	718	728	646	488	571
5	874	838	856	858	800	828	742	724	735	474	408	423
6	858	810	838	833	763	798	754	734	741	514	424	464
7	828	814	822	808	774	786	770	740	751	590	518	559
8	856	818	840	805	775	790	780	754	765	624	590	602
9	868	820	849	802	734	764	792	766	778	684	622	639
10	862	822	845	828	750	772	794	766	781	752	684	717
11	864	812	838	823	783	800	804	776	790	794	756	783
12	850	808	837	852	794	819	814	780	796	800	770	784
13	865	795	831	820	780	797	810	778	795	810	770	780
14	846	804	826	831	783	804	806	776	791	844	792	816
15	855	793	827	840	778	798	816	786	801	808	780	792
16	832	804	821	831	791	809	826	784	804	822	786	798
17	855	813	834	876	808	838	842	792	813	830	812	821
18	858	806	836	862	810	838	998	852	933	852	828	839
19	851	809	824	846	610	788	920	854	883	846	824	834
20	890	836	861	726	520	587	862	826	846	914	822	841
21	876	834	852	662	538	587	878	826	840	1050	894	984
22	868	830	854	732	666	703	1050	870	949	1040	566	889
23	854	806	834	736	696	720	1040	532	715	678	404	517
24	832	792	815	742	682	708	558	486	514	412	362	383
25	818	788	804	724	690	710	558	502	524	478	388	424
26	812	642	765	718	622	704	618	560	586	560	482	519
27	736	614	679	718	684	698	670	622	647	640	568	607
28	652	600	625	720	704	710	778	674	704	748	646	679
29	720	662	688	720	700	705	802	722	747	756	706	728
30	742	708	722	736	690	715	738	726	732	782	492	689
31	760	722	734	---	---	---	766	728	742	476	240	302
MONTH	894	600	813	876	520	757	1050	486	747	1050	240	675

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	288	224	241	586	562	577	606	414	467	748	706	727
2	430	296	366	584	526	559	520	432	471	738	694	714
3	540	436	492	542	482	504	526	486	500	728	690	704
4	594	506	536	628	508	577	528	500	516	738	690	714
5	652	600	622	612	374	496	570	532	556	738	690	715
6	654	634	647	414	378	389	614	564	590	738	688	715
7	672	648	658	480	418	455	646	614	627	732	652	714
8	720	670	693	550	484	515	660	644	655	708	622	658
9	758	716	729	608	552	577	710	652	677	694	662	677
10	780	744	759	650	608	627	670	654	663	712	664	679
11	776	752	762	654	520	604	654	596	627	730	704	716
12	778	764	772	590	404	472	596	554	567	736	706	720
13	784	758	771	438	396	417	564	546	556	758	730	737
14	796	766	778	438	422	431	590	562	573	758	728	744
15	860	774	827	492	434	458	626	590	604	762	732	749
16	836	468	641	502	430	475	642	620	631	766	724	743
17	450	258	339	458	384	401	662	620	648	768	736	749
18	254	206	219	448	396	414	666	646	654	774	738	753
19	282	222	259	516	452	488	684	658	668	776	648	712
20	314	282	296	476	416	431	688	670	679	736	512	660
21	326	296	316	442	418	429	690	666	675	626	524	570
22	302	294	297	520	440	479	702	676	686	648	482	560
23	332	304	315	576	520	554	716	688	699	654	616	637
24	346	314	331	624	566	604	718	686	706	662	586	616
25	346	316	325	644	600	631	714	682	697	718	658	681
26	458	352	405	654	614	641	718	684	696	732	700	712
27	530	462	496	656	640	649	728	694	709	738	464	651
28	562	532	546	660	640	649	730	688	708	582	344	446
29	---	---	---	680	600	659	732	694	715	410	328	364
30	---	---	---	696	670	684	742	704	721	488	412	458
31	---	---	---	636	540	580	---	---	---	526	490	508
MONTH	860	206	516	696	374	530	742	414	631	776	328	661

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	564	496	536	608	558	577	784	726	752	830	770	806
2	616	564	592	686	608	648	802	732	758	818	782	803
3	632	612	625	700	674	683	814	754	784	834	780	817
4	666	632	646	714	682	694	812	622	756	846	804	825
5	692	656	671	722	688	701	698	448	641	830	794	809
6	704	684	691	736	702	721	744	708	735	790	768	781
7	730	696	706	742	698	721	744	720	731	1070	776	892
8	734	636	687	744	644	693	730	634	674	1010	826	927
9	720	536	680	722	642	675	672	630	650	880	816	842
10	630	534	563	734	684	711	684	662	677	860	804	836
11	642	582	620	714	680	695	740	688	723	858	818	838
12	654	636	645	724	692	708	764	732	755	824	804	814
13	686	654	671	738	689	713	816	766	798	832	804	820
14	---	---	---	732	690	715	840	764	799	858	806	830
15	---	---	---	738	688	713	812	732	770	858	814	835
16	620	578	602	736	684	710	792	724	754	874	820	853
17	562	394	472	750	670	705	824	736	769	888	830	863
18	530	460	491	718	650	687	806	738	772	876	838	860
19	588	534	564	722	660	688	794	750	777	856	822	840
20	628	590	610	706	662	684	832	784	809	858	812	845
21	670	628	643	726	670	694	808	662	746	878	816	847
22	674	644	659	760	646	717	742	660	713	850	802	827
23	678	646	659	728	650	680	758	730	745	876	826	850
24	708	676	687	750	720	738	782	506	728	834	806	821
25	732	700	713	756	696	724	460	310	364	820	764	794
26	734	704	718	752	708	725	608	474	546	812	760	794
27	738	706	719	774	574	712	674	614	629	802	764	787
28	732	412	653	754	666	730	734	680	717	796	744	764
29	632	402	493	794	744	765	770	732	755	802	764	789
30	594	420	516	818	758	782	800	748	779	812	768	790
31	---	---	---	798	742	771	822	762	792	---	---	---
MONTH	738	394	626	818	558	706	840	310	723	1070	744	827
YEAR	1070	206	686									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	7.7	7.9	8.0	7.8	7.9	8.3	8.0	8.1	8.2	8.2	8.2
2	8.1	7.8	7.9	7.9	7.7	7.8	8.1	8.0	8.1	8.3	8.2	8.3
3	8.2	7.7	8.0	8.0	7.7	7.8	8.2	8.1	8.1	8.3	8.1	8.3
4	8.2	7.9	8.0	8.0	7.7	7.9	8.2	8.1	8.1	8.2	7.9	8.1
5	8.2	7.9	8.1	7.9	7.7	7.8	8.2	8.1	8.1	7.9	7.8	7.9
6	8.1	7.8	7.9	7.9	7.6	7.8	8.3	8.1	8.2	8.0	7.9	8.0
7	8.0	7.7	7.8	8.0	7.8	7.9	8.2	8.1	8.2	8.0	8.0	8.0
8	8.0	7.7	7.8	8.1	7.8	7.9	8.2	8.1	8.1	8.1	8.0	8.1
9	8.1	7.6	7.9	8.1	7.7	8.0	8.3	8.1	8.2	8.1	8.0	8.1
10	8.1	7.8	7.9	8.1	7.9	8.0	8.4	8.1	8.2	8.0	8.0	8.0
11	8.2	7.9	8.0	8.2	7.9	8.0	8.4	8.2	8.3	8.0	8.0	8.0
12	8.1	7.9	8.0	8.2	7.8	8.0	8.3	8.0	8.2	8.1	7.9	8.0
13	8.2	7.8	8.0	8.2	7.8	8.0	8.4	8.2	8.3	8.1	8.0	8.1
14	8.2	8.0	8.1	8.2	7.7	8.0	8.3	8.2	8.2	8.1	7.9	8.1
15	8.2	7.9	8.0	8.2	7.9	8.1	8.3	8.1	8.2	8.2	8.0	8.1
16	8.0	7.9	7.9	8.2	7.9	8.1	8.4	8.1	8.3	8.1	8.0	8.0
17	8.0	7.8	7.9	8.2	7.8	8.0	8.3	8.2	8.2	8.0	7.7	7.9
18	8.1	7.9	8.0	8.2	8.0	8.1	8.4	8.1	8.2	8.2	7.9	8.1
19	8.1	7.9	8.0	8.1	7.9	8.0	8.4	7.8	8.2	8.1	8.0	8.0
20	8.1	7.6	7.9	8.0	7.8	7.9	8.5	8.1	8.3	8.1	8.0	8.0
21	8.1	7.7	8.0	8.1	7.7	8.0	8.4	8.2	8.3	8.1	7.9	8.0
22	8.0	7.5	7.8	8.4	8.1	8.3	8.4	8.2	8.3	8.1	7.9	8.0
23	8.1	7.6	7.9	8.4	8.2	8.3	8.1	8.0	8.1	8.1	7.8	7.9
24	8.1	7.8	7.9	8.2	8.1	8.2	8.0	7.9	8.0	7.8	7.7	7.8
25	8.1	7.6	8.0	8.2	8.1	8.2	8.2	8.0	8.1	7.9	7.8	7.8
26	8.1	7.7	7.9	8.2	8.1	8.2	8.2	8.1	8.2	8.1	7.8	7.9
27	7.7	7.6	7.7	8.3	8.2	8.2	8.2	8.2	8.2	8.1	7.9	8.0
28	7.8	7.6	7.7	8.3	8.2	8.3	8.2	8.2	8.2	8.1	8.0	8.1
29	8.0	7.8	7.9	8.3	8.2	8.3	8.2	8.2	8.2	8.2	8.0	8.1
30	8.0	7.8	7.9	8.4	8.2	8.3	8.4	8.2	8.3	8.1	7.8	8.0
31	8.0	7.8	7.9	---	---	---	8.3	8.2	8.3	8.0	7.7	7.8
MONTH	8.2	7.5	7.9	8.4	7.6	8.0	8.5	7.8	8.2	8.3	7.7	8.0

## GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MTN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	7.8	7.7	7.8	8.0	7.9	8.0	8.0	7.7	7.8	8.5	8.1	8.3
2	7.9	7.7	7.8	8.0	7.9	7.9	7.9	7.7	7.8	8.6	8.1	8.4
3	7.9	7.8	7.9	7.9	7.8	7.8	8.0	7.7	7.9	8.5	8.1	8.3
4	7.9	7.8	7.9	7.9	7.8	7.8	8.0	7.9	7.9	8.5	8.0	8.2
5	8.0	7.9	8.0	7.9	7.7	7.8	7.9	7.9	7.9	8.5	8.0	8.2
6	8.1	7.9	8.0	7.8	7.7	7.7	7.9	7.8	7.9	8.4	8.0	8.1
7	8.1	8.0	8.0	7.9	7.7	7.8	8.0	7.9	8.0	8.0	7.6	7.9
8	8.1	8.0	8.1	7.9	7.8	7.9	8.0	7.9	8.0	7.9	7.7	7.8
9	8.1	8.0	8.0	8.0	7.9	8.0	8.0	7.9	8.0	8.0	7.8	7.9
10	8.1	7.9	8.0	8.0	7.9	7.9	8.1	8.0	8.0	8.5	7.9	8.1
11	8.2	8.0	8.1	8.0	7.9	8.0	8.1	8.0	8.1	8.3	8.0	8.1
12	8.2	7.9	8.0	8.0	7.8	7.9	8.1	7.9	8.0	8.3	8.0	8.1
13	8.2	8.0	8.1	7.9	7.7	7.8	8.1	7.9	8.0	8.2	7.9	8.0
14	8.2	8.0	8.1	7.9	7.8	7.8	8.1	7.9	8.0	8.2	7.9	8.0
15	8.2	8.0	8.1	8.0	7.8	7.9	8.0	7.9	8.0	8.2	7.9	8.0
16	8.1	7.8	8.0	8.1	8.0	8.1	8.1	7.9	8.0	8.1	7.8	8.0
17	7.9	7.8	7.8	8.0	7.9	7.9	8.1	8.0	8.1	8.0	7.8	7.9
18	7.8	7.8	7.8	8.0	7.8	7.9	8.2	8.0	8.1	8.0	7.8	7.9
19	7.8	7.7	7.8	8.0	7.9	7.9	8.2	8.1	8.1	7.9	7.7	7.8
20	7.9	7.8	7.8	8.1	7.9	8.0	8.1	8.0	8.1	7.9	7.8	7.8
21	7.8	7.7	7.8	7.9	7.9	7.9	8.2	8.0	8.1	7.9	7.7	7.8
22	7.9	7.7	7.8	8.0	7.8	8.0	8.3	8.1	8.2	7.8	7.7	7.8
23	7.9	7.7	7.8	8.1	7.8	8.0	8.4	8.2	8.3	7.8	7.7	7.8
24	7.7	7.6	7.7	8.1	7.8	8.0	8.5	7.9	8.3	7.8	7.7	7.8
25	7.7	7.6	7.7	8.1	7.9	8.0	8.5	8.2	8.3	7.9	7.7	7.8
26	7.8	7.7	7.8	8.1	7.9	8.0	8.4	8.1	8.2	7.9	7.8	7.8
27	7.9	7.7	7.9	8.2	7.8	8.0	8.3	8.0	8.2	7.9	7.7	7.8
28	8.1	7.9	8.0	8.2	7.8	8.1	8.6	8.1	8.3	7.8	7.5	7.6
29	---	---	---	8.2	7.9	8.1	8.5	8.3	8.4	7.6	7.5	7.6
30	---	---	---	8.1	7.8	8.0	8.5	8.1	8.3	7.8	7.6	7.7
31	---	---	---	8.1	7.9	8.0	---	---	---	7.8	7.8	7.8
MONTH	8.2	7.6	7.9	8.2	7.7	7.9	8.6	7.7	8.1	8.6	7.5	7.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.9	7.8	7.8	8.0	7.8	7.9	8.8	8.1	8.5	8.2	7.7	8.0
2	8.0	7.9	7.9	8.0	7.9	7.9	8.6	8.1	8.3	8.2	7.8	7.9
3	8.0	7.7	7.9	8.1	7.9	8.0	8.6	7.8	8.2	8.1	7.7	7.9
4	7.9	7.8	7.9	8.1	7.9	8.0	8.3	7.8	8.0	8.3	7.8	8.0
5	8.0	7.8	7.9	8.2	7.9	8.0	8.1	7.8	7.9	8.5	7.9	8.2
6	8.1	7.9	8.0	8.3	7.9	8.0	8.4	7.8	8.0	8.5	8.1	8.3
7	8.1	7.9	8.0	8.5	8.0	8.2	8.2	7.7	7.9	8.3	8.0	8.2
8	8.0	7.8	7.9	8.2	7.9	8.1	8.4	7.9	8.1	8.3	7.8	8.0
9	8.0	7.9	7.9	8.6	7.9	8.2	8.1	7.7	7.9	8.4	7.9	8.1
10	7.9	7.6	7.8	8.6	8.0	8.3	7.9	7.6	7.7	8.4	7.8	8.1
11	8.0	7.7	7.9	8.6	8.1	8.3	8.1	7.6	7.8	8.4	7.8	8.0
12	7.9	7.7	7.9	8.7	8.2	8.4	8.5	7.7	8.0	8.5	8.0	8.2
13	8.0	7.8	7.9	8.7	8.1	8.4	8.6	7.9	8.2	8.3	8.1	8.2
14	---	---	---	8.7	8.2	8.4	8.7	8.1	8.4	8.2	7.9	8.1
15	---	---	---	8.8	8.0	8.3	8.8	8.0	8.4	8.2	7.8	8.0
16	8.0	7.8	7.9	8.7	8.0	8.3	8.8	8.0	8.4	8.0	7.8	7.9
17	8.0	7.7	7.8	8.8	7.9	8.3	8.7	7.8	8.2	8.1	7.9	8.0
18	7.9	7.7	7.8	8.7	8.0	8.4	8.5	7.8	8.1	8.0	7.7	7.8
19	7.9	7.7	7.9	8.4	7.9	8.2	8.5	7.8	8.1	8.2	7.9	8.0
20	8.0	7.9	8.0	8.6	7.8	8.1	8.2	7.8	7.9	8.2	7.9	8.0
21	8.1	8.0	8.0	8.9	7.8	8.3	8.3	7.7	8.0	8.0	7.8	7.9
22	8.0	7.9	8.0	8.3	8.0	8.1	8.5	7.8	8.1	7.9	7.7	7.9
23	8.0	7.9	8.0	8.3	7.7	7.9	8.2	7.9	8.1	8.1	7.8	7.9
24	8.1	7.9	8.0	8.8	7.8	8.2	8.2	7.8	7.9	8.0	7.7	7.8
25	8.2	7.9	8.0	8.9	8.1	8.5	7.9	7.6	7.7	7.9	7.8	7.8
26	8.2	7.9	8.0	8.8	8.1	8.5	7.8	7.6	7.7	7.8	7.7	7.8
27	8.3	7.9	8.1	8.4	7.9	8.1	7.9	7.6	7.7	7.9	7.8	7.8
28	8.3	7.8	8.1	8.8	7.8	8.2	8.4	7.8	8.1	7.9	7.7	7.8
29	8.1	7.7	7.8	8.8	7.9	8.3	8.7	8.0	8.3	7.9	7.6	7.8
30	8.1	7.7	7.9	8.7	7.9	8.3	8.5	8.1	8.3	8.2	7.7	7.9
31	---	---	---	8.7	7.7	8.3	8.4	7.9	8.1	---	---	---
MONTH	8.3	7.6	7.9	8.9	7.7	8.2	8.8	7.6	8.1	8.5	7.6	8.0
YEAR	8.9	7.5	8.0									

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.0	18.0	18.5	14.5	13.5	14.0	7.0	5.0	6.0	3.0	2.5	3.0
2	18.0	15.5	16.5	16.0	14.0	14.5	6.5	6.5	6.5	2.5	2.0	2.5
3	16.0	13.5	15.0	16.5	15.5	16.0	7.0	6.5	6.5	4.5	2.5	3.0
4	16.0	14.5	15.5	16.5	15.5	16.0	7.0	6.5	6.5	5.0	4.0	4.5
5	18.5	15.5	17.0	16.0	15.0	15.5	6.5	5.5	6.0	3.5	2.0	2.5
6	19.5	18.5	19.0	15.0	12.0	13.5	5.5	5.0	5.0	3.0	2.0	2.5
7	18.5	17.5	18.0	12.0	11.0	11.5	6.0	5.0	5.5	3.5	3.0	3.0
8	18.5	17.0	17.5	11.5	10.0	11.0	6.0	5.0	5.5	3.0	1.5	2.0
9	18.0	16.5	17.0	11.5	9.5	10.5	5.0	4.0	4.5	1.0	.5	.5
10	17.0	16.0	16.5	10.5	9.0	10.0	4.0	3.5	4.0	.5	.5	.5
11	17.0	15.0	16.0	11.0	9.5	10.5	3.5	2.5	3.0	.5	.5	.5
12	17.0	15.0	16.0	11.0	9.5	10.0	3.5	3.0	3.0	.5	.0	.5
13	18.0	16.5	17.0	11.0	9.0	10.0	4.5	3.5	4.0	2.0	.5	1.0
14	17.5	16.5	17.0	10.5	9.0	10.0	4.5	4.0	4.5	1.5	1.0	1.5
15	17.5	17.0	17.0	10.0	8.0	9.0	5.0	4.0	4.5	2.0	.5	1.0
16	17.0	15.5	16.5	10.0	8.0	9.0	4.5	4.0	4.0	1.5	.5	1.0
17	17.0	15.5	16.5	10.5	9.5	10.0	4.5	4.0	4.5	.5	.5	.5
18	16.5	14.0	15.5	10.5	9.5	10.0	4.0	2.5	3.5	2.5	.0	.5
19	14.0	12.5	13.5	11.5	10.0	10.5	3.0	.5	1.5	2.5	1.5	2.0
20	14.5	12.5	13.5	11.0	8.5	9.5	.5	.5	.5	3.0	1.5	2.0
21	14.5	13.0	14.0	8.0	5.5	7.0	.5	.5	.5	2.0	1.5	2.0
22	15.0	14.0	14.5	5.5	5.0	5.0	2.0	.5	1.5	2.0	1.5	1.5
23	15.0	13.5	14.0	6.0	4.5	5.0	2.0	1.5	1.5	1.5	.5	1.0
24	14.0	12.0	13.0	6.5	6.0	6.0	1.5	1.0	1.0	.5	.5	.5
25	12.5	10.5	11.5	6.5	5.5	6.0	2.0	1.0	1.5	.5	.5	.5
26	14.0	12.0	13.0	8.5	6.0	7.0	2.5	2.0	2.0	1.0	.5	.5
27	14.5	13.0	13.5	8.0	7.5	7.5	3.5	3.0	3.0	2.5	.5	1.5
28	13.0	12.0	12.5	7.0	6.5	7.0	3.5	3.0	3.5	3.0	1.5	2.5
29	13.0	11.5	12.5	6.5	6.0	6.0	3.5	2.5	3.0	3.0	2.0	2.5
30	14.0	12.5	13.0	6.0	5.0	5.5	2.5	2.0	2.5	3.0	2.0	2.5
31	14.5	13.5	14.0	---	---	---	3.0	2.0	2.5	2.0	.5	1.0
MONTH	19.5	10.5	15.5	16.5	4.5	10.0	7.0	.5	3.5	5.0	.0	1.5

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

## GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.5	19.0	19.5	22.5	21.0	22.0	26.5	24.0	25.5	23.5	22.5	23.0
2	20.0	18.0	19.0	22.5	21.0	22.0	26.5	24.0	25.0	25.0	23.5	24.0
3	20.0	19.0	19.5	23.5	21.5	22.5	26.5	24.0	25.5	24.0	22.5	23.0
4	19.5	19.0	19.0	25.0	23.0	23.5	27.5	25.5	26.5	23.0	20.5	22.0
5	19.5	18.0	19.0	26.0	23.5	24.5	27.0	24.5	26.0	23.5	20.5	22.0
6	21.0	18.5	19.5	27.0	24.5	26.0	28.5	26.0	27.0	22.5	21.0	22.0
7	21.0	19.5	20.5	27.5	26.0	27.0	28.0	26.5	27.0	22.5	21.5	22.0
8	22.0	20.0	21.0	27.0	25.5	26.0	26.0	25.0	25.5	23.5	20.5	22.0
9	22.0	21.0	21.5	28.0	25.0	26.5	26.5	24.5	25.5	23.5	21.0	22.5
10	22.0	21.0	21.5	27.0	25.5	26.5	25.5	24.0	25.0	24.0	22.0	23.0
11	22.0	20.5	21.0	25.5	24.5	25.0	24.5	22.5	23.5	25.0	22.5	23.5
12	22.0	20.5	21.5	27.0	23.5	25.0	23.5	21.0	22.5	25.0	23.0	24.0
13	22.0	20.0	20.5	26.5	24.5	25.5	24.5	21.0	23.0	24.5	23.5	24.0
14	---	---	---	26.5	24.0	25.0	25.0	22.0	23.5	26.0	24.0	24.5
15	---	---	---	27.5	24.5	26.0	25.5	22.5	24.0	27.5	24.5	26.0
16	21.0	20.5	21.0	28.0	26.0	27.0	26.0	23.0	24.5	26.0	23.5	25.0
17	20.0	18.5	19.5	28.5	26.0	27.0	26.5	24.0	25.5	23.5	21.0	22.5
18	20.5	18.5	19.0	27.5	26.0	27.0	25.5	23.5	24.5	23.0	21.0	22.0
19	20.0	19.0	19.5	27.0	25.5	26.5	26.0	23.0	24.5	22.0	20.0	21.0
20	20.0	18.5	19.0	28.0	26.0	27.0	25.0	23.0	23.5	20.5	19.0	19.5
21	21.0	19.0	20.0	28.5	25.5	27.0	23.5	21.5	22.5	19.0	18.0	18.5
22	20.5	19.5	20.0	27.0	25.0	26.0	23.0	20.5	22.0	18.0	17.0	17.5
23	21.5	19.0	20.0	25.0	23.5	24.5	22.5	21.5	22.0	18.5	16.0	17.5
24	22.0	19.5	20.5	26.5	23.0	25.0	23.5	21.5	22.0	18.0	17.0	17.0
25	23.0	20.5	21.5	27.5	24.5	26.0	22.0	21.0	21.5	18.0	17.0	17.5
26	23.0	21.5	22.0	28.0	25.5	26.5	22.5	20.5	21.5	18.0	17.5	17.5
27	24.0	21.5	23.0	27.0	26.0	26.5	23.0	21.5	22.5	18.0	17.5	17.5
28	23.5	22.5	23.0	27.5	26.0	26.5	23.5	21.5	22.5	19.5	18.0	18.5
29	23.0	21.5	22.5	26.5	25.0	26.0	22.5	20.0	21.5	21.0	18.0	19.5
30	23.0	22.0	22.5	26.5	24.0	25.5	21.5	20.5	21.0	21.0	18.5	20.0
31	---	---	---	27.5	24.5	26.0	23.5	21.5	22.5	---	---	---
MONTH	24.0	18.0	20.5	28.5	21.0	25.5	28.5	20.0	24.0	27.5	16.0	21.5
YEAR	28.5	.0	13.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.5	5.0	6.0	8.5	7.4	7.9	11.2	10.2	10.7	12.5	11.9	12.2
2	7.6	5.1	6.2	8.0	6.1	7.3	10.7	10.4	10.5	12.9	12.3	12.7
3	8.6	6.2	7.2	8.2	6.3	7.1	11.1	10.4	10.7	12.7	11.9	12.3
4	8.4	6.6	7.5	8.2	6.5	7.2	10.8	10.3	10.5	11.8	11.5	11.6
5	7.8	5.7	6.8	7.6	6.2	6.8	12.1	10.4	11.0	12.6	11.9	12.3
6	7.1	4.7	5.8	8.3	6.3	7.2	12.5	11.0	11.6	12.7	12.4	12.6
7	8.0	3.9	5.7	10.1	7.2	8.7	---	---	---	12.4	12.3	12.3
8	8.1	4.5	6.0	10.1	8.1	9.2	---	---	---	13.0	12.6	12.9
9	8.8	5.0	6.6	9.1	8.1	8.6	---	---	---	13.2	13.0	13.0
10	8.0	5.4	6.7	10.1	7.9	9.0	---	---	---	13.4	13.1	13.3
11	9.3	6.2	7.6	10.1	8.1	9.1	---	---	---	13.1	12.1	12.7
12	8.8	6.6	7.5	10.3	8.1	9.3	---	---	---	12.3	11.7	12.0
13	10.2	5.5	7.5	10.3	7.9	9.1	---	---	---	12.3	11.9	12.1
14	9.5	5.5	7.3	10.1	7.7	8.9	---	---	---	12.5	12.0	12.2
15	7.0	5.1	5.8	10.3	7.6	9.1	---	---	---	12.4	11.9	12.1
16	8.3	5.2	6.4	9.7	7.7	8.7	12.8	10.3	11.5	12.6	11.9	12.2
17	7.6	5.3	6.4	10.1	6.3	8.4	11.6	10.3	11.0	12.5	12.3	12.3
18	8.1	5.8	6.9	10.5	7.8	9.2	12.9	10.1	11.5	12.2	11.5	11.8
19	8.5	6.4	7.4	9.4	7.9	8.6	13.4	11.0	12.2	13.1	11.3	12.0
20	9.4	6.7	8.0	9.7	8.3	9.1	13.6	11.8	12.8	13.3	12.3	12.8
21	9.4	6.6	7.9	11.0	9.6	10.3	12.9	11.6	12.3	12.6	12.2	12.5
22	7.9	6.3	7.2	12.0	10.7	11.4	12.6	11.2	11.8	13.0	12.3	12.6
23	9.0	6.2	7.5	12.4	11.2	11.7	12.2	11.7	12.0	13.4	12.9	13.1
24	9.9	6.6	8.3	11.1	10.6	10.8	12.8	12.2	12.6	13.7	13.4	13.6
25	10.2	8.0	9.2	11.9	10.8	11.2	12.8	12.7	12.7	13.7	13.2	13.5
26	9.1	7.3	8.2	11.9	10.4	11.1	12.7	12.4	12.6	13.7	13.4	13.6
27	8.2	7.0	7.6	10.8	9.9	10.3	12.3	12.0	12.2	12.9	11.5	12.4
28	9.1	8.1	8.8	11.3	10.2	10.6	12.1	12.0	12.0	12.0	11.0	11.6
29	9.6	9.0	9.3	12.1	10.5	11.2	12.5	12.0	12.3	12.4	9.3	10.9
30	9.4	8.5	9.0	12.0	10.7	11.3	13.0	12.4	12.7	11.8	10.1	11.3
31	8.9	7.8	8.3	---	---	---	12.6	12.2	12.4	13.2	11.8	12.5
MONTH	10.2	3.9	7.3	12.4	6.1	9.3	13.6	10.1	11.8	13.7	9.3	12.4

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	11.8	10.8	11.1	13.9	13.1	13.5	10.1	9.5	9.9	11.3	5.4	8.0
2	12.4	9.0	11.3	15.9	13.2	14.3	10.1	9.7	10.0	12.2	6.0	8.9
3	---	---	---	15.5	14.4	15.0	10.3	9.5	9.8	11.2	5.8	8.3
4	---	---	---	---	---	---	11.1	10.4	10.9	9.8	4.8	7.2
5	---	---	---	12.5	11.5	12.1	11.3	10.9	11.1	9.7	3.7	6.4
6	---	---	---	12.8	12.5	12.7	11.5	10.9	11.3	7.9	3.8	5.7
7	---	---	---	12.8	12.6	12.7	11.9	11.2	11.6	4.8	2.3	3.5
8	---	---	---	13.0	12.7	12.8	11.5	11.0	11.2	5.5	2.7	4.0
9	---	---	---	12.8	12.4	12.6	11.4	10.9	11.2	6.5	2.8	4.6
10	---	---	---	12.4	11.9	12.2	11.4	11.0	11.3	11.0	2.7	6.0
11	---	---	---	11.9	11.1	11.5	11.3	10.8	11.0	9.9	5.1	7.3
12	---	---	---	12.1	11.4	11.8	10.9	10.4	10.7	9.3	5.1	7.0
13	---	---	---	11.9	11.5	11.6	10.4	10.1	10.2	8.6	4.6	6.4
14	---	---	---	11.8	11.5	11.6	10.2	9.4	9.9	7.8	4.1	5.7
15	---	---	---	11.7	11.6	11.6	9.4	8.1	8.8	7.5	3.6	5.3
16	---	---	---	11.7	11.2	11.5	8.3	6.7	7.5	7.4	3.9	5.3
17	---	---	---	11.2	11.1	11.2	7.4	5.8	6.6	7.1	3.7	5.1
18	---	---	---	11.5	11.2	11.3	8.7	6.7	7.7	6.5	3.7	4.9
19	15.0	14.5	14.8	11.3	11.1	11.2	8.5	6.8	7.5	5.1	4.4	4.7
20	14.8	14.0	14.5	11.8	11.4	11.6	9.2	5.7	7.1	6.2	4.1	5.0
21	14.0	13.8	13.9	11.7	11.5	11.6	11.0	7.9	9.3	6.6	5.2	5.8
22	14.5	13.7	14.0	11.6	11.5	11.6	11.8	8.1	9.8	6.6	5.7	6.3
23	15.0	13.5	14.0	11.8	11.4	11.6	12.5	8.1	10.0	6.6	5.7	6.2
24	14.1	13.6	13.8	11.5	10.5	11.0	13.2	7.5	10.0	6.6	6.1	6.3
25	14.6	14.1	14.3	10.6	10.2	10.4	12.1	7.0	9.3	6.8	6.0	6.2
26	15.0	14.0	14.5	11.2	11.1	10.9	10.6	6.5	8.2	6.7	5.6	6.0
27	14.5	13.5	14.1	12.0	11.2	11.6	10.7	5.4	7.8	6.9	5.5	6.1
28	14.5	13.1	13.9	12.2	10.0	11.7	13.7	6.2	9.2	7.5	5.4	6.3
29	---	---	---	11.7	10.5	11.2	12.2	7.0	9.5	8.0	7.6	7.8
30	---	---	---	10.6	9.2	10.1	11.9	6.2	8.6	8.1	7.9	8.0
31	---	---	---	9.4	8.9	9.2	---	---	---	8.3	7.7	8.1
MONTH	15.0	9.0	13.7	15.9	8.9	11.8	13.7	5.4	9.6	12.2	2.3	6.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	7.9	7.7	7.8	6.8	5.9	6.2	17.6	3.9	10.3	11.6	5.2	8.3
2	8.3	7.8	8.1	7.3	5.8	6.3	12.6	.4	6.8	9.9	2.9	5.9
3	8.0	7.5	7.7	7.1	5.5	6.1	13.0	1.7	6.8	10.3	2.7	5.9
4	8.0	7.4	7.6	6.5	4.9	5.5	9.9	1.7	5.2	11.3	3.2	6.6
5	7.9	7.3	7.6	7.8	4.6	5.9	6.0	2.0	3.9	13.0	4.3	7.9
6	8.0	7.1	7.5	8.3	4.6	5.9	9.8	2.4	5.3	12.7	4.3	8.2
7	7.6	6.7	7.0	10.2	4.0	6.7	6.3	1.8	3.6	10.6	3.7	6.8
8	7.1	6.3	6.7	7.4	3.8	5.6	9.5	2.7	5.1	10.4	3.3	6.0
9	7.4	6.0	6.7	13.6	4.1	7.5	8.0	3.0	5.1	11.8	3.4	6.9
10	7.2	5.9	6.4	12.7	4.8	8.7	6.6	2.5	4.3	12.9	2.9	7.1
11	7.4	6.4	6.8	13.3	5.3	8.9	8.6	2.7	5.0	10.4	2.6	6.0
12	7.1	6.2	6.5	14.7	6.1	9.9	12.8	3.0	7.7	10.7	3.0	6.5
13	7.3	6.0	6.6	13.7	5.8	8.9	16.2	3.5	9.3	8.5	2.6	5.4
14	---	---	---	13.5	5.1	8.4	19.8	4.3	11.3	7.7	1.9	4.3
15	---	---	---	14.7	4.9	9.0	20.0	4.6	12.4	7.2	1.3	3.6
16	7.3	5.6	6.7	14.6	4.1	8.5	20.0	4.7	12.3	7.2	1.4	3.8
17	8.0	7.0	7.7	16.3	3.6	9.3	19.0	3.4	10.4	6.6	2.2	4.1
18	8.3	7.8	8.1	13.7	4.0	9.1	16.4	2.8	8.6	6.3	2.5	4.2
19	8.1	7.8	7.9	---	---	---	15.9	3.2	8.5	8.5	3.5	5.4
20	8.3	7.6	7.9	12.3	4.3	6.3	7.6	2.7	4.8	8.5	3.3	5.2
21	8.0	7.2	7.5	16.5	3.3	8.9	9.6	2.8	5.6	7.3	3.7	5.2
22	7.9	6.9	7.3	6.7	3.3	4.8	12.3	3.9	7.4	6.1	3.5	4.7
23	7.8	6.8	7.3	9.1	2.8	5.3	9.0	3.9	6.5	7.3	3.6	5.3
24	8.0	6.7	7.2	15.7	3.7	8.3	10.0	3.1	6.1	5.7	3.6	4.5
25	8.0	6.1	6.8	17.7	3.9	10.3	7.2	5.8	6.5	5.7	3.5	4.4
26	8.3	5.5	6.7	16.8	3.9	9.6	---	---	---	5.2	3.3	4.2
27	9.3	5.4	7.1	8.5	3.6	6.1	---	---	---	5.4	3.4	4.1
28	8.8	5.3	6.5	15.7	2.4	7.4	---	---	---	6.7	3.2	4.6
29	6.9	5.3	6.0	16.8	2.6	8.1	---	---	---	6.6	3.1	4.5
30	6.3	5.3	5.8	15.7	2.5	8.4	---	---	---	7.9	3.3	5.0
31	---	---	---	16.1	2.8	8.6	---	---	---	---	---	---
MONTH	9.3	5.3	7.1	17.7	2.4	7.6	20.0	.4	7.2	13.0	1.3	5.5
YEAR	20.0	.4	8.8									

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	868	748	605	735	234	579	447	727	535	571	750	808
2	872	768	621	704	366	563	468	710	592	647	757	802
3	863	796	692	704	497	498	494	704	626	681	781	822
4	848	800	724	566	538	606	520	716	641	693	778	824
5	858	831	737	417	619	529	559	715	669	697	652	803
6	844	806	740	459	649	384	591	719	690	722	737	780
7	822	780	752	561	656	458	625	721	704	722	728	850
8	844	791	766	597	684	513	656	656	683	680	663	960
9	855	759	776	632	725	572	675	676	703	675	650	834
10	846	770	781	716	758	620	662	674	553	708	678	837
11	833	801	790	787	759	598	626	716	632	691	724	835
12	839	821	795	783	770	435	562	718	644	707	757	813
13	831	798	791	774	772	413	556	734	670	710	800	821
14	830	805	790	807	779	431	569	744	---	715	796	830
15	828	796	802	791	824	452	598	750	---	711	770	837
16	823	809	801	792	643	471	626	741	601	710	752	854
17	833	834	814	822	332	394	647	748	453	695	763	862
18	836	839	931	838	212	409	650	751	487	686	775	860
19	824	819	879	834	262	488	665	720	562	688	780	843
20	860	577	843	832	294	419	676	660	607	682	812	851
21	853	581	835	999	319	425	674	569	635	694	751	843
22	856	710	936	931	296	480	682	564	661	708	720	830
23	835	719	656	488	314	558	694	640	658	680	746	854
24	816	706	504	381	335	610	710	614	684	743	763	821
25	804	711	521	416	320	636	696	674	710	722	338	802
26	777	706	583	515	404	648	693	708	716	721	547	797
27	684	697	645	596	495	650	706	680	718	723	626	790
28	624	708	686	674	541	648	704	431	699	736	721	751
29	681	704	729	726	---	664	716	367	458	759	754	793
30	722	714	730	720	---	682	721	461	535	775	785	788
31	734	---	742	286	---	578	---	506	---	774	789	---
MEAN	814	757	742	674	514	529	629	662	626	704	724	827
WTR YR 1982	MEAN	685	MAX	999	MIN	212						

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	7.8	8.1	8.2	7.8	8.0	7.8	8.2	7.8	7.9	8.5	8.0
2	7.9	7.8	8.1	8.3	7.8	7.9	7.9	8.4	7.9	7.9	8.3	8.0
3	8.0	7.8	8.1	8.3	7.9	7.8	7.9	8.3	7.9	7.9	8.2	7.9
4	8.1	7.8	8.1	8.1	7.9	7.8	7.9	8.2	7.9	7.9	8.1	7.9
5	8.1	7.8	8.1	7.9	8.0	7.8	7.9	8.1	7.9	8.0	7.9	8.2
6	7.9	7.8	8.1	8.0	8.0	7.7	7.9	8.1	8.0	8.0	8.0	8.3
7	7.8	8.0	8.2	8.0	8.0	7.8	8.0	7.9	8.0	8.2	7.8	8.2
8	7.8	7.9	8.1	8.1	8.1	7.9	8.0	7.8	7.9	8.1	8.1	8.1
9	7.9	8.0	8.2	8.1	8.0	7.9	8.0	7.9	7.9	8.1	7.9	8.1
10	7.9	8.0	8.2	8.0	8.0	7.9	8.0	8.0	7.8	8.3	7.7	8.1
11	8.1	8.1	8.3	8.0	8.1	8.0	8.1	8.1	7.9	8.3	7.8	8.0
12	8.1	8.0	8.2	8.0	8.0	7.8	8.1	8.1	7.9	8.4	7.9	8.2
13	8.0	8.0	8.3	8.1	8.1	7.8	8.0	8.0	6.6	8.3	8.2	8.2
14	8.1	7.9	8.2	8.1	8.1	7.8	8.0	8.0	---	8.3	8.5	8.1
15	8.0	8.1	8.2	8.0	8.1	7.8	8.0	7.9	---	8.2	8.5	8.0
16	7.9	8.1	8.3	8.0	8.0	8.1	8.0	7.9	6.8	8.2	8.5	7.9
17	7.9	8.0	8.2	7.9	7.8	7.9	8.1	7.9	7.8	8.2	8.3	7.9
18	8.0	8.0	8.3	8.0	7.8	8.0	8.1	7.8	7.9	8.5	8.1	7.8
19	8.0	8.0	8.1	8.0	7.8	7.9	8.1	7.8	7.9	8.2	8.2	8.0
20	7.9	7.9	8.3	8.0	7.8	8.0	8.1	7.8	8.0	7.9	7.9	7.9
21	8.0	8.0	8.4	8.0	7.8	7.9	8.1	7.8	8.0	8.4	7.9	7.9
22	7.9	8.3	8.3	8.0	7.8	8.0	8.2	7.8	8.0	8.1	8.1	7.9
23	7.9	8.3	8.1	8.0	7.7	8.1	8.2	7.8	8.0	7.9	8.1	7.9
24	7.9	8.2	8.0	7.8	7.7	8.1	8.3	7.8	8.0	8.3	7.9	7.8
25	8.0	8.2	8.1	7.8	7.7	8.0	8.3	7.8	8.0	8.5	7.6	7.8
26	7.9	8.2	8.2	8.0	7.8	8.0	8.2	7.8	8.0	8.5	7.6	7.8
27	7.7	8.2	8.2	8.1	7.9	8.1	8.1	7.8	8.1	8.1	7.7	7.8
28	7.7	8.3	8.2	8.1	7.9	8.1	8.2	7.7	8.2	8.2	8.1	7.8
29	7.9	8.3	8.2	8.1	---	8.1	8.3	7.6	7.8	8.4	8.2	7.8
30	7.9	8.3	8.3	8.1	---	8.1	8.3	7.8	8.0	8.4	8.2	7.9
31	7.8	---	8.3	7.8	---	8.0	---	7.8	---	8.2	8.1	---
MEAN	7.9	8.0	8.2	8.0	7.9	7.9	8.1	7.9	7.9	8.2	8.1	8.0
WTR YR 1982	MEAN	8.0	MAX	8.5	MIN	6.6						

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH.--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	14.0	6.0	3.0	.5	4.5	11.0	16.0	19.5	22.0	25.5	23.0
2	16.5	14.5	6.5	2.0	1.0	5.5	11.0	16.5	19.0	22.0	25.0	24.0
3	15.0	16.0	6.5	3.0	2.5	4.0	11.0	17.5	19.5	22.0	25.5	23.0
4	15.0	16.0	6.5	5.0	2.0	4.0	8.0	18.0	19.0	23.5	26.5	22.0
5	16.5	15.5	6.0	2.5	2.5	3.5	7.0	18.5	18.5	24.5	26.0	22.0
6	19.0	14.0	5.5	2.0	2.0	2.5	6.0	19.5	19.0	25.5	27.0	22.0
7	18.0	11.5	5.5	3.0	1.0	2.5	6.0	19.5	20.5	27.0	27.0	22.0
8	17.5	11.0	5.5	1.5	1.5	3.0	6.5	18.0	20.5	26.0	25.5	21.5
9	17.0	11.0	4.5	.5	2.0	4.0	6.0	19.0	21.5	26.0	25.5	22.0
10	16.5	10.0	4.0	.5	2.0	4.5	6.5	19.5	21.5	26.5	25.0	23.0
11	16.0	10.5	3.0	.5	2.0	6.5	7.5	19.5	21.5	25.0	23.5	23.5
12	16.0	10.5	3.0	.5	2.0	6.0	8.5	20.5	21.0	25.0	22.5	24.0
13	17.0	10.0	4.0	.5	2.5	7.0	9.5	21.5	20.5	25.5	22.5	24.5
14	17.5	10.0	4.5	1.5	2.5	7.5	10.0	22.5	---	25.0	23.5	24.5
15	17.0	9.0	4.5	1.0	4.0	7.0	11.5	22.5	---	25.5	24.0	26.0
16	16.5	9.0	4.0	1.0	4.0	7.0	14.0	22.5	21.0	27.0	24.5	24.5
17	16.5	10.0	4.5	.5	1.5	8.5	14.5	23.0	19.5	27.0	25.5	22.5
18	15.5	10.0	3.5	.5	1.0	8.5	13.5	23.0	19.0	27.0	25.0	22.0
19	13.5	10.5	2.0	2.0	1.5	8.0	14.0	22.0	19.5	26.5	24.5	20.5
20	13.0	9.5	.5	2.0	1.5	7.0	14.0	21.5	19.0	26.5	23.5	19.5
21	13.5	6.5	.5	2.0	2.0	7.5	13.0	20.5	19.5	27.0	23.0	18.5
22	14.5	5.0	1.5	1.5	2.0	7.0	13.5	20.5	20.0	26.0	22.5	17.5
23	14.0	5.0	1.5	1.0	2.5	6.5	13.5	21.0	20.0	24.5	22.0	17.0
24	13.0	6.0	1.0	.5	3.5	7.0	14.5	20.5	20.5	24.5	22.0	17.0
25	12.0	6.0	1.5	.5	2.5	8.5	15.0	20.5	21.0	26.0	21.5	17.0
26	13.0	6.5	2.0	.5	2.0	6.5	15.5	20.5	22.0	26.5	21.5	17.5
27	13.5	8.0	3.0	1.0	2.5	5.5	15.5	20.5	22.5	26.5	22.5	17.5
28	12.5	7.0	3.5	2.0	3.5	5.5	14.0	20.0	23.0	26.5	22.5	18.5
29	12.5	6.0	3.0	2.5	---	7.5	14.0	19.0	22.5	26.0	21.5	19.5
30	13.0	5.5	2.5	2.5	---	10.0	14.5	18.5	22.5	25.5	21.0	20.0
31	14.0	---	2.5	1.0	---	12.5	---	18.5	---	26.0	22.5	---
MEAN	15.5	10.0	3.5	1.5	2.0	6.5	11.5	20.0	20.5	25.5	24.0	21.0
WTR YR 1982	MEAN	13.5	MAX	27.0	MIN	.5						

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	7.8	10.7	12.3	11.0	13.5	10.0	8.0	7.8	6.2	9.7	7.8
2	6.0	7.3	10.5	12.7	11.5	14.5	10.0	8.9	8.1	6.2	6.9	5.7
3	7.1	7.1	10.7	12.4	---	15.0	9.7	8.1	7.7	5.8	6.3	5.5
4	7.6	7.2	10.5	11.6	---	---	11.0	7.1	7.6	5.4	5.2	6.2
5	6.8	6.8	11.0	12.4	---	12.1	11.1	6.1	7.5	5.7	3.7	7.3
6	5.7	7.4	11.5	12.6	---	12.7	11.4	5.4	7.5	5.6	4.8	7.5
7	5.6	9.1	---	14.5	---	12.7	11.6	3.3	7.0	6.1	3.6	6.1
8	5.7	9.3	---	13.0	---	12.8	11.2	3.9	6.7	5.6	4.7	5.5
9	6.5	8.7	---	13.0	---	12.6	11.3	4.5	6.5	7.0	4.9	6.4
10	6.5	9.0	---	13.3	---	12.2	11.3	4.5	6.5	8.8	3.9	6.4
11	7.6	9.2	---	12.7	---	11.6	11.0	7.3	6.7	8.5	4.4	5.7
12	7.5	9.3	---	12.0	---	11.9	10.8	6.8	6.5	9.1	6.5	5.8
13	7.1	9.1	---	12.0	---	11.7	10.3	6.2	6.6	8.3	9.1	5.0
14	7.3	9.0	---	12.1	---	11.7	9.9	5.5	---	7.3	11.2	3.9
15	5.8	9.4	---	12.1	---	11.6	8.8	5.0	---	7.7	12.2	3.3
16	6.0	8.8	11.5	12.2	---	11.6	7.5	5.0	6.8	7.3	11.7	3.6
17	6.5	9.0	11.0	12.3	---	11.2	6.8	5.1	7.9	9.7	10.0	3.8
18	6.9	9.3	11.6	11.8	---	11.4	7.7	4.9	8.1	9.1	8.8	3.8
19	7.4	8.7	12.2	11.7	14.8	11.2	7.2	4.8	7.9	---	8.3	4.7
20	8.0	9.4	12.9	12.8	14.7	11.7	6.4	4.9	7.9	8.1	4.8	5.0
21	7.9	10.5	12.4	12.5	13.9	11.6	9.3	5.7	7.5	8.4	5.6	5.1
22	7.3	11.4	11.9	12.5	13.9	11.6	9.7	6.3	7.3	4.6	7.2	4.5
23	7.7	11.5	12.1	13.1	13.8	11.7	9.8	6.2	7.2	4.7	6.5	5.2
24	8.3	10.8	12.7	13.6	13.9	11.2	9.7	6.3	7.2	7.6	5.8	4.5
25	9.3	11.1	12.8	13.6	14.3	10.5	8.9	6.2	6.7	10.2	6.1	4.1
26	8.2	10.9	12.6	13.6	14.6	11.1	7.9	5.9	6.6	9.0	---	4.2
27	7.5	10.3	12.2	12.5	14.2	11.7	7.3	6.2	7.0	6.2	---	4.0
28	9.0	10.6	12.0	11.7	13.8	11.8	9.0	6.1	6.1	6.6	---	4.4
29	9.3	11.2	12.4	11.3	---	11.3	9.2	7.8	6.0	7.8	---	4.3
30	9.0	11.1	12.6	11.6	---	10.2	8.1	8.1	5.9	7.8	---	4.8
31	8.3	---	12.4	12.4	---	9.3	---	8.2	---	8.0	---	---
MEAN	7.3	9.3	11.8	12.5	13.7	11.9	9.5	6.1	7.1	7.3	6.9	5.1
WTR YR 1982	MEAN	8.8	MAX	15.0	MIN	3.3						

## GREAT MIAMI RIVER BASIN

03271800 TWIN CREEK NEAR INGOMAR, OH

LOCATION.--Lat 39°42'28", long 84°31'30", in sec. 15, T.5 N., R.3 E., Preble County, Hydrologic Unit 05080002, on left bank at downstream side of bridge on Halderman Road, 0.5 mi (0.8 km) downstream from Bantas Fork, 1.4 mi (2.3 km) west of Ingomar, and 4.8 mi (7.7 km) upstream from Aukerman Creek.

DRAINAGE AREA.--197 mi<sup>2</sup> (510 km<sup>2</sup>).

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 (248.540 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter period, which are fair. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 6 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--20 years, 195 ft<sup>3</sup>/s (5.522 m<sup>3</sup>/s) 13.44 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft<sup>3</sup>/s (547 m<sup>3</sup>/s) Mar. 4, 1963, gage height, 14.40 ft (4.389 m), from rating curve extended above 7,000 ft<sup>3</sup>/s (198 m<sup>3</sup>/s) on basis of contracted-opening measurement at gage height 18.8 ft (5.73 m); minimum daily, 2.5 ft<sup>3</sup>/s (0.071 m<sup>3</sup>/s) Sept. 12-14, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.8 ft (5.73 m), discharge, 30,300 ft<sup>3</sup>/s (858 m<sup>3</sup>/s), computed by Miami Conservancy District. Flood of Mar. 25, 1913 reached a stage of 28.0 ft (8.53 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4700 ft<sup>3</sup>/s (133 m<sup>3</sup>/s) and maximums (\*):

Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)	Date	Time	Discharge (ft <sup>3</sup> /s) (m <sup>3</sup> /s)	Gage height (ft) (m)				
Jan.23	0745	5300	150	7.80	2.377	Feb. 16	2330	* 7960	225	* 9.63	2.935
Jan.31	1415	6990	198	9.00	2.743						

Minimum discharge, 10 ft<sup>3</sup>/s (0.283m<sup>3</sup>/s) Oct. 3,4-6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	37	155	371	1910	157	382	72	849	81	19	27
2	11	34	171	279	586	166	260	69	407	64	19	25
3	11	31	106	618	662	172	1140	67	237	58	19	23
4	10	30	83	3250	448	491	544	65	177	54	22	21
5	10	29	69	1130	236	789	333	63	147	48	51	20
6	12	29	60	504	150	313	565	62	120	43	34	19
7	12	27	58	336	120	228	372	63	99	41	44	19
8	12	27	57	200	100	181	299	216	303	51	263	17
9	12	26	50	110	90	167	283	181	427	43	140	17
10	12	25	44	82	84	159	318	120	222	37	73	16
11	12	25	40	72	78	1090	340	99	132	37	44	16
12	12	24	38	66	74	1230	262	87	102	35	33	15
13	12	24	37	62	72	1340	226	79	88	32	28	15
14	12	24	37	60	70	730	179	71	75	30	24	14
15	12	24	36	60	140	553	161	66	68	28	22	14
16	12	24	36	58	2640	1700	153	62	293	27	21	13
17	12	24	36	58	4920	1120	203	57	463	26	20	13
18	12	24	36	56	1360	535	176	56	206	26	18	13
19	12	36	35	56	733	426	155	126	146	27	17	12
20	13	168	35	56	872	2640	142	124	121	28	17	12
21	13	94	44	56	1190	1120	122	199	103	26	18	13
22	14	57	74	54	469	545	106	134	90	39	17	13
23	14	46	1810	3320	537	349	99	94	76	62	16	13
24	14	69	896	868	618	276	95	83	65	38	381	14
25	14	80	386	313	294	248	93	68	59	30	1090	27
26	19	66	252	182	206	312	99	61	55	26	170	20
27	57	71	233	130	184	262	91	430	82	25	75	21
28	225	66	257	110	166	209	82	732	401	24	48	25
29	94	54	196	100	---	191	76	1020	268	23	37	20
30	58	48	159	1880	---	180	74	1380	124	21	31	17
31	44	---	158	6100	---	683	---	448	---	20	30	---
TOTAL	801	1343	5684	20597	19009	18562	7430	6454	6005	1150	2841	524
MEAN	25.8	44.8	183	664	679	599	248	208	200	37.1	91.6	17.5
MAX	225	168	1810	6100	4920	2640	1140	1380	849	81	1090	27
MIN	10	24	35	54	70	157	74	56	55	20	16	12
CFSM	.13	.23	.93	3.37	3.45	3.04	1.26	1.06	1.02	.19	.47	.09
IN.	.15	.25	1.07	3.89	3.59	3.51	1.40	1.22	1.13	.22	.54	.10

CAL YR 1981	TOTAL	57212	MEAN 157	MAX 4050	MIN 10	CFSM .80	IN 10.80
WTR YR 1982	TOTAL	90400	MEAN 248	MAX 6100	MIN 10	CFSM 1.26	IN 17.07

## 03272000 TWIN CREEK NEAR GERMANTOWN, OH

LOCATION.--Lat 39°38'10", long 84°23'48", in NW 1/4 sec. 11, T.3 N., R.4 E., Montgomery County, Hydrologic Unit 05080002, on right bank 0.3 mi (0.5 km) downstream from Germantown Dam, 1.5 mi (2.4 km) northwest of Germantown, and 3 mi (5 km) upstream from Little Twin Creek.

DRAINAGE AREA.--275 mi<sup>2</sup> (712 km<sup>2</sup>).

PERIOD OF RECORD.--April 1914 to December 1923, December 1926 to current year.

REVISED RECORDS.--WSP 403: 1914(M). WSP 1385: 1915(M).

GAGE.--Water-stage recorder. Datum of gage is 700.24 ft (213.433 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1926, nonrecording gage at site 1 mi (2 km) downstream at datum 12.49 ft (3.807 m) higher.

REMARKS.--Records good except those for the winter period which are fair. Flood flow regulated by Germantown retarding basin, 0.3 mi (0.5 km) upstream beginning in 1920.

COOPERATION.--Gage-height tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--64 years (1914-23, 1927-82), 265 ft<sup>3</sup>/s (7.505 m<sup>3</sup>/s), 13.09 in/yr (332 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,390 ft<sup>3</sup>/s (266 m<sup>3</sup>/s) July 8, 1915, gage height 11.7 ft (3.57 m), from graph based on gage readings, site and datum then in use; maximum gage height, 29.19 ft (8.897 m) Jan. 22, 1959; minimum discharge, 1.5 ft<sup>3</sup>/s (0.042 m<sup>3</sup>/s) Sept. 25, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 18.3 ft (5.58 m), original site and datum, discharge, 66,000 ft<sup>3</sup>/s (1,870 m<sup>3</sup>/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR. --Maximum discharge, 6,950 ft<sup>3</sup>/s (197 m<sup>3</sup>/s) Feb. 1, gage height 27.13 ft (8.269 m); minimum, 12.0 ft<sup>3</sup>/s (0.34 m<sup>3</sup>/s) Oct. 5, 6.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	58	300	581	6420	215	651	108	1000	129	41	45
2	13	51	277	430	1950	220	405	104	610	108	40	41
3	13	47	174	739	988	238	1720	101	341	99	39	39
4	13	43	136	4000	828	521	938	97	255	93	40	34
5	12	42	114	1930	409	1220	502	94	214	87	72	32
6	13	41	99	763	293	502	777	92	180	81	64	30
7	14	39	93	508	240	350	553	95	156	76	54	29
8	14	37	90	300	210	270	433	268	486	81	206	28
9	14	37	82	230	190	243	402	255	481	90	176	27
10	14	36	73	180	170	226	431	168	368	72	129	26
11	13	35	65	140	150	1200	453	139	206	69	92	25
12	13	34	62	130	140	1890	367	123	166	66	72	23
13	13	33	60	120	130	1820	311	112	148	62	60	23
14	14	33	58	110	130	1110	252	103	129	58	53	23
15	14	32	56	100	310	814	223	95	123	55	48	23
16	14	32	54	98	2140	2110	209	90	365	53	44	22
17	14	32	54	96	5410	1840	259	85	610	52	42	20
18	14	32	54	94	3500	838	246	92	295	51	40	20
19	14	35	52	92	1080	615	209	139	203	53	38	20
20	14	221	52	90	873	3490	195	195	180	54	39	20
21	15	154	70	90	1640	1880	173	385	153	50	40	20
22	15	98	89	400	684	888	154	316	141	51	38	20
23	16	78	2270	4570	652	560	143	163	126	87	38	20
24	16	106	1350	1900	771	427	139	133	112	72	41	21
25	16	122	561	998	450	367	137	112	104	58	1360	23
26	19	106	350	520	297	450	145	101	98	50	246	32
27	57	112	300	350	263	396	133	312	94	53	118	27
28	276	106	260	250	232	307	121	824	204	51	82	28
29	152	89	230	180	---	272	114	1120	438	46	62	28
30	95	79	210	1630	---	253	112	1910	175	44	52	23
31	72	---	200	5950	---	1110	---	678	---	42	49	---
TOTAL	1019	2000	7895	27569	30550	26642	10907	8609	8161	2093	3515	792
MEAN	32.9	66.7	255	889	1091	859	364	278	272	67.5	113	26.4
MAX	276	221	2270	5950	6420	3490	1720	1910	1000	129	1360	45
MIN	12	32	52	90	130	215	112	85	94	42	38	20
CFSM	.12	.24	.93	3.23	3.97	3.12	1.32	1.01	.99	.25	.41	.10
IN.	.14	.27	1.07	3.73	4.13	3.60	1.48	1.16	1.10	.28	.48	.11

CAL YR 1981 TOTAL 84724 MEAN 232 MAX 3540 MIN 12 CFSM .84 IN 11.46  
WTR YR 1982 TOTAL 129752 MEAN 355 MAX 6420 MIN 12 CFSM 1.29 IN 17.55

## 03272700 SEVENMILE CREEK AT CAMDEN, OH

LOCATION.--Lat 39°37'45", long 84°38'40", Preble County, Hydrologic Unit 05080002, 0.3 mi (0.5 km) downstream from Beasley Run on right bank at downstream side of bridge on State Highway 725 in Camden, and at mile 16.2 (26.1 km).

DRAINAGE AREA.--69.0 mi<sup>2</sup> (179 km<sup>2</sup>).

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

GAGE.--Water-stage recorder. Datum of gage is 818.57 ft (249.501 m) National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District). Prior to Oct. 1, 1975, at same site at datum 3.02 ft (0.920 m) higher.

REMARKS.--Records fair except those for the winter period, which are poor. Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Gage-height tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--11 years (1972-82), 73.9 ft<sup>3</sup>/s (2.093 m<sup>3</sup>/s), 14.54 in/yr (369 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,210 ft<sup>3</sup>/s (176 m<sup>3</sup>/s) June 22, 1974, gage height 13.25 ft (4.039 m), present datum from rating curve extended above 2,200 ft<sup>3</sup>/s (62.3 m<sup>3</sup>/s); minimum daily, 1.6 ft<sup>3</sup>/s (0.045 m<sup>3</sup>/s) July 21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1500 ft<sup>3</sup>/s (42.5 m<sup>3</sup>/s) and maximums (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft <sup>3</sup> /s)	Discharge (m <sup>3</sup> /s)	Gage height (ft)	Gage height (m)
Jan. 4	0230	1600	45.3	7.85	2.393	Jan. 31	1415	* 3260	92.3	* 10.10	3.078
Jan. 23	----	1800	51.0	----	----	Feb. 16	2230	3050	86.4	9.85	3.002

Minimum daily discharge, 1.7 ft<sup>3</sup>/s (0.048 m<sup>3</sup>/s) Oct. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	7.8	69	148	524	52	145	30	333	23	4.6	7.5
2	2.0	7.2	49	97	192	52	106	29	154	19	4.3	6.8
3	1.7	6.7	35	244	268	54	412	27	99	18	4.4	6.0
4	2.0	6.4	29	1110	158	173	186	27	73	16	4.5	5.1
5	2.0	6.4	25	342	93	201	138	25	59	14	10	4.6
6	2.4	6.4	22	190	66	107	199	24	47	13	8.5	4.5
7	2.4	6.3	10	141	54	81	133	34	41	12	16	4.3
8	2.2	6.1	9.0	85	46	64	109	135	260	14	149	4.3
9	2.8	5.8	8.0	52	38	58	105	69	109	14	66	4.1
10	2.7	5.8	7.4	36	32	56	100	48	92	12	32	3.8
11	2.8	5.8	6.6	30	28	360	98	41	53	11	20	3.7
12	3.0	5.5	6.0	26	26	313	86	36	43	10	14	3.6
13	3.0	5.5	12	23	24	431	78	32	37	9.0	10	3.8
14	3.2	5.5	11	21	23	225	63	30	31	8.3	8.2	3.7
15	3.2	5.5	10	20	148	228	58	28	33	6.8	7.0	3.4
16	3.0	5.8	9.0	19	989	564	57	26	128	6.7	6.0	3.2
17	2.8	5.8	8.0	18	1220	295	84	25	110	6.6	6.9	3.3
18	3.2	5.8	7.4	17	258	174	67	24	53	6.1	5.5	3.2
19	3.1	32	6.6	17	183	169	60	25	42	11	4.7	3.2
20	3.3	64	6.0	17	205	640	55	40	36	9.4	5.1	3.2
21	3.9	23	5.8	18	211	309	46	113	30	7.1	5.2	3.2
22	4.2	15	38	36	120	173	42	79	26	12	4.3	3.3
23	4.7	12	471	1300	127	126	39	53	23	13	4.3	3.3
24	4.9	23	189	223	137	103	39	41	20	7.9	40	3.9
25	4.9	20	111	111	86	100	38	36	19	6.5	223	11
26	11	18	80	61	67	116	43	32	18	5.7	49	8.9
27	51	22	83	50	61	98	37	106	17	6.0	24	8.7
28	40	17	83	42	54	81	32	194	36	6.1	15	11
29	15	14	62	35	---	74	31	408	82	5.8	10	7.6
30	11	13	51	1030	---	71	30	490	34	5.2	8.6	6.1
31	9.0	---	57	2650	---	263	---	176	---	4.8	8.0	---
TOTAL	213.1	383.1	1576.8	8209	5438	5811	2716	2483	2138	320.0	778.1	152.3
MEAN	6.87	12.8	50.9	265	194	187	90.5	80.1	71.3	10.3	25.1	5.08
MAX	51	64	471	2650	1220	640	412	490	333	23	223	11
MIN	1.7	5.5	5.8	17	23	52	30	24	17	4.8	4.3	3.2
CFSM	.10	.19	.74	3.84	2.81	2.71	1.31	1.16	1.03	.15	.36	.07
IN.	.11	.21	.85	4.43	2.93	3.13	1.46	1.34	1.15	.17	.42	.08

CAL YR 1981	TOTAL	16551.5	MEAN 45.3	MAX 500	MIN 1.7	CFSM .66	IN 8.92
WTR YR 1982	TOTAL	30218.4	MEAN 82.8	MAX 2650	MIN 1.7	CFSM 1.20	IN 16.29

## 03274000 GREAT MIAMI RIVER AT HAMILTON, OH

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1 N., R.3 E., Butler County, Hydrologic Unit 05080002, on right bank 1,000 ft (305 m) downstream from Columbia Bridge at Hamilton, 3 mi (5 km) downstream from Four Mile Creek, 4.3 mi (6.9 km) upstream from Pleasant Run, and at mile 34.8 (56.8 km).

DRAINAGE AREA.--3,630 mi<sup>2</sup> (9,402 km<sup>2</sup>).

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 mi (1.1 km) upstream since 1911 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Hamilton.

REVISED RECORDS.--WSP 803: 1936. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 499.98 ft (152.394 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 12, 1927, nonrecording gage at site 0.7 mi (1.1 km) upstream at datum 64.65 ft (19.705 m) higher.

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 mi (10 km) upstream from gage for municipal supply of Hamilton. Diversion averaged 1.1 ft<sup>3</sup>/s (0.031 m<sup>3</sup>/s) in 1982 and is returned as sewage 1.4 mi (2.3 km) downstream from the station. The Miami and Erie Canal diverted water from the basin 1.7 mi (2.7 km) upstream from station until Nov. 1, 1930, when the canal was abandoned; amount of diversion not known. Water-quality data collected at this site for water years 1950, 1951, 1973. Water temperature data collected at this site October 1950 to September 1951, October 1957 to September 1976.

COOPERATION.--Gage-height charts, tapes and 13 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--51 years (1931-82), 3,292 ft<sup>3</sup>/s (93.23 m<sup>3</sup>/s), 12.32 in/yr (313 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352,000 ft<sup>3</sup>/s (9,970 m<sup>3</sup>/s) Mar. 26, 1913, gage height, 38.5 ft (11.73 m), site and datum then in use, computed by Miami Conservancy District; maximum discharge since construction of five retarding basins upstream in 1922, 108,000 ft<sup>3</sup>/s (3,060 m<sup>3</sup>/s) Jan. 21, 1959, gage height 79.47 ft (24.222 m); minimum daily discharge, 155 ft<sup>3</sup>/s (4.39 m<sup>3</sup>/s) Sept. 27, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 58,100 ft<sup>3</sup>/s (1650 m<sup>3</sup>/s) Jan. 31, gage height, 73.75 ft (22.479 m); minimum daily, 553 ft<sup>3</sup>/s (15.7 m<sup>3</sup>/s) Sept. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	825	1710	3980	4670	43000	5560	12800	2120	9740	3800	850	780
2	816	1460	3910	4680	21800	6100	10100	2020	7790	2610	791	750
3	791	1350	3210	5130	12700	7460	13500	1940	5710	2090	790	710
4	769	1250	2680	16000	11500	7720	11700	1900	4300	1830	829	701
5	760	1170	2320	18800	7920	12000	8250	1850	3600	1760	1440	680
6	826	1120	2050	13400	6670	13000	7820	1760	3080	1640	1140	691
7	903	1070	1870	8930	5620	9330	6640	1780	2690	1580	910	679
8	801	1020	1810	6340	4960	6940	5950	3240	6280	1900	1240	696
9	768	1020	1690	4870	4410	5650	5890	3140	4640	1860	1480	652
10	752	1040	1540	2840	3910	4880	6020	3080	4560	1450	1190	634
11	715	967	1440	1670	3620	7610	6680	2510	3850	1420	1030	638
12	712	952	1360	2240	3480	16200	7560	2200	3160	1360	892	607
13	726	936	1310	3030	3260	18300	6820	2040	2710	1340	866	646
14	724	901	1290	2850	3030	17200	5910	1860	2380	1300	766	635
15	709	870	1250	2560	3460	15300	5050	1700	2140	1210	725	652
16	714	821	1230	2260	9370	16700	4410	1640	3240	1130	711	624
17	718	900	1200	1740	25700	21100	4260	1590	8760	1100	732	599
18	703	850	1150	1580	28700	17800	4180	1610	9030	1060	743	593
19	726	1040	1050	1810	23500	14200	4070	1850	5830	1250	671	553
20	711	3490	963	1770	18900	22200	3760	2700	4250	1420	677	557
21	724	2650	933	1830	18700	21700	3370	6870	3400	1190	821	562
22	784	2090	1080	2190	17900	15300	3100	6190	3320	1180	834	626
23	842	1730	9470	24000	15700	11000	2930	3450	3180	1460	662	597
24	793	1900	13600	17000	15600	8230	2710	3280	2500	1240	682	589
25	742	2140	9730	9240	15200	7470	2610	2690	2160	1140	4720	679
26	991	2150	6130	6080	11200	7340	2690	2310	1930	1120	2090	696
27	2020	2290	4870	4370	7430	7060	2560	2700	1790	1290	1290	712
28	3900	2220	4590	3750	6070	6370	2420	8110	2670	1280	1060	801
29	4100	2220	4220	3510	---	5730	2350	15800	5890	1060	891	793
30	3070	2000	3620	7210	---	5140	2240	15300	4790	985	750	751
31	2130	---	3240	46700	---	9240	---	11400	---	951	798	---
TOTAL	35265	45327	98786	233050	353310	349830	168350	120630	129370	46006	33071	19883
MEAN	1138	1511	3187	7518	12620	11280	5612	3891	4312	1484	1067	663
MAX	4100	3490	13600	46700	43000	22200	13500	15800	9740	3800	4720	801
MIN	703	821	933	1580	3030	4880	2240	1590	1790	951	662	553
CFSM	.31	.42	.88	2.07	3.48	3.11	1.55	1.07	1.19	.41	.29	.18
IN.	.36	.46	1.01	2.39	3.62	3.59	1.73	1.24	1.33	.47	.34	.20

CAL YR 1981 TOTAL 1198557 MEAN 3284 MAX 20800 MIN 703 CFSM .91 IN 12.28  
WTR YR 1982 TOTAL 1632878 MEAN 4474 MAX 46700 MIN 553 CFSM 1.23 IN 16.73

## GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH  
(National stream-quality accounting network station)

LOCATION.--Lat 39°15'47", long 84°40'04", in N 1/2 sec. 34, R.1, T.2, Hamilton County, Hydrologic Unit 05080002, at Blue Rock Road bridge at New Baltimore, 6.4 mi (10.3 km) downstream from Indian Creek, and 14.3 mi (23.0 km) downstream from discharge station at Hamilton.

DRAINAGE AREA.--3,814 mi<sup>2</sup> (9,878 km<sup>2</sup>).

PERIOD OF RECORD.--July 1966 to current year.

REMARKS.--Four parameter (Specific conductance, pH, Water temperature, and Dissolved oxygen) water quality monitor at site from July 1966 to September 1981. See records of daily discharge for station at Hamilton (station 03274000).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)
OCT 08...	1130	799	905	8.2	16.5	23	9.7	99	45
DEC 08...	1100	1810	760	7.8	6.0	7.6	11.4	91	<10
FEB 26...	1200	11300	365	7.9	4.0	65	--	--	15
MAY 06...	0930	1770	710	8.5	19.0	18	9.4	100	--
JUN 23...	1000	3250	650	8.0	20.0	45	8.2	89	--
AUG 19...	0930	678	790	8.7	23.0	24	7.8	90	--

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 08...	2100	120	330	80	32	48	5.0	84	83
DEC 08...	3000	1300	330	80	31	30	3.2	75	49
FEB 26...	8800	8300	170	43	14	8.8	2.7	27	16
MAY 06...	550	18	310	74	30	27	3.2	72	47
JUN 23...	1000	230	300	75	28	21	3.3	58	39
AUG 19...	200	70	300	66	32	45	4.5	83	74

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 08...	.6	3.6	551	487	.070	.88	3.8	.770
DEC 08...	.4	4.7	470	424	.690	1.40	4.1	.390
FEB 26...	.2	4.7	230	189	.390	1.20	2.5	.350
MAY 06...	.4	.0	434	--	.040	1.90	2.8	.480
JUN 23...	.4	7.2	453	367	.110	.80	6.9	.640
AUG 19...	.6	<.0	490	--	<.010	2.10	4.0	.500

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 08...	1130	5	5	100	90	1	<1	20	10
DEC 08...	1100	2	1	100	84	1	<1	20	10
MAY 06...	0930	2	2	100	100	1	<1	10	<10
JUN 23...	1000	2	2	100	93	2	<1	30	20

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 08...	4	2	14	5	1400	4	29	<1	80
DEC 08...	3	<1	11	3	700	11	5	3	60
MAY 06...	1	<1	14	13	570	4	20	4	90
JUN 23...	4	<1	18	6	3900	12	13	7	130

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 08...	3	.3	.1	2	2	<1	<1	70	15
DEC 08...	21	.1	<.1	<1	<1	<1	<1	60	13
MAY 06...	4	<.1	<.1	<1	<1	<1	<1	50	7
JUN 23...	2	.6	<.1	<1	<1	<1	<1	60	<4

## GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 08...	1130	--	<.1	--	3.0	--	.4	--	<.1	--	<.1
FEB 26...	1200	<.01	--	<.10	--	<.01	--	<.01	--	<.01	--
MAY 06...	0930	<.01	<.1	<.10	<1.0	<.01	<.1	<.01	<.1	<.01	<.1

DATE	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)
OCT 08...	--	--	1.1	--	<.1	--	--	<.1	--	<.1
FEB 26...	.01	.01	--	<.01	--	<.01	<.01	--	<.01	<.01
MAY 06...	.03	<.01	<.1	<.01	<.1	<.01	<.01	<.1	<.01	<.01

DATE	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT 08...	.3	--	--	--	--	--	<1.0	--	--	--	--
FEB 26...	--	<.01	<.01	<.01	<.01	--	--	<.01	<.01	<.01	<.01
MAY 06...	<.1	<.01	<.01	<.01	<.01	<1	<10	<.01	.38	<.01	<.01

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 08...	1130	799	16.5	36	78
DEC 08...	1100	1810	6.0	110	538
FEB 26...	1200	11300	4.0	99	3020
MAY 06...	0930	1770	19.0	35	167
JUN 23...	1000	3250	20.0	320	2810
AUG 19...	0930	678	23.0	51	93

As the number of streams on which discharge and chemical quality data information is likely to be desired far exceeds the number of stations feasible to operate at one time, the Geological Survey collects limited data at sites other than regular stations. When limited 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 useable in low-flow or floodflow analyses, depending on the type data collected. In addition, discharge measurements are made at othersites 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 parts. Given first are records of discharge measurements and chemical-quality data made at low flow sites followed by 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 second table.

## LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow and chemical quality data in the area covered by this report made at low-flow partial-record stations are given in the following section. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The "PERIOD OF RECORD" paragraph shows the water years in which measurements were made at the same, or practically the same, site.

## LITTLE BEAVER CREEK BASIN

03108980 MIDDLE FORK LITTLE BEAVER CREEK NEAR SALEM, OH

LOCATION.--Lat 40°54'20", long 80°48'17", Mahoning County, Hydrologic Unit 05030101, at bridge on State Highway Alt. 14, 1.1 mi (1.8 km) east of Salem, 4 mi (6.4 km) upstream from East Branch Middle Fork Little Beaver Creek.

DRAINAGE AREA.--35.7 mi<sup>2</sup> (92.5 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 19...	1050	6.2	--	--	--	--	--	--	--	--	--	--
MAY 04...	1100	14	--	--	--	--	--	--	--	--	--	--
SEP 01...	1315	6.7	890	7.7	19.0	8.3	89	19	60	5.8	190	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 19...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 01...	160	61	.6	6.7	571	3.2	.090	.71	.150	.110	110	460

## LITTLE BEAVER CREEK BASIN

03108990 EAST BRANCH MIDDLE FORK LITTLE BEAVER CREEK AT LEETONIA, OH

LOCATION.--Lat 40°52'16", long 80°45'54", Columbiana County, Hydrologic Unit 05030101, at bridge on State Route 344, 0.6 mi (1.0 km) southwest of Leetonia, 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--28.0 mi<sup>2</sup> (72.5 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 19...	1330	3.0	--	--	--	--	--	--	--	--	--	--
MAY 04...	1400	5.6	--	--	--	--	--	--	--	--	--	--
SEP 01...	1200	1.4	770	8.0	20.0	7.0	91	25	29	3.4	240	0

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTH0, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 19...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 01...	150	50	.3	6.8	454	<.10	.040	.46	.080	.030	61	220

03109150 WEST FORK LITTLE BEAVER CREEK AT GUILFORD, OH

LOCATION.--Lat 40°47'30", long 80°52'12", Columbiana County, Hydrologic Unit 05030101, at culvert on State Route 172, downstream from Guilford Lake at Guilford.

DRAINAGE AREA.--11.5 mi<sup>2</sup> (29.8 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 19...	1630	3.5	--	--	--	--	--	--	--	--	--	--
MAY 04...	0950	.81	--	--	--	--	--	--	--	--	--	--
SEP 01...	1015	.49	410	7.8	18.0	7.7	57	11	10	1.6	230	0

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTH0, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 19...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 01...	20	13	.3	8.5	231	.40	.110	.59	.030	.020	58	270

03111465 SHORT CREEK AT ADENA, OH

LOCATION.--Lat 40°13'09", long 80°52'22", Jefferson County, Hydrologic Unit 05030106, at bridge on Adena-Smithfield Road, 400 ft (120 m) downstream from North Fork.

DRAINAGE AREA.--63.9 mi<sup>2</sup> (165.5 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1981 to current year (discontinued); chemical analyses, water years 1981 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 16...	1235	23	--	--	--	--	--	--	--	--	--	--
MAY 04...	1400	48	--	--	--	--	--	--	--	--	--	--
JUL 28...	1115	44	2320	8.1	22.5	8.3	290	150	86	6.9	240	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	1200	36	.2	4.9	2060	.32	.180	1.4	.080	.040	40	70	

03122980 MIDDLE FORK SUGAR CREEK NEAR BREWSTER, OH

LOCATION.--Lat 40°41'10", long 81°36'40", Stark County, Hydrologic Unit 05040001, at bridge on Welty Road, 1.5 mi (2.4 km) upstream from mouth, 1.5 mi (2.4 km) southwest of Brewster.

DRAINAGE AREA.--45.4 mi<sup>2</sup> (117.5 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water year 1982 (discontinued); chemical analysis, water year 1982 (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
JUL 07...	1450	13	--	--	--	--	--	--	--	--	--	--
29...	1415	4.9	510	8.1	22.0	8.4	59	15	18	4.3	230	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JUL 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	59	26	.2	7.4	317	<.10	.070	.63	.180	.070	15	200	

## 03123166 SOUTH FORK SUGAR CREEK NEAR SUGARCREEK, OH

LOCATION.--Lat 40°31'25", long 81°36'52", Tuscarawas County, Hydrological Unit 05040001, at bridge on County Road 75, 0.2 mi (0.3 km) downstream from East Branch, 2.0 mi (3.2 km) northeast of Sugarcreek.

DRAINAGE AREA.--63.3 mi<sup>2</sup> (163.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water year 1982 (discontinued); chemical analysis, water year 1982 (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
JUL												
07...	0900	15	--	--	--	--	--	--	--	--	--	--
29...	0900	7.4	1350	7.6	17.0	6.0	140	59	55	12	180	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	480	55	.4	12	992	.32	1.60	.60	3.10	3.20	36	6700	

## 03123299 WALNUT CREEK AT DUNDEE, OH

LOCATION.--Lat 40°35'12", long 81°37'16", Tuscarawas County, Hydrological Unit 05040001, at bridge on private road, 0.6 mi (0.8 km) upstream from mouth, 0.7 mi (1.1 km) west of Dundee.

DRAINAGE AREA.--48.0 mi<sup>2</sup> (123.4 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water year 1982 (discontinued); chemical analysis, water year 1982 (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
JUL 07...	1115	13	--	--	--	--	--	--	--	--	--	--
29...	1015	3.6	1100	7.9	19.5	9.4	110	75	28	6.8	170	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JUL 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	470	25	.4	3.9	938	.60	.180	.72	.090	.040	37	3000	

## MUSKINGUM RIVER BASIN

249

03143760 WAKATOMIKA CREEK NEAR PERRYTOWN, OH

LOCATION.--Lat 40°13'10", long 82°10'53", Coshocton County, Hydrological Unit 05040004, 0.15 mi (0.24 km) north east-west section of county road, 0.7 mi (1.1 km) upstream from Winding Fork, 5.2 mi (8.4 km) north of Perrytown.

DRAINAGE AREA.--58.3 mi<sup>2</sup> (150.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water year 1982 (discontinued); chemical analysis, water year 1982 (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 06...	1145	12	430	7.6	15.0	9.6	42	13	16	2.7	140	0
APR 27...	1500	42	--	--	--	--	--	--	--	--	--	--
JUL 29...	1015	8.2	420	8.2	20.0	7.9	41	14	19	2.8	160	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 06...	22	56	.1	4.4	276	.43	.020	.39	.020	.010	230	51
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	19	45	.2	6.7	261	.13	.030	.67	.020	<.010	110	70

## MUSKINGUM RIVER BASIN

03144830 SOUTH FORK LICKING RIVER NEAR MILLERSPORT OH

LOCATION.--Lat 39°56'17", long 82°32'13", Licking County, Hydrologic Unit 05040006, at bridge on State Route 37, 0.3 mi (0.5 km) south of Interstate 70, 2.5 mi (4.0 km) north of Miller'sport.

DRAINAGE AREA.--62.9 mi<sup>2</sup> (162.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 13...	1020	2.8	--	--	--	--	--	--	--	--	--	--
MAY 04...	0910	14	--	--	--	--	--	--	--	--	--	--
JUL 27...	1000	4.9	620	7.6	24.0	6.5	70	23	23	2.8	290	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	56	34	.4	6.1	404	.36	.070	.73	.290	.060	88	57

LOCATION.--Lat 40°06'15", long 82°31'06", Licking County, Hydrologic Unit 05040006, at bridge on State Highway 661 in Homer, 1.0 mi (1.6 km) downstream from Otter Fork.

PERIOD OF RECORD.--Discharge, water year 1982 (discontinued); Chemical analysis, water year 1982 (discontinued).

[illegible][illegible]

LOCATION.--Lat 40°04'15", long 82°15'55", Licking County, Hydrologic Unit 05040006, at bridge on county road at Hanover, 1.8 mi (2.9 km) upstream from mouth.

PERIOD OF RECORD.--Discharge, water year 1982 (discontinued); Chemical analysis, water year 1982 (discontinued).

[illegible][illegible]

## 03136235 KOKOSING RIVER NEAR MT. VERNON, OH

LOCATION.--Lat 40°25'33", long 82°30'59", Knox County, Hydrologic Unit 05040003, at bridge on county road 1.0 mi (1.6 km) upstream from North Branch, 2.8 mi (4.5 km) northwest of Mt. Vernon.

DRAINAGE AREA.--100 mi<sup>2</sup> (259 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 15...	1210	11	--	--	--	--	--	--	--	--	--	--
MAY 03...	1250	34	--	--	--	--	--	--	--	--	--	--
AUG 31...	1415	12	520	8.2	20.0	10.8	69	22	9.4	2.2	250	0

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 15...	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--
AUG 31...	57	23	.3	7.5	324	.40	<.010	.040	.010	59	27

## 03138910 SALT CREEK AT HOLMESVILLE, OH

LOCATION.--Lat 40°38'07", long 81°55'26", Holmes County, Hydrologic Unit 05040003, at bridge on State Highway 83, 0.3 mi (0.5 km) north of Holmesville, 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--42.6 mi<sup>2</sup> (110.3 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 15...	1000	4.2	--	--	--	--	--	--	--	--	--	--
MAY 03...	0910	13	--	--	--	--	--	--	--	--	--	--
AUG 31...	1030	1.4	445	8.2	20.0	11.5	57	16	13	2.6	220	0

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 15...	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--
AUG 31...	37	13	.2	4.7	274	.80	<.010	.020	<.010	8	6

## HOCKING RIVER BASIN

03156550 RUSH CREEK NEAR JUNCTION CITY, OH

LOCATION.--Lat 39°43'13", long 82°21'01", Perry County, Hydrologic Unit 05030204, at bridge on Flag Dale Road (Perry County Road 23), 0.4 mi (0.6 km) downstream from Center Branch, 2.7 mi (4.3 km) west of Junction City.

DRAINAGE AREA.--71.0 mi<sup>2</sup> (183.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	ACIDITY (MG/L AS H)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 13...	1600	5.9	--	--	--	--	--	--
MAY 03...	1745	25	--	--	--	--	--	--
JUL 26...	1830	6.0	1950	3.6	26.0	7.3	4.4	130

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
OCT 13...	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--
JUL 26...	100	51	5.6	0	0	790	120	.7	27

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--
JUL 26...	1290	1.0	3.10	.00	.060	.020	14000	18000

## HOCKING RIVER BASIN

253

## 03156900 CLEAR CREEK AT CLEARPORT, OH

LOCATION.--Lat 39°37'06", long 82°40'50", in sec. 9 T.13 N., R.19 W., Fairfield County, Hydrologic Unit 05030204, at bridge on Clearport Road (Fairfield County Road 24), in Clearport, 0.5 mi (0.8 km) upstream from Muddy Prairie Run, 8.5 mi (13.7 km) south of Lancaster.

DRAINAGE AREA.--47.3 mi<sup>2</sup> (122.5 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 14...	1445	5.8	--	--	--	--	--	--	--	--	--	--
MAY 03...	1130	18	--	--	--	--	--	--	--	--	--	--
JUL 29...	1400	5.6	568	7.9	20.0	9.5	68	26	8.5	1.5	290	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	34	14	.3	7.2	395	.55	.050	.25	.040	.020	43	100	

## SHADE RIVER BASIN

## 03159536 WEST BRANCH SHADE RIVER AT CHESTER, OH

LOCATION.--Lat 39°06'00", long 81°55'33", Meigs County, Hydrologic Unit 05030202, at bridge on State Route 7, 0.2 mi (0.3 km) upstream from mouth. 0.9 mi (1.4 km) north of Chester.

DRAINAGE AREA.--71.1 mi<sup>2</sup> (184.2 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 14...	1015	.63	--	--	--	--	--	--	--	--	--	--
APR 28...	1400	28	--	--	--	--	--	--	--	--	--	--
JUL 28...	1100	4.7	424	7.2	23.5	8.4	50	11	12	2.8	74	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	110	13	.2	7.1	294	<.10	.030	1.2	.040	<.010	40	400	

## SHADE RIVER BASIN

03159538 MIDDLE BRANCH SHADE RIVER AT CHESTER, OH

LOCATION.--Lat 39°06'14", long 81°55'24", Meigs County, Hydrologic Unit 05030202, at bridge on State Route 7, 0.4 mi (0.6 km) upstream from mouth 1.1 mi (1.8 km) northwest of Chester.

DRAINAGE AREA.--57.5 mi<sup>2</sup> (148.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLO (MG/L AS HCO3)	CAR- BONATE FET-FLO (MG/L AS CO3)
OCT 14...	1100	.34	--	--	--	--	--	--	--	--	--	--
APR 28...	1520	22	--	--	--	--	--	--	--	--	--	--
JUL 28...	1200	3.7	480	7.3	23.5	7.6	57	12	17	2.4	180	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 14...	--	--	--	--	--	--	--	--	--	--	--	--
APR 28...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	61	18	.2	4.9	300	<.10	.510	.09	.070	.030	43	340

## SCIOTO RIVER BASIN

03219520 FULTON CREEK NEAR RADNOR, OH

LOCATION.--Lat 40°22'17", long 83°11'20", Delaware County, Hydrologic Unit 05060001, at bridge on State Route 257, 0.2 mi (0.3 km) upstream from mouth, 2.2 mi (3.7 km) southwest of Radnor.

DRAINAGE AREA.--46.9 mi<sup>2</sup> (121.5 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1956, 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLO (MG/L AS HCO3)	CAR- BONATE FET-FLO (MG/L AS CO3)
OCT 13...	1145	2.4	--	--	--	--	--	--	--	--	--	--
APR 29...	0845	7.7	--	--	--	--	--	--	--	--	--	--
JUL 29...	1000	.38	840	8.4	20.0	6.8	84	43	31	3.9	340	15

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
APR 29...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	120	40	.7	2.4	570	<.10	.060	1.0	.220	.140	18	28

## 03219770 MILL CREEK NEAR BROADWAY, OH

LOCATION.--Lat 40°17'21", long 83°24'05", Union County, Hydrologic Unit 05060001, at bridge on Cotton Slash Road, 1.0 mi (1.6 km) upstream from Otter Run, 3.6 mi (5.8 km) south of Broadway.

DRAINAGE AREA.--66.1 mi<sup>2</sup> (171.2 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 13...	0945	2.4	--	--	--	--	--	--	--	--	--	--
APR 29...	1055	14	--	--	--	--	--	--	--	--	--	--
JUL 29...	1200	1.3	760	8.3	23.5	6.9	67	47	17	3.5	250	170

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--
APR 29...	--	--	--	--	--	--	--	--	--	--	--
JUL 29...	17	.6	2.9	520	<.10	.080	1.0	.060	.040	58	36

## 03222700 MUD RUN NEAR CALEDONIA, OH

LOCATION.--Lat 40°41'20", long 82°57'45", in T.4 S., R.16 E., Marion County, Hydrologic Unit 05060001, at bridge on Morral-Kirkpatrick Road, 2.6 mi (4.2 km) upstream from mouth, 3.5 mi (5.5 km) north of Caledonia.

DRAINAGE AREA.--16.1 mi<sup>2</sup> (41.7 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 14...	1035	3.2	--	--	--	--	--	--	--	--	--	--
APR 27...	1445	4.3	--	--	--	--	--	--	--	--	--	--
JUL 28...	1245	.77	950	8.2	24.5	110	39	26	2.8	360	0	170

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 14...	--	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	26	.8	8.9	692	<.10	.070	.63	.040	.020	48	52

## SCIOTO RIVER BASIN

03222800 FLAT RUN NEAR CALEDONIA, OH

LOCATION.--Lat 40°37'51", long 82°56'53", in sec. 7, T.5 S., R.17 E., Morrow County, Hydrologic Unit 05060001, at bridge on Marion Johnsville Road, 0.9 mi (1.4 km) upstream from mouth, 1.2 (1.9 km) southeast of Caledonia.

DRAINAGE AREA.--29.9 mi<sup>2</sup> (77.4 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 14...	0950	2.9	--	--	--	--	--	--	--	--	--	--
APR 27...	1340	12	--	--	--	--	--	--	--	--	--	--
JUL 28...	1100	1.6	675	8.1	24.5	83	26	15	4.1	330	0	77

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 14...	--	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	23	.3	8.1	426	.92	5.20	12	.220	.170	14	25

03228690 BLACKLICK CREEK NEAR BRICE, OH

LOCATION.--Lat 39°54'18", long 82°50'01", in sec. 2, T.11 N., R.21 W., Franklin County, Hydrologic Unit 05060001, at bridge on Brice Road, 0.9 mi (1.4 km) south of Brice.

DRAINAGE AREA.--51.6 mi<sup>2</sup> (133.6 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 13...	1000	7.7	--	--	--	--	--	--	--	--	--	--
MAY 03...	1245	12	--	--	--	--	--	--	--	--	--	--
JUL 26...	1220	8.5	740	8.1	24.0	9.2	88	27	33	3.4	320	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 26...	79	52	.3	7.5	470	1.3	.060	.74	.710	.690	9	66

## 03229750 WALNUT CREEK NEAR CARROLL, OH

LOCATION.--Lat 39°49'07", long 82°40'30", in SE 1/4 sec. 32, T.16 N., R.14 W., Fairfield County, Hydrologic Unit 05060001, at bridge on Havensport Road, 0.6 mi (1.0 km) north of Havensport, 0.8 mi (1.3 km) upstream from Poplar Creek, 2.0 mi (3.2 km) northeast of Carroll.

DRAINAGE AREA.--69.2 mi<sup>2</sup> (179.2 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 14...	1110	3.5	--	--	--	--	--	--	--	--	--	--
MAY 03...	1443	11	--	--	--	--	--	--	--	--	--	--
JUL 26...	1430	6.5	640	8.4	28.0	14.6	68	24	38	4.4	260	10

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 14...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 26...	73	40	.4	6.3	421	.70	.140	1.2	.180	.120	27	41

## 03229770 WALNUT CREEK NEAR GROVEPORT, OH

LOCATION.--Lat 39°47'56", long 82°53'55", Franklin County, Hydrologic Unit 05060001, on Franklin-Pickaway County line at bridge on London-Lancaster Road, 3.7 mi (6.0 km) south of Groveport.

DRAINAGE AREA.--198 mi<sup>2</sup> (513 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 13...	1315	20	--	--	--	--	--	--	--	--	--	--
MAY 03...	1120	54	--	--	--	--	--	--	--	--	--	--
JUL 26...	1100	36	671	7.9	24.0	6.7	82	25	21	3.2	300	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 26...	64	29	.3	8.4	444	.72	.110	1.1	.260	.190	22	32

## SCIOTO RIVER BASIN

03230180 BIG DARBY CREEK NEAR UNIONVILLE CENTER, OH

LOCATION.--Lat 40°09'00", long 83°22'54", Union County, Hydrologic Unit 05060001, at bridge on State Route 38, 1.1 mi (1.8 km) downstream from Buck Run, 2.5 mi (4.0 km) west of Unionville Center.

DRAINAGE AREA.--139 mi<sup>2</sup> (360.0 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
APR 27...	1030	43	--	--	--	--	--	--	--	--	--	--
AUG 17...	1400	3.5	650	8.1	25.0	9.6	56	34	18	3.2	280	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	79	32	.6	4.1	377	.17	.070	.73	.110	.030	240	60

03230230 BIG DARBY CREEK NEAR WEST JEFFERSON, OH

LOCATION.--Lat 39°58'47", long 83°14'57", Madison-Franklin County line, Hydrologic Unit 05060001, at bridge on Hubbard Road, 1.7 mi (2.7 km) northwest of West Jefferson, 7.4 mi (11.9 km) upstream from Little Darby Creek.

DRAINAGE AREA.--239 mi<sup>2</sup> (619 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
APR 27...	1445	84	--	--	--	--	--	--	--	--	--	--
AUG 17...	1200	11	800	7.7	23.5	8.2	76	39	25	8.3	390	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	100	46	.9	5.5	481	<.10	.020	.88	.100	.040	22	13

## 03230250 LITTLE DARBY CREEK NEAR IRWIN, OH.

LOCATION.--Lat 40°07'18", long 83°27'22", Union County, Hydrologic Unit 05060001, at bridge on State Route 161, 0.5 mi (0.8 km) upstream from Treacle Creek, 1.6 mi (2.6 km) east of Irwin.

DRAINAGE AREA.--29.4 mi<sup>2</sup> (76.2 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
APR 27...	1200	18	--	--	--	--	--	--	--	--	--	--
AUG 17...	1630	3.8	715	8.3	28.0	10.2	63	35	24	2.3	330	68

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	40	.5	4.8	413	.37	.030	1.3	.100	.050	56	32

## 03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OH

LOCATION.--Lat 39°57'04", long 83°16'10", Madison County, Hydrologic Unit 05060001, at bridge on Middle Pike, 0.4 mi (0.6 km) north of West Jefferson 7.2 mi (11.6 km) upstream from Big Darby Creek.

DRAINAGE AREA.--162 mi<sup>2</sup> (420 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
APR 27...	1330	81	--	--	--	--	--	--	--	--	--	--
AUG 17...	0930	7.5	690	8.1	23.0	9.2	61	38	21	2.6	300	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	66	40	.6	4.0	358	<.10	.040	.66	.080	.010	34	21

## SCIOTO RIVER BASIN

03230750 DEER CREEK NEAR BIG PLAIN, OH

LOCATION.--Lat 39°51'09", long 83°21'24", Madison County, Hydrologic Unit 05060002, at bridge on Glade Run Road, 0.5 mi (0.8 km) upstream from Glade Run, 3.8 mi (6.1 km) northwest of Big Plain.

DRAINAGE AREA.--60.2 mi<sup>2</sup> (155.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HCO3)	CAR- BONATE FET-FLD AS CO3)
APR 29...	1030	23	--	--	--	--	--	--	--	--	--	--
AUG 16...	1045	.79	590	7.9	23.0	9.4	56	34	10	1.6	310	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	38	21	.6	4.5	331	.29	.040	.26	.080	.010	10	13

## 03231550 PAINT CREEK AT WASHINGTON COURT HOUSE, OH

LOCATION.--Lat 39°32'12", long 83°26'46", Fayette County, Hydrologic Unit 05060003, at bridge on State Route 35 (Dayton Avenue) in Washington Court House, 1.7 mi (2.7 km) upstream from East Fork Paint Creek.

DRAINAGE AREA.--62.3 mi<sup>2</sup> (161.4 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HCO3)	CAR- BONATE FET-FLD AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
APR 28...	1030	17	--	--	--	--	--	--	--	--	--	--
AUG 09...	1345	1.8	535	28.0	10.2	45	29	18	2.2	220	12	39

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 28...	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	34	.5	4.2	316	.13	.040	1.7	.140	.050	23	15

## 03231620 EAST FORK PAINT CREEK NEAR BLOOMINGBURG, OH

LOCATION.--Lat 39°35'15", long 83°23'47", Fayette County, Hydrologic Unit 05060003 at bridge on Matthews Road, 0.3 mi (0.5 km) upstream from Green Ditch, 1.2 mi (1.9 km) south of Bloomingburg, 2.0 mi (3.2 km) upstream from Big Run.

DRAINAGE AREA.--36.8 mi<sup>2</sup> (95.3 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year(discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
APR 28...	0930	10	--	--	--	--	--	--	--	--	--	--
AUG 09...	1520	.45	620	8.7	30.0	11.8	46	36	23	2.1	240	20

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	53	41	.6	4.5	331	.30	.050	1.9	.210	.080	30	28

## 03231800 SUGAR CREEK NEAR ROCK MILLS, OH

LOCATION.--Lat 39°28'10", long 83°26'06", Fayette County, Hydrologic Unit 05060003, at bridge on New Martinsburg Road (State Route 70) 1.5 mi (2.4 km) upstream from Paint Creek, 2.3 (3.7 km) northwest of Rock Mills.

DRAINAGE AREA.--78.3 mi<sup>2</sup> (202.8 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
APR 28...	1125	25	--	--	--	--	--	--	--	--	--	--
AUG 09...	1230	.97	520	8.2	27.0	8.2	47	29	11	1.4	250	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	40	25	.4	2.6	344	.26	.030	.47	.060	.040	17	20

## SCIOTO RIVER BASIN

03232295 LEES CREEK NEAR LEESBURG, OH

LOCATION.--Lat 39°20'39", long 83°30'33", Highland County, Hydrologic Unit 05060003, at bridge on Monroe Road, 1.2 mi (1.9 km) upstream from mouth, 2.4 mi (3.9 km) east of Leesburg.

DRAINAGE AREA.--74.3 mi<sup>2</sup> (192.4 km<sup>2</sup>)

PERIOD OF RECORD.--Discharge, water years 1981 to current year (discontinued); chemical analyses, water years 1981 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
APR 27...	1315	22	--	--	--	--	--	--	--	--	--
AUG 10...	1115	1.3	520	8.2	23.0	52	28	13	3.1	260	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	33	24	.4	4.3	343	.69	.040	.76	.120	29	11

03232480 CLEAR CREEK NEAR HILLSBORO, OH

LOCATION.--Lat 39°12'45", long 83°33'00", Highland County, Hydrologic Unit 05060003, at bridge on U.S. Highway 50, 2.0 mi (3.2 km) upstream from dam on Rocky Fork Lake, 3.4 mi (5.5 km) east of Hillsboro.

DRAINAGE AREA.--35.4 mi<sup>2</sup> (91.7 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
APR 27...	1200	20	--	--	--	--	--	--	--	--	--	--
AUG 10...	1315	3.8	560	7.9	21.0	8.3	57	23	16	4.2	270	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	30	24	.4	7.0	342	1.8	.530	1.1	.610	.570	53	110

## 03236055 MIDDLE FORK SALT CREEK NEAR RICHMOND DALE, OH

LOCATION.--Lat 39°13'00", long 82°45'46", Ross County, Hydrologic Unit 05060002, at bridge on West Junction Road, 0.2 mi (0.3 km) upstream from Little Salt Creek, 1.7 mi (2.7 km) north of Brocks Corner, 3.0 mi (4.8 km) northwest of Richmond Dale.

DRAINAGE AREA.--109 mi<sup>2</sup> (282 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HC03)	CARBONATE FET-FLD (MG/L AS C03)
OCT 13...	1610	.89	--	--	--	--	--	--	--	--	--	--
MAY 03...	1830	32	--	--	--	--	--	--	--	--	--	--
JUL 27...	1130	4.7	225	7.2	24.0	7.0	21	9.0	9.8	2.4	80	0

DATE	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	26	8.9	.1	8.6	139	.22	.050	1.3	.040	.020	120	140

## 03236600 LITTLE SALT CREEK NEAR RICHMOND DALE, OH

LOCATION.--Lat 39°11'27", long 82°46'10", Ross County, Hydrologic Unit 05060002, at bridge on State Route 35, 0.4 mi (0.6 km) west of Brocks Corner, 2.3 mi (3.7 km) upstream from mouth, 2.5 mi (4.0 km) east of Richmond Dale.

DRAINAGE AREA.--133 mi<sup>2</sup> (344 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HC03)	CARBONATE FET-FLD (MG/L AS C03)
OCT 13...	1515	3.7	--	--	--	--	--	--	--	--	--	--
MAY 04...	1000	32	--	--	--	--	--	--	--	--	--	--
JUL 27...	1330	6.3	310	7.3	24.0	8.5	22	8.6	23	3.5	90	0

DATE	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	<1.0	29	.2	6.4	187	.28	.030	.57	.090	.020	120	360

## SCIOTO RIVER BASIN

03237040 BIG BEAVER CREEK NEAR PIKETON, OH

LOCATION.--Lat 39°02'41", long 83°01'18", in NW 1/4 sec. 1, T.4 N., R.22 W., Pike County Hydrologic Unit 05060002, at bridge on State Route 124, 0.9 mi (1.4 km) upstream from Little Beaver Creek, 1.2 mi (1.9 km) south of Piketon.

DRAINAGE AREA.--62.5 mi<sup>2</sup> (161.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 17...	1225	.27	--	--	--	--	--	--	--	--	--	--
APR 30...	1015	13	--	--	--	--	--	--	--	--	--	--
AUG 10...	1615	4.0	325	7.6	23.0	8.6	22	15	17	4.6	120	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
APR 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	35	16	.2	5.3	197	.14	.030	.67	.050	.020	43	1

## WHITE OAK CREEK BASIN

03238370 EAST FORK WHITE OAK CREEK AT SARDINIA, OH

LOCATION.--Lat 39°00'24", long 83°49'19", Brown County, Hydrologic Unit 05090201, at bridge on State Route 32, 0.2 mi (0.3 km) upstream from Slab Camp Run 0.7 mi (1.1 km) west of Sardinia.

DRAINAGE AREA.--60.1 mi<sup>2</sup> (155.7 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 17...	1340	2.8	--	--	--	--	--	--	--	--	--	--
APR 29...	1230	9.5	--	--	--	--	--	--	--	--	--	--
AUG 16...	1410	1.8	425	8.2	22.0	8.2	54	18	9.6	5.0	220	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
APR 29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	31	11	.2	4.9	250	.74	.020	.58	.100	.040	28	31

## 03238423 NORTH FORK WHITE OAK CREEK NEAR SARDINIA, OH

LOCATION.--Lat 39°00'58", long 83°52'16", Brown County, Hydrologic Unit 05090201, at bridge on State Route 32, 0.2 mi (0.3 km) upstream from Flat Run, 3.4 mi (5.5 km) west of Sardinia.

DRAINAGE AREA.--53.5 mi<sup>2</sup> (138.6 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 17...	1445	.89	--	--	--	--	--	--	--	--	--	--
APR 29...	1100	5.2	--	--	--	--	--	--	--	--	--	--
AUG 16...	1140	.65	300	8.0	21.5	8.9	40	9.6	5.9	4.6	140	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
APR 29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	20	8.7	.2	3.6	181	.26	.030	.87	.120	.040	35	68

## 03238433 FLAT RUN NEAR SARDINIA, OH

LOCATION.--Lat 39°00'59", long 83°52'05", Brown County, Hydrologic Unit 05090201, at bridge on State Route 32, 0.2 mi (0.3 km) upstream from mouth, 3.3 mi (5.3 km) west of Sardinia.

DRAINAGE AREA.--12.2 mi<sup>2</sup> (31.6 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 17...	1425	.09	--	--	--	--	--	--	--	--	--	--
APR 29...	1145	.67	--	--	--	--	--	--	--	--	--	--
AUG 16...	1230	.02	390	8.0	22.5	8.3	51	15	13	4.4	200	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 17...	--	--	--	--	--	--	--	--	--	--	--	--
APR 29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 16...	37	11	.2	3.2	239	<.10	.040	2.9	.070	.020	68	240

## LITTLE MIAMI RIVER BASIN

03238950 LITTLE MIAMI RIVER NEAR SOUTH CHARLESTON, OH

LOCATION.--Lat 39°49'23", long 83°39'40", Clark County, Hydrologic Unit 05090202, at bridge on Clifton Road, 1.4 mi (2.3 km) west of South Charleston.

DRAINAGE AREA.--9.75 mi<sup>2</sup> (25.28 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLO (MG/L AS HCO3)	CAR- BONATE FET-FLO (MG/L AS CO3)
OCT 13...	1010	.51	--	--	--	--	--	--	--	--	--	--
MAY 05...	0830	2.2	--	--	--	--	--	--	--	--	--	--
AUG 12...	1330	.57	730	8.4	20.0	13.5	91	44	17	3.3	370	4

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	78	28	.6	9.5	488	.77	.010	1.3	.180	.130	28	23

03241890 LITTLE BEAVER CREEK AT ALPHA, OH

LOCATION.--Lat 39°42'36", long 84°01'44", Greene County, Hydrologic Unit 05090202, at bridge on Factory Road in Alpha, 300 ft (90 m) upstream from mouth, 1.9 mi (3.1 km) southeast of Zimmerman.

DRAINAGE AREA.--26.4 mi<sup>2</sup> (68.4 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 14...	1400	26	--	--	--	--	--	--	--	--	--	--
MAY 05...	1310	32	--	--	--	--	--	--	--	--	--	--
AUG 12...	1005	22	1100	7.9	18.5	6.6	96	38	110	6.8	400	0

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	86	120	.3	15	638	4.2	.600	3.1	2.60	2.30	40	45	

## 03241960 LITTLE SUGAR CREEK AT BELLBROOK, OH

LOCATION.--Lat 39°37'51", long 84°04'17", Greene County, Hydrologic Unit 05090202, at bridge on Upper Bellbrook Road, 400 ft (120 m) upstream from mouth, 0.4 mi (0.6 km) southeast of Bellbrook.

DRAINAGE AREA.--12.4 mi<sup>2</sup> (32.1 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 13...	1225	.48	--	--	--	--	--	--	--	--	--	--
MAY 05...	1400	5.2	--	--	--	--	--	--	--	--	--	--
AUG 11...	1250	2.5	550	8.5	21.0	11.4	60	29	29	1.6	240	10

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	34	40	.2	6.4	335	.31	.020	.18	.040	.030	22	9

## 03241990 SUGAR CREEK NEAR BELLBROOK, OH

LOCATION.--Lat 39°37'15", long 84°03'26", Greene County, Hydrologic Unit 05090202, at bridge on Pennewit Road, 0.4 mi (0.6 km) upstream from mouth, 1.3 mi (2.1 km) southeast of Bellbrook.

DRAINAGE AREA.--33.5 mi<sup>2</sup> (86.8 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 13...	1125	1.7	--	--	--	--	--	--	--	--	--	--
MAY 05...	1445	11	--	--	--	--	--	--	--	--	--	--
AUG 11...	1135	4.1	490	7.9	19.0	6.5	56	21	27	2.2	240	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	24	32	.2	7.5	284	.60	.060	2.5	.130	.060	19	64

## LITTLE MIAMI RIVER BASIN

03243850 TODD FORK AT CLARKSVILLE, OH

LOCATION.--Lat 39°24'12", long 83°58'31", Clinton County, Hydrologic Unit 05090202, at bridge on George Road, 0.3 mi (0.5 km) northeast of Clarksville.

DRAINAGE AREA.--140 mi<sup>2</sup> (363 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 15...	1450	2.5	--	--	--	--	--	--	--	--	--	--
MAY 03...	1630	28	--	--	--	--	--	--	--	--	--	--
AUG 10...	1545	16	430	8.2	22.5	8.5	50	24	22	3.1	200	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	37	27	.4	5.3	263	1.9	.030	2.2	.380	.330	23	13

## 03244550 LITTLE MUDDY CREEK NEAR LEBANON, OH

LOCATION.--Lat 39°24'19", long 84°17'07", Warren County, Hydrologic Unit 05090202, at bridge on State Highway 741, 4.5 mi (7.2 km) southwest of Lebanon.

DRAINAGE AREA.--18.3 mi<sup>2</sup> (47.4 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 15...	1035	.03	--	--	--	--	--	--	--	--	--	--
MAY 03...	1410	2.6	--	--	--	--	--	--	--	--	--	--
AUG 11...	0850	.13	450	7.8	19.5	3.8	72	24	30	3.7	330	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	20	30	.3	6.0	318	<.10	.440	2.6	.370	.230	22	1600

## 03244570 TURTLE CREEK AT SOUTH LEBANON, OH

LOCATION.--Lat 39°22'21", long 84°13'47", Warren County, Hydrologic Unit 05090202, at bridge on Mason Road at South Lebanon.

DRAINAGE AREA.--58.2 mi<sup>2</sup> (150.7 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 15...	1020	2.6	--	--	--	--	--	--	--	--	--	--
MAY 03...	1325	13	--	--	--	--	--	--	--	--	--	--
AUG 10...	1715	2.5	990	8.2	23.0	8.9	95	25	74	5.3	370	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	58	130	.3	6.7	626	3.2	1.40	.70	1.30	1.10	57	110

## 03244950 O'BANNON CREEK AT LOVELAND, OH

LOCATION.--Lat 39°16'08", long 84°15'21", Clermont County, Hydrologic Unit 05090202, at bridge on State Highway 48, at Loveland.

DRAINAGE AREA.--59.0 mi<sup>2</sup> (153 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 15...	1150	.39	--	--	--	--	--	--	--	--	--	--
MAY 03...	1220	6.6	--	--	--	--	--	--	--	--	--	--
AUG 10...	1250	1.5	440	8.3	24.0	7.8	49	11	37	5.1	170	2

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 15...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	37	29	.3	5.4	265	.45	.060	.54	.400	.220	12	22

## GREAT MIAMI RIVER BASIN

03261700 LORAMIE CREEK NEAR MCCARTYVILLE, OH

LOCATION.--Lat 40°25'26", long 84°13'28", Shelby County, Hydrologic Unit 05080001, at bridge on Amsterdam Road, 0.6 mi (1.0 km) upstream from Clay Creek, 2.7 mi (4.3 km) northeast of McCartyville.

DRAINAGE AREA.--20.6 mi<sup>2</sup> (53.4 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1979 to current year, chemical analyses, waters 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 16...	1220	.50	--	--	--	--	--	--	--	--	--	--
MAY 04...	1620	4.0	--	--	--	--	--	--	--	--	--	--
AUG 11...	1745	.72	1050	8.0	25.0	5.9	98	40	120	6.3	400	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	93	150	.6	8.2	657	2.0	.410	3.0	1.50	1.50	19	97

03265395 LUDLOW CREEK AT LUDLOW FALLS, OH

LOCATION.--Lat 39°59'52", long 84°20'15", Miami County, Hydrologic Unit 05080001, at bridge on State Highway 48 at Ludlow Falls.

DRAINAGE AREA.--62.9 mi<sup>2</sup> (162.9 km<sup>2</sup>).

PERIOD OF RECORD.--Discharge, water years 1964-65, 1980 to current year; chemical analyses, water years 1980 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 16...	1525	2.7	--	--	--	--	--	--	--	--	--	--
MAY 04...	1020	17	--	--	--	--	--	--	--	--	--	--
AUG 11...	1530	5.0	530	8.5	21.0	12.4	68	32	23	2.7	280	8

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	37	32	.3	9.5	350	2.2	.020	.88	.150	.110	460	14

Discharge Measurements made at low-flow partial-record stations during water year 1982

Station Number	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of Record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
03104030	Yankee Run near Masury, OH	Lat 41°14'40", long 80°32'20", Trumbull County, Hydrologic Unit 05030102, at ford on private road, 50 ft (15 m) west of Yankee Run Road, 0.7 mi (1.1 km) northwest of intersection of Yankee Run Road with Warren-Sharon Road, 2.5 mi (4.0 km) north of center of Masury, 3.4 mi (5.5 km) upstream from mouth.	38.9	1981-82 1981*	10-19-81 05-03-82	2.52 6.26
03104070	Little Yankee Run at Masury, OH	Lat 41°11'36", long 80°32'03", Trumbull County, Hydrologic Unit 05030102, at at bridge on Chestnut Ridge Road, 0.9 mi (1.5 km) south of center of Masury, 1.6 mi (2.6 km) upstream from mouth.	41.0	1981-82 1981*	10-19-81 05-03-82	8.60 13.8
03108985	Cherry Valley Run at Leetonia, OH	Lat 40°52'33", long 80°45'24", Columbiana County, Hydrologic Unit 05030101, at bridge on Madison Street in Leetonia.	11.9	1979-82 1980-81*	10-19-81 05-04-82	3.03 4.31
03109395	Bull Creek at Negley, OH	Lat 40°47'15", long 80°32'42", Columbiana County, Hydrologic Unit 05030101, at bridge on State Route 170, 0.6 mi (1.0 km) upstream from mouth, at Negley.	55.4	1979-82 1980-81*	10-19-81 05-04-82	9.85 26.7
03109860	Elkhorn Creek at Bergholz, OH	Lat 40°30'37", long 80°53'50", Jefferson County, Hydrologic Unit 05030101, at a discontinued bridge 400 ft (120 m) west of State Route 164, 0.2 mi (0.3 km) upstream from mouth, 1.0 mi (1.6 km) southwest of Bergholz.	33.5	1981-82 1981*	10-19-81 05-05-82	7.56 15.6
031110950	Cross Creek at Broadacre, OH	Lat 40°21'56", long 80°47'05", Jefferson County, Hydrologic Unit 05030101, at bridge on State Route 152, at Broadacre.	53.5	1981-82 1981*	10-19-81 05-04-82	10.1 22.5
03112820	McMahon Creek at Glencoe, OH	Lat 40°00'10", long 80°52'38", Belmont County, Hydrologic Unit 05030106, at bridge on County Road 149, 0.7 mi (1.1 km) southeast of Glencoe.	50.7	1981-82 1981*	10-15-81 05-05-82 08-06-82	5.58 16.1 3.95
03113550	McMahon Creek at Bellaire, OH	Lat 40°00'39", long, 80°45'45", Belmont County, Hydrologic Unit 05030106, at bridge on county road connecting Bellaire with State Route 147 on right bank of McMahon Creek, 300 ft (91 m) upstream from Bellaire city limits at stream crossing.	90.2	1981-82 1981*	10-15-81 05-04-82 08-06-82	11.7 35.4 9.62
03113840	North Fork Captina Creek near Barnesville, OH	Lat 39°54'44", long 81°02'51", Belmont County, Hydrologic Unit 05030106, at bridge on County Road 92, 0.4 mi (0.6 km) upstream from mouth, 8.5 mi (13.7 km) southeast of Barnesville.	32.6	1981-82 1981*	10-15-81 05-04-82 08-06-82	3.47 11.7 2.33
03124705	Stone Creek near New Philadelphia, OH	Lat 40°28'42", long 81°28'59", Tuscarawas County, Hydrologic Unit 05040001, at bridge on township road, 2.1 mi (3.4 km) southwest of New Philadelphia.	26.9	1981-82 1981*	10-15-81 05-04-82 08-09-82	3.48 13.7 4.70
03126170	Skull Fork at Freeport, OH	Lat 40°11'52", long 81°16'13", Harrison County, Hydrologic Unit 05040001, at bridge on county road, 0.8 mi (1.3 km) south of Freeport.	45.9	1981-82 1981*	10-15-81 05-05-82 08-09-82	2.65 11.5 2.72
03129175	Cedar Fork near Bellville, OH	Lat 40°37'25", long 82°32'57", Richland County, Hydrologic Unit 05040002, at bridge on Johnsville Road, 1.1 mi (1.8 km) downstream from Steel Run, 2.0 mi (3.2 km) west of Bellville.	46.5	1980-82 1980-81*	10-15-81 05-03-82	9.96 21.5
03142085	Crooked Creek at Cambridge, OH	Lat 40°02'07", long 81°37'07", Guernsey County, Hydrologic Unit 05040005, at bridge on State Route 209, 0.9 mi (1.4 km) northwest of west city limits of Cambridge.	58.3	1981-82 1981*	10-15-81 05-05-82	2.11 13.5

Discharge Measurements made at low-flow partial-record stations during water year 1982

Station Number	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of Record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
03145185	South Fork Licking River at Newark, OH	Lat 40°02'04", long 82°24'43", Licking County, Hydrologic Unit 05040006, at bridge on Orchard Street, 0.1 mi (0.2 km) north of south city limits of Newark, 0.3 mi (0.5 km) upstream from Raccoon Creek, 1.5 mi (2.4 km) upstream from North Fork.	183	1981-82 1981*	10-13-81 05-04-82 07-27-82	17.2 49.9 27.0
03150200	Meigs Creek near Reinersville, OH	Lat 39°37'43", long 81°43'12", Morgan County, Hydrologic Unit 05040004, at bridge on county road at Unionville, 0.1 mi (0.2 km) upstream from Dyes Fork, 5.1 mi (8.2 km) southwest of Reinersville.	73.0	1981-82 1981*	10-14-81 04-29-82 07-28-82	2.73 25.0 2.77
03150365	Olive Green Creek near Beverly, OH	Lat 39°35'10", long 81°39'07", Washington County, Hydrologic Unit 05040004, at bridge on State Route 83, 2.1 mi (3.4 km) upstream from mouth, 2.7 mi (4.3 km) north of Beverly.	80.7	1981-82 1981*	10-14-81 04-29-82 07-28-82	1.76 26.7 3.76
03155895	Hocking River at Union Street, Lancaster, OH	Lat 39°43'04", long 82°36'35", Fairfield County, Hydrologic Unit 05030204, at footbridge at east end of Union Street, 0.2 mi (0.3 km) downstream from 6th Avenue bridge in Lancaster, and 0.8 mi (1.3 km) upstream from Hunters Run.	36.2	1978-82 1980-81*	10-14-81 05-03-82	5.92 11.6
03156549	Center Branch Rush Creek near Junction City, OH	Lat 39°43'24", long 82°20'36", Perry County, Hydrologic Unit 05030204, at bridge on State Route 37, 2.3 mi (3.7 km) west of Junction City.	24.9	1979-82 1980-81*	10-13-81 05-03-82	.784 6.75
03159000	Sunday Creek at Glouster,	Lat 39°30'03", long 82°05'07", Athens County, Hydrologic Unit 05030204, 150 ft (46 m) downstream from West Branch and 200 ft (61 m) upstream from bridge on State Highway 78 at Glouster.	104	1951-78# 1982	6-18-82	+459
03219590	Bokes Creek near Warrensburg, OH	Lat 40°19'20", long 83°10'30", Delaware County, Hydrologic Unit 05060001, at bridge on State Route 257, 0.2 mi (0.3 km) upstream from mouth, 1.2 mi (1.9 km) north of Warrensburg.	83.2	1956 1960 a/1979-82 1980-81*	10-13-81 04-27-82	.783 16.4
03230745	Deer Creek at U.S. 142 near London, OH	Lat 39°54'17", long 83°23'35", Madison County, Hydrologic Unit 05060002, at bridge on State Route 142, 3.0 mi (4.3 km) northeast of London.	50.7	1981-82 1981*	04-28-82 08-16-82	15.5 1.10
03230770	Oak Run near Big Plain, OH	Lat 39°50'25", long 83°22'01", Madison County, Hydrologic Unit 05060002, at bridge on Gregg Mill Road, 2.0 mi (3.2 km) upstream from mouth, 4.1 mi (6.6 km) west of Big Plain.	41.1	1981-82 1981*	04-29-82 08-16-82	16.3 5.97
03230790	Sugar Run near Mt. Sterling, OH	Lat 39°45'09", long 83°17'38", Madison County, Hydrologic Unit 05060002, at bridge on State Route 56, 0.4 mi (0.6 km) upstream from mouth, 2.7 mi (4.3 km) northwest of Mt. Sterling.	51.7	1981-82 1981*	04-28-82 08-16-82	14.0 .586
03230800	Deer Creek at Mt. Sterling, Oh.	Lat 39°42'54", long 83°15'26", Madison County, Hydrologic Unit 05060002, at bridge on State Highway 56, 0.2 mi (0.3 km) downstream from unnamed right bank tributary, 0.6 mi (1.0 km) southeast of Mt. Sterling, and 4.9 mi (7.9 km) upstream from Duffs Fork.	228	1966-82	10-14-81 04-28-82 08-16-82	*11 *82 *7.6

Discharge Measurements made at low-flow partial-record stations during water year 1982

Station Number	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of Record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
03232000	Paint Creek near Greenfield, OH.	Lat 39°22'45", long 83°22'32", Fayette County, Hydrologic Unit 05060003, at bridge on State Highway 753, 0.6 mi (1.0 km) upstream from Stone Run, 2.0 mi (3.2 km) north of Greenfield and 3.0 mi (4.8 km) downstream from Indian Creek.	249	1926-35, 1939-56, 1962-80, 1982	10-06-81 04-27-82 08-09-82	*4.6 *81 *13
03234442	Walnut Creek near Richmond Dale, OH	Lat 39°13'53", long 82°51'53", Ross County, Hydrologic Unit 05060002, at bridge on U.S. Highway 35, 1.3 mi (2.1 km) upstream from mouth, 3.1 mi (5.0 km) northwest of Richmond Dale.	57.9	1981-82 1981*	10-13-81 05-04-82 07-27-82	.636 12.2 3.61
03235090	Salt Creek at Adelphi, OH	Lat 39°28'23", long 82°45'01", Pickaway County, Hydrologic Unit 05060002, at bridge on State Routes 56 and 180, 0.6 mi (1.0 km) downstream from Beech Fork, 0.5 mi (0.8 km) north of Adelphi.	47.8	1978-82 1980-81*	10-13-81 05-03-82	1.83 11.7
03236200	Little Salt Creek at Jackson, OH	Lat 39°03'13", long 82°38'05", Jackson County, Hydrologic Unit 05060002, at bridge on U.S. Highway 35 in Jackson, 0.6 mi (1.0 km) upstream from Horse Creek.	33.6	1978-82 1980-81*	10-13-81 05-04-82	.548 5.25
03236800	Salt Creek at Richmond Dale, OH	Lat 39°11'53", long 82°48'49", Ross County, Hydrologic Unit 05060002, at bridge on State Route 35, 0.3 mi (0.5 km) south of Richmond Dale, 1.2 mi (1.9 km) upstream from mouth.	552	1979-82 1980-81*	10-13-81 05-04-82	23.0 171.0
03239800	Little Miami River at John Bryant State Park near Clifton, OH	Lat 39°47'09", long 83°51'39", Greene County, Hydrologic Unit 05090202, at Old Stage Coach Trail Walkbridge (near Park Road No. 2) in John Bryant State Park, 1.2 mi (1.9 km) upstream from Yellow Springs Creek, 2.0 mi (3.2 km) southwest of Clifton.	103	1979-82 1980-81*	10-13-81 05-05-82	18.3 54.5
03241700	Little Miami River near Xenia, OH	Lat 39°42'27", long 83°59'15", Greene County, Hydrologic Unit 05090202, at bridge on Dayton-Xenia Road, 0.9 mi (1.4 km) downstream from Shawnee Creek, 3.5 mi (5.6 km) northwest of Xenia.	238	1948 1979-82 1980-81*	10-14-81 05-05-82	54.0 139.0
03243150	Todd Fork near Clarksville, OH	Lat 39°26'10", long 83°56'41", Clinton County, Hydrologic Unit 05090202, at bridge on U.S. Highway 22, 1.0 mi (1.6 km) upstream from Lytle Creek, 2.7 mi (4.3 km) northeast of Clarksville.	56.6	1981-82 1981*	10-15-81 05-03-82 08-18-82	0.72 14.4 1.26
03244000	Todd Fork near Roachester, OH.	Lat 39°20'07", long 84°05'12", Warren County, Hydrologic Unit 05090202, at bridge on State Highway 123, 0.3 mi (0.5 km) downstream from Lick Run, 1.6 mi (2.6 km) southeast of Roachester	219	1952-74# 1980-82	10-15-81 05-03-82 08-10-82	2.53 40.5
03245775	East Fork Little Miami River at Lynchburg, OH	Lat 39°14'26", long 83°47'46", Clinton County, Hydrologic Unit 05090202, at site just downstream from Turtle Creek at southwest corner of town limits of Lynchburg.	48.1	1981-82 1981*	11-17-81 04-28-82 07-27-82	0.93 10.1 2.16

Discharge Measurements made at low-flow partial-record stations during water year 1982

Station Number	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of Record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
03247300	Stonelick Creek near Perintown, OH	Lat 39°07'20", long 84°11'56", Clermont County, Hydrologic Unit 05090202, at bridge on U.S. Highway 50, 1.9 mi (2.3 km) east of Perintown.	76.0	1981-82 1981*	10-15-81 05-03-82 08-10-82	.74 5.96 5.54
03260450	South Fork Great Miami River near Huntsville, OH	Lat 40°28'43", long 83°48'43", Logan County, Hydrologic Unit 05080001, at bridge on State Route 117, 2.5 mi (4.0 km) north of Huntsville, 3.3 mi (5.3 km) upstream from Indian Lake.	47.5	1981-82 1981*	10-15-81 05-04-82 08-10-82	3.04 13.6 3.47
03261495	Tawawa Creek at Sidney, OH	Lat 40°17'22", long 84°07'59", Shelby County, Hydrologic Unit 05080001, at wooden covered bridge in Civic Park, 0.9 mi (1.4 km) upstream from mouth, 0.6 mi (1.0 Km), east of State Route 47 at Sidney.	54.2	1981-82 1981*	10-15-81 05-04-82 08-17-82	6.00 17.6 1.14
03263195	Swamp Creek at Versailles, OH	Lat 40°12'45", long 84°29'55", Darke County, Hydrologic Unit 05080001, at bridge on State Highway 121, 1.0 mi (1.6 km) southwest of Versailles.	58.8	1971 1975 1980-82 1980-81*	10-16-81 05-04-82	1.77 7.04
03263390	Greenville Creek near Coletown, OH	Lat 40°08'54", long 84°43'56", Darke County, Hydrologic Unit 05080001, at bridge on Fisher Road, 1.8 mi (2.9 km) northwest of Coletown.	69.2	1981-82 1981*	11-17-81 05-04-82 08-17-82	8.15 27.5 7.83
03264900	Painter Creek near Sugar Grove, OH	Lat 40°04'58", long 84°23'52", Miami County, Hydrologic Unit 05080001, at bridge on Panther Creek Road, 2.2 mi (3.5 km) west of Sugar Grove, 3.3 mi (5.3 km) upstream from mouth.	34.9	1981-82 1981*	11-17-81 05-04-82 08-17-82	3.70 11.7 1.30

\* Period of record for Water Quality Data

# Operated as a continuous record gaging station

NOTE--All sites in above table were discontinued in 1982.

## CREST-STAGE PARTIAL-RECORD STATIONS

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 1982

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum Gage height (feet)	Discharge (ft <sup>3</sup> /s)
Beaver River basin							
03092099	Hinkley Creek at Charlestown, OH	Lat 41°09'16", long 81°08'51", Portage County, Hydrologic Unit 05030103, at bridge on Rock Spring Road, 0.6 mi (1.0 km) south of Charlestown, 2.2 mi (3.5 km) upstream from mouth.	7.85	1970-82	6-29-82 (discontinued)	11.84	360
03098350 (c)	Charles Ditch at Boardman, OH	Lat 41°00'43", long 80°39'44", Mahoning County, Hydrologic Unit 05030103, at culvert on Boardman Boulevard, 400 ft (122 m) east of Market Street in Boardman.	0.45	1980-82	9- 2-82	16.72	236
03098700	Crab Creek at Youngstown, OH	Lat 41°07'20", long 80°38'08", Mahoning County, Hydrologic Unit 05030103, at bridge on Hubbard Road at Youngstown, 2.0 mi (3.2 km) upstream from mouth.	14.0	1959-82	1-31-82 (discontinued)	6.99	815
03098900 (c)	Bunn Brook at Struthers, OH	Lat 41°03'05", long 80°36'28", Mahoning County, Hydrologic Unit 05030103, at culvert under 8th Street, 300 ft (91 m) south of Bunn Street at Struthers.	0.63	1980-82	9- 2-82 (discontinued)	15.05	142
Cross Creek basin							
03110980	Consol Run at Bloomingdale, OH	Lat 40°19'56", long 80°48'44", Jefferson County, Hydrologic Unit 05030101, at culvert on Township Road, 0.8 mi (1.3 km) southeast of Bloomingdale.	0.044	1978-82	1-31-82	99.80	4.4
03113802 (d)	Chestnut Creek near Barnesville, OH	Lat 39°56'50", long 81°09'25", Belmont County, Hydrologic Unit 05030106, at culvert on SR 148, .98 mi east of SR 800, 200 ft upstream from an unnamed tributary to North Fork Captina Creek, and 2.45 mi south of Barnesville.	0.22	1982	4- 7-82	10.79	8.8
Short Creek basin							
03111450	Branson Run at Georgetown, OH	Lat 40°12'26", long 80°55'22", Harrison County, Hydrologic Unit 05030101, at culvert on County Highway 41, 300 ft (91 m) southwest from intersection with U.S. Highway 250 in Georgetown.	1.31	1978-82	1-23-82	95.58	73
03111455	South Fork Short Creek at Georgetown, OH	Lat 40°12'27", long 80°55'12", Harrison County, Hydrologic Unit 05030101, at bridge on U.S. Highway 250 in Georgetown.	10.9	1978-82	-----	<86.51	<190
03111470	Little Piney Fork at Parlett, OH	Lat 40°18'07", long 80°50'55", Jefferson County, Hydrologic Unit 05030101, at culvert on State Route 151, 0.9 mi (1.4 km) east of Parlett.	1.57	1978-82	1-23-82	94.23	39
03111490	Piney Fork tributary near Piney Fork, OH	Lat 40°16'18", long 80°50'48", Jefferson County, Hydrologic Unit 05030101, at culvert on County Road 12, 0.08 mi (0.13 km) east of Penn Central Railroad crossing on Smithfield-Adena Road, 1.6 mi (2.6 km) northwest of Piney Fork and 3.0 mi (4.8 km) west of Smithfield.	0.44	1978-82	-----	<97.26	<12
Wheeling Creek basin							
03111540	Sloan Run tributary near Harrisville, OH	Lat 40°09'07", long 80°52'59", Belmont County, Hydrologic Unit 05030106, at culvert on unnamed R & F Coal Company private road, 1.7 mi (2.7 km) south of Harrisville, and 2.1 mi (3.4 km) west of Pleasant Grove.	0.34	1978-82	2- 1-82	102.39	42

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES  
CREST STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
Sunfish Creek basin							
03114240	Wood Run near Woodfield, OH	Lat 39°46'56", long 81°03'21", Monroe County, Hydrologic Unit 05030201, at culvert on State Highway 26, 0.5 mi (0.8 km) upstream from Standing Stone Run, and 3.5 mi (5.6 km) northeast of Woodfield.	0.53	1978-82	-----	<95.94	<32
Little Muskingum River basin							
03115280	Trail Run near Antioch, OH	Lat 39°37'29", long 81°02'54", Monroe County, Hydrologic Unit 05030201, at private road bridge, adjacent to State Route 800, 2.7 mi (4.3 km) southeast of Antioch.	5.45	1978-82	7- 4-82	93.25	390
03115410	Graham Run near Bloomfield, OH	Lat 39°32'36", long 81°12'32", Washington County, Hydrologic Unit 05030201, at culvert on State Highway 26, 0.25 mi (0.40 km) upstream from mouth, and 1.2 mi (1.9 km) southwest of Bloomfield.	0.13	1978-82	7- 3-82	97.99	215
03115510	Moss Run near Wingett, OH	Lat 39°28'24", long 81°18'52", Washington County, Hydrologic Unit 05030201, at culvert on State Route 26 at Moss Run and 8 mi (13 km) southwest of Wingett.	1.52	1978-82	7- 4-82	89.99	177
03115596 (d)	Barnes Run at Summerfield, OH	Lat 39°47'18", long 81°21'08", Noble County, Hydrologic Unit 05030201, at culvert on State Route 78, 0.83 mi west of State Route 513 and State Route 146, 1.25 upstream from the discontinued site Barnes Run near Summerfield (03115600) and 0.67 mi southwest of Summerfield.	1.02	1982	6-16-82	11.99	40
Duck Creek basin							
03115710	Buffalo Run tributary near Dexter City, OH	Lat 39°31'41", long 81°26'58", Noble County, Hydrologic Unit 05030201, at culvert on County Road 2, 1.3 mi (2.1 km) east of Dexter City.	0.19	1978-82	-----	<96.45	<36
03115810 (c)	Rand Run on Acme Road at Marietta, OH	Lat 39°24'48", long 81°25'44", Washington County, Hydrological Unit 05030201, at culvert on Acme Road, 0.2 mi (0.32 km) north of State Route 7 and 0.3 mi (0.48 km) west of Interstate 77 at Marietta.	0.57	1980-82	5-29-82 (discontinued)	11.99	29
Muskingum River basin							
03115995 (c)	Sweet Henri Ditch at Norton, OH	Lat 41°01'27", long 81°38'13", Summit County, Hydrologic Unit 05040001, at culvert under driveway 300 ft (91 m) east of Cleveland Massillon Road on Gardner Boulevard at Norton.	0.36	1980-82	5-23-82 (discontinued)	12.78	70
03116150 (c)	Orchard Run at Wadsworth, OH	Lat 41°01'52", long 81°44'03", Medina County, Hydrologic Unit 05040001, at culvert on Baldwin Street between High Street and West Street at Wadsworth.	0.44	1980-82	5-23-82	12.81	110
03120580 (d)	Falling Branch at Sherrods-ville, OH	Lat 40°30'28", long 81°14'25", Carroll County, Hydrologic Unit 05040001, at culvert on State Route 39, 0.28 mi northeast of State Route 212, 250 ft upstream of Thompson Run, and 0.81 mi north of Sherrods-ville.	0.33	1982	3-21-82	11.17	29
03123060 (d)	Cattail Creek at Baltic, OH	Lat 40°27'12", long 81°42'01", Holmes County, Hydrologic Unit 05040001, at culvert on County Road 575, 0.67 mi north of State Route 651, 550 ft upstream of Brush Run, and 0.60 mi north of Baltic.	0.14	1982	3-16-82	10.69 (e)	8.0

## CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis-charge (ft <sup>3</sup> /s)
03159503 (c)	Home Ditch on STP road at Athens, OH	Lat 39°20'06", long 82°04'43", Athens County, Hydrologic Unit 05030204, at culvert on Sewage Treatment Plant Road, 0.15 mi (0.24 km) south of U.S. 50 and 0.2 mi (0.32 km) east of U.S. Route 33 at Athens.	0.37	1980-82	6-16-82	12.30	53
03159537 (d)	Elk Run near Alfred, OH	Lat 39°09'41", long 81°57'47", Meigs County, Hydrologic Unit 05030202, at culvert on State Route 681, .94 mi east of Flora, 1.05 mi upstream from Middle Branch Shade River, and 2.37 mi from Alfred.	0.48	1982	6- 5-82	12.05	46
Raccoon Creek basin							
03201550	Starr Run near New Plymouth, OH	Lat 39°23'46", long 82°20'49", Hocking County, Hydrologic Unit 05090101, at culvert on State Route 56, 0.8 mi (1.3 km) east of State Route 328, and 3.0 mi (4.8 km) east of New Plymouth.	0.30	1978-82	5-22-82	98.09	85
Charlie Creek basin							
03205995 (d)	Sandusky Creek near Burlington, OH	Lat 38°25'03", long 82°30'36", Lawrence County, Hydrologic Unit 05090101, at culvert on U.S. Highway 52, 0.35 mi (0.55 km) west of Charley Creek Road, and 1.25 mi (2.00 km) northeast of Burlington.	0.73	1978-82	5-30-82	12.27	37
Scioto River basin							
03219849 (d)	Scott Creek near Marysville, OH	Lat 40°12'42", long 83°18'15", Union County, Hydrologic Unit 05060001, at culvert on U.S. Highway 33, 1.12 mi upstream of Mill Creek, and 3.0 mi southeast of Marysville.	4.03	1982	3-16-82	15.57	403
03221900	Dry Run at Columbus, OH	Lat 39°57'22", long 83°06'19", Franklin County, Hydrologic Unit 05060001, at culvert in Westinghouse employees parking lot at entrance to plant, 1,000 ft (305 m) north of U.S. Highway 40, near west edge of Columbus.	1.91	1965-82	3-16-82 (discontinued)	20.62	405
03223330 (d)	March Run near West Point, OH	Lat 40°37'55", long 82°45'56", Morrow County, Hydrologic Unit 05060001, at culvert on State Route 19, .8 mi up- stream of Whetstone creek, .5 mi south of West Point - Bellville Road, and 1.15 mi southeast of West Point.	0.18	1982	8- 4-82	11.64	21
03226860 (c)	Rush Run near Worthington, OH	Lat 40°05'41", long 82°59'56", Franklin County, Hydrological Unit 05060001, at culvert on G.E. Drive, 50 ft (15 m) west of Huntley Road at Worthington.	0.60	1980-82	6- 9-82	---	32
03226890	Turkey Run at Upper Arlington, OH	Lat 40°02'10", long 83°04'06", Franklin County, Hydrologic Unit 05060001, at culvert on Lytham Road at Upper Arlington.	0.90	1972-82	5-22-82	14.52	128
03235080 (d)	Bull Creek near Adelphi, OH	Lat 39°27'11", long 82°46'46", Ross County, Hydrologic Unit 05060002, at culvert on State Route 180, 1.9 mi (3.1 km) southwest of Adelphi.	3.13	1978-82	3-20-82	70.92	400
03235200	Little Blackjack Branch near South Bloomington, OH	Lat 39°27'23", long 82°30'25", Hocking County, Hydrologic Unit 05060002, at culvert on State Highway 664, 5.5 mi (8.8 km) northeast of South Bloomington.	0.89	1966-82	5-22-82 (discontinued)	23.48	355
03236050 (c)	Coalton Ditch at Ankrom Drive at Coalton, OH	Lat 39°06'36", long 82°36'44", Jackson County, Hydrological Unit 05060002, at culvert on driveway of Ankrom residence 20 ft (6 m) east of Ohio Route 93, 0.25 mi (0.80 km) above mouth at Coalton.	0.50	1980-82	6-16-82 (discontinued)	12.46	42

## CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
03123400 (d)	Dundee Creek at Dundee, OH	Lat 40°35'35", long 81°36'13", Tuscarawas County, Hydrologic Unit 05040001, at culvert on State Highway 93, 0.4 mi (0.6 km) upstream from mouth, 0.5 mi (0.8 km) northeast of Dundee.	0.71	1966-82	1-31-82	20.54	43
03125450	Robinson Run near Hendrysburg, OH	Lat 40°05'08", long 81°10'27", Belmont County, Hydrologic Unit 05040001, at culvert on County Road 108, 1.7 mi (2.7 km) north of Hendrysburg.	1.97	1978-82	2- 1-82	98.93	80
03127950	Clear Fork near Jewett, OH	Lat 40°19'28", long 81°01'20", Harrison County, Hydrologic Unit 05040001, at bridge 150 ft (46 m) north of County Road 13, 0.5 mi (0.8 km) east of State Route 9, and 3.1 mi (5.0 km) south of Jewett.	5.45	1978-82	1-31-82	96.21	168
03128650	Mud Run tributary at Wainwright, OH	Lat 40°25'07", long 81°24'57", Tuscarawas County, Hydrologic Unit 05040001, at culvert on Warwick Township Road 461, 0.5 mi (0.8 km) west of State Route 416, and 0.7 mi (1.1 km) east of Wainwright.	0.55	1978-82	2- 1-82	99.91	15
03138900	Jennings Ditch tributary near Wooster, OH	Lat 40°44'45", long 81°55'48", Wayne County, Hydrologic Unit 05040003, at culvert on State Highway 83, 0.8 mi (1.3 km) upstream from mouth, 4.0 mi (6.4 km) south of Wooster.	0.90	1946, 1966-82	5-21-82 (discontinued)	17.70	34
03144800	Etna Creek at Etna, OH	Lat 39°58'08", long 82°40'55", Licking County, Hydrologic Unit 05040006, at culvert on State Highway 310, 0.7 mi (1.1 km) north of Etna.	1.10	1966-82	1-31-82	10.06	58
03144865 (d)	Slim Creek at Kirkersville, OH	Lat 39°56'51", long 82°36'13", Licking County, Hydrologic Unit 05040006, at culvert on the Interstate 70-U.S. Highway 40 connector, .20 mi west of State Route 158, 1.17 mi upstream of a reservoir feeder to Buckeye Lake, and .85 mi south of Kirkersville.	0.13	1982	3-31-82	11.57	16
03148300	Moxahala Creek at Roseville, OH	Lat 39°48'38", long 82°04'13", Muskingum County, Hydrologic Unit 05040004, at pumping station about 2,500 ft (762 m) downstream from First Street bridge in Roseville.	80.6	1964-82	-----	<10.49	<1,600
03148395 (d)	Claypit Creek near Roseville, OH	Lat 39°50'28", long 82°04'15", Muskingum County, Hydrologic Unit 05040004, at culvert on State Route 93, 2.90 mi south of U.S. Highway 22, 1.13 mi upstream of Moxahala Creek, and 1.75 mi north of Roseville.	2.25	1982	8-24-82	13.44	54
03150602 (d)	Second Creek near Marietta, OH	Lat 39°27'36", long 81°26'24", Washington County, Hydrologic Unit 05040004, at culvert on State Route 821, 1.20 mi northeast of State Route 60, 1.34 mi upstream from the Muskingum River, and 1.28 mi north of Marietta.	1.04	1982	6-16-82	17.00	410
Hocking River basin							
03158102 (d)	Wolfkiln Run at Haydenville, OH	Lat 39°28'35", long 82°18'51", Hocking County, Hydrologic Unit 05030204, at culvert on U.S. Highway 33, 1.54 mi southeast of State Route 595, 500 ft upstream of an unnamed tributary to the Hocking River, and .9 mi southeast of Haydenville.	0.88	1982	3-20-82	12.00	31
03158220	Glen Run near Doanville, OH	Lat 39°24'06", long 82°11'44", Athens County, Hydrologic Unit 05030204, at culvert on County Road 4, 0.8 mi (1.3 km) west of U.S. Highway 33, and 2.3 mi (3.7 km) south of Doanville.	1.09	1978-82	-----	<95.90	<83
03159450	Mill Creek near Chauncey, OH	Lat 39°22'46", long 82°05'04", Athens County, Hydrologic Unit 05030204, at Culvert on U.S. Highway 50, 200 ft (61 m) above mouth, 4.5 mi (7.2 km) north of Athens, and 3.0 mi (4.8 km) southeast of Chauncey.	1.48	1978-82	3-20-82	96.46	250

## CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
03236090	South Branch Little Salt Creek near Jackson, OH	Lat 39°00'50", long 82°39'01", Jackson County, Hydrologic Unit 05010002, at culvert on State Highway 124, 300 ft (90 m) east of State Highway 139, and 2.7 mi (4.3 km) south of Jackson.	1.28	1978-82	1-25-82	92.62	57
03237095	Devers Run at Lucasville, OH	Lat 38°52'54", long 83°01'13" Scioto County, Hydrologic Unit 05060002, at culvert on State Highway 104, 300 ft (91 m) north of State Highway 348, and 1.2 mi (1.9 km) northwest of Lucasville.	1.22	1978-82	5-30-82	95.64	330
03237120 (d)	Stone Branch near Peebles, OH	Lat 38°57'03", long 83°22'29", Adams County, Hydrologic Unit 05060002, at culvert on State Route 32, 700 ft upstreams from Plum Run, 2.72 mi northeast of State Route 41, and 1.10 mi east of Peebles.	0.85	1982	5-30-82	13.86	113
03237198 (d)	Duncan Hollow Creek near McDermott, OH	Lat 38°52'29", long 83°03'37", Scioto County, Hydrologic Unit 05060002, at culvert on State Route 348, 2.23 mi west of State Route 104, .78 mi upstream from Duck Run, and 2.75 mi north of McDermott.	0.51	1982	5-30-82	13.25	86
03237315 (d)	Elk Fork at Winchester, OH	Lat 38°56'49", long 83°37'21", Adams County, Hydrologic Unit 05090201, at culvert on State Route 32, 3.08 mi west of State Route 247 in Seaman, 1.72 mi upstream from West Fork Ohio Brush Creek, and .82 mi east of Winchester.	6.45	1982	5-30-82	20.90	1140
03238285 (d)	Sugar Run near New Market, OH	Lat 39°06'30", long 83°40'36", Highland County, Hydrologic Unit 05090201, at culvert on U.S. Highway 62, .55 mi south of State Route 136, 900 ft up- stream from an unnamed tributary, .62 mi upstream from East Fork White Oak Creek, and 1.97 mi south of New Market.	1.37	1982	3-21-82	14.04	150
Four Mile Creek basin							
03238790 (c)	Anderson Ditch at Maycliff Place at Cincinnati, OH	Lat 39°04'14", long 84°22'51", Hamilton County, Hydrological Unit 05090201, at culvert on Maycliff Place, 0.25 mi (0.40 km) south of Salem Road at Cincinnati.	0.07	1980-82	6- 8-82	17.23	189
Little Miami River basin							
03241850 (c)	Gentile Ditch on EDSC Base at Kettering, OH	Lat 39°42'47", long 84°08'56", Montgomery County, Hydrological Unit 05090202 at culvert on Electronic Defense Supply Center Base, Willmington Pike and Smithfield Road at Kettering.	0.07	1980-82	8-24-82 (discontinued)	14.68	138
03241994 (d)	Twist Run at Xenia, OH	Lat 39°39'53", long 83°56'00", Greene County, Hydrologic Unit 05090202, at culvert on State Route 380 (S. Detroit St.), 600 ft south of Ledbetter Road, .60 mi upstream from a tributary to Gladys Run, and on the corporate line of Xenia.	0.65	1982	5-29-82	11.43	16
Mill Creek basin							
03256250 (c)	Springfield Ditch at Mockingbird Lane near Cincinnati, OH	Lat 39°13'48", long 84°31'16", Hamilton County, Hydrologic Unit 05090203, at culvert on Mockingbird Lane, 800 ft (244 m) west of Fountainbleau Terrace near Cincinnati.	0.28	1980-82	6- 8-82 (discontinued)	16.80	312

## PARTIAL-RECORD STATIONS AND MISCELLANEOUS STIES

## CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station Name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
03258520 (c)	Amberly Ditch on Hudson Parkway near Cincinnati, OH	Lat 39°11'31", long 84°25'44", Hamilton County, Hydrologic Unit 05090203, at culvert on Hudson Parkway 900 ft (274 m) east of Ridge Road in Amberly Village near Cincinnati.	0.14	1980-82	6- 8-82	13.64	116
03259050 (c)	Wyoming Ditch on Oregon Trail at Wyoming, OH	Lat 39°14'00", long 84°29'26", Hamilton County, Hydrologic Unit 05090203, at culvert on Oregon Trail, 800 ft (244 m) south of Fleming Road at Wyoming.	0.03	1980-82	5-21-82		44 (e)
Rapid Run basin							
03260095 (c)	Delhi Ditch on Cannas Road near Cincinnati OH	Lat 39°05'48", long 84°37'23", Hamilton County, Hydrologic Unit 05090203, at culvert on Cannas Road, 0.25 mi (0.40 km) west of Anderson Ferry Road near Cincinnati.	0.16	1980-82	7- 3-82	14.26	120
Great Miami River basin							
03262750	Millers Ditch at Tipp City, OH	Lat 39°57'59", long 84°10'22", Miami County, Hydrologic Unit 05080001, at culvert on 4th Street in Tipp City.	0.83	1966-82	6-29-82 (discontinued)	14.70	175
03263171 (d)	Harte Run near Greenville, OH	Lat 40°08'41", long 84°36'41", Darke County, Hydrologic Unit 05080001, at culvert on U.S. Highway 127, 1.31 mi north of State Route 121, .45 mi up- stream of an unnamed tributary to Boyd Creek, and 3.15 mi north of Greenville.	0.86	1982	6-16-82	11.17	12
03267435 (d)	Kitty Creek at Terre Haute, OH	Lat 40°03'09", long 83°52'57", Champaign County, Hydrologic Unit 05080001, at culvert on State Route 55, 1,000 ft up- stream from Storms Creek, and .40 mi northwest of Terre Haute.	1.75	1982	6-28-82	12.10	99
03271295 (c)	Whipps Ditch on Seton Hill Road near Centerville, OH	Lat 39°39'18", long 84°10'10", Montgomery County, Hydrologic Unit 05080002, at culvert on Seton Hill Road, 0.3 mi (0.48 km) south of Whipps Road and 0.6 mi (0.97 km) west of Far Hills Road on Route 48 near Centerville.	2.50	1980-82	8-24-82 (discontinued)	16.32	503
03272695 (d)	Trippetts Branch at Camden, OH	Lat 39°38'03", long 84°39'08", Preble County, Hydrologic Unit 05080002, at culvert on U.S. Highway 127, 0.3 mi (0.5 km) north of State Highway 725 at Camden.	0.33	1978-82	1-31-82	12.74	47
03272900	Collins Creek at Collinsville, OH	Lat 39°31'05", long 84°36'53", Butler County, Hydrologic Unit 05090002, at culvert on U.S. Highway 127, 0.3 mi (0.5 km) upstream from mouth, 0.4 mi (0.6 km) northwest of Collinsville.	0.94	1966-82	6- 8-82 (discontinued)	22.77	375

c operated as an urban hydrology site where additional data may be available.  
d operated as a rural flood volume site where additional data may be available.  
e estimate

## GROUND-WATER RECORDS

281

## ASHLAND COUNTY

405303082170700. Local number, AS-2.

LOCATION.--Lat 40°53'03", long 82°17'07", Hydrologic Unit 05040002, Jerome Fork well field 2 mi (3.2 km) northeast of Ashland.

Owner: Ashland Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 64 ft (19.5 m), cased.

DATUM.--Altitude of land-surface datum is 980 ft (300 m), from topographic map. Measuring point: Floor of instrument shelter 2.00 ft (0.610 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 34.22 ft (10.430 m) March 17, 1972; minimum daily low, 13.20 ft (4.023 m) May 15, 18, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 24.33 ft (7.416 m); Sep. 28; minimum daily low, 20.53 ft (6.258 m) Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.53	22.04	23.76	23.58	22.90	22.83	22.01	22.68	21.53	22.92	23.41	23.03
2	20.64	22.18	23.80	23.59	22.81	22.84	22.02	22.73	21.59	22.93	23.36	23.10
3	20.69	22.29	23.79	23.64	22.81	22.87	21.84	22.80	21.64	22.88	23.30	23.21
4	20.70	22.40	23.80	23.73	22.95	22.83	21.82	22.85	21.66	22.80	23.24	23.23
5	20.68	22.47	23.80	23.77	23.06	22.93	21.76	22.89	21.71	22.72	23.18	23.23
6	20.70	22.59	23.78	23.79	23.07	22.91	21.89	22.92	21.78	22.71	23.15	23.23
7	20.73	22.68	23.69	23.89	23.03	22.89	21.94	22.96	21.88	22.75	23.12	23.26
8	20.77	22.76	23.72	23.89	23.15	22.94	21.93	23.01	21.94	22.79	23.12	23.32
9	20.79	22.84	23.74	23.89	23.28	22.85	21.99	22.97	21.98	22.83	23.12	23.37
10	20.78	22.88	23.71	23.84	23.42	22.77	22.03	22.88	22.07	22.83	23.16	23.42
11	20.79	22.91	23.71	23.69	23.50	22.74	22.02	22.78	22.11	22.88	23.14	23.48
12	20.80	22.96	23.73	23.67	23.60	22.74	21.91	22.69	22.13	22.93	23.09	23.54
13	20.89	23.01	23.73	23.54	23.59	22.70	21.94	22.62	22.12	22.92	23.08	23.60
14	20.97	23.06	23.69	23.46	23.61	22.68	21.95	22.54	22.14	22.84	23.02	23.65
15	20.94	23.08	23.67	23.41	23.63	22.58	21.95	22.47	22.17	22.87	22.98	23.73
16	21.01	23.08	23.76	23.38	23.65	22.50	21.96	22.40	22.21	22.91	22.94	23.80
17	21.00	23.21	23.82	23.34	23.60	22.43	21.98	22.35	22.27	22.94	23.01	23.84
18	20.96	23.31	23.82	23.26	23.55	22.38	21.98	22.29	22.33	22.99	23.03	23.93
19	21.02	23.37	23.81	23.21	23.42	22.28	21.88	22.20	22.42	23.04	22.99	23.98
20	21.04	23.51	23.79	23.18	23.30	22.14	21.97	22.10	22.39	23.15	22.93	24.05
21	21.07	23.55	23.71	23.13	23.15	22.03	22.05	22.03	22.35	23.21	22.90	24.11
22	21.07	23.57	23.79	23.11	23.08	22.00	22.10	21.99	22.46	23.29	22.88	24.17
23	21.23	23.57	23.96	22.96	23.03	21.94	22.12	21.88	22.53	23.32	22.84	24.23
24	21.37	23.59	23.92	22.95	23.00	21.84	22.18	21.81	22.58	23.34	22.81	24.29
25	21.52	23.60	23.85	22.92	23.01	21.82	22.23	21.71	22.62	23.38	22.82	24.31
26	21.58	23.58	23.71	22.91	22.95	21.87	22.31	21.63	22.65	23.40	22.78	24.31
27	21.57	23.64	23.52	22.86	22.89	21.94	22.42	21.56	22.67	23.43	22.73	24.31
28	21.65	23.68	23.55	22.81	22.88	21.96	22.49	21.49	22.72	23.49	22.78	24.33
29	21.69	23.68	23.58	22.81	---	21.95	22.56	21.46	22.78	23.51	22.82	24.32
30	21.81	23.70	23.58	22.81	---	21.89	22.62	21.40	22.87	23.48	22.90	24.31
31	21.93	---	23.42	22.81	---	21.96	---	21.39	---	23.44	22.97	---
MAX	21.93	23.70	23.96	23.89	23.65	22.94	22.62	23.01	22.87	23.51	23.41	24.33
WTR YR 1982	MEAN	22.77		HIGH	20.53		LOW	24.33				

## ASHLAND COUNTY--Continued

405425082173000. Local number. As-3.

LOCATION.--Lat 40°54'25", long 82°17'30", Hydrologic Unit 05040002, Ashland Bates well field along Jerome Fork near Ashland.

Owner: Ashland Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 78 ft (23.8 m), cased.

DATUM.--Altitude of land-surface datum is 990 ft (302 m), from topographic map. Measuring point: Floor of instrument shelter 5.00 ft (1.524 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.05 ft (9.769 m) Oct. 22, 1980; minimum daily low, 3.10 ft (0.945 m) above land surface Feb. 23, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 31.85 ft (9.708 m) Jan. 29; minimum daily low, 9.38 ft (2.859 m) Apr. 11.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.28		---	23.89	30.93	21.94	24.36	23.51	20.13	---	18.49	20.10
2	28.74		---	23.16	30.41	22.14	24.37	23.61	22.19	---	13.40	20.47
3	28.74		---	22.27	30.06	22.23	17.35	23.76	22.63	---	12.09	21.17
4	28.57		---	24.71	29.86	22.40	15.86	23.81	---	---	11.23	21.25
5	28.52		---	25.10	29.01	22.50	14.71	23.86	---	---	11.52	20.76
6	28.27		---	25.21	28.76	22.48	12.96	23.89	---	---	15.99	20.52
7	28.58		26.77	25.09	28.41	22.64	12.43	24.04	---	---	16.79	20.42
8	28.75		28.18	25.11	28.17	22.73	11.48	24.25	---	---	11.65	20.35
9	29.13		28.36	25.33	27.83	22.84	10.28	24.32	---	---	10.43	20.30
10	29.54		28.90	25.48	27.67	26.48	9.99	18.94	---	---	14.68	20.09
11	29.85		29.34	26.28	27.46	26.73	9.38	19.61	---	---	17.72	20.16
12	30.03		29.18	27.12	27.30	26.74	15.91	20.11	---	---	18.49	20.19
13	30.36		29.03	27.47	27.13	26.74	16.37	20.49	---	---	18.44	20.20
14	30.60		28.91	27.81	26.98	26.64	15.95	20.76	---	11.31	18.79	21.07
15	30.71		25.52	24.24	26.83	26.45	16.88	21.03	---	11.84	14.30	21.61
16	30.65		25.19	24.18	23.46	26.30	17.57	21.25	---	16.64	18.14	21.70
17	30.80		25.19	24.19	26.12	26.10	17.89	25.82	---	17.92	14.50	21.95
18	26.94		25.28	24.25	26.18	25.94	16.28	26.42	---	14.32	13.83	18.21
19	---		25.40	24.35	26.11	25.76	19.07	22.54	---	15.54	12.46	16.63
20	---		25.48	28.18	25.96	25.54	20.93	22.42	---	18.64	17.77	19.52
21	---		25.57	29.32	25.79	25.43	21.69	22.46	---	16.10	18.21	19.89
22	---		25.62	29.40	20.63	25.37	22.12	21.82	---	12.85	14.11	20.03
23	---		25.76	29.78	20.87	25.28	22.31	20.45	---	12.64	13.59	20.13
24	---		25.60	30.17	21.20	25.14	22.53	18.67	---	12.75	13.54	20.14
25	---		25.53	30.30	21.35	25.13	22.66	17.11	---	12.83	13.54	20.13
26	---		25.54	30.91	21.46	25.15	22.87	15.75	---	12.87	13.56	15.15
27	---		25.68	31.34	21.64	25.24	23.16	14.50	---	12.78	16.25	15.46
28	---		29.20	31.79	21.78	25.24	23.23	13.43	---	17.30	17.53	17.65
29	---		29.22	31.85	---	25.17	23.29	12.58	---	18.17	15.25	18.72
30	---		29.22	31.47	---	25.08	23.38	11.72	---	18.25	17.71	19.46
31	---		27.30	31.22	---	25.08	---	17.43	---	18.42	19.33	---
MAX	30.80		29.34	31.85	30.93	26.74	24.37	26.42	22.63	18.64	19.33	21.95
WTR YR 1982	MEAN	22.22		HIGH	9.38		LOW	31.85				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

283

## ATHENS COUNTY

391940082070000. Local number, AT-4.

LOCATION.--Lat 39°19'40", long 82°07'00", Hydrologic Unit 05030204, in Athens well field along Hocking River  
Owner: Athens Water Department.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in (0.3 m), depth drilled 50 ft (15.2 m), cased.

DATUM.--Altitude of land-surface datum is 638.51 ft (194.618 m). Measuring point: Floor of instrument shelter 2.20 ft (0.671 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.44 ft (6.840 m) Nov. 17, 1977; minimum daily low, 12.66 ft (3.859 m) Feb. 10, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 21.92 ft (6.681 m) Dec. 3, 7; minimum daily low, 19.08 ft (5.816 m) Apr. 10, 11.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.47	21.79	21.91	21.90	21.17	20.32	19.26	19.54	20.10	20.05		
2	21.49	21.79	21.91	21.89	21.10	20.32	19.24	19.57	20.07	20.06		
3	21.51	21.81	21.92	21.89	21.01	20.31	19.22	19.61	20.05	20.06		
4	21.51	21.82	21.92	21.89	20.93	20.31	19.20	19.64	20.05	20.09		
5	21.51	21.83	21.92	21.88	20.86	20.31	19.17	19.67	20.04	20.10		
6	21.53	21.84	21.92	21.87	20.79	20.31	19.14	19.70	20.04	20.12		
7	21.53	21.85	21.92	21.83	20.73	20.29	19.14	19.75	20.01	20.14		
8	21.54	21.85	21.91	21.81	20.67	20.26	19.11	19.80	19.99	20.15		
9	21.55	21.86	21.91	21.78	20.62	20.23	19.09	19.84	19.98	20.15		
10	21.57	21.86	21.89	21.76	20.59	20.22	19.08	19.86	19.98	20.15		
11	21.58	21.87	21.89	21.73	20.59	20.21	19.08	19.90	19.98	20.15		
12	21.62	21.87	21.89	21.71	20.58	20.21	19.09	19.93	19.98	20.16		
13	21.62	21.87	21.89	21.67	20.56	20.20	19.11	19.96	19.98	20.17		
14	21.63	21.87	21.89	21.66	20.56	20.16	19.11	20.00	19.98	20.19		
15	21.63	21.87	21.91	21.65	20.57	20.13	19.15	20.02	20.00	20.21		
16	21.65	21.87	21.91	21.63	20.60	20.11	19.17	20.03	20.02	20.23		
17	21.67	21.86	21.91	21.62	20.60	20.05	19.19	20.06	20.02	20.26		
18	21.70	21.86	21.91	21.60	20.60	19.98	19.20	20.08	20.01	20.28		
19	21.72	21.87	21.91	21.59	20.58	19.90	19.22	20.09	19.98	20.29		
20	21.74	21.88	21.91	21.59	20.53	19.86	19.24	20.10	19.96	---		
21	21.77	21.89	21.90	21.60	20.46	19.81	19.26	20.11	19.96	---		
22	21.78	21.90	21.90	21.60	20.41	19.69	19.27	20.12	19.95	---		
23	21.78	21.90	21.90	21.60	20.36	19.57	19.29	20.12	19.94	---		
24	21.78	21.90	21.90	21.59	20.35	19.48	19.32	20.12	19.96	---		
25	21.79	21.90	21.90	21.50	20.35	19.41	19.37	20.11	19.98	---		
26	21.79	21.90	21.90	21.43	20.34	19.37	19.40	20.11	19.99	---		
27	21.79	21.90	21.90	21.39	20.34	19.32	19.42	20.13	20.01	---		
28	21.79	21.90	21.90	21.34	20.33	19.31	19.45	20.15	20.02	---		
29	21.79	21.90	21.90	21.31	---	19.31	19.46	20.15	20.03	---		
30	21.79	21.90	21.90	21.27	---	19.30	19.48	20.15	20.07	---		
31	21.79	---	21.90	21.22	---	19.27	---	20.13	---	---		
MAX	21.79	21.90	21.92	21.90	21.17	20.32	19.48	20.15	20.10	20.29		
WTR YR 1982	MEAN	20.72		HIGH	19.08		LOW	21.92				

## GROUND-WATER RECORDS

## ATHENS COUNTY--Continued

392009082072200. Local number, AT-5

LOCATION.--Lat 39°20'09", long 82°07'22", Hydrologic Unit 05030204, in Athens well field along Hocking River.

Owner: Athens Water Department.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in (0.365 m), depth 48 ft (14.63 m), cased. DATUM.--Altitude of land surface datum is 640 ft (195.1 m), from topographic map. Measuring point: floor of instrument shelter, 4.75 ft (1.448 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1982 to September 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.45 ft (6.538 m) July 25, 1982; Minimum daily low 17.96 ft (5.474 m) Sept. 5, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 21.45 ft (6.538 m) July 25; minimum daily low, 17.96 ft (5.474 m) Sept. 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	20.66	19.42
2										---	19.25	19.79
3										---	19.07	18.49
4										---	19.00	18.05
5										---	20.45	17.96
6										---	20.62	18.01
7										---	21.17	19.85
8										---	20.66	19.94
9										---	20.39	20.47
10										---	20.33	20.65
11										---	20.66	19.32
12										---	20.82	19.08
13										---	20.84	19.08
14										---	19.00	19.92
15										---	18.60	18.94
16										---	19.81	19.98
17										---	20.26	19.96
18										---	19.74	20.33
19										20.71	19.88	20.44
20										20.74	20.06	20.94
21										21.00	19.54	20.70
22										21.14	19.79	20.75
23										21.34	19.77	20.94
24										21.42	18.70	21.31
25										21.45	18.28	21.31
26										20.56	19.42	21.20
27										20.84	20.07	21.21
28										20.76	20.41	21.25
29										20.55	20.42	21.28
30										19.25	20.36	20.97
31										20.40	20.30	---
MAX										21.45	21.17	21.31

WTR YR 1982 MEAN 20.14 HIGH 17.96 LOW 21.45

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## ATHENS COUNTY--Continued

392004082071600. Local number, AT-2A.

LOCATION.--Lat 39°20'04", long 82°07'16", Hydrologic Unit 05030204, 1.1 mi (1.8 km) west of city hall in Athens.

Owner: City of Athens.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Unused drilled water-table well, diameter 12 in (0.3 m), depth 35.5 ft (10.8 m), cased.

DATUM.--Altitude of land-surface datum is 641.81 ft (195.624 m). Measuring point: Floor of instrument shelter, 5.80 ft (1.768 m) above land-surface datum.

REMARKS.--Prior to water year 1978, well depth reported as 43 ft (13.1 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.25 ft (6.172 m) Sept. 29, 1982; minimum daily low, 1.05 ft (0.320 m) May 25, 28, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low 20.25 ft (6.172 m) Sept. 29; minimum recorded daily low, 15.76 ft (4.804 m) Mar. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	19.95	---	19.38	18.88	17.55	16.53	18.80	18.46	18.45	19.60	---
2	19.51	19.96	19.84	19.37	18.68	17.47	16.56	18.87	18.49	18.62	19.57	---
3	19.49	19.97	19.81	19.34	18.52	17.42	16.64	18.81	18.56	18.71	19.52	---
4	19.45	19.97	19.81	19.32	18.50	17.39	16.69	18.73	18.67	18.74	19.50	---
5	19.42	19.98	19.82	19.31	18.48	17.33	16.70	18.74	18.66	18.59	19.59	---
6	19.39	19.99	19.80	19.25	18.53	17.33	16.80	18.77	18.47	18.47	19.64	---
7	19.37	20.00	19.75	19.29	18.54	17.30	---	18.91	18.43	18.48	19.82	---
8	19.36	20.00	19.72	19.31	18.43	17.23	---	---	18.41	18.44	19.82	---
9	19.36	19.99	19.71	19.38	18.36	17.18	---	---	---	---	19.78	---
10	19.44	19.98	19.69	19.41	18.36	16.87	---	---	---	---	19.70	---
11	19.50	19.98	19.68	19.41	18.35	16.73	---	---	---	---	19.61	---
12	19.55	---	19.67	19.41	18.36	16.60	---	---	---	---	19.65	---
13	19.60	---	19.67	19.39	18.39	16.46	---	---	---	---	19.64	---
14	19.64	---	19.66	19.39	18.43	16.35	---	---	---	18.85	19.47	---
15	19.67	---	19.66	19.41	18.47	16.27	---	---	---	18.98	19.30	19.65
16	19.71	---	19.66	19.43	18.48	16.16	---	---	18.41	19.10	19.18	19.54
17	19.74	---	19.66	19.44	18.40	16.08	---	---	18.28	19.17	19.25	19.55
18	19.78	---	19.66	19.44	18.35	16.06	---	---	18.19	19.22	19.23	19.65
19	19.81	---	19.67	19.44	18.21	16.03	---	19.46	18.15	19.24	19.16	19.70
20	19.83	---	19.69	19.44	18.11	16.04	---	19.48	17.98	19.21	19.19	19.85
21	19.85	---	19.68	19.53	18.00	15.96	17.86	19.32	18.06	19.30	19.18	19.92
22	19.87	---	19.69	19.54	17.95	15.88	18.07	19.09	18.20	19.40	19.15	19.95
23	19.89	---	19.69	19.52	17.91	15.83	18.18	18.83	18.30	19.52	19.12	19.99
24	19.90	---	19.67	19.25	17.89	15.81	18.24	18.64	18.36	19.64	19.11	20.11
25	19.90	---	19.61	18.98	17.82	15.77	18.24	18.61	18.39	19.68	19.02	20.16
26	19.91	---	19.53	18.79	17.71	15.76	18.30	18.67	18.46	19.66	19.00	20.19
27	19.92	---	19.46	18.67	17.61	16.01	18.37	18.84	18.41	19.60	---	20.21
28	19.93	---	19.43	18.64	17.59	16.20	18.45	18.93	18.23	19.59	---	20.22
29	19.93	---	19.41	18.68	---	16.24	18.57	18.95	18.29	19.59	---	20.25
30	19.93	---	19.40	18.80	---	16.40	18.69	18.80	18.39	19.54	---	20.22
31	19.94	---	19.37	18.89	---	16.45	---	18.57	---	19.54	---	---
MAX	19.94	20.00	19.84	19.54	18.88	17.55	18.69	19.48	18.67	19.68	19.82	20.25
WTR YR 1982	MEAN	18.84		HIGH	15.76		LOW	20.25				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## AUGLAIZE COUNTY

403233083574500. Local number, AU-3.

LOCATION.--Lat 40°32'33", long 83°57'45", Hydrologic Unit 05080001, 1.0 mi (1.6 km) southwest of New Hampshire.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 380 ft (115.8 m), cased to 52 ft (15.8 m).

DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 11.87 ft (3.618 m) Feb. 7-8, 1977; minimum daily low, 5.18 ft (1.579 m) Apr. 14, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 8.55 ft (2.606 m) Sept. 30; minimum daily low, 5.82 ft (1.774 m) Apr. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.01	8.34	7.76	7.32	7.01	6.85	6.13	6.18	6.49	6.62	7.27	7.99
2	8.09	8.31	7.78	7.32	6.91	6.81	6.06	6.20	6.53	6.64	7.28	7.95
3	8.11	8.28	7.79	7.17	6.87	6.82	5.92	6.23	6.54	6.52	7.32	7.99
4	8.11	8.22	7.84	7.13	6.96	6.72	6.04	6.26	6.54	6.58	7.33	8.08
5	8.09	8.14	7.86	7.15	6.90	6.82	5.99	6.30	6.52	6.64	7.40	8.07
6	8.07	8.09	7.83	7.06	6.97	6.77	6.01	6.28	6.52	6.67	7.43	8.09
7	8.10	8.11	7.67	7.15	6.94	6.79	6.05	6.30	6.55	6.68	7.43	8.13
8	8.15	8.12	7.79	7.02	6.91	6.80	5.97	6.33	6.54	6.72	7.38	8.14
9	8.18	8.23	7.80	6.92	6.93	6.81	5.91	6.40	6.55	6.74	7.38	8.16
10	8.21	8.17	7.77	6.92	6.98	6.75	5.94	6.42	6.50	6.72	7.46	8.16
11	8.25	8.18	7.77	6.96	7.04	6.67	5.93	6.43	6.58	6.68	7.48	8.19
12	8.32	8.18	7.80	6.92	7.02	6.68	5.89	6.45	6.53	6.76	7.52	8.23
13	8.32	8.16	7.79	6.82	7.04	6.64	5.89	6.49	6.53	6.84	7.54	8.24
14	8.30	8.12	7.70	6.79	7.00	6.66	5.90	6.50	6.57	6.85	7.57	8.27
15	8.28	8.08	7.63	6.80	7.01	6.58	5.87	6.55	6.52	6.89	7.60	8.28
16	8.29	8.00	7.64	6.94	7.00	6.48	5.83	6.60	6.44	6.93	7.64	8.33
17	8.29	7.98	7.60	6.94	6.93	6.49	5.84	6.64	6.49	6.96	7.68	8.30
18	8.21	8.01	7.64	6.91	6.93	6.46	5.87	6.65	6.51	6.99	7.73	8.33
19	8.29	7.94	7.67	6.95	6.92	6.39	5.82	6.67	6.49	6.99	7.77	8.34
20	8.31	7.90	7.67	6.97	6.80	6.21	5.91	6.67	6.49	7.02	7.72	8.36
21	8.35	7.99	7.54	7.10	6.90	6.24	5.97	6.70	6.52	7.08	7.75	8.38
22	8.36	8.00	7.49	7.01	6.92	6.21	6.03	6.64	6.55	7.07	7.75	8.41
23	8.40	7.96	7.60	6.88	6.86	6.16	6.07	6.67	6.62	7.02	7.75	8.44
24	8.39	8.00	7.60	6.98	6.99	6.13	6.03	6.72	6.61	7.07	7.77	8.42
25	8.36	7.97	7.52	7.08	7.04	6.10	5.98	6.71	6.59	7.05	7.80	8.42
26	8.32	7.91	7.42	7.08	7.04	6.12	5.98	6.64	6.61	7.10	7.85	8.45
27	8.29	7.97	7.39	7.04	6.96	6.24	6.10	6.61	6.60	7.11	7.87	8.40
28	8.34	8.03	7.46	7.13	6.93	6.26	6.13	6.56	6.58	7.15	7.96	8.48
29	8.33	8.03	7.47	7.11	---	6.20	6.14	6.53	6.47	7.19	8.01	8.51
30	8.35	7.98	7.44	6.94	---	6.13	6.15	6.48	6.57	7.20	7.96	8.55
31	8.36	---	7.28	6.88	---	6.08	---	6.46	---	7.21	8.02	---
MAX	8.40	8.34	7.86	7.32	7.04	6.85	6.15	6.72	6.62	7.21	8.02	8.55
WTR YR 1982	MEAN	7.19		HIGH	5.82		LOW	8.55				

## BELMONT COUNTY

400619080423200. Local number, B-1.

LOCATION.--Lat 40°06'19", long 80°42'32", Hydrologic Unit 05030106, in the northeast part of Martins Ferry.

Owner: City of Martins Ferry.

AQUIFER.--Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Unused drilled water-table well, diameter 40 in (1.02 m), depth drilled 79 ft (24.1 m), present depth 61 ft (18.6 m), cased.

DATUM.--Altitude of land-surface datum is 1,160 ft (354 m), from topographic map. Measuring point: Surface of instrument platform, 13.40 ft (4.084 m) above land-surface datum.

REMARKS.--Water level affected by Ohio River stage and by pumping from nearby municipal wells.

PERIOD OF RECORD.--June 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 38.95 ft (11.872 m) Sept. 27, 1968; minimum daily low, 0.05 ft (0.015 m) Mar. 11, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 34.65 ft (10.561 m) May. 5; minimum daily low, 21.79 ft (6.642 m) Mar. 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.62	29.54	31.77	29.53	25.46	32.02	28.90	33.87	30.76	31.16	31.61	33.20
2	33.98	29.85	32.05	29.48	24.76	31.70	29.62	33.40	30.77	32.85	31.67	33.32
3	32.61	31.22	31.78	30.93	26.04	32.39	27.16	33.74	31.56	32.05	31.74	33.16
4	31.94	32.07	32.03	31.04	26.97	32.49	26.45	34.33	32.17	30.01	32.46	31.81
5	32.29	32.79	31.40	29.68	25.96	31.99	26.15	34.65	31.50	28.27	32.87	31.59
6	31.41	32.40	30.66	27.98	25.59	30.45	29.10	34.19	29.77	30.57	32.01	32.55
7	31.98	31.79	31.16	28.61	26.66	30.09	28.50	34.11	28.93	30.79	31.80	32.01
8	31.25	30.60	31.84	29.63	28.55	31.25	28.59	33.30	28.53	29.85	31.35	31.99
9	31.81	31.53	30.80	29.44	29.51	31.81	27.34	32.74	28.93	29.98	31.74	32.12
10	30.88	32.50	31.55	30.82	30.43	32.11	27.20	32.42	30.23	30.21	32.05	33.04
11	31.24	32.69	31.81	31.81	30.86	32.33	27.15	32.90	30.39	30.54	32.02	31.74
12	32.67	32.84	31.12	32.77	31.39	31.41	29.38	33.26	30.20	31.52	32.18	30.70
13	33.03	33.67	30.90	33.09	30.42	29.32	30.31	33.04	29.93	32.21	32.78	32.40
14	33.49	32.85	32.53	32.85	30.30	25.09	31.84	32.63	30.03	32.68	32.25	32.99
15	34.19	31.89	32.68	33.37	31.60	24.09	31.01	33.10	30.19	31.85	31.54	32.97
16	33.74	32.99	33.14	32.94	32.26	25.07	31.57	32.98	30.52	32.53	32.18	32.99
17	32.75	34.05	32.94	32.24	32.17	23.54	31.47	33.33	29.83	32.64	32.93	33.11
18	32.79	33.47	33.16	33.09	28.37	21.85	31.31	33.78	27.71	32.06	32.37	31.02
19	33.41	33.25	32.59	33.53	29.27	23.17	32.04	34.39	28.56	32.78	32.47	30.71
20	33.94	33.48	31.79	33.52	28.59	23.00	32.21	34.52	28.88	32.33	33.30	31.68
21	34.29	32.72	33.09	33.92	26.39	22.43	32.60	34.20	30.20	32.18	31.90	32.82
22	34.07	31.47	33.00	34.38	28.50	21.79	33.14	33.11	30.59	31.98	31.49	31.76
23	34.27	32.15	32.10	32.61	29.38	22.33	33.06	31.46	31.24	32.47	31.89	33.36
24	33.64	31.84	28.85	27.20	30.33	23.62	33.27	32.06	31.43	31.55	32.13	33.52
25	32.17	32.08	24.48	30.53	30.91	26.22	32.48	32.38	31.45	30.69	31.61	32.33
26	33.06	31.40	25.42	31.61	31.73	25.22	33.11	32.74	31.64	31.41	32.28	31.80
27	32.99	31.20	28.20	31.54	31.58	26.25	33.84	32.54	31.62	32.03	32.52	31.64
28	32.09	31.17	28.80	33.03	30.94	25.17	33.67	32.97	32.18	31.79	32.87	31.72
29	28.93	30.61	29.40	33.18	---	26.73	34.62	31.69	32.24	32.14	31.51	32.66
30	29.15	32.24	30.34	32.42	---	29.00	34.60	30.14	31.84	32.31	33.17	33.28
31	28.19	---	29.54	30.00	---	29.74	---	30.08	---	31.75	32.70	---
MAX	34.29	34.05	33.16	34.38	32.26	32.49	34.62	34.65	32.24	32.85	33.30	33.52
WTR YR 1982	MEAN	31.17		HIGH	21.79		LOW	34.65				

## GROUND-WATER RECORDS

## BUTLER COUNTY

391805084261800. Local number, BU-9.

LOCATION.--Lat 39°18'05", long 84°26'18", Hydrologic Unit 05090203, 2.5 mi (4.0 km) northwest of Sharonville.

Owner: Olinkraft, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.20 m) depth 85 ft (26 m), cased.

DATUM.--Altitude of land-surface datum is 586.89 ft (178.884 m). Measuring point: Floor of instrument shelter, 4.66 ft (1.420 m) above land surface datum.

REMARKS.--Prior to water year 1978, well diameter reported as 26 in (0.66 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.40 ft (7.437 m) Mar. 16, 1954; minimum daily low, 4.40 ft (1.341 m) Aug. 3, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.26 ft (4.346 m) Oct. 24-25; minimum daily low, 6.69 ft (2.039 m) Feb. 6.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.32	14.10	12.86	11.27	7.79	7.35	6.98	8.58	10.13	8.68	10.95	12.37
2	13.39	14.07	12.51	11.22	7.43	7.40	7.00	8.70	10.11	8.75	11.01	12.41
3	13.46	14.03	12.29	11.15	7.15	7.46	7.00	8.81	10.09	8.82	11.06	12.46
4	13.49	14.01	12.15	11.04	6.91	7.50	6.99	8.92	10.08	8.89	11.12	12.51
5	13.52	14.00	12.07	10.86	6.72	7.58	6.99	9.05	10.07	8.97	11.17	12.55
6	13.54	13.98	12.04	10.71	6.69	7.64	6.96	9.16	10.07	9.06	11.22	12.59
7	13.60	13.98	11.96	10.55	6.76	7.71	6.97	9.28	10.09	9.15	11.27	12.64
8	13.66	13.99	11.85	10.48	6.80	7.79	6.97	9.39	10.09	9.24	11.30	12.68
9	13.73	14.03	11.87	10.41	6.84	7.88	6.97	9.50	9.99	9.32	11.34	12.72
10	13.78	14.03	11.89	10.30	6.89	7.95	6.97	9.59	9.72	9.39	11.39	12.76
11	13.84	14.03	11.93	10.29	6.93	8.01	6.99	9.68	9.44	9.47	11.43	12.80
12	13.88	14.01	11.99	10.33	---	8.04	7.00	9.77	9.19	9.54	11.48	12.84
13	13.94	14.00	12.05	10.57	---	8.06	7.03	9.87	8.99	9.63	11.52	12.87
14	13.98	13.98	12.09	10.58	---	8.07	7.07	9.97	8.81	9.71	11.56	12.91
15	14.00	13.94	12.14	---	---	8.07	7.12	10.07	8.68	9.80	11.60	12.95
16	14.05	13.86	12.23	---	---	8.07	7.18	10.15	8.56	9.88	11.64	12.99
17	14.08	13.79	12.30	---	6.94	8.05	7.24	10.24	8.47	9.97	11.68	13.04
18	14.08	13.77	12.40	---	6.97	8.03	7.30	10.32	8.40	10.05	11.73	13.07
19	14.09	13.77	12.50	10.63	6.99	8.01	7.37	10.40	8.36	10.13	11.78	13.11
20	14.13	13.71	12.59	10.73	7.00	7.98	7.44	10.48	8.33	10.20	11.83	13.15
21	14.17	13.62	12.60	10.85	7.01	7.91	7.53	10.50	8.32	10.28	11.88	13.19
22	14.20	13.54	12.61	10.92	7.04	7.74	7.63	10.50	8.33	10.31	11.92	13.23
23	14.23	13.43	12.59	10.91	7.06	7.51	7.73	10.46	8.34	10.42	11.96	13.27
24	14.26	13.29	12.47	10.62	7.09	7.30	7.83	10.41	8.36	10.48	12.00	13.31
25	14.26	13.17	12.31	9.79	7.14	7.12	7.92	10.32	8.39	10.54	12.05	13.34
26	14.24	13.11	12.10	9.42	7.20	7.01	8.00	10.26	8.42	10.60	12.10	13.37
27	14.20	12.98	11.85	9.26	7.25	6.96	8.11	10.20	8.46	10.66	12.15	13.40
28	14.15	12.95	11.64	9.12	7.30	6.95	8.22	10.17	8.50	10.72	12.20	13.45
29	14.15	12.94	11.50	8.93	---	6.96	8.34	10.16	8.54	10.77	12.24	13.49
30	14.13	12.93	11.46	8.59	---	6.96	8.47	10.15	8.60	10.83	12.29	13.53
31	14.12	---	11.40	8.21	---	6.97	---	10.14	---	10.89	12.33	---
MAX	14.26	14.10	12.86	11.27	7.79	8.07	8.47	10.50	10.13	10.89	12.33	13.53
WTR YR 1982	MEAN	10.53		HIGH	6.69		LOW	14.26				

## GROUND-WATER RECORDS

289

## BUTLER COUNTY--Continued

391904084371800. Local number, BU-12.

LOCATION.--Lat 39°19'04", long 84°37'18", Hydrologic Unit 05080002. Cincinnati well field 1.5 mi (2.4 km) east of Ross.

Owner: City of Cincinnati.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 157 ft (47.9 m), cased.

DATUM.--Altitude of land-surface datum is 547.73 ft (166.948 m). Measuring point: Floor of instrument shelter 7.80 ft (2.377 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.55 ft (6.873 m) Sep. 24, 25, 1982; Minimum daily low, 2.00 ft (0.610 m) above land surface, May 24, 25, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 22.55 ft (6.873 m) Sept. 24, 25; minimum daily low, 10.00 ft (3.048 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.60	19.95	19.50	18.15	---	16.10	15.95	19.00	15.75	19.20	20.00	20.45
2	20.55	20.00	19.75	18.10	---	16.25	15.45	19.25	16.25	19.30	20.10	20.90
3	20.50	20.05	19.75	19.05	---	16.50	15.30	18.70	16.75	18.55	20.15	21.20
4	20.55	20.15	19.65	16.05	---	16.50	14.85	18.75	17.25	18.70	20.25	21.30
5	20.55	20.00	19.70	13.95	---	16.00	15.15	18.85	17.65	18.80	20.55	21.35
6	20.25	20.15	19.70	15.15	---	14.95	15.55	18.85	17.95	18.90	20.20	21.40
7	20.30	20.30	19.70	15.95	---	15.55	15.95	18.80	18.20	19.00	20.00	20.95
8	20.70	---	19.85	16.50	---	16.10	16.00	18.65	18.25	19.35	20.00	21.00
9	20.65	---	20.30	17.20	---	16.60	15.55	18.30	17.45	19.15	19.85	21.25
10	20.65	20.80	20.40	17.85	---	16.95	15.60	18.35	17.40	19.20	19.95	21.30
11	20.65	20.75	20.50	18.25	---	16.95	15.55	18.55	17.55	19.30	20.05	21.40
12	20.65	20.75	20.50	18.30	17.25	14.80	16.25	18.65	17.85	19.25	20.40	21.45
13	20.35	20.55	20.45	18.35	17.40	13.70	16.50	19.00	18.05	20.15	20.50	21.85
14	19.50	20.60	20.20	18.20	17.55	12.95	16.75	18.95	18.45	19.85	20.40	21.85
15	20.60	20.65	20.30	18.40	17.60	13.25	17.10	19.05	18.55	20.05	20.45	21.55
16	20.95	21.05	20.40	18.50	17.25	13.45	17.25	19.10	18.55	20.30	20.50	21.60
17	20.95	20.95	20.80	---	15.45	12.15	17.35	19.10	18.40	20.40	20.55	21.20
18	20.90	20.90	20.85	18.70	11.65	12.00	17.45	18.95	16.85	20.50	20.60	21.30
19	20.90	20.85	20.80	19.20	10.95	11.65	17.45	18.95	17.10	20.50	20.60	21.30
20	20.75	20.65	20.90	19.15	11.80	11.70	17.60	18.95	17.50	21.05	20.40	21.75
21	20.80	19.75	20.95	19.00	11.85	10.00	17.80	18.35	17.95	20.05	20.45	22.00
22	21.15	19.85	20.80	18.70	12.15	12.60	18.15	17.65	18.35	20.25	20.50	22.15
23	21.00	20.25	20.35	17.00	12.35	13.95	18.20	17.85	18.65	20.05	20.90	22.15
24	20.95	20.15	17.45	13.20	12.00	14.95	18.25	17.85	18.45	20.15	21.10	22.55
25	20.90	20.05	15.85	13.30	13.40	15.75	18.30	18.15	18.40	20.05	21.05	22.55
26	20.90	20.00	16.35	14.05	14.35	16.00	18.30	18.35	18.55	20.65	19.75	21.30
27	20.35	19.90	16.65	14.75	15.25	16.25	18.25	18.45	18.70	21.05	19.75	21.45
28	19.85	19.85	16.50	16.60	15.85	16.50	18.35	18.25	19.10	19.45	19.95	21.45
29	19.25	19.80	16.55	17.20	---	16.65	18.85	17.00	18.65	19.80	20.10	21.30
30	19.20	19.60	17.85	17.25	---	16.90	19.05	14.85	18.20	19.90	20.25	22.20
31	19.35	---	18.20	11.50	---	16.75	---	14.95	---	19.90	20.35	---
MAX	21.15	21.05	20.95	19.20	17.60	16.95	19.05	19.25	19.10	21.05	21.10	22.55
WTR YR 1982	MEAN	18.57		HIGH	10.00		LOW	22.55				

## GROUND-WATER RECORDS

## BUTLER COUNTY--Continued

392017084345200. Local number, BU-7.

LOCATION.--Lat 39°20'17", long 84°34'52", Hydrologic Unit 05080002, 5584 East River Road in Fairfield.

Owner: C. E. Schiering.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 176 ft (53.6 m), cased.

DATUM.--Altitude of land-surface datum is 572.54 ft (174.510 m), measuring point: Floor of instrument shelter 1.93 ft (0.588 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 31.17 ft (9.501 m) Jan. 13, 1977; minimum daily low, 11.45 ft (3.490 m) June 6, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 30.32 ft (9.242 m) Non. 20; minimum daily low, 23.45 ft (7.148 m) Apr. 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.58	30.10	30.06	29.53	26.94	24.55	23.67	24.71	25.57	26.15	27.55	28.60
2	29.62	30.10	29.94	29.50	25.59	24.62	23.63	24.84	25.49	26.16	27.62	28.63
3	29.66	30.13	29.96	29.46	25.29	24.65	23.56	24.93	25.54	26.24	27.68	28.66
4	29.70	30.15	29.95	29.41	25.21	24.67	23.57	25.01	25.58	26.28	27.71	28.67
5	29.74	30.17	29.79	29.28	25.19	24.70	23.56	25.06	25.55	26.31	27.67	28.70
6	29.77	30.19	29.78	29.04	25.20	24.64	23.63	25.10	25.58	26.40	27.72	28.74
7	29.81	30.21	29.86	28.89	25.20	24.62	23.65	25.14	25.63	26.48	27.77	28.78
8	29.84	30.23	29.90	28.80	25.20	24.67	23.57	25.08	25.64	26.55	27.78	28.81
9	29.86	30.25	29.93	28.72	25.24	24.75	23.67	25.21	25.61	26.56	27.82	28.85
10	29.90	30.25	29.95	28.67	25.27	24.78	23.66	25.30	25.58	26.63	27.86	28.88
11	29.92	30.27	29.97	28.74	25.34	24.82	23.69	25.36	25.57	26.66	27.89	28.92
12	29.95	30.28	29.86	28.75	25.38	24.81	23.63	25.45	25.62	26.75	27.94	28.97
13	29.99	30.20	29.93	28.77	25.44	24.66	23.61	25.54	25.64	26.83	28.00	29.00
14	30.01	30.16	29.97	28.81	25.47	24.56	23.53	25.63	25.69	26.85	28.07	29.04
15	30.04	30.18	29.98	28.82	25.51	24.46	23.45	25.70	25.78	26.96	28.12	29.07
16	30.06	30.19	29.98	28.85	25.51	24.38	23.63	25.76	25.81	27.00	28.16	29.12
17	30.08	30.20	30.03	28.87	25.45	24.30	23.76	25.84	25.81	27.04	28.20	29.17
18	30.11	30.25	30.06	28.88	25.21	24.21	23.80	25.91	25.74	27.10	28.23	29.23
19	30.13	30.31	30.10	28.91	24.96	24.12	23.80	25.99	25.67	27.13	28.29	29.28
20	30.15	30.32	30.12	28.93	24.75	24.06	23.70	26.00	25.65	27.20	28.32	29.33
21	30.17	30.24	30.14	28.92	24.61	23.91	23.74	26.03	25.76	27.29	28.33	29.38
22	30.20	30.24	30.16	28.93	24.57	23.77	23.94	25.95	25.84	27.35	28.35	29.41
23	30.24	30.23	30.15	28.83	24.48	23.69	24.05	25.82	25.91	27.38	28.40	29.36
24	30.25	30.23	30.00	28.48	24.44	23.65	24.13	25.85	25.93	27.41	28.42	29.20
25	30.27	30.23	29.86	28.26	24.42	23.67	24.27	25.88	26.01	27.43	28.41	29.18
26	30.29	30.22	29.65	28.17	24.38	23.67	24.34	25.94	26.10	27.41	28.43	29.29
27	30.31	30.08	29.59	28.09	24.41	23.69	24.44	26.01	26.16	27.42	28.47	29.33
28	30.28	30.12	29.56	28.07	24.49	23.63	24.51	26.07	26.21	27.41	28.50	29.38
29	30.20	30.15	29.56	28.06	---	23.52	24.54	26.07	26.19	27.36	28.52	29.40
30	30.14	30.10	29.55	28.05	---	23.50	24.56	25.95	26.18	27.42	28.54	29.43
31	30.11	---	29.53	27.97	---	23.66	---	25.75	---	27.47	28.57	---
MAX	30.31	30.32	30.16	29.53	26.94	24.82	24.56	26.07	26.21	27.47	28.57	29.43
WTR YR 1982	MEAN	27.31		HIGH	23.45		LOW	30.32				

## GROUND-WATER RECORDS

291

## BUTLER COUNTY--Continued

392021084340300. Local number, BU-56.

LOCATION.--Lat 39°20'21", long 84°34'03", Hydrologic Unit 05080002, 1.3 mi (2.1 km) east of the Great Miami River in Fairfield.

Owner: Hamilton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in (0.13 m), depth 58 ft (17.7 m), cased.

DATUM.--Altitude of land-surface datum is 583.62 ft (177.887 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 39.11 ft (11.921 m) Feb. 25-26, 1977; minimum daily low, 26.81 ft (8.172 m) Apr. 10, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 36.47 ft (11.116 m) Dec. 24-25; minimum daily low, 29.65 ft (9.037 m) Apr. 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.55	36.28	36.41	36.19	35.12	31.91	30.26	30.22	31.25	32.07	33.79	35.28
2	35.60	36.33	36.42	36.15	34.79	31.86	30.20	30.23	31.02	32.07	33.87	35.32
3	35.65	36.37	36.41	36.11	34.47	31.84	30.12	30.32	30.89	32.06	33.96	35.35
4	35.69	36.39	36.37	36.07	34.16	31.77	30.13	30.40	31.05	32.09	34.03	35.37
5	35.72	36.40	36.35	36.06	33.84	31.64	30.06	30.45	31.26	32.15	34.07	35.41
6	35.76	36.38	36.31	36.04	33.58	31.60	30.04	30.51	31.31	32.21	34.12	35.44
7	35.81	36.38	36.27	36.02	33.35	31.61	30.02	30.53	31.42	32.27	34.17	35.48
8	35.83	36.36	36.29	35.99	33.17	31.63	29.94	30.54	31.43	32.32	34.22	35.53
9	35.83	36.38	36.30	35.92	33.00	31.64	29.90	30.59	31.38	32.37	34.27	35.57
10	35.84	36.40	36.30	35.87	32.92	31.61	29.90	30.67	31.40	32.41	34.32	35.62
11	35.85	36.42	36.30	35.83	32.82	31.59	29.85	30.75	31.43	32.43	34.38	35.66
12	35.87	36.42	36.30	35.83	32.75	31.58	29.83	30.84	31.46	32.52	34.42	35.71
13	35.89	36.42	36.30	35.85	32.68	31.56	29.78	30.92	31.52	32.59	34.46	35.76
14	35.94	36.43	36.29	35.85	32.62	31.56	29.80	30.99	31.53	32.61	34.51	35.77
15	35.98	36.43	36.28	35.81	32.60	31.49	29.65	31.06	31.72	32.71	34.56	35.81
16	36.03	36.43	36.34	35.81	32.55	31.44	29.74	31.15	31.55	32.76	34.61	35.87
17	36.06	36.44	36.35	35.82	32.50	31.42	29.79	31.22	31.52	32.86	34.66	35.92
18	36.11	36.45	36.37	35.84	32.48	31.40	29.81	31.29	31.55	32.92	34.71	35.96
19	36.12	36.45	36.38	35.89	32.46	31.34	29.79	31.32	31.57	32.97	34.77	36.01
20	36.17	36.44	36.42	35.90	32.40	31.23	29.80	31.37	31.58	33.02	34.81	36.06
21	36.20	36.43	36.43	35.86	32.33	31.13	29.81	31.34	31.61	33.12	34.87	36.11
22	36.21	36.43	36.45	35.86	32.31	31.06	29.87	31.18	31.70	33.21	34.89	36.14
23	36.22	36.42	36.46	35.79	32.24	30.95	29.89	31.23	31.72	33.25	34.93	36.18
24	36.22	36.42	36.47	35.72	32.15	30.84	29.92	31.26	31.73	33.28	34.96	36.20
25	36.23	36.42	36.47	35.66	32.15	30.75	29.97	31.31	31.81	33.38	35.01	36.10
26	36.24	36.40	36.44	35.61	32.10	30.67	30.02	31.33	31.89	33.46	35.05	36.19
27	36.25	36.39	36.37	35.55	32.02	30.61	30.10	31.35	31.95	33.52	35.08	36.24
28	36.25	36.39	36.33	35.48	31.97	30.57	30.12	31.39	31.99	33.54	35.13	36.29
29	36.25	36.38	36.30	35.45	---	30.48	30.15	31.40	31.99	33.56	35.17	36.33
30	36.26	36.38	36.28	35.37	---	30.39	30.16	31.35	32.06	33.63	35.21	36.36
31	36.27	---	36.23	35.29	---	30.30	---	31.26	---	33.71	35.24	---
MAX	36.27	36.45	36.47	36.19	35.12	31.91	30.26	31.40	32.06	33.71	35.24	36.36
WTR YR 1982	MEAN	33.71		HIGH	29.65		LOW	36.47				

GROUND-WATER RECORDS  
BUTLER COUNTY--Continued

392048084311400. Local number, BU-8.

LOCATION.--Lat 39°20'48", long 84°31'14", Hydrologic Unit 05080002, Symmes and Gilmore Road, east of Hamilton.

Owner: Hamilton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m), depth 200 ft (61.0 m), cased.

DATUM.--Altitude of land-surface datum is 630 ft (192 m), from topographic map. Measuring point: Floor of instrument shelter 4.13 ft (1.259 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 71.70 ft (21.854 m) Oct. 24, 1944; minimum daily low, 38.24 ft (11.556 m) June 8, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 57.37 ft (17.486 m) Jan. 22; minimum daily low, 45.83 ft (13.969 m) Jun. 14, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.25	55.75	56.55	57.14	56.25	51.57	48.16	47.46	46.75	47.02	49.51	51.79
2	54.42	55.76	56.64	57.19	56.04	51.49	48.16	47.45	46.69	47.04	49.58	51.81
3	54.47	55.78	56.72	57.09	55.40	51.36	47.88	47.46	46.72	47.04	49.69	51.93
4	54.46	55.79	56.80	57.06	55.17	51.36	47.50	47.50	46.74	46.97	49.78	52.07
5	54.45	55.80	56.88	57.24	55.12	51.28	47.51	47.54	46.75	47.08	49.92	52.13
6	54.51	55.82	56.89	57.17	54.68	51.31	47.29	47.57	46.79	47.19	50.01	52.24
7	54.60	55.89	56.78	57.27	54.51	51.17	47.37	47.57	46.84	47.28	50.06	52.45
8	54.68	55.93	56.84	57.30	54.06	51.22	47.37	47.62	46.89	47.39	50.07	52.49
9	54.72	56.06	56.96	57.11	53.72	51.23	47.00	47.67	46.90	47.48	50.14	52.51
10	54.76	56.08	56.99	57.06	53.75	51.25	46.91	47.74	46.50	47.53	50.37	52.57
11	54.81	56.12	57.02	57.05	53.73	51.12	46.91	47.80	46.17	47.60	50.48	52.63
12	54.89	56.16	57.05	57.07	53.63	50.95	46.90	47.90	46.11	47.82	50.53	52.67
13	54.93	56.18	57.06	57.07	53.43	50.88	46.87	48.07	45.89	47.96	50.55	52.73
14	54.95	56.20	57.05	57.02	53.26	50.69	46.96	48.20	45.83	48.03	50.58	52.79
15	54.98	56.20	57.00	57.06	53.05	50.69	47.01	48.28	45.84	48.12	50.61	52.86
16	55.00	56.14	57.04	57.32	53.03	50.43	47.02	48.36	45.83	48.19	50.67	52.94
17	55.01	56.25	57.05	57.35	52.74	50.13	47.02	48.48	45.92	48.26	50.78	52.98
18	54.88	56.32	57.09	57.23	52.69	50.17	47.07	48.58	45.99	48.32	50.91	52.98
19	55.14	56.33	57.16	57.23	52.66	50.18	47.08	48.68	46.01	48.38	51.02	53.01
20	55.23	56.39	57.18	57.28	52.44	49.91	47.05	48.76	46.05	48.61	51.06	53.09
21	55.32	56.48	57.17	57.33	52.05	49.54	47.26	48.76	46.11	48.75	51.10	53.24
22	55.35	56.51	57.02	57.37	52.09	49.28	47.35	48.30	46.28	48.83	51.13	53.29
23	55.41	56.52	57.28	57.20	52.08	49.23	47.39	47.67	46.52	48.96	51.20	53.34
24	55.46	56.59	57.34	57.08	51.93	48.99	47.39	47.32	46.63	49.02	51.28	53.35
25	55.44	56.63	57.34	57.08	52.09	48.68	47.28	47.18	46.71	49.08	51.39	53.37
26	55.37	56.62	57.27	56.98	52.10	48.56	47.14	47.00	46.77	49.17	51.46	53.40
27	55.46	56.63	57.04	56.99	51.93	48.60	47.25	46.91	46.83	49.23	51.55	53.50
28	55.60	56.67	57.15	56.69	51.67	48.60	47.44	46.97	46.88	49.35	51.68	53.68
29	55.64	56.70	57.29	56.72	---	48.61	47.45	46.98	46.91	49.36	51.73	53.77
30	55.70	56.72	57.32	56.49	---	48.45	47.46	46.90	46.95	49.40	51.74	53.82
31	55.74	---	57.27	56.31	---	48.25	---	46.85	---	49.45	51.77	---
MAX	55.74	56.72	57.34	57.37	56.25	51.57	48.16	48.76	46.95	49.45	51.77	53.82
WTR YR 1982	MEAN	51.85		HIGH	45.83		LOW	57.37				

## BUTLER COUNTY--Continued

392445084333000. Local number BU-36.

LOCATION.--Lat 39°24'45", long 84°33'30", Hydrologic Unit 05080002, on right bank of Great Miami River 300 ft (90 m) downstream from Twomile Creek in Hamilton.

Owner: Champion Paper Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 30 in (0.76 m), depth 168 ft (51.2 m) cased.

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	BICARBONATE FET-FLD (MG/L AS HC03)	CARBONATE FET-FLD (MG/L AS C03)	ALKALINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)
NOV 04...	1145	830	7.2	16.5	400	72	106	32	400	0	328	38
FEB 16...	1430	840	7.4	15.0	410	88	110	33	392	0	322	25
MAY 06...	1330	860	7.2	16.5	410	90	110	34	390	--	320	38
AUG 19...	1330	860	7.3	16.0	380	52	100	32	400	0	328	30

DATE	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUS-PENDED RECOVERABLE (UG/L AS CR)
NOV 04...	100	48	.1	545	557	<.010	1.4	1	0	1	20	10
FEB 16...	100	46	.2	476	486	.020	1.3	--	--	--	--	--
MAY 06...	99	48	.1	573	586	.010	1.3	--	--	--	--	--
AUG 19...	21	50	.1	528	588	<.010	1.7	1	0	1	20	0

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 04...	10	7	1	6	20	1	0	1	<10	50	40	6
FEB 16...	--	--	--	--	70	--	--	--	<10	--	--	--
MAY 06...	--	--	--	--	40	--	--	--	10	--	--	--
AUG 19...	20	25	0	25	40	4	2	2	10	20	10	7

## GROUND-WATER RECORDS

## BUTLER COUNTY--Continued

392515084322000. Local number, BU-5.

LOCATION.--Lat 39°25'15", long 84°32'22", Hydrologic Unit 05080002, 2.0 mi (3.2 km) north of courthouse in Hamilton.

Owner: Hamilton Water Department

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 18 in (0.46 m), depth 110 ft (33.5 m) cased.

DATUM.--Altitude of land-surface datum is 590 ft (180 m), from topographic map. Measuring point: Floor of instrument shelter 5.71 ft (1.740 m) above land surface datum.

REMARKS.--Water level affected by pumping of nearby North Hamilton well field and by stage of the Great Miami River.

PERIOD OF RECORD.--July 1939 to Current year

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.05 ft (12,817 m) Sept. 16-17, 1954; minimum daily low, 4.10 ft (1,250 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 25.39 ft (7.739 m) Sept. 24; minimum recorded daily low, 10.01 ft (3.051 m) Feb. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	19.21	18.83	17.99	15.05	---	13.62	14.55	14.58	19.24	23.64	18.16
2	---	19.34	18.77	17.93	10.01	---	13.01	14.39	20.16	15.46	23.92	18.01
3	---	19.38	18.65	17.84	10.13	---	12.74	14.49	14.83	15.33	24.69	24.34
4	---	19.19	23.55	17.69	---	12.67	12.56	20.40	14.77	15.43	24.74	18.46
5	---	19.15	18.86	17.34	---	12.75	12.50	20.59	14.84	15.47	23.16	18.25
6	---	19.15	18.66	16.90	---	12.50	12.66	20.68	14.86	22.06	18.47	18.22
7	19.35	19.15	18.59	16.87	---	12.54	12.77	22.65	14.93	22.25	24.25	24.42
8	19.44	19.15	18.68	21.28	---	12.70	12.71	17.09	14.87	16.33	18.32	24.71
9	23.89	19.16	23.06	17.11	---	12.85	12.92	15.70	14.64	16.15	24.35	25.16
10	19.65	19.13	18.84	16.96	---	12.88	12.84	15.48	19.12	16.08	18.94	25.15
11	19.59	24.11	18.70	16.88	---	17.81	12.74	20.07	14.89	16.06	18.05	25.14
12	24.00	19.52	18.75	20.87	---	13.09	12.79	15.29	14.85	16.13	17.90	25.24
13	19.91	19.35	18.77	17.17	---	12.85	18.45	21.43	14.86	22.94	17.85	25.06
14	19.76	19.28	22.11	21.63	---	12.62	20.29	21.57	14.93	17.24	24.05	25.10
15	19.75	19.26	18.78	17.14	---	12.55	20.48	21.24	15.00	23.18	18.20	19.24
16	19.73	19.20	18.71	17.19	---	12.43	13.84	22.02	15.11	23.50	24.30	25.09
17	19.68	19.28	18.68	17.18	---	12.39	13.81	22.27	15.08	23.40	25.01	19.17
18	19.70	23.58	18.72	21.29	---	16.47	13.83	22.65	14.85	23.01	25.09	18.83
19	19.78	19.55	18.67	22.80	---	16.67	20.26	22.52	14.84	21.98	24.81	18.69
20	19.78	19.26	18.70	23.01	---	12.73	20.43	22.65	14.91	17.09	24.86	18.67
21	19.82	19.11	18.68	19.95	---	12.33	14.31	16.66	14.96	16.95	24.85	18.61
22	23.95	19.08	18.78	17.62	---	12.21	14.15	15.96	15.02	17.03	23.17	24.99
23	20.07	18.99	22.61	17.28	---	12.32	14.11	15.76	19.88	16.89	18.66	25.33
24	19.93	19.00	18.65	16.07	---	12.44	14.00	15.65	15.26	16.85	24.63	25.39
25	19.96	23.03	21.95	16.03	---	16.56	13.94	15.85	15.31	16.91	18.88	19.46
26	20.07	19.19	18.14	16.12	---	12.88	14.03	15.87	15.33	16.88	24.20	18.96
27	23.73	19.07	17.97	16.22	---	12.95	18.37	16.01	15.33	16.94	18.29	18.78
28	20.31	19.01	17.90	16.39	---	13.02	14.73	15.74	15.37	16.98	18.01	18.63
29	23.40	18.96	17.89	16.44	---	18.69	19.17	15.28	15.18	16.96	17.88	18.39
30	19.66	18.89	17.89	15.95	---	19.07	14.60	14.90	15.10	16.99	17.87	18.16
31	19.35	---	17.94	15.48	---	17.99	---	14.62	---	23.31	24.09	---
MAX	24.00	24.11	23.55	23.01	15.05	19.07	20.48	22.65	20.16	23.50	25.09	25.39
WTR YR 1982	MEAN	18.24		HIGH	10.01		LOW	25.39				

## GROUND WATER RECORDS

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## BUTLER COUNTY--Continued

392733084293000 Local number, BU-16.

LOCATION.--Lat 39°27'33", long 84°29'30", Hydrologic Unit 05080002, Wayn-Madison Rd. 2 mi (3.2 km) southwest of Trenton.

Owner: Miller Brewing Co.

AQUIFER.--Sand and gravel of pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 4 in. (0.10 m), depth 218 ft (66.446 m), cased.

DATUM.--Altitude of land surface datum is 640 ft (195.07 m), from topographic map. Measuring point: floor of instrument shelter, 1.5 ft (0.457 m) above land surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1982 to September 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.58 ft (5.054 m) Sept. 28, 1982; Minimum daily low, 11.38 ft (3.469 m) May 23, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low 16.58 ft (5.054 m) Sept. 28; Minimum recorded daily low 11.38 ft (3.469 m) May 23.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	11.45	13.28	13.32	14.44
2								---	13.34	12.39	13.36	14.48
3								---	13.43	12.42	13.39	14.53
4								---	13.50	12.47	14.08	14.57
5								---	11.62	12.50	13.48	14.60
6								---	11.67	12.54	13.50	14.64
7								---	11.75	12.59	13.53	15.07
8								---	11.77	12.61	13.57	16.13
9								---	13.77	12.47	13.62	14.79
10								---	12.69	12.46	14.29	15.46
11								---	12.71	12.55	13.70	14.85
12								---	11.88	13.58	14.00	14.88
13								---	11.94	12.68	13.76	15.80
14								---	11.97	12.71	13.81	15.92
15								---	12.83	12.75	13.88	15.41
16								---	12.87	12.79	13.88	15.22
17								---	12.83	12.83	14.81	16.46
18								---	12.00	12.86	13.98	15.08
19								11.94	12.06	13.85	14.73	15.10
20								13.64	12.10	12.96	14.02	15.14
21								13.37	13.56	12.98	14.03	16.31
22								11.58	13.06	13.01	14.06	15.73
23								11.38	13.10	13.00	14.11	15.60
24								11.47	12.66	13.03	14.14	15.59
25								12.72	12.31	13.08	14.18	15.36
26								13.29	12.36	13.13	14.21	15.38
27								13.77	12.37	14.10	14.33	15.43
28								11.80	12.39	13.75	14.75	16.58
29								11.82	12.64	13.82	14.33	16.49
30								11.70	13.18	13.86	14.50	15.56
31								11.46	---	13.27	15.05	---
MAX								13.77	13.77	14.10	15.05	16.58
WTR YR 1982	MEAN	13.58		HIGH	11.38		LOW	16.58				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## BUTLER COUNTY--Continued

392939084231700. Local number, BU-3.

LOCATION.--Lat 39°29'39", long 84°23'17", Hydrologic Unit 05080002, Armco Steel Corp. Rt. 122 in Middletown.

Owner: Armco Steel Corp.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 in (0.61 m), depth 250 ft (76.2 m) cased.

DATUM.--Altitude of land-surface datum is 668 ft (204 m), from topographic map. Measuring point: Floor of instrument shelter 1.08 ft (0.329 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 147.27 ft (44.888 m) Apr. 4, 1955; minimum daily low, 45.27 ft (13.798 m) July 21, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 53.13 ft (16.194 m) Dec. 29; minimum daily low, 47.19 ft (14.384 m) May. 13.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.08	---	---	---	---	51.10	49.95	48.73	48.08	48.60	48.98	49.27
2	---	---	---	---	52.50	51.01	49.85	48.64	48.03	48.54	48.94	49.33
3	---	---	---	---	52.40	51.11	49.69	48.63	48.06	48.41	48.95	49.49
4	---	---	---	---	52.51	51.04	49.82	48.62	48.07	48.42	49.03	49.53
5	---	---	---	---	52.45	51.15	49.76	48.60	48.00	48.52	49.04	49.51
6	---	---	---	---	52.31	51.15	49.89	48.53	48.02	48.54	49.04	49.53
7	---	---	---	---	52.24	51.14	49.91	48.50	48.06	48.60	48.89	49.59
8	---	---	---	---	52.07	51.33	49.79	48.03	48.03	48.62	48.77	49.60
9	---	---	---	---	52.02	51.25	49.57	47.85	48.04	48.58	48.71	49.64
10	---	---	---	---	52.03	51.23	49.57	47.72	48.14	48.53	48.77	49.62
11	---	---	---	---	52.01	51.34	49.48	47.65	48.15	48.51	48.76	49.57
12	---	---	---	---	51.97	51.13	49.41	47.70	48.03	48.62	48.69	49.59
13	---	---	---	---	51.84	50.82	49.46	47.19	47.99	48.63	48.63	49.61
14	---	---	---	---	51.72	50.84	49.48	48.25	48.14	48.63	48.60	49.70
15	---	---	---	---	51.60	50.68	49.39	48.25	48.10	48.68	48.61	49.80
16	---	---	---	---	---	50.55	49.30	48.24	48.16	48.68	48.62	50.87
17	---	---	---	---	---	50.63	49.33	48.22	48.25	48.67	48.66	51.12
18	---	---	---	---	---	50.63	49.36	48.16	48.25	48.64	48.68	51.24
19	---	---	---	---	---	50.53	49.16	48.14	48.21	48.67	48.70	51.28
20	---	---	---	---	---	50.34	49.17	48.12	48.24	48.79	48.72	51.54
21	---	---	---	---	---	50.27	49.30	48.14	48.25	48.89	49.00	51.65
22	---	---	---	---	---	50.31	49.24	48.10	48.40	49.05	49.02	51.67
23	---	---	---	---	---	50.31	49.21	48.06	48.49	49.16	49.09	51.60
24	---	---	---	---	---	50.16	49.05	48.06	48.50	49.21	49.15	51.02
25	---	---	---	---	51.58	50.68	48.89	48.04	48.45	49.30	49.20	50.76
26	---	---	---	---	51.52	51.34	48.82	47.93	48.43	49.41	49.22	50.72
27	51.98	---	---	---	51.29	51.09	49.03	47.93	48.43	49.45	49.18	50.70
28	---	---	---	52.84	51.16	50.64	49.03	48.08	48.44	49.21	49.31	50.79
29	---	---	53.13	---	---	50.22	48.88	48.09	48.50	49.07	49.41	50.82
30	---	52.70	53.11	---	---	50.00	48.76	48.05	48.58	49.12	49.35	50.78
31	---	---	52.75	---	---	49.95	---	48.06	---	49.07	49.31	---
MAX	52.08	52.70	53.13	52.84	52.51	51.34	49.95	48.73	48.58	49.45	49.41	51.67
WTR YR 1982	MEAN	49.53		HIGH	47.19		LOW	53.13				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

297

## BUTLER COUNTY--Continued

393103084240900. Local number, BU-2

LOCATION.--Lat 39°31'03", long 84°24'09", Hydrologic Unit 05080002, in basement of YMCA in Middletown.

Owner: Middletown YMCA.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 88 ft (25.8 m), cased.

DATUM.--Altitude of land-surface datum is 636.27 ft (193.935 m). Measuring point: Top of platform 14.77 ft (4.502 m) below land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--October 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 52.15 ft (15.895 m) Sept. 28, Nov. 5, 1953 and Jan. 22, 1954; minimum daily low, 27.30 ft (8.321 m) June 17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 38.25 ft (11.659 m) Oct. 15; minimum daily low, 28.15 ft (8.580 m) Mar. 20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.40	35.65	35.10	33.80	32.20	31.75	---	29.80		32.25	32.65	36.10
2	35.50	36.00	35.20	32.75	32.05	31.75	---	29.40		32.20	33.35	36.25
3	35.50	35.70	35.35	33.80	32.55	32.15	---	29.95		30.50	32.35	36.25
4	35.45	35.80	35.10	34.15	32.90	31.90	---	29.90		29.10	33.60	33.40
5	35.85	35.60	35.20	35.15	33.60	30.20	---	29.80		29.55	32.35	33.20
6	36.20	35.60	34.15	35.25	32.80	29.65	---	31.80		31.40	33.15	33.40
7	36.25	36.20	34.60	35.95	32.45	29.65	---	31.95		32.45	32.40	33.55
8	36.65	35.65	35.05	36.00	32.60	30.10	---	30.40		32.05	31.50	35.15
9	36.45	35.80	35.35	35.95	31.95	29.90	---	30.20		30.80	34.85	35.75
10	36.35	36.35	35.15	34.85	32.10	29.65	---	31.85		30.75	34.75	35.10
11	36.40	36.90	35.25	35.00	32.65	29.75	---	31.80		30.75	34.65	34.15
12	37.00	36.50	35.00	35.05	33.30	31.25	---	32.05		31.00	34.90	33.45
13	37.65	34.80	34.20	35.15	33.75	31.35	---	32.55		31.70	34.50	34.60
14	38.05	34.50	34.80	35.40	32.40	31.00	---	33.10		31.90	32.65	34.75
15	38.25	34.50	35.60	35.40	32.05	30.95	---	33.50		31.55	31.95	34.55
16	37.05	35.10	36.00	35.60	31.30	30.20	---	33.60		31.80	33.05	35.95
17	34.65	35.35	36.05	34.65	30.65	30.60	---	33.30		31.80	33.10	36.50
18	34.75	34.95	35.80	34.65	30.80	30.30	---	31.80		31.50	33.45	36.35
19	34.55	34.70	35.15	33.35	32.25	29.75	---	32.00		31.50	33.65	35.40
20	34.35	35.05	35.25	33.45	32.40	28.15	---	31.85		31.85	35.00	36.55
21	34.40	34.40	35.20	34.05	32.15	28.25	---	32.05		31.35	34.85	35.60
22	34.40	34.15	34.40	35.40	31.90	28.55	---	31.15		31.50	34.75	36.00
23	36.45	34.55	34.05	34.70	31.95	28.55	---	30.80		31.60	34.50	34.85
24	36.55	34.85	33.55	34.70	32.05	28.60	---	32.50		31.10	33.85	34.80
25	36.70	35.30	31.80	34.55	30.65	30.40	---	33.05		31.30	33.95	34.40
26	36.50	34.30	31.25	33.95	30.95	31.10	---	32.95		33.80	33.45	34.45
27	35.65	34.05	31.35	35.50	30.10	30.35	---	33.50		34.30	33.25	35.10
28	35.95	---	33.90	35.55	29.15	30.65	---	33.05		34.50	32.80	35.15
29	35.65	---	33.60	35.55	---	---	30.55	32.80		34.75	32.55	36.95
30	35.50	34.90	35.70	35.35	---	---	30.55	32.40		34.05	35.45	36.65
31	35.75	---	35.65	33.85	---	---	---	31.90		33.50	35.80	---
MAX	38.25	36.90	36.05	36.00	33.75	32.15	30.55	33.60		34.75	35.80	36.95
WTR YR 1982	MEAN	33.55		HIGH	28.15		LOW	38.25				

## GROUND-WATER RECORDS

## BUTLER COUNTY--Continued

393202084241500. Local number, BU-15.

LOCATION.--Lat 39°32'02", long 84°24'15", Hydrologic Unit 05080002, at Hook Field (municipal airport) at Middletown.

Owner: City of Middletown.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 23 ft (7.0 m) cased. DATUM.--Altitude of land-surface datum is 641 ft (195 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Water level affected by pumping wells nearby in Middletown well field.

PERIOD OF RECORD.--June 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.60 ft (4.450 m) Jan. 26, 1981; minimum daily low, 0.06 ft (0.018 m) Feb. 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.76 ft (4.194 m) Dec. 21; minimum daily low, 4.52 ft (1.378 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.55	11.52	12.79	11.19		---	8.17	10.34	9.08	11.08	---	12.74
2	13.01	12.10	12.25	11.37		---	8.10	10.21	8.74	11.17	---	12.84
3	12.68	11.91	11.82	11.49		---	8.06	10.59	8.90	10.77	---	12.86
4	12.46	11.74	11.55	11.46		8.37	7.27	10.81	9.10	10.70	---	12.32
5	12.38	11.81	11.93	10.21		8.38	7.38	10.85	9.27	10.83	---	12.35
6	12.41	11.86	12.26	9.16		8.07	7.82	11.20	9.31	11.33	---	12.32
7	12.92	12.32	12.34	9.42		8.07	7.96	11.34	10.05	11.41	---	12.34
8	13.01	12.59	12.39	9.62		8.08	7.66	10.84	10.16	11.49	---	12.42
9	13.04	12.23	12.57	9.90		8.15	7.85	10.46	9.85	11.47	---	12.31
10	13.11	12.14	12.70	10.22		8.39	7.96	10.40	9.79	11.63	---	12.22
11	13.15	12.14	12.84	10.22		8.51	7.96	10.77	9.94	11.66	---	12.23
12	13.16	12.42	12.96	10.16		8.38	7.75	11.02	10.11	---	---	12.26
13	13.16	12.68	13.06	10.11		7.55	8.10	11.21	10.17	---	---	12.27
14	13.17	12.87	13.45	10.09		6.91	8.44	11.63	10.21	---	---	12.27
15	13.17	13.01	13.48	---		6.41	8.12	11.27	10.35	---	---	12.28
16	12.85	13.12	13.52	---		6.36	8.43	11.26	10.77	---	---	12.51
17	12.85	13.20	13.56	---		5.99	8.63	11.64	10.76	---	---	12.61
18	12.78	13.31	13.61	---		5.38	8.77	11.67	10.13	---	12.48	12.52
19	12.73	13.38	13.67	11.80		5.43	9.09	11.67	9.94	---	12.49	12.40
20	12.72	13.34	13.74	11.87		5.44	9.69	11.19	9.70	---	---	12.69
21	12.72	12.97	13.76	11.92		4.52	9.93	11.03	9.48	---	---	12.98
22	12.72	12.92	13.53	12.00		4.85	10.00	10.44	9.57	---	---	13.16
23	13.06	12.89	13.51	11.60		5.37	9.99	10.06	9.70	---	---	13.23
24	13.08	12.95	12.46	9.70		6.32	10.09	10.08	9.85	---	---	13.58
25	12.49	12.95	11.59	9.12		6.58	10.00	10.39	10.26	---	---	13.58
26	12.32	12.94	11.27	9.15		6.95	10.26	10.66	10.68	---	---	13.53
27	12.30	12.84	11.14	8.89		7.26	10.42	11.17	10.70	---	11.50	12.95
28	12.09	12.59	11.13	10.02		7.57	10.51	11.17	11.26	---	11.76	12.76
29	11.64	12.69	11.15	10.16		7.72	10.32	10.52	11.26	---	11.87	12.84
30	11.37	12.78	11.24	10.22		7.94	10.38	9.66	11.09	---	12.46	13.10
31	11.43	---	11.32	9.88		8.13	---	9.08	---	---	12.66	---
MAX	13.17	13.38	13.76	12.00		8.51	10.51	11.67	11.26	11.66	12.66	13.58
WTR YR 1982	MEAN	10.93		HIGH	4.52		LOW	13.76				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

299

## CARROLL COUNTY

403709081052800. Local number, C-1.

LOCATION.--Lat 40°37'09", long 81°05'28", Hydrologic Unit 05040001, Carrollton well field, State Route 171, 3 mi (4.8 km) north of Carrollton.

Owner: Carrollton Water Department.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in (0.25 m), depth 70 ft (21.336 m), cased.

DATUM.--Altitude of land-surface datum is 1050 ft (320 m), from topographic map. Measuring point: Top of platform 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.70 ft (12.405 m) Nov. 19, 1957; minimum daily low, 7.20 ft (2.195 m) Jan. 10, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 35.01 ft (10.671 m) Sep. 30; minimum recorded daily low, 20.68 ft (6.303 m) Mar 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.05	33.42	---	26.27	22.88	22.09	20.91		---	30.36	31.79	33.67
2	31.14	33.52	---	26.19	22.52	22.14	20.93		---	30.51	32.04	33.78
3	31.18	33.60	---	25.69	22.38	22.24	20.86		---	30.62	32.24	33.89
4	31.25	33.70	---	25.22	22.58	22.14	21.07		---	30.72	32.46	34.03
5	31.34	33.78	---	25.32	22.42	22.33	21.01		---	30.79	32.65	34.15
6	31.25	33.91	---	24.72	22.44	22.23	21.17		---	30.81	32.81	34.23
7	31.30	33.96	---	24.54	22.45	22.18	21.05		---	30.81	32.97	34.25
8	31.37	34.05	---	24.23	22.48	22.27	20.95		---	30.87	33.16	34.21
9	31.41	34.15	---	23.84	22.51	22.25	21.09		---	30.92	33.35	34.17
10	31.47	34.14	---	23.88	22.62	22.06	21.12		---	30.94	33.49	34.13
11	31.58	---	---	23.74	22.69	21.99	21.11		---	30.98	33.64	34.10
12	31.61	---	---	23.73	22.73	22.02	21.13		---	31.08	33.72	34.12
13	31.65	---	---	23.50	22.85	21.96	21.29		---	31.09	33.62	34.14
14	31.49	---	---	23.53	22.93	21.95	21.29		---	31.09	33.18	34.11
15	31.61	---	---	23.63	23.01	21.75	21.29		---	31.16	32.89	34.13
16	31.66	---	---	23.70	23.05	21.60	21.31		---	31.21	32.62	34.09
17	31.67	---	---	23.71	23.06	21.58	21.49		---	31.23	32.52	33.78
18	31.90	---	---	23.66	23.05	21.46	21.54		---	31.31	32.63	33.65
19	32.02	---	---	23.75	22.94	21.22	21.51		---	31.40	32.69	33.52
20	32.13	---	---	23.81	22.81	20.96	---		---	31.47	32.80	33.58
21	32.21	---	---	23.96	22.72	20.94	---		---	31.53	32.92	34.22
22	32.30	---	---	23.98	22.70	20.94	---		---	31.57	33.03	34.40
23	32.46	---	---	23.83	22.49	20.82	---		---	31.68	33.06	33.98
24	32.53	---	---	23.92	22.39	20.68	---		---	31.76	33.03	34.32
25	32.68	---	---	23.86	22.51	20.69	---		---	31.83	33.15	34.72
26	32.76	---	---	23.76	22.33	20.72	---		---	31.83	33.15	34.78
27	32.83	---	---	23.56	22.16	20.35	---		---	31.94	33.24	34.53
28	32.88	---	---	23.35	22.19	20.80	---		---	31.97	33.32	34.46
29	33.04	---	---	23.37	---	20.78	---		---	31.26	33.41	34.77
30	33.17	---	26.65	22.99	---	20.76	---		30.15	31.32	33.52	35.01
31	33.28	---	26.55	22.99	---	20.87	---		---	31.54	33.59	---
MAX	33.28	34.15	26.65	26.27	23.06	22.33	21.54		30.15	31.97	33.72	35.01
WTR YR 1982	MEAN	28.07		HIGH	20.68		LOW	35.01				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## CHAMPAIGN COUNTY

400638083453900. Local number, CH-3.

LOCATION.--Lat 40°06'38", long 83°45'39", Hydrologic Unit 05080001, in Urbana.

Owner: Howard Paper Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.2 m), depth 40 ft (12.2 m), cased.

DATUM.--Altitude of land-surface datum is 1030 ft (314 m), from topographic map. Measuring point: Floor of instrument shelter 4.50 ft (1.372 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1957, to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.80 ft (7.559 m) Feb. 26-29, Mar. 13, 1964; minimum daily low, 12.45 ft (3.795 m) Mar. 24, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 18.45 ft (5.624 m) Sep. 30; minimum daily low, 14.58 ft (4.328 m) Apr. 11.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.17	17.68	18.07	17.66	16.63	15.65	14.85	15.13	15.72	16.15	16.86	17.89
2	17.23	17.71	18.07	17.64	16.34	15.73	14.85	15.13	15.76	16.18	17.01	17.89
3	17.26	17.74	18.10	17.63	16.25	15.76	14.81	15.14	15.81	16.22	17.10	17.90
4	17.17	17.79	18.11	17.67	16.22	15.75	14.77	15.18	15.85	16.10	17.13	17.92
5	17.29	17.83	18.11	17.70	16.19	15.75	14.76	15.19	15.86	16.06	17.20	17.85
6	17.35	17.88	18.03	17.70	16.18	15.74	14.77	15.24	15.89	16.07	17.27	17.83
7	17.40	17.89	18.09	17.74	16.19	15.72	14.78	15.27	15.95	16.09	17.30	17.93
8	17.44	17.82	18.14	17.75	16.20	15.73	14.78	15.25	16.01	16.10	17.22	17.92
9	17.47	17.92	18.16	17.74	16.22	15.75	14.77	15.19	16.04	16.12	17.32	17.94
10	17.50	17.94	18.19	17.73	16.23	15.75	14.64	15.32	16.01	16.13	17.38	17.94
11	17.38	17.97	18.24	17.73	16.26	15.72	14.58	15.30	16.06	16.14	17.41	17.98
12	17.52	17.99	18.26	17.74	16.29	15.66	14.55	15.36	16.09	16.34	17.44	17.95
13	17.61	18.02	18.20	17.74	16.29	15.62	14.72	15.40	16.12	16.39	17.49	18.02
14	17.68	18.03	18.23	17.75	16.18	15.51	14.75	15.44	16.15	16.42	17.51	18.07
15	17.74	17.91	18.27	17.76	16.20	15.51	14.78	15.48	16.20	16.46	17.45	18.09
16	17.78	18.00	18.30	17.77	16.16	15.51	14.80	15.45	15.81	16.50	17.51	18.13
17	17.80	18.04	18.32	17.80	16.01	15.35	14.83	15.53	15.71	16.53	17.53	18.16
18	17.73	18.07	18.36	17.83	15.81	15.29	14.83	15.54	15.72	16.41	17.55	18.20
19	17.77	18.11	18.38	17.84	15.75	15.24	14.84	15.58	15.73	16.59	17.55	18.22
20	17.82	18.03	18.21	17.86	15.75	15.17	14.89	15.59	15.59	16.66	17.58	18.25
21	17.84	18.08	18.13	17.87	15.74	15.03	14.96	15.59	15.75	16.68	17.58	18.27
22	17.83	18.11	18.10	17.88	15.77	14.91	15.01	15.62	15.83	16.69	17.62	18.31
23	17.83	18.14	18.00	17.85	15.79	14.85	15.03	15.52	15.89	16.70	17.64	18.33
24	17.84	18.15	17.88	17.60	15.82	14.82	15.05	15.59	15.94	16.72	17.67	18.33
25	17.84	18.14	17.82	17.59	15.82	14.81	14.93	15.63	15.98	16.75	17.69	18.36
26	17.84	18.16	17.78	17.57	15.69	14.81	15.00	15.67	16.02	16.78	17.71	18.39
27	17.81	17.99	17.74	17.57	15.59	14.83	15.04	15.68	16.05	16.83	17.74	18.38
28	17.52	17.91	17.70	17.59	15.51	14.77	15.09	15.68	16.09	16.84	17.77	18.35
29	17.59	17.87	17.69	17.59	---	14.82	15.11	15.71	16.07	16.86	17.75	18.42
30	17.63	18.06	17.69	17.58	---	14.83	15.13	15.61	16.11	16.89	17.81	18.45
31	17.66	---	17.69	17.35	---	14.82	---	15.60	---	16.92	17.84	---
MAX	17.84	18.16	18.38	17.88	16.63	15.76	15.13	15.71	16.20	16.92	17.84	18.45
WTR YR 1982	MEAN	16.75		HIGH	14.58		LOW	18.45				

## GROUND-WATER RECORDS

301

## CLARK COUNTY

395639084012200. Local number, CL-9.

LOCATION.--Lat 39°56'39", long 84°01'22", Hydrologic Unit 05080001, at north edge of New Carlisle.

Owner: New Carlisle Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 113 ft (34.4 m), cased.

DATUM.--Altitude of land-surface datum is 900 m (274 m), from topographic map. Measuring point: Top of platform 2.50 ft (0.752 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 31.25 ft (9.525 m) July 13, 1977; minimum daily low, 18.20 ft (5.547 m) July 4, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 26.68 ft (8.132 m) Sep. 27; minimum daily low, 19.62 ft (5.980 m) Feb. 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.47	24.38	24.41	24.87	22.25	21.95	21.67	23.09	23.70	24.16	25.81	25.95
2	23.40	24.43	24.51	24.87	21.48	21.35	21.61	23.13	23.18	22.91	25.74	25.95
3	23.83	24.14	24.43	24.78	21.25	20.00	21.68	23.18	23.65	23.90	25.89	26.01
4	23.65	24.62	24.50	24.64	20.98	20.03	21.64	23.36	22.66	24.07	25.87	26.08
5	23.91	24.79	24.41	24.60	20.65	22.41	21.25	23.19	23.72	24.10	25.80	26.15
6	23.90	24.31	24.48	24.34	20.73	22.34	21.68	23.48	23.80	24.37	25.83	26.03
7	23.85	24.75	24.46	24.44	20.68	22.55	21.53	23.46	23.83	24.40	25.91	26.11
8	23.73	24.61	24.48	24.16	20.61	22.29	21.62	23.30	23.30	23.53	25.63	26.18
9	23.77	24.66	24.30	24.35	20.41	22.51	21.57	22.90	23.97	24.40	25.82	26.12
10	23.93	24.64	24.38	24.23	20.81	22.60	21.74	23.40	24.01	24.52	25.79	26.05
11	23.94	24.65	24.57	24.60	20.98	22.70	21.87	23.75	23.76	24.28	25.85	26.20
12	24.07	24.64	24.67	24.78	21.06	22.52	21.79	23.48	24.09	24.72	26.09	26.16
13	24.38	24.53	24.93	24.25	20.97	22.57	21.52	24.00	24.20	24.70	25.92	26.37
14	24.04	24.70	24.76	24.27	21.42	22.45	21.79	23.92	24.28	24.69	26.00	26.28
15	24.08	24.64	24.99	24.14	21.62	22.75	22.10	24.05	24.34	24.90	25.94	26.44
16	24.06	24.74	24.87	24.44	21.34	22.50	22.19	24.13	23.95	25.00	26.08	26.37
17	24.28	24.75	25.00	24.51	20.82	22.22	22.04	23.75	23.76	24.98	26.12	26.40
18	24.21	24.64	25.09	24.65	20.62	22.16	22.26	23.98	23.76	25.11	26.21	26.54
19	24.64	24.72	24.99	24.50	20.55	22.15	22.32	23.93	24.19	25.05	26.18	26.45
20	24.82	24.64	25.14	24.52	20.64	21.58	22.22	24.15	24.07	24.46	25.93	26.62
21	24.86	24.55	25.19	24.44	20.75	21.86	22.43	23.48	23.24	24.69	26.07	26.44
22	24.75	24.61	25.17	24.42	20.86	21.75	22.15	23.62	23.83	25.15	25.89	26.55
23	24.65	24.56	25.12	24.31	20.86	21.48	22.39	24.05	24.41	25.14	26.00	26.47
24	24.83	24.55	24.84	23.91	21.14	21.56	22.57	23.90	23.89	24.74	25.87	26.50
25	24.77	24.53	24.64	23.70	21.22	21.56	22.63	24.41	23.63	25.33	25.90	26.65
26	24.47	24.46	24.78	23.55	21.15	21.57	22.54	24.38	24.38	25.43	25.93	26.42
27	24.41	24.35	24.81	23.42	21.30	21.82	22.46	24.07	24.67	25.11	25.87	26.68
28	24.47	24.62	24.86	23.60	19.62	21.84	22.68	23.46	23.99	24.65	26.05	26.52
29	24.33	24.65	24.77	23.57	---	21.58	22.56	23.75	24.27	25.41	26.04	26.67
30	24.35	24.56	24.81	23.43	---	21.78	23.06	23.41	23.85	25.52	25.98	26.30
31	24.46	---	24.71	23.02	---	21.82	---	23.76	---	25.55	26.04	---
MAX	24.86	24.79	25.19	24.87	22.25	22.75	23.06	24.41	24.67	25.55	26.21	26.68
WTR YR 1982	MEAN	23.96		HIGH	19.62		LOW	26.68				

## GROUND-WATER RECORDS

## CLARK COUNTY--Continued

395840083495200. Local number, CL-7.

LOCATION.--Lat 39°58'40", long 83°49'52", Hydrologic Unit 05080001. Eagle City Road northwest of Springfield.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 50 ft (15.2 m), cased.

DATUM.--Altitude of land-surface datum is 928.02 ft (282.860 m). Measuring point: Floor of instrument shelter 2.00 ft (0.610 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 30.17 ft (9.196 m) Feb. 18, 19, 1961; minimum daily low, 10.04 ft (3.133 m) June 16, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 16.04 ft (4.889 m) Sep. 18-23, 30; minimum daily low, 10.12 ft (3.085 m) Mar. 23.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.50	15.17	15.21	14.67	11.88	11.24	11.05	12.61	13.95	14.78	15.34	15.88
2	14.56	15.15	15.17	14.66	11.28	11.34	11.07	12.66	13.99	14.79	15.36	15.89
3	14.62	15.13	15.17	14.59	11.03	11.43	11.10	12.71	14.04	14.79	15.39	15.91
4	14.65	15.10	15.15	14.53	10.90	11.50	11.16	12.78	14.09	14.79	15.43	15.92
5	14.67	15.09	15.15	14.43	10.87	11.52	11.16	12.83	14.14	14.78	15.46	15.92
6	14.72	15.07	15.13	14.19	10.94	11.50	11.27	12.90	14.16	14.78	15.48	15.90
7	14.79	15.07	15.09	14.03	10.98	11.53	11.32	12.97	14.17	14.81	15.49	15.87
8	14.84	15.07	15.09	13.95	11.02	11.55	11.34	13.01	14.20	14.84	15.49	15.89
9	14.89	15.12	15.09	13.84	11.16	11.62	11.45	13.05	14.24	14.87	15.48	15.92
10	14.93	15.14	15.15	13.83	11.28	11.67	11.46	13.07	14.29	14.89	15.51	15.93
11	14.96	15.21	15.19	13.80	11.39	11.71	11.52	13.13	14.32	14.91	15.52	15.95
12	14.98	15.25	15.23	13.77	11.50	11.71	11.53	13.19	14.36	14.91	15.54	15.95
13	15.02	15.28	15.24	13.70	11.58	11.56	11.62	13.31	14.37	14.93	15.57	15.96
14	15.07	15.31	15.25	13.72	11.63	11.50	11.67	13.42	14.39	14.94	15.59	15.95
15	15.11	15.34	15.30	13.77	11.69	11.35	11.74	13.50	14.42	14.97	15.60	15.98
16	15.16	15.37	15.33	13.87	11.58	11.28	11.79	13.54	14.45	15.02	15.63	16.01
17	15.18	15.42	15.38	13.92	11.11	11.01	11.87	13.56	14.45	15.06	15.67	16.03
18	15.23	15.46	15.40	13.98	10.60	10.72	11.90	13.61	14.44	15.08	15.73	16.04
19	15.26	15.48	15.43	14.05	10.54	10.62	11.92	13.64	14.49	15.07	15.79	16.04
20	15.31	15.47	15.46	14.12	10.52	10.53	12.00	13.69	14.49	15.06	15.83	16.04
21	15.38	15.49	15.49	14.21	10.57	10.26	12.06	13.74	14.48	15.09	15.85	16.04
22	15.45	15.50	15.50	14.22	10.61	10.15	12.13	13.75	14.53	15.10	15.85	16.04
23	15.52	15.50	15.48	14.16	10.69	10.12	12.17	13.75	14.57	15.12	15.83	16.04
24	15.54	15.48	15.40	13.84	10.82	10.23	12.22	13.75	14.62	15.14	15.84	16.03
25	15.55	15.49	15.40	13.77	10.92	10.36	12.25	13.76	14.66	15.13	15.85	16.03
26	15.55	15.47	15.03	13.70	10.99	10.49	12.30	13.80	14.71	15.13	15.86	16.03
27	15.55	15.44	14.87	13.66	11.07	10.64	12.38	13.84	14.74	15.16	15.87	16.01
28	15.47	15.39	14.82	13.68	11.16	10.72	12.43	13.88	14.74	15.20	15.89	16.00
29	15.35	15.32	14.77	13.69	---	10.79	12.49	13.91	14.73	15.23	15.90	16.02
30	15.26	15.26	14.74	13.65	---	10.90	12.55	13.93	14.76	15.26	15.89	16.04
31	15.21	---	14.69	13.25	---	10.99	---	13.93	---	15.30	15.88	---
MAX	15.55	15.50	15.50	14.67	11.88	11.71	12.55	13.93	14.76	15.30	15.90	16.04
WTR YR 1982	MEAN	14.01		HIGH	10.12		LOW	16.04				

## GROUND-WATER RECORDS

303

## CLERMONT COUNTY

385144084133900. Local number, CT-2.

LOCATION.--Lat 38°51'44", long 84°13'39", Hydrologic Unit 05090201, at the Wm. H. Zimmer Nuclear Power Station, Moscow Ohio.

Owner: Cincinnati Gas and Electric Company.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.2 m), depth 90 ft (27.4 m), cased to 90 ft (27.4 m).

DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of instrument shelter 2.50 ft (0.762 m) above land-surface datum.

PERIOD OF RECORD.--January 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 43.24 ft (13.180 m) May 23, 1978; minimum daily, 22.45 ft (6.843 m) March 13, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 42.14 ft (12.844 m) Oct. 30 -Nov. 1; minimum daily low, 29.17 ft (8.891 m) Apr. 6.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.03	42.14	42.00	41.42	---	34.22	29.29	32.19	36.60	36.03	38.36	40.53
2	41.10	42.13	41.98	41.39	---	34.11	29.30	32.37	36.64	36.11	38.44	40.58
3	41.15	42.12	41.99	41.27	---	34.03	29.25	32.54	36.66	36.18	38.53	40.64
4	41.20	42.10	42.01	41.17	---	34.03	29.24	32.70	36.68	36.26	38.63	40.69
5	41.25	42.07	42.02	41.08	---	34.04	29.24	32.87	36.69	36.34	38.71	40.74
6	41.28	42.03	42.02	41.02	---	34.08	29.17	33.03	36.71	36.39	38.80	40.78
7	41.33	42.00	42.01	40.90	---	34.08	29.19	33.20	36.72	36.44	38.88	40.83
8	41.38	41.98	41.98	40.87	---	34.11	29.19	33.38	36.72	36.49	38.95	40.87
9	41.42	41.95	41.99	40.76	---	34.11	29.17	33.55	36.69	36.54	39.03	40.90
10	41.46	41.93	41.99	40.65	---	34.11	29.27	33.71	36.66	36.59	39.12	40.93
11	41.50	41.90	41.98	40.56	---	34.05	29.32	33.88	36.63	36.63	39.21	40.97
12	41.54	41.88	41.97	40.45	36.84	34.00	29.36	34.03	36.59	36.69	39.28	41.01
13	41.58	41.87	41.96	40.33	36.74	33.93	29.48	34.20	36.53	36.76	39.35	41.05
14	41.61	41.85	41.93	40.22	36.56	33.91	29.58	34.35	36.46	36.81	39.42	41.08
15	41.65	41.83	41.91	40.13	36.38	33.82	29.70	34.51	36.39	36.88	39.48	41.12
16	41.68	41.81	41.89	40.07	36.26	33.62	29.79	34.68	36.30	36.93	39.55	41.17
17	41.70	41.80	41.89	---	36.13	33.37	29.95	34.82	36.19	36.99	39.62	41.21
18	41.75	41.81	41.88	---	36.05	33.21	30.12	34.96	36.10	37.08	39.69	41.26
19	41.82	41.81	41.88	---	36.00	32.97	30.21	35.11	36.00	37.16	39.75	41.29
20	41.85	41.84	41.88	---	35.87	32.60	30.35	35.26	35.92	37.25	39.81	41.32
21	41.88	41.87	41.87	---	35.62	32.16	30.55	35.42	35.84	37.32	39.88	41.36
22	41.91	41.89	41.86	---	35.45	31.84	30.65	35.56	35.79	37.42	39.94	41.40
23	41.95	41.90	41.87	---	35.29	31.51	30.79	35.71	35.75	37.50	39.99	41.43
24	41.98	41.93	41.89	---	35.04	31.10	30.93	35.86	35.74	37.60	40.06	41.46
25	42.00	41.95	41.89	---	34.88	30.70	31.09	35.98	35.73	37.70	40.13	41.49
26	42.03	41.95	41.84	---	34.74	30.32	31.27	36.11	35.74	37.79	40.19	41.52
27	42.08	41.98	41.75	---	34.53	30.00	31.47	36.22	35.77	37.89	40.25	41.56
28	42.12	41.99	41.70	---	34.34	29.78	31.66	36.34	35.81	37.99	40.33	41.60
29	42.13	42.01	41.67	---	---	29.58	31.84	36.42	35.87	38.08	40.39	41.64
30	42.14	42.01	41.65	---	---	29.38	32.02	36.50	35.94	38.18	40.44	41.68
31	42.14	---	41.55	---	---	29.27	---	36.55	---	38.27	40.48	---
MAX	42.14	42.14	42.02	41.42	36.84	34.22	32.02	36.55	36.72	38.27	40.48	41.68
WTR YR 1982	MEAN	37.73		HIGH	29.17		LOW	42.14				

## GROUND-WATER RECORDS

## COSHOCTON COUNTY

401256081525100. Local number, CS-3.

LOCATION.--Lat 40°12'56", long 81°52'51", Hydrologic Unit 05040004, 1.5 mi (2.4 km) north of Conesville.

Owner: Universal Cyclops Corp.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.2 m), depth 110 ft (33.5 m), cased.

DATUM.--Altitude of land-surface datum is 745 ft (227 m) from topographic map. Measuring point: Floor of instrument shelter 2.80 ft (0.853 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 36.98 ft (11.272 m) Oct. 16, 1973; minimum daily low, 21.40 ft (5.523 m) July 10, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 33.19 ft (10.116 m) Sep. 24; minimum daily low, 23.41 ft (7.135 m) Mar. 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.02	31.96	30.83	29.52	27.37	26.36	26.28	29.31	30.99	31.08	32.13	33.07
2	32.15	31.98	30.74	29.54	26.93	26.73	26.15	29.45	30.88	30.92	32.44	33.13
3	32.06	32.08	30.74	29.53	26.57	27.05	26.06	29.61	31.02	30.82	32.44	33.13
4	31.87	32.14	30.83	29.59	26.22	27.36	26.03	29.81	31.09	30.77	32.61	32.93
5	32.01	32.14	30.80	29.51	25.84	27.45	26.08	29.94	31.10	30.58	32.67	32.49
6	32.01	32.11	30.63	29.17	25.55	27.28	26.41	30.05	31.03	30.31	32.47	32.21
7	32.05	32.06	30.93	28.88	25.28	26.91	26.56	30.16	31.13	30.12	32.36	32.45
8	32.06	31.84	31.05	28.72	24.98	26.83	26.51	30.16	31.24	30.02	32.31	32.58
9	31.85	31.74	31.14	28.45	24.77	26.93	26.83	30.05	31.31	29.95	32.37	32.63
10	31.84	31.84	31.14	28.60	24.96	26.91	26.97	30.21	31.37	29.91	32.42	32.64
11	31.85	31.92	31.13	29.99	25.13	27.02	27.03	30.37	31.37	30.08	32.48	32.58
12	32.01	31.96	31.05	28.99	25.39	27.03	27.00	30.53	31.30	30.34	32.51	32.45
13	31.91	31.94	30.88	28.61	25.77	26.79	27.16	30.64	31.25	30.63	32.58	32.73
14	31.89	31.97	31.09	28.31	26.11	26.35	27.26	30.71	31.42	30.85	32.53	32.81
15	31.97	31.92	31.20	28.18	26.67	25.95	27.32	30.67	31.51	31.05	32.43	32.95
16	32.07	31.98	31.29	28.08	26.94	25.68	27.41	30.50	31.55	31.23	32.64	32.95
17	32.00	32.06	31.37	27.98	26.94	25.43	27.38	30.63	31.54	31.30	32.74	32.97
18	31.86	32.05	31.45	28.16	26.81	25.16	27.43	30.76	31.34	31.34	32.84	32.89
19	32.14	31.98	31.41	28.30	26.32	24.83	27.69	30.85	31.14	31.51	32.89	32.68
20	32.16	31.89	31.32	28.38	25.94	24.42	27.90	30.87	30.97	31.59	32.96	32.88
21	32.18	31.73	31.42	28.50	25.41	23.96	28.15	30.90	31.04	31.65	32.99	33.02
22	32.21	31.40	31.55	28.58	25.29	23.73	28.38	30.94	31.12	31.69	32.89	33.11
23	32.23	31.27	31.64	28.48	25.27	23.49	28.56	30.78	31.19	31.74	32.78	33.13
24	32.21	31.24	31.35	28.03	25.27	23.41	28.51	30.84	31.26	31.71	32.89	33.19
25	32.06	31.24	30.58	27.76	25.29	23.78	28.63	30.82	31.29	31.80	32.96	33.10
26	32.16	31.11	29.97	27.67	25.55	24.21	28.84	30.74	31.20	31.83	32.96	32.84
27	32.19	30.86	29.62	27.59	25.71	24.45	28.98	30.70	31.03	32.15	32.91	32.98
28	32.21	30.74	29.45	27.58	25.94	24.86	29.08	30.83	30.96	32.25	32.85	32.98
29	32.27	30.68	29.39	27.67	---	25.46	29.17	30.75	30.94	32.30	32.63	32.91
30	32.29	30.76	29.45	27.71	---	25.90	29.23	30.66	31.18	32.34	32.81	32.83
31	32.13	---	29.44	27.70	---	26.26	---	30.58	---	32.32	32.97	---
MAX	32.29	32.14	31.64	29.59	27.37	27.45	29.23	30.94	31.55	32.34	32.99	33.19
WTR YR 1982	MEAN	30.06		HIGH	23.41		LOW	33.19				

## GROUND-WATER RECORDS

305

## COSHOCTON COUNTY--Continued

401735081523800. Local number, CS-2.

LOCATION.--Lat 40°17'35", long 81°52'38", Hydrologic Unit 05040003, 1.7 mi (2.7 km) northwest of courthouse in Coshocton.

Owner: City of Coshocton.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test well, diameter 6 in (0.15 m), depth 40 ft (12.2 m) cased.

DATUM.--Altitude of land-surface datum is 740 ft (226 m), from topographic map. Measuring point: Floor of instrument shelter 8.50 ft (2.591 m) above land surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.83 ft (6.044 m) Nov. 20, 1982; minimum daily low, 0.43 ft (0.131 m) Feb. 21, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.83 ft (6.044 m) Nov. 20; minimum daily low, 6.59 ft (2.009 m) Mar. 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.21	18.62	18.08	15.66		11.42	11.60	14.48	16.10	17.04	16.84	19.03
2	18.29	18.63	18.24	15.63		12.54	11.15	14.63	16.53	16.98	16.86	18.53
3	18.37	18.64	18.36	15.36		13.20	11.19	15.11	16.62	16.70	17.72	18.45
4	18.41	18.94	18.46	15.38		13.63	11.30	15.79	16.72	16.35	17.76	18.35
5	18.18	19.32	18.54	15.13		13.71	11.23	16.05	15.98	15.35	17.07	18.21
6	18.31	19.42	18.42	14.89		12.54	11.01	16.03	15.84	16.24	16.76	18.00
7	18.36	19.03	18.72	14.80		12.10	11.91	16.17	16.50	16.43	16.40	18.51
8	18.35	18.52	19.10	14.71		12.41	12.42	15.65	16.86	16.38	16.30	18.82
9	18.41	18.41	18.59	14.42		12.90	12.47	15.22	17.00	16.33	16.40	19.01
10	18.46	18.51	18.85	14.44		13.15	11.53	15.44	17.12	16.45	17.13	19.14
11	18.47	18.20	19.13	---		13.32	11.19	15.87	16.21	16.49	17.39	19.15
12	18.34	18.63	18.46	---		13.31	11.05	15.99	15.97	16.44	17.63	18.51
13	18.96	18.81	18.68	---		12.39	11.73	16.22	15.97	16.84	17.67	18.78
14	19.17	18.83	18.42	---		10.76	11.32	16.35	16.66	17.20	17.04	18.90
15	19.29	18.59	18.91	---		10.11	11.69	16.45	17.11	17.29	17.22	19.03
16	19.25	18.71	18.99	---		9.90	11.85	15.32	17.35	17.18	17.35	19.21
17	17.89	19.28	18.94	---		9.79	11.87	16.23	17.27	17.31	18.10	19.28
18	17.88	19.61	19.21	---		9.34	11.42	16.70	16.26	17.51	18.69	19.32
19	18.12	19.77	18.86	---		7.95	12.60	17.00	16.73	18.04	18.93	18.79
20	18.50	19.83	18.37	---		7.21	13.33	17.06	16.80	18.11	19.03	18.83
21	19.24	19.32	18.94	---		6.86	13.20	17.04	15.89	18.09	18.73	18.98
22	19.44	18.43	18.76	---		6.59	13.64	16.93	16.78	18.13	18.33	19.08
23	19.54	18.27	18.43	---		7.05	14.25	16.81	16.88	18.14	18.53	19.11
24	17.89	18.49	17.45	---		7.36	14.07	16.29	16.99	17.42	18.87	18.68
25	17.76	18.68	15.80	---		7.93	13.96	16.83	17.03	17.13	19.15	19.06
26	18.37	18.48	15.34	---		8.80	14.48	16.80	16.28	16.92	19.15	18.70
27	18.60	18.10	15.27	---		9.41	14.17	16.78	16.23	17.05	19.08	18.80
28	18.66	17.89	15.17	---		9.89	14.50	16.82	16.58	17.09	17.93	18.97
29	18.39	17.81	15.87	---		10.86	14.53	16.86	17.22	17.20	17.65	18.99
30	18.25	18.03	16.14	---		11.47	14.14	15.60	17.25	17.44	18.68	19.00
31	18.34	---	15.27	---		11.70	---	15.53	---	16.83	18.98	---
MAX	19.54	19.83	19.21	15.66		13.71	14.53	17.06	17.35	18.14	19.15	19.32
WTR YR 1982	MEAN	16.43		HIGH	6.59		LOW	19.83				

## GROUND-WATER RECORDS

## DARKE COUNTY

400514084345700. Local number, D-2.

LOCATION.--Lat 40°05'14", long 84°34'57", Hydrologic Unit 05080001, State Route 571, 3 mi (4.8 km) east of Greenville.

Owner: Greenville Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 70 ft (21.3 m), cased.

DATUM.--Altitude of land-surface datum is 1038 ft (316 m), from topographic map. Measuring point: Floor of shelter 4.00 ft (1.219 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.43 ft (6.227 m) Nov. 29, 1977; minimum daily low, 16.76 ft (5.108 m) Apr. 14, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.26 ft (5.870 m), Dec. 23, 25; minimum daily low, 17.23 ft. (5.252 m) Apr. 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.44	18.84	18.74	19.07	18.92	18.07	17.64	17.42	17.45	17.72	18.04	18.39
2	18.64	18.81	19.02	19.07	18.67	18.05	17.50	17.47	17.49	17.63	18.03	18.47
3	18.66	18.80	19.02	18.80	18.55	18.18	17.39	17.50	17.40	17.49	18.05	18.59
4	18.54	18.74	19.20	18.93	18.76	17.98	17.68	17.49	17.39	17.63	18.09	18.66
5	18.58	18.68	19.20	19.03	18.56	18.25	17.64	17.48	17.38	17.68	18.15	18.61
6	18.63	18.80	19.10	18.73	18.57	18.19	17.69	17.40	17.41	17.65	18.15	18.60
7	18.65	18.87	18.75	18.98	18.48	18.19	17.70	17.42	17.38	17.66	18.12	18.61
8	18.66	18.86	19.10	18.98	18.42	18.28	17.47	17.56	17.34	17.69	18.05	18.63
9	18.66	19.04	19.13	18.57	18.46	18.29	17.49	17.58	17.35	17.70	18.17	18.60
10	18.66	18.97	19.04	18.86	18.54	18.05	17.50	17.57	17.49	17.62	18.24	18.55
11	18.75	18.88	19.04	18.73	18.52	18.02	17.36	17.50	17.53	17.71	18.24	18.60
12	18.73	18.95	19.11	18.75	18.52	18.03	17.34	17.48	17.40	17.81	18.27	18.64
13	18.76	18.88	19.06	18.53	18.45	18.06	17.48	17.51	17.46	17.82	18.18	18.63
14	18.68	18.82	18.95	18.52	18.33	18.08	17.50	17.51	17.51	17.80	18.22	18.64
15	18.63	18.74	18.96	18.67	18.36	17.84	17.37	17.51	17.36	17.62	18.23	18.66
16	18.74	18.71	19.13	18.96	18.35	17.69	17.29	17.55	17.44	17.80	18.25	18.75
17	18.68	18.85	19.10	18.92	18.30	17.91	17.48	17.54	17.50	17.78	18.27	18.69
18	18.80	18.91	19.12	18.59	18.36	17.91	17.54	17.47	17.45	17.77	18.33	18.71
19	18.92	18.81	19.13	18.69	18.41	17.80	17.33	17.48	17.46	17.78	18.33	18.71
20	18.81	19.00	19.12	18.80	18.26	17.50	17.50	17.48	17.46	17.90	18.27	18.79
21	18.84	19.08	18.92	18.85	18.37	17.72	17.62	17.58	17.45	17.94	18.38	18.83
22	18.81	19.02	18.89	18.84	18.45	17.72	17.52	17.55	17.53	17.87	18.33	18.80
23	18.90	18.96	19.26	18.45	18.26	17.65	17.50	17.62	17.59	17.92	18.34	18.81
24	18.90	19.09	19.26	18.65	18.47	17.54	17.33	17.60	17.57	17.95	18.38	18.72
25	18.73	19.09	19.05	18.74	18.61	17.62	17.23	17.56	17.47	17.95	18.47	18.82
26	18.70	18.82	18.89	18.83	18.47	17.71	17.30	17.48	17.50	17.95	18.46	18.81
27	18.94	19.09	18.98	18.67	18.19	17.87	17.53	17.48	17.49	17.91	18.46	18.89
28	18.99	19.11	19.09	18.83	18.21	17.83	17.56	17.51	17.43	17.98	18.56	18.99
29	18.89	19.07	19.20	18.83	---	17.62	17.45	17.46	17.46	18.03	18.53	18.92
30	18.88	18.96	19.11	18.45	---	17.44	17.46	17.41	17.67	17.96	18.40	18.91
31	18.86	---	18.76	18.53	---	17.61	---	17.38	---	18.00	18.46	---
MAX	18.99	19.11	19.26	19.07	18.92	18.29	17.70	17.62	17.67	18.03	18.56	18.99
WTR YR 1982	MEAN	18.25		HIGH	17.23		LOW	19.26				

## GROUND-WATER RECORDS

307

## DELAWARE COUNTY

402126083040400. Local number, DL-3.

LOCATION.--Lat 40°21'26", long 83°04'04", Hydrologic Unit 05060001, east bank of Olentangy River at toe of Delaware dam.

Owner: U.S. Army Corps Engineers.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 135 ft (41.1 m), cased.

DATUM.--Altitude of land-surface datum is 900 ft (374 m), from topographic map. Measuring point: Floor of instrument shelter 2.60 ft (0.792 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--October 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.04 ft (11.290 m) Nov. 1, 1948, Dec. 2, 3, 1948; minimum daily low, 20.43 ft (6.227 m) Jan. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 31.95 ft (9.738 m) Dec. 20; minimum daily low, 28.72 ft (8.754 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	31.50	31.27	31.66	30.89	31.02	30.63	30.89	30.84	30.81	31.39	31.33
2	---	31.50	31.30	31.66	30.28	30.92	30.59	30.92	30.75	30.99	31.39	31.33
3	---	31.39	31.30	31.60	29.18	31.12	30.57	30.95	30.86	31.00	31.40	31.40
4	---	31.33	31.46	31.53	28.93	31.12	30.61	30.96	30.97	31.03	31.42	31.44
5	---	31.28	31.50	30.49	28.81	30.85	30.64	30.98	31.00	30.75	31.43	31.44
6	---	31.27	31.50	30.68	29.44	30.28	30.25	30.96	31.04	30.82	31.43	31.45
7	---	31.32	31.49	31.07	29.95	29.99	30.43	30.94	31.08	30.87	31.42	31.45
8	31.44	31.36	31.66	31.17	30.23	30.84	30.42	31.00	31.07	31.01	31.36	31.45
9	31.51	31.43	31.68	31.24	30.48	30.95	30.34	31.04	31.09	31.07	31.40	31.45
10	31.54	31.42	31.68	31.36	30.77	30.94	30.28	31.02	31.08	31.08	31.42	31.45
11	31.57	31.47	31.70	31.38	30.97	30.94	30.25	30.97	31.10	31.11	31.43	31.45
12	31.58	31.49	31.73	31.47	31.07	30.81	30.17	30.96	31.05	31.21	31.41	31.47
13	31.59	31.49	31.74	31.46	31.16	30.17	29.86	30.96	30.98	31.27	31.40	31.49
14	31.56	31.46	31.73	31.50	31.21	29.75	29.92	31.03	31.01	31.30	31.40	31.49
15	31.52	31.44	31.79	31.62	31.25	29.88	29.89	31.06	31.00	31.33	31.40	31.48
16	31.49	31.44	31.87	31.67	31.14	30.15	30.04	31.09	30.94	31.35	31.41	31.50
17	31.49	31.49	31.87	31.73	30.42	30.29	30.20	31.11	30.75	31.35	31.43	31.49
18	31.46	31.52	31.90	31.78	29.72	30.08	30.26	31.10	30.21	31.36	31.43	31.45
19	31.55	31.50	31.93	31.83	29.50	29.08	30.24	31.14	30.21	31.36	31.42	31.47
20	31.56	31.55	31.95	31.89	29.38	28.82	30.41	31.16	30.55	31.39	31.41	31.45
21	31.60	31.59	31.93	31.89	29.49	28.72	30.58	31.16	30.72	31.39	31.41	31.50
22	31.58	31.60	31.82	31.86	29.76	29.02	30.64	31.05	30.74	31.29	31.36	31.50
23	31.57	31.59	31.76	31.64	30.09	29.71	30.68	31.03	30.80	31.30	31.36	31.50
24	31.61	31.54	31.25	31.46	30.25	30.00	30.68	31.01	30.88	31.32	31.33	31.50
25	31.55	31.51	30.87	31.23	30.72	30.23	30.66	30.97	30.96	31.32	31.26	31.46
26	31.53	31.43	30.98	30.99	30.88	30.56	30.66	30.95	31.00	31.34	31.19	31.49
27	31.48	31.44	31.30	31.19	30.95	30.76	30.77	31.02	31.02	31.34	31.31	31.45
28	31.57	31.44	31.39	31.42	31.02	30.85	30.82	31.00	31.04	31.36	31.35	31.55
29	31.57	31.43	31.48	31.51	---	30.88	30.85	30.90	31.02	31.37	31.31	31.54
30	31.53	31.40	31.55	31.45	---	30.81	30.89	30.86	30.92	31.37	31.32	31.52
31	31.52	---	31.54	31.17	---	30.86	---	30.87	---	31.38	31.34	---
MAX	31.61	31.60	31.95	31.89	31.25	31.12	30.89	31.16	31.10	31.39	31.43	31.55
WTR YR 1982	MEAN	31.08		HIGH	28.72		LOW	31.95				

## GROUND-WATER RECORDS

## FAIRFIELD COUNTY

394257082362900. Local number, F-6.

LOCATION.--Lat 39°42'57", long 82°36'29", Hydrologic Unit 05030204, near Hocking River in well field at Lancaster.

Owner: Lancaster Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in (0.3 m), depth 108 ft (32.9 m), cased.

DATUM.--Altitude of land-surface datum is 820 ft (250 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.70 ft (7.833 m) Sep. 13, 1982; minimum daily low, 16.40 ft (4.999 m) June 25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 25.70 ft (7.833 m) Sep. 13; minimum recorded daily low, 19.95 ft (6.081 m) Oct. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.10	20.50	23.15	20.85	---	20.95	21.10	---	22.35	23.15	25.00	24.70
2	21.35	20.70	22.25	20.90	---	21.30	21.00	---	22.30	23.45	24.90	24.60
3	21.15	20.80	22.50	21.80	---	21.25	20.45	---	22.90	22.70	25.25	24.85
4	20.70	21.25	22.65	22.25	---	22.20	20.40	---	22.70	22.30	25.00	24.70
5	21.25	20.80	22.40	22.75	---	---	20.95	---	21.05	22.70	25.00	24.75
6	21.15	20.90	21.80	22.60	---	---	20.95	21.40	21.30	23.45	25.35	24.65
7	21.35	20.80	22.10	22.80	---	---	21.00	22.00	21.50	23.10	25.35	24.70
8	21.15	20.25	22.60	22.40	---	---	---	22.40	21.40	22.95	24.55	24.70
9	21.45	20.85	22.75	21.80	---	---	---	21.20	22.35	22.85	25.00	25.40
10	20.55	20.75	22.05	---	---	21.35	---	21.00	23.20	22.45	25.05	25.50
11	---	20.80	22.65	---	20.45	21.90	---	21.30	23.00	22.80	25.05	25.00
12	---	20.70	22.25	21.10	21.15	22.10	---	21.25	21.95	22.90	25.25	24.65
13	---	21.15	21.90	23.40	20.30	22.10	---	21.65	22.65	23.50	25.15	25.70
14	---	21.50	22.15	22.35	20.15	21.25	---	23.25	23.00	23.60	24.90	25.00
15	---	20.70	22.85	22.30	21.05	21.80	---	21.90	21.90	23.85	24.75	24.75
16	---	21.65	22.05	---	20.80	21.95	---	21.95	22.50	24.05	25.00	24.85
17	---	21.75	21.70	---	21.00	21.90	---	21.55	23.00	23.85	25.00	25.50
18	---	21.75	22.05	---	20.30	21.70	---	23.00	23.30	23.70	25.05	25.00
19	---	21.50	---	---	20.35	21.75	---	22.55	22.90	23.85	25.30	25.00
20	---	21.35	20.75	---	20.20	21.05	---	23.05	22.55	23.95	25.15	25.25
21	---	21.40	21.45	---	20.25	21.25	---	22.70	23.00	24.25	25.10	24.95
22	20.50	21.25	22.50	---	21.15	20.55	---	22.00	23.05	24.20	24.85	25.45
23	20.60	21.65	21.70	---	21.05	21.25	---	22.55	22.90	24.60	25.35	25.20
24	20.50	21.60	22.05	---	21.15	20.85	---	22.80	22.95	24.15	25.35	25.10
25	20.35	21.90	21.40	---	21.20	20.75	---	22.35	23.55	23.90	25.45	24.75
26	19.95	21.20	21.25	---	21.30	21.55	---	22.45	22.90	24.45	25.70	25.10
27	20.60	21.95	21.65	---	21.10	20.95	---	22.15	22.60	24.60	25.60	24.95
28	20.65	21.35	21.85	---	21.00	20.80	---	22.55	23.05	24.50	24.75	25.45
29	20.65	21.35	22.15	---	---	21.00	---	22.20	23.35	24.80	24.70	24.85
30	20.75	23.70	21.90	---	---	20.85	---	22.15	22.75	24.70	23.55	25.00
31	20.55	---	21.50	---	---	21.05	---	22.00	---	24.85	24.95	---
MAX	21.45	23.70	23.15	23.40	21.30	22.20	21.10	23.25	23.55	24.85	25.70	25.70
WTR YR 1982	MEAN	22.58		HIGH	19.95		LOW	25.70				

## GROUND-WATER RECORDS

309

## FAIRFIELD COUNTY--Continued

394544082271000. Local number, F-1.

LOCATION.--Lat 39°45'44", long 82°27'10", Hydrologic Unit 05030204, near the west edge of West Rushville.

Owner: State of Ohio.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 84 ft (25.6 m), cased.

DATUM.--Altitude of land-surface datum is 980 ft (299 m), from topographic map. Measuring point: Floor of instrument shelter 8.02 ft (2.444 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.81 ft (6.038 m) Mar. 1-4, 1964; minimum daily low, 7.27 ft (2.216 m) May 5-6, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.47 ft (5.934 m) Dec. 30; minimum daily low, 13.49 ft (4.112 m) Mar. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.41	19.10	19.17	19.37	---	15.64	13.63	14.82	16.24	16.87	17.82	18.35
2	18.47	19.10	19.18	19.38	18.16	15.58	13.67	14.84	16.32	16.91	17.97	18.32
3	18.47	19.10	19.21	19.29	18.09	15.43	13.63	14.96	16.37	16.87	17.98	18.34
4	18.51	19.10	19.19	19.19	17.91	15.43	13.64	14.99	16.43	16.83	18.03	18.40
5	18.52	19.06	19.23	19.24	17.84	15.37	13.65	15.10	16.43	16.94	18.08	18.41
6	18.51	19.04	19.23	19.19	17.66	15.37	13.59	15.19	16.47	16.97	18.19	18.40
7	18.52	19.11	19.20	19.19	17.53	15.37	13.66	15.22	16.51	16.99	18.21	18.45
8	---	19.23	19.22	19.19	17.40	15.37	13.66	15.32	16.50	16.97	18.17	18.46
9	---	19.22	19.22	19.10	17.24	15.33	13.56	15.38	16.52	16.99	18.14	18.46
10	---	19.22	19.20	19.07	17.12	15.31	13.62	15.43	16.52	17.03	18.22	18.49
11	---	19.23	19.20	19.04	17.05	15.19	13.62	15.59	16.54	17.09	18.22	18.48
12	---	19.26	19.23	19.05	16.98	15.11	13.62	15.65	16.55	17.13	18.25	18.48
13	---	19.28	19.23	19.01	16.93	15.09	13.63	15.70	16.56	17.13	18.30	18.51
14	---	19.33	19.25	18.96	16.90	15.04	13.66	15.90	16.61	17.19	18.40	18.51
15	---	19.32	19.22	18.94	16.82	14.97	13.66	15.92	16.60	17.23	18.40	18.40
16	---	19.27	19.26	18.99	16.79	14.78	13.66	15.99	16.58	17.25	18.41	18.43
17	---	19.26	19.26	18.99	16.71	14.58	13.83	16.09	16.56	17.26	18.41	18.41
18	---	19.33	19.32	---	16.66	14.53	13.90	16.10	16.61	17.26	18.48	18.39
19	---	19.32	19.35	---	16.60	14.43	13.96	16.12	16.65	17.28	18.44	18.42
20	---	19.23	19.40	---	16.54	14.24	14.01	16.05	16.65	17.31	18.40	18.43
21	---	19.31	19.38	---	16.36	14.07	14.13	16.13	16.75	17.39	18.38	18.48
22	---	19.28	19.29	---	16.26	13.96	14.16	16.13	16.68	17.38	18.38	18.46
23	---	19.31	19.38	---	16.16	13.82	14.41	16.14	16.69	17.42	18.35	18.45
24	---	19.27	19.41	---	16.00	13.68	14.38	16.23	16.71	17.48	18.35	18.41
25	---	19.28	19.42	---	15.90	13.55	14.36	16.18	16.70	17.50	18.25	18.41
26	---	19.26	19.40	---	15.88	13.49	14.43	16.21	16.77	17.64	18.29	18.41
27	---	19.24	19.34	---	15.79	13.55	14.49	16.21	16.77	17.72	18.33	18.39
28	---	19.27	19.38	---	15.69	13.55	14.59	16.19	16.82	17.68	18.38	18.46
29	---	19.27	19.42	---	---	13.64	14.64	16.23	16.80	17.74	18.43	18.46
30	19.09	19.29	19.47	---	---	13.60	14.73	16.20	16.82	17.79	18.41	18.46
31	19.09	---	19.39	---	---	13.55	---	16.26	---	17.81	18.38	---
MAX	19.09	19.33	19.47	19.38	18.16	15.64	14.73	16.26	16.82	17.81	18.48	18.51
WTR YR 1982	MEAN	17.18		HIGH	13.49		LOW	19.47				

## GROUND-WATER RECORDS

## FAIRFIELD COUNTY--Continued

395053082361900. Local number, F-5.

LOCATION.--Lat 39°50'53", long 82°36'19", Hydrologic Unit 05060001, Gaylord Paper Co., Baltimore.

Owner: Crown Zellerbach - Gaylord Paper Division.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 180 (54.9 m), cased.

DATUM.--Altitude of land-surface datum is 850 ft (259 m), from topographic map. Measuring point: Floor of instrument shelter 3.5 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 30.70 ft (9.357 m) Aug. 30, 1982; minimum daily low, 0.98 ft (0.299 m) above land surface Nov. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 30.70 ft (9.357 m) Aug. 30; minimum daily low, 2.20 ft (0.671 m) Jul. 4.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.10	13.50	13.70	4.10	9.10	17.50	7.10	8.20	19.30	9.10	18.50	27.10
2	18.60	17.00	12.30	7.30	9.80	11.00	9.00	7.30	14.80	8.00	20.60	20.20
3	17.10	19.20	12.90	6.60	9.10	8.80	10.00	10.20	10.80	7.90	20.40	18.10
4	17.00	21.50	12.00	7.70	8.00	7.80	11.80	10.40	10.90	2.20	20.50	17.70
5	16.80	22.40	12.00	6.60	6.40	7.50	12.20	19.10	12.00	3.70	20.10	15.60
6	15.70	23.30	11.10	6.80	6.70	6.50	10.60	21.90	12.50	11.60	20.40	17.30
7	16.80	22.90	11.30	7.70	7.30	6.50	11.00	22.30	12.70	5.00	21.10	23.70
8	15.10	22.70	11.20	6.80	7.00	7.40	10.00	21.10	10.50	3.80	20.70	23.90
9	17.30	25.70	11.40	6.50	7.00	7.70	8.10	21.30	9.70	7.80	20.20	24.90
10	16.90	26.00	9.40	6.40	7.50	7.80	9.60	22.50	10.80	13.70	21.10	24.50
11	16.80	25.80	9.50	7.60	7.70	7.70	7.10	22.10	11.10	14.90	23.50	24.30
12	22.20	25.60	8.60	7.50	7.70	9.80	7.60	21.90	11.70	16.60	23.90	24.30
13	20.30	25.00	8.80	16.70	7.50	7.40	15.30	22.00	12.80	16.10	23.10	25.30
14	20.10	24.60	8.50	9.40	7.10	7.20	17.60	21.00	12.00	15.70	24.30	24.90
15	19.70	24.30	8.70	12.20	6.70	7.30	18.00	21.60	10.40	16.10	24.70	25.00
16	19.10	24.40	8.80	9.30	7.50	6.30	11.20	21.50	8.70	15.40	27.90	17.30
17	19.10	22.90	8.70	9.20	9.00	6.10	10.50	22.30	8.60	14.20	26.90	15.30
18	19.30	22.80	9.00	10.20	9.10	5.40	9.50	23.90	9.20	13.90	26.00	14.00
19	19.10	23.20	7.90	10.00	6.10	6.20	9.80	24.70	8.25	12.90	27.10	14.10
20	18.80	22.30	7.70	9.80	5.30	6.70	9.90	24.60	8.20	18.30	26.20	19.30
21	18.50	21.80	9.00	9.80	5.10	7.90	9.70	24.90	9.50	14.30	26.70	22.10
22	18.60	22.20	8.90	9.50	6.40	8.10	9.70	18.10	9.40	11.20	26.70	22.10
23	18.30	22.50	9.00	11.00	10.00	8.50	9.30	16.90	10.30	11.60	26.70	23.40
24	17.80	22.70	12.90	9.80	8.90	8.10	8.20	17.90	10.20	11.90	27.60	24.40
25	18.70	22.40	6.20	---	8.50	7.90	7.90	16.10	9.80	13.20	27.90	24.30
26	19.30	15.30	6.50	---	9.50	9.30	8.10	15.10	9.30	13.40	27.10	25.40
27	19.10	14.00	6.30	11.70	8.20	8.00	9.10	14.00	8.80	12.20	27.10	25.80
28	20.10	12.10	10.50	13.20	15.60	7.40	8.90	13.50	7.30	12.30	27.20	15.90
29	20.80	11.70	6.20	11.00	---	7.30	8.20	13.20	7.50	13.50	27.80	14.00
30	19.40	13.00	7.00	9.80	---	6.40	7.90	13.10	8.10	15.50	30.70	18.30
31	15.00	---	6.10	8.60	---	6.90	---	10.40	---	18.40	27.90	---
MAX	22.20	26.00	13.70	16.70	15.60	17.50	18.00	24.90	19.30	18.40	30.70	27.10
WTR YR 1982	MEAN	14.25		HIGH	2.20		LOW	30.70				

## GROUND-WATER RECORDS

311

## FAYETTE COUNTY

393153083322000. Local number, FA-1.

LOCATION.--Lat 39°31'53", long 83°32'20", Hydrologic Unit 05060003, Burnett-Perill Road about 6 mi (9.6 km) west of Washington Court House.

Owner: Martha Slagle.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in (0.13 m), depth 78 ft (23.8 m), cased.

DATUM.--Altitude of land-surface datum is 1010 ft (308 m), from topographic map. Measuring point: Floor of instrument shelter 3.30 ft (1.006 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 13.45 ft (4.100 m) Sep. 30 1982; minimum daily low, 3.26 ft (0.994 m) Apr. 28, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.45 ft (4.100 m) Sep. 30; minimum daily low, 6.15 ft (1.875 m) Mar. 23, 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.00	9.05	8.50	7.75	7.30	6.95	6.20	7.20	7.45	8.05	8.90	9.15
2	8.80	9.00	8.65	8.10	7.00	6.75	6.50	7.40	7.50	7.60	8.85	9.40
3	8.40	8.95	8.70	7.65	7.00	6.95	6.20	7.05	7.50	7.75	8.70	9.50
4	8.65	8.95	8.50	7.65	7.00	6.70	6.35	7.10	7.40	7.85	8.60	9.55
5	8.45	8.95	8.85	7.70	6.90	6.70	6.35	7.15	7.35	8.00	8.70	9.75
6	8.60	8.90	8.40	7.65	7.00	6.85	6.50	7.10	7.65	8.25	9.45	9.50
7	8.45	9.05	8.50	7.45	7.00	6.80	6.50	7.20	7.75	8.15	9.00	9.40
8	8.65	9.00	8.55	7.55	6.70	6.75	6.55	7.45	7.55	7.90	8.85	9.55
9	8.50	8.95	8.50	7.50	6.75	6.75	6.45	7.30	7.55	8.10	8.90	9.50
10	9.05	8.85	8.30	7.60	6.95	6.65	6.65	7.25	7.55	8.05	8.70	9.60
11	8.60	8.80	8.40	7.30	6.90	6.60	6.45	7.35	7.65	8.00	8.95	9.55
12	8.85	8.95	8.35	7.40	6.90	6.50	6.35	7.60	7.60	8.20	8.85	9.80
13	8.70	9.00	8.40	7.20	7.00	6.80	6.60	7.50	7.75	8.20	8.90	9.75
14	8.80	8.95	8.25	7.35	6.95	6.70	6.55	7.50	7.95	8.05	9.55	9.65
15	8.60	9.25	8.40	7.20	6.90	6.55	6.55	7.40	7.65	8.25	9.30	10.00
16	8.90	8.95	8.25	7.50	7.00	6.45	6.45	7.55	7.55	8.15	9.25	10.00
17	9.40	8.95	8.40	7.25	6.85	6.50	6.50	7.35	7.50	8.50	9.25	9.95
18	9.00	9.05	8.20	7.40	6.85	6.45	6.80	7.30	7.40	8.50	9.80	10.15
19	8.75	8.90	8.40	7.35	7.00	6.35	6.75	7.55	7.65	8.80	9.35	10.15
20	8.85	8.90	8.25	7.45	6.85	6.45	6.70	7.40	7.40	8.75	9.25	9.95
21	8.85	9.15	8.40	7.35	7.00	6.35	6.80	7.25	7.60	9.25	9.85	10.20
22	9.00	8.90	8.25	7.45	7.00	6.30	6.75	7.50	7.60	8.70	9.25	10.15
23	8.85	8.85	8.35	7.10	6.90	6.15	6.90	7.55	7.90	8.30	9.20	10.10
24	8.85	8.90	8.25	7.60	6.75	6.30	6.75	7.25	7.55	8.35	8.95	10.25
25	8.80	8.65	8.35	7.30	7.10	6.15	7.05	7.45	8.05	9.00	9.10	10.25
26	8.75	8.70	8.30	7.30	6.80	6.45	7.00	7.60	7.75	8.55	8.95	10.15
27	8.65	8.55	8.20	7.10	6.80	6.30	6.95	7.40	7.75	8.45	9.15	10.35
28	8.95	8.90	8.10	7.25	6.80	6.45	6.95	7.65	7.70	8.60	9.05	10.30
29	8.85	8.70	8.20	7.10	---	6.25	6.90	7.60	7.65	8.55	9.25	12.85
30	8.95	8.45	7.95	7.20	---	6.25	7.05	7.55	7.90	8.25	9.20	13.45
31	9.10	---	8.00	7.30	---	6.20	---	7.65	---	8.65	9.25	---
MAX	9.40	9.25	8.85	8.10	7.30	6.95	7.05	7.65	8.05	9.25	9.85	13.45
WTR YR 1982	MEAN	8.01		HIGH	6.15		LOW	13.45				

## GROUND-WATER RECORDS

## FRANKLIN COUNTY

395118082573300. Local number, FR-3.

LOCATION.--Lat 39°51'14", long 82°57'32", Hydrologic Unit 05060001, 0.7 mi (1.1 km) southwest of Reese.

Owner: R. Hann

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 12 in (0.3 m), depth drilled 60 ft (18.3 m), present depth 53 ft (16.2 m), cased.

DATUM.--Altitude of land-surface datum is 712.94 ft (217.304 m). Measuring point: Floor of instrument shelter 3.43 ft (1.045 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.75 ft (6.325 m) July 7, 1966; minimum daily low, 0.0 ft (0.0 m) Jan. 22, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 12.83 ft (3.911 m) Sept. 13; minimum recorded daily low, 9.30 ft (2.835 m) Feb. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.61	12.54	12.29	12.06	9.30	11.28	10.82	12.31	11.78	12.39	12.58	12.80
2	12.65	12.53	12.31	12.11	9.95	11.43	10.96	12.33	11.68	12.44	12.59	12.78
3	12.67	12.54	12.40	12.14	9.97	11.50	10.95	12.35	11.70	12.44	12.62	12.59
4	12.67	12.54	12.46	12.09	9.80	11.48	10.71	12.37	11.81	12.27	12.64	12.57
5	12.68	12.51	12.50	---	9.77	11.27	10.79	12.37	11.87	12.35	12.47	12.65
6	12.67	12.51	12.52	---	9.79	10.95	10.84	12.38	12.00	12.41	12.50	12.70
7	12.62	12.52	12.53	---	9.83	10.74	10.99	12.40	12.09	12.45	12.57	12.74
8	12.65	12.48	12.61	---	10.25	10.89	11.07	12.40	12.16	12.33	12.59	12.77
9	12.66	12.49	12.66	---	10.80	11.18	11.20	12.28	12.20	12.19	12.58	12.78
10	12.64	12.44	12.67	---	11.15	11.31	11.24	12.35	12.20	12.05	12.56	12.79
11	12.65	12.38	---	---	11.37	11.38	11.31	12.39	12.04	12.18	12.60	12.81
12	12.65	12.38	---	---	11.50	10.88	11.35	12.43	11.99	12.28	12.62	12.82
13	12.65	12.36	---	---	11.64	---	11.49	12.46	12.10	12.35	12.66	12.83
14	12.66	12.35	---	---	11.72	---	11.57	12.48	12.16	12.40	12.68	12.81
15	12.67	12.38	---	---	11.76	---	11.65	12.51	12.18	12.45	12.71	12.64
16	12.67	12.42	---	---	11.51	---	11.71	12.52	12.18	12.48	12.72	12.49
17	12.61	12.48	---	---	10.84	---	11.77	12.53	11.94	12.51	12.74	12.55
18	12.53	12.51	---	---	9.70	---	11.81	12.55	11.78	12.52	12.75	12.65
19	12.55	12.51	---	---	9.86	---	11.85	12.56	11.75	12.47	12.76	12.70
20	12.50	12.46	---	---	9.83	---	11.93	12.50	11.75	12.47	12.76	12.74
21	12.41	12.33	---	---	9.56	---	11.98	12.40	11.88	12.53	12.76	12.74
22	12.31	12.42	---	---	9.90	---	12.03	12.36	12.00	12.56	12.76	12.75
23	12.22	12.45	---	---	10.17	---	12.05	12.24	12.12	12.59	12.75	12.76
24	12.31	12.43	---	---	10.41	---	12.07	12.17	12.21	12.60	12.71	12.77
25	12.39	12.29	---	---	10.58	---	12.10	12.26	12.30	12.62	12.65	12.79
26	12.40	12.27	---	---	10.73	---	12.13	12.33	12.37	12.64	12.63	12.79
27	12.37	12.33	---	---	10.97	---	12.17	12.37	12.43	12.65	12.71	12.76
28	12.42	12.36	---	11.39	11.15	---	12.19	12.38	12.44	12.50	12.77	12.63
29	12.47	12.37	---	11.43	---	---	12.25	12.38	12.43	12.39	12.78	12.67
30	12.51	12.37	11.88	11.45	---	---	12.28	11.81	12.30	12.42	12.80	12.70
31	12.53	---	11.89	11.12	---	10.66	---	11.78	---	12.53	12.81	---
MAX	12.68	12.54	12.67	12.14	11.76	11.50	12.28	12.56	12.44	12.65	12.81	12.83
WTR YR 1982	MEAN	12.12		HIGH	9.30		LOW	12.83				

## GROUND-WATER RECORDS

313

## FRANKLIN COUNTY--Continued

395157083003500. Local number, FR-109.

LOCATION.--Lat 39°51'57", long 83°00'35", Hydrologic Unit 05060001, 6.6 mi (10.5 km) south of the State capital in Columbus.

Owner: City of Columbus.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 92 ft (28.0 m), cased to 82 ft (25.0 m).

DATUM.--Altitude of land-surface datum is 702.24 ft (214.043 m). Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.34 ft (6.504 m) Feb. 9-12, 1977; minimum daily low, 12.43 ft (3.789 m) Mar. 27, 197.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.47 ft (6.239 m) Sept. 30; minimum daily low, 13.44 ft (4.079 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.78	19.59	20.06	20.08	17.36	14.56	14.25	15.68	16.40	17.28	18.46	19.55
2	18.83	19.62	20.06	20.08	16.45	14.61	14.27	15.75	16.41	17.31	18.50	19.56
3	18.85	19.64	20.07	20.06	16.15	14.67	14.21	15.81	16.42	17.32	18.54	19.54
4	18.87	19.65	20.10	20.01	15.88	14.66	14.33	15.87	16.42	17.35	18.57	19.57
5	18.90	19.67	20.10	19.98	15.76	14.67	14.33	15.93	16.44	17.39	18.60	19.60
6	18.93	19.69	20.11	19.66	15.71	14.65	14.41	15.98	16.47	17.43	18.64	19.63
7	18.96	19.72	20.11	19.40	15.70	14.57	14.45	16.05	16.50	17.46	18.67	19.67
8	18.99	19.74	20.14	19.26	15.67	14.64	14.45	16.13	16.53	17.48	18.71	19.69
9	19.02	19.76	20.15	19.10	15.64	14.72	14.52	16.19	16.56	17.51	18.75	19.72
10	19.05	19.77	20.16	19.02	15.66	14.72	14.55	16.24	16.61	17.55	18.79	19.75
11	19.08	19.79	20.18	18.95	15.68	14.70	14.60	16.31	16.64	17.59	18.82	19.79
12	19.11	19.81	20.19	18.91	15.69	14.67	14.62	16.38	16.66	17.65	18.86	19.82
13	19.13	19.83	20.19	18.84	15.70	14.51	14.71	16.44	16.71	17.68	18.90	19.85
14	19.15	19.84	20.20	18.81	15.71	14.25	14.74	16.50	16.74	17.71	18.94	19.89
15	19.19	19.86	20.22	18.77	15.73	14.03	14.78	16.56	16.75	17.76	18.99	19.93
16	19.21	19.88	20.24	18.76	15.64	14.01	14.82	16.62	16.77	17.80	19.03	19.96
17	19.22	19.90	20.26	18.76	15.47	13.67	14.90	16.68	16.81	17.84	19.08	20.00
18	19.26	19.92	20.27	18.74	14.90	13.68	14.94	16.73	16.83	17.87	19.12	20.07
19	19.29	19.92	20.28	18.74	14.55	13.68	14.97	16.78	16.87	17.91	19.15	20.11
20	19.31	19.91	20.29	18.74	14.39	13.56	15.05	16.77	16.89	17.97	19.18	20.15
21	19.33	19.94	20.30	18.76	14.31	13.44	15.11	16.77	16.92	18.00	19.23	20.18
22	19.35	19.96	20.31	18.77	14.31	13.53	15.17	16.79	16.96	18.03	19.25	20.22
23	19.38	19.96	20.29	18.68	14.26	13.64	15.20	16.70	17.00	18.07	19.29	20.25
24	19.40	19.97	20.25	18.53	14.34	13.74	15.25	16.59	17.02	18.12	19.31	20.28
25	19.42	19.98	20.24	18.53	14.41	13.82	15.29	16.60	17.06	18.17	19.32	20.33
26	19.43	19.99	20.22	18.52	14.46	13.92	15.36	16.62	17.09	18.21	19.34	20.35
27	19.47	20.03	20.19	18.52	14.49	14.04	15.45	16.65	17.12	18.24	19.40	20.39
28	19.49	20.05	20.17	18.52	14.53	14.08	15.50	16.70	17.14	18.30	19.44	20.41
29	19.51	20.05	20.15	18.53	---	14.11	15.56	16.73	17.18	18.34	19.46	20.44
30	19.54	20.06	20.15	18.50	---	14.13	15.62	16.46	17.25	18.38	19.49	20.47
31	19.57	---	20.14	18.45	---	14.18	---	16.40	---	18.42	19.52	---
MAX	19.57	20.06	20.31	20.08	17.36	14.72	15.62	16.79	17.25	18.42	19.52	20.47
WTR YR 1982	MEAN	17.73		HIGH	13.44		LOW	20.47				

## GROUND-WATER RECORDS

## FRANKLIN COUNTY--Continued

400101083021800. Local number, FR-10.

LOCATION.--Lat 40°01'01", long 83°02'18", Hydrologic Unit 05060001, Kenny and Ackerman Roads, Columbus.

Owner: Ohio State University..

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 4 in (0.1 m), depth 75 ft (22.9 m), cased.

DATUM.--Altitude of land-surface datum is 775 ft (236 m) from topographic map. Measuring point: Floor of instrument shelter 4.00 ft (1.219 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 48.20 ft (14.691 m) Oct. 7, 1954; minimum daily low, 37.76 ft (11.509 m) Apr. 13, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 42.69 ft (13.012 m) Sep. 28; minimum recorded daily low, 40.02 ft (12.198 m) Apr. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.84	41.32	41.14	41.61	41.57	---	40.28	40.78	40.57	41.15	41.44	
2	---	41.30	41.27	41.62	41.46	---	40.26	40.38	40.74	41.33	41.72	
3	---	41.30	41.29	41.45	41.36	---	40.02	40.72	40.66	40.93	41.49	
4	---	41.31	41.49	41.41	41.48	---	40.23	40.75	40.68	40.99	41.55	
5	---	41.20	41.56	41.53	41.40	---	40.19	40.88	40.65	41.06	41.55	
6	---	41.11	41.56	41.38	41.41	---	40.27	40.39	40.70	41.07	41.58	
7	---	41.20	41.35	41.65	41.42	---	40.33	40.34	40.96	41.46	41.68	
8	---	41.24	41.46	41.65	41.39	---	40.22	40.41	40.97	41.14	41.54	
9	---	41.42	41.53	41.46	41.21	---	40.09	40.43	41.05	41.28	41.78	
10	---	41.42	41.52	41.53	41.26	---	40.14	40.46	40.85	41.06	41.66	
11	---	41.39	41.56	41.56	41.28	---	40.05	40.71	40.83	40.99	41.81	
12	---	41.41	41.62	41.56	41.28	---	40.04	40.83	40.74	41.81	41.98	
13	---	41.39	41.61	41.45	41.21	---	40.06	41.08	40.79	41.33	42.07	
14	---	41.35	41.55	41.35	41.14	---	40.09	40.82	41.38	41.82	41.71	
15	---	41.24	41.49	41.41	41.04	---	40.10	40.99	40.84	41.63	42.15	
16	---	41.15	41.59	41.63	41.01	---	40.07	40.74	40.70	41.44	42.23	
17	---	41.15	41.59	41.65	40.87	---	40.07	40.85	40.77	41.50	42.10	
18	---	41.20	41.63	41.52	40.98	---	40.15	40.95	40.83	41.36	42.23	
19	---	41.19	41.66	41.51	40.99	---	40.03	40.62	41.09	41.20	42.05	
20	---	41.15	41.74	41.61	40.94	---	40.19	40.51	40.84	41.25	42.01	
21	---	41.31	41.60	41.73	40.93	---	40.29	40.58	40.77	41.80	42.02	
22	---	41.37	41.38	41.73	41.00	---	40.34	40.64	41.12	41.57	42.02	
23	---	41.37	41.62	41.30	40.92	---	40.37	40.70	41.05	41.78	42.05	
24	---	41.41	41.66	41.45	40.87	---	40.30	40.62	41.00	41.60	42.08	
25	---	41.43	41.62	41.52	41.23	---	40.19	40.59	41.00	41.43	42.20	
26	---	41.38	41.58	41.62	41.25	---	40.14	40.89	40.93	42.21	42.48	
27	---	41.42	41.48	41.62	---	---	40.36	40.56	40.94	41.92	42.43	
28	---	41.51	41.60	41.62	---	---	40.44	40.52	41.28	41.49	42.69	
29	---	41.52	41.76	41.65	---	---	40.55	40.53	41.01	41.43	42.43	
30	41.33	41.50	41.76	41.39	---	---	40.46	40.52	41.56	41.75	42.40	
31	41.33	---	41.60	41.33	---	40.22	---	40.52	---	41.47	42.38	
MAX	41.33	41.52	41.76	41.73	41.57	40.22	40.55	41.08	41.56	42.21	42.69	
WTR YR 1982	MEAN	41.20		HIGH	40.02		LOW	42.69				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

315

## GALLIA COUNTY

383638082103300. Local number, G-2.

LOCATION.--Lat 38°36'38", long 82°10'33", Hydrologic Unit 05090101, 5.9 mi (9.5 km) east of Crown City.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 12 in (0.3 m), depth 65 ft, (19.8 m), cased.

DATUM.--Altitude of land-surface datum is 552 ft (168 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--June 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded daily low, 33.10 ft (10.089 m) Feb. 10-11, 1977; minimum daily low 16.43 ft (5.008 m) Mar. 8, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 32.86 ft (10.016 m) Aug. 23; minimum daily low, 21.51 ft (6.556 m) Mar. 23.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.61	30.78	32.17	30.45	29.29	28.11	25.81	30.54	29.57	30.90	32.08	
2	32.61	31.04	32.23	30.56	27.39	28.73	25.57	30.63	30.00	30.74	32.22	
3	32.56	31.11	32.09	30.64	26.46	28.86	25.70	30.84	30.30	31.06	32.26	
4	32.41	31.46	32.04	30.50	26.48	28.96	25.71	30.95	30.71	30.95	32.37	
5	32.34	31.62	31.96	29.94	25.68	28.99	25.51	31.01	30.69	29.94	32.40	
6	32.30	31.69	31.91	28.69	25.57	28.06	25.89	31.13	28.92	29.93	32.46	
7	32.28	31.72	31.87	28.13	25.96	28.14	25.95	31.28	28.80	30.21	32.52	
8	32.35	31.72	31.96	28.24	26.33	28.15	25.99	31.38	28.69	30.65	32.52	
9	32.34	31.68	31.88	28.63	26.80	27.96	26.34	31.29	28.64	30.60	32.56	
10	32.33	31.46	31.69	28.91	26.61	27.74	26.52	31.33	28.61	30.82	32.57	
11	32.32	31.61	31.66	29.69	26.76	27.70	26.67	31.32	28.27	31.10	32.25	
12	32.38	31.78	31.62	30.43	27.23	27.49	26.81	31.45	28.18	31.32	32.36	
13	32.53	31.93	31.80	30.55	27.72	26.01	27.46	31.51	28.31	31.45	32.59	
14	32.55	31.96	31.95	30.68	28.16	25.32	27.54	31.43	28.12	31.53	32.61	
15	32.52	32.16	31.95	30.77	28.51	24.57	27.84	31.63	27.67	31.65	32.64	
16	32.61	32.21	32.01	30.83	28.58	23.93	28.14	31.70	28.10	31.66	32.72	
17	32.63	32.32	31.96	31.03	27.61	23.01	28.33	31.73	28.39	31.72	32.74	
18	32.63	32.39	32.00	31.12	26.74	22.40	28.58	31.75	28.42	31.88	32.73	
19	32.66	32.42	31.99	31.29	25.37	21.84	28.66	31.78	28.50	31.90	32.78	
20	32.62	32.49	32.14	31.43	24.83	22.19	28.95	31.82	29.09	31.93	32.81	
21	32.64	32.37	32.17	31.42	25.42	22.37	29.08	31.76	29.64	31.96	32.83	
22	32.69	32.23	32.29	30.92	25.54	21.94	29.43	31.63	29.93	31.97	32.80	
23	32.74	32.12	32.10	30.08	25.68	21.51	29.77	31.78	30.17	31.89	32.86	
24	32.63	32.17	30.73	28.50	26.34	22.29	29.95	31.78	30.45	32.03	---	
25	32.59	32.20	29.50	27.30	26.51	23.16	29.95	31.31	30.76	32.14	---	
26	32.61	32.12	28.75	28.39	26.71	23.60	30.18	31.09	30.89	32.27	---	
27	32.65	32.11	29.12	28.71	27.35	23.78	30.38	31.12	31.16	32.29	---	
28	32.56	32.24	29.50	29.14	27.81	24.01	30.37	30.99	31.21	32.30	---	
29	31.68	32.20	29.68	29.29	---	24.82	30.09	31.07	31.23	32.29	---	
30	30.85	31.95	29.90	29.39	---	25.66	30.29	30.67	31.23	32.28	---	
31	30.82	---	30.22	29.39	---	25.85	---	29.07	---	32.26	---	
MAX	32.74	32.49	32.29	31.43	29.29	28.99	30.38	31.82	31.23	32.30	32.86	
WTR YR 1982	MEAN	30.00		HIGH	21.51		LOW	32.86				

## GROUND-WATER RECORDS

## GREENE COUNTY

394411083561300. Local number, GR-1.

LOCATION.--Lat 39°44'11", long 83°56'13", Hydrologic Unit 05090202, along Massies Creek near U.S. 68 north of Xenia.

Owner: Xenia Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 30 in (0.75 m), depth 77 ft (23.5 m), cased.

DATUM.--Altitude of land-surface datum is 818.88 ft (249.595 m). Measuring point: Floor of instrument shelter 4.50 ft (1.372 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.60 ft (6.584 m) July 7, 1916; minimum daily low, 0.70 ft (0.213 m) above land surface Aug. 3, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 12.08 ft (3.682 m) Dec. 16; minimum daily low, 4.25 ft (1.295 m) Feb. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.20	9.98	10.51	10.07	4.25	8.66	8.37	8.54	8.13	8.81	10.04	10.45
2	10.16	9.95	10.33	9.93	5.89	8.79	8.02	8.55	8.70	8.93	9.76	10.89
3	10.28	10.01	10.33	10.01	9.96	8.75	7.76	8.72	8.70	8.64	9.34	10.92
4	10.17	10.14	10.99	9.93	6.37	8.81	7.91	8.75	8.79	8.58	9.25	10.91
5	10.03	10.11	11.20	9.40	6.79	8.60	8.04	8.67	9.09	9.23	9.30	10.57
6	9.99	10.08	11.17	9.50	7.18	8.66	8.32	8.69	9.09	9.42	9.94	10.33
7	9.86	10.22	11.08	9.52	7.23	8.78	8.37	8.65	9.16	9.63	8.49	10.78
8	9.85	10.66	11.16	9.76	7.48	9.18	8.49	8.50	9.26	9.31	9.99	11.11
9	9.86	10.87	11.35	9.75	7.64	9.23	8.43	8.44	9.28	9.01	10.45	10.85
10	9.91	10.98	11.39	9.78	7.77	9.23	8.54	9.19	9.16	8.96	10.43	10.73
11	10.01	11.01	11.42	9.34	7.85	9.23	8.49	9.42	8.99	8.97	10.46	10.67
12	10.16	10.91	11.47	9.36	7.95	8.84	8.43	9.61	9.00	10.11	10.26	10.93
13	10.27	10.94	11.51	9.39	7.98	8.64	8.51	9.45	8.64	10.55	10.31	11.21
14	10.25	11.27	11.64	9.45	8.25	8.49	8.46	9.21	9.22	10.81	10.12	11.30
15	10.31	11.06	11.64	9.43	8.49	8.22	8.49	10.02	8.89	11.02	10.08	10.82
16	10.30	10.68	12.08	9.62	8.24	8.17	8.45	9.91	8.89	11.07	10.49	10.84
17	10.16	10.64	12.05	9.79	7.47	7.59	8.38	9.74	8.74	11.08	9.36	11.11
18	10.31	10.56	11.26	10.00	7.53	7.53	8.46	9.46	8.85	11.02	9.89	11.02
19	10.54	10.53	11.08	10.09	7.85	7.71	8.44	9.49	8.84	11.03	10.39	11.15
20	10.65	10.30	11.37	10.12	8.06	7.88	8.39	8.61	8.74	10.61	10.74	11.00
21	10.66	10.17	11.22	10.32	8.08	7.04	8.44	8.76	8.85	10.64	10.05	11.23
22	10.73	10.33	11.38	10.20	8.05	7.62	8.50	8.60	8.91	10.66	10.57	11.55
23	10.70	10.38	11.27	9.59	8.06	7.82	8.49	8.56	8.97	10.24	10.44	11.64
24	10.66	10.29	10.44	7.97	8.17	7.88	8.58	8.84	9.61	10.25	10.03	11.47
25	10.59	10.11	10.44	8.04	8.20	7.97	8.40	8.93	9.64	10.26	9.51	9.25
26	10.32	10.05	10.53	7.95	8.45	8.10	8.41	9.01	9.71	10.59	9.68	10.40
27	9.77	10.06	10.53	7.94	8.49	8.41	8.52	9.03	9.09	10.76	10.44	10.87
28	9.51	10.17	10.24	8.21	8.56	8.56	8.56	8.84	9.29	10.79	10.19	10.85
29	9.58	10.42	10.13	8.51	---	8.74	8.58	8.39	8.94	10.85	9.99	11.55
30	9.60	10.57	10.19	8.51	---	8.69	8.57	7.98	8.79	10.87	10.98	11.14
31	9.83	---	10.19	7.04	---	8.49	---	8.04	---	10.65	10.24	---
MAX	10.73	11.27	12.08	10.32	8.56	9.23	8.58	10.02	9.71	11.08	10.98	11.64
WTR YR 1982	MEAN	9.54		HIGH	4.25		LOW	12.08				

## GROUND-WATER RECORDS

317

## GREENE COUNTY--Continued

394425083551100. Local number, GR-10.

LOCATION.--Lat 39°44'25", long 83°55'11", Hydrologic Unit 05090202, in well field along Massies Creek north of Xenia.

Owner: Xenia Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 100 ft (30 m), cased.

DATUM.--Altitude of land-surface datum is 835 ft (255 m), from topographic map. Measuring point: Floor of instrument shelter at land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.40 ft (5.218 m) Nov. 5, 1977; minimum daily low, 0.15 ft (0.046 m) Feb. 1, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.18 ft (4.017 m) Sep. 27; minimum recorded daily low, 0.15 ft (0.046 m) FEB. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.32	9.08	9.34	8.68	.15	5.91	7.12	8.39	8.32	9.14	8.86	8.81
2	9.24	7.83	9.19	8.68	2.66	5.85	6.88	8.39	8.32	10.26	6.86	8.77
3	9.22	7.70	9.12	8.59	2.87	5.86	6.87	7.04	8.50	10.17	7.74	8.85
4	9.18	7.74	8.97	7.29	3.44	5.85	6.69	6.97	8.47	9.20	7.80	8.83
5	8.95	7.74	8.94	6.75	3.96	5.71	5.60	6.95	9.11	10.54	7.86	8.87
6	9.04	7.79	8.88	6.61	4.37	6.61	5.83	6.95	9.19	10.88	7.86	8.90
7	9.12	7.85	8.66	6.75	5.74	7.38	5.90	9.64	9.29	11.07	7.86	9.86
8	9.19	9.46	8.87	6.93	6.11	7.48	5.96	8.98	9.25	10.73	7.86	12.22
9	9.28	9.46	9.04	6.96	6.31	7.52	6.09	10.28	9.76	9.78	12.25	12.94
10	9.28	9.37	9.08	8.18	6.43	7.53	6.17	10.41	9.04	9.89	8.30	9.12
11	9.27	9.36	9.18	8.27	6.58	7.48	7.52	9.68	9.52	9.66	8.35	9.06
12	8.00	9.36	9.21	8.27	7.44	7.13	7.64	9.33	9.32	10.18	8.60	9.07
13	7.91	9.38	9.25	8.26	6.78	6.88	8.24	10.18	9.18	8.04	8.90	9.06
14	7.98	9.38	8.02	9.07	7.17	6.77	7.82	10.27	9.14	7.75	8.51	12.58
15	7.98	9.24	7.95	8.34	7.17	6.68	7.87	10.18	9.35	7.55	8.57	11.17
16	8.00	9.15	8.11	8.39	6.78	6.70	7.89	8.94	9.37	7.43	12.87	11.74
17	8.00	9.27	7.94	8.42	5.93	6.32	7.95	10.48	9.27	7.31	8.73	12.44
18	9.65	9.35	7.97	7.12	5.97	6.55	7.95	10.59	9.44	7.17	8.75	11.87
19	9.65	9.38	7.98	7.09	6.22	6.71	6.67	10.62	9.48	7.12	8.75	9.17
20	9.63	9.38	9.62	7.07	6.28	6.35	6.58	10.44	9.85	7.07	9.09	12.46
21	9.63	9.37	9.60	8.94	6.96	5.85	6.61	9.12	9.64	7.01	8.76	11.18
22	9.59	9.37	9.58	7.17	6.37	5.05	6.62	8.98	10.60	6.95	8.76	11.37
23	9.59	8.12	9.57	6.93	6.54	5.27	6.68	8.87	10.49	7.86	8.76	11.32
24	9.58	8.03	9.04	6.97	6.69	5.45	6.88	8.66	10.88	6.92	8.77	9.25
25	9.49	8.02	8.74	7.37	6.80	5.58	7.97	8.78	11.13	6.90	8.46	9.12
26	9.22	7.93	8.53	7.61	6.96	5.69	8.07	8.35	10.60	6.89	8.40	9.12
27	9.22	7.80	8.40	7.70	6.98	5.81	8.18	9.58	10.95	6.87	8.49	13.18
28	9.01	7.75	8.16	8.50	7.05	7.50	8.28	8.07	11.08	6.86	8.60	13.07
29	8.98	9.36	8.40	8.07	---	7.55	8.32	8.70	10.89	6.86	8.63	11.44
30	9.03	9.36	8.49	8.08	---	7.54	8.39	8.10	9.76	6.86	9.87	12.58
31	9.07	---	8.59	7.11	---	7.50	---	8.42	---	6.86	9.52	---
MAX	9.65	9.46	9.62	9.07	7.44	7.55	8.39	10.62	11.13	11.07	12.87	13.18
WTR YR 1982	MEAN	8.35		HIGH	.15		LOW	13.18				

## GROUND-WATER RECORDS

## HAMILTON COUNTY

390653084485700. Local number, H-5.

LOCATION.--Lat 39°06'53", long 84°48'57", Hydrologic Unit 05080002, 3.1 mi (5.0 km) south of Elizabethtown.

Owner: E. I. Dupont de Nemours and Company.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.20 m), depth 122 ft (37.2 m), cased to 122 ft (37.2 m).

DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of shelter, 4.00 ft (1.219 m) above land-surface datum.

REMARKS.--Water levels affected by stages in the Ohio and Great Miami Rivers.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 74.50 ft (22.708 m) Sept. 10-11, 1957; minimum daily low, 24.15 ft (7.361 m) Mar. 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 53.35 ft (16.261 m) Nov. 21; minimum daily low, 39.81 ft (12.134 m) Mar. 20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	53.04	51.82	46.12	49.99	48.44	52.08	49.27	---	---	---
2	---	---	53.06	51.83	45.97	50.02	48.19	52.22	50.37	---	---	---
3	---	---	53.03	51.90	45.64	50.58	47.57	52.25	51.07	---	---	---
4	---	---	53.11	51.63	44.69	50.54	47.01	52.29	51.48	---	---	---
5	---	---	53.04	50.96	44.56	50.51	47.20	52.40	51.75	---	---	---
6	---	---	53.03	50.07	44.60	50.21	48.00	52.32	51.67	---	---	---
7	53.32	---	53.00	49.20	44.61	49.93	48.51	52.38	50.68	---	---	---
8	---	---	53.12	48.72	45.89	49.81	48.81	52.39	50.11	---	---	---
9	---	53.12	53.08	49.59	47.55	49.94	49.28	52.42	50.29	---	---	---
10	---	53.13	52.84	50.27	47.82	49.81	49.43	52.43	50.27	---	---	---
11	---	53.08	52.81	50.98	47.57	49.64	49.87	52.44	49.82	---	---	---
12	---	53.22	52.85	51.27	47.71	49.20	49.85	52.47	49.55	---	---	---
13	---	53.17	52.90	51.65	48.91	48.17	50.12	52.59	50.10	---	---	---
14	---	53.19	52.89	51.78	49.62	46.53	50.61	52.62	50.43	---	---	---
15	---	53.23	53.08	51.87	50.08	45.07	50.67	52.49	50.49	---	---	---
16	---	53.24	53.09	52.07	50.06	43.47	50.56	52.60	49.96	---	---	---
17	---	53.28	52.91	51.95	49.63	42.27	50.90	52.57	49.44	---	---	---
18	---	53.26	52.78	52.09	47.86	40.91	51.06	52.55	50.05	---	---	---
19	---	53.29	52.74	52.13	45.82	40.31	51.07	52.59	50.54	---	---	---
20	---	53.28	52.74	52.14	44.18	39.81	51.50	52.77	50.74	---	---	---
21	---	53.35	52.76	52.23	43.74	39.83	51.53	52.56	52.89	---	---	---
22	---	53.26	52.78	52.08	44.72	40.41	51.69	52.31	---	---	---	---
23	---	53.24	52.78	50.70	45.36	40.44	51.76	52.49	---	---	---	---
24	---	53.26	52.46	46.50	46.40	40.83	51.90	52.51	---	---	---	---
25	---	53.19	51.80	45.24	47.15	42.20	51.96	52.42	---	---	52.78	---
26	---	53.12	50.89	44.93	47.91	44.12	51.99	52.24	---	---	---	---
27	---	53.15	50.12	47.69	48.80	45.49	52.09	52.33	---	---	---	---
28	---	53.17	50.58	49.42	49.47	46.06	52.12	52.25	---	---	---	---
29	---	53.18	51.03	49.78	---	46.94	52.00	52.09	---	---	---	---
30	---	53.11	51.32	50.06	---	47.83	52.00	51.76	---	---	---	---
31	---	---	51.57	49.39	---	48.41	---	50.46	---	---	---	---
MAX	53.32	53.35	53.12	52.23	50.08	50.58	52.12	52.77	52.89	---	52.78	---
WTR YR 1982	MEAN	50.21	---	HIGH	39.81	---	LOW	53.35	---	---	---	---

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## HAMILTON COUNTY--Continued

391039084291500. Local number, H-11.

LOCATION.--Lat 39°10'39", long 84°29'15", Hydrologic Unit 05090203, 5.6 mi (9.0 km) north of Riverfront Stadium in Cincinnati.

Owner: Procter and Gamble Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m), depth 148 ft (45.1 m), cased.

DATUM.--Altitude of land-surface datum is 539 ft (164 m), from topographic map.

Measuring point: floor of instrument shelter 2.23 ft (0.680 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 129.72 ft (39.539 m) Oct 25, 1948; minimum daily low, 75.42 ft (22.988 m) Sept. 1, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 75.77 ft (23.095 m) Dec. 5; minimum daily low, 73.82 ft (22.500 m) Sept. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.33	75.64	74.81	75.45	75.54	74.92	74.67	74.52	74.27	74.41	74.05	73.92
2	75.62	75.55	75.19	75.43	75.39	74.71	74.55	74.49	74.36	74.36	73.99	73.82
3	75.74	75.50	75.27	75.06	75.16	74.82	74.24	74.49	74.35	74.04	73.96	74.01
4	75.60	75.40	75.65	75.17	75.49	74.58	74.64	74.48	74.35	74.11	74.01	74.15
5	75.52	75.28	75.77	75.38	75.35	74.96	74.63	74.42	74.36	74.19	74.08	74.13
6	75.52	75.32	75.69	75.05	75.41	74.91	74.84	74.31	74.41	74.18	74.10	74.09
7	75.59	75.43	75.19	75.63	75.34	74.94	74.91	74.20	74.36	74.14	74.08	74.08
8	75.60	75.44	75.43	75.66	75.14	75.13	74.71	74.44	74.24	74.17	73.96	74.07
9	75.57	75.67	75.55	75.16	75.04	75.18	74.61	74.49	74.24	74.13	73.95	74.05
10	75.52	75.65	75.48	75.57	75.18	74.93	74.65	74.52	74.37	74.03	74.10	73.93
11	75.63	75.54	75.44	75.31	75.18	74.70	74.52	74.44	74.45	74.00	74.13	73.92
12	75.65	75.61	75.52	75.34	75.18	74.73	74.49	74.40	74.35	74.15	74.17	73.94
13	75.71	75.57	75.48	75.00	75.10	74.87	74.49	74.43	74.32	74.19	74.06	73.91
14	75.65	75.44	75.27	74.96	74.95	74.94	74.57	74.41	74.38	74.17	74.02	73.88
15	75.52	75.25	75.18	75.14	74.81	74.67	74.53	74.40	74.19	74.18	73.99	73.87
16	75.55	75.06	75.44	75.66	74.75	74.51	74.47	74.43	74.13	74.17	73.96	73.99
17	75.50	75.16	75.39	75.66	74.66	74.83	74.67	74.39	74.23	74.12	73.98	73.99
18	75.39	75.28	75.52	75.23	74.80	74.90	74.75	74.27	74.24	74.06	74.06	73.86
19	75.64	75.13	75.59	75.21	74.99	74.81	74.52	74.27	74.23	73.97	74.10	73.88
20	75.62	75.34	75.58	75.39	74.87	74.50	74.62	74.24	74.23	74.07	74.03	73.85
21	75.65	75.51	75.24	75.50	74.85	74.78	74.85	74.29	74.15	74.14	74.07	73.98
22	75.57	75.53	74.86	75.49	75.04	74.79	74.85	74.29	74.26	74.03	74.07	74.00
23	75.75	75.46	75.45	74.88	74.94	74.77	74.87	74.34	74.38	74.10	73.93	74.08
24	75.76	75.47	75.58	75.16	75.15	74.54	74.60	74.33	74.39	74.17	73.98	73.95
25	75.43	75.53	75.45	75.33	75.46	74.67	74.41	74.27	74.27	74.18	74.05	73.90
26	75.24	75.23	75.21	75.55	75.44	74.82	74.24	74.16	74.23	74.14	74.10	73.89
27	75.48	75.44	75.10	75.43	75.16	75.09	74.59	74.12	74.19	74.05	74.01	73.93
28	75.64	75.57	75.32	75.51	75.06	75.14	74.67	74.21	74.06	74.03	74.23	74.11
29	75.58	75.57	75.62	75.53	---	74.87	74.56	74.21	73.98	74.11	74.28	74.13
30	75.65	75.44	75.63	74.98	---	74.59	74.57	74.18	74.28	74.03	74.04	74.14
31	75.67	---	75.23	74.99	---	74.60	---	74.17	---	74.01	73.99	---
MAX	75.76	75.67	75.77	75.66	75.54	75.18	74.91	74.52	74.45	74.41	74.28	74.15
WTR YR 1982	MEAN	74.75		HIGH	73.82		LOW	75.77				

## GROUND-WATER RECORDS

## HAMILTON COUNTY-Continued

391101084172100. Local number, H-3.

LOCATION.--Lat 39°11'01", long 84°17'21", Hydrologic Unit 05090202, southeast of Miamiville.

Owner: Indian Hills Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 4 in (0.1 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 532.22 ft (162.221 m). Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August, 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 35.75 ft (10.897 m) Aug. 29, 1955; minimum daily low, 15.60 ft (4.755 m) Feb. 28, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 31.65 ft (9.647 m) Jul. 17; minimum daily low, 21.70 ft (6.614 m) Feb. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.60	30.40	30.20	28.80	21.70	27.75	26.10	29.30	26.80	29.20	27.70	27.10
2	27.65	30.55	29.95	27.90	22.55	27.70	26.00	28.60	27.15	29.30	28.25	26.75
3	27.65	30.55	29.95	28.00	23.00	27.95	25.95	28.30	27.35	29.45	28.05	26.75
4	27.90	30.55	29.80	27.45	23.90	28.15	24.60	28.90	27.55	28.85	28.25	26.65
5	27.95	30.70	30.00	26.75	24.50	27.90	---	29.35	27.50	28.15	28.10	26.70
6	28.00	31.15	27.45	26.70	24.70	26.70	25.00	29.45	28.40	28.75	27.15	27.55
7	27.75	30.80	27.80	28.45	25.30	26.90	25.60	29.10	29.00	29.10	26.95	27.45
8	27.45	30.90	28.30	25.30	25.70	27.15	25.75	27.95	28.30	29.30	27.00	28.00
9	27.60	30.55	27.75	25.30	26.10	27.55	---	28.10	28.45	29.30	26.90	27.90
10	27.80	30.75	28.55	27.95	26.25	27.60	---	28.60	28.05	29.35	26.95	27.75
11	27.50	30.80	28.10	28.65	26.15	27.55	---	29.40	27.55	29.50	26.75	28.30
12	28.35	30.65	28.20	28.95	26.35	26.75	---	29.35	28.10	29.70	26.50	28.00
13	28.55	31.20	28.00	29.70	26.85	25.85	26.85	29.30	28.30	30.15	27.10	27.70
14	28.45	30.75	28.15	28.95	27.15	25.55	26.80	29.70	28.50	30.65	27.25	27.55
15	28.35	30.90	28.30	28.90	27.25	25.75	26.95	30.10	28.55	30.85	27.30	27.65
16	27.35	31.35	28.05	28.55	26.85	25.35	27.05	30.05	28.70	31.00	27.30	27.70
17	27.65	31.25	29.90	29.20	25.25	24.75	27.40	30.30	28.40	31.65	27.45	27.50
18	27.65	31.10	28.45	29.15	25.10	25.10	27.50	30.30	27.60	31.60	27.55	27.40
19	29.60	31.05	28.45	29.60	25.25	25.25	27.50	30.30	28.05	28.15	27.70	26.80
20	29.85	30.40	28.50	29.65	25.55	24.95	27.35	30.35	27.55	27.95	27.95	27.00
21	29.90	29.65	28.50	29.55	25.95	22.75	27.25	27.70	27.85	28.30	27.25	27.05
22	29.95	29.05	28.60	29.80	26.30	24.00	27.35	25.10	27.85	28.50	27.15	27.05
23	29.95	27.75	28.25	26.90	26.40	24.45	25.60	25.00	28.30	27.55	27.10	27.25
24	30.00	---	30.20	24.35	26.70	24.95	27.45	25.20	28.60	27.00	26.95	27.45
25	30.00	30.05	30.65	25.30	26.95	25.25	27.35	27.70	29.00	27.95	26.90	27.25
26	30.00	30.05	30.65	25.45	26.85	25.20	24.90	27.80	29.50	28.45	26.35	27.25
27	30.25	29.95	30.10	26.45	27.35	25.95	24.75	25.60	29.85	28.35	26.30	27.75
28	30.25	30.05	28.05	26.90	27.40	26.20	27.50	25.50	29.15	27.15	26.20	28.80
29	29.85	30.25	30.70	27.35	---	26.90	28.15	27.10	28.10	26.75	26.95	29.75
30	29.85	30.20	31.35	27.25	---	27.25	27.35	26.50	28.90	26.90	27.00	29.50
31	30.10	---	31.40	25.50	---	26.80	---	26.65	---	27.40	27.05	---
MAX	30.25	31.35	31.40	29.80	27.40	28.15	28.15	30.35	29.85	31.65	28.25	29.75
WTR YR 1982	MEAN	27.91		HIGH	21.70		LOW	31.65				

## GROUND-WATER RECORDS

321

## HAMILTON COUNTY--Continued

391201084281600. Local number, H-10.

LOCATION.--Lat 39°12'01", long 84°28'16", Hydrologic Unit 05090203, Section Road, Cincinnati.

Owner: National Distillers.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 170 ft (51.8 m), cased.

DATUM.--Altitude of land-surface datum is 544.7 ft (166.025 m). Measuring point: Floor of instrument shelter 8.13 ft (2.478 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--January 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 121.58 ft (37.058 m) Nov. 3, 10, 1950; minimum daily low, 65.41 ft (19.937 m) Sep. 26, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 68.80 ft (20.970 m) Jan. 21; minimum daily low, 65.41 ft (19.937 m) Sep. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67.20	67.44	66.98	67.32	67.36	66.74	66.50	66.14	65.88	65.80	65.59	55.45
2	67.36	67.37	67.17	67.29	67.21	66.65	66.38	66.12	65.90	65.74	65.54	55.43
3	67.44	67.35	67.21	67.10	67.12	66.73	66.33	66.13	65.87	65.53	65.52	55.54
4	67.34	67.28	67.40	67.23	67.25	66.65	66.52	66.11	65.86	65.59	65.56	55.62
5	67.30	67.19	67.47	67.30	67.13	66.85	66.46	66.06	65.86	65.64	65.57	55.60
6	67.30	67.22	67.42	67.13	67.18	66.76	66.59	66.01	65.89	65.64	65.57	55.58
7	67.34	67.28	67.13	67.40	67.12	66.81	66.62	65.94	65.86	65.61	65.55	55.59
8	67.35	67.29	67.28	67.40	67.00	66.94	66.45	66.07	66.95	65.61	65.48	55.59
9	67.35	67.45	67.35	67.13	66.98	66.96	66.38	66.08	65.82	65.58	65.51	55.55
10	67.31	67.42	67.30	67.35	67.02	66.75	66.39	66.09	65.86	65.51	65.59	55.48
11	67.38	67.36	67.30	67.20	67.00	66.64	66.30	66.02	65.88	65.54	65.60	55.48
12	67.41	67.40	67.35	67.23	66.99	66.64	66.27	65.99	65.79	65.62	65.63	55.49
13	67.46	67.37	67.33	67.01	66.93	66.76	66.31	66.00	65.78	65.64	65.54	55.47
14	67.41	67.29	67.19	66.98	66.79	66.81	66.34	65.98	65.80	65.61	65.52	55.47
15	67.33	67.18	67.16	67.11	66.75	66.58	66.27	65.97	67.11	65.61	65.51	55.46
16	67.35	67.10	67.30	67.37	68.10	66.48	66.20	65.99	65.74	65.58	65.49	55.53
17	67.30	67.15	67.27	67.36	67.83	66.71	66.36	65.97	65.77	65.54	65.49	55.52
18	67.30	67.21	67.35	67.14	66.83	66.74	66.38	67.46	65.74	65.50	65.53	55.43
19	67.45	67.12	67.39	67.15	66.91	66.64	66.20	66.03	65.73	65.50	65.54	55.44
20	67.42	67.25	67.39	67.22	66.76	66.43	66.33	65.94	65.72	65.54	65.50	55.44
21	67.44	67.34	67.18	68.80	66.80	66.64	66.42	65.95	65.67	65.57	65.51	55.50
22	67.36	67.35	66.97	67.45	66.91	66.63	66.41	65.91	65.74	65.49	65.50	55.49
23	67.49	67.29	67.34	66.99	66.80	66.59	66.40	65.94	65.79	65.52	65.45	55.53
24	67.49	67.32	67.39	67.15	66.99	66.42	66.23	65.92	65.79	65.55	65.47	55.44
25	67.29	67.35	67.30	67.24	67.15	66.52	66.08	65.89	65.71	65.57	65.52	55.43
26	67.18	67.16	67.15	67.35	67.11	66.60	66.05	65.82	65.68	65.55	65.55	55.41
27	67.34	67.29	67.13	67.26	66.91	66.76	66.25	65.80	65.65	65.50	65.50	55.50
28	67.44	67.38	67.27	68.24	66.87	66.79	66.28	65.84	65.57	65.50	65.65	55.60
29	67.38	67.38	67.41	67.34	---	66.63	66.19	65.82	65.56	67.12	65.68	55.61
30	67.44	67.29	67.42	66.98	---	66.42	66.18	65.82	65.74	65.75	65.51	55.62
31	67.44	---	67.15	67.16	---	66.48	---	65.80	---	65.58	65.50	---
MAX	67.49	67.45	67.47	68.80	68.10	66.96	66.62	67.46	67.11	67.12	65.68	55.62
WTR YR 1982	MEAN	66.49		HIGH	65.41		LOW	68.80				

## GROUND-WATER RECORDS

## HAMILTON COUNTY--Continued

391214084470100. Local number, H-1.

LOCATION.--Lat 39°12'14", long 84°47'01", Hydrologic Unit 05080003, Kilby Road 4 mi (6.4 km) southeast of Harrison.

Owner: Robert Weber.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 124 ft (37.8 m), cased.

DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of instrument shelter 2.70 ft (0.823 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--February 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.80 ft (7.864 m) Jan. 18-20, 1964; minimum daily low, 14.00 ft (4.267 m) Jan. 22, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 24.26 ft (7.394 m) Sep. 30; minimum daily low, 18.20 ft (5.547 m) Feb. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.79	23.68	24.11	23.23	18.53	19.77	19.73	21.45	20.23	21.64	22.74	23.51
2	23.80	23.70	23.94	23.15	19.18	19.94	19.86	21.50	20.13	21.77	22.82	23.55
3	23.81	23.76	23.91	23.16	19.18	20.08	19.85	21.54	20.51	21.86	22.87	23.58
4	23.85	23.72	23.91	22.68	19.17	20.10	19.56	21.58	20.78	21.94	22.91	23.62
5	23.86	23.70	23.92	21.82	19.31	19.86	19.73	21.62	20.93	22.06	22.93	23.65
6	23.88	23.71	23.96	22.02	19.58	20.03	19.74	21.66	21.12	22.14	22.94	23.69
7	23.90	23.71	23.97	22.05	19.56	20.18	19.86	21.67	21.23	22.19	22.98	23.71
8	23.93	23.73	24.01	22.12	19.54	20.43	19.93	21.46	21.25	22.22	22.98	23.74
9	23.94	23.73	24.00	---	19.92	20.58	20.04	21.23	20.44	22.21	22.98	23.77
10	23.96	23.85	24.00	---	19.93	20.66	20.09	21.38	20.50	22.25	23.01	23.81
11	23.98	23.93	24.00	---	19.83	20.69	20.13	21.48	21.03	22.26	23.05	23.83
12	24.00	23.97	23.98	---	20.56	19.87	20.27	21.56	21.23	22.26	23.07	23.86
13	24.03	23.99	24.00	---	20.55	19.92	20.38	21.63	21.33	22.33	23.08	23.90
14	24.04	24.01	24.00	---	20.62	19.89	20.49	21.67	21.47	22.37	23.12	23.92
15	24.06	24.03	23.81	---	20.68	19.91	20.53	21.72	21.54	22.44	23.18	23.95
16	24.06	24.05	23.82	---	20.48	19.75	20.71	21.76	21.54	22.48	23.23	23.97
17	23.99	24.11	23.86	---	19.55	19.25	20.72	21.79	21.31	22.50	23.26	24.00
18	23.97	24.24	23.90	---	18.20	19.43	20.73	21.83	21.40	22.53	23.29	24.03
19	23.98	24.25	23.91	---	19.25	19.31	20.82	21.86	21.51	22.54	23.33	24.04
20	23.98	24.09	23.92	---	19.46	18.87	20.91	21.80	21.54	22.29	23.35	24.07
21	23.87	24.04	23.94	---	19.47	18.76	21.00	20.87	21.61	22.42	23.31	24.11
22	23.86	24.06	23.95	---	19.47	19.03	21.06	21.07	21.67	22.42	23.34	24.13
23	23.85	24.07	23.96	22.39	19.59	19.32	21.11	21.16	21.74	22.39	23.39	24.14
24	23.85	24.09	23.90	20.40	19.34	19.66	21.14	21.16	21.83	22.46	23.42	24.15
25	23.86	24.09	23.55	20.84	19.41	19.75	21.14	21.34	21.91	22.52	23.44	24.16
26	23.86	24.09	23.30	21.00	19.53	19.76	21.21	21.13	21.96	22.63	23.44	24.17
27	23.83	24.10	23.15	21.03	19.61	19.83	21.28	21.14	22.00	22.69	23.23	24.20
28	23.71	24.11	23.03	21.09	19.67	19.91	21.33	20.90	21.95	22.69	23.28	24.21
29	23.69	24.13	23.27	21.31	---	20.12	21.36	19.95	21.39	22.64	23.32	24.23
30	23.68	24.14	23.36	21.36	---	20.20	21.41	19.90	21.33	22.63	23.38	24.26
31	23.68	---	23.37	19.76	---	20.19	---	20.22	---	22.71	23.47	---
MAX	24.06	24.25	24.11	23.23	20.68	20.69	21.41	21.86	22.00	22.71	23.47	24.26
WTR YR 1982	MEAN	22.15		HIGH	18.20		LOW	24.26				

## GROUND-WATER RECORDS

323

## HAMILTON COUNTY--Continued

391324084272500. Local number, H-9.

LOCATION.--Lat 39°13'24", long 84°27'25", Hydrologic Unit 05090203, 9.1 mi (14.6 km) north of Riverfront Stadium in Cincinnati.

Owner: Diamond National Corporation.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in (0.25 m), depth drilled 168 ft (51.2 m) present depth 163 ft (49.7 m), cased.

DATUM.--Altitude of land-surface datum is 555.30 ft (169.255 m). Measuring point: Floor of instrument shelter, 2.76 ft (0.841 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 136.80 ft (41.697 m) Nov. 9, 1947, Feb. 15, 1948; minimum, daily low, 72.23 ft (22.016 m) Sept. 20, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 76.83 ft (23.418 m) July. 30; minimum daily low, 68.49 ft (20.876 m) Apr. 12.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.32	70.23	70.00	---	70.34	69.49	69.28	69.30	68.73	69.26	72.37	70.10
2	70.71	70.54	70.20	---	70.09	69.23	69.18	69.33	69.09	69.20	71.82	70.01
3	70.74	70.58	70.00	---	69.64	69.28	68.93	69.43	69.12	68.90	71.55	70.34
4	70.37	70.55	70.38	---	70.10	68.97	69.27	69.40	69.19	68.97	71.78	70.33
5	70.59	70.44	70.01	---	69.94	69.32	68.91	69.31	68.82	69.04	71.25	70.39
6	70.64	70.48	69.91	69.53	70.08	69.23	68.97	69.17	68.85	68.94	71.11	70.20
7	70.76	70.10	69.77	70.17	69.86	69.26	69.03	69.07	68.98	69.03	70.97	70.06
8	70.82	70.01	69.61	70.18	70.02	69.44	68.79	69.32	69.05	69.10	70.79	70.12
9	70.82	70.74	70.16	69.41	69.73	69.45	68.62	69.42	69.10	69.98	70.64	70.09
10	70.40	70.71	69.94	69.70	70.00	69.17	68.65	69.39	69.25	70.74	71.49	69.97
11	70.25	70.68	69.71	69.82	70.10	68.90	68.52	69.45	69.34	68.61	70.73	69.94
12	70.72	70.70	69.41	69.89	70.06	68.92	68.49	69.44	69.20	73.08	70.71	69.97
13	70.88	70.71	69.39	69.45	69.80	69.05	68.93	69.49	69.16	74.08	70.54	69.97
14	70.85	70.74	69.64	69.43	69.52	69.14	69.19	69.30	69.26	74.65	70.45	69.98
15	70.74	69.95	69.88	69.62	69.18	68.85	69.04	69.25	69.08	75.09	70.37	69.96
16	70.81	70.04	70.18	69.81	69.51	68.67	69.05	69.34	69.01	75.37	69.93	70.06
17	70.43	70.30	69.53	69.81	69.43	68.96	69.19	69.40	69.14	71.94	70.65	70.04
18	69.99	70.43	69.66	69.68	69.41	69.01	69.30	69.30	69.14	70.88	70.28	69.87
19	70.70	70.31	69.62	69.60	69.90	68.88	69.04	69.23	68.99	71.69	70.27	69.89
20	70.74	70.51	69.26	70.13	69.61	68.53	69.36	69.23	68.64	74.17	71.29	69.85
21	70.76	70.52	69.52	70.26	69.62	68.84	69.59	69.27	68.87	74.69	71.46	69.93
22	70.70	70.10	69.98	70.13	70.20	68.85	69.61	69.24	69.05	71.09	70.45	69.78
23	70.91	70.35	69.55	69.12	69.96	68.81	69.59	69.28	69.20	74.10	71.57	69.91
24	70.62	70.37	---	69.37	70.25	68.60	69.30	69.29	69.23	75.22	71.78	69.79
25	70.07	70.51	---	69.66	70.59	68.78	69.04	69.22	69.10	75.42	70.45	69.73
26	70.30	69.74	---	70.19	70.42	68.90	69.05	69.10	68.83	76.00	70.45	69.74
27	70.59	69.88	---	69.92	70.13	69.17	69.43	69.03	68.50	76.19	70.23	69.79
28	70.74	69.99	---	69.96	69.89	69.22	69.48	69.11	68.61	76.58	70.40	70.00
29	70.69	70.10	---	70.13	---	69.10	69.25	68.92	68.76	76.79	70.45	70.01
30	70.77	70.11	---	69.31	---	69.04	69.36	68.70	69.10	76.83	70.27	70.05
31	70.51	---	---	69.28	---	69.21	---	68.57	---	73.13	70.22	---
MAX	70.91	70.74	70.38	70.26	70.59	69.49	69.61	69.49	69.34	76.83	72.37	70.39
WTR YR 1982	MEAN	70.03		HIGH	68.49		LOW	76.83				

## GROUND-WATER RECORDS

## HAMILTON COUNTY--Continued

391341084275300. Local number, H-8.

LOCATION.--Lat 39°13'41", long 84°27'53", Hydrologic Unit 05090203. Vine and Water Streets, Wyoming.

Owner.--Wyoming Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 194 ft (59.1 m), cased.

DATUM.--Altitude of land-surface datum is 576.2 ft (175.626 m). Measuring point: Top of platform 3.30 ft (1.006 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 148.86 ft (45.373 m) Dec. 1, 1948; minimum daily low, 95.50 ft (29.108 m) Jul. 10, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 101.70 ft (30.998 m) Oct. 22, 29; minimum daily low, 95.50 ft (29.108 m) Jul. 10.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98.20	98.15	96.25	96.75	98.35	97.15	96.25	96.35	99.15	95.55	97.10	96.35
2	98.40	98.05	96.45	96.95	96.90	96.80	95.90	96.70	95.60	99.10	97.15	99.15
3	98.60	98.00	96.65	96.30	99.95	97.05	95.60	96.65	96.30	97.65	97.00	96.25
4	98.50	97.80	97.00	96.30	96.75	96.85	96.05	96.70	96.30	98.95	96.70	95.95
5	98.50	97.75	97.05	96.40	96.70	96.20	95.80	98.70	95.55	99.35	96.35	95.90
6	98.30	97.75	100.25	96.20	96.70	96.05	96.35	99.45	95.60	99.75	96.85	99.35
7	98.30	97.75	96.50	96.70	99.75	96.10	96.45	99.15	97.80	96.50	96.45	99.15
8	98.30	97.80	96.75	96.50	96.55	96.60	96.15	100.10	99.10	95.70	96.25	96.20
9	98.30	98.00	97.45	96.15	97.20	96.55	99.75	99.40	99.20	95.55	96.50	96.85
10	98.45	97.90	97.45	96.55	97.05	96.15	98.05	95.95	96.00	95.50	96.75	96.20
11	98.70	101.20	97.55	96.50	96.50	96.35	95.95	95.85	95.55	95.85	96.45	96.10
12	98.55	97.90	97.60	96.55	97.10	99.15	96.00	96.40	98.55	95.90	96.75	99.65
13	98.60	98.45	100.00	96.50	97.00	96.60	99.25	96.90	98.25	96.20	96.50	98.45
14	101.25	97.45	97.15	96.85	97.00	96.80	96.10	96.75	96.00	99.25	99.30	100.00
15	98.35	100.20	97.15	96.95	96.95	96.45	96.05	101.10	95.75	---	96.55	97.00
16	98.25	97.15	97.30	97.50	96.65	98.60	96.00	97.25	98.75	---	96.65	97.00
17	98.00	99.45	97.10	97.45	96.60	99.50	96.15	100.90	95.85	---	100.15	100.15
18	98.00	97.40	97.50	97.10	96.90	96.15	98.85	97.05	95.90	---	97.10	96.25
19	98.20	96.90	97.60	97.05	97.00	96.30	96.25	97.15	95.80	96.60	100.75	96.30
20	98.20	---	97.45	97.20	96.50	95.50	96.40	97.00	95.85	96.65	96.70	96.05
21	98.25	97.25	97.05	97.30	96.90	98.25	96.60	96.75	99.30	96.95	96.75	99.95
22	101.70	100.75	99.20	97.05	97.25	99.15	96.65	96.90	95.90	96.65	96.50	96.30
23	98.30	98.45	97.30	100.20	96.80	99.30	99.95	100.15	96.15	96.50	96.55	95.90
24	100.90	97.50	97.45	97.30	100.45	95.60	96.45	96.75	96.10	96.90	99.85	95.85
25	101.45	97.60	97.40	97.15	97.60	95.70	96.25	100.20	96.20	---	96.55	95.70
26	101.20	97.30	97.00	97.50	97.55	95.90	96.10	96.55	96.15	---	96.65	98.65
27	98.00	97.75	97.05	99.40	97.30	96.35	96.45	96.55	96.15	96.80	96.55	98.40
28	98.10	---	97.25	97.45	97.25	96.25	99.30	96.50	95.95	96.60	96.55	99.70
29	101.70	---	97.55	97.35	---	96.65	99.15	96.35	95.85	96.70	96.60	95.75
30	97.90	100.20	97.50	97.00	---	96.50	96.55	96.35	96.00	96.70	96.45	99.50
31	100.75	---	96.85	96.80	---	96.10	---	96.40	---	100.05	99.80	---
MAX	101.70	101.20	100.25	100.20	100.45	99.50	99.95	101.10	99.30	100.05	100.75	100.15
WTR YR 1982	MEAN	97.40		HIGH	95.50		LOW	101.70				

## GROUND-WATER RECORDS

325

## HAMILTON COUNTY--Continued

391442084262900. Local number, H-7.

LOCATION.--Lat 39°14'42", long 84°26'29", Hydrologic Unit 05090203, at Evendale.

Owner: General Electric Corp.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m), depth 180 ft (54.9 m), cased.

DATUM.--Altitude of land-surface datum is 555.40 ft (159.286 m). Measuring point: Floor of instrument shelter 7.78 ft (2.371 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April, 1941 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 101.09 ft (30.812 m) Jan. 29, 1964; minimum daily low, 43.17 ft (13.158 m) Apr. 13, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 51.23 ft (15.615 m) Aug. 12; minimum daily low, 46.31 ft (14.115 m) May 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.95	49.94	50.20	50.00	49.87	49.22	48.71	46.57	46.80	47.92	48.84	49.86
2	50.31	49.84	50.21	50.00	49.75	49.00	48.57	46.49	47.33	47.79	48.73	49.71
3	50.35	49.83	50.06	49.63	49.62	49.06	48.11	46.51	47.38	47.43	50.18	50.18
4	50.21	49.71	50.25	49.90	49.99	48.83	48.41	46.56	47.82	47.07	49.83	50.18
5	50.32	49.58	50.28	50.02	49.95	49.00	48.40	46.54	47.73	47.13	49.80	50.06
6	50.66	49.60	50.16	50.10	50.23	48.99	47.60	46.60	47.30	47.09	49.55	49.99
7	50.65	49.72	50.07	50.52	50.18	49.13	47.61	46.45	47.44	47.68	50.53	51.19
8	50.38	49.74	50.18	50.52	49.70	49.28	47.29	46.48	47.53	48.12	49.95	51.07
9	50.39	50.18	50.21	49.85	49.44	49.31	46.90	46.50	49.17	47.99	49.82	50.92
10	50.38	50.16	50.25	50.14	49.50	49.05	47.57	46.61	48.85	47.88	49.90	50.20
11	50.35	50.02	50.35	50.11	49.57	48.90	47.63	46.53	48.09	47.86	49.84	49.90
12	50.39	49.98	50.36	50.14	49.56	48.88	47.53	46.39	47.77	48.50	51.23	49.74
13	50.38	49.92	50.27	49.84	49.42	49.21	47.52	46.40	47.78	51.18	50.89	49.58
14	50.58	49.80	49.96	49.77	49.38	49.28	47.65	46.43	47.84	49.15	49.80	49.49
15	50.48	49.55	50.18	50.08	49.00	49.00	47.26	47.23	48.55	48.40	49.53	49.42
16	50.49	49.38	50.32	50.28	49.59	48.93	47.24	46.73	48.00	48.36	49.73	49.73
17	50.19	49.60	50.20	50.29	48.74	49.21	47.50	46.62	47.87	48.33	49.83	49.64
18	49.92	49.62	50.39	49.91	48.80	49.21	47.53	49.41	50.79	48.36	49.81	49.38
19	50.04	49.33	50.39	50.02	48.84	49.04	47.25	47.37	50.00	48.75	49.72	49.39
20	50.04	49.76	50.33	50.12	48.72	48.75	47.51	46.83	47.83	48.87	50.03	49.50
21	50.06	49.93	49.90	50.34	48.84	48.98	47.57	46.86	47.49	49.45	50.78	50.76
22	49.99	49.93	49.50	50.32	49.07	48.99	47.61	46.64	47.46	49.68	49.93	49.83
23	50.16	49.87	50.12	49.41	49.03	48.97	47.61	46.96	47.72	49.38	49.77	50.11
24	50.15	50.10	50.18	49.71	49.33	48.97	47.34	46.96	47.60	49.37	49.75	49.62
25	49.80	50.08	50.06	50.02	49.43	49.22	47.13	46.74	47.81	49.11	49.86	49.55
26	49.57	49.81	49.86	50.11	49.41	49.25	46.93	46.42	48.20	49.05	49.74	49.79
27	49.85	49.90	49.74	49.96	49.30	49.33	47.09	46.41	48.27	48.59	50.00	49.58
28	50.04	49.98	50.12	49.95	49.32	49.31	46.89	46.41	47.78	48.64	50.16	49.72
29	50.00	49.88	50.25	49.97	---	49.13	46.73	46.31	47.25	48.57	49.99	50.18
30	50.00	49.75	50.26	49.63	---	48.98	46.67	46.45	47.76	48.46	49.95	50.33
31	50.01	---	49.93	49.49	---	48.75	---	46.70	---	48.84	49.96	---
MAX	50.66	50.18	50.39	50.52	50.23	49.33	48.71	49.41	50.79	51.18	51.23	51.19
WTR YR 1982	MEAN	49.10		HIGH	46.31		LOW	51.23				

## GROUND-WATER RECORDS

## HAMILTON COUNTY--Continued

391608084254400. Local number, H-6.

LOCATION.--Lat 39°16'08", long 84°25'44", Hydrologic Unit 05090203, water-treatment plant in Glendale.

Owner: Glendale Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 167 ft (50.9 m), cased.

DATUM.--Altitude of land-surface datum is 570.65 ft (173.934 m). Measuring point: Floor of instrument shelter 4.05 ft (1.234 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July, 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 84.10 ft (25.634 m) Oct. 14, 1960; minimum daily low, 23.10 ft (7.041 m) Apr. 28, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 46.90 ft (14.295 m) Dec. 23; minimum recorded daily low, 37.20 ft (11.339 m) May. 31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.90	43.20	44.60	44.50	43.10	---	41.10	39.10	38.50	40.20	39.90	42.00
2	44.00	43.60	45.10	44.30	43.10	---	---	37.60	39.00	40.30	41.30	41.80
3	43.30	44.20	45.30	43.80	43.30	---	---	39.10	39.70	---	41.30	40.90
4	42.10	44.30	45.60	44.50	43.80	---	---	38.30	40.00	---	41.00	41.00
5	43.20	44.30	44.90	45.20	43.40	---	---	40.20	39.50	---	41.10	40.30
6	43.30	44.60	44.70	45.50	43.20	---	---	39.70	---	---	41.30	40.20
7	43.50	44.60	45.10	45.90	41.50	---	---	39.60	---	---	41.80	40.90
8	43.60	42.70	45.70	45.70	---	---	---	39.50	---	---	41.80	41.70
9	43.70	44.40	46.00	45.50	---	---	---	38.70	---	---	42.10	42.00
10	43.40	45.10	45.40	43.90	---	41.40	---	39.20	---	---	41.90	41.90
11	42.70	45.50	46.10	44.50	---	42.30	---	39.50	---	---	41.40	42.60
12	43.40	45.80	45.70	45.50	---	41.10	---	39.90	39.30	---	41.70	41.20
13	44.00	45.20	45.20	45.50	---	40.90	---	40.00	---	---	40.80	41.80
14	44.00	45.30	45.70	46.40	---	---	---	39.90	---	---	---	42.30
15	44.00	43.40	45.80	45.70	---	40.80	---	39.90	---	---	---	42.30
16	43.20	44.50	46.10	45.50	---	40.50	---	38.80	39.60	---	42.10	42.60
17	43.00	45.30	46.30	44.10	---	40.90	---	39.30	39.90	---	42.00	43.00
18	41.30	45.50	46.30	44.60	---	40.80	---	39.60	40.00	---	41.50	42.40
19	42.80	45.00	45.60	45.10	---	40.50	---	39.70	---	---	41.60	41.70
20	43.10	45.30	43.90	45.50	---	40.30	---	40.30	---	---	41.30	41.70
21	43.20	45.50	45.60	44.90	---	---	---	39.60	---	---	41.20	42.00
22	43.10	44.00	45.30	44.70	---	---	---	39.80	---	---	41.30	42.70
23	44.50	44.00	46.90	44.10	---	---	---	38.40	---	---	41.30	42.40
24	43.30	44.70	45.90	43.70	41.00	---	---	38.70	41.40	---	42.70	41.90
25	42.60	44.50	44.70	43.70	41.30	---	---	39.30	---	---	41.90	41.50
26	42.00	43.00	45.00	43.80	41.70	---	---	39.90	---	---	41.50	39.90
27	42.90	43.00	44.50	43.70	41.70	---	---	40.50	---	---	41.00	42.30
28	43.70	---	45.00	44.10	---	---	---	40.50	---	---	---	42.50
29	43.80	---	45.90	43.90	---	---	39.00	39.20	---	---	---	41.80
30	44.20	43.70	45.90	43.40	---	---	39.40	37.70	---	41.60	---	40.10
31	44.10	---	45.80	42.10	---	41.10	---	37.20	---	40.30	42.00	---
MAX	44.50	45.80	46.90	46.40	43.80	42.30	41.10	40.50	41.40	41.60	42.70	43.00
WTR YR 1982	MEAN	42.61		HIGH	37.20		LOW	46.90				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## HAMILTON COUNTY--Continued

391733084392400. Local number, H-2.

LOCATION.--Lat 39°17'33", long 84°39'24", Hydrologic Unit 05080002, East Miami River Road 1.5 mi (2.4 km) south of Ross.

Owner: Lee Wilhelm.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in (0.15 m), depth 89 ft (27.1 m), cased.

DATUM.--Altitude of land-surface datum is 534.21 ft (162.827 m), Measuring point: Floor of instrument shelter 8.97 ft (2.734 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.37 ft (7.428 m) Sept. 24, 25, 1972; minimum daily low 1.60 ft (0.488 m) June 16, 1958. (Water level above land surface but could not be measured during January 1959 flood.)

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.18 ft (5.846 m) Dec. 23; minimum daily low, 6.85 ft (2.088 m) Feb. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982.  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.86	18.05	18.22	17.26	6.85	11.31	12.56	14.95	13.20	15.03	17.09	17.13
2	17.94	18.12	18.29	17.16	7.08	11.71	---	15.06	13.06	14.98	17.09	17.24
3	17.98	18.14	18.36	17.01	7.70	12.00	---	15.19	12.82	14.97	17.14	17.32
4	18.00	18.14	18.48	16.81	8.19	12.19	---	15.32	12.88	14.98	17.22	17.33
5	18.03	18.16	18.55	16.59	8.96	12.28	---	15.41	13.06	15.01	17.25	17.31
6	18.11	18.25	18.55	16.13	9.70	12.25	---	15.51	13.23	15.18	17.25	17.19
7	18.18	18.31	18.60	15.87	10.37	12.00	---	15.69	13.47	15.37	17.24	17.11
8	18.25	18.32	18.70	15.83	10.91	12.12	---	15.74	13.52	15.47	17.18	17.25
9	18.28	18.32	18.81	15.83	11.55	12.42	---	15.72	13.60	15.53	17.13	17.36
10	18.29	18.32	18.90	15.90	12.07	12.67	---	15.58	13.77	15.65	17.11	17.44
11	18.31	18.32	19.01	16.03	12.54	12.91	---	15.45	13.92	15.66	17.09	17.48
12	18.29	18.33	19.08	16.17	12.89	12.91	---	15.48	14.02	15.76	17.02	17.48
13	18.28	18.36	19.10	16.36	13.10	12.59	---	15.49	14.17	15.87	16.99	17.49
14	18.25	18.41	19.10	16.54	13.38	12.18	---	15.51	14.34	15.99	17.00	17.51
15	18.26	18.46	19.09	16.75	13.52	11.55	---	15.54	14.51	16.08	17.00	17.55
16	18.33	18.50	19.05	16.99	13.53	11.12	---	15.60	14.68	16.18	17.06	17.61
17	18.36	18.53	19.01	17.15	13.37	10.82	---	15.69	14.68	16.18	17.14	17.61
18	18.43	18.56	18.97	17.32	12.57	10.41	---	15.75	14.56	16.17	17.25	17.59
19	18.46	18.62	18.97	17.51	11.41	10.14	---	15.81	14.27	16.18	17.32	17.59
20	18.46	18.65	19.02	17.62	10.55	10.02	---	15.86	14.11	16.29	17.33	17.53
21	18.47	18.65	19.08	17.67	10.09	9.70	---	15.78	14.16	16.41	17.35	17.48
22	18.46	18.64	19.14	17.67	9.88	9.25	---	15.45	14.26	16.53	17.35	17.46
23	18.47	18.66	19.18	17.40	9.78	9.45	---	15.22	14.35	16.61	17.27	17.49
24	18.47	18.71	19.10	16.59	9.92	9.87	---	15.11	14.45	16.61	17.20	17.59
25	18.46	18.72	18.74	15.70	9.95	10.36	---	15.07	14.56	16.60	17.19	17.67
26	18.40	18.72	18.31	15.37	10.13	10.81	---	15.20	14.69	16.63	17.15	17.73
27	18.41	18.69	17.95	15.43	10.46	11.20	---	15.28	14.85	16.72	16.97	17.77
28	18.41	18.63	17.70	15.61	10.89	11.50	---	15.22	15.00	16.83	16.88	17.77
29	18.32	18.50	17.55	15.72	---	11.85	14.83	14.84	15.04	16.93	16.86	17.73
30	18.18	18.40	17.51	15.77	---	12.20	14.89	14.18	15.04	17.01	16.95	17.66
31	18.08	---	17.41	15.56	---	12.56	---	13.50	---	17.08	17.02	---
MAX	18.47	18.72	19.18	17.67	13.53	12.91	14.89	15.86	15.04	17.08	17.35	17.77
WTR YR 1982	MEAN	15.85		HIGH	6.85		LOW	19.18				

GROUND-WATER RECORDS  
HAMILTON COUNTY--Continued

391748084393800. Local number, H-19.

LOCATION.--Lat 39°17'48", long 84°39'38", Hydrologic Unit 05080002, on left bank of Great Miami River 1.3 mi (2.1 km) southwest of Venice.

Owner: Southwest Ohio Water Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Collector-type industrial supply water-table well, diameter 20 ft (6.1 m), depth 144 ft (43.9 m) horizontal intakes at 95-100 ft (29.0-30.5 m).

PERIOD OF RECORD.--1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)	ALKA- LITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)
NOV 04...	1030	710	7.4	17.0	320	51	85	27	328	0	269	19
FEB 26...	1030	700	7.5	14.5	330	59	86	28	330	0	271	16
MAY 06...	1200	660	7.4	15.0	320	66	83	27	310	--	254	19
AUG 19...	1200	680	8.0	17.0	290	44	77	24	300	0	246	4.5

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, SUS- PENDED RECOV. (UG/L AS CR)
NOV 04...	69	49	.2	446	461	.020	1.9	1	1	0	10	--
FEB 26...	69	45	.7	467	553	.020	3.9	--	--	--	--	--
MAY 06...	63	37	.1	432	445	.040	3.1	--	--	--	--	--
AUG 19...	63	43	.1	377	386	.020	1.9	1	0	1	10	0

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 04...	<10	9	6	3	50	2	0	2	270	60	40	24
FEB 26...	--	--	--	--	20	--	--	--	250	--	--	--
MAY 06...	--	--	--	--	40	--	--	--	270	--	--	--
AUG 19...	10	28	0	28	120	7	0	7	230	50	20	35

## GROUND-WATER RECORDS

329

## HAMILTON COUNTY--Continued

391817084393300. Local number, H-4.

LOCATION.--Lat 39°18'17", long 84°39'33", Hydrologic Unit 05080002, 0.7 mi (1.1 km) southwest of Ross.

Owner: Southwestern Ohio Water Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 100 ft (30.3 m), cased.

DATUM.--Altitude of land-surface datum is 541.57 ft (165.071 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.16 ft (9.802 m) Nov. 20, 1971; minimum daily low, 11.60 ft (3.536 m) June 16, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 25.50 ft (7.772 m) Nov. 19; minimum daily low, 15.14 ft (4.615 m) Mar. 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	24.76	---	---	---	---	17.29	19.43	18.39	20.31	22.10	22.94
2	---	24.61	---	---	---	---	17.07	19.28	18.59	20.32	21.94	23.04
3	---	24.84	24.23	---	---	---	16.89	19.41	18.76	20.07	22.07	23.14
4	---	25.01	24.22	---	---	18.07	16.69	19.59	18.89	19.90	22.20	23.14
5	---	25.11	24.24	---	---	18.10	16.60	19.73	18.84	19.84	22.32	22.89
6	---	25.16	24.31	---	---	18.03	16.75	19.78	18.74	19.83	22.40	22.71
7	24.63	25.22	24.31	---	---	17.62	16.85	19.46	19.12	19.99	22.44	22.58
8	24.72	25.12	24.28	---	---	17.59	16.90	19.68	19.17	20.35	22.29	22.50
9	24.83	24.88	24.30	---	---	17.73	17.05	19.64	19.06	20.52	22.30	22.82
10	24.85	25.08	24.32	---	---	18.00	17.02	19.40	19.04	20.48	22.42	23.04
11	24.62	25.22	24.36	---	---	18.11	16.82	19.56	19.21	20.47	22.51	23.15
12	24.41	25.33	24.40	---	---	18.11	16.90	19.80	19.38	20.58	22.57	23.08
13	24.50	25.41	24.42	---	---	17.89	17.18	20.00	19.41	20.78	22.62	23.25
14	24.70	25.37	24.48	---	---	17.20	17.42	20.12	19.53	20.94	22.70	23.35
15	24.82	25.12	24.82	---	---	16.56	17.63	20.26	19.71	21.06	22.71	23.45
16	24.87	25.23	25.08	---	---	16.48	17.83	20.30	19.82	21.19	22.65	23.51
17	24.91	25.39	25.29	---	---	16.45	17.97	20.34	19.83	21.27	22.73	23.60
18	24.75	25.48	25.38	---	---	16.15	17.96	20.49	19.78	21.21	22.79	23.65
19	24.75	25.50	25.30	23.50	---	15.95	18.00	20.59	19.59	21.30	22.88	23.50
20	24.93	---	25.09	23.67	---	15.96	18.11	20.60	19.42	21.36	22.96	23.35
21	25.06	---	---	23.88	---	15.65	18.11	20.60	19.19	21.43	22.92	23.53
22	25.15	---	---	23.94	---	15.14	18.11	20.39	19.50	21.47	22.64	23.66
23	25.23	---	---	23.94	---	15.43	18.75	20.18	19.73	21.54	22.55	23.66
24	25.26	---	---	23.68	---	15.81	18.82	19.98	19.90	21.67	22.77	23.44
25	25.10	---	---	23.33	---	16.18	18.75	20.08	20.06	21.73	22.86	23.25
26	24.85	---	---	---	---	16.50	18.76	20.16	20.19	21.74	22.87	23.14
27	24.78	---	---	---	---	16.75	18.95	20.23	20.31	21.80	22.93	23.29
28	24.97	---	---	---	---	16.97	19.09	20.25	20.39	21.84	22.96	23.54
29	25.07	---	---	---	---	17.12	19.25	20.23	20.39	21.90	22.81	23.70
30	25.12	---	---	---	---	17.28	19.40	19.71	20.35	21.96	22.63	23.82
31	25.07	---	---	---	---	17.32	---	18.86	---	22.06	22.79	---
MAX	25.26	25.50	25.38	23.94	---	18.11	19.40	20.60	20.39	22.06	22.96	23.82
WTR YR 1982	MEAN	21.31	---	HIGH	15.14	---	LOW	25.50	---	---	---	---

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## HARDIN COUNTY

404218083503700. Local number, HN-1.

LOCATION.--Lat 40°42'18", long 83°50'37", Hydrologic Unit 05060001, at grain elevator in Alger.

Owner: Village of Alger.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 40 ft (12.2 m), cased.

DATUM.--Altitude of land-surface datum is 975 ft (297 m), from topographic map. Measuring point: Floor of instrument shelter 1.5 ft (0.457 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.15 ft (6.751 m) Dec. 14, 1964; minimum daily low, 5.85 ft (1.783 m) July 1, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.70 ft (6.005 m) Sep. 2; minimum daily low, 11.80 ft (3.597 m) Nov. 6.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.90	14.10	12.30	13.65	15.85	14.05	13.60	13.05	12.80	12.75	14.65	15.85
2	14.05	13.30	13.00	13.90	16.00	13.85	13.25	13.15	12.85	13.15	14.45	19.70
3	14.15	12.35	12.90	13.65	15.50	14.25	12.85	13.15	12.75	12.90	14.75	18.15
4	14.00	12.30	12.90	13.60	15.80	14.10	13.20	13.05	13.35	12.80	14.55	17.40
5	14.60	11.95	13.60	13.70	15.00	14.30	13.25	14.00	13.15	13.55	14.40	17.80
6	14.25	11.80	13.30	13.55	15.30	14.35	13.55	13.55	13.10	14.10	14.25	15.65
7	14.25	13.05	13.30	17.60	15.50	13.85	13.75	13.55	13.10	13.85	14.80	15.35
8	14.15	12.90	13.45	13.60	15.55	14.25	14.05	13.25	13.60	13.70	14.10	15.70
9	14.00	13.10	13.65	13.75	14.85	13.85	13.50	12.95	13.55	13.90	14.30	15.10
10	14.25	12.80	13.65	14.70	15.55	13.65	13.90	13.15	13.05	13.55	14.65	15.05
11	14.10	13.70	13.15	15.15	15.65	13.65	13.70	14.50	13.35	13.45	14.60	15.50
12	14.05	12.95	13.15	15.65	15.60	13.95	13.95	14.50	13.30	14.15	15.15	15.30
13	14.15	12.75	13.30	15.45	15.70	14.45	13.45	14.15	13.10	14.15	14.85	15.85
14	13.95	13.35	13.35	15.25	15.50	14.40	13.20	14.70	14.00	15.00	15.65	15.35
15	13.60	12.85	12.55	15.35	15.50	14.15	13.30	16.75	12.45	15.10	15.75	15.30
16	13.75	12.90	13.05	16.05	15.20	13.00	13.20	17.10	14.70	14.55	16.60	15.45
17	14.00	13.70	13.25	16.45	15.10	13.15	13.05	15.15	13.05	14.35	16.65	15.20
18	14.05	13.15	13.30	16.40	14.95	13.10	13.10	15.10	12.95	13.75	16.55	15.45
19	13.95	12.50	13.85	16.15	15.00	13.00	13.35	14.00	12.80	13.70	16.35	15.70
20	13.95	12.45	14.05	16.00	14.85	12.80	12.75	13.70	13.25	13.80	16.85	15.70
21	13.75	12.95	14.55	17.45	14.75	12.55	13.10	13.40	13.65	14.40	14.75	15.65
22	13.85	13.35	14.60	17.90	15.25	12.75	13.50	13.70	13.00	14.20	14.90	15.55
23	14.10	13.30	14.55	17.10	14.90	12.85	12.40	13.55	13.40	14.20	14.95	15.55
24	14.80	13.10	14.35	16.90	15.05	12.90	14.40	13.60	13.25	14.50	14.80	15.80
25	14.35	13.35	14.00	16.45	15.00	13.00	13.85	13.55	13.55	14.65	14.70	15.90
26	14.25	13.90	14.45	16.60	14.50	13.25	13.50	14.00	13.65	15.15	15.45	15.55
27	13.90	13.20	13.80	16.20	14.55	13.60	13.70	13.70	13.10	14.60	14.70	16.00
28	12.90	13.15	14.00	16.60	14.20	13.60	13.40	12.85	13.05	14.40	15.55	15.70
29	13.00	13.00	18.35	16.45	---	13.65	13.00	13.00	12.55	14.80	15.75	15.70
30	13.05	13.00	13.60	16.10	---	13.20	12.95	12.45	13.20	14.65	15.85	16.00
31	13.00	---	13.55	15.65	---	13.15	---	13.45	---	15.70	16.05	---
MAX	14.80	14.10	18.35	17.90	16.00	14.45	14.40	17.10	14.70	15.70	16.85	19.70
WTR YR 1982	MEAN	14.22		HIGH	11.80		LOW	19.70				

## HOCKING COUNTY

393200082235300. Local number, HK-1.

LOCATION.--Lat 39°32'00", long 82°23'53", Hydrologic Unit 05060002, at railroad yards southeast edge of Logan.

Owner: Chessie System.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 88 ft (26.8 m), cased.

DATUM.--Altitude of land-surface datum is 710 ft (216 m), from topographic map. Measuring point: Top of gage platform 4.90 ft (1.494 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.35 ft (6.507 m) Dec. 21, 22, 1967; minimum daily low, 9.11 ft (2.777 m) Apr. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 17.68 ft (5.389 m) Nov. 25; minimum daily low, 13.58 ft (4.139 m) Mar. 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.33	17.58	17.56	17.23	15.48	15.85	14.70	16.09	15.82	16.27	16.80	17.12
2	17.34	17.60	17.52	17.21	14.95	15.91	14.62	16.13	15.88	16.30	16.83	17.12
3	17.35	17.60	17.48	17.15	14.93	15.97	14.62	16.25	15.95	16.34	16.86	17.03
4	17.36	17.60	17.50	17.12	14.98	15.97	14.53	16.26	16.01	16.35	16.88	16.90
5	17.39	17.60	17.49	17.04	15.08	15.96	14.49	16.23	16.01	16.29	16.88	16.94
6	17.40	17.59	17.49	16.93	15.23	15.75	14.63	16.26	15.86	16.31	16.90	16.99
7	17.40	17.59	17.49	16.96	15.38	15.65	14.71	16.30	15.89	16.36	16.92	17.03
8	17.41	17.60	17.52	16.99	15.50	15.67	14.76	16.31	15.95	16.37	16.89	17.07
9	17.42	17.60	17.54	17.02	15.62	15.76	14.86	16.27	16.00	16.31	16.81	17.11
10	17.43	17.59	17.56	17.04	15.74	15.81	14.90	16.30	15.95	15.81	16.73	17.14
11	17.44	17.60	17.58	16.99	15.83	15.84	14.95	16.32	15.78	15.85	16.71	17.15
12	17.46	17.60	17.60	17.02	15.89	15.79	14.98	16.35	15.85	15.95	16.73	17.17
13	17.47	17.60	17.59	17.03	15.95	15.41	15.07	16.38	15.92	16.03	16.79	17.20
14	17.48	17.59	17.54	17.06	15.98	15.21	15.15	16.42	15.98	16.10	16.83	17.22
15	17.49	17.59	17.55	17.09	16.02	15.09	15.23	16.44	16.03	16.17	16.88	17.22
16	17.50	17.56	17.59	17.11	16.01	15.06	15.32	16.47	16.03	16.23	16.93	17.10
17	17.50	17.57	17.61	17.10	15.80	14.90	15.38	16.50	15.80	16.29	16.96	17.08
18	17.52	17.61	17.62	17.05	15.53	14.72	15.39	16.53	15.61	16.32	16.99	17.13
19	17.53	17.62	17.63	17.07	15.31	14.77	15.43	16.56	15.69	16.34	17.01	17.17
20	17.53	17.61	17.60	17.09	15.21	14.77	15.51	16.56	15.77	16.39	17.03	17.20
21	17.54	17.52	17.56	17.11	15.23	14.23	15.57	16.38	15.86	16.42	17.05	17.24
22	17.55	17.43	17.55	17.11	15.30	13.58	15.63	16.25	15.93	16.46	17.07	17.25
23	17.55	17.46	17.54	17.04	15.37	13.67	15.69	16.03	16.01	16.50	17.10	17.28
24	17.54	17.63	17.42	16.31	15.47	13.88	15.74	16.06	16.06	16.54	17.11	17.29
25	17.52	17.68	17.23	15.93	15.57	14.07	15.79	16.14	16.13	16.59	17.10	17.31
26	17.54	17.65	17.16	15.78	15.65	14.24	15.85	16.21	16.17	16.63	16.93	17.31
27	17.55	17.55	17.14	15.87	15.72	14.42	16.00	16.27	16.16	16.66	16.93	17.32
28	17.56	17.55	17.15	16.01	15.79	14.53	16.01	16.27	16.19	16.69	16.99	17.32
29	17.55	17.55	17.18	16.08	---	14.64	16.12	16.04	16.20	16.72	17.03	17.31
30	17.57	17.56	17.21	16.14	---	14.74	16.12	15.94	16.23	16.75	17.08	17.33
31	17.57	---	17.23	16.14	---	14.77	---	15.75	---	16.77	17.11	---
MAX	17.57	17.68	17.63	17.23	16.02	15.97	16.12	16.56	16.23	16.77	17.11	17.33
WTR YR 1982	MEAN	16.49		HIGH	13.58		LOW	17.68				

## GROUND-WATER RECORDS

## KNOX COUNTY

402344082300700. Local number, K-1.

LOCATION.--Lat 40°23'44", long 82°30'07", Hydrologic Unit 05040003, in city park, Mt. Vernon.

Owner: Mt. Vernon Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.2 m), depth 90 ft (27-4 m), cased.

DATUM.--Altitude of land-surface datum is 1000 ft (305 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.69 ft (4.602 m) Nov. 26, 1980; minimum daily low, 1.43 ft (0.436 m) Apr. 9, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.01 ft (6.099 m) Sep. 30; minimum daily low, 6.79 ft (2.070 m) Dec. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.30	11.95	12.46	8.20	9.78	9.95	10.20	12.43	9.75	12.88	12.84	13.01
2	13.69	0.67	11.72	7.70	10.13	9.88	9.52	9.08	11.53	13.31	12.24	13.83
3	12.28	13.11	11.49	8.84	9.99	8.81	9.97	11.24	11.21	9.29	11.59	12.83
4	12.36	14.69	11.93	9.39	11.06	11.19	8.44	11.87	10.15	9.92	14.15	12.50
5	13.66	13.99	10.58	9.79	11.27	9.91	9.55	11.07	9.60	9.19	11.73	10.37
6	13.66	13.31	10.42	10.32	9.98	9.81	9.69	10.92	9.51	12.19	14.86	12.87
7	13.55	13.30	10.14	10.45	9.57	9.05	10.48	12.06	12.14	13.25	12.68	13.29
8	15.73	11.69	10.36	10.36	9.70	9.85	10.15	12.26	11.00	14.28	11.05	13.90
9	15.65	12.23	10.34	10.37	9.02	10.27	10.76	9.71	10.42	14.73	11.86	13.05
10	13.63	13.77	11.58	11.66	9.12	10.54	8.42	10.99	12.93	11.22	12.16	12.94
11	13.90	13.53	11.55	10.92	12.44	9.94	8.34	10.59	12.96	11.95	10.96	12.98
12	15.90	13.05	9.93	9.80	11.01	12.20	8.87	12.35	13.12	14.31	11.48	10.28
13	16.32	14.37	9.42	13.06	10.69	10.58	12.78	14.32	11.96	13.47	12.28	12.09
14	15.87	12.17	9.59	11.93	9.29	10.58	11.55	14.66	15.08	14.80	12.46	12.51
15	17.39	9.95	10.93	12.52	9.97	9.53	11.55	12.58	14.19	13.35	10.81	12.09
16	15.77	12.85	11.10	12.16	10.52	8.19	10.27	10.15	13.31	14.89	11.70	14.09
17	13.25	13.91	10.12	10.31	10.25	10.26	10.94	13.14	11.07	14.88	14.03	14.24
18	12.46	12.78	10.35	10.69	10.85	10.48	8.09	13.79	11.58	12.27	14.87	11.05
19	14.68	13.29	9.57	10.56	10.31	10.71	8.26	14.32	13.62	11.83	13.29	12.06
20	14.16	12.75	12.34	9.96	8.01	10.94	9.72	14.23	10.88	14.84	14.47	15.79
21	13.83	11.77	9.93	9.84	8.72	7.97	12.58	14.09	12.38	12.82	13.53	14.22
22	15.63	10.73	10.43	9.95	10.15	10.44	12.08	11.86	12.22	14.63	11.27	16.60
23	13.32	10.60	10.66	10.45	8.78	9.56	12.88	11.63	11.35	12.44	12.73	16.71
24	11.87	11.28	8.38	9.99	9.90	12.17	10.94	12.02	10.78	12.30	16.21	15.42
25	11.73	12.12	7.18	11.18	11.79	12.27	9.77	11.71	11.99	9.86	15.49	12.49
26	13.31	9.61	7.49	13.55	11.72	9.94	10.08	15.16	9.26	14.54	14.91	13.00
27	13.64	9.39	6.79	13.22	8.49	10.05	9.86	14.59	9.56	14.99	14.76	17.50
28	12.91	8.64	9.68	10.96	9.15	8.23	10.25	12.51	13.04	13.28	11.25	18.57
29	14.26	8.46	9.53	11.18	---	9.53	9.96	12.07	11.14	15.25	10.15	19.64
30	12.25	10.91	10.58	9.70	---	10.02	12.50	8.58	10.36	16.95	11.88	20.01
31	13.19	---	8.76	8.29	---	9.88	---	9.66	---	15.99	12.96	---
MAX	17.39	14.69	12.46	13.55	12.44	12.27	12.88	15.16	15.08	16.95	16.21	20.01
WTR YR 1982	MEAN	11.76		HIGH	6.79		LOW	20.01				

## GROUND-WATER RECORDS

333

## LICKING COUNTY

400159082282100. Local number, LI-2.

LOCATION.--Lat 40°01'59", long 82°28'21", Hydrologic Unit 05040006, Heath Refinery at Heath.

Owner: Heath Refinery.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well. diameter 6 in (0.15 m), depth 23 ft (7.010 m) cased.

DATUM.--Altitude of land-surface datum is 890 ft (271 m), from topographic map. Measuring point: Floor of instrument shelter 3.80 ft (1.158 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.55 ft (5.654 m); Dec. 17, 18, 1953; minimum daily low, 0.48 ft (0.146 m) above land surface June 23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 4.52 ft (1.378 m) Sep. 14; minimum daily low, 0.60 ft (0.018 m) Feb. 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.56		---	3.59	- .03	0.50	0.60	1.44	---	0.86	2.50	2.73
2	3.60		---	3.37	0.08	0.53	---	1.46	---	1.05	2.57	2.74
3	3.66		---	3.36	0.19	---	0.43	1.49	0.86	1.05	2.63	2.60
4	3.70		---	3.36	0.30	---	0.51	1.52	0.93	1.02	2.66	2.67
5	3.73		---	2.13	0.41	0.35	0.62	1.53	0.88	1.19	2.72	2.72
6	3.74		---	2.08	0.51	0.45	0.45	1.55	0.99	1.31	2.78	2.77
7	3.75		---	2.16	0.62	0.54	0.57	1.59	1.04	1.37	2.83	2.99
8	3.79		---	2.24	0.73	0.63	0.60	1.50	---	1.26	2.85	3.23
9	3.82		---	2.25	0.83	0.72	0.61	1.35	---	1.33	0.29	3.73
10	3.86		---	2.38	0.94	0.83	0.57	1.45	---	1.47	0.67	4.11
11	3.90		---	2.46	1.01	0.33	0.68	1.52	1.10	1.54	0.93	4.29
12	3.92		---	2.58	---	0.30	0.77	1.60	1.19	1.65	1.20	4.31
13	3.93		---	2.61	---	0.37	0.85	1.67	1.28	1.72	1.38	4.51
14	---		---	2.68	---	0.38	0.91	1.73	1.40	1.78	1.50	4.52
15	---		---	2.77	---	---	0.96	1.79	1.45	1.84	1.59	3.88
16	---		---	2.85	0.51	---	0.98	1.84	1.48	1.89	1.69	3.28
17	---		---	2.92	0.36	---	0.64	1.88	0.97	1.95	1.78	3.15
18	---		---	3.00	- .06	---	0.80	1.93	0.96	1.88	1.85	3.15
19	---		---	3.08	- .03	---	0.90	1.96	1.19	1.89	1.92	3.18
20	---		---	3.16	0.05	---	0.93	1.96	1.27	1.93	1.95	3.22
21	---		---	3.22	0.14	---	1.04	---	1.35	2.01	2.05	3.23
22	---		---	3.27	0.22	---	1.12	---	1.42	2.03	2.10	3.26
23	---		---	3.27	0.34	0.52	1.18	---	1.56	2.11	2.13	3.30
24	---		3.43	0.44	0.38	---	1.24	---	1.63	2.19	2.18	3.33
25	---		3.49	0.65	0.40	---	1.29	---	1.69	2.26	2.21	3.39
26	---		3.53	0.83	0.43	---	1.34	---	1.62	2.32	2.28	3.42
27	---		3.54	1.05	0.45	---	1.39	---	1.65	2.35	2.38	3.42
28	---		3.47	1.15	0.47	---	1.41	---	1.64	2.19	2.49	3.30
29	---		3.57	1.20	---	---	1.42	---	1.64	2.28	2.55	3.36
30	---		3.62	1.19	---	---	1.43	---	0.46	2.36	2.61	3.41
31	---		3.64	0.18	---	0.57	---	---	---	2.43	2.67	---
MAX	3.56		3.43	0.18	- .06	0.30	1.43	1.35	0.46	0.86	0.29	2.60
WTR YR 1982	MEAN	1.86		MAX	- .06	MIN	4.52					

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## MADISON COUNTY

395301083272200. Local number, M-2.

LOCATION.--Lat 39°53'01", long 83°27'22", Hydrologic Unit 05060002, U.S. 42 and Westmore Dr., London.

Owner: State of Ohio

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 350 ft (106.7 m); cased.

DATUM.--Altitude of land-surface datum is 1035 ft (315 m), from topographic map. Measuring point: Floor of instrument shelter 1.00 ft (0.305 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August, 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 35.18 ft (10.723 m) July 16, 1977; minimum daily low, 0.55 ft (1.68 m) above land surface Apr. 13, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 33.01 ft (10.061 m) Oct. 29; minimum daily low, .11 ft (0.034 m) above land surface datum Apr. 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.74	28.77	11.90	6.50	8.72	5.60	0.75	12.25	20.63	24.62	24.26	17.72
2	13.86	23.22	10.47	9.78	9.14	4.09	0.66	8.78	16.91	22.69	23.43	17.24
3	13.09	23.82	12.09	7.76	7.99	3.31	0.32	17.37	16.15	21.02	24.10	15.81
4	13.37	23.65	9.69	8.98	8.51	2.85	0.38	19.84	18.41	21.80	24.16	15.58
5	14.21	19.91	7.93	8.74	8.27	2.60	0.32	17.79	16.47	22.27	21.49	12.38
6	13.61	19.54	6.87	15.11	8.40	2.55	0.08	19.41	17.28	22.95	20.09	14.09
7	13.90	19.16	6.73	12.55	6.58	2.34	0.09	20.11	19.31	25.07	20.72	16.80
8	14.02	16.58	5.98	11.10	7.38	5.15	1.10	18.46	20.20	23.09	19.85	18.68
9	14.43	15.91	5.65	9.27	6.96	3.64	0.46	16.98	21.04	22.29	22.27	18.81
10	14.90	15.37	5.32	10.91	7.06	3.04	0.22	19.58	18.83	22.38	22.48	19.19
11	14.30	14.57	10.16	14.37	7.04	2.47	0.02	20.98	17.27	21.49	20.29	17.77
12	16.07	14.66	14.52	21.21	7.61	4.93	-0.07	23.55	16.04	23.63	20.67	16.10
13	14.96	17.92	13.32	20.59	7.74	3.37	-0.10	25.43	15.89	24.45	19.22	18.43
14	14.83	17.58	14.06	18.05	5.83	2.87	-0.05	27.07	16.65	26.48	20.69	19.00
15	17.61	14.17	12.83	16.30	6.90	12.58	-0.11	24.96	17.22	27.53	19.50	20.28
16	26.61	15.90	12.66	16.59	7.27	15.82	2.55	25.86	17.26	27.44	21.31	20.51
17	29.11	16.34	11.22	13.05	7.49	11.09	1.13	28.15	17.32	28.02	23.36	20.98
18	31.64	15.77	9.28	19.46	7.75	15.16	0.73	27.43	18.04	26.17	23.77	19.18
19	31.10	12.51	10.18	18.15	7.79	13.98	0.37	25.13	15.96	24.48	22.28	16.67
20	26.17	9.74	8.48	15.42	5.76	9.66	1.78	24.72	17.13	22.67	20.70	18.45
21	29.70	10.80	10.04	14.62	4.35	6.73	10.78	23.36	16.91	22.88	18.61	18.54
22	28.54	9.06	9.70	13.60	6.17	5.17	14.77	21.07	19.32	21.38	17.08	19.97
23	28.66	11.27	11.18	12.79	6.03	3.97	14.28	18.96	20.08	21.27	17.48	19.49
24	29.02	9.92	10.66	10.16	6.18	3.05	12.72	20.99	20.59	20.85	18.89	17.57
25	27.41	14.26	8.76	12.73	4.94	2.44	9.20	20.36	21.32	21.03	17.81	16.28
26	27.77	12.81	8.95	11.77	6.37	2.01	10.25	24.24	20.96	23.71	18.00	15.28
27	30.39	10.49	7.47	11.22	4.72	1.73	10.57	25.47	19.87	24.83	15.94	15.77
28	32.73	11.01	8.86	10.91	3.71	1.57	8.34	29.06	21.43	22.24	16.19	16.11
29	33.01	9.05	9.44	11.47	---	1.24	10.02	26.70	22.15	22.08	15.65	16.02
30	27.69	9.03	10.95	10.20	---	0.98	12.48	21.16	24.56	22.87	18.82	16.79
31	30.30	---	8.70	7.99	---	0.77	---	20.39	---	25.27	15.51	---
MAX	13.09	9.03	5.32	6.50	3.71	0.77	-0.11	3.78	15.89	20.85	15.51	12.38
WTR YR 1982	MEAN	14.92		MAX	-0.11		MIN	33.01				

## GROUND-WATER RECORDS

335

## MADISON COUNTY--Continued

395740083255700. Local number, M-3.

LOCATION.--Lat 39°57'40", long 83°25'57", Hydrologic Unit 05060002, 5.2 mi (8.4 km) north of London.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 290 ft (88.4 m) cased to 145 ft (44.2 m).

DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 9.54 ft (1.405 m) Dec. 3, 1978; minimum daily low, 3.93 ft (1.198 m) Feb. 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.00 ft (3.048 m) Sept. 30; minimum daily low, 5.22 ft (1.591 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.37	9.21	9.46	7.72	---	6.36	5.62	6.33	6.35	7.35	8.19	9.09
2	8.52	9.20	9.53	7.71	---	6.32	5.55	6.35	6.26	7.00	8.24	9.08
3	8.58	9.20	9.54	7.49	---	6.37	5.34	6.36	6.22	6.71	8.23	9.19
4	8.61	9.18	9.59	7.17	---	6.26	5.52	6.40	6.50	6.71	8.27	9.26
5	8.64	9.14	9.63	7.23	---	6.34	5.48	6.40	6.27	6.80	8.41	9.26
6	8.62	9.14	9.61	6.97	---	6.24	5.66	6.39	6.24	6.88	8.59	9.31
7	8.65	9.23	9.39	6.97	---	6.25	5.72	6.50	6.74	6.95	8.69	9.32
8	8.73	9.32	9.51	6.94	---	6.29	5.69	6.49	6.35	7.06	8.55	9.34
9	8.79	9.45	9.58	6.88	---	6.34	5.67	6.52	6.42	7.19	8.58	9.36
10	8.81	9.43	9.59	---	---	6.29	5.73	6.63	6.29	7.19	8.63	9.37
11	8.87	9.50	9.62	---	---	6.18	5.71	6.77	6.28	7.16	8.62	9.41
12	8.94	9.53	9.64	---	---	6.08	5.70	6.65	6.20	7.25	8.62	9.52
13	8.96	9.52	9.59	---	---	5.77	5.71	6.72	6.19	7.28	8.58	9.59
14	8.95	9.48	9.54	---	---	5.73	5.76	6.92	6.24	7.30	8.58	9.69
15	8.94	9.43	9.53	---	---	5.60	5.74	7.34	6.24	7.36	8.63	9.79
16	8.93	9.36	9.59	---	---	5.54	5.79	7.02	6.26	7.44	8.83	9.85
17	8.94	9.38	9.56	---	---	5.46	5.80	7.19	6.28	7.51	8.92	9.81
18	8.85	9.42	9.53	---	6.24	5.43	5.85	7.38	6.28	7.61	8.87	9.74
19	8.98	9.39	9.40	---	6.20	5.38	5.81	7.30	6.22	7.60	8.95	9.74
20	9.04	9.40	9.39	---	6.13	5.24	6.29	7.10	6.27	7.66	8.90	9.71
21	9.08	9.55	9.31	---	6.13	5.22	6.40	7.01	6.26	7.78	8.91	9.73
22	9.07	9.63	9.17	---	6.20	5.28	6.29	6.92	6.29	7.79	8.90	9.75
23	9.13	9.63	9.12	---	6.17	5.30	6.30	6.72	6.37	7.76	8.82	9.84
24	9.15	9.67	9.07	---	6.24	5.35	6.23	6.52	6.39	7.79	8.84	9.87
25	9.13	9.66	8.78	---	6.39	5.40	6.14	6.38	6.38	7.84	8.94	9.82
26	9.06	9.57	8.46	---	6.39	5.51	6.17	6.27	6.42	7.95	9.01	9.86
27	9.11	9.64	8.13	---	6.35	5.70	6.22	6.23	6.44	8.02	8.98	9.83
28	9.19	9.70	8.09	---	6.38	5.78	6.47	6.23	6.49	8.00	9.08	9.95
29	9.19	9.69	8.03	---	---	5.78	6.34	6.22	6.47	8.06	9.13	9.98
30	9.22	9.65	8.01	---	---	5.70	6.33	6.13	7.07	8.05	9.10	10.00
31	9.23	---	7.84	---	---	5.62	---	6.16	---	8.11	9.11	---
MAX	9.23	9.70	9.64	7.72	6.39	6.37	6.47	7.38	7.07	8.11	9.13	10.00
WTR YR 1982	MEAN	7.73		HIGH	5.22		LOW	10.00				

## GROUND-WATER RECORDS

## MAHONING COUNTY

410042080453800. Local number, MA-1.

LOCATION.--Lat 41°00'42", long 80°45'38", Hydrologic Unit, 05030103, in county fairgrounds at south edge of Canfield.

Owner: Canfield Water Department.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 ), depth 170 ft (51.8 m) cased to 99.5 ft (30.3 m).

DATUM.--Altitude of land-surface datum is 1,160 ft (354 m), from topographic map. Measuring point: Floor of instrument shelter at land-surface datum.

REMARKS.--Influenced by seasonal water demand at county fairgrounds.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 110.75 ft (33.757 m) Sept. 18, 1946; minimum daily low, 30.35 ft (9.251 m) Apr. 23, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 38.68 ft (11.790 m) Aug. 27, Sept. 1; minimum daily low, 34.31 ft (10.458 m) Apr. 11.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.01	37.36	36.70	36.94	34.79	34.51	34.65	34.95	35.66	36.52	37.67	38.68
2	37.06	37.31	36.65	36.95	34.85	34.48	34.68	34.85	35.82	36.54	37.69	38.62
3	37.07	37.35	36.66	36.92	34.79	34.49	34.58	34.80	35.88	36.46	37.94	---
4	37.05	37.36	36.66	36.83	34.87	34.45	34.46	34.89	35.93	36.22	38.13	---
5	37.01	37.36	36.65	36.86	34.85	34.39	34.45	34.97	36.06	36.18	38.30	---
6	37.05	37.27	36.60	36.80	34.84	34.38	34.51	35.08	35.95	36.29	38.40	---
7	37.08	37.30	36.50	36.67	34.79	34.42	34.59	35.14	35.90	36.43	38.37	---
8	37.12	37.28	36.46	36.62	34.74	34.50	34.57	35.12	36.00	36.50	38.26	---
9	37.15	37.28	36.51	36.51	34.69	34.60	34.54	35.00	36.10	36.56	38.12	---
10	37.14	37.28	36.51	36.38	34.74	34.61	34.40	35.06	36.18	36.49	38.31	---
11	37.14	37.32	36.65	36.29	34.83	34.55	34.31	35.19	36.24	36.35	38.42	---
12	37.13	37.35	36.73	36.28	34.85	34.55	34.36	35.30	36.19	36.37	38.45	---
13	37.20	37.35	36.76	36.22	34.85	34.53	34.47	35.38	36.07	36.44	38.51	---
14	37.23	37.34	36.81	36.13	34.78	34.58	34.53	35.44	36.09	36.50	38.45	---
15	37.26	37.28	36.87	36.06	34.71	34.64	34.56	35.42	36.19	36.57	38.30	---
16	37.32	37.20	36.97	35.91	34.56	34.62	34.61	35.36	36.20	36.61	38.26	---
17	37.33	37.21	37.00	35.69	34.52	34.66	34.55	35.42	36.29	36.55	38.39	---
18	37.24	37.21	37.07	35.49	34.54	34.71	34.46	35.50	36.36	36.41	38.47	---
19	37.26	37.20	37.07	35.38	34.51	34.73	34.53	35.55	36.34	36.40	38.57	---
20	37.28	36.97	37.05	35.29	34.51	34.67	34.62	35.62	36.23	36.50	38.52	---
21	37.35	36.99	37.02	35.24	34.46	34.54	34.73	35.71	36.18	36.61	38.46	---
22	37.36	36.97	36.95	35.22	34.51	34.60	34.79	35.71	36.23	36.76	38.34	---
23	37.36	36.91	36.91	35.04	34.50	34.64	34.82	35.62	36.39	36.91	38.31	---
24	37.35	36.91	36.99	34.97	34.49	34.66	34.83	35.60	36.46	36.86	38.41	---
25	37.26	36.93	36.99	34.98	34.55	34.65	34.72	35.70	36.52	36.71	38.52	---
26	37.17	36.91	36.98	34.98	34.61	34.68	34.66	35.78	36.48	36.77	38.62	---
27	37.27	36.83	36.94	34.98	34.62	34.67	34.77	35.84	36.40	37.12	38.68	---
28	37.36	36.83	36.95	34.94	34.58	34.64	34.88	35.80	36.36	37.49	38.63	---
29	37.36	36.82	37.01	34.95	---	34.63	35.02	35.77	36.30	37.70	38.48	---
30	37.37	36.75	37.01	34.91	---	34.63	35.01	35.65	36.42	37.85	38.50	---
31	37.38	---	37.00	34.71	---	34.58	---	35.59	---	37.79	38.60	---
MAX	37.38	37.36	37.07	36.95	34.87	34.73	35.02	35.84	36.52	37.85	38.68	38.68
WTR YR 1982	MEAN	36.17		HIGH	34.31		LOW	38.68				

## GROUND-WATER RECORDS

337

## MARION COUNTY

403413083170500. Local number, MN-4.

LOCATION.--Lat 40°34'13", long 83°17'05", Hydrologic Unit 05060001, 1.9 mi (3.1 km) southeast of New Bloomington.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth drilled 290 ft (88.4 m), present depth 286 ft (87.2 m), cased to 33 ft (10.1 m).

DATUM.--Altitude of land-surface datum is 915.96 ft (279.185 m). Measuring point: Floor of shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Influenced by seasonal water demand for nearby wildlife refuge.

PERIOD OF RECORD.--January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.60 ft (7.803 m) Aug. 28, 1981. minimum daily low, 0.61 ft. (0.186 m) Mar. 18, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 26.20 ft (7.986 m) Aug. 31; minimum recorded daily low, 4.27ft (1.301 m) Feb. 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.01	7.58	6.72	5.94	5.47	4.49		---	5.46	5.95	7.09	
2	8.01	7.50	6.68	5.95	5.33	4.47		---	5.52	5.99	7.12	
3	8.03	7.48	6.71	5.79	5.13	4.58		---	5.55	5.90	12.84	
4	8.00	7.41	6.75	5.61	5.24	4.53		---	5.60	5.95	7.86	
5	7.93	7.33	6.78	5.58	5.21	4.58		5.46	5.61	6.02	7.35	
6	7.82	7.29	6.75	5.21	5.24	4.47		5.48	5.66	6.06	7.22	
7	7.82	7.34	6.58	5.38	5.24	4.50		5.48	5.72	6.09	7.16	
8	13.74	7.38	6.65	5.38	5.24	4.61		5.56	5.94	6.13	7.11	
9	18.08	7.48	6.67	5.20	5.26	4.61		5.63	5.84	6.19	7.10	
10	19.46	7.48	6.67	5.25	5.38	---		5.64	5.75	6.19	7.19	
11	20.23	7.45	6.66	5.32	5.46	---		5.63	5.75	6.21	7.22	
12	20.74	7.45	6.69	5.40	5.49	---		5.66	5.65	6.33	16.88	
13	21.09	7.46	6.71	5.35	5.49	---		5.72	5.70	6.41	20.62	
14	21.18	7.43	6.67	5.36	5.48	---		5.75	5.75	6.47	22.03	
15	13.89	7.35	6.63	5.47	5.52	---		5.81	5.72	6.53	24.57	
16	11.12	7.28	6.68	5.71	5.52	---		5.88	5.63	6.59	25.54	
17	10.00	7.29	6.67	5.77	5.40	---		5.92	5.59	6.63	26.03	
18	9.08	7.34	6.69	5.79	5.19	---		5.91	5.48	6.67	26.18	
19	8.81	7.34	6.72	5.84	4.90	---		5.92	5.42	6.67	26.18	
20	8.61	7.24	6.74	5.93	4.79	---		5.91	5.44	6.71	26.19	
21	8.42	7.31	6.69	6.07	4.55	---		5.99	5.42	6.76	---	
22	8.30	7.29	6.52	6.08	4.45	---		5.97	5.43	6.73	---	
23	8.17	7.24	6.57	5.80	4.35	---		5.98	5.55	6.75	---	
24	8.14	7.18	6.57	5.82	4.27	---		6.01	5.59	6.78	---	
25	8.01	7.18	6.37	5.82	4.38	---		5.99	5.61	6.79	---	
26	7.92	7.07	6.06	5.83	4.41	---		5.95	5.66	6.83	---	
27	7.85	7.03	5.94	5.83	4.43	---		5.87	5.70	6.85	---	
28	7.85	7.03	5.96	5.84	4.51	---		5.84	5.72	6.87	---	
29	7.79	7.04	6.01	5.87	---	---		5.78	5.73	6.94	---	
30	7.65	6.99	6.04	5.70	---	---		5.43	5.87	6.95	---	
31	7.63	---	5.93	5.62	---	---		5.42	---	7.02	26.20	
MAX	21.18	7.58	6.78	6.08	5.52	4.61		6.01	5.94	7.02	26.20	
WTR YR 1982	MEAN	7.32		HIGH	4.27		LOW	26.20				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## MARION COUNTY--Continued

403443083230400. Local number, MN-1.

LOCATION.--Lat 40°34'43, long 83°23'04", Hydrologic Unit 05060001, SR 37 at Baptist Church in LaRue.

Owner: Village of LaRue.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in (0.1 m), depth 100 ft (30.5 m), cased.

DATUM.--Altitude of land-surface datum is 930 ft (283 m), from topographic map. Measuring point: Floor of instrument shelter 3.30 ft (1.006 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.55 ft (4.435 m) Aug. 10, 1950; minimum daily low, 5.67 ft (1.728 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.98 ft (4.261 m) Sep. 30; minimum daily low, 6.83 ft (2.082 m) Feb. 24.

WATER LEVEL. IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.24	11.08	10.81	10.00	7.94	7.96	7.98	9.88	9.39	10.70	11.53	13.40
2	12.20	11.15	10.42	9.76	---	8.15	7.95	9.94	9.33	10.57	11.69	13.43
3	12.21	11.15	10.33	9.49	---	8.35	8.20	10.03	9.50	10.46	11.82	13.36
4	12.09	11.11	10.41	9.24	---	8.08	8.15	10.29	9.53	10.53	11.66	13.43
5	12.23	11.09	10.48	8.44	---	7.81	8.15	10.18	9.81	10.77	11.68	13.38
6	12.17	---	10.48	8.11	---	7.37	8.66	10.28	9.94	10.96	11.79	13.39
7	12.05	---	10.42	8.37	---	7.89	8.58	10.16	10.35	10.83	11.80	13.47
8	12.18	---	10.50	8.46	---	7.98	8.61	10.18	10.36	10.74	11.75	13.44
9	12.04	---	10.75	8.67	---	8.22	8.81	10.16	10.20	11.03	11.92	13.44
10	11.85	---	10.61	8.90	---	8.31	8.75	10.22	9.80	11.42	11.83	13.40
11	11.90	---	10.63	9.24	---	8.10	8.24	10.18	9.14	11.56	11.88	13.52
12	11.98	---	10.82	9.38	9.57	7.31	7.79	10.62	9.29	11.38	11.90	13.54
13	12.00	---	10.90	9.72	9.65	7.28	7.67	10.52	9.59	11.40	11.86	13.53
14	12.13	---	10.78	9.50	9.66	7.17	7.88	10.57	9.88	11.34	12.06	13.56
15	12.02	---	11.15	9.90	9.74	7.29	8.11	10.65	9.83	11.35	12.16	13.59
16	12.06	---	11.07	10.19	9.65	7.20	8.38	10.64	9.67	11.68	12.31	13.66
17	11.99	---	10.97	9.96	9.25	7.15	8.46	10.64	9.29	11.37	12.49	13.62
18	11.98	---	10.96	10.03	8.33	7.21	8.49	11.39	9.38	11.35	12.56	13.61
19	12.08	---	11.18	10.00	7.83	7.29	8.71	11.46	9.40	11.25	12.66	13.62
20	11.99	---	11.08	10.03	7.34	7.43	9.05	11.16	9.46	11.30	12.86	13.65
21	12.09	11.13	11.00	10.32	7.18	7.20	9.06	11.32	9.70	11.33	12.76	13.68
22	11.92	11.05	10.96	10.30	7.26	7.55	9.16	11.24	9.65	11.27	12.83	13.67
23	11.88	11.04	10.55	9.97	7.22	7.68	9.23	10.92	9.93	11.28	12.87	13.64
24	11.83	11.02	10.25	9.53	6.83	7.90	9.39	10.80	10.04	11.29	12.96	13.66
25	12.18	11.07	9.02	9.25	7.25	8.38	9.38	10.67	10.17	11.38	12.92	13.64
26	12.00	10.84	9.17	9.31	7.57	8.33	9.74	10.65	10.26	11.52	13.01	13.65
27	11.83	10.68	9.31	9.34	7.84	8.40	9.66	10.50	10.37	11.44	13.02	13.87
28	11.46	10.66	9.45	9.56	7.87	8.50	9.80	10.34	10.16	11.49	13.06	13.81
29	10.92	10.72	9.66	9.63	---	8.66	9.79	8.95	10.13	11.56	13.18	13.86
30	10.91	10.87	9.69	9.53	---	8.89	9.79	8.98	10.75	11.59	13.20	13.98
31	11.05	---	9.75	9.13	---	8.65	---	9.01	---	11.59	13.54	---
MAX	12.24	11.15	11.18	10.32	9.74	8.89	9.80	11.46	10.75	11.68	13.54	13.98
WTR YR 1982	MEAN	10.47		HIGH	6.83		LOW	13.98				

## GROUND-WATER RECORDS

339

## MARION COUNTY--Continued

403601083110400. Local number, MN-2.

LOCATION.--Lat 40°36'01", long 83°11'04", Hydrologic Unit 05060001 water treatment plant 2 mi (3.2 km) west of Marion.

Owner: Marion Water Department.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 67 ft (20.4 m), cased.

DATUM.--Altitude of land-surface datum is 910 ft (277 m), from topographic map. Measuring point: Floor of instrument shelter 2.00 ft (0.610 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May, 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 49.50 ft (15.088 m) Feb. 11, 1956; minimum daily low, 7.35 ft (2.240 m) Apr. 2, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 15.36 ft (4.682 m) Sep. 20; minimum daily low, 10.53 ft (3.210 m) May. 7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.37	12.56	12.55	11.93	12.53	12.78	11.66	10.70	11.99	11.34	11.60	13.12
2	13.34	12.51	12.32	11.92	12.56	12.68	11.68	10.68	12.01	11.32	11.62	13.18
3	13.34	12.50	12.35	11.73	12.68	12.66	11.36	10.66	12.01	11.20	11.69	13.27
4	13.31	12.46	12.37	11.54	12.76	12.52	11.50	10.64	12.01	11.38	11.82	13.35
5	13.25	12.38	12.40	11.58	12.76	12.56	11.50	10.63	12.00	11.50	11.97	13.44
6	13.20	12.33	12.39	11.71	12.77	12.57	11.49	10.60	12.01	11.59	12.06	13.47
7	13.13	12.32	12.23	11.86	12.76	12.82	11.54	10.53	12.01	11.68	12.08	13.56
8	13.17	12.32	12.25	11.86	12.66	12.90	11.47	10.56	11.97	11.76	12.09	13.61
9	13.17	12.38	12.27	11.82	12.50	12.95	11.32	10.59	11.92	11.62	12.23	13.69
10	13.15	12.38	12.22	11.80	12.50	12.91	11.32	10.61	11.86	11.54	12.33	13.89
11	13.13	12.45	12.16	11.78	12.47	12.74	11.19	10.61	11.88	11.47	12.42	14.15
12	13.10	12.51	12.20	11.84	12.41	12.78	11.16	10.55	11.81	11.47	12.55	14.37
13	13.08	12.54	12.19	11.78	12.35	12.95	11.11	10.54	11.77	11.46	12.52	14.58
14	13.05	12.52	12.13	11.72	12.26	13.01	11.12	10.55	11.80	11.44	12.53	14.75
15	12.98	12.48	12.07	11.76	12.11	13.10	11.08	10.55	11.76	11.43	12.54	14.88
16	12.95	12.42	12.09	11.88	12.06	13.00	10.98	10.59	11.71	11.40	12.62	15.03
17	12.91	12.40	12.07	11.91	12.16	13.00	10.88	10.59	11.75	11.37	12.71	15.09
18	12.84	12.45	12.07	11.90	12.27	13.00	10.92	10.55	11.69	11.33	12.79	15.24
19	12.87	12.45	12.07	11.90	12.41	13.04	10.94	10.54	11.68	11.32	12.86	15.33
20	12.84	12.34	12.08	11.93	12.41	12.94	10.83	10.54	11.66	11.35	12.93	15.36
21	12.81	12.51	11.98	11.95	12.50	12.77	10.89	10.75	11.59	11.32	12.96	15.33
22	12.76	12.61	11.88	11.95	12.58	12.74	10.89	10.96	11.57	11.34	13.01	15.28
23	12.76	12.66	11.80	11.74	12.66	12.73	10.89	11.18	11.56	11.36	13.02	15.25
24	12.76	12.65	11.78	11.94	12.78	12.67	10.83	11.39	11.54	11.36	13.02	15.20
25	12.70	12.71	11.79	12.08	12.91	12.49	10.79	11.52	11.50	11.36	13.02	15.13
26	12.63	12.70	11.80	12.22	12.88	12.37	10.74	11.56	11.48	11.35	12.98	15.11
27	12.62	12.61	11.96	12.23	12.82	12.32	10.82	11.58	11.44	11.40	12.98	15.06
28	12.65	12.63	12.06	12.29	12.84	12.24	10.86	11.66	11.38	11.45	13.04	15.05
29	12.64	12.63	12.12	12.32	---	12.08	10.81	11.76	11.33	11.50	13.06	15.03
30	12.58	12.63	12.15	12.19	---	11.88	10.75	11.93	11.32	11.50	13.02	14.98
31	12.58	---	12.00	12.40	---	11.60	---	11.94	---	11.61	13.08	---
MAX	13.37	12.71	12.55	12.40	12.91	13.10	11.68	11.94	12.01	11.76	13.08	15.36
WTR YR 1982	MEAN	12.24		HIGH	10.53		LOW	15.36				

## GROUND-WATER RECORDS

## MEDINA COUNTY

410120081431800. Local number, MD-3.

LOCATION.--Lat 41°01'20", long 81°43'18", Hydrologic Unit 05040001, Auble Street at water treatment plant in Wadsworth.

Owner: Wadsworth Water Department.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 275 ft (83.8 m), cased.

DATUM.--Altitude of land-surface datum is 1180 ft (360 m), from topographic map. Measuring point: Floor of instrument shelter 1.00 ft (0.305 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--December 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 186.74 ft (56.918 m) Jan. 21, 1975; minimum daily low, 144.00 ft (43.891 m) May 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 170.30 ft (51.907 m) Apr. 4; minimum recorded daily low, 142.00 ft (43.282 m) Dec. 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150.00	149.10	152.20	150.30	148.60	148.90	159.50	149.50	160.70	147.90	162.70	155.30
2	163.10	162.00	147.10	150.40	163.30	158.40	162.20	161.40	161.10	147.70	163.90	165.30
3	163.40	162.30	147.20	143.90	163.40	161.30	---	162.40	161.90	147.40	154.00	155.30
4	164.60	149.80	147.00	163.20	149.70	147.00	170.30	153.10	162.50	145.90	162.80	152.70
5	165.70	149.30	147.40	---	149.50	160.80	150.00	162.10	162.30	145.00	163.50	163.90
6	164.60	148.80	147.50	---	148.70	147.20	148.60	161.60	162.50	151.00	161.50	164.00
7	165.10	148.70	147.20	---	147.80	159.00	149.00	163.20	162.50	158.50	151.50	150.50
8	165.40	148.90	147.20	---	162.50	161.40	---	150.40	162.70	159.30	148.90	150.50
9	167.20	149.00	146.50	---	150.80	147.80	---	149.50	163.90	159.10	---	150.30
10	165.80	149.00	146.80	---	---	---	---	149.00	150.60	148.60	---	149.70
11	165.80	149.00	147.10	---	---	148.30	---	161.10	162.70	146.90	---	149.50
12	167.50	148.60	147.20	---	---	147.40	---	162.60	163.00	159.80	---	149.40
13	166.10	148.30	147.20	---	147.00	160.80	---	163.00	149.70	160.20	---	151.60
14	166.00	148.30	147.10	---	160.10	148.80	---	164.30	162.60	160.50	---	152.50
15	167.70	148.10	147.10	---	161.20	161.00	---	151.80	163.10	161.50	---	152.50
16	165.80	147.90	147.40	---	148.20	148.30	---	163.60	149.80	162.70	---	149.70
17	165.90	148.10	146.80	---	147.70	147.60	---	164.80	161.30	160.90	---	149.50
18	165.40	156.70	147.00	---	147.50	161.10	---	165.50	162.70	149.50	---	148.90
19	166.20	160.60	147.10	---	147.40	150.50	---	165.60	149.90	148.50	---	148.30
20	153.50	148.10	160.00	---	147.00	160.50	---	152.20	148.20	148.10	---	147.40
21	152.30	148.20	---	---	147.00	148.00	---	163.90	161.40	148.00	---	147.80
22	151.60	147.90	---	---	147.20	161.60	---	151.70	161.70	147.70	---	147.90
23	150.50	148.00	146.80	---	161.60	149.10	---	150.30	149.20	148.50	---	148.00
24	150.60	148.20	146.40	---	161.80	161.30	---	163.30	148.90	160.80	---	148.00
25	150.00	148.20	142.00	---	162.10	148.60	---	164.20	148.70	161.60	---	150.50
26	149.90	147.70	143.90	---	149.20	159.30	---	163.00	148.40	162.00	---	150.80
27	149.60	146.60	144.40	---	148.60	161.40	---	164.70	147.60	162.80	---	148.40
28	149.80	147.20	144.50	---	161.90	148.70	---	164.90	147.70	155.90	---	148.50
29	149.80	147.40	145.30	150.50	---	162.20	---	---	147.50	162.80	---	148.40
30	149.50	147.30	160.20	149.30	---	---	153.15	---	147.80	162.10	---	148.20
31	148.90	---	149.50	148.60	---	---	---	161.20	---	162.50	---	---
MAX	167.70	162.30	160.20	163.20	163.40	162.20	170.30	165.60	163.90	162.80	163.90	155.30
WTR YR 1982	MEAN	154.30		HIGH	142.00		LOW	170.30				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

341

## MERCER COUNTY

402833084375200. Local number, MR-2.

LOCATION.--Lat 40°28'33", long 84°37'52", Hydrologic Unit 05120101, at AVCO Mfg. Co. building in Coldwater.

Owner: AVCO Mfg. Company.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 253 ft (77.1 m), cased.

DATUM.--Altitude of land-surface datum is 915 ft (279 m), from topographic map. Measuring point: Top of platform 1.2 ft (0.366 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 74.75 ft (22.784 m) May 15, 1980; minimum daily low, 60.13 ft (18.328 m) Feb. 14, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 72.36 ft (22.055 m) Aug. 26; minimum daily low, 65.70 ft (20.025 m) Apr. 13.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71.75	70.04	69.14	68.34	69.61	70.66	67.47	68.93	70.35	70.82	71.73	71.88
2	71.72	70.10	69.56	68.11	69.61	70.70	67.09	69.02	70.55	70.88	71.55	71.92
3	71.19	70.15	69.74	67.83	69.92	70.54	66.45	69.95	70.77	70.36	71.92	72.17
4	70.75	70.12	71.00	69.00	70.17	70.10	66.90	70.24	70.85	70.14	72.10	71.68
5	71.01	69.96	70.78	69.35	70.10	69.84	66.90	70.55	70.94	70.34	72.16	71.69
6	71.09	69.75	70.33	68.80	70.66	69.39	67.75	70.16	70.62	70.36	72.07	70.75
7	70.99	69.55	70.09	69.66	71.30	69.86	67.44	70.48	70.57	71.73	72.10	71.51
8	71.07	69.31	70.95	69.90	71.41	69.45	67.61	69.30	70.70	71.55	71.89	71.51
9	70.96	69.97	71.25	68.76	71.56	68.41	66.92	69.39	70.56	71.61	71.86	71.55
10	70.77	70.00	70.65	68.63	71.75	68.63	67.37	69.89	70.93	71.42	72.06	71.56
11	70.42	69.95	70.69	68.87	71.77	69.18	67.33	70.30	70.99	71.41	72.01	71.46
12	71.07	69.93	70.66	69.05	71.73	68.42	66.90	70.49	70.91	71.74	72.13	71.07
13	70.64	69.96	70.18	68.99	71.84	67.85	65.70	70.67	70.57	71.52	71.97	71.55
14	70.54	69.97	69.91	69.24	71.78	68.37	66.18	70.72	70.54	71.62	71.89	71.47
15	70.56	69.77	70.00	70.02	71.51	67.83	68.51	70.86	70.58	71.72	71.75	71.66
16	70.61	69.41	70.12	70.75	71.63	67.94	69.17	70.95	70.58	71.78	71.82	71.76
17	70.66	69.56	68.97	70.77	71.37	67.96	69.82	70.58	70.65	71.72	72.07	71.80
18	70.46	69.73	69.06	70.36	71.53	67.56	69.98	70.72	70.47	71.06	72.15	71.63
19	70.47	69.74	68.91	70.47	71.62	67.94	69.31	70.83	70.53	71.69	72.19	71.64
20	70.29	69.70	68.43	70.47	71.47	68.16	69.70	70.66	69.73	71.85	72.20	71.75
21	70.56	69.77	68.45	70.73	70.93	67.27	69.02	70.75	70.34	71.84	72.27	71.88
22	70.58	69.78	68.57	70.74	71.16	67.41	69.64	70.76	70.78	71.86	71.78	71.73
23	70.10	69.82	69.11	70.28	71.05	68.14	69.17	70.70	70.86	71.63	72.10	71.76
24	69.19	69.77	69.16	70.33	71.17	67.05	68.53	70.76	70.68	71.77	72.17	71.68
25	68.61	69.85	68.58	70.64	71.50	68.07	68.13	70.81	70.76	71.70	72.30	71.52
26	69.93	69.65	68.25	70.70	71.16	67.54	68.43	70.08	70.85	71.84	72.36	71.44
27	70.24	67.42	68.09	70.26	70.74	67.96	68.66	70.51	70.45	71.82	72.25	71.45
28	70.40	69.53	68.54	70.66	70.87	67.53	69.54	70.78	70.33	71.95	72.30	71.68
29	70.16	69.33	68.90	70.52	---	67.73	69.15	70.44	70.65	72.00	72.34	71.72
30	70.88	69.24	68.81	70.06	---	67.49	69.32	69.26	70.78	72.02	72.02	71.60
31	70.76	---	68.57	69.98	---	67.59	---	69.01	---	71.82	72.03	---
MAX	71.75	70.15	71.25	70.77	71.84	70.70	69.98	70.95	70.99	72.02	72.36	72.17
WTR YR 1982	MEAN	70.27		HIGH	65.70		LOW	72.36				

## GROUND-WATER RECORDS

## MIAMI COUNTY

395848084085500. Local number, MI-3.

LOCATION.--Lat 39°58'48", long 84°08'55", Hydrologic Unit 05080001, 2.0 mi (3.2 km) northeast of Tipp City.

Owner: Fulton Fruit Farms.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in (0.13 m), depth 48 ft (14.6 m), cased.

DATUM.--Altitude of land-surface datum is 804.78 ft (245.297 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of shelter 3.50 ft (1.067 m) above land-surface datum.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.61 ft (4.758 m) Feb. 4, 1971; minimum daily low, 7.53 ft (2.295 m) Feb. 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 12.18 ft (3.712 m) Sept. 21; minimum recorded daily low, 8.37 ft (2.551 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.07	11.23	11.33	10.39	---	9.32	---	10.31	10.13	9.34	11.18	11.68
2	11.12	11.23	11.25	10.39	---	9.39	---	10.40	10.13	9.39	11.20	11.66
3	11.19	11.24	11.22	10.38	8.47	9.45	---	10.45	10.15	9.47	11.29	11.77
4	11.15	11.25	11.19	10.22	8.60	9.45	---	10.47	10.17	9.55	11.34	11.94
5	11.17	11.25	11.19	10.00	8.77	9.35	---	10.51	10.21	9.61	11.25	11.76
6	11.20	11.26	11.17	---	8.90	9.37	---	10.52	10.25	9.66	11.24	11.75
7	11.22	11.28	11.15	---	9.00	9.47	9.44	10.57	10.27	9.72	11.24	11.75
8	11.31	11.29	11.16	---	9.11	9.50	9.45	10.53	10.35	9.77	11.24	11.86
9	11.32	11.31	11.16	---	9.21	9.59	9.53	10.52	10.16	9.83	11.25	12.04
10	11.30	11.31	11.16	---	9.31	9.62	9.56	10.53	10.20	9.86	11.26	11.88
11	11.32	11.35	11.18	---	9.40	9.62	9.60	10.54	10.24	9.93	11.27	11.86
12	11.34	11.36	11.18	---	9.47	9.52	9.61	10.99	10.27	9.98	11.30	11.85
13	11.37	11.37	11.18	---	9.57	9.46	9.68	10.64	10.31	10.09	11.33	11.93
14	11.39	11.37	11.19	---	9.64	9.43	9.73	11.00	10.41	10.45	11.34	11.89
15	11.40	11.38	11.21	---	9.67	9.41	9.74	10.76	10.46	10.66	11.44	11.96
16	11.50	11.39	11.23	---	9.41	9.39	9.71	10.78	10.20	10.77	11.47	12.01
17	11.51	11.41	11.24	---	8.83	9.20	9.75	10.75	9.98	10.77	11.52	12.05
18	11.48	11.43	11.25	---	8.46	9.18	9.78	10.96	9.96	10.86	11.73	12.06
19	11.50	11.43	11.27	---	8.51	9.18	9.81	10.77	10.00	10.83	11.67	12.01
20	11.51	11.37	11.28	---	8.55	8.72	9.88	10.77	10.01	10.73	11.67	12.10
21	11.52	11.37	11.27	---	8.70	8.37	9.91	10.78	10.05	10.74	11.54	12.18
22	11.53	11.39	11.28	---	8.79	8.39	10.01	10.78	10.09	10.75	11.54	12.11
23	11.56	11.39	10.96	---	8.84	8.46	10.04	10.76	10.13	10.71	11.54	12.09
24	11.57	11.38	10.61	---	8.96	8.57	10.01	10.76	10.16	10.76	11.54	12.08
25	11.58	11.38	10.46	---	9.03	8.64	10.09	10.77	10.20	10.83	11.54	12.06
26	11.58	11.35	10.37	---	9.12	8.72	10.14	10.77	10.24	10.87	11.54	12.06
27	11.56	11.36	10.34	---	9.19	8.83	10.14	10.78	10.26	11.06	11.55	12.06
28	11.31	11.36	10.35	---	9.26	8.90	10.52	10.49	10.12	11.40	11.55	12.05
29	11.30	11.36	10.37	---	---	8.95	10.19	10.42	9.50	11.56	11.56	12.05
30	11.24	11.36	10.37	---	---	---	10.23	10.23	9.50	11.63	11.67	12.04
31	11.23	---	10.37	---	---	---	---	10.18	---	11.47	11.72	---
MAX	11.58	11.43	11.33	10.39	9.67	9.62	10.52	11.00	10.46	11.63	11.73	12.18
WTR YR 1982	MEAN	10.61		HIGH	8.37		LOW	12.18				

## MIAMI COUNTY--Continued

400208084112900. Local number, MI-44.

LOCATION.--Lat 40°02'08", long 84°11'29", Hydrologic Unit 05080001, on left bank of Great Miami River 0.7 mi (1.1 km) east of city hall in Troy.

Owner: City of Troy.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 26 in (0.66 m), depth 105 ft (32.0 m) screened below 89 ft (27.1 m).

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	BICARBONATE FET-FLD (MG/L AS HC03)	CARBONATE FET-FLD (MG/L AS C03)	ALKALINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)
NOV 04...	1630	690	7.4	12.0	330	18	78	32	380	0	312	23
FEB 16...	1030	695	7.7	12.0	320	12	77	32	376	0	308	12
MAY 05...	1300	705	7.5	15.0	340	28	80	34	380	--	312	13
AUG 18...	1630	690	7.5	16.0	310	15	74	31	360	0	295	18

DATE	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUS-PENDED RECOVERABLE (UG/L AS CR)
NOV 04...	61	27	.5	421	430	<.010	.01	2	1	1	10	--
FEB 16...	64	23	.4	402	402	.030	.05	--	--	--	--	--
MAY 05...	63	23	.3	419	425	.010	<.10	--	--	--	--	--
AUG 18...	58	25	.3	438	357	<.010	<.10	2	1	1	10	0

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 04...	<10	6	4	2	1500	2	1	1	40	50	40	8
FEB 16...	--	--	--	--	1500	--	--	--	40	--	--	--
MAY 05...	--	--	--	--	1500	--	--	--	40	40	--	20
AUG 18...	10	26	1	25	1900	6	0	6	40	50	40	8

## GROUND-WATER RECORDS

## MONTGOMERY COUNTY

393853084170700. Local number, MT-63.

LOCATION.--Lat 39°38'53", long 84°17'07", Hydrologic Unit 05080002, on left bank of Great Miami River 0.4 mi (0.6 km) north of city hall in Miamisburg.

Owner: Miamisburg Box Board Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 16 in (0.41 m), depth 95 ft (29.0 m) cased below 73 ft (22.3 m).

PERIOD OF RECORD.--September 1972 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	BICARBONATE, FET-FLD (MG/L AS HCO3)	CARBONATE, FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)
NOV 04...	1500	870	7.3	14.0	400	42	101	35	436	0	358	33
FEB 16...	1245	860	7.6	12.5	400	47	100	36	430	0	353	17
MAY 05...	1430	900	7.5	15.0	400	47	100	36	430	--	353	19

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUS-PENDED RECOVERABLE (UG/L AS CR)
NOV 04...	80	55	.3	401	485	<.010	.03	8	1	7	20	10
FEB 16...	78	42	.3	426	494	.010	.04	--	--	--	--	--
MAY 05...	77	56	.3	558	568	.010	<.10	--	--	--	--	--

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 04...	10	15	13	2	2500	3	2	1	150	40	30	13
FEB 16...	--	--	--	--	2500	--	--	--	160	--	--	--
MAY 05...	--	--	--	--	2600	--	--	--	160	--	--	--

## GROUND-WATER RECORDS

345

## MONTGOMERY COUNTY--Continued

394012084151700. Local number, MT-55.

LOCATION.--Lat 39°40'12", long 84°15'17", Hydrologic Unit 05080002, Elm Street in West Carrollton.

Owner: Oxford Paper Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in (0.3 m), depth 84 ft (25.6 m), cased.

DATUM.--Altitude of land-surface datum is 717.6 ft (218.724 m). Measuring point: Floor of instrument shelter 0.30 ft (0.091 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 58.57 ft (17.852 m) Nov. 24, 1974; minimum daily low, 26.16 ft (7.974 m) Mar. 22, 23, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 34.29 ft (10.452 m) Oct. 2; minimum daily low, 26.16 ft (7.974 m) Mar. 22, 23.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.26	32.58	33.06	32.45	31.45	28.03	26.94	28.07	28.00	28.98	30.74	31.81
2	34.29	32.88	33.09	32.47	30.71	28.18	26.78	28.11	28.00	28.93	30.87	31.89
3	34.25	33.17	33.14	32.52	30.16	28.25	26.57	28.30	28.05	28.82	30.98	31.84
4	34.14	33.42	33.16	32.55	30.02	28.24	26.38	28.46	28.09	28.88	31.10	31.91
5	34.15	33.49	33.21	32.48	29.92	28.27	26.33	28.55	28.04	28.96	31.06	31.78
6	33.65	33.49	33.08	32.18	29.87	28.17	26.59	28.66	28.08	29.10	31.01	31.63
7	33.60	33.52	33.13	32.03	29.79	27.94	26.69	28.67	28.29	29.20	31.01	31.77
8	33.58	33.61	33.22	31.93	29.84	28.00	26.72	28.67	28.38	29.25	30.91	32.00
9	33.48	33.66	33.33	31.80	30.01	28.15	26.78	28.53	28.43	29.27	30.94	32.01
10	33.40	33.79	33.41	31.72	30.14	28.25	26.78	28.52	28.47	29.27	31.03	31.87
11	33.16	33.94	33.50	31.89	30.24	28.37	26.75	28.50	28.50	29.29	31.10	31.88
12	33.25	33.91	33.43	32.00	30.31	28.37	26.81	28.51	28.46	29.46	31.14	31.80
13	33.27	33.91	33.46	32.15	30.33	28.14	26.94	28.57	28.37	29.61	31.20	31.92
14	33.21	34.06	33.59	32.22	30.22	27.98	26.98	28.64	28.58	29.72	31.21	32.06
15	33.16	32.89	33.69	32.31	30.41	27.64	27.04	28.69	28.69	29.80	31.22	32.05
16	33.07	33.33	33.79	32.45	30.43	27.46	27.05	28.75	28.82	29.89	31.32	32.06
17	32.93	33.77	33.76	32.42	30.33	27.34	27.09	28.95	28.82	30.02	31.34	32.11
18	32.66	33.91	33.67	32.50	30.03	27.14	27.11	29.10	28.62	30.05	31.50	32.06
19	32.74	34.04	33.58	32.66	29.46	26.92	27.24	29.16	28.52	30.16	31.55	32.09
20	32.84	34.11	33.57	32.70	28.79	26.73	27.44	29.20	28.35	30.19	31.53	32.12
21	32.95	34.08	33.65	32.88	28.53	26.37	27.59	29.14	28.49	30.33	31.09	32.18
22	32.93	34.01	33.84	32.90	28.21	26.16	27.68	29.05	28.62	30.38	31.00	32.21
23	32.93	34.06	33.93	32.87	28.05	26.16	27.73	28.85	28.73	30.43	31.29	32.35
24	32.47	33.94	33.80	32.64	27.95	26.29	27.71	28.83	28.82	30.58	31.42	32.34
25	32.88	33.96	32.43	32.31	27.92	26.45	27.69	28.85	28.91	30.60	31.46	32.37
26	32.96	33.91	31.87	32.26	27.86	26.58	27.81	28.88	28.99	30.68	31.51	32.30
27	32.87	33.03	31.53	32.24	27.80	26.61	27.94	28.96	29.04	30.73	31.53	32.40
28	32.37	33.06	32.44	32.29	27.84	26.59	28.01	28.91	29.11	30.77	31.38	32.53
29	32.82	33.05	32.67	32.28	---	26.77	28.05	28.78	29.08	30.78	30.94	32.52
30	32.78	33.14	32.70	32.26	---	26.87	28.11	28.41	28.99	30.84	31.44	32.51
31	32.68	---	32.55	32.08	---	26.96	---	28.14	---	30.80	31.63	---
MAX	34.29	34.11	33.93	32.90	31.45	28.37	28.11	29.20	29.11	30.84	31.63	32.53
WTR YR 1982	MEAN	30.58		HIGH	26.16		LOW	34.29				

## GROUND-WATER RECORDS

## MONTGOMERY COUNTY--Continued

394025084162800. Local number, MT-49.

LOCATION.--Lat 39°40'25", long 84°16'28", Hydrologic Unit 05080002, 1.2 mi (1.9 km) west of city hall in West Carrollton.

Owner: Metal Shredders, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 220 ft (67.1 m), cased.

DATUM.--Altitude of land-surface datum is 714.61 ft (217.813 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of shelter 2.50 ft (0.762 m) above land-surface datum.

PERIOD OF RECORD.--November 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 36.30 ft (11.064 m) Dec. 8, 1974; minimum daily low, 10.58 ft (3.225 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.19 ft (7.068 m) Nov. 18; minimum daily low, 15.80 ft (4.816 m) Mar. 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.35	22.41	22.98	22.18	18.53	17.09	16.24	17.74	17.94	18.89	19.97	21.07
2	22.46	22.69	23.00	22.14	17.97	17.14	16.17	17.76	17.98	18.64	20.35	21.00
3	22.23	22.73	23.02	22.04	17.91	17.18	16.05	18.10	18.06	18.59	20.43	20.87
4	22.15	22.82	23.10	21.86	17.90	17.23	16.07	18.19	18.12	18.65	20.47	20.79
5	22.25	22.85	22.87	21.61	17.89	17.24	16.26	18.26	17.88	18.68	20.25	20.79
6	22.17	22.94	22.76	21.28	17.92	17.03	16.28	18.34	17.90	19.03	19.94	20.81
7	22.19	22.73	22.99	21.32	17.98	17.18	16.29	18.39	18.23	19.15	19.93	21.14
8	22.54	22.64	23.11	21.31	18.01	17.24	16.47	18.15	18.31	19.21	19.90	21.23
9	22.62	22.86	22.90	21.30	18.14	17.37	16.74	18.11	18.35	18.98	19.95	21.28
10	22.41	22.87	22.82	21.39	18.21	17.42	16.49	18.41	18.42	18.95	20.03	21.08
11	22.35	22.67	23.07	21.37	18.33	17.44	16.41	18.52	18.19	19.01	20.32	21.03
12	22.70	22.93	22.89	21.38	18.35	17.27	16.59	18.60	18.13	19.39	20.48	21.03
13	22.75	23.03	22.83	21.39	18.44	17.05	16.86	18.62	18.16	19.49	20.24	21.32
14	22.80	22.83	23.09	21.39	18.47	16.90	16.90	18.70	18.22	19.56	20.22	21.39
15	22.86	22.73	23.14	21.44	18.52	16.74	16.97	18.48	18.50	19.62	20.23	21.39
16	22.87	23.02	22.96	21.56	18.46	16.71	16.99	18.46	18.60	19.38	20.64	21.43
17	22.65	23.12	22.94	21.55	18.10	16.51	16.82	18.80	18.38	19.36	20.73	21.22
18	22.55	23.19	22.95	21.55	17.46	16.33	16.85	18.92	18.12	19.37	20.81	21.22
19	22.80	23.08	22.96	21.62	17.10	16.31	17.20	18.93	18.05	19.47	20.88	21.21
20	22.91	22.90	22.97	21.64	16.99	16.22	17.27	18.98	18.06	19.79	20.63	21.51
21	22.98	22.81	22.91	21.70	16.87	15.82	17.42	18.90	18.49	19.88	20.54	21.58
22	23.01	22.74	23.16	21.68	16.82	15.80	17.51	18.45	18.58	19.93	20.50	21.58
23	23.08	22.94	22.92	21.43	16.74	15.85	17.52	18.31	18.65	19.68	20.87	21.64
24	22.84	23.10	22.58	20.85	16.73	15.93	17.30	18.51	18.74	19.66	20.95	21.41
25	22.69	23.06	22.28	20.76	16.75	16.05	17.28	18.60	18.51	19.69	20.83	21.40
26	22.91	22.84	22.20	20.77	16.80	16.14	17.60	18.64	18.48	20.05	20.84	21.39
27	22.89	23.09	22.21	20.74	16.91	16.22	17.72	18.73	18.50	20.10	20.64	21.62
28	22.80	22.87	22.24	20.82	17.02	16.27	17.79	18.59	18.81	20.18	20.56	21.70
29	22.72	22.76	22.24	20.81	---	16.32	17.89	18.11	18.77	20.23	20.55	21.62
30	22.77	22.98	22.22	20.74	---	16.35	17.97	17.78	18.81	19.99	20.89	21.67
31	22.58	---	22.15	20.35	---	16.36	---	17.64	---	19.95	20.98	---
MAX	23.08	23.19	23.16	22.18	18.53	17.44	17.97	18.98	18.81	20.23	20.98	21.70
WTR YR 1982	MEAN	19.93		HIGH	15.80		LOW	23.19				

## GROUND-WATER RECORDS

347

## MONTGOMERY COUNTY--Continued

394425084113200. Local number, MT-3.

LOCATION.--Lat 39°44'25", long 84°11'32", Hydrologic Unit 05080002, Patterson Blvd. at Stewart St., in Dayton.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in. (0.15 m), depth 80 ft (24.4 m), cased.

DATUM.--Altitude of land-surface datum is 744 ft (226.8 m), from topographic map. Measuring point: Floor of instrument shelter 1.20 ft (0.366 m) above land-surface datum.

PERIOD OF RECORD.--May 1945 to June 1974. Re-activated June 1980.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 79.45 ft (24.216 m) Apr. 6, 1971; minimum daily low, 25.72 ft (7.839 m) Mar. 21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily low 39.51 ft (12.043 m) Oct. 8, minimum daily low, 25.72 ft (7.839 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.13	36.17	32.68	32.15	28.91	27.01	26.91	27.48	30.76	31.33	32.82	33.48
2	39.21	36.37	34.03	31.53	28.38	27.03	26.68	27.31	31.00	31.42	33.03	33.53
3	39.21	36.49	34.70	31.11	28.52	27.08	26.10	28.53	31.16	30.71	32.95	33.65
4	39.20	37.31	35.13	32.17	28.56	27.01	26.17	28.65	31.23	30.47	32.97	33.07
5	39.24	37.90	34.27	32.46	28.46	27.01	26.14	28.78	31.29	30.44	32.93	32.68
6	39.44	38.16	33.35	31.79	28.47	26.71	26.37	28.91	30.98	31.45	32.94	32.52
7	39.49	37.47	32.86	31.85	28.39	26.78	26.37	29.06	31.08	31.50	32.84	32.51
8	39.51	37.16	32.77	31.13	29.52	26.93	26.27	29.09	31.22	31.52	32.10	32.33
9	38.78	37.14	33.97	30.60	28.67	27.08	26.23	29.10	31.01	31.56	32.70	32.25
10	37.98	37.11	34.65	30.67	28.55	26.92	26.23	29.21	31.09	30.93	32.87	32.23
11	37.50	37.06	35.06	30.41	28.46	26.90	26.04	29.33	31.08	30.51	32.97	32.25
12	37.20	37.08	35.21	30.40	28.46	27.72	27.09	29.46	31.18	31.64	33.04	32.23
13	37.11	37.05	34.23	30.17	28.40	26.67	27.63	29.54	31.32	31.78	33.06	32.34
14	36.98	37.00	34.28	31.16	28.31	26.42	27.68	29.61	31.46	31.88	32.48	32.31
15	36.75	36.93	34.89	31.33	29.36	26.27	27.55	29.64	31.29	31.94	32.11	33.33
16	36.66	36.92	35.18	30.51	28.58	26.25	27.89	29.66	31.23	32.06	33.02	33.27
17	36.61	36.97	35.45	30.38	28.06	26.12	28.08	29.80	30.78	32.23	33.13	33.05
18	36.45	37.01	35.57	30.24	27.58	25.98	28.10	30.21	30.88	31.31	33.19	33.17
19	36.53	36.95	34.81	30.24	27.19	26.05	28.37	30.40	31.08	32.05	33.23	32.32
20	36.49	35.70	33.62	30.26	26.98	25.97	28.48	30.55	30.16	32.13	33.26	32.92
21	36.47	34.83	32.99	31.76	26.81	25.72	28.53	30.62	30.90	32.25	32.72	33.01
22	36.43	34.31	33.66	32.12	26.70	25.86	28.64	30.63	30.94	32.34	32.78	33.03
23	36.39	33.97	34.25	32.16	26.65	25.94	28.67	30.71	31.08	32.47	33.38	33.04
24	35.58	33.73	32.92	31.07	26.69	26.10	27.57	30.94	31.14	32.57	33.33	33.03
25	34.88	33.68	31.74	30.16	26.77	26.23	27.19	31.05	31.17	31.75	33.04	33.18
26	34.54	33.38	31.41	30.13	27.73	26.30	28.15	31.16	30.49	32.45	33.11	33.19
27	34.45	33.25	31.31	30.00	27.01	26.36	28.52	31.18	30.23	32.38	33.24	33.17
28	34.74	33.14	32.44	30.08	26.98	26.36	28.67	31.15	31.17	32.47	32.68	33.19
29	35.25	33.01	31.91	31.11	---	27.30	28.70	30.76	31.11	32.47	32.36	33.17
30	35.76	32.87	32.08	31.55	---	27.33	27.92	30.51	31.21	32.57	33.30	33.13
31	36.04	---	32.90	30.28	---	26.55	---	30.53	---	32.73	33.42	---
MAX	39.51	38.16	35.57	32.46	29.52	27.72	28.70	31.18	31.46	32.73	33.42	33.65
WTR YR 1982	MEAN	31.53		HIGH	25.72		LOW	39.51				

## GROUND-WATER RECORDS

## MONTGOMERY COUNTY--Continued

394533084113800. Local number, MT-6.

LOCATION.--Lat 39°45'33", long 84°11'38", Hydrologic Unit 05080002, 3rd and Ludlow Sts., Dayton.

Owner: City of Dayton

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 740 ft (226 m) from topographic map. Measuring point: Floor of instrument shelter 13.00 ft (3.962 m) below land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.20 ft (18.349 m) Oct. 2, 1970; minimum daily low, 21.23 ft (6.471 m) Feb. 26, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 31.53 ft (9.610 m) Sep. 15; minimum daily low, 21.23 ft (6.471 m) Feb. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.23	26.31	25.48	23.75	22.92	21.44	23.36	23.96	26.95	28.87	30.07	30.92
2	28.34	26.91	25.58	23.70	22.38	21.76	23.36	23.47	26.94	28.87	30.48	31.08
3	28.12	27.58	25.27	23.56	22.11	21.64	22.97	24.86	26.86	28.46	30.59	30.81
4	27.93	27.71	25.21	24.01	22.11	21.81	22.92	25.22	26.64	28.07	30.71	30.87
5	28.98	27.37	25.17	23.67	22.07	22.10	22.53	25.51	26.44	27.86	30.94	29.97
6	29.28	27.08	25.08	23.96	22.03	21.65	22.78	25.94	26.05	28.80	30.99	30.00
7	28.16	26.54	25.22	23.70	22.01	21.60	22.72	25.62	27.09	29.22	30.94	30.52
8	27.82	26.25	25.36	23.59	22.00	21.66	22.63	25.96	27.16	29.65	30.42	30.20
9	27.70	26.18	24.99	23.42	22.07	21.77	22.65	25.07	27.61	29.87	30.51	30.04
10	28.24	26.12	24.85	23.55	22.10	21.97	22.67	25.96	27.66	29.90	30.64	30.53
11	28.04	26.22	24.81	23.51	22.64	22.21	22.64	26.45	27.74	29.42	30.40	30.72
12	27.79	25.99	24.80	23.68	22.68	22.16	22.58	26.66	27.72	29.44	30.62	30.00
13	27.73	25.96	24.77	23.44	22.22	21.84	23.16	26.82	26.82	29.61	30.85	30.89
14	27.44	25.95	24.67	23.85	22.17	21.73	22.92	26.99	27.81	29.75	30.10	31.23
15	27.72	25.84	25.03	23.94	22.76	21.87	23.70	26.88	28.00	30.04	30.04	31.53
16	27.71	25.84	25.13	23.65	22.79	22.08	24.23	26.05	27.95	29.99	30.68	31.45
17	27.37	25.83	24.86	23.62	22.59	22.23	23.78	26.90	28.16	30.17	30.83	31.18
18	27.17	25.83	24.85	23.50	22.60	22.05	23.36	27.09	28.13	29.80	30.84	30.50
19	26.95	25.74	24.74	23.55	22.02	22.06	23.90	27.20	27.46	29.74	31.08	30.15
20	26.82	25.74	24.65	23.96	21.66	21.60	23.58	27.46	27.05	30.04	31.06	30.21
21	29.06	25.65	24.59	24.05	21.41	21.49	23.29	27.45	27.76	30.11	30.79	30.01
22	27.00	25.55	24.78	23.80	21.33	21.44	23.07	26.79	27.97	30.27	30.06	29.44
23	27.07	25.47	24.90	23.49	21.54	21.45	23.03	26.45	27.86	30.40	30.61	29.22
24	26.69	25.38	24.92	23.43	21.24	21.95	23.17	27.23	27.98	30.44	30.89	28.94
25	26.39	25.51	24.37	23.35	21.27	21.92	22.81	27.26	27.87	30.02	30.86	29.23
26	26.30	25.27	24.11	23.35	21.23	22.23	23.70	27.43	27.57	30.27	30.76	29.12
27	26.61	25.55	23.95	23.27	21.27	22.26	23.65	27.62	27.23	30.30	31.06	29.22
28	26.64	25.66	23.91	23.35	21.36	21.89	23.65	27.82	28.23	30.45	30.66	29.31
29	26.63	25.69	24.19	23.33	---	22.60	23.53	26.99	28.69	30.58	29.73	29.41
30	27.02	25.64	24.03	23.21	---	22.91	24.20	26.56	28.89	30.66	30.23	29.99
31	26.51	---	23.74	23.14	---	23.21	---	26.11	---	30.44	30.60	---
MAX	29.28	27.71	25.58	24.05	22.92	23.21	24.23	27.82	28.89	30.66	31.08	31.53
WTR YR 1982	MEAN	26.17		HIGH	21.23		LOW	31.53				

## GROUND-WATER RECORDS

349

## MUSKINGUM COUNTY

395804081593200. Local number, MU-1A.

LOCATION.--Lat 39°58'04", long 81°59'32", Hydrologic Unit 05040004, 2.2 mi (3.5 km) northeast of the "Y" bridge in Zanesville.

Owner: Zanesville Water Department.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 109 ft (33.2 m), cased.

DATUM.--Altitude of land-surface datum is 700 ft (213 m), from topographic map. Measuring point: Floor of instrument shelter 4.48 ft (1.366 m) above land-surface datum.

REMARKS.--Water level affected by nearby municipal wells and by stage of the Muskingum River. Prior to water year 1978, well depth reported as 132 ft (40.2 m).

PERIOD OF RECORD.--May 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.25 ft (11.354 m) Aug. 1-2, 1954; minimum daily low, 8.50 ft (2.591 m) May 25, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 20.79 ft (6.337 m) Dec. 30; minimum daily low, 14.59 ft (4.447 m) Apr. 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---			---	16.00	16.39	16.44	16.04	17.05	19.06
2	---	15.80	---			---	15.95	15.84	16.48	15.91	17.38	19.14
3	---	---	---			---	15.35	15.90	16.51	15.77	17.25	19.20
4	---	---	---			19.63	15.19	16.32	16.51	15.71	17.90	19.16
5	---	---	---			19.87	14.59	16.40	16.57	15.56	18.15	19.11
6	---	---	---			19.51	15.19	15.86	16.64	15.41	18.00	19.24
7	---	---	---			19.28	15.40	15.50	16.73	15.46	17.87	19.32
8	---	---	---			19.48	15.08	15.82	16.82	15.47	17.73	19.45
9	---	---	---			19.57	15.20	16.36	16.93	15.37	17.82	19.49
10	---	---	---			19.53	15.56	16.55	16.95	15.35	17.97	19.59
11	---	---	---			19.57	15.58	16.32	16.93	15.48	18.06	19.61
12	---	---	---			19.35	15.57	16.32	16.35	15.59	18.11	19.62
13	---	---	---			19.14	15.72	15.80	16.56	15.71	18.15	19.56
14	---	---	---			19.10	15.85	15.57	16.20	15.79	18.10	19.69
15	---	---	---			18.78	15.72	16.02	16.07	15.87	17.71	19.79
16	---	---	---			18.51	15.73	16.31	16.40	16.10	17.94	19.89
17	---	---	---			18.19	15.44	16.40	16.31	16.53	18.31	19.91
18	---	---	---			17.83	15.57	16.45	16.10	16.78	18.33	19.68
19	---	---	---			17.28	15.39	16.43	15.67	16.52	18.63	19.53
20	---	---	---			16.53	15.73	16.46	15.75	16.47	18.96	19.47
21	16.05	---	---			15.46	15.97	16.23	15.58	16.60	19.07	19.71
22	---	---	---			15.05	15.86	16.51	15.69	16.91	18.99	19.94
23	---	---	---			15.15	15.77	16.61	15.96	17.35	18.62	19.88
24	---	---	---			14.64	15.59	16.68	15.93	17.65	18.92	20.02
25	---	---	---			14.59	15.32	16.69	15.79	17.77	19.02	20.02
26	---	---	---			14.59	15.75	16.41	15.82	17.60	19.06	19.87
27	---	---	---			14.59	15.85	16.27	15.87	17.49	19.06	19.90
28	---	---	---			14.78	16.05	16.26	15.85	17.14	19.15	19.89
29	---	---	20.76			14.82	16.05	16.21	15.90	17.02	19.17	20.12
30	---	---	20.79			15.35	16.15	16.27	16.04	16.92	19.08	20.20
31	---	---	---			15.83	---	16.38	---	16.97	19.05	---
MAX	16.05	15.80	20.79			19.87	16.15	16.69	16.95	17.77	19.17	20.20
WTR YR 1982	MEAN	17.13		HIGH	14.59		LOW	20.79				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## PICKAWAY COUNTY

393327082571600. Local number, PK-7.

LOCATION.--Lat 39°33'27", long 82°57'16", Hydrologic Unit 05060002, 3.1 mi (5.0 km) south of Circleville.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m) depth drilled 172 ft (52.4 m), present depth 169 ft (51.5 m), cased to 164 ft (50.0 m).

DATUM.--Altitude of land-surface datum is 705 ft (215 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--July 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 54.80 ft (16.703 m) Sept. 15, 1977; minimum daily low, 38.32 ft (11.680 m) Dec. 25, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 47.66 ft (14.527 m) Jan. 21-22; minimum daily low, 43.52 ft (13.265 m) Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.52	45.02	46.17	46.75	47.28	46.32	46.22	45.45	45.16	44.64	44.87	45.37
2	43.73	45.09	46.46	46.75	47.28	46.42	46.24	44.78	45.48	44.64	44.78	45.41
3	43.75	45.19	46.64	46.59	47.29	46.56	46.03	44.76	45.53	44.33	45.03	45.47
4	43.68	45.26	46.77	46.92	47.42	46.50	45.75	44.92	45.55	44.13	45.22	45.40
5	43.75	45.27	46.79	47.21	47.40	46.59	45.69	44.95	45.48	44.26	45.34	45.08
6	43.92	45.34	46.60	47.31	47.13	46.54	46.16	45.15	45.02	44.38	45.38	44.94
7	43.97	45.36	46.32	47.51	47.01	46.17	46.17	45.35	44.71	44.60	45.40	44.98
8	44.04	45.26	46.74	47.51	47.04	46.22	46.06	45.34	45.08	44.96	45.15	45.19
9	44.08	45.09	46.88	47.37	47.29	46.40	45.77	45.03	45.17	44.74	44.99	45.30
10	44.09	45.15	46.87	47.06	47.35	46.40	45.77	45.00	45.32	44.60	45.08	45.43
11	44.05	45.30	46.92	47.24	47.34	46.38	45.43	45.22	45.39	44.29	45.11	45.45
12	44.11	45.36	46.94	47.40	47.15	46.42	45.31	45.33	45.34	44.55	45.13	45.05
13	44.26	45.36	46.52	47.44	46.97	46.26	45.60	45.40	44.82	44.74	45.13	45.12
14	44.27	45.33	46.67	47.53	46.60	46.10	45.72	45.56	44.82	44.78	45.10	45.35
15	44.28	45.11	46.87	47.65	46.69	46.02	45.74	45.55	44.91	44.86	44.83	45.38
16	44.34	45.20	47.06	47.64	46.86	46.11	45.72	45.11	44.95	44.86	44.58	45.38
17	44.36	45.48	47.07	47.41	46.89	46.36	45.60	45.15	44.97	44.84	44.83	45.44
18	44.08	45.67	47.11	47.29	46.89	46.38	45.31	45.37	44.80	44.74	45.01	45.41
19	44.31	45.66	47.10	47.51	46.94	46.37	45.27	45.47	44.73	44.67	45.11	45.31
20	44.48	45.71	46.66	47.59	46.91	46.34	45.46	45.56	44.48	44.80	45.21	45.27
21	44.53	45.73	46.60	47.66	46.50	46.00	45.58	45.67	44.43	44.82	45.26	45.38
22	44.53	45.60	46.76	47.66	46.71	46.15	45.59	45.62	44.53	44.90	45.07	45.44
23	44.65	45.60	47.11	47.13	46.78	46.25	45.59	45.46	44.61	45.02	45.09	45.53
24	44.65	46.06	47.13	47.11	46.92	46.31	45.51	45.41	44.61	45.02	45.23	45.54
25	44.39	46.17	46.73	47.28	47.07	46.31	45.07	45.52	44.65	44.75	45.32	45.49
26	44.48	46.15	46.49	47.44	47.07	46.32	45.14	45.58	44.64	44.90	45.27	45.22
27	44.79	45.72	46.42	47.44	46.92	46.32	45.42	45.57	44.37	45.10	45.21	45.29
28	44.96	45.73	46.83	47.54	46.52	46.01	45.48	45.57	44.28	45.21	45.24	45.56
29	45.01	45.73	47.17	47.56	---	45.62	45.50	45.54	44.47	45.31	45.01	45.62
30	45.08	45.91	47.21	47.20	---	45.61	45.51	45.09	44.59	45.31	45.01	45.67
31	45.09	---	47.18	46.96	---	46.00	---	44.90	---	45.22	45.27	---
MAX	45.09	46.17	47.21	47.66	47.42	46.59	46.24	45.67	45.55	45.31	45.40	45.67
WTR YR 1982	MEAN	45.68		HIGH	43.52		LOW	47.66				

## GROUND-WATER RECORDS

351

## PICKAWAY COUNTY--Continued

393402082572500. Local number, Pk-4.

LOCATION.--Lat 39°34'02", long 82°57'25", Hydrologic Unit 05060002, 2 mi (3.2 km) south of Circleville.

Owner: E.I. DuPont DeNemours.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 136 ft (41.5 m), cased.

DATUM.--Altitude of land-surface datum is 707 ft (215 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 80.15 ft (24.430 m) Nov. 3, 1972; minimum daily low, 47.40 ft (14.448 m) Feb. 25, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 70.35 ft (21.443 m) Dec. 14; minimum daily low, 62.50 ft (19.050 m) Aug. 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.55	67.80	68.00	68.55	67.65	64.75	64.55	65.95	65.35	64.95	65.10	66.00
2	67.20	67.95	68.15	68.35	67.05	64.30	64.30	66.35	65.35	64.80	65.10	66.05
3	66.25	67.75	68.20	68.65	67.20	64.45	65.20	66.50	65.05	67.55	66.00	65.65
4	66.20	68.05	68.30	69.60	67.50	64.35	67.90	66.75	---	64.65	66.35	64.50
5	67.20	67.85	68.25	69.30	67.25	64.95	66.85	66.75	---	64.55	66.35	66.75
6	67.35	67.55	67.90	69.45	67.50	64.25	66.85	67.25	65.25	64.35	66.55	64.45
7	66.75	65.95	68.55	69.55	67.05	64.25	65.20	66.60	62.95	68.45	66.30	65.35
8	66.60	66.00	68.70	69.50	67.10	64.20	63.85	65.95	65.55	68.70	66.15	64.80
9	66.70	66.50	68.80	69.45	67.30	64.30	63.70	67.80	66.15	64.75	66.45	64.70
10	66.35	67.45	68.60	69.65	67.95	64.45	63.65	---	63.90	64.55	66.50	64.85
11	66.15	67.80	68.65	69.60	66.80	63.95	63.50	66.60	67.75	64.55	69.85	64.65
12	66.60	67.75	68.85	69.45	66.25	64.55	63.70	66.65	---	62.80	---	64.60
13	66.90	66.50	68.70	69.55	65.75	64.35	64.25	66.75	---	63.05	---	66.60
14	66.70	66.00	70.35	70.05	65.65	67.35	64.15	67.55	68.55	63.25	---	64.75
15	66.55	66.55	68.80	69.75	69.75	64.20	64.10	67.20	---	63.45	---	67.55
16	66.80	66.25	68.95	69.85	---	64.35	64.00	67.15	62.55	63.25	---	68.25
17	66.20	67.30	68.65	69.50	---	64.70	64.15	67.40	65.40	69.20	---	64.45
18	66.30	67.60	68.60	69.60	---	64.45	63.75	67.80	---	64.45	66.15	64.15
19	66.80	66.45	68.45	69.20	---	64.35	64.00	66.95	67.40	62.95	66.05	67.15
20	66.85	67.60	68.45	69.10	---	64.35	64.05	64.30	67.75	62.85	66.00	67.05
21	66.90	67.60	69.60	70.35	---	67.50	64.10	63.95	66.10	65.85	66.05	64.85
22	66.95	67.90	69.05	69.55	---	64.45	64.20	66.10	64.60	67.30	64.85	64.85
23	67.00	68.40	69.45	68.70	---	64.35	65.80	---	64.80	67.85	62.70	64.80
24	66.55	69.60	68.70	68.80	---	64.35	65.65	63.35	64.80	66.45	62.50	64.95
25	66.40	67.65	68.50	69.05	---	65.20	65.60	63.50	64.70	66.30	64.70	67.45
26	67.15	67.25	68.35	67.95	---	64.15	67.45	63.75	64.35	67.55	64.15	64.35
27	67.65	67.20	68.65	67.75	67.25	63.80	66.85	63.50	64.50	66.85	64.00	64.80
28	---	67.80	69.00	68.40	64.75	66.70	64.20	63.50	64.85	66.70	64.15	65.10
29	66.25	67.40	68.95	68.00	---	67.05	65.60	63.30	65.00	66.95	67.05	65.15
30	66.55	67.75	68.20	67.90	---	66.60	64.15	62.75	65.05	66.55	67.15	65.15
31	66.40	---	68.65	67.75	---	65.05	---	64.65	---	68.55	65.75	---
MAX	67.65	69.60	70.35	70.35	69.75	67.50	67.90	67.80	68.55	69.20	69.85	68.25
WTR YR 1982	MEAN	66.38		HIGH	62.50		LOW	70.35				

## GROUND-WATER RECORDS

## PICKAWAY COUNTY--Continued

393638082572300. Local number, PK-6.

LOCATION.--Lat 39°36'38", long 82°57'23", Hydrologic Unit 05060002, water works plant 1 mi (1.6 km) northwest of Circleville.

Owner: Circleville Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 120 ft (36.6 m), cased.

DATUM.--Altitude of land-surface datum is 672 ft (205 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.32 ft (11.375 m) Feb. 24, 1977; minimum daily low, 14.50 ft (4.420 m) Feb. 2, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 34.80 ft (10.607 m) Sep. 22; minimum daily low, 23.55 ft (7.178 m) Feb. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.70	32.65	29.65	28.90	29.00	26.85	29.55	30.80	31.75	32.90	34.45	34.25
2	29.80	32.75	29.55	30.90	23.55	27.55	29.55	31.30	31.95	32.20	34.30	34.35
3	29.75	29.90	29.45	30.25	24.65	27.85	29.45	31.55	32.30	29.60	34.50	33.50
4	29.75	29.95	29.15	31.50	26.15	28.05	28.05	32.40	32.30	33.15	34.05	34.30
5	29.75	30.05	32.05	28.55	25.95	28.45	29.45	32.15	32.40	33.35	31.10	34.35
6	29.90	29.95	33.25	27.85	26.45	27.95	29.65	32.20	30.05	33.15	34.00	32.15
7	30.10	30.55	33.25	27.45	26.40	25.80	29.90	32.20	32.40	33.15	34.05	34.45
8	33.75	33.55	29.90	29.65	26.80	28.60	30.00	31.85	33.10	33.00	34.05	34.60
9	33.35	33.35	29.85	32.15	27.15	28.75	29.20	31.80	31.90	32.85	34.25	34.40
10	33.45	29.90	33.25	31.60	---	28.55	29.30	32.20	30.45	32.90	32.35	34.45
11	30.45	29.90	31.60	28.15	29.30	28.85	29.30	32.35	30.50	33.20	33.45	32.55
12	32.80	29.85	33.15	31.90	29.65	28.20	29.85	32.00	29.35	29.95	34.40	34.30
13	33.65	29.85	32.85	---	28.35	27.90	29.95	32.45	29.15	31.80	34.30	34.65
14	33.65	33.00	34.05	32.40	30.15	27.45	30.20	33.00	30.35	33.15	34.50	33.50
15	30.05	33.10	34.20	33.00	30.40	26.60	30.20	33.00	32.65	33.40	32.35	34.35
16	30.00	30.40	33.65	30.25	30.35	26.70	30.30	32.85	31.35	33.45	34.25	33.40
17	30.10	29.70	33.00	---	30.20	26.25	30.15	33.00	31.15	33.40	34.25	33.85
18	30.10	32.30	32.85	---	27.20	25.55	29.25	32.50	32.05	33.55	33.40	33.75
19	29.95	32.35	32.40	33.20	27.15	25.00	29.90	32.80	31.10	33.50	33.95	32.75
20	30.10	29.85	33.15	33.45	26.70	25.45	30.15	32.60	28.65	33.50	33.60	34.20
21	30.70	31.90	33.60	33.60	27.05	24.75	29.60	32.75	32.20	33.85	33.95	34.30
22	30.15	29.55	30.10	33.60	26.60	24.20	30.90	30.75	32.20	33.75	34.15	34.80
23	30.00	29.75	30.05	33.00	26.50	24.55	31.20	32.25	32.80	34.00	34.30	33.50
24	30.55	29.95	32.60	30.30	25.90	25.55	30.70	31.50	32.85	30.65	34.15	34.10
25	30.05	29.80	33.05	28.05	26.40	25.55	30.95	32.30	32.45	32.95	34.25	34.15
26	32.65	29.80	30.85	29.75	26.45	26.35	30.15	32.35	32.75	33.80	34.20	34.40
27	33.65	29.50	29.60	32.05	26.05	27.25	31.25	33.15	30.45	33.55	32.30	33.00
28	32.80	29.75	29.35	32.10	26.40	26.70	31.35	33.20	32.45	33.85	34.30	34.15
29	30.15	29.75	28.65	---	---	27.45	30.85	32.45	33.25	34.10	34.55	33.35
30	30.15	29.60	30.80	---	---	28.25	31.40	29.10	31.55	33.75	34.25	34.15
31	31.90	---	28.85	29.35	---	29.20	---	31.40	---	34.25	34.70	---
MAX	33.75	33.55	34.20	33.60	30.40	29.20	31.40	33.20	33.25	34.25	34.70	34.80
WTR YR 1982	MEAN	31.13		HIGH	23.55		LOW	34.80				

## GROUND-WATER RECORDS

353

## PICKAWAY COUNTY--Continued

393639082564400, Local number, Pk-3.

LOCATION.--Lat 39°36'39", long 82°56'44", Hydrologic Unit 05060002, State Highway garage, Circleville.

Owner: Ohio Highway Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in (0.13 m), depth 87 ft (25.5 m), cased.

DATUM.--Altitude of land-surface datum is 680 ft (207 m), from topographic map. Measuring point: Floor of instrument shelter 3.20 ft (0.975 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.49 ft (5.940 m) Jan. 3, 1964; minimum daily low, 11.83 ft (3.605 m) May 29, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 18.36 ft (5.596 m) Sep. 30; minimum daily low, 14.88 ft (4.535 m) Mar. 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.94	17.36	17.47	17.50	16.53	15.74	15.13	15.78	15.85	16.33	17.16	17.86
2	16.95	17.37	17.46	17.50	16.25	15.77	15.13	15.81	15.88	16.35	17.19	17.87
3	16.96	17.38	17.46	17.50	16.02	15.80	15.11	15.84	15.93	16.35	17.23	17.89
4	16.98	17.39	17.47	17.49	15.95	15.81	15.07	15.88	15.95	16.38	17.25	17.91
5	16.99	17.40	17.49	17.46	15.95	15.85	15.07	15.90	15.96	16.41	17.26	17.92
6	17.01	17.41	17.51	17.43	15.93	15.85	15.12	15.93	15.97	16.44	17.29	17.93
7	17.03	17.42	17.52	17.38	15.93	15.86	15.15	15.95	15.99	16.46	17.32	17.95
8	17.05	17.44	17.53	17.36	15.95	15.88	15.15	15.95	16.01	16.49	17.34	17.99
9	17.08	17.46	17.55	17.35	15.98	15.90	15.18	15.98	16.04	16.50	17.36	18.01
10	17.09	17.46	17.56	17.35	16.00	15.91	15.20	15.99	16.06	16.53	17.39	18.02
11	17.11	17.46	17.57	17.34	16.04	15.91	15.23	15.99	16.07	16.54	17.41	18.04
12	17.13	17.48	17.59	17.35	16.07	15.89	15.25	16.00	16.09	16.57	17.43	18.06
13	17.16	17.48	17.60	17.35	16.10	15.80	15.30	16.01	16.10	16.60	17.45	18.07
14	17.17	17.50	17.61	17.33	16.12	15.75	15.32	16.01	16.13	16.63	17.48	18.10
15	17.18	17.51	17.64	17.35	16.15	15.68	15.35	16.02	16.15	16.66	17.50	18.11
16	17.19	17.52	17.65	17.36	16.14	15.64	15.38	16.03	16.15	16.70	17.51	18.11
17	17.20	17.52	17.66	17.39	16.06	15.58	15.41	16.05	16.06	16.72	17.56	18.13
18	17.23	17.51	17.68	17.40	15.84	15.53	15.43	16.05	16.04	16.75	17.58	18.15
19	17.24	17.51	17.69	17.42	15.68	15.47	15.44	16.06	16.04	16.77	17.60	18.16
20	17.26	17.50	17.71	17.44	15.60	15.43	15.46	16.05	16.06	16.80	17.62	18.18
21	17.27	17.41	17.72	17.46	15.55	15.14	15.51	16.04	16.10	16.84	17.64	18.20
22	17.27	17.40	17.72	17.47	15.57	14.95	15.54	16.04	16.14	16.86	17.66	18.22
23	17.27	17.41	17.72	17.47	15.58	14.91	15.57	15.83	16.18	16.89	17.68	18.24
24	17.28	17.41	17.65	17.13	15.62	14.88	15.59	15.81	16.20	16.91	17.72	18.26
25	17.29	17.41	17.62	17.00	15.66	14.90	15.60	15.80	16.22	16.93	17.72	18.27
26	17.30	17.42	17.57	16.95	15.67	14.94	15.63	15.81	16.25	16.96	17.74	18.29
27	17.32	17.43	17.52	16.95	15.69	15.00	15.67	15.83	16.27	16.99	17.75	18.30
28	17.33	17.44	17.51	16.96	15.72	15.01	15.71	15.88	16.27	17.03	17.78	18.31
29	17.34	17.45	17.50	16.97	---	15.04	15.74	15.92	16.28	17.06	17.79	18.33
30	17.35	17.46	17.51	16.97	---	15.06	15.76	15.91	16.30	17.11	17.81	18.36
31	17.36	---	17.51	16.95	---	15.10	---	15.85	---	17.14	17.84	---
MAX	17.36	17.52	17.72	17.50	16.53	15.91	15.76	16.06	16.30	17.14	17.84	18.36
WTR YR 1982	MEAN	16.72		HIGH	14.88		LOW	18.36				

## GROUND-WATER RECORDS

## PICKAWAY COUNTY--Continued

39348083072200. Local number, Pk-8.

LOCATION.--Lat 39°34'38", long 83°07'22", Hydrologic Unit 05060002, 0.5 mi (0.8 km) south of Williamsport.

Owner: Village of Williamsport.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 10 in (0.25 m), depth 18 ft (5.5 m), cased.

DATUM.--Altitude of land-surface datum is 723 ft (220.3 m), from topographic map. Measuring point: Floor of instrument shelter 0.9 ft (0.274 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 9.43 ft (2.874 m) Dec. 16, 1982; minimum daily low, 0.43 ft (0.131 m) June 1, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.43 ft (2.874 m) Dec. 16; minimum recorded daily low, 1.04 ft (0.317 m) Feb. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.07	8.48	7.98	7.75	1.37	3.48	3.17	6.24	6.06	5.06	7.50	8.09
2	9.12	8.50	8.13	7.74	1.48	3.66	3.22	6.25	6.01	5.05	8.06	7.98
3	9.16	8.66	8.20	7.70	1.72	3.89	3.12	6.36	5.83	5.13	7.59	7.92
4	9.15	8.51	8.11	7.65	1.77	3.84	3.23	6.50	5.84	5.17	7.53	7.92
5	9.38	8.74	8.24	7.20	1.63	3.85	3.38	6.78	5.82	5.46	6.85	7.92
6	9.17	9.08	8.12	7.04	1.69	3.86	3.56	6.83	5.67	5.87	6.43	7.98
7	8.75	8.59	8.10	6.97	---	3.86	3.59	6.81	5.85	5.97	6.78	7.95
8	8.60	8.50	8.13	6.85	1.86	3.95	3.72	6.63	6.15	6.06	6.59	8.01
9	8.62	8.75	8.03	6.97	1.89	4.00	3.79	6.68	6.16	6.12	6.59	8.00
10	8.66	8.65	8.30	6.98	---	4.00	4.01	6.88	5.99	6.13	6.73	8.09
11	8.69	8.84	8.18	7.15	2.40	3.97	4.05	7.32	5.75	6.16	6.80	8.08
12	8.73	8.52	8.28	7.41	2.71	3.45	4.25	7.55	5.43	6.75	6.90	8.10
13	8.83	8.38	8.33	7.49	3.18	2.61	4.34	7.62	5.35	7.03	7.00	8.21
14	8.69	8.81	8.69	7.36	3.37	2.43	4.49	7.56	5.49	7.25	7.07	8.24
15	8.82	8.49	8.93	7.41	3.39	2.33	4.68	7.64	5.61	7.16	7.20	8.20
16	8.78	8.57	9.43	7.61	2.54	3.21	4.64	7.50	5.30	6.91	7.24	8.63
17	8.68	8.44	8.96	7.78	1.90	2.77	4.81	7.62	4.64	6.98	7.30	8.46
18	8.69	8.63	8.87	8.01	1.11	2.83	4.81	7.90	4.70	7.25	7.39	8.34
19	8.72	8.60	8.86	8.19	1.04	2.97	4.92	7.71	4.70	7.05	7.41	8.39
20	8.64	8.04	8.92	8.31	1.08	2.12	4.96	7.67	4.71	7.18	7.37	8.45
21	8.59	8.07	8.80	8.39	1.10	---	5.18	7.74	5.02	6.99	7.46	8.47
22	8.45	8.11	8.76	8.27	1.13	---	5.19	7.35	5.13	7.24	7.38	8.63
23	8.45	8.05	8.72	7.55	1.41	---	5.41	6.73	5.39	7.17	7.47	8.67
24	8.42	7.96	7.93	3.50	1.85	---	5.40	6.71	5.56	7.39	7.54	8.54
25	8.34	7.94	7.90	3.90	2.29	1.40	5.60	6.64	5.69	7.06	7.65	8.49
26	8.28	7.89	8.03	4.24	2.67	1.67	5.64	6.45	5.78	7.76	7.84	8.48
27	8.36	7.93	7.99	4.25	3.06	2.05	5.69	6.40	5.75	8.31	7.83	8.56
28	8.32	7.91	8.00	4.45	3.34	2.25	5.86	6.44	5.90	7.90	7.80	8.53
29	8.39	7.91	7.85	4.48	---	2.82	6.04	6.43	5.88	7.75	7.79	8.60
30	8.53	8.01	7.75	4.52	---	2.79	6.09	5.90	5.71	7.87	7.81	8.58
31	8.55	---	7.83	4.23	---	2.76	---	5.83	---	7.63	7.81	---
MAX	9.38	9.08	9.43	8.39	3.39	4.00	6.09	7.90	6.16	8.31	8.06	8.67

WTR YR 1982 MEAN 6.48 HIGH 1.04 LOW 9.43

## PIKE COUNTY

390359083015100. Local number, PI-2.

LOCATION.--Lat 39°03'59", long 83°01'51", Hydrologic Unit 05060002, 1 mi (1.6 km) west of Piketon.

Owner: Goodyear Atomic Corporation.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 550 ft (168 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.46 ft (8.370 m) Feb. 15, 1977; minimum daily low, 10.06 ft (3.066 m) Mar. 1, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 25.94 ft (7.907 m) Dec. 19-20; minimum recorded daily low, 18.43 ft (5.617 m) April 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.20		---		---		---	21.61	22.92			
2	25.23		---		---		18.43	21.72	22.92			
3	25.26		---		---		18.51	21.83	22.92			
4	25.29		---		---		18.65	21.95	22.94			
5	25.32		---		---		18.66	22.04	22.96			
6	25.34		---		---		18.79	22.15	22.52			
7	25.37		---		---		18.86	22.26	22.47			
8	25.40		---		22.05		18.88	22.37	22.45			
9	25.44		---		21.92		19.03	22.47	22.42			
10	25.46		---		---		19.15	22.56	22.40			
11	25.48		---		---		19.27	22.65	22.41			
12	25.50		---		---		19.37	22.74	22.43			
13	25.52		---		---		19.52	22.82	22.48			
14	25.53		25.86		---		19.63	22.89	22.53			
15	25.55		25.87		---		19.74	22.97	22.60			
16	25.57		25.89		---		19.84	23.06	22.79			
17	25.58		25.92		---		20.01	23.14	22.85			
18	25.62		25.93		---		20.09	23.21	---			
19	25.63		25.94		---		20.18	23.28	---			
20	25.85		25.94		---		20.34	23.49	---			
21	---		---		---		20.45	23.55	---			
22	---		---		---		20.56	23.59	---			
23	---		---		---		20.66	23.61	---			
24	---		---		---		20.77	23.64	---			
25	---		---		---		20.87	23.59	---			
26	---		---		---		21.01	23.25	---			
27	---		---		---		21.15	23.16	---			
28	---		---		---		21.25	23.09	---			
29	---		---		---		21.38	23.04	---			
30	---		---		---		21.49	22.96	---			
31	---		---		---		---	22.92	---			
MAX	25.85		25.94		22.05		21.49	23.64	22.96			
WTR YR 1982	MEAN	22.68		HIGH	18.43		LOW	25.94				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## PORTAGE COUNTY

411101081022000. Local number, PO-3.

LOCATION.--Lat 41°11'01", long 81°02'20", Hydrologic Unit 05030103, at Ravenna Army Ammunition Plant 10.9 mi (17.5 km) east of Ravenna.

Owner: U.S. Army.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.30 m), depth 165 ft (50.3 m), cased.

DATUM.--Altitude of land-surface datum is 985 ft (300 m), from topographic map. Measuring point: Surface of instrument platform 2.80 ft (0.853 m) above land-surface datum.

REMARKS.--Water level affected by nearby pumping wells. Prior to water year 1978, well depth reported as 163 ft (49.7 m).

PERIOD OF RECORD.--May 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 41.35 ft (12.603 m) Jan. 28, Feb. 6, 1954; minimum daily low, 19.34 ft (5.895 m) Mar. 31, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 26.15 ft (7.971 m) Sept. 30; minimum daily low, 20.08 ft (6.120 m) April 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	23.02	22.61	22.32	22.01	21.46	21.10	20.43	21.89	22.52	22.82	24.82
2	---	22.93	22.63	22.41	21.95	21.19	21.13	20.42	23.09	23.72	23.41	24.41
3	---	22.97	22.68	22.05	21.50	21.36	20.35	20.45	22.01	22.29	23.85	23.72
4	---	22.86	22.86	21.65	21.88	21.12	20.85	20.53	23.40	23.62	22.81	25.19
5	---	22.73	22.97	22.06	21.77	21.29	20.86	20.51	21.90	22.40	23.97	24.35
6	---	22.45	22.95	21.84	21.65	21.23	20.77	20.38	23.05	23.61	23.07	23.92
7	---	22.68	22.58	22.15	21.59	21.15	20.91	20.62	23.25	22.36	22.96	25.36
8	---	22.78	22.59	22.15	21.53	21.41	20.82	20.50	22.25	23.54	22.80	24.09
9	---	23.10	22.70	21.64	21.25	21.43	20.50	20.60	23.48	23.65	23.88	25.44
10	---	23.06	22.60	21.73	21.47	21.34	20.59	20.69	22.93	22.49	24.20	23.99
11	---	23.00	23.30	21.85	21.53	20.92	20.46	21.70	22.33	22.11	23.29	25.37
12	---	23.06	22.88	22.02	21.59	20.98	20.51	21.75	23.43	23.39	23.12	24.07
13	---	23.04	22.86	21.77	21.38	20.85	20.36	20.88	22.19	23.84	24.34	25.45
14	---	22.92	22.72	21.55	21.28	21.08	20.49	21.75	23.63	22.64	23.07	24.07
15	---	22.68	22.47	21.62	21.17	21.19	20.43	20.95	22.54	23.86	23.03	25.22
16	---	23.48	22.63	21.89	21.17	20.93	20.35	20.94	23.29	22.82	24.21	25.60
17	---	22.52	22.61	21.99	21.05	20.90	20.27	21.87	23.58	23.03	24.46	24.59
18	---	23.25	22.54	21.83	21.14	20.95	20.41	21.72	22.43	23.69	23.39	25.48
19	---	23.29	22.57	21.82	21.09	21.97	20.35	21.94	23.33	23.63	24.28	24.28
20	---	23.03	22.66	22.00	21.04	20.73	20.26	22.27	22.27	22.49	23.28	25.59
21	---	23.03	22.52	22.14	20.96	21.88	20.50	22.30	23.44	23.46	23.27	24.36
22	---	23.14	22.12	22.15	21.17	20.87	20.58	21.38	22.24	23.16	23.30	25.59
23	---	23.16	22.43	21.40	21.41	21.03	20.55	21.31	23.74	23.88	24.54	25.85
24	---	23.06	22.53	21.59	21.35	21.13	20.36	22.67	22.58	22.80	24.32	24.62
25	---	23.49	22.49	21.70	22.19	20.90	20.25	22.58	23.67	24.04	23.42	25.73
26	---	23.03	22.35	21.97	22.25	21.07	20.08	22.45	23.74	23.84	24.73	24.57
27	22.63	22.95	22.12	21.97	21.84	21.66	20.39	21.70	22.72	22.89	23.49	25.61
28	22.98	23.09	22.17	21.90	21.69	21.78	20.90	22.54	23.57	23.88	25.05	24.79
29	22.99	23.11	22.56	22.04	---	21.73	20.65	22.58	22.17	22.88	23.90	26.03
30	23.08	23.05	22.60	21.64	---	21.75	20.59	22.71	23.49	24.10	24.97	26.15
31	23.09	---	22.35	21.60	---	20.96	---	22.85	---	22.88	23.68	---
MAX	23.09	23.49	23.30	22.41	22.25	21.97	21.13	22.85	23.74	24.10	25.05	26.15
WTR YR 1982	MEAN	22.47		HIGH	20.08		LOW	26.15				

## GROUND-WATER RECORDS

357

## PORTAGE COUNTY--Continued

411401081025000. Local number, PO-1.

LOCATION.--Lat 41°14'01", long 81°02'50" Hydrologic Unit 05030103. Bauer Street in Windham.

Owner: Edward Liddle.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 55 ft (16.8 m), cased.

DATUM.--Altitude of land-surface datum is 980 ft (298 m) from topographic map. Measuring point: Floor of instrument shelter 0.60 ft (0.183 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORDED.--May 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.08 ft (7.035 m) Feb. 22, 1954; minimum daily low, 14.59 ft (4.448 m) June 24, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 21.50 ft (6.553 m) Sep. 29, 30; minimum daily low, 19.70 ft (6.005 m) Apr. 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.31	20.71	20.63	20.81	20.88	20.47	19.97	19.71	20.10	20.21	20.55	21.07
2	20.39	20.72	20.73	20.82	20.78	20.43	19.98	19.73	20.13	20.21	20.57	21.09
3	20.41	20.75	20.75	20.76	20.67	20.49	19.85	19.73	20.15	20.16	20.58	21.13
4	20.41	20.73	20.80	20.71	20.74	20.47	19.97	19.76	20.14	20.14	20.60	21.16
5	20.40	20.73	20.81	20.79	20.72	20.45	19.97	19.77	20.13	20.16	20.64	21.16
6	20.39	20.72	20.81	20.71	20.69	20.45	19.95	19.76	20.14	20.16	20.65	21.17
7	20.41	20.76	20.75	20.76	20.69	20.43	19.97	19.77	20.14	20.16	20.65	21.19
8	20.45	20.77	20.81	20.76	20.66	20.48	19.93	19.78	20.14	20.18	20.65	21.19
9	20.48	20.82	20.83	20.66	20.63	20.47	19.85	19.80	20.15	20.19	20.68	21.20
10	20.48	20.81	20.80	20.72	20.67	20.46	19.85	19.81	20.19	20.19	20.78	21.21
11	20.49	20.82	20.82	20.75	20.68	20.36	19.80	19.81	20.22	20.19	20.77	21.23
12	20.51	20.84	20.84	20.78	20.69	20.35	19.80	19.81	20.21	20.23	20.77	21.25
13	20.54	20.83	20.84	20.72	20.67	20.33	19.81	19.84	20.23	20.24	20.77	21.27
14	20.53	20.82	20.79	20.68	20.66	20.37	19.82	19.86	20.23	20.24	20.79	21.28
15	20.53	20.79	20.77	20.72	20.66	20.36	19.80	19.87	20.24	20.26	20.81	21.30
16	20.55	20.77	20.84	20.77	20.62	20.31	19.78	19.89	20.23	20.27	20.84	21.33
17	20.55	20.79	20.84	20.77	20.56	20.21	19.76	19.92	20.19	20.28	20.86	21.34
18	20.52	20.82	20.84	20.74	20.54	20.21	19.79	19.92	20.20	20.29	20.88	21.35
19	20.57	20.82	20.86	20.74	20.52	20.18	19.76	20.00	20.21	20.30	20.90	21.36
20	20.60	20.70	20.88	20.80	20.50	20.13	19.76	20.05	20.22	20.32	20.90	21.39
21	20.63	20.75	20.85	20.83	20.48	20.13	19.80	20.04	20.24	20.35	20.93	21.40
22	20.62	20.76	20.83	20.83	20.50	20.14	19.80	20.03	20.25	20.34	20.93	21.40
23	20.65	20.76	20.76	20.69	20.48	20.13	19.78	20.02	20.27	20.37	20.93	21.42
24	20.66	20.76	20.77	20.66	20.53	20.11	19.73	20.08	20.27	20.39	20.95	21.42
25	20.63	20.77	20.75	20.68	20.55	20.10	19.71	20.09	20.28	20.40	20.99	21.43
26	20.61	20.72	20.73	20.77	20.55	20.10	19.70	20.03	20.30	20.42	21.00	21.45
27	20.66	20.74	20.76	20.82	20.50	20.14	19.76	20.02	20.31	20.42	21.03	21.46
28	20.71	20.75	20.79	20.98	20.49	20.14	19.78	20.04	20.31	20.46	21.05	21.49
29	20.71	20.70	20.83	21.00	---	20.09	19.77	20.04	20.17	20.48	21.06	21.50
30	20.72	20.68	20.83	20.93	---	20.03	19.74	20.06	20.17	20.50	21.06	21.50
31	20.72	---	20.77	20.89	---	19.98	---	20.05	---	20.52	21.06	---
MAX	20.72	20.84	20.88	21.00	20.88	20.49	19.98	20.09	20.31	20.52	21.06	21.50
WTR YR 1982	MEAN	20.51		HIGH	19.70		LOW	21.50				

## GROUND-WATER RECORDS

## PREBLE COUNTY

394438084335900. Local number, PR-2.

LOCATION.--Lat 39°44'38", long 84°33'59", Hydrologic Unit 05080002, Stover Rd 4 mi (6.4) east of Eaton.

Owner: Eaton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 78.5 ft (23.927 m), cased.

DATUM.--Altitude of land-surface datum is 900 ft (274 m), from topographic map. Measuring point: Floor of instrument shelter 1.50 ft (0.457 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.92 ft (4.548 m) Oct. 17, 1980; minimum daily low, 7.94 ft (2.420 m) May 4, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.32 ft (4.365 m) Nov. 9; minimum daily low, 9.81 ft (2.990 m) Apr. 9.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.78	14.06	13.32	13.05	11.01	10.58	10.12	10.68	10.66	11.53	12.46	12.63
2	13.91	14.07	13.37	13.03	11.00	10.58	10.23	10.75	10.65	11.49	12.50	12.40
3	13.95	14.08	13.47	12.82	10.92	10.62	10.12	10.77	10.62	11.42	12.69	12.46
4	13.92	14.07	13.51	12.50	10.86	10.47	10.05	10.80	10.48	11.42	12.79	12.53
5	13.97	14.07	13.52	12.49	10.85	10.56	9.95	10.84	10.43	11.40	12.59	12.49
6	13.97	14.16	13.44	12.27	10.85	10.60	9.94	10.85	10.46	11.46	12.61	12.62
7	13.99	14.20	13.37	12.18	10.87	10.45	10.06	10.89	10.58	11.61	12.51	12.65
8	13.99	14.19	13.39	11.99	10.93	10.44	9.96	10.97	10.36	11.68	12.47	12.63
9	14.00	14.32	13.46	11.90	10.88	10.57	9.81	10.96	10.40	11.55	12.51	12.78
10	13.97	14.27	13.43	11.66	11.01	10.60	9.91	10.92	10.31	11.43	12.39	12.90
11	14.00	14.12	13.57	11.76	11.15	10.52	9.96	10.95	10.62	11.41	12.41	13.02
12	14.07	14.05	13.61	11.81	11.26	10.51	9.94	11.00	10.69	11.43	12.48	12.92
13	14.09	14.03	13.53	11.84	11.26	10.51	10.04	11.20	10.72	11.53	12.51	12.92
14	14.08	13.88	13.52	11.89	11.13	10.63	10.13	11.40	10.66	11.60	12.45	12.87
15	13.90	13.71	13.64	12.13	11.05	10.46	10.13	11.46	10.68	11.79	12.46	13.07
16	13.90	13.63	13.68	12.32	10.99	10.39	10.10	11.46	10.58	12.10	12.42	13.10
17	13.85	13.65	13.55	12.43	11.01	10.53	10.07	11.63	10.71	12.32	12.63	13.14
18	13.65	13.55	13.53	12.46	11.01	10.58	10.23	11.80	10.97	12.41	12.87	13.08
19	13.77	13.59	13.51	12.47	10.90	10.53	10.07	11.67	10.87	12.07	12.91	13.00
20	13.87	13.51	13.42	12.52	10.87	10.20	10.01	11.65	10.82	12.23	12.88	12.89
21	13.75	13.74	13.34	12.58	10.70	10.08	10.02	11.54	11.01	12.30	12.83	12.94
22	13.98	13.74	13.32	12.50	10.63	10.08	10.14	11.36	10.85	12.29	12.85	12.94
23	13.88	13.66	13.40	12.28	10.60	10.06	10.20	11.34	11.26	12.28	12.81	12.93
24	13.85	13.60	13.45	12.17	10.63	10.03	10.15	11.37	11.34	12.40	12.83	12.89
25	13.76	13.76	13.45	12.14	10.75	10.04	10.00	11.43	11.46	12.39	12.66	12.84
26	13.69	13.71	13.45	11.98	10.75	10.09	9.96	11.64	11.65	12.43	12.54	12.84
27	13.51	13.59	13.39	12.02	10.69	10.18	10.03	11.62	11.65	12.43	12.49	12.89
28	13.85	13.59	13.40	11.97	10.62	10.13	10.46	11.52	11.40	12.48	12.57	12.99
29	13.91	13.58	13.48	11.89	---	9.95	10.56	11.37	11.39	12.49	12.53	13.06
30	14.01	13.54	13.47	11.58	---	9.95	10.64	11.10	11.44	12.50	12.50	12.90
31	14.03	---	13.24	11.44	---	10.06	---	10.98	---	12.52	12.58	---
MAX	14.09	14.32	13.68	13.05	11.26	10.63	10.64	11.80	11.65	12.52	12.91	13.14
WTR YR 1982	MEAN	12.03		HIGH	9.81		LOW	14.32				

## RICHLAND COUNTY

404625082305100. Local number, R-4.

LOCATION.--Lat 40°46'25", long 82°30'51", Hydrologic Unit 05040002, at Ohio Brass Plant in Mansfield.

Owner: Ohio Brass Company

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 14 in (0.36 m), depth 127 ft (38.7 m), cased.

DATUM.--Altitude of land-surface datum is 1150 ft (351 m) from topographic map. Measuring point: Top of platform 5.00 ft (1.524 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May, 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.10 ft (18.318 m) Oct. 12, 13, 19, 20, 1962; minimum daily low, 6.88 ft (2.097 m) June 22, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.23 ft (2.813 m) Dec. 20, 21; minimum daily low, 7.22 ft (2.201 m) Apr. 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.53	8.89	8.77	8.96	8.88	8.60	7.62	7.77	7.50	7.79	7.63	7.87
2	8.52	8.89	8.70	8.94	8.89	8.55	7.63	7.76	7.49	7.80	7.63	7.87
3	8.52	8.87	8.74	8.93	8.89	8.49	7.61	7.72	7.53	7.80	7.68	7.88
4	8.52	8.86	8.79	8.87	8.93	8.46	7.45	7.73	7.55	7.71	7.71	7.90
5	8.52	8.86	8.84	8.82	8.94	8.41	7.41	7.76	7.55	7.62	7.77	7.91
6	8.52	8.84	8.85	8.84	8.93	8.41	7.39	7.76	7.54	7.56	7.80	7.90
7	8.49	8.83	8.84	8.89	8.90	8.38	7.44	7.76	7.52	7.53	7.82	7.84
8	8.50	8.83	8.79	8.94	8.84	8.30	7.46	7.75	7.52	7.52	7.82	7.82
9	8.52	8.83	8.87	8.94	8.80	8.34	7.46	7.71	7.54	7.53	7.80	7.88
10	8.54	8.87	8.97	8.91	8.81	8.36	7.41	7.68	7.57	7.53	7.78	7.91
11	8.56	8.90	9.03	8.86	8.87	8.36	7.36	7.65	7.63	7.51	7.80	7.91
12	8.59	8.99	9.06	8.83	8.94	8.33	7.30	7.65	7.65	7.46	7.83	7.91
13	8.69	9.02	9.07	8.86	8.95	8.30	7.23	7.67	7.65	7.49	7.86	7.90
14	8.74	9.03	9.07	8.89	8.95	8.21	7.22	7.70	7.64	7.53	7.86	7.90
15	8.76	9.03	9.04	8.95	8.88	8.18	7.25	7.72	7.66	7.56	7.86	7.92
16	8.79	8.99	9.06	8.95	8.84	8.14	7.28	7.72	7.66	7.59	7.81	7.98
17	8.80	8.92	9.11	8.96	8.83	8.05	7.28	7.71	7.67	7.59	7.78	8.02
18	8.79	8.90	9.17	8.96	8.80	8.05	7.25	7.70	7.67	7.58	7.80	8.02
19	8.71	8.90	9.22	8.98	8.78	8.05	7.24	7.70	7.67	7.54	7.83	8.02
20	8.73	8.90	9.23	9.03	8.78	8.05	7.23	7.70	7.63	7.48	7.85	7.98
21	8.77	8.89	9.23	9.12	8.68	7.95	7.30	7.70	7.58	7.46	7.86	7.95
22	8.78	8.89	9.21	9.17	8.56	7.80	7.42	7.70	7.59	7.46	7.85	8.01
23	8.79	8.89	9.17	9.17	8.55	7.73	7.52	7.69	7.67	7.46	7.80	8.05
24	8.79	8.89	9.15	9.05	8.54	7.70	7.57	7.65	7.76	7.46	7.77	8.07
25	8.79	8.90	9.15	8.99	8.56	7.68	7.57	7.65	7.80	7.45	7.80	8.07
26	8.78	8.90	9.10	8.97	8.63	7.68	7.57	7.66	7.81	7.43	7.85	8.07
27	8.73	8.86	9.02	9.03	8.65	7.70	7.62	7.66	7.81	7.46	7.90	8.03
28	8.76	8.82	8.92	9.02	8.65	7.71	7.67	7.65	7.80	7.51	7.91	7.99
29	8.80	8.80	8.89	9.04	---	7.71	7.73	7.64	7.77	7.56	7.91	8.04
30	8.85	8.79	8.97	9.04	---	7.69	7.76	7.60	7.75	7.60	7.91	8.08
31	8.88	---	8.98	9.01	---	7.65	---	7.54	---	7.62	7.86	---
MAX	8.88	9.03	9.23	9.17	8.95	8.60	7.76	7.77	7.81	7.80	7.91	8.08
WTR YR 1982	MEAN	8.21		HIGH	7.22		LOW	9.23				

## GROUND-WATER RECORDS

## ROSS COUNTY

391341083172200. Local number, RO-7.

LOCATION.--Lat 39°13'41", long 83°17'22", Hydrologic Unit 05060003, Highland County well field, 1 mi (1.6 km) west of Bainbridge.

Owner: Highland County Water Company.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 67 ft (20.4 m), cased.

DATUM.--Altitude of land-surface datum is 740 ft (226 m) from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 41.94 ft (12.783 m) Jan. 19, 1982; minimum daily low, 20.93 ft (6.379 m) Feb. 28, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 41.94 ft (12.783 m) Jan. 19; minimum daily low, 33.04 ft (10.070 m) Mar. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.25	40.21	39.00	39.89	38.94	36.45	33.22	37.00	39.00	37.65	39.35	39.34
2	39.25	39.74	38.73	39.62	38.83	36.42	33.19	37.00	38.57	37.58	39.33	39.39
3	39.15	39.52	38.77	39.49	38.76	36.56	33.42	37.02	38.23	37.70	39.99	39.24
4	39.27	39.60	38.75	39.54	38.54	36.71	33.43	37.45	38.27	37.71	40.12	39.51
5	39.51	39.63	38.67	39.59	38.28	36.67	33.38	37.68	38.06	37.67	40.17	39.80
6	39.60	39.38	38.80	39.66	37.92	36.94	33.52	38.15	37.98	37.98	40.13	39.90
7	39.57	39.53	39.14	39.72	37.56	36.89	33.62	38.07	37.88	38.44	40.13	40.26
8	39.45	39.76	39.18	39.68	37.33	36.95	33.87	38.23	37.80	38.49	40.13	40.31
9	39.41	39.66	39.32	40.00	37.26	37.00	34.19	38.35	37.94	38.59	40.06	40.37
10	39.51	39.58	39.32	40.00	37.29	36.93	34.31	38.49	37.79	38.69	40.38	40.45
11	39.64	39.46	39.38	40.43	37.39	37.01	34.39	38.81	37.79	38.65	40.37	40.61
12	39.56	39.34	39.52	40.60	37.56	37.18	34.38	39.22	37.86	38.85	40.02	40.71
13	39.80	39.32	39.65	40.74	37.54	37.05	34.78	39.47	37.69	39.07	39.98	41.02
14	39.97	39.50	39.66	41.02	37.71	37.10	34.90	39.81	37.57	39.10	40.15	41.13
15	40.07	39.50	39.79	41.32	37.81	36.97	35.09	40.09	37.81	39.44	40.21	41.26
16	40.10	39.45	39.82	41.58	37.94	36.68	35.24	40.40	37.84	39.48	40.19	41.27
17	40.21	39.56	39.82	41.56	37.92	36.68	35.38	40.64	37.66	39.68	40.23	41.11
18	40.27	39.40	39.77	41.72	37.83	36.43	35.48	40.79	37.79	40.08	40.39	40.93
19	40.33	39.58	39.76	41.94	37.50	36.11	35.68	40.97	37.60	40.06	40.26	40.63
20	40.39	39.57	39.80	41.82	37.24	35.83	35.68	40.79	37.50	39.99	40.35	40.54
21	40.39	39.49	39.80	41.84	37.15	35.60	35.62	40.46	37.86	40.02	40.26	40.40
22	40.40	39.39	39.90	41.70	36.80	35.39	35.65	40.19	37.86	39.95	40.17	40.15
23	40.42	39.09	39.88	41.53	36.78	34.92	35.66	40.07	37.66	39.62	40.33	40.16
24	40.43	39.10	39.90	41.31	36.67	34.54	35.67	39.87	37.48	39.62	40.38	40.10
25	40.44	39.23	39.76	41.03	36.56	33.83	35.90	39.84	37.58	39.70	40.24	39.92
26	40.34	39.25	39.71	40.48	36.64	33.63	36.06	39.84	37.91	39.73	39.69	40.02
27	40.34	38.95	39.63	40.00	36.54	33.22	35.98	39.53	38.04	39.78	39.80	39.72
28	40.13	39.09	39.79	39.63	36.43	33.21	36.22	39.19	38.02	39.58	39.57	39.66
29	40.02	38.95	39.79	39.29	---	33.04	36.44	39.19	37.80	39.39	39.57	39.80
30	39.89	38.98	39.69	39.08	---	33.23	36.70	39.20	37.61	39.07	39.46	39.80
31	40.16	---	39.79	39.12	---	33.32	---	39.20	---	39.14	39.24	---
MAX	40.44	40.21	39.90	41.94	38.94	37.18	36.70	40.97	39.00	40.08	40.39	41.27
WTR YR 1982	MEAN	38.67		HIGH	33.04		LOW	41.94				

## GROUND-WATER RECORDS

361

## ROSS COUNTY--Continued

391922082580000. Local number, RO-3.

LOCATION.--Lat 39°19'22", long 82°58'00", Hydrologic Unit 05060003, 1.1 mi (1.8 km) southeast of courthouse in Chillicothe.

Owner: The Mead Corporation.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 30 in (0.76 m), depth 56.5 ft (17.2 m), cased.

DATUM.--Altitude of land-surface datum is 610 ft (186 m), from topographic map. Measuring point: Floor of instrument shelter 4.71 ft (1.436 m) above land-surface datum.

REMARKS.--Prior to water year 1978, well depth reported as 60 ft (18.3 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.92 ft (13.082 m) Dec. 24, 1949; minimum daily low, 17.20 ft (5.243 m) Mar. 21, 1943.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 29.05 ft (8.854 m) Dec. 23, minimum daily low, 23.58 ft (7.187 m) April 20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.94	28.76	28.79	28.89	28.20	26.58	24.42	23.69	24.33	24.75	25.33	26.27
2	28.03	28.76	28.81	28.90	28.11	26.53	24.36	23.71	24.35	24.76	25.37	26.28
3	28.10	28.80	28.82	28.90	27.96	26.50	24.25	23.73	24.37	24.73	25.41	26.33
4	28.17	28.80	28.85	28.92	27.89	26.45	24.21	23.75	24.39	24.73	25.45	26.37
5	28.22	28.79	28.86	28.93	27.82	26.44	24.18	23.77	24.40	24.76	25.44	26.39
6	28.29	28.81	28.87	28.87	27.74	26.40	24.09	23.78	24.41	24.76	25.45	26.38
7	28.36	28.83	28.86	28.87	27.67	26.33	24.04	23.80	24.42	24.76	25.48	26.37
8	28.41	28.84	28.90	28.87	27.58	26.31	23.97	23.84	24.44	24.77	25.50	26.30
9	28.47	28.85	28.92	28.82	27.50	26.28	23.86	23.87	24.46	24.74	25.54	26.21
10	28.50	28.85	28.92	28.83	27.46	26.24	23.86	23.91	24.48	24.68	25.58	26.18
11	28.53	28.85	28.92	28.82	27.44	26.19	23.81	23.93	24.50	24.64	25.61	26.18
12	28.54	28.85	28.93	28.82	27.42	26.17	23.78	23.97	24.50	24.65	25.64	26.22
13	28.54	28.72	28.94	28.81	27.40	26.11	23.73	24.01	24.52	24.66	25.66	26.25
14	28.55	28.65	28.93	28.79	27.39	26.07	23.73	24.05	24.54	24.66	25.69	26.30
15	28.56	28.64	28.94	28.77	27.35	25.98	23.69	24.10	24.55	24.69	25.73	26.36
16	28.57	28.69	28.96	28.77	27.32	25.89	23.67	24.13	24.56	24.67	25.76	26.40
17	28.57	28.73	28.98	28.77	27.26	25.78	23.65	24.14	24.49	24.69	25.79	26.43
18	28.58	28.76	29.00	28.74	27.21	25.70	23.66	24.14	24.47	24.75	25.83	26.47
19	28.58	28.76	29.02	28.72	27.14	25.58	23.62	24.13	24.46	24.79	25.86	26.50
20	28.58	28.78	29.04	28.74	27.06	25.46	23.58	24.07	24.48	24.84	25.89	26.54
21	28.60	28.79	29.04	28.75	26.96	25.33	23.62	23.97	24.50	24.88	25.93	26.59
22	28.63	28.79	29.04	28.76	26.90	25.23	23.62	23.84	24.55	24.91	25.95	26.64
23	28.65	28.78	29.05	28.69	26.84	25.10	23.63	23.86	24.58	24.95	25.98	26.67
24	28.66	28.78	29.05	28.57	26.78	24.98	23.60	23.95	24.61	24.99	26.01	26.70
25	28.67	28.78	29.02	28.48	26.76	24.88	23.59	24.04	24.63	25.05	26.05	26.73
26	28.68	28.75	28.98	28.40	26.73	24.80	23.59	24.11	24.65	25.10	26.08	26.76
27	28.69	28.78	28.89	28.33	26.67	24.73	23.65	24.17	24.66	25.13	26.12	26.80
28	28.70	28.80	28.81	28.26	26.62	24.70	23.67	24.23	24.68	25.17	26.16	26.84
29	28.72	28.80	28.84	28.27	---	24.63	23.69	24.28	24.69	25.21	26.19	26.86
30	28.74	28.80	28.85	28.23	---	24.55	23.72	24.30	24.72	25.25	26.22	26.90
31	28.75	---	28.84	28.21	---	24.46	---	24.31	---	25.29	26.25	---
MAX	28.75	28.85	29.05	28.93	28.20	26.58	24.42	24.31	24.72	25.29	26.25	26.90
WTR YR 1982	MEAN	26.44		HIGH	23.58		LOW	29.05				

## GROUND-WATER RECORDS

## SHELBY COUNTY

401712084103500. Local number, SH-4.

LOCATION.--Lat 40°17'12", long 84°10'35", Hydrologic Unit 05080001, State Route 47 in Sidney.

Owner: Stolle Corporation.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 280 ft (85.3 m) cased to 136 ft (41.5 m).

DATUM.--Altitude of land-surface datum is 1,033.72 ft (315.078 m). Measuring point: Top of platform 4.50 ft (1.372 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 93.91 ft (28.623 m) May 25, 1982; minimum daily low, 63.45 ft (19.340 m) Jan. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low 93.91 ft (28.623 m) May 25; minimum daily low, 68.75 ft (20.955 m) July 4.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85.50	76.91	72.41	71.10	86.03	86.64	92.04	89.79	89.33	93.09	80.33	92.88
2	85.48	86.56	72.93	88.55	87.12	86.71	90.99	79.46	90.72	83.30	90.38	92.32
3	76.95	86.64	79.06	75.57	84.77	87.46	85.87	91.29	87.71	73.36	91.96	92.08
4	74.86	86.46	92.09	89.87	87.88	91.80	79.77	91.64	88.11	68.75	92.61	88.92
5	85.93	86.41	90.99	88.68	87.55	92.31	86.29	90.79	86.08	83.69	92.51	82.71
6	86.37	86.39	78.12	90.72	90.93	86.99	90.65	92.45	83.02	91.75	93.01	82.86
7	86.75	85.36	90.24	90.27	81.78	79.76	88.91	92.19	89.49	92.73	87.97	96.61
8	86.87	79.08	90.99	90.26	91.07	91.57	90.02	85.76	89.44	91.65	83.45	84.56
9	86.68	85.91	83.77	84.43	87.33	88.39	81.91	82.41	92.38	92.55	92.59	96.29
10	79.62	86.07	84.99	73.66	91.35	90.83	84.57	92.33	92.42	90.42	92.98	86.73
11	73.97	86.00	90.79	83.70	87.25	92.04	78.90	93.06	92.07	81.45	93.29	86.73
12	85.77	85.61	88.86	91.06	87.07	91.43	89.14	92.32	85.00	92.92	90.32	80.46
13	85.89	85.46	76.26	86.10	89.03	84.28	91.95	92.99	81.57	92.53	88.70	91.11
14	86.40	84.21	90.48	91.82	79.73	80.36	92.50	92.75	90.70	92.06	86.14	92.68
15	86.58	79.61	91.35	86.07	85.12	85.51	91.97	86.86	92.17	92.78	81.11	89.91
16	86.27	82.45	92.04	83.80	89.94	85.48	88.76	81.32	92.73	92.48	92.65	92.26
17	85.46	84.92	92.42	79.65	90.84	91.75	89.30	88.11	92.74	89.97	92.15	89.42
18	77.60	85.92	88.39	86.61	89.21	92.23	78.63	92.58	92.42	82.05	92.83	87.05
19	84.98	85.72	85.39	91.34	91.24	90.42	88.83	92.20	90.99	91.67	93.56	80.63
20	85.92	86.06	80.86	90.87	89.34	89.51	88.22	93.37	81.64	93.25	92.90	91.94
21	86.58	86.21	86.05	90.77	80.07	81.62	91.60	91.83	93.12	92.88	86.74	92.50
22	86.88	79.89	85.17	86.64	88.15	89.74	92.63	86.57	92.87	88.10	82.72	91.96
23	86.47	81.52	85.80	84.53	92.33	85.62	92.64	81.34	92.93	89.04	93.20	88.78
24	85.15	82.92	81.19	77.92	86.12	85.63	89.72	91.78	90.78	91.55	93.16	89.60
25	76.03	83.97	70.59	88.23	91.27	91.22	82.60	93.91	92.96	83.89	92.51	88.96
26	86.06	76.96	74.24	90.75	90.08	92.47	91.93	93.58	90.53	92.32	92.25	87.52
27	86.55	73.78	80.29	88.78	86.33	87.22	91.97	93.05	81.12	93.68	93.57	91.01
28	86.65	81.17	85.52	91.86	82.05	82.84	93.08	85.46	85.97	90.39	86.50	92.97
29	85.57	72.78	88.14	92.48	---	91.81	92.56	71.92	91.93	93.45	83.07	89.76
30	85.66	72.39	85.66	85.45	---	91.94	91.54	69.71	89.65	92.55	92.60	93.07
31	75.09	---	86.72	80.44	---	91.45	---	83.56	---	87.40	93.24	---
MAX	86.88	86.64	92.42	92.48	92.33	92.47	93.08	93.91	93.12	93.68	93.57	93.07
WTR YR 1982	MEAN	87.28		HIGH	68.75		LOW	93.91				

## GROUND-WATER RECORDS

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## STARK COUNTY

404939081203800. Local number, ST-5A.

LOCATION.--Lat 40°49'39", long 81°20'38", Hydrologic Unit 05040001, Northeast well field off Harrisburg Rd, Canton.

Owner: Canton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in (0.3 m), depth 132 ft (40.2 m), cased.

DATUM.--Altitude of land-surface datum is 1060 ft (323 m), from topographic map. Measuring point: Floor of instrument shelter 1.00 ft (0.305 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 54.00 ft (16.459 m) Feb. 10, 1956; minimum daily low, 26.13 ft (7.964 m) May 18, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 40.91 ft (12.469 m) Jan. 29; minimum daily low, 36.15 ft (11.019 m) Apr. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.98	38.51	38.82	39.75	40.45	38.99	37.32	36.72	36.76	37.16	38.54	38.70
2	38.02	38.67	39.07	39.60	40.36	38.98	37.43	37.13	36.73	37.74	38.24	38.92
3	38.01	39.21	39.22	39.78	40.16	39.21	36.88	37.09	36.78	37.72	38.21	38.52
4	38.05	39.43	39.07	39.84	40.01	38.36	36.51	37.53	36.75	37.82	38.14	38.55
5	37.92	39.47	39.21	39.84	39.85	38.25	36.42	37.11	36.76	36.65	38.26	38.42
6	37.90	39.12	39.27	39.97	39.88	37.92	36.53	36.88	36.99	37.30	38.59	38.40
7	38.00	39.12	39.27	40.07	39.87	37.82	36.41	37.20	36.80	37.06	38.42	38.74
8	37.49	39.09	39.34	40.03	39.79	37.74	36.72	37.41	36.77	37.19	38.39	38.78
9	37.50	38.69	39.39	40.12	39.66	37.69	36.84	37.42	36.82	37.61	38.17	38.87
10	38.12	38.57	39.40	40.14	39.69	37.65	36.99	37.39	36.90	37.60	37.97	38.74
11	38.10	38.76	39.44	39.93	39.51	37.57	36.94	37.30	37.18	37.59	37.73	39.24
12	38.20	38.85	39.47	40.32	39.61	37.83	36.66	37.43	37.33	37.53	37.78	38.69
13	37.98	38.78	39.43	40.23	39.66	38.46	36.52	37.54	37.05	37.54	38.11	38.74
14	37.60	38.73	39.68	40.42	39.47	38.53	36.31	37.49	37.02	37.56	38.20	39.07
15	37.63	38.89	39.56	40.25	39.35	38.58	36.25	37.23	36.99	37.71	38.23	38.94
16	37.79	38.95	39.44	40.30	39.44	37.95	36.27	37.30	37.35	37.93	37.96	39.12
17	37.68	39.08	39.50	40.16	39.45	37.97	36.15	37.75	37.44	37.76	38.18	39.12
18	37.71	38.80	39.53	40.27	39.48	37.54	36.51	37.92	37.20	37.79	38.04	39.07
19	37.76	38.63	39.78	40.37	39.36	37.53	36.64	37.59	37.52	38.05	38.43	38.73
20	38.15	38.65	39.62	40.38	39.28	37.32	36.75	37.47	37.84	37.66	38.10	38.73
21	37.84	39.70	39.63	40.37	39.12	37.50	36.38	37.64	37.87	37.58	38.11	38.76
22	38.40	39.35	39.70	40.22	38.94	37.07	36.45	37.34	37.83	37.37	38.00	38.76
23	38.45	39.65	39.97	40.16	39.05	37.24	36.38	37.59	37.44	37.89	38.28	38.94
24	37.93	39.50	39.90	40.33	38.89	37.33	36.57	37.02	37.66	38.01	38.58	38.97
25	38.50	39.65	39.79	40.50	39.30	37.04	36.89	36.97	37.95	38.47	38.68	38.97
26	38.50	39.42	39.74	40.40	39.15	36.82	37.07	37.01	37.88	38.59	38.74	38.79
27	38.43	38.98	39.67	40.35	39.05	36.88	37.06	37.37	37.39	38.89	38.66	39.06
28	38.47	39.21	39.83	40.87	39.03	36.81	37.09	37.11	37.40	38.68	38.74	39.13
29	38.51	38.80	39.68	40.91	---	36.80	37.02	36.93	37.78	38.64	38.94	39.39
30	38.56	38.51	39.72	40.71	---	36.79	37.10	37.20	38.03	38.31	38.66	39.25
31	38.58	---	39.82	40.49	---	36.63	---	37.07	---	38.32	38.70	---
MAX	38.58	39.70	39.97	40.91	40.45	39.21	37.43	37.92	38.03	38.89	38.94	39.39
WTR YR 1982	MEAN	38.36		HIGH	36.15		LOW	40.91				

## GROUND-WATER RECORDS

## STARK COUNTY--Continued

405051081244200. Local number, ST-28.

LOCATION.--Lat 40°50'51", long 81°24'42", Hydrologic Unit 05040001, Salway St., northwest of Canton.

Owner: North Canton Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.2 m) depth 70 ft (21.3 m), cased.

DATUM.--Altitude of land-surface datum is 1060 ft (323 m), from topographic map. Measuring point: Floor of instrument shelter 1.50 ft (0.457 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.00 ft (4.879 m) July 27, 28, 1978; minimum daily low,

9.37 ft (2.856 m) July 17, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 15.12 ft (4.609 m) Sep. 30; minimum recorded daily low, 12.18 ft (3.712 m) Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.18	12.77										---
2	12.20	12.79										---
3	12.21	12.81										---
4	12.23	12.81										---
5	12.25	12.83										---
6	12.27	12.85										---
7	12.29	12.87										---
8	12.31	12.89										---
9	12.32	12.92										---
10	12.34	12.95										---
11	12.36	12.97										---
12	12.38	13.00										---
13	12.40	13.02										---
14	12.41	13.03										---
15	12.46	13.06										---
16	12.49	13.10										---
17	12.51	---										---
18	12.53	---										---
19	12.55	---										---
20	12.61	---										---
21	12.62	---										---
22	12.64	---										---
23	12.65	---										15.03
24	12.68	---										15.05
25	12.69	---										15.07
26	12.71	---										15.08
27	12.71	---										15.09
28	12.71	---										15.10
29	12.74	---										15.11
30	12.75	13.40										15.12
31	12.76	---										---
MAX	12.76	13.40										15.12
WTR YR 1982	MEAN	12.99		HIGH	12.18		LOW	15.12				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## STARK COUNTY

405052081193700. Local number, ST-4.

LOCATION.--Lat 40°50'52", long 81°19'37", Hydrologic Unit 05040001, northeast of Canton on Harmont Avenue.

Owner: Adessi Brothers.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 4 in (0.10 m), depth 73 ft (22.3 m), cased. DATUM.--Altitude of land-surface datum is 1,075 ft (328 m), from topographic map. Measuring point: Top of casing 4.00 ft (1.219 m) above land-surface datum.

REMARKS.--Prior to water year 1976 well depth reported as 190 ft (57.9 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.49 ft (7.160 m) Sept. 22, 1978; minimum daily low, 6.93 ft (2.112 m) Feb. 6, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 16.07 ft (4.898 m) Sept, 28-30; minimum daily low, 13.54 ft (4.127 m) March 26-29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.78		---	15.46	15.62	14.31	13.55	14.08	14.71	15.02	15.27	15.80
2	14.80		---	15.47	15.35	14.34	13.55	14.11	14.72	15.02	15.28	15.80
3	14.81		---	15.47	15.07	14.37	13.55	14.14	14.74	15.02	15.31	15.82
4	14.83		---	15.48	14.85	14.39	13.54	14.15	14.75	15.00	15.33	15.82
5	14.85		---	15.48	14.65	14.42	13.54	14.16	14.76	14.98	15.35	15.83
6	14.88		---	15.48	14.51	14.42	13.54	14.18	14.79	14.96	15.35	15.83
7	14.89		---	15.47	14.42	14.42	13.54	14.22	14.79	14.95	15.37	15.84
8	14.93		---	15.46	14.35	14.41	13.54	14.24	14.81	14.93	15.37	15.86
9	14.95		---	15.46	14.31	14.41	13.54	14.27	14.85	14.93	15.38	15.87
10	14.96		---	15.46	14.31	14.42	13.56	14.29	14.89	14.93	15.40	15.88
11	14.97		---	15.47	14.31	14.44	13.56	14.30	14.89	14.93	15.44	15.88
12	14.98		---	15.48	14.34	14.44	13.60	14.31	14.90	14.93	15.44	15.90
13	15.00		---	15.50	14.37	14.43	13.60	14.36	14.94	14.93	15.47	15.91
14	15.01		15.67	15.52	14.38	14.37	13.62	14.36	14.94	14.93	15.50	15.92
15	---		15.77	15.54	14.46	14.31	13.64	14.39	14.95	14.93	15.51	15.93
16	---		15.71	15.56	14.47	14.25	13.67	14.42	14.95	14.95	15.52	15.95
17	---		15.72	15.58	14.49	14.20	13.70	14.46	14.97	14.95	15.55	15.95
18	---		15.73	15.60	14.49	14.04	13.73	14.50	14.97	14.98	15.55	15.96
19	---		15.75	15.60	14.44	13.89	13.76	14.52	14.97	14.98	15.56	15.97
20	---		15.76	15.64	14.42	13.76	13.78	14.53	14.97	14.99	15.58	15.98
21	---		15.77	15.66	14.36	13.70	13.79	14.56	14.97	15.01	15.61	15.98
22	---		15.78	15.72	14.31	13.65	13.82	14.58	14.97	15.04	15.65	15.99
23	---		15.80	15.72	14.28	13.62	13.86	14.60	14.97	15.07	15.66	16.00
24	---		15.79	15.72	14.27	13.59	13.88	14.60	14.97	15.10	15.68	16.02
25	---		15.79	15.72	14.26	13.56	13.92	14.60	14.98	15.12	15.70	16.05
26	---		15.79	15.72	14.26	13.54	13.94	14.60	15.00	15.13	15.72	16.05
27	---		15.79	15.70	14.26	13.54	13.96	14.62	15.00	15.16	15.74	16.06
28	---		15.51	15.68	14.28	13.54	13.99	14.62	15.02	15.17	15.75	16.07
29	---		15.51	15.66	---	13.54	14.02	14.68	15.02	15.18	15.76	16.07
30	---		15.49	15.66	---	13.55	14.06	14.68	15.02	15.20	15.76	16.07
31	---		15.46	15.66	---	13.55	---	14.70	---	15.23	15.76	---
MAX	15.01		15.80	15.72	15.62	14.44	14.06	14.70	15.02	15.23	15.76	16.07

WTR YR 1982 MEAN 14.90 HIGH 13.54 LOW 16.07

## GROUND-WATER RECORDS

## STARK COUNTY--Continued

405211081253500. Local number, ST-27.

LOCATION.--Lat 40°52'11", long 81°25'35", Hydrologic Unit 05040001, Dresler Rd near North Canton.

Owner: North Canton Water Department

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 55 ft (16.8 m), cased.

DATUM.--Altitude of land-surface datum is 1060 ft (323 m), from topographic map. Measuring point: Floor of instrument shelter 2.50 ft (0.762 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.80 ft (12.436 m) Aug. 29, 1982; minimum daily low, 7.10 ft (2.164 m) June 15, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 40.80 ft (12.436 m) Aug. 29; minimum daily low, 9.40 ft (2.865 m) Apr. 12.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.35	11.75	13.70	10.35	24.35	9.85	11.20	29.50	34.05	38.00	---
2	---	11.35	11.80	13.55	10.10	24.00	9.80	11.00	29.55	33.85	38.75	---
3	---	11.40	11.80	13.25	9.90	23.60	9.60	10.95	29.75	33.60	39.15	39.60
4	---	11.30	11.75	12.95	9.90	22.55	9.70	10.95	29.10	32.30	39.60	39.25
5	---	11.25	11.75	12.85	9.90	23.60	9.65	10.95	29.35	31.65	39.60	39.05
6	---	11.25	11.70	12.60	9.90	22.30	9.65	10.90	29.30	32.20	39.35	37.55
7	---	11.30	11.60	12.50	9.90	22.45	9.55	10.90	29.90	33.85	39.40	38.70
8	---	11.30	11.70	12.40	9.85	26.50	9.60	10.90	29.80	34.05	38.35	39.10
9	11.20	11.35	11.65	12.15	9.90	28.15	9.50	10.90	31.60	---	---	---
10	11.15	11.35	23.40	12.05	10.00	29.60	9.45	10.90	31.35	---	---	38.20
11	11.10	11.40	27.95	11.95	10.00	27.00	9.45	10.90	31.20	---	---	39.05
12	11.10	21.35	30.20	11.95	10.00	19.80	9.40	10.95	29.85	---	39.10	38.85
13	11.10	25.50	32.00	11.80	10.00	16.25	9.50	11.00	30.00	33.80	---	39.80
14	11.15	26.80	33.30	11.70	10.00	14.65	9.55	20.65	30.65	33.35	---	---
15	11.15	17.00	34.25	11.65	10.00	13.80	9.55	22.10	30.95	33.60	---	---
16	11.25	14.85	35.00	11.65	9.95	13.05	9.55	13.90	32.05	36.00	---	39.75
17	11.25	14.00	35.70	11.65	9.85	12.40	10.40	12.75	32.60	36.25	40.10	39.80
18	11.05	13.55	36.55	11.55	9.80	11.90	9.70	12.35	---	---	40.30	40.20
19	11.15	13.15	37.00	11.55	9.65	15.90	18.40	12.15	32.85	36.25	---	38.20
20	11.30	12.85	33.30	11.55	9.55	16.30	17.35	12.05	31.25	36.25	---	39.65
21	11.30	12.65	24.15	11.55	9.50	11.20	21.75	11.90	32.30	36.25	---	38.95
22	11.30	12.45	21.00	11.55	9.55	10.80	23.10	11.85	32.80	36.70	---	32.25
23	11.30	12.35	19.55	11.30	9.55	10.55	24.05	11.70	33.05	37.00	---	28.20
24	11.30	12.20	18.25	11.15	9.60	14.70	15.40	11.65	33.25	37.70	---	26.10
25	11.25	12.10	17.25	11.05	10.75	15.25	13.50	22.75	33.50	38.00	---	25.00
26	11.20	12.00	16.60	11.05	9.85	10.50	12.35	25.10	33.65	---	---	24.00
27	11.20	11.95	15.80	12.30	16.35	10.40	11.95	26.30	33.55	38.20	---	23.15
28	11.35	11.90	15.30	11.05	21.25	10.30	11.80	27.95	32.85	38.55	---	22.40
29	11.35	11.90	14.95	11.00	---	10.15	11.50	29.25	33.35	38.20	40.80	21.85
30	11.90	11.85	14.50	10.95	---	10.05	11.30	29.45	33.65	38.15	---	21.30
31	11.40	---	14.05	10.80	---	9.90	---	---	---	37.90	39.75	---
MAX	11.90	26.80	37.00	13.70	21.25	29.60	24.05	29.45	33.65	38.55	40.80	40.20
WTR YR 1982	MEAN	19.94		HIGH	9.40		LOW	40.80				

## GROUND-WATER RECORDS

367

## SUMMIT COUNTY

410141081315200. Local number, SU-4A.

LOCATION.--Lat 41°01'41", long 81°31'52", Hydrologic Unit 05040001, Firestone well field, Akron.

Owner: Firestone Tire and Rubber Co.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 970 ft (296 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.60 ft (12.984 m) Oct. 21, 1966; minimum daily low, 3.45 ft (1.052 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 22.90 ft (6.980 m) Sep. 24, 26; minimum daily low, 10.89 ft (3.319 m) Apr. 13.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.60	21.17	19.22	16.37	14.95	12.95	11.16	12.84	16.08	18.68	20.35	22.45
2	21.68	20.95	19.12	16.30	14.80	12.91	11.08	12.87	16.15	18.71	20.44	22.54
3	21.75	20.74	19.03	16.23	14.58	12.88	11.02	12.92	16.26	18.71	20.53	22.61
4	21.82	20.60	18.96	16.16	14.37	12.86	10.97	12.99	16.33	18.69	20.63	22.65
5	21.89	20.61	18.89	16.08	14.22	12.83	10.95	13.08	16.33	18.54	20.72	22.67
6	21.96	20.62	18.81	16.00	14.09	12.79	10.93	13.21	16.33	18.30	20.81	22.69
7	22.03	20.63	18.73	15.92	13.98	12.71	10.94	13.38	16.32	18.12	20.88	22.72
8	22.10	20.65	18.65	15.85	13.90	12.63	10.94	13.54	16.42	18.03	20.93	22.75
9	22.16	20.68	18.57	15.78	13.83	12.59	10.94	13.69	16.55	17.95	20.99	22.79
10	22.20	20.71	18.49	15.71	13.77	12.56	10.92	13.89	16.71	17.89	21.06	22.84
11	22.20	20.74	18.40	15.65	13.73	12.52	10.91	14.13	16.85	17.83	21.14	22.85
12	22.19	20.78	18.32	15.60	13.70	12.47	10.90	14.40	16.98	17.85	21.21	22.84
13	22.17	20.83	18.23	15.56	13.68	12.42	10.89	14.65	17.08	17.93	21.28	22.81
14	22.15	20.88	18.16	15.52	13.65	12.34	10.93	14.87	17.21	18.04	21.35	22.77
15	22.12	20.93	18.08	15.48	13.63	12.26	10.97	15.06	17.35	18.17	21.41	22.74
16	22.09	20.97	18.00	15.45	13.62	12.19	11.03	15.23	17.50	18.31	21.48	22.70
17	22.06	21.00	17.93	15.43	13.58	12.08	11.23	15.41	17.56	18.45	21.55	22.66
18	22.01	21.02	17.87	15.41	13.52	11.94	11.45	15.61	17.63	18.59	21.61	22.62
19	21.96	21.01	17.80	15.39	13.46	11.80	11.68	15.82	17.69	18.73	21.68	22.62
20	21.93	20.91	17.74	15.37	13.39	11.70	11.89	15.97	17.73	18.89	21.75	22.67
21	21.90	20.75	17.69	15.35	13.31	11.59	12.08	16.08	17.79	19.04	21.81	22.74
22	21.88	20.49	17.63	15.34	13.25	11.52	12.27	16.19	17.88	19.18	21.85	22.81
23	21.84	20.28	17.56	15.33	13.19	11.44	12.44	16.28	18.00	19.32	21.89	22.86
24	21.81	20.10	17.49	15.30	13.14	11.38	12.60	16.30	18.10	19.46	21.96	22.90
25	21.76	19.96	17.36	15.26	13.09	11.33	12.74	16.29	18.19	19.58	22.03	22.90
26	21.72	19.84	17.18	15.21	13.07	11.29	12.83	16.24	18.30	19.69	22.09	22.90
27	21.67	19.70	16.98	15.18	13.03	11.27	12.85	16.17	18.39	19.82	22.16	22.89
28	21.60	19.57	16.79	15.14	12.99	11.27	12.85	16.14	18.48	19.94	22.21	22.87
29	21.52	19.46	16.64	15.10	---	11.26	12.85	16.11	18.58	20.05	22.25	22.84
30	21.47	19.34	16.54	15.07	---	11.24	12.84	16.09	18.63	20.17	22.30	22.80
31	21.37	---	16.46	15.03	---	11.21	---	16.07	---	20.26	22.37	---
MAX	22.20	21.17	19.22	16.37	14.95	12.95	12.85	16.30	18.63	20.26	22.37	22.90
WTR YR 1982	MEAN	17.40		HIGH	10.89		LOW	22.90				

## GROUND-WATER RECORDS

## TRUMBULL COUNTY

411604080505600. Local number, T-3.

LOCATION.--Lat 41°16'04", long 80°50'56", Hydrologic Unit 05030103, N. River Rd near Warren.

Owner: Copperweld Steel Corp.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 125 ft (38.1 m), cased.

DATUM.--Altitude of land-surface datum is 890 ft (271 m), from topographic map. Measuring point: Floor of instrument shelter 2.50 ft (0.762 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.30 ft (18.379 m) July 2, 1975; minimum daily low, 19.35 ft (5.898 m) Feb. 21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 33.18 ft (10.113 m) Aug. 6; minimum daily low, 19.35 ft (5.898 m) Feb. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.53	24.82	26.86	22.90	20.19	22.09	24.46	24.12	23.32	24.26	26.56	25.65
2	29.80	25.73	26.75	22.69	20.61	22.13	23.17	23.15	23.39	24.28	26.30	25.56
3	29.77	25.90	27.52	22.54	21.90	22.41	22.11	24.43	23.85	24.04	28.58	25.24
4	29.52	25.92	27.20	22.79	21.97	22.30	20.90	24.13	24.34	23.15	30.72	24.85
5	29.75	26.51	27.01	23.13	21.82	22.15	21.34	26.29	23.69	22.95	32.71	24.27
6	29.63	26.38	26.94	23.10	22.84	21.54	22.13	26.74	22.64	24.04	33.18	23.98
7	30.29	25.94	26.85	23.37	24.34	20.62	21.87	29.52	23.09	24.64	31.11	24.67
8	30.60	25.32	27.08	23.05	25.36	21.35	21.79	29.05	23.67	25.07	28.19	25.20
9	30.21	26.31	26.80	23.03	25.33	21.94	21.46	27.51	23.86	25.51	26.02	25.84
10	29.77	26.34	26.81	22.43	24.49	21.96	21.17	26.29	24.49	25.27	25.84	25.99
11	29.72	26.40	26.62	23.03	24.74	21.84	20.73	27.15	24.33	24.75	25.97	25.36
12	29.41	27.01	26.64	24.40	23.52	21.50	21.27	27.88	23.82	24.84	26.01	24.45
13	29.38	26.67	26.39	24.38	21.79	20.95	21.74	27.38	22.98	26.84	25.42	24.44
14	29.60	26.09	26.26	24.36	20.14	19.93	22.84	28.17	23.57	28.89	25.12	24.71
15	29.84	24.19	25.77	24.38	20.53	19.88	23.99	27.59	24.59	29.67	25.18	24.71
16	29.79	25.19	25.14	24.18	20.67	20.58	24.64	26.97	24.42	30.17	25.85	24.64
17	28.71	25.80	25.16	25.08	20.51	20.55	23.94	26.20	23.70	29.88	27.98	24.50
18	28.26	26.10	24.95	25.81	20.63	20.78	22.88	28.06	23.63	28.86	28.45	24.17
19	28.83	26.48	24.73	26.37	20.40	21.31	23.23	29.16	23.53	23.84	26.81	23.81
20	27.96	26.34	23.48	26.18	19.89	21.17	24.25	29.84	23.44	23.97	26.40	24.66
21	28.16	25.81	23.48	26.16	19.35	19.80	24.93	29.23	23.89	21.97	25.71	26.09
22	27.85	25.25	24.85	25.92	19.97	20.29	24.51	27.61	24.63	20.78	24.42	26.75
23	27.42	26.07	25.28	24.80	20.55	20.70	25.33	24.99	24.75	20.32	24.47	27.09
24	27.00	26.23	25.09	24.56	20.81	21.37	24.35	23.66	24.52	20.03	25.14	26.93
25	26.53	26.97	24.17	25.63	21.03	22.95	24.08	25.02	24.78	19.71	25.93	26.63
26	27.20	26.85	23.32	25.56	21.28	22.90	25.42	28.05	24.27	24.79	26.67	25.73
27	27.06	26.75	23.01	25.09	21.23	22.85	26.26	28.49	23.85	27.15	26.03	26.40
28	27.81	26.75	23.23	25.95	21.24	22.66	26.66	28.02	24.18	28.45	25.64	26.54
29	27.51	26.74	23.37	25.07	---	23.53	24.78	26.21	24.08	28.91	24.77	26.38
30	26.63	26.96	23.70	23.20	---	23.43	24.88	23.55	23.72	28.15	24.88	26.47
31	26.20	---	23.71	21.80	---	25.25	---	22.60	---	27.52	25.44	---
MAX	30.60	27.01	27.52	26.37	25.36	25.25	26.66	29.84	24.78	30.17	33.18	27.09
WTR YR 1982	MEAN	24.97		HIGH	19.35		LOW	33.18				

## GROUND-WATER RECORDS

369

## TUSCARAWAS COUNTY

403207081293800. Local number, TU-3.

LOCATION.--Lat 40°32'07", long 81°29'38", Hydrologic Unit 05040001, in the northwest part of Dover.

Owner: Dover City Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 62 ft (18.9 m), cased.

DATUM.--Altitude of land-surface datum is 880 ft (268 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.35 ft (5.898 m) Nov. 29-30, Dec. 6-8, 1962; minimum daily low, 3.20 ft (0.975 m) July 15, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 11.04 ft (3.365 m) Sept. 30; minimum daily low, 6.01 ft (1.832 m) Mar. 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.61	10.27	10.57	10.32	7.48	7.52	6.77	8.01	8.95	9.66	10.65	10.97
2	9.63	10.37	10.60	10.32	7.27	7.41	6.76	8.09	8.98	9.60	10.66	10.92
3	9.57	10.43	10.64	10.32	7.23	7.65	6.76	8.16	9.01	9.56	10.61	10.71
4	9.55	10.40	10.64	10.32	7.06	7.65	6.77	8.23	9.02	9.29	10.55	10.66
5	9.69	10.41	10.63	10.32	6.61	7.63	6.74	8.35	8.97	9.23	10.56	10.64
6	9.77	10.45	10.63	10.32	6.44	7.47	6.91	8.36	8.85	9.27	10.55	10.64
7	9.82	10.40	10.63	10.32	6.36	7.48	6.91	8.37	9.05	9.32	10.63	10.76
8	9.85	10.41	10.68	10.32	6.59	7.58	6.79	8.25	9.18	9.27	10.63	10.78
9	9.85	10.42	10.74	10.32	6.76	7.66	6.80	8.23	9.19	9.37	10.59	10.88
10	9.88	10.44	10.73	10.32	7.15	7.71	6.79	8.18	9.22	9.40	10.69	10.89
11	9.90	10.46	10.74	10.07	7.28	7.70	6.76	8.32	9.23	9.40	10.72	10.95
12	10.01	10.47	10.71	10.09	7.31	7.47	6.89	8.56	9.26	9.69	10.65	10.96
13	10.06	10.49	10.61	10.09	7.14	7.15	7.13	8.71	9.33	9.74	10.67	11.02
14	10.07	10.44	10.73	10.12	7.43	7.02	7.18	8.81	9.42	9.84	10.75	10.97
15	10.28	10.42	10.86	10.14	7.49	7.10	7.26	8.68	9.46	9.92	10.82	10.95
16	10.08	10.51	10.80	10.12	7.44	7.00	7.31	8.67	9.40	9.99	10.85	10.96
17	9.94	10.53	10.82	10.11	7.07	6.61	7.35	8.78	9.31	10.07	10.93	10.95
18	9.96	10.56	10.85	10.17	6.91	6.42	7.33	8.85	9.25	10.10	10.92	10.90
19	10.05	10.57	10.87	10.19	6.54	6.31	7.36	8.75	9.21	9.99	10.96	10.84
20	10.11	10.55	10.86	10.22	6.46	6.21	7.48	8.70	9.21	10.04	10.85	10.96
21	10.13	10.48	10.84	10.25	6.63	6.12	7.56	8.83	9.38	10.14	10.80	10.97
22	10.15	10.41	10.86	10.28	6.96	6.01	7.35	8.65	9.41	10.22	10.79	10.97
23	10.21	10.40	10.83	10.16	7.07	6.20	7.35	8.65	9.45	10.33	10.85	10.99
24	10.24	10.45	10.61	9.74	7.19	6.35	7.63	8.74	9.53	10.28	10.89	11.02
25	10.17	10.47	10.33	9.40	7.30	6.45	7.55	8.73	9.57	10.37	10.88	11.03
26	10.25	10.36	10.32	9.07	7.31	6.58	7.70	8.81	9.63	10.48	10.87	10.99
27	10.28	10.38	10.32	8.86	7.33	6.48	7.77	8.89	9.61	10.48	10.82	11.01
28	10.33	10.42	10.32	8.93	7.40	6.52	7.84	8.93	9.64	10.38	10.89	11.02
29	10.33	10.35	10.32	8.97	---	6.74	7.74	8.92	9.62	10.50	10.90	11.01
30	10.36	10.48	10.32	8.94	---	6.75	7.69	8.87	9.61	10.58	10.93	11.04
31	10.24	---	10.32	8.73	---	6.77	---	8.81	---	10.62	10.94	---
MAX	10.36	10.57	10.87	10.32	7.49	7.71	7.84	8.93	9.64	10.62	10.96	11.04
WTR YR 1982	MEAN	9.32		HIGH	6.01		LOW	11.04				

## GROUND-WATER RECORDS

## TUSCARAWAS COUNTY--Continued.

403557081313600. Local number, TU-4.

LOCATION.--Lat 40°35'57", long 81°31'36", Hydrologic Unit 05040001, near Fire Dept. building in Strasburg.

Owner: Strasburg Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 42.5 ft (13.0 m), cased.

DATUM.--Altitude of land-surface datum is 920 ft (280 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 10.48 ft (3.194 m) Feb. 6, 1977; minimum daily low, 4.05 ft (1.234 m) July 13, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.44 ft (3.182 m) Sep. 25; minimum daily low, 7.06 ft (2.152 m) Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.67	---	---	9.71	7.99	7.86	7.41	8.04	8.99	9.46	9.84	---
2	9.67	---	---	9.63	7.92	7.90	7.50	8.21	9.00	9.45	9.91	---
3	9.70	10.03	---	9.61	7.91	8.00	7.29	8.18	9.03	9.43	9.90	---
4	9.65	10.04	---	9.63	7.91	7.98	7.34	8.21	9.02	9.23	9.94	---
5	9.70	10.03	---	9.62	7.81	7.92	7.39	8.26	9.06	9.23	9.91	---
6	9.70	10.03	---	9.53	7.77	7.80	7.40	8.40	9.03	9.30	9.92	---
7	9.80	10.03	---	9.50	7.65	7.74	7.54	8.33	9.08	9.33	9.97	---
8	9.84	10.02	---	9.51	7.70	7.83	7.43	8.34	9.10	9.44	9.96	---
9	9.78	---	---	9.55	7.75	7.88	7.54	8.33	9.14	9.35	9.96	---
10	9.79	---	---	9.63	7.84	7.89	7.41	8.40	9.17	9.41	10.00	---
11	9.85	---	---	9.66	7.93	7.93	7.41	8.46	9.21	9.36	10.00	---
12	9.82	---	---	9.49	7.99	7.79	7.48	8.49	9.19	9.44	10.01	---
13	9.89	---	---	9.50	8.06	7.62	7.52	8.52	9.23	9.50	10.01	---
14	9.88	---	---	9.43	8.05	7.54	7.51	8.61	9.27	9.51	---	---
15	9.89	---	---	9.47	8.15	7.55	7.54	8.60	9.28	9.61	---	---
16	9.95	---	---	9.40	8.07	7.53	7.56	8.69	9.24	9.61	---	---
17	9.84	---	---	9.41	7.95	7.43	7.65	8.68	9.23	9.53	---	---
18	9.97	---	---	9.46	7.68	7.30	7.58	8.74	9.19	9.64	---	---
19	9.91	---	---	9.36	7.59	7.23	7.65	8.75	9.23	9.61	---	---
20	10.01	10.02	---	9.39	7.54	7.09	7.58	8.80	9.19	9.62	---	---
21	9.97	9.98	---	9.50	7.50	7.06	7.85	8.31	9.27	9.67	---	---
22	9.96	---	---	9.38	7.58	7.11	7.82	8.33	9.34	9.66	---	---
23	9.93	10.01	9.97	9.31	7.60	7.23	7.92	8.75	9.45	9.67	---	10.37
24	9.98	10.04	9.84	9.08	7.63	7.20	7.92	8.84	9.41	9.77	---	10.39
25	9.94	10.03	9.64	8.95	7.74	7.19	7.83	8.81	9.42	9.76	---	10.44
26	9.97	10.00	9.74	8.84	7.75	7.24	7.91	8.84	9.41	9.80	---	10.34
27	10.01	10.00	9.64	8.68	7.74	7.37	7.97	8.85	9.43	9.81	---	10.36
28	9.95	10.04	9.68	8.80	7.79	7.34	7.99	9.00	9.46	9.86	---	10.36
29	9.98	10.04	9.72	8.76	---	7.39	8.07	8.85	9.50	9.81	---	10.44
30	9.99	10.04	9.76	8.77	---	7.47	8.16	9.01	9.44	9.86	---	10.38
31	10.03	---	9.74	8.56	---	7.40	---	8.96	---	9.94	10.22	---
MAX	10.03	10.04	9.97	9.71	8.15	8.00	8.16	9.01	9.50	9.94	10.22	10.44
WTR YR 1982	MEAN	8.92		HIGH	7.06		LOW	10.44				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

371

## TUSCARAWAS COUNTY--continued

403653081321800. Local number, TU-1.

LOCATION.--Lat 40°36'53", long 81°32'18", Hydrologic Unit 05040001, 1.3 mi (2.1 km) north of Strasburg.

Owner: Everett Waltz.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.1 m), depth 23 ft (7.0 m), cased.

DATUM.--Altitude of land-surface datum is 928.24 ft (282.928 m). Measuring point: Floor of instrument shelter 0.90 ft (0.274 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.20 ft (4.633 m) Sep. 30, 1982; minimum daily low, 6.64 ft (2.024 m) July 14, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 15.20 ft (4.633 m) Sep. 30; minimum daily low, 10.95 ft (3.338 m) Apr. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.22	14.65	14.76	14.19	12.32	---	10.97	12.05	13.32	14.01	14.50	14.99
2	14.25	14.66	14.76	14.18	12.01	---	10.95	12.11	13.35	14.03	14.52	15.00
3	14.28	14.68	14.75	14.14	11.92	---	10.96	12.18	13.40	14.03	14.54	14.94
4	14.30	14.69	14.76	14.14	11.88	---	10.98	12.25	13.42	13.97	14.55	14.91
5	14.33	14.69	14.76	14.07	11.77	---	10.97	12.30	13.46	13.94	14.56	14.93
6	14.34	14.69	14.76	13.96	11.71	---	11.01	12.36	13.50	13.93	14.58	14.96
7	14.37	14.69	14.77	13.93	11.66	---	11.02	12.41	13.52	13.95	14.60	14.99
8	14.39	14.71	14.77	13.89	11.67	---	11.01	12.46	13.56	13.95	14.62	15.00
9	14.41	14.71	14.76	13.85	11.81	---	11.05	12.51	13.59	13.94	14.64	15.01
10	14.43	14.73	14.75	13.85	11.88	---	11.05	12.56	13.63	13.96	14.66	15.02
11	14.45	14.74	14.75	13.80	11.99	---	11.06	12.61	13.66	13.99	14.68	15.03
12	14.46	14.75	14.76	13.76	12.06	---	11.07	12.66	13.70	14.02	14.70	15.05
13	14.47	14.76	14.77	13.71	12.13	---	11.10	12.72	13.73	14.04	14.72	15.06
14	14.48	14.77	14.77	13.69	12.21	---	11.13	12.77	13.76	14.06	14.74	15.08
15	14.49	14.78	14.78	13.69	12.22	---	11.19	12.82	13.79	14.10	14.77	15.09
16	14.50	14.79	14.79	13.70	12.10	---	11.23	12.88	13.79	14.12	14.78	15.10
17	14.51	14.80	14.80	13.70	11.97	---	11.30	12.92	13.77	14.14	14.80	15.11
18	14.51	14.81	14.81	13.70	11.79	---	11.34	12.98	13.76	14.16	14.82	15.11
19	14.52	14.81	14.81	13.72	11.68	---	11.39	13.01	13.79	14.17	14.84	15.12
20	14.53	14.72	14.82	13.73	11.57	---	11.47	13.02	13.82	14.19	14.86	15.14
21	14.54	14.65	14.82	13.77	11.58	---	11.51	13.01	13.84	14.21	14.88	15.15
22	14.54	14.64	14.83	13.78	11.58	---	11.57	13.05	13.87	14.23	14.88	15.16
23	14.55	14.65	14.81	13.76	11.59	---	11.61	13.07	13.89	14.26	14.91	15.17
24	14.56	14.66	14.67	13.57	11.66	---	11.67	13.07	13.92	14.28	14.91	15.18
25	14.57	14.67	14.48	13.36	11.68	---	11.72	13.11	13.94	14.31	14.91	15.19
26	14.58	14.70	14.34	13.21	11.68	---	11.77	13.15	13.96	14.35	14.92	15.19
27	14.58	14.71	14.26	13.08	---	---	11.84	13.19	13.99	14.37	14.93	15.20
28	14.60	14.72	14.23	13.04	---	---	11.90	13.22	14.00	14.39	14.95	15.19
29	14.61	14.74	14.19	13.05	---	---	11.95	13.26	14.00	14.41	14.96	15.19
30	14.62	14.75	14.18	13.05	---	10.96	11.99	13.27	14.01	14.44	14.96	15.20
31	14.64	---	14.18	12.95	---	10.98	---	13.29	---	14.48	14.98	---
MAX	14.64	14.81	14.83	14.19	12.32	10.98	11.99	13.29	14.01	14.48	14.98	15.20
WTR YR 1982	MEAN	13.76		HIGH	10.95		LOW	15.20				

## GROUND-WATER RECORDS

## TUSCARAWAS COUNTY--Continued.

403823081324200. Local number, TU-5.

LOCATION.--Lat 40°38'23", long 81°32'42", Hydrologic Unit 05040001, Sugar Creek well field near Strasburg.

Owner: Canton Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 100 ft (30.5 m), cased.

DATUM.--Altitude of land-surface datum is 937.93 ft (285.881). Measuring point: Floor of instrument shelter 4.00 ft (1.219 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 12.68 ft (3.865 m) Feb. 14, 24, 1977; minimum daily low, 1.05 ft (0.320 m) July 9, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.13 ft (3.088 m) Sep. 15; minimum daily low, 3.59 ft (1.094 m) Mar. 20, 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.54	7.93	8.10	8.09	8.10	6.23	5.35	6.49	7.65	8.75	9.47	9.63
2	8.35	7.91	8.69	7.85	6.84	6.29	5.12	6.30	8.09	8.84	9.61	9.78
3	7.91	8.08	8.74	7.88	6.63	6.38	5.20	6.42	8.43	8.95	9.48	9.43
4	7.58	8.15	8.57	8.07	6.93	6.43	5.00	7.01	8.20	8.16	9.52	8.93
5	7.70	8.17	8.61	8.08	6.47	6.10	5.37	6.68	8.17	7.61	9.75	8.95
6	7.77	8.07	8.34	8.32	5.80	5.46	5.45	6.87	8.21	8.42	9.67	8.68
7	7.82	7.89	8.48	8.31	5.55	5.70	5.50	7.28	8.03	8.61	9.13	9.77
8	8.15	7.87	8.70	8.32	---	5.86	5.72	7.40	8.13	8.79	9.51	9.83
9	7.73	7.81	8.75	---	5.35	6.49	5.41	7.07	8.15	8.51	9.68	9.94
10	7.63	8.00	9.02	---	5.80	6.39	4.93	6.62	8.58	8.30	9.35	9.95
11	7.58	8.08	9.18	---	6.45	6.46	4.89	7.08	8.36	7.78	9.42	9.83
12	7.73	8.18	8.25	---	---	6.20	4.91	7.07	7.83	8.33	9.88	9.25
13	8.45	---	8.25	---	---	5.30	4.95	7.51	7.75	8.60	9.89	9.57
14	8.40	---	8.70	---	---	4.51	5.40	7.73	8.34	8.58	9.58	9.75
15	8.05	---	8.87	---	6.36	4.58	5.96	7.83	8.73	8.81	10.02	10.13
16	8.19	8.00	9.17	---	6.51	5.10	6.09	7.97	7.92	9.02	9.98	9.95
17	8.16	8.06	9.26	---	6.33	4.62	5.98	8.25	8.71	8.83	10.01	9.77
18	7.89	8.07	8.83	---	6.02	3.99	5.28	8.19	8.72	8.28	10.11	9.68
19	7.95	8.20	8.95	---	5.31	4.11	5.63	8.13	8.00	8.73	9.99	9.49
20	8.30	7.91	9.20	---	4.94	3.59	5.85	8.00	8.32	9.13	9.59	9.71
21	8.24	8.40	---	---	4.83	3.59	5.91	8.12	8.83	9.22	9.65	10.00
22	8.75	---	9.37	---	5.49	3.82	6.43	7.83	8.58	9.10	9.83	10.09
23	8.74	---	9.00	---	5.44	3.81	6.46	7.43	8.73	9.30	9.82	10.11
24	7.77	8.50	8.36	---	5.29	4.28	6.49	7.85	8.85	9.16	9.70	9.99
25	8.15	8.58	7.63	---	5.58	4.30	6.02	7.88	8.55	9.01	9.52	10.00
26	7.98	8.37	7.30	---	5.75	4.78	6.67	8.12	8.66	9.08	9.81	9.83
27	8.18	8.30	7.37	---	5.95	4.88	6.70	8.20	8.75	9.23	9.75	9.80
28	8.17	8.50	7.84	8.88	5.70	4.73	6.55	8.01	8.41	9.16	9.44	9.74
29	8.63	---	7.95	8.94	---	4.92	6.67	7.92	8.76	9.00	9.46	9.78
30	7.96	8.36	8.42	8.99	---	5.68	7.01	7.48	8.68	9.63	9.90	9.71
31	7.93	---	8.52	8.30	---	5.60	---	7.58	---	9.55	9.74	---
MAX	8.75	8.58	9.37	8.99	8.10	6.49	7.01	8.25	8.85	9.63	10.11	10.13
WTR YR 1982	MEAN	7.84		HIGH	3.59		LOW	10.13				

## GROUND-WATER RECORDS

373

## UNION COUNTY

401826083255200. Local number, U-4.

LOCATION.--Lat 40°18'26", long 83°25'52", Hydrologic Unit 05060001, 2.6 mi (4.2 km) southeast of Raymond.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 350 ft (107 m), cased to 37 ft (11.3 m).

DATUM.--Altitude of land-surface datum is 1,040 ft (317 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.34 ft (7.419 m) Sept. 11, 1977; minimum daily low, 19.32 ft (5.889 m) Feb. 24, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 24.30 ft (7.407 m) Sept. 30; minimum recorded daily low, 20.59 ft (6.276 m) April 12.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.01	23.35	22.91	22.50	21.20	21.70	20.91	21.81	22.35	22.59	23.34	23.84
2	23.12	23.34	22.90	22.51	21.25	21.62	20.91	21.86	22.42	22.61	23.36	23.81
3	23.18	23.34	22.91	22.33	21.39	21.71	20.61	21.93	22.45	22.48	23.40	23.88
4	23.15	23.32	23.04	21.82	21.56	21.58	20.83	21.94	22.48	22.55	23.43	23.97
5	23.15	23.25	23.09	21.61	21.59	21.26	20.85	21.96	22.45	22.69	23.47	23.99
6	23.14	23.25	23.08	21.69	21.75	21.26	20.97	21.93	22.51	22.65	23.47	23.99
7	23.17	23.32	22.87	21.95	21.80	21.48	21.05	21.90	22.55	22.69	23.49	24.02
8	23.20	23.36	23.06	21.92	21.81	21.58	20.98	22.01	22.51	22.74	23.44	24.03
9	23.23	23.47	23.10	21.87	21.91	21.68	20.76	22.06	22.54	22.73	23.45	24.02
10	23.23	23.42	23.09	21.99	22.02	21.66	20.79	22.08	22.48	22.72	23.54	24.00
11	23.29	23.45	23.14	22.15	22.12	21.50	20.60	22.08	22.55	22.69	23.57	24.04
12	23.32	23.46	23.19	22.17	22.14	20.99	20.59	22.10	22.49	22.82	23.63	24.05
13	23.34	23.44	23.15	22.12	22.16	20.87	20.75	22.16	22.54	22.86	23.62	24.07
14	23.32	23.40	23.10	22.11	22.14	21.04	20.91	22.16	22.57	22.86	23.63	24.08
15	23.32	23.34	23.09	22.22	22.16	21.04	20.94	22.24	22.52	22.90	23.71	24.08
16	23.28	23.29	23.17	22.44	21.69	20.99	20.99	22.26	22.48	22.94	23.70	24.15
17	23.33	23.34	23.15	22.47	21.08	20.65	21.10	22.29	22.15	22.96	23.72	24.14
18	23.21	23.37	23.20	22.44	21.11	20.79	21.21	22.27	22.14	22.98	23.76	24.12
19	23.33	23.30	23.24	22.47	21.19	20.80	21.19	22.26	22.13	23.00	23.78	24.17
20	23.34	23.24	23.26	22.54	21.16	20.61	21.35	22.26	22.19	23.02	23.75	24.16
21	23.38	23.36	23.15	22.67	20.94	20.70	21.49	22.26	22.24	23.07	23.80	24.21
22	23.35	23.38	23.07	22.63	21.14	20.87	21.56	22.29	22.26	23.05	23.83	24.22
23	23.41	23.37	22.69	22.25	21.12	20.89	21.59	22.31	22.38	23.08	23.75	24.22
24	23.44	23.41	22.45	21.78	21.37	20.97	21.56	22.35	22.39	23.13	23.79	24.22
25	23.37	23.40	22.42	21.89	21.63	21.05	21.54	22.34	22.37	23.14	23.77	24.20
26	23.24	23.26	22.39	22.03	21.66	21.14	21.53	22.30	22.41	23.18	23.82	24.21
27	23.25	23.22	22.41	22.04	21.65	21.34	21.72	22.28	22.41	23.18	23.81	24.18
28	23.29	23.28	22.49	22.21	21.72	21.40	21.77	22.29	22.40	23.21	23.93	24.27
29	23.28	23.27	22.63	22.26	---	21.38	21.82	22.30	22.38	23.25	23.96	24.29
30	23.37	23.23	22.66	22.09	---	21.31	21.81	22.26	22.52	23.25	23.90	24.30
31	23.35	---	22.52	21.42	---	21.18	---	22.28	---	23.28	23.89	---
MAX	23.44	23.47	23.26	22.67	22.16	21.71	21.82	22.35	22.57	23.28	23.96	24.30
WTR YR 1982	MEAN	22.58		HIGH	20.59		LOW	24.30				

## GROUND-WATER RECORDS

## VINTON COUNTY

391452082282900. Local number, V-1.

LOCATION.--Lat 39°14'52", long 82°28'29", Hydrologic Unit 05090101, State Highway garage in Vinton.

Owner: Ohio Department of Highways.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 218 ft (66.4 m), cased.

DATUM.--Altitude of land-surface datum is 730 ft (223 m) from topographic map. Measuring Point: Top of platform 2.50 ft (0.762 m) below land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 93.23 ft (28.417 m); Apr. 12, 1979; minimum daily low, 49.55 ft (15.103 m) Mar. 20, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 89.65 ft (27.325 m) Aug. 7; minimum daily low, 85.72 ft (26.127 m), Jan. 4.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86.17	86.68	86.14	86.00	87.73	---	---	88.20	---	89.24	89.23	---
2	86.08	86.68	85.97	86.02	87.76	---	---	88.18	---	89.34	89.07	---
3	86.18	86.60	86.01	85.93	87.62	---	---	88.45	89.10	---	89.08	---
4	86.10	86.55	86.01	85.72	87.75	---	---	88.52	89.17	---	89.30	---
5	86.12	86.54	86.17	85.83	87.74	---	---	88.65	---	---	89.01	---
6	86.28	86.44	86.12	85.84	87.80	---	---	88.63	---	---	89.33	---
7	86.29	86.60	86.00	86.08	87.82	---	---	88.75	89.21	---	89.65	---
8	86.46	86.52	85.97	86.19	87.72	---	87.59	88.75	---	---	89.53	---
9	86.49	86.53	86.03	86.06	87.67	---	87.73	88.60	---	---	89.39	---
10	86.52	86.73	86.06	86.06	87.89	---	87.72	88.66	89.27	---	89.45	88.99
11	86.46	86.80	86.08	86.02	88.12	---	87.68	88.76	89.43	---	89.40	89.20
12	86.57	86.83	86.29	86.08	88.14	---	87.71	88.74	89.26	89.54	89.15	89.16
13	86.70	86.85	86.29	86.12	88.10	---	87.94	88.67	89.25	89.52	89.08	89.04
14	86.69	86.79	86.25	86.20	87.99	---	88.17	88.82	89.27	89.33	89.03	---
15	86.70	86.64	86.06	86.43	88.05	---	88.12	88.89	89.35	89.57	89.02	---
16	86.62	86.34	86.22	86.70	88.01	---	88.31	88.80	89.18	89.56	88.97	---
17	86.44	86.29	86.13	86.76	---	---	88.14	88.88	89.22	89.55	89.00	---
18	86.30	86.63	86.23	86.81	---	---	88.23	88.98	89.32	89.64	88.98	---
19	86.49	86.53	86.19	86.98	---	---	88.38	89.09	---	89.57	---	---
20	86.44	86.41	86.14	87.29	---	---	88.25	89.11	---	89.53	---	---
21	86.64	86.50	86.14	87.35	---	---	88.31	89.04	---	89.61	---	---
22	86.64	86.50	85.89	87.36	---	---	88.25	---	---	89.54	---	---
23	86.43	86.48	86.23	87.20	---	---	88.48	---	---	89.50	---	---
24	86.54	86.45	86.51	87.04	---	---	88.21	89.00	---	89.62	---	---
25	86.43	86.51	86.56	87.15	88.06	---	88.05	89.02	---	89.53	---	---
26	86.26	86.49	86.61	87.33	88.09	---	88.07	---	89.22	89.59	---	---
27	86.23	86.40	86.29	87.34	88.15	88.07	88.34	---	89.19	89.52	---	---
28	86.41	86.51	86.24	87.56	88.03	87.99	88.31	---	---	89.41	---	---
29	86.47	86.44	86.29	87.57	---	---	88.32	---	---	89.47	---	---
30	86.70	86.29	86.29	87.48	---	---	88.26	---	---	89.43	---	---
31	86.70	---	85.93	87.42	---	---	---	---	---	89.34	---	---
MAX	86.70	86.85	86.61	87.57	88.15	88.07	88.48	89.11	89.43	89.64	89.65	89.20
WTR YR 1982	MEAN	87.61		HIGH	85.72		LOW	89.65				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## WARREN COUNTY

392511084182500. Local number, W-14.

LOCATION.--Lat 39°25'11", long 84°18'31", Hydrologic Unit 05090202, 3.3 mi (5.3 km) east of Monroe.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth drilled 81 ft (24.7 m), present depth 73 ft (22.3 m) cased to 75 ft (22.9 m). depth drilled 81 ft (24.7 m), present depth 73 ft (22.3 m), cased to 75 ft (22.9 m).

DATUM.--Altitude of land-surface datum is 660 ft (201 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m), above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.48 ft (5.023 m) Sept. 29, 1977; minimum daily low, 6.43 ft (1.960 m) Feb. 19-20, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 14.87 ft (4.532 m) Nov. 21; minimum recorded daily low, 9.44 ft (2.877 m) Feb. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.98	14.24	14.24	13.48	9.98	10.95	10.58					
2	14.05	14.27	14.24	13.44	9.62	10.94	10.50					
3	14.07	14.27	14.22	13.32	9.44	10.99	10.16					
4	14.08	14.26	14.23	13.12	9.48	10.98	10.00					
5	14.16	14.27	14.28	13.11	9.70	11.03	9.94					
6	14.17	14.28	14.29	13.07	9.99	10.91	10.32					
7	14.28	14.29	14.10	13.19	10.13	11.05	10.33					
8	14.31	14.34	14.21	13.12	10.21	11.10	10.27					
9	14.30	14.38	14.20	13.04	10.45	11.17	10.42					
10	14.32	14.40	14.14	13.15	10.56	11.07	10.45					
11	14.37	14.50	14.14	13.18	10.71	11.02	10.47					
12	14.40	14.56	14.13	13.19	10.77	10.73	10.46					
13	14.41	14.58	14.10	13.15	10.83	10.66	10.77					
14	14.42	14.65	14.07	13.15	10.91	10.60	10.84					
15	14.41	14.64	14.12	13.24	10.92	10.51	10.80					
16	14.44	14.67	14.16	13.38	10.79	10.41	---					
17	14.42	14.74	14.15	13.38	10.36	10.52	---					
18	14.43	14.80	14.24	13.30	10.20	10.52	---					
19	14.50	14.85	14.31	13.40	10.29	10.46	---					
20	14.50	14.85	14.31	13.39	10.24	10.22	---					
21	14.50	14.87	14.23	13.49	10.35	9.96	---					
22	14.49	14.80	14.22	13.44	10.43	9.99	---					
23	14.53	14.78	14.12	12.80	10.50	9.98	---					
24	14.50	14.73	13.77	11.64	10.75	10.09	---					
25	14.44	14.71	13.55	11.71	10.80	10.20	---					
26	14.39	14.58	13.39	11.80	10.80	10.35	---					
27	14.47	14.51	13.36	11.76	10.83	10.49	---					
28	14.43	14.49	13.47	12.08	10.91	10.50	---					
29	14.31	14.43	13.58	12.05	---	10.48	---					
30	14.27	14.40	13.56	11.86	---	10.51	---					
31	14.25	---	13.41	11.00	---	10.59	---					
MAX	14.53	14.87	14.31	13.49	10.92	11.17	10.84					
WTR YR 1982	MEAN	12.64		HIGH	9.44		LOW	14.87				

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

## GROUND-WATER RECORDS

## WARREN COUNTY--Continued.

392712084191700. Local number, W-5.

LOCATION.--Lat 39°27'12", long 84°19'17", Hydrologic Unit 05080002, Union Rd., 2 mi (3.2 km) east of Monroe.

Owner: Bob Proeschel.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 121 ft (36.9 m), cased.

DATUM.--Altitude of land-surface datum is 660 ft (201 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.40 ft (12.314 m) Sep. 30, 1982; minimum daily low, 17.70 ft (5.395 m) Apr. 30, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 40.40 ft (12.314 m) Sep. 30; minimum daily low, 36.55 ft (11.140 m) May 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.90	38.40	38.65	39.25	39.55	38.40	37.75	36.85	37.05	37.20	38.85	39.45
2	38.00	38.40	38.90	39.25	39.45	38.40	37.55	37.05	36.95	36.85	38.85	39.70
3	38.20	38.35	39.00	39.25	39.35	38.40	37.20	36.95	36.90	36.95	39.00	39.85
4	38.15	38.35	39.10	38.90	39.50	38.35	37.70	36.90	36.85	37.20	38.90	39.70
5	38.10	38.65	39.25	39.60	39.25	38.60	37.15	36.95	37.00	37.35	38.90	39.75
6	38.05	38.30	39.00	39.15	39.25	38.25	37.65	36.90	36.95	37.40	38.90	39.95
7	38.05	38.80	38.80	39.55	39.25	38.35	37.50	36.90	36.85	37.45	38.85	40.00
8	38.30	38.75	39.10	39.70	39.20	38.45	37.10	37.10	36.85	37.20	38.80	40.30
9	38.10	38.55	39.10	39.40	39.00	38.45	37.30	37.15	36.80	37.50	38.90	40.05
10	38.00	38.50	39.05	39.35	39.25	38.20	37.35	36.85	36.95	37.40	39.05	40.15
11	38.30	38.55	39.05	39.30	39.05	38.15	37.25	36.70	37.00	37.45	39.10	40.05
12	38.10	38.85	39.05	39.60	39.05	38.10	36.95	36.95	37.05	37.65	39.05	40.20
13	38.25	38.65	38.95	39.45	39.05	38.25	37.10	37.15	37.25	37.75	39.15	40.15
14	38.35	38.50	38.95	39.45	38.75	38.40	37.10	37.10	37.45	37.80	39.25	40.30
15	38.00	38.75	39.05	39.40	38.80	38.15	36.95	37.25	37.30	37.65	39.25	40.20
16	38.20	38.50	39.20	39.45	38.70	38.35	36.90	37.60	37.00	37.95	39.45	40.25
17	38.20	38.75	39.10	39.85	38.75	38.05	37.10	37.60	37.20	38.25	39.55	40.15
18	38.05	38.80	39.25	39.45	38.90	38.25	37.15	37.25	37.00	37.95	39.65	40.40
19	38.65	38.55	39.45	39.55	38.90	38.20	36.80	37.25	36.80	37.75	39.85	40.25
20	38.30	38.85	39.30	39.50	38.55	37.95	37.15	37.35	36.95	38.05	39.60	40.30
21	38.20	39.00	39.35	39.60	38.65	38.05	37.25	37.00	36.75	38.10	39.45	40.20
22	38.60	38.95	39.00	39.35	38.80	37.90	37.25	36.95	37.00	37.80	39.35	40.30
23	38.20	38.85	39.50	39.45	38.65	37.75	37.10	36.95	37.25	38.05	39.45	40.35
24	38.55	39.00	39.65	39.55	38.85	37.55	36.75	36.90	36.95	38.25	39.50	39.95
25	38.10	38.90	39.35	39.65	38.95	---	36.55	36.85	36.85	38.30	39.55	40.05
26	38.10	39.00	38.95	39.75	38.75	---	36.75	36.75	37.05	38.25	39.40	40.10
27	38.30	39.05	39.35	39.50	38.65	---	37.00	36.85	37.00	38.30	39.50	40.25
28	38.40	38.95	39.45	39.75	38.60	---	36.75	36.75	36.80	38.25	39.70	40.35
29	38.75	38.90	39.70	39.75	---	---	36.75	36.55	36.80	38.50	39.55	40.25
30	38.35	38.85	39.25	39.45	---	---	36.95	36.65	36.95	38.35	39.45	40.40
31	38.70	---	38.90	39.25	---	37.60	---	36.65	---	38.95	39.35	---
MAX	38.75	39.05	39.70	39.85	39.55	38.60	37.75	37.60	37.45	38.95	39.85	40.40
WTR YR 1982	MEAN	38.42		HIGH	36.55		LOW	40.40				

## GROUND-WATER RECORDS

377

## WASHINGTON COUNTY

392458081271100. Local number, WA-1.

LOCATION.--Lat 39°24'58", long 81°27'11", Hydrologic Unit 05040004, at Third and Putnam Streets, Marietta.

Owner: City of Marietta.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 63 ft (19.2 m), cased. DATUM.--Altitude of land-surface datum is 610 ft (186 m), from topographic map. Measuring point: Floor of instrument shelter 4.80 ft (1.463 m) above land-surface datum.

REMARKS.--Prior to water year 1978, well depth reported as 42 ft (12.8 m).

PERIOD OF RECORD.--May 1942 to June 1974, May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 30.70 ft (9.357 m) Sept. 9, 1962; minimum daily low, 18.83 ft (5.739 m) Mar. 25, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 27.34 ft (8.333 m) Sept. 28-29; minimum daily low, 22.22 ft (6.773 m) Mar. 24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.91	26.63	26.98	26.39	25.72	24.93	23.03	25.14	26.05	26.20		---
2	26.95	26.63	26.99	26.40	25.04	25.03	22.99	25.20	26.11	26.18		---
3	26.94	26.63	26.94	26.42	24.79	25.05	22.81	25.27	26.17	26.21		---
4	26.90	26.68	26.90	26.36	24.79	25.06	22.88	25.30	26.19	26.16		---
5	26.89	26.72	26.91	26.33	24.69	25.08	22.87	25.35	26.16	25.99		---
6	26.95	26.78	26.93	26.12	24.61	24.92	23.02	25.49	26.02	25.93		---
7	26.93	26.79	26.90	25.96	24.60	24.92	23.03	25.57	25.92	25.99		---
8	26.96	26.76	26.88	25.92	24.66	24.96	22.97	25.60	25.78	26.03		27.23
9	26.96	26.71	26.88	25.91	24.78	25.04	23.12	25.62	25.73	26.06		27.25
10	26.94	26.68	26.87	25.96	24.87	25.06	23.17	25.62	25.72	26.14		27.27
11	26.91	26.69	26.86	26.09	24.98	25.05	23.24	25.64	25.74	26.21		27.27
12	26.94	26.74	26.86	26.18	24.99	25.01	23.28	25.70	25.75	26.27		27.29
13	26.97	26.77	26.87	26.17	25.10	24.61	23.48	25.74	25.82	26.29		27.30
14	26.99	26.80	---	26.17	25.13	24.33	23.51	25.75	25.86	26.33		27.31
15	27.02	26.83	---	26.20	25.18	24.04	23.74	25.81	25.82	26.34		27.31
16	27.05	26.86	---	26.27	25.19	23.78	23.79	25.85	25.75	26.35		27.25
17	27.05	26.90	---	26.28	25.03	23.58	23.96	25.85	25.74	26.37		27.23
18	27.08	26.94	---	26.31	24.91	23.16	23.95	25.92	25.70	26.37		27.21
19	27.09	26.94	---	26.32	24.57	22.83	24.09	25.95	25.66	---		27.20
20	27.07	26.93	---	26.34	24.47	22.76	24.24	25.94	25.70	---		27.18
21	27.05	26.94	---	26.39	24.38	22.53	24.34	25.99	25.80	---		27.17
22	27.08	26.93	---	26.40	24.35	22.33	24.54	26.05	25.89	---		27.17
23	27.11	26.90	---	26.35	24.34	22.26	24.62	26.05	25.93	---		27.22
24	27.10	26.90	26.87	26.05	24.46	22.22	24.64	26.04	25.98	---		27.26
25	27.05	26.92	26.59	25.56	24.51	22.37	24.67	26.00	26.03	---		27.32
26	27.03	26.93	26.31	25.73	24.55	22.43	24.83	26.06	26.09	---		27.32
27	27.02	26.97	26.22	25.74	24.68	22.50	24.98	26.08	26.14	---		27.33
28	26.99	26.99	26.25	25.76	24.77	22.55	25.00	26.15	26.19	---		27.34
29	26.90	26.98	26.29	25.79	---	22.78	25.00	26.16	26.21	---		27.34
30	26.75	26.94	26.29	25.81	---	22.83	25.09	26.07	26.22	---		27.32
31	26.70	---	26.29	25.79	---	23.06	---	25.99	---	---		---
MAX	27.11	26.99	26.99	26.42	25.72	25.08	25.09	26.16	26.22	26.37		27.34
WTR YR 1982	MEAN	25.77		HIGH	22.22		LOW	27.34				

## GROUND-WATER RECORDS

## WASHINGTON COUNTY--Continued

392553081281600. Local number, WA-2.

LOCATION.--Lat 39°25'53", long 81°28'16", Hydrologic Unit 05040004 near county fairgrounds north of Marietta.

Owner: Marietta Water Dept.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in (0.2 m) depth 50 ft (15.2 m), cased.

DATUM.--Altitude of land-surface datum is 605 ft (184 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 34.38 ft (10.479 m) Feb. 16, 1980; minimum daily low, 18.72 ft (5.706 m) June 28, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 33.62 ft (10.247 m) Aug. 10; minimum daily low, 22.44 ft (6.840 m) Feb. 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.21	29.59	30.29	30.07	29.65	30.01	27.87	30.45	30.34	30.32	32.98	32.07
2	31.07	29.61	30.24	30.06	27.89	30.08	28.25	30.00	30.16	30.35	32.97	32.02
3	30.83	29.86	30.22	30.08	27.91	29.45	28.47	32.05	30.43	30.40	33.08	32.02
4	30.49	30.03	30.21	29.96	28.85	29.46	27.25	32.17	30.49	30.38	32.27	30.60
5	30.56	30.06	30.34	29.31	27.87	29.92	26.42	32.33	30.50	29.78	32.28	30.60
6	30.56	30.07	30.30	28.94	28.25	29.83	27.17	31.75	29.98	29.58	30.89	30.39
7	31.38	30.58	30.31	29.05	28.38	29.85	27.11	32.44	30.38	29.60	30.88	30.36
8	31.60	29.88	30.44	29.84	28.39	29.92	27.03	32.63	29.29	29.80	33.34	30.45
9	30.90	29.83	30.74	30.06	28.74	29.99	27.34	32.72	28.87	29.83	33.55	30.58
10	30.11	29.82	30.36	29.27	29.06	30.10	27.48	31.28	29.03	30.03	33.62	30.61
11	30.29	30.12	30.44	30.20	29.37	30.10	27.61	32.27	31.06	29.28	33.32	30.61
12	30.12	30.11	30.51	30.27	29.55	29.94	27.66	32.23	31.13	29.34	32.50	30.61
13	30.22	30.25	31.11	30.40	29.91	28.90	27.86	31.04	29.50	31.26	32.93	30.78
14	30.29	30.38	31.19	30.86	30.07	28.18	27.93	32.21	31.39	31.34	33.01	30.91
15	30.43	30.52	31.29	30.64	30.28	27.41	30.12	32.41	31.57	32.59	32.85	30.98
16	30.44	30.61	30.58	30.75	30.29	25.69	30.18	31.08	31.54	31.42	32.84	31.21
17	30.38	30.86	30.63	30.92	29.93	24.74	28.73	31.14	31.46	31.43	32.16	31.15
18	30.42	30.59	30.90	31.15	29.51	23.59	28.79	32.52	31.31	31.98	33.13	30.93
19	30.41	30.40	30.76	31.90	28.70	23.04	28.84	31.27	31.25	31.95	32.83	32.28
20	30.41	30.36	30.98	31.59	28.53	23.15	30.14	32.65	30.15	31.53	32.17	32.29
21	30.53	30.27	31.92	31.68	28.36	22.59	30.50	32.21	29.86	31.50	32.06	31.56
22	30.66	30.18	30.96	31.30	28.19	22.44	29.66	32.24	29.96	32.13	31.94	31.61
23	30.64	30.34	30.96	31.24	28.34	22.65	29.76	31.41	30.02	31.33	31.85	31.50
24	30.61	30.54	30.09	29.68	28.66	23.34	29.82	31.23	30.01	33.07	31.99	32.62
25	30.62	30.68	29.20	29.65	28.76	24.05	29.62	30.88	30.14	31.56	32.16	31.91
26	30.55	30.75	28.78	29.99	29.04	24.53	29.74	31.04	30.40	31.66	32.10	31.79
27	30.54	30.56	28.89	29.98	29.42	24.85	29.87	31.06	30.48	33.16	31.94	31.80
28	30.26	30.59	29.16	30.20	29.59	25.34	29.85	31.09	30.56	31.17	31.87	32.52
29	29.87	30.46	29.70	30.75	---	26.00	30.71	30.79	30.55	33.12	31.87	31.76
30	29.65	30.59	29.75	30.32	---	26.23	31.94	31.99	30.54	31.65	32.05	30.72
31	29.49	---	30.06	30.32	---	26.68	---	30.79	---	32.08	32.08	---
MAX	32.21	30.86	31.92	31.90	30.29	30.10	31.84	32.72	31.57	33.16	33.62	32.62
WTR YR 1982	MEAN	30.27		HIGH	22.44		LOW	33.62				

## GROUND-WATER RECORDS

379

## WAYNE COUNTY

404655081553200. Local number, WN-3.

LOCATION.--Lat 40°46'55", long 81°55'32", Hydrologic Unit 05040003, OARDC-OSU Experiment Station near Wooster.

Owner: OARDC-OSU.

AQUIFER.--Shale of Mississippian Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.2 m) depth 20 ft (6.1 m), cased.

DATUM.--Altitude of land-surface datum is 1040 ft (317 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.17 ft (4.929 m) Jan. 27, 29, 1956; minimum daily low, 10.51 ft (3.203 m) Feb. 12, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.83 ft (4.520 m) Nov. 19, 20; minimum daily low, 10.81 ft (3.295 m) Mar. 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.29	14.55	14.06	12.99	10.94	11.11	11.04	11.20	11.24	13.40	13.94	14.18
2	14.33	14.58	14.08	13.08	11.46	11.09	11.07	11.20	11.24	11.59	13.99	14.19
3	14.38	14.61	14.11	13.17	11.23	11.00	11.07	11.20	11.37	11.82	14.00	14.19
4	14.42	14.64	14.16	13.19	11.56	10.89	11.09	11.20	11.49	12.01	14.00	14.15
5	14.46	14.65	14.20	11.73	11.71	10.98	11.10	11.21	11.59	11.58	11.92	14.12
6	14.48	14.65	14.24	11.99	11.83	11.00	11.10	11.21	11.68	11.49	11.80	14.10
7	14.46	14.61	14.28	12.08	11.96	10.99	11.11	11.22	11.77	11.60	11.98	14.10
8	14.38	14.59	14.29	12.19	12.13	10.98	11.11	11.21	11.83	11.73	12.04	14.11
9	14.35	14.60	14.28	12.29	12.32	10.97	11.12	11.20	11.90	11.85	12.11	14.12
10	14.36	14.63	14.26	12.45	12.46	10.95	11.11	11.20	11.96	11.98	12.19	14.12
11	14.39	14.65	14.27	12.61	12.60	10.91	11.10	11.20	12.02	12.11	12.34	14.13
12	14.42	14.68	14.29	12.79	12.71	10.92	11.11	11.21	12.12	12.24	12.53	14.14
13	14.46	14.71	14.32	12.97	12.83	10.93	11.11	11.21	12.24	12.38	12.68	14.15
14	14.49	14.73	14.36	13.10	12.11	10.94	11.12	11.21	12.41	12.51	12.95	14.15
15	14.53	14.75	14.39	13.24	11.05	10.95	11.13	11.22	12.56	12.64	13.14	14.15
16	14.56	14.77	14.42	13.37	11.02	10.81	11.13	11.22	12.69	12.76	13.30	14.17
17	14.60	14.79	14.47	13.53	11.07	10.93	11.14	11.22	12.89	12.88	13.45	14.17
18	14.61	14.81	14.51	13.64	11.13	10.99	11.14	11.23	13.00	13.01	13.57	14.18
19	14.63	14.83	14.56	13.73	11.27	11.00	11.15	11.23	13.00	13.10	13.67	14.18
20	14.65	14.83	14.60	13.82	11.33	10.96	11.15	11.23	11.72	13.18	13.75	14.19
21	14.68	12.74	14.65	13.91	11.33	11.02	11.16	11.23	11.89	13.24	13.81	14.19
22	14.70	12.96	14.67	13.99	11.30	11.03	11.16	11.22	12.14	13.28	13.86	14.19
23	14.70	13.14	14.65	14.02	11.25	11.05	11.17	11.22	12.34	13.34	13.91	14.19
24	14.69	13.30	11.50	11.27	11.22	11.07	11.17	11.22	12.58	13.41	13.94	14.19
25	14.67	13.45	11.92	11.79	11.20	11.09	11.17	11.22	12.79	13.59	13.97	14.18
26	14.65	13.59	12.08	12.04	11.18	11.10	11.18	11.21	12.95	13.67	13.99	14.15
27	14.61	13.69	12.24	12.24	11.16	11.11	11.18	11.22	13.09	13.72	14.02	14.13
28	14.57	13.80	12.39	12.47	11.14	11.12	11.19	11.23	13.21	13.77	14.04	13.81
29	14.53	13.91	12.56	12.65	---	11.13	11.19	11.23	13.32	13.82	14.08	13.62
30	14.52	14.00	12.70	12.81	---	11.13	11.20	11.24	13.39	13.86	14.13	13.61
31	14.53	---	12.88	11.98	---	11.13	---	11.24	---	13.91	14.16	---
MAX	14.70	14.83	14.67	14.02	12.83	11.13	11.20	11.24	13.39	13.91	14.16	14.19
WTR YR 1982	MEAN	12.74		HIGH	10.81		LOW	14.83				

## GROUND-WATER RECORDS

## WAYNE COUNTY--Continued.

404802081583100. Local number, WN-2A.

LOCATION.--Lat 40°48'02", long 81°58'31", Hydrologic Unit 05040003, in well field by Kilbuck Creek near Wooster.

Owner: Wooster Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 65 ft (19.8 m), cased.

DATUM.--Altitude of land-surface datum is 855 ft (261 m), from topographic map. Measuring point: Floor of instrument shelter 6.00 ft (1.829 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 34.45 ft (10.500 m) Feb. 17, 1972; minimum daily low, 2.35 ft (0.716 m) Jan. 28, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 22.18 ft (6.760 m) Sep. 30; minimum daily low, 17.78 ft (5.420 m) Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.78	18.81	19.93	21.17	21.92	21.47	18.50	18.14	18.30	18.76	20.29	21.43
2	17.82	18.84	19.98	21.20	21.92	21.40	18.43	18.14	18.31	18.80	20.34	21.46
3	17.85	18.88	20.03	21.23	21.93	21.33	18.40	18.15	18.31	18.83	20.39	21.48
4	17.89	18.91	20.07	21.27	21.93	21.28	18.36	18.15	18.32	18.87	20.43	21.51
5	17.92	18.95	20.11	21.30	21.93	21.21	18.32	18.16	18.33	18.89	20.47	21.54
6	17.95	18.98	20.15	21.33	21.93	21.16	18.30	18.16	18.34	18.93	20.51	21.57
7	17.99	19.02	20.19	21.36	21.93	21.10	18.27	18.16	18.35	18.97	20.56	21.59
8	18.02	19.05	20.24	21.40	21.94	21.06	18.23	18.17	18.35	19.01	20.61	21.62
9	18.06	19.08	20.28	21.43	21.94	21.01	18.18	18.17	18.36	19.05	20.65	21.65
10	18.10	19.11	20.33	21.46	21.94	20.96	18.16	18.17	18.36	19.09	20.69	21.67
11	18.13	19.15	20.37	21.49	21.93	20.90	18.15	18.18	18.37	19.12	20.73	21.70
12	18.17	19.19	20.41	21.52	21.93	20.82	18.12	18.18	18.38	19.17	20.76	21.71
13	18.20	19.23	20.45	21.53	21.93	20.75	18.12	18.18	18.39	19.21	20.80	21.76
14	18.24	19.27	20.49	21.56	21.93	20.68	18.11	18.18	18.39	19.26	20.85	21.78
15	18.27	19.30	20.54	21.58	21.93	20.61	18.10	18.19	18.40	19.31	20.89	21.81
16	18.31	19.34	20.58	21.60	21.94	20.51	18.07	18.20	18.40	19.36	20.93	21.83
17	18.35	19.38	20.62	21.63	21.94	20.40	18.06	18.21	18.42	19.41	20.95	21.84
18	18.38	19.42	20.66	21.65	21.94	20.26	18.05	18.21	18.43	19.45	20.98	21.87
19	18.42	19.46	20.69	21.66	21.92	20.08	18.05	18.21	18.45	19.50	21.00	21.89
20	18.45	19.50	20.72	21.68	21.91	19.88	18.06	18.22	18.46	19.55	21.03	21.92
21	18.47	19.54	20.77	21.69	21.90	19.70	18.07	18.22	18.48	19.61	21.07	21.95
22	18.50	19.57	20.82	21.71	21.88	19.50	18.08	18.23	18.49	19.67	21.11	21.97
23	18.53	19.61	20.86	21.73	21.85	19.36	18.09	18.24	18.52	19.73	21.14	21.99
24	18.56	19.65	20.90	21.75	21.81	19.20	18.09	18.25	18.54	19.78	21.18	22.02
25	18.60	19.70	20.93	21.77	21.75	19.05	18.10	18.25	18.57	19.83	21.21	22.05
26	18.64	19.74	20.96	21.78	21.69	18.94	18.11	18.26	18.59	19.89	21.23	22.07
27	18.67	19.78	20.99	21.80	21.59	18.88	18.11	18.27	18.62	19.95	21.26	22.10
28	18.70	19.81	21.02	21.82	21.52	18.81	18.12	18.27	18.65	20.02	21.29	22.13
29	18.72	19.85	21.06	21.85	---	18.73	18.13	18.28	18.69	20.09	21.32	22.16
30	18.75	19.89	21.10	21.88	---	18.65	18.13	18.29	18.72	20.17	21.36	22.18
31	18.78	---	21.14	21.90	---	18.58	---	18.30	---	20.23	21.39	---
MAX	18.78	19.89	21.14	21.90	21.94	21.47	18.50	18.30	18.72	20.23	21.39	22.18
WTR YR 1982	MEAN	19.89		HIGH	17.78		LOW	22.18				

## GROUND-WATER RECORDS

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## WAYNE COUNTY--continued

405745081510200. Local number, WN-7.

LOCATION.--Lat 40°57'45", long 81°51'02", Hydrologic Unit 05040001, in well field along Steele Ditch near Sterling.

Owner: Rittman Water Department

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 123 ft (37.5 m), cased.

DATUM.--Altitude of land-surface datum is 965 ft (294 m), from topographic map. Measuring point: Floor of instrument shelter 5.00 ft (1.524 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.35 ft (7.117 m) Sep. 23, 1982; minimum daily low, 5.38 ft (1.640 m) Jan. 17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.35 ft (7.117 m) Sep. 23; minimum daily low, 16.35 ft (4.983 m) May. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.20	16.65	18.70	19.10	19.60		18.70	16.50	20.35	18.25	19.20	19.30
2	17.80	16.80	18.70	19.10	19.35		18.90	16.35	18.55	18.25	19.80	18.95
3	17.20	16.70	18.75	19.20	19.35		18.95	17.25	18.70	17.90	21.95	19.50
4	17.05	16.65	18.85	18.95	18.55		18.50	17.30	18.55	17.80	19.85	19.05
5	18.85	16.70	19.10	19.15	19.35		19.55	17.45	18.50	17.85	19.75	18.80
6	18.95	16.55	18.95	19.55	19.55		19.40	17.55	18.30	18.75	19.75	19.05
7	18.60	16.65	20.60	18.90	19.55		19.30	17.80	18.50	18.75	19.85	18.75
8	17.35	16.80	20.00	19.05	20.80		19.65	17.40	17.70	18.90	19.70	21.55
9	18.35	18.65	19.90	19.25	20.75		17.10	17.35	17.55	18.90	19.85	21.65
10	17.35	17.50	19.90	19.00	20.65		19.60	18.05	17.45	19.00	19.85	22.40
11	18.85	19.65	19.65	19.65	20.70		19.30	18.25	17.50	18.90	19.85	19.10
12	17.30	17.45	19.80	18.90	20.50		19.55	18.45	17.50	18.70	19.95	21.80
13	17.90	17.50	19.65	19.15	20.65		19.55	18.55	17.35	17.85	19.95	23.25
14	19.00	17.05	19.65	18.95	20.40		19.55	18.65	20.35	18.05	19.85	21.50
15	19.50	17.30	19.60	19.70	20.55		19.35	18.55	18.20	18.15	19.85	19.30
16	17.50	17.20	19.55	19.80	20.50		19.55	18.65	18.05	18.30	20.15	19.10
17	17.25	17.30	19.40	20.05	20.25		19.65	18.65	18.15	18.20	20.20	19.05
18	18.10	18.15	19.45	19.40	20.60		19.55	18.90	18.15	17.90	20.15	21.45
19	18.00	20.35	19.50	18.65	20.80		20.60	17.75	17.85	17.95	20.15	20.95
20	16.50	18.15	19.25	21.65	20.85		19.45	17.60	17.80	18.55	20.05	22.15
21	16.45	17.95	19.95	21.25	20.60		17.55	17.40	20.40	18.65	19.95	23.05
22	16.45	18.25	19.40	21.30	20.60		17.50	17.35	18.25	20.50	19.75	22.65
23	16.60	18.30	19.35	20.65	20.05		17.50	17.40	18.15	18.85	19.50	23.35
24	16.50	18.30	19.55	18.95	20.05		17.55	20.65	18.30	18.95	20.50	22.10
25	16.55	18.45	19.35	19.90	20.20		17.40	21.05	18.25	18.90	19.65	19.10
26	16.45	18.60	19.50	19.60	20.10		17.45	20.15	18.35	19.20	21.05	19.00
27	16.45	18.55	19.25	19.65	20.35		17.55	21.65	18.20	19.05	19.25	18.95
28	16.45	18.55	19.30	19.20	---		17.05	21.95	18.35	18.95	19.30	19.50
29	16.60	18.70	19.40	21.10	---		16.45	21.30	18.20	19.10	19.05	19.45
30	16.60	18.60	19.30	19.70	---		16.40	20.85	18.20	19.15	19.10	19.50
31	16.65	---	19.40	19.30	---		---	18.05	---	19.25	19.15	---
MAX	19.50	20.35	20.60	21.65	20.85		20.60	21.95	20.40	20.50	21.95	23.35
WTR YR 1982	MEAN	18.98		HIGH	16.35		LOW	23.35				

## GROUND-WATER RECORDS

## WAYNE COUNTY--Continued

405805081462300. Local number, WN-6.

LOCATION.--Lat 40°58'05", long 81°46'23", Hydrologic Unit 05040001, Salt Street, Rittman.

Owner: Tenneco, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 180 ft (54.9 m), cased.

DATUM.--Altitude of land-surface datum is 960 ft (293 m), from topographic map. Measuring point: Floor of instrument shelter 2.30 ft (0.701 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 92.80 ft (28.285 m) July 21, 1971; minimum daily low, 74.28 ft (22.641 m) Mar. 1, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 80.55 ft (24.552 m) Oct. 20; minimum daily low, 75.71 ft (23.076 m) Jul. 4.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.91	80.03	79.12	77.12	79.55	78.84	78.93	76.79	79.50	78.95	79.70	77.42
2	80.12	79.93	79.14	77.31	79.52	78.56	78.94	76.79	79.68	78.96	79.67	77.21
3	80.26	79.99	79.23	77.46	79.24	78.73	78.25	79.24	80.34	75.92	79.71	77.38
4	80.25	79.89	79.44	77.36	79.65	78.59	78.82	79.32	80.08	75.71	79.67	77.52
5	80.09	79.77	79.58	79.11	79.64	78.70	78.81	79.33	80.01	75.78	79.83	76.43
6	80.01	79.53	79.58	78.97	79.48	78.73	78.82	79.22	80.27	79.25	79.84	76.97
7	80.09	79.75	79.26	79.54	79.49	78.60	78.98	79.09	80.30	79.42	79.81	77.29
8	80.24	79.83	79.31	79.57	79.41	78.91	78.91	79.13	80.20	79.51	79.66	77.16
9	80.31	80.11	79.45	79.16	79.17	78.94	78.63	75.76	80.22	79.56	79.59	77.14
10	80.27	80.09	79.40	79.30	79.37	78.91	78.71	79.50	80.30	79.58	79.78	76.97
11	80.34	80.01	79.47	79.95	79.42	78.47	78.57	79.59	80.39	79.51	79.80	76.99
12	80.40	80.08	79.62	80.19	79.51	78.53	77.84	79.69	80.30	79.74	79.83	77.03
13	80.48	80.05	79.63	79.99	79.34	78.46	79.33	79.82	79.42	79.83	79.75	77.08
14	80.42	79.92	79.54	79.14	79.23	78.70	79.49	79.98	79.25	79.83	79.72	76.94
15	80.23	79.66	79.29	79.16	79.09	78.67	79.51	79.99	79.10	79.83	79.65	76.92
16	80.21	79.50	79.50	79.44	79.07	78.46	79.49	79.35	78.89	79.82	79.44	77.03
17	80.21	79.39	79.48	79.54	78.95	78.57	79.55	79.89	79.04	79.72	79.44	77.06
18	76.02	79.52	79.48	79.46	79.02	78.63	79.71	79.86	79.04	75.87	79.61	76.87
19	80.46	79.53	79.55	79.36	79.07	78.56	79.68	79.64	78.93	79.33	79.97	76.90
20	80.55	79.19	79.65	79.51	79.04	79.13	79.71	79.59	78.95	79.57	79.91	76.83
21	79.86	79.53	79.54	79.62	78.93	78.70	79.96	79.74	78.91	79.65	79.97	76.94
22	79.83	79.64	79.16	79.64	79.16	78.85	79.94	79.72	78.94	79.63	79.97	76.93
23	79.92	79.69	79.56	79.04	79.12	78.89	79.68	79.71	79.06	79.69	79.74	76.94
24	80.00	79.63	79.65	79.13	79.24	78.77	79.47	79.75	79.06	79.77	79.78	76.94
25	79.80	79.71	79.31	79.22	79.55	78.72	76.71	79.75	78.96	79.74	77.59	76.88
26	79.62	79.61	79.11	79.52	79.33	78.90	76.36	79.68	78.93	79.71	77.64	76.90
27	79.64	76.29	78.71	79.52	79.09	79.32	78.98	79.61	78.90	79.68	77.54	76.86
28	79.98	79.83	78.77	79.46	78.96	79.40	76.03	79.62	78.76	79.66	77.73	77.16
29	79.98	79.93	79.05	79.59	---	79.26	75.99	79.61	78.58	79.74	77.80	77.22
30	80.06	79.47	77.88	79.26	---	79.00	76.77	79.61	78.88	79.73	77.55	77.22
31	80.10	---	77.37	79.09	---	78.74	---	79.64	---	79.66	77.49	---
MAX	80.55	80.11	79.65	80.19	79.65	79.40	79.96	79.99	80.39	79.83	79.97	77.52
WTR YR 1982	MEAN	79.08		HIGH	75.71		LOW	80.55				

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## FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	$2.54 \times 10^1$	millimeters (mm)
	$2.54 \times 10^{-2}$	meters (m)
feet (ft)	$3.048 \times 10^{-1}$	meters (m)
miles (mi)	$1.609 \times 10^0$	kilometers (km)
<i>Area</i>		
acres	$4.047 \times 10^3$	square meters (m <sup>2</sup> )
	$4.047 \times 10^{-1}$	square hectometers (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometers (km <sup>2</sup> )
<i>Volume</i>		
gallons (gal)	$3.785 \times 10^0$	liters (L)
	$3.785 \times 10^0$	cubic decimeters (dm <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic meters (m <sup>3</sup> )
million gallons	$3.785 \times 10^3$	cubic meters (m <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeters (dm <sup>3</sup> )
	$2.832 \times 10^{-2}$	cubic meters (m <sup>3</sup> )
cfs-days	$2.447 \times 10^3$	cubic meters (m <sup>3</sup> )
	$2.447 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
acre-feet (acre-ft)	$1.233 \times 10^3$	cubic meters (m <sup>3</sup> )
	$1.233 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
	$1.233 \times 10^{-6}$	cubic kilometers (km <sup>3</sup> )
<i>Flow</i>		
cubic feet per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liters per second (L/s)
	$2.832 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$2.832 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
gallons per minute (gal/min)	$6.309 \times 10^{-2}$	liters per second (L/s)
	$6.309 \times 10^{-2}$	cubic decimeters per second (dm <sup>3</sup> /s)
	$6.309 \times 10^{-5}$	cubic meters per second (m <sup>3</sup> /s)
million gallons per day	$4.381 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$4.381 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
<i>Mass</i>		
tons (short)	$9.072 \times 10^{-1}$	megagrams (Mg) or metric tons

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