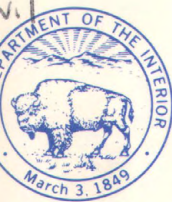


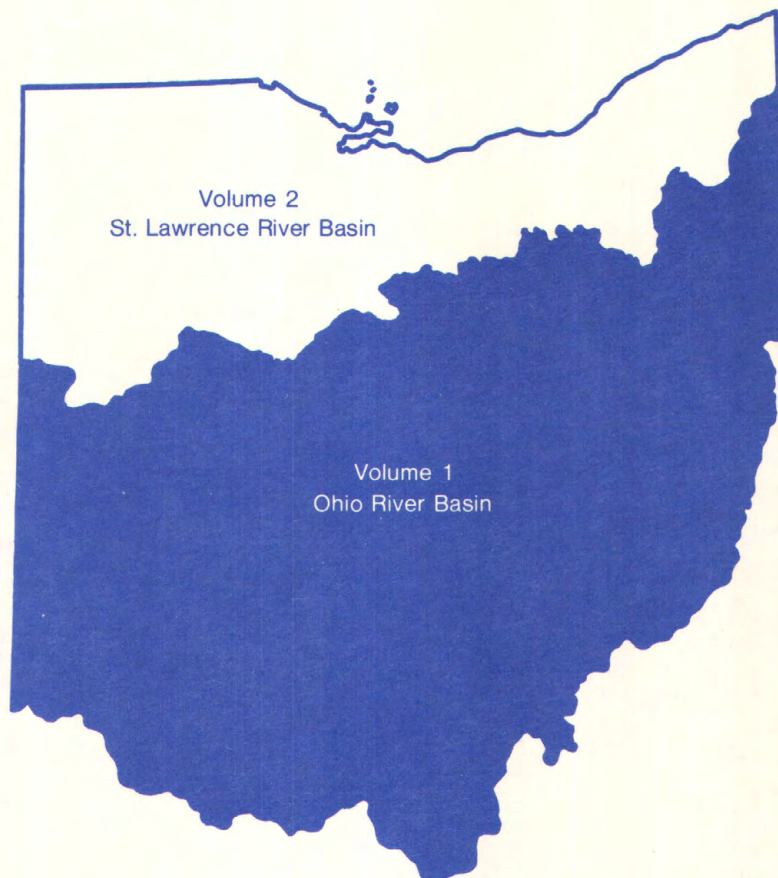
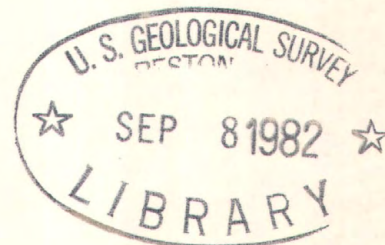
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Water Resources Data Ohio

Water Year 1981

Volume 1. Ohio River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-81-1
Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1981

1980

OCTOBER

S	M	T	W	T	F	S
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1981

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20	21	22	23	24	25	26
27	28	29	30			



Water Resources Data Ohio Water Year 1981

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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

1982

PREFACE

This report was prepared by personnel of the Ohio district of the Water Resources Division of the U.S. Geological Survey under the supervision of S.M. Hindall, District Chief, and J.E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of Ohio and with other agencies.

This report is one of a series issued State by State under the general direction of Robert J. Dingman, Chief Hydrologist, U.S. Geological Survey, and John E. Moore, Deputy Assistant Chief Hydrologist for Scientific Publications and Data Management.

III

Data for Ohio are in two volumes as follows:

- Volume 1. Ohio River basin
- Volume 2. St. Lawrence River basin
and Statewide Project Data

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			14.
15. Supplementary Notes Prepared in cooperation with the State of Ohio and with other agencies.			
16. Abstract (Limit: 200 words) Water resources data for the 1981 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 169 gaging stations; stage and contents at 39 lakes and reservoirs; water quality at 53 gaging stations and 59 wells; and water levels at 280 observation wells. Also included are data from 81 crest-stage partial-record stations; 120 low-flow partial-record stations, and 331 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.			
17. Document Analysis a. Descriptors *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. Identifiers/Open-Ended Terms c. COSATI Field/Group			
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GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED

(Letter after station location designates type of data: (c) chemical, (l) water level.)

Well number	Local number	Location	Page
ASHLAND COUNTY			
405303082170700	AS-2	Ashland (lc)	399
405425082173000	AS-3	Jerome Fork (l)	400
ATHENS COUNTY			
392004082071600	AT-4	Athens (l)	401
391940082070000	AT-2A	Athens (l)	402
AUGLAIZE COUNTY			
403233083574500	AU-3	Southwest of New Hampshire (l)	403
BELMONT COUNTY			
400619080423200	B-1	Martins Ferry (l)	404
BUTLER COUNTY			
391805084261800	BU-9	Northwest of Sharonville (l)	405
391904084371800	BU-12	East of Ross (l)	406
392017084345200	BU-7	Fairfield (lc)	407
392021084340300	BU-56	Fairfield (l)	408
392048084311400	BU-8	East of Hamilton (lc)	409
392445084333000	BU-36	Hamilton (c)	410
392515084322000	BU-5	North of Hamilton (l)	411
392939084231700	BU-3	Middletown (l)	412
393103084240900	BU-2	Middletown (l)	413
393202084241500	BU-15	Middletown (l)	414
CARROLL COUNTY			
403709081052800	C-1	North of Carrollton (l)	415
CHAMPAIGN COUNTY			
400638083453900	CH-3	Urbana (l)	416
CLARK COUNTY			
395639084012200	CL-9	New Carlisle (lc)	417
395840083495200	CL-7	Northwest of Springfield (lc)	418
CLERMONT COUNTY			
385144084133900	CT-2	Moscow (l)	419
COSHOCTON COUNTY			
401256081525100	CS-3	North of Conesville (l)	420
401735081523800	CS-2	Coshocton (l)	421
DARKE COUNTY			
400514084345700	D-2	East of Greenville (l)	422
DELAWARE COUNTY			
402126083040400	DL-3	Delaware (lc)	423
FAIRFIELD COUNTY			
394257082362900	F-6	Lancaster (lc)	424
394544082271000	F-1	West Rushville (l)	425
395053082361900	F-5	Baltimore (lc)	426
FAYETTE COUNTY			
393153083322000	FA-1	West of Washington Court House (lc)	427

<u>Well number</u>	<u>Local number</u>	<u>Location</u>	<u>Page</u>
FRANKLIN COUNTY			
395118082573300	FR-3	Southwest of Reese (1)	428
395157083003500	FR-109	Columbus (1)	429
400101083021800	FR-10	Columbus (1c)	430
GALLIA COUNTY			
383638082103300	G-2	East of Crown City (1)	431
GREENE COUNTY			
394411083561300	GR-1	North of Xenia (1c)	432
394425083551100	GR-10	North of Xenia (1c)	433
HAMILTON COUNTY			
390653084485700	H-5	South of Elizabethtown (1)	434
391039084291500	H-11	Cincinnati (1)	435
391101084172100	H-3	Southeast of Miamiville (1)	436
391201084281600	H-10	Cincinnati (1)	437
391214084470100	H-1	Southeast of Harrison (1)	438
391324084272500	H-9	Cincinnati (1)	439
391341084275300	H-8	Wyoming (1)	440
391442084262900	H-7	Evendale (1)	441
391608084254400	H-6	Glendale (1c)	442
391733084392400	H-2	South of Ross (1)	443
391748084393800	H-19	Southwest of Venice (c)	444
391817084393300	H-4	Southwest of Ross (1)	445
HARDIN COUNTY			
404218083503700	HN-1	Alger (1)	446
HOCKING COUNTY			
393200082235300	HK-1	Logan (1)	447
KNOX COUNTY			
402344082300700	K-1	Mt. Vernon (1c)	448
LICKING COUNTY			
400159082282100	LI-2	Heath (1)	449
MADISON COUNTY			
395301083272200	M-2	London (1c)	450
395740083255700	M-3	North of London (1)	451
MAHONING COUNTY			
410042080453800	MA-1	Canfield (1)	452
MARION COUNTY			
403413083170500	MN-4	Southeast of New Bloomington (1)	453
403443083230400	MN-1	LaBue (1c)	454
403601083110400	MN-2	West of Marion (1c)	455
MEDINA COUNTY			
410120081431800	MD-3	Wadsworth (1c)	456
MERCER COUNTY			
402833084375200	MR-2	Coldwater (1)	457
MIAMI COUNTY			
395848084085500	MI-3	Northeast of Tipp City (1)	458
400308084112900	MI-44	Troy (c)	459
MONTGOMERY COUNTY			
393853084170700	MT-63	Miamisburg (c)	460
394012084151700	MT-55	West Carrollton (1)	461
394025084162800	MT-49	West Carrollton (1)	462
394425084113200	MT-3	Dayton (1c)	463
394533084113800	MT-6	Dayton (1)	464
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395804081593200	MU-1A	Zanesville (1)	465

X

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

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393327082571600	PK-7	South of Circleville (1)	466
393402082572500	PK-4	South of Circleville (1c)	467
393638082572300	PK-6	Northwest of Circleville (1)	468
393639082564400	PK-3	Circleville (1c)	469
393438083072200	PK-8	Williamsport (1c)	470
PIKE COUNTY			
390359083015100	PI-2	West of Piketon (1)	471
PORTAGE COUNTY			
411101081022000	PO-3	East of Ravenna (1)	472
411401081025000	PO-1	Windham (1)	473
PREBLE COUNTY			
394438084335900	PR-2	East of Eaton (1)	474
RICHLAND COUNTY			
404625082305100	R-4	Mansfield (1)	475
ROSS COUNTY			
391341083172200	RO-7	West of Bainbridge (1c)	476
391922082580000	RO-3	Chillicothe (1)	477
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401712084103500	SH-4	Sidney (1)	478
STARK COUNTY			
404939081203800	ST-5A	Canton (1)	479
405051081244200	ST-28	Northwest of Canton (1)	480
405052081193700	St-4	Northeast of Canton (1)	481
405211081253500	St-27	North Canton (1)	482
SUMMIT COUNTY			
410141081315200	SU-4A	Akron (1)	483
TRUMBULL COUNTY			
411604080505600	T-3	Near Warren (1)	484
TUSCARAWAS COUNTY			
403207081293800	TU-3	Dover (1)	485
403557081313600	TU-4	Strasburg (1c)	486
403653081321800	TU-1	North of Strasburg (1)	487
403823081324200	TU-5	Near Strasburg (1c)	488
UNION COUNTY			
401826083255200	U-4	Southeast of Raymond (1)	489
VINTON COUNTY			
391452082282900	V-1	McArthur (1)	490
WARREN COUNTY			
392511084182500	W-14	East of Monroe (1)	491
392712084191700	W-5	East of Monroe (1)	492
WASHINGTON COUNTY			
392438081271100	WA-1	Marietta (1)	493
392553081281600	WA-2	Marietta (1)	494
WAYNE COUNTY			
404655081553200	WN-3	Near Wooster (1)	495
404802081583100	WN-2A	Near Wooster (1)	496
405745081510200	WN-7	Near Sterling (1)	497
405805081462300	WN-6	Rittman (1)	498

WATER RESOURCES DATA FOR OHIO, 1981

INTRODUCTION

Water resources data for the 1981 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 169 gaging stations; stage stations and contents for 39 lakes and reservoirs; water quality for 53 gaging stations and 59 wells; and water levels for 280 observation wells. Also included are 81 crest-stage stations, 120 low-flow stations, and 6 water-quality partial-record stations, and 331 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-81-1." 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.

Geauga County, Zane Lee, sanitary engineer.

Northeast Ohio Areawide Coordinating Agency, F.E.J. Pizzedaz, director.

Cuyahoga County, Leon Ozebek, chief, Planning Branch.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 142 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 1981 water year, streamflow was normal throughout most of the State. The only exception was southwestern Ohio, where it was excessive. The month of November was normal except in eastern Ohio where persistent rain the last week of the month produced slightly excessive runoff. December streamflow was normal throughout the State.

Streamflow for January was normal in eastern and northwestern Ohio but deficient in the southwestern and central portion of the State. February was normal except in northwest and eastern Ohio where it was excessive.

March streamflow was deficient throughout the State. Streamflow returned to normal in April except in eastern Ohio, where it was excessive.

Streamflow in May was normal except in central and southwestern Ohio where it was excessive.

June streamflow was excessive throughout the State. Heavy thunderstorms June 13 and 14 caused flooding on numerous streams. Blanchard River near Findlay crested 0.69 feet above the previously recorded peak.

July streamflow remained excessive except in central Ohio, where it returned to normal. Streamflow in August remained normal.

Heavy rain the first week of September resulted in above-average precipitation totals for the entire month. runoff to be excessive and remained excessive for the entire month.

Figure 2 compares the 1981 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 little change from previous years. Two samples taken on unnamed tributaries to Alum Creek in April showed a lead concentration in excess of the U.S. Public Health Standard of 250 micrograms per liter. Muskingum River at McConnelville was above the limit for dissolved mercury when sampled in April. Scioto River at Higby, also sampled in April, was above limits for cadmium and chromium.

One of the four major basins in the State that have U.S. Geological Survey monitors at NASQAN sites showed slight improvement in water quality. The Cuyahoga River basin showed improved quality, which may be due to a cleanup of the upper reaches of the river by the National Park Service. The Park Service's National Recreation Area plan calls for relocation of industries that are major polluters. The city of Akron has also improved its sewage treatment facility which discharges into the upper reaches of the Cuyahoga River.

Chemical analyses of water from reconstructed wells located in reclaimed coal land in southeast Ohio showed phenol concentrations well above the U.S. Public Health Standard of 5 micrograms per liter.

Water samples from observation wells throughout Ohio showed very little change from previous years.

Ground-Water Levels in Ohio: 1981 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 range of levels for both water-table and confined-aquifer wells is 3 to 5 feet.

Ground-water levels in 1981 were somewhat lower than the above-normal levels that prevailed throughout 1980, although the range between maximum and minimum levels was greater in 1981. At the beginning of the 1981 water year, water levels in most wells were still above normal but declining steadily. The decline continued into January with a minor rise in mid-December. Lows for the year were recorded in some wells in January after a dry and very cold period. Levels across the State rose abruptly in February due to thawing and rainfall, but declined again in March. Above-normal precipitation during April, May and June resulted in annual highs in mid-June for many wells. Levels in parts of northern Ohio rose higher than in 1980, and remained relatively high to the end of the 1981 water year. Across much of southern Ohio, however, levels were declining in most areas at the end of the water year, with lows being recorded at some stations.

With respect to long-term trends, ground-water levels throughout Ohio remained favorable.

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 \pm 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 $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ 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 $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ 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 (g/m^3), and periphyton and benthic organisms in grams per square meter (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 (ft^3/s , ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 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 (CaCO₃).

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.

Micrograms 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 (m²), 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 (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. 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 indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

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.

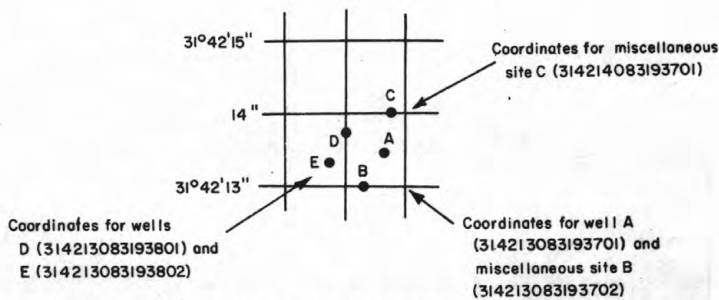


Figure 1.-- System for numbering wells and miscellaneous sites (latitude and longitude)

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 5.

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

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. 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 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/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 1.

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.

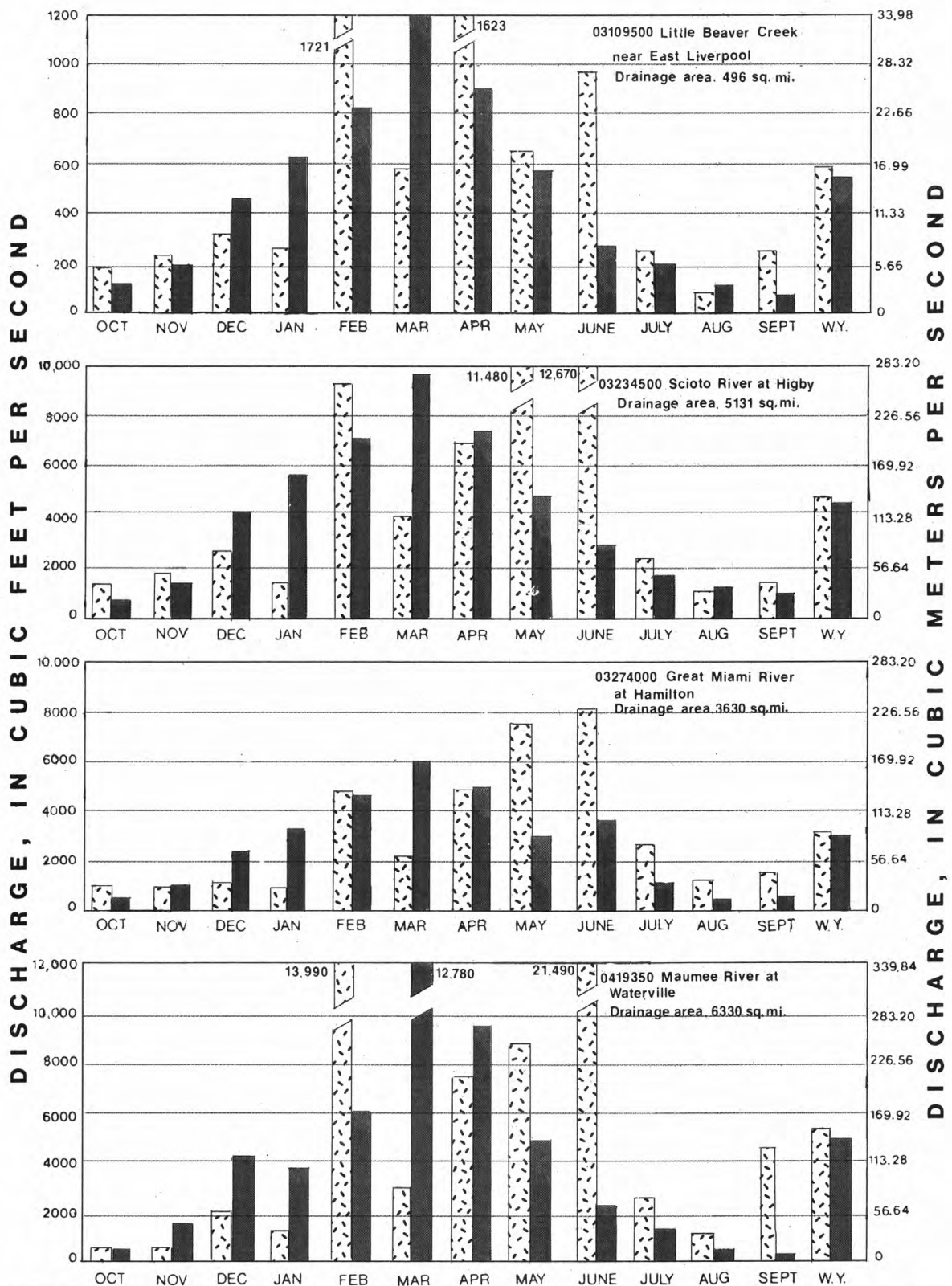
Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is 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-four 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, 1200 South Eads Street, Arlington, VA 22202 (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".

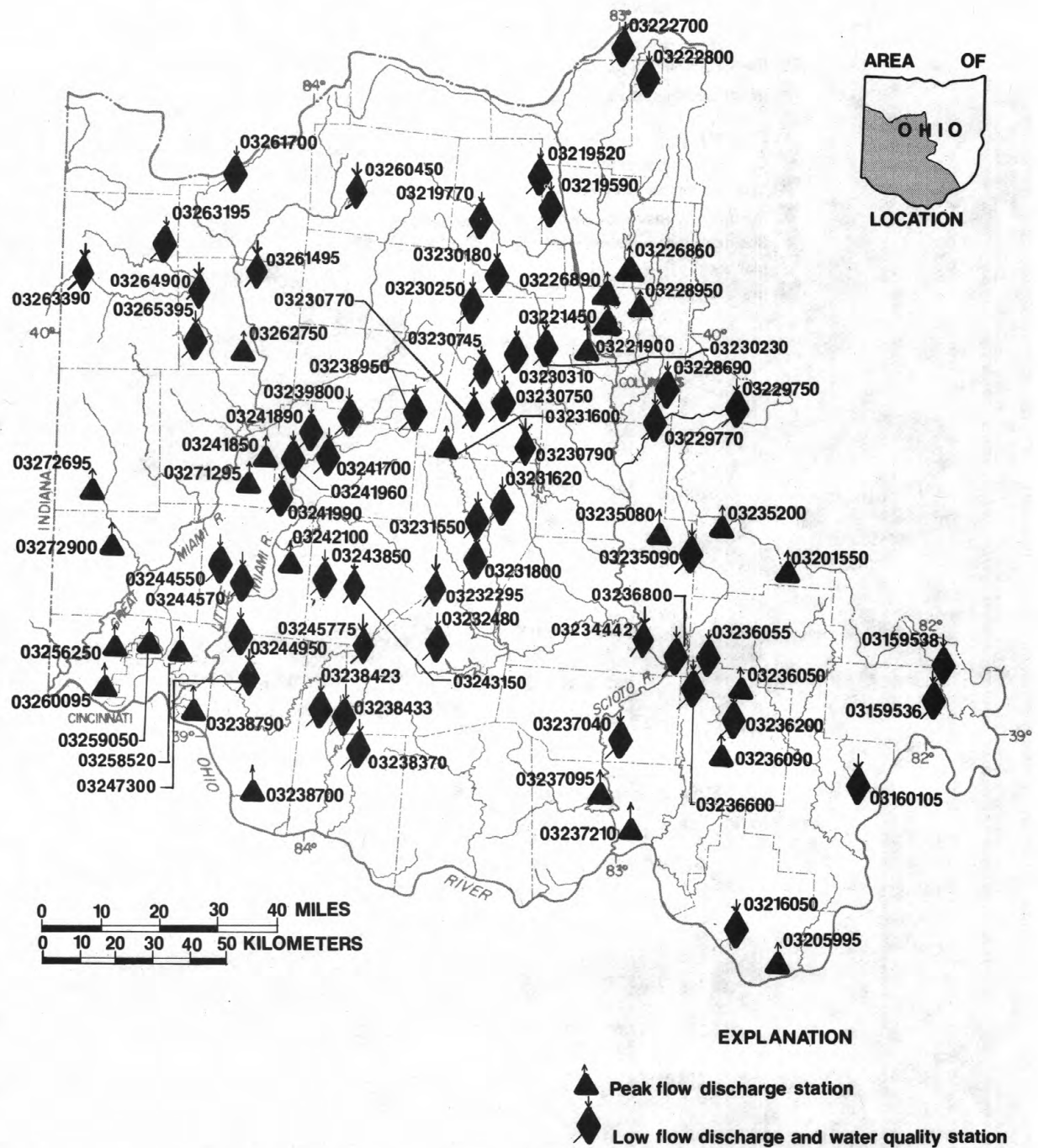
- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, 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-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-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. Greeson, T. A. Ehke, 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.
- 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.



■ Median of monthly and yearly mean discharge for period 1951-80.
 ▨ Monthly and yearly mean discharge for 1981 water year
 Figure 2. --Runoff during 1981 water year compared with median runoff for period 1951-80 for four representative gaging stations.



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





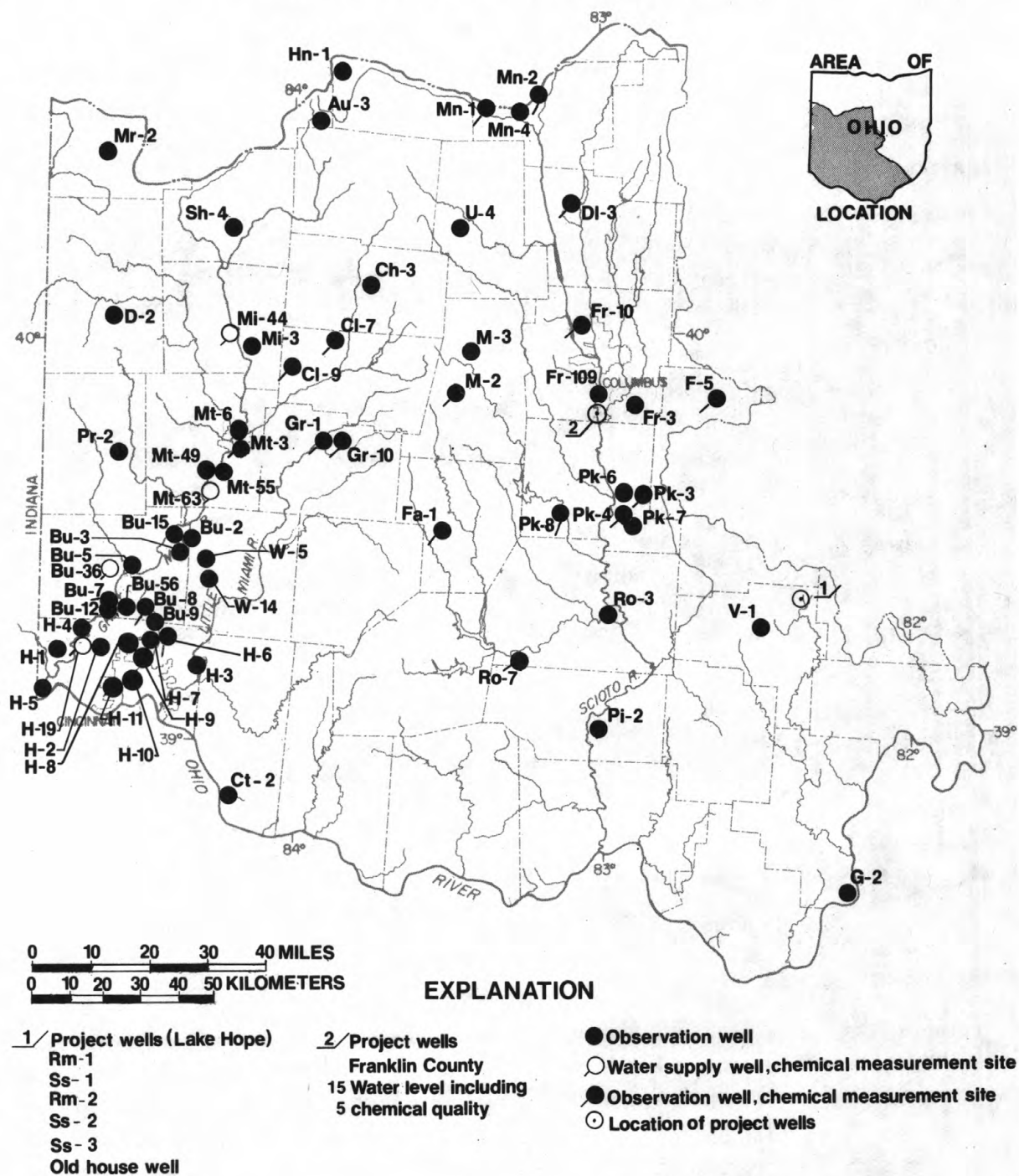
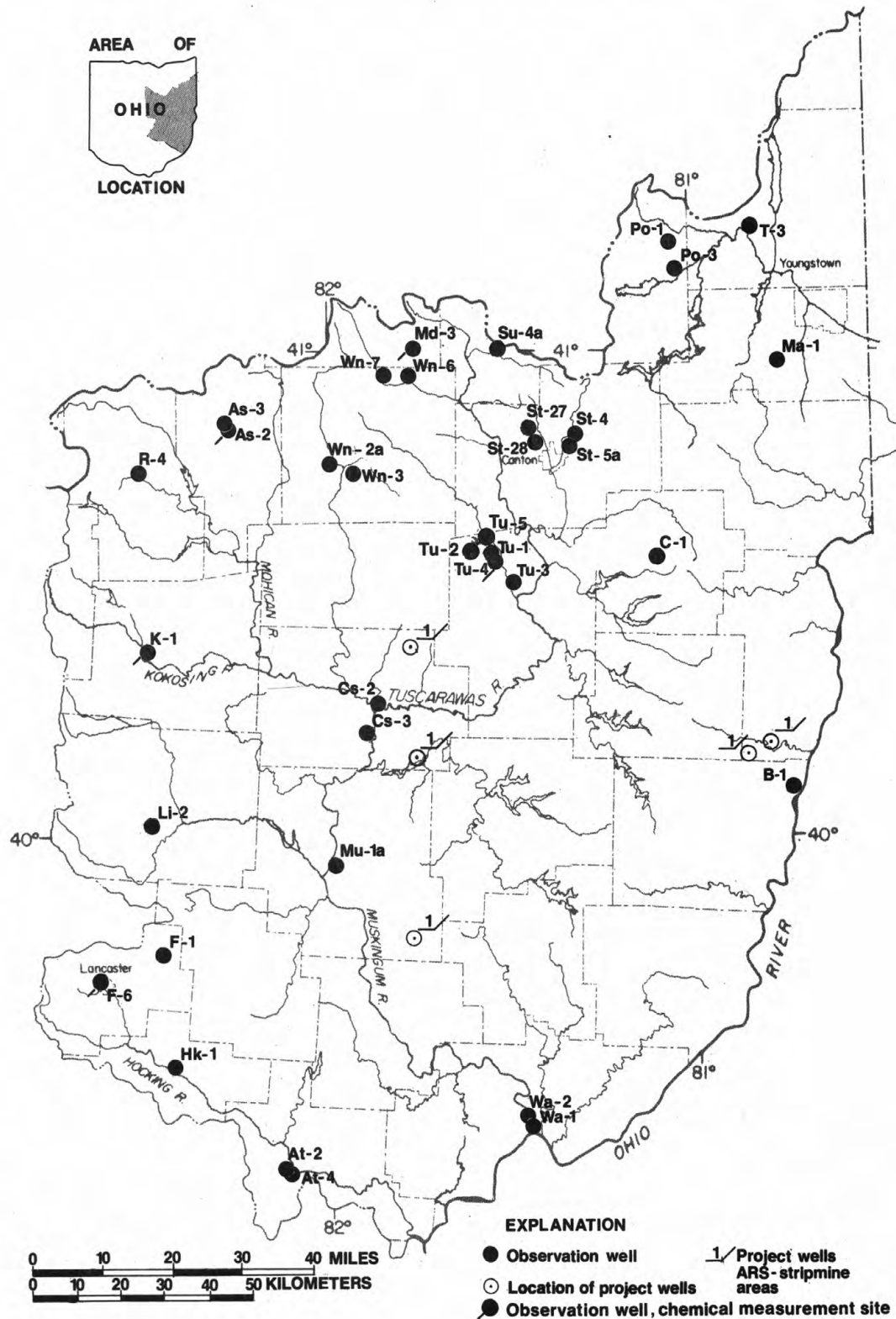


Figure 3e. --Location of wells.



HYDROLOGIC-DATA STATION RECORDS

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 mi² (231 km²).

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.--40 years, 88.5 ft³/s (2.506 m³/s), 13.48 in/yr (342 mm/yr), unadjusted for diversion 1941-55.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s (276 m³/s) Jan. 21, 1959, gage height, 9.11 ft (2.777 m), from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 17	2100	1010 28.6	3.36 1.024	Apr. 14	1400	2980 84.4	5.52 1.682
Feb. 21	0400	1070 30.3	3.45 1.052	Apr. 30	0200	1430 40.5	3.96 1.207
Apr. 5	2000	1050 29.7	3.42 1.042	June 9	2000	*4400 12.5	*6.55 1.996

Minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Aug. 29, 30.

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	21	19	64	14	54	116	112	417	64	320	28	15
2	19	19	61	14	457	101	94	191	54	90	21	121
3	19	17	83	13	417	90	79	129	75	57	31	97
4	21	24	45	13	154	83	94	101	263	57	15	289
5	19	26	33	12	104	97	800	87	101	200	13	168
6	17	21	28	12	72	104	653	163	142	253	19	83
7	19	19	36	12	39	90	234	163	83	112	10	54
8	17	19	61	12	36	101	142	97	72	75	8.6	42
9	17	17	125	12	26	97	112	87	1750	64	10	45
10	17	17	196	11	33	112	90	79	1700	54	12	39
11	17	17	87	11	395	101	87	137	624	45	19	28
12	15	15	51	11	574	101	767	294	229	57	12	21
13	15	15	45	11	215	108	1180	186	146	42	7.2	15
14	15	17	33	11	97	101	2040	129	451	75	6.0	12
15	15	19	24	11	75	68	1110	451	279	33	10	19
16	17	19	18	11	146	54	417	299	116	39	31	24
17	21	17	15	11	761	72	299	146	112	39	31	31
18	45	21	13	11	862	83	299	101	54	24	15	28
19	39	21	11	12	787	94	186	90	33	15	13	24
20	21	21	10	12	985	83	142	68	21	97	13	10
21	17	21	9.5	12	919	61	104	54	33	400	8.6	8.6
22	15	24	9.5	13	440	87	87	45	191	154	10	8.6
23	15	24	9.5	14	373	104	112	42	133	72	10	8.6
24	13	33	9.5	15	660	112	159	39	31	42	7.2	8.6
25	33	54	9.5	19	368	112	150	36	75	31	7.2	10
26	54	36	9.5	42	191	112	116	31	121	31	7.2	10
27	28	39	9.5	279	142	315	97	61	33	28	7.2	8.6
28	45	104	10	172	125	234	104	210	19	39	7.2	8.6
29	45	104	11	97	---	163	767	150	28	75	6.0	19
30	28	68	12	54	---	146	1120	90	75	57	6.0	21
31	21	---	13	39	---	146	---	101	---	39	12	---
TOTAL	720	887	1151.5	993	9507	3448	11753	4274	7108	2716	413.4	1276.6
MEAN	23.2	29.6	37.1	32.0	340	111	392	138	237	87.6	13.3	42.6
MAX	54	104	196	279	985	315	2040	451	1750	400	31	289
MIN	13	15	9.5	11	26	54	79	31	19	15	6.0	8.6
CFSM	.26	.33	.42	.36	3.81	1.24	4.40	1.55	2.66	.98	.15	.48
IN.	.30	.37	.48	.41	3.96	1.44	4.90	1.78	2.96	1.13	.17	.53
CAL YR 1980 TOTAL	33934.5	MEAN	92.7	MAX	926	MIN	9.5	CFSM	1.04	IN	14.15	
WTR YR 1981 TOTAL	44247.5	MEAN	121	MAX	2040	MIN	6.0	CFSM	1.36	IN	18.45	

BEAVER RIVER BASIN

23.

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 mi² (642 km²).

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 fair. 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. No diversion during the year by Mahoning Valley Sanitary District. Water-quality data collected at this site 1965 to 1977.

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

AVERAGE DISCHARGE.--51 years, 237 ft³/s (6.712 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft³/s (244 m³/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, 2,070 ft³/s (58.6 m³/s) Apr. 20, gage height, 4.51 ft (1.375 m); minimum daily, 80 ft³/s (2.27 m³/s) Jan. 22-24, 26-29.

DISCHARGE, IN CURIC 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	93	185	123	102	81	780	193	780	255	136	181	217
2	93	185	136	102	84	765	280	916	255	136	181	217
3	93	185	154	104	86	757	280	916	239	136	193	217
4	93	185	154	104	86	750	173	916	217	151	206	177
5	91	185	154	104	86	676	177	916	217	173	206	139
6	91	185	154	93	86	461	521	916	217	193	206	139
7	91	185	151	81	86	271	641	757	217	217	206	139
8	91	189	148	81	84	271	563	592	217	217	206	169
9	91	189	147	81	86	185	396	592	239	217	206	201
10	91	189	214	81	84	125	286	592	563	224	206	201
11	89	189	290	81	86	125	286	480	947	224	206	201
12	89	185	326	83	88	125	494	356	1370	224	206	201
13	88	185	324	81	88	125	676	356	1690	224	206	206
14	88	185	324	83	88	125	712	364	1310	224	210	206
15	138	181	326	81	86	125	834	364	1340	224	210	206
16	189	181	210	81	88	125	916	364	1640	206	210	206
17	185	177	133	83	89	125	987	364	1610	193	210	206
18	185	177	123	81	89	125	1140	306	1570	193	210	206
19	189	177	123	81	93	125	1300	232	1520	193	210	206
20	189	177	125	81	95	125	1700	185	1330	189	217	206
21	189	177	125	81	93	125	2010	151	932	169	206	206
22	189	177	116	80	93	128	1940	151	705	147	193	206
23	189	177	104	80	95	128	1590	154	705	147	193	210
24	189	148	102	80	144	128	773	133	507	147	193	210
25	189	120	104	81	413	128	334	109	158	165	193	210
26	185	123	104	80	620	128	334	109	106	185	193	210
27	185	123	104	80	720	136	334	109	106	185	193	210
28	185	123	104	80	780	136	334	128	141	185	201	210
29	185	123	102	80	---	136	341	158	181	185	217	210
30	185	123	102	84	---	136	500	189	158	185	217	210
31	185	---	102	84	---	136	---	232	---	181	217	---
TOTAL	4402	5090	5008	2639	4697	7736	21045	12887	20662	5775	6308	5958
MEAN	142	170	162	85.1	168	250	702	416	689	186	203	199
MAX	189	189	326	104	780	780	2010	916	1690	224	217	217
MIN	88	120	102	80	81	125	173	109	106	136	181	139

CAL YR 1980 TOTAL 97887 MEAN 267 MAX 872 MIN 45
WTR YR 1981 TOTAL 102207 MEAN 280 MAX 2010 MIN 80

Note: No diversion during the year by Mahoning Valley Sanitary District.

BEAVER RIVER BASIN

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 mi² (707 km²).

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

AVERAGE DISCHARGE.--52 years, 259 ft³/s (7.335 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,770 ft³/s (192 m³/s) Jan. 25, 1937, gage height, 15.01 ft (4.575 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of velocity-area studies; minimum daily, 0.4 ft³/s (0.011 m³/s) Nov. 9, 1941, Feb. 19, 20, Oct. 11, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,120 ft³/s (60.0 m³/s) Apr. 23, gage height, 6.96 ft (2.121 m); minimum daily discharge, 74 ft³/s (2.10 m³/s) many days January to April.

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	83	236	227	83	75	866	74	839	255	149	172	196
2	84	235	226	83	77	864	74	839	258	135	172	199
3	84	234	226	83	77	860	74	843	263	115	174	196
4	83	234	226	83	77	860	74	843	295	119	174	196
5	83	234	226	79	77	855	76	847	339	119	174	194
6	83	248	226	74	76	721	74	855	342	158	174	194
7	85	272	226	74	74	549	74	735	347	202	174	194
8	85	272	226	74	74	545	75	577	350	199	179	194
9	85	272	226	74	74	398	75	577	365	202	179	194
10	85	272	237	74	75	250	75	581	567	199	179	194
11	85	270	301	74	78	250	75	585	863	196	179	194
12	85	270	370	74	75	250	264	585	867	196	179	194
13	85	270	367	74	74	200	589	450	884	191	179	194
14	85	268	367	74	74	136	728	278	994	189	181	194
15	163	267	367	74	74	137	937	283	1130	186	181	196
16	239	267	303	74	75	136	931	283	1560	181	184	196
17	238	267	253	74	77	136	932	286	1610	181	184	196
18	237	267	218	74	77	138	935	289	1590	179	184	196
19	237	267	140	74	80	138	940	292	1540	176	186	196
20	239	265	140	74	80	113	963	295	1420	179	186	196
21	239	264	139	74	78	89	1700	301	1150	176	179	196
22	237	264	116	74	77	90	2070	222	905	176	172	196
23	238	264	83	74	79	91	1970	123	851	174	172	196
24	239	248	83	74	112	87	1270	125	847	174	172	196
25	239	231	83	74	398	74	877	129	835	172	174	196
26	239	229	83	75	693	74	869	135	700	174	172	196
27	239	229	83	75	870	76	862	140	424	172	174	199
28	237	228	83	74	868	74	856	181	269	174	181	199
29	236	228	83	74	---	74	851	236	269	172	194	199
30	236	228	83	74	---	75	843	252	217	169	196	204
31	236	---	83	74	---	74	---	252	---	172	196	---
TOTAL	5148	7600	6100	2337	4695	9280	20207	13258	22306	5356	5556	5880
MEAN	166	253	197	75.4	168	299	674	428	744	173	179	196
MAX	239	272	370	83	870	866	2070	855	1610	202	196	204
MIN	83	228	83	74	74	74	74	123	217	115	172	194
CAL YR 1980	TOTAL	105225	MEAN 288	MAX	930	MIN 54						
WTR YR 1981	TOTAL	107723	MEAN 295	MAX	2070	MIN 74						

BEAVER RIVER BASIN

25

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 mi² (56.7 km²).

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.--41 years, 23.3 ft³/s (0.660 m³/s), 14.45 in/yr (367 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,890 ft³/s (110 m³/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 ft³/s (14.2 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 19	2200	574 16.3	5.08 1.548	June 9	2030	*627 17.8	*5.10 1.554

Minimum daily discharge, 0.12 ft³/s (0.003 m³/s) Aug. 31.

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	4.2	8.0	22	6.9	14	24	25	35	9.8	1.6	2.0	.24
2	3.8	7.0	28	5.8	76	22	18	22	8.7	1.5	1.4	4.5
3	4.5	6.0	34	5.2	54	20	15	16	8.7	1.6	1.2	6.9
4	4.3	5.5	28	4.4	23	17	15	14	12	2.0	1.4	6.5
5	4.0	5.0	24	4.0	12	18	210	12	17	2.9	2.0	5.2
6	3.4	4.8	23	3.7	8.0	19	66	72	11	14	2.4	4.2
7	3.3	4.8	25	3.0	6.3	17	30	66	10	6.1	2.1	2.9
8	2.7	4.6	32	2.6	6.3	15	21	26	9.3	2.5	1.8	2.2
9	2.0	4.6	48	2.2	5.2	15	17	17	309	1.5	1.9	1.5
10	1.8	4.4	56	1.9	4.5	14	15	14	152	1.3	2.2	1.4
11	1.2	4.4	32	1.6	46	14	13	29	26	1.2	2.5	1.4
12	.61	4.4	24	1.4	61	15	72	95	12	1.2	2.5	1.1
13	.75	4.4	22	1.3	24	14	180	44	10	1.1	3.1	.82
14	.75	4.4	19	1.3	9.3	14	253	26	90	1.1	3.5	.49
15	.82	4.4	15	1.3	5.0	13	125	80	34	1.0	3.4	.33
16	1.1	4.4	12	1.3	10	12	36	51	11	.96	4.8	.33
17	1.1	4.4	11	1.3	230	12	51	29	11	.96	5.0	.41
18	1.3	4.4	9.2	1.3	230	12	80	18	5.7	1.1	4.3	.41
19	1.8	4.4	7.8	1.4	363	12	37	14	4.2	1.5	3.4	.45
20	2.1	4.4	6.8	1.5	401	12	25	12	3.3	2.1	2.5	.33
21	2.2	4.4	6.0	1.6	183	14	20	11	3.1	3.3	1.4	.24
22	2.2	4.4	5.7	1.8	66	20	16	9.3	11	2.7	.75	.24
23	2.4	4.6	5.2	2.2	140	22	20	8.7	15	2.6	.37	.19
24	2.0	7.0	4.8	2.7	153	19	45	7.8	5.9	2.1	.33	.16
25	3.0	14	4.4	3.7	56	16	41	6.9	5.5	1.9	.37	.19
26	5.0	12	4.2	9.5	36	15	27	6.7	9.0	2.2	.33	.14
27	5.2	9.0	4.0	65	27	260	21	8.7	5.2	3.1	.41	.16
28	4.6	11	4.0	45	24	78	19	19	3.3	3.4	.37	.19
29	13	22	4.2	29	---	36	138	22	2.1	4.8	.27	.16
30	11	18	5.5	22	---	31	91	16	1.8	5.2	.19	.16
31	10	---	6.5	16	---	35	---	11	---	3.0	.12	---
TOTAL	106.13	205.1	533.3	251.9	2273.6	857	1742	819.1	816.6	81.52	58.31	43.44
MEAN	3.42	6.84	17.2	8.13	81.2	27.6	58.1	26.4	27.2	2.63	1.88	1.45
MAX	13	22	56	65	401	260	253	95	309	14	5.0	6.9
MIN	.61	4.4	4.0	1.3	4.5	12	13	6.7	1.8	.96	.12	.14
CFSM	.16	.31	.79	.37	3.71	1.26	2.65	1.21	1.24	.12	.09	.07
IN.	.18	.35	.91	.43	3.86	1.46	2.96	1.39	1.39	.14	.10	.07

CAL YR 1980	TOTAL	7621.64	MEAN 20.8	MAX 493	MIN .61	CFSM .95	IN 12.95
WTR YR 1981	TOTAL	7788.00	MEAN 21.3	MAX 401	MIN .12	CFSM .97	IN 13.23

BEAVER RIVER BASIN

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 mi² (56.5 km²).

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.--16 years, 27.9 ft³/s (0.790 m³/s), 17.38 in/yr (441 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,810 ft³/s (79.6 m³/s) Sept. 14, 1979, inside gage height 8.63 ft (2.630 m), outside gage height, 9.34 ft (2.847 m); minimum, 0.45 ft³/s (0.013 m³/s) Sept. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.7 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 19	1600	*975 27.6	*6.16 1.878	June 14	0430	470 13.3	4.64 1.414
June 9	0530	658 18.6	5.28 1.609				

Minimum discharge, 0.78 ft³/s (0.022 m³/s) Sept. 27, 28, 29, 30.

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	3.5	9.5	27	13	20	25	24	44	19	6.3	3.9	3.9
2	3.9	9.5	34	12	141	22	18	27	17	4.9	3.1	48
3	4.5	8.9	36	11	86	20	15	20	17	3.9	2.7	51
4	3.5	13	17	10	42	18	19	17	18	3.5	3.1	63
5	2.7	11	13	9.4	23	19	106	15	16	62	2.7	24
6	2.7	9.5	13	9.0	16	19	44	78	13	43	2.4	16
7	2.7	8.3	17	9.0	12	17	25	46	11	16	2.4	13
8	2.7	8.9	22	9.0	10	16	19	24	10	10	9.5	11
9	2.7	9.5	61	9.0	9.0	15	17	17	324	7.3	7.3	9.5
10	3.1	11	44	9.0	11	15	15	21	62	5.3	3.9	7.1
11	3.1	8.9	22	9.0	147	17	23	94	28	3.9	7.8	5.0
12	3.9	8.9	16	9.0	242	16	222	77	18	3.5	5.3	3.7
13	4.9	9.5	15	9.0	153	15	66	37	102	7.3	3.1	3.2
14	4.9	9.5	12	9.0	35	13	248	29	272	4.9	3.9	2.9
15	5.8	11	9.6	9.0	24	11	103	75	59	2.7	6.3	2.7
16	5.8	12	8.3	9.0	72	12	40	42	55	2.4	16	2.7
17	5.8	9.5	7.0	9.0	322	12	86	25	70	2.0	16	3.3
18	8.3	9.5	6.4	9.0	248	11	89	22	32	1.7	7.8	2.7
19	8.9	11	6.0	9.0	632	11	40	31	17	1.7	3.9	2.7
20	7.3	11	5.6	9.0	398	12	30	34	12	6.3	2.4	2.1
21	6.8	11	5.4	9.0	157	17	22	27	11	10	1.7	1.6
22	6.3	11	5.0	9.0	73	25	18	25	58	5.8	1.5	2.3
23	6.3	11	4.9	9.0	143	40	30	23	29	3.1	1.2	1.8
24	6.8	17	4.9	9.0	110	40	41	22	16	3.1	3.9	1.4
25	13	23	4.9	12	59	27	38	21	33	5.8	3.5	2.0
26	17	15	4.9	31	38	27	25	21	23	7.3	2.4	1.4
27	12	13	4.9	92	28	268	21	30	13	8.9	1.5	.95
28	14	21	5.3	54	28	65	26	113	9.5	13	1.7	.83
29	14	24	7.3	35	---	36	281	57	7.3	22	2.0	.81
30	12	21	13	30	---	37	105	32	6.3	11	2.0	1.9
31	10	---	14	22	---	36	---	24	---	6.3	2.0	---
TOTAL	208.9	366.9	466.4	502.4	3279.0	934	1856	1170	1378.1	294.9	136.9	292.49
MEAN	6.74	12.2	15.0	16.2	117	30.1	61.9	37.7	45.9	9.51	4.42	9.75
MAX	17	24	61	92	632	268	281	113	324	62	16	63
MIN	2.7	8.3	4.9	9.0	9.0	11	15	15	6.3	1.7	1.2	.81
CFSM	.31	.56	.69	.74	5.37	1.38	2.84	1.73	2.11	.44	.20	.45
IN.	.36	.63	.80	.86	5.60	1.59	3.17	2.00	2.35	.50	.23	.50
CAL YR 1980	TOTAL	9093.90	MEAN 24.8	MAX 403	MIN 1.7	CFSM 1.14	IN 15.52					
WTR YR 1981	TOTAL	10885.99	MEAN 29.8	MAX 632	MIN .81	CFSM 1.37	IN 18.58					

BEAVER RIVER BASIN

27

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 mi² (212 km²).

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

AVERAGE DISCHARGE.--13 years, 105 ft³/s (2.974 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft³/s (39.1 m³/s) Feb. 25, 1971, gage height, 11.82 ft (3.603 m) present datum; minimum daily, 2.5 ft³/s (0.071 m³/s) Apr. 9, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 352 ft³/s (9.97 m³/s) Feb. 26, gage height, 6.60 ft (2.012 m); minimum daily, 21 ft³/s (0.59 m³/s) Jan. 24, 25, 30, 31, Feb. 4-10, 13-15.

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	122	95	26	23	23	346	24	216	83	192	94	101
2	143	95	26	23	27	343	24	258	83	193	93	103
3	169	95	26	23	22	344	24	256	84	193	93	102
4	168	96	26	23	21	304	24	256	68	194	93	101
5	168	96	25	23	21	217	28	220	50	196	93	100
6	168	78	25	23	21	147	24	182	50	233	93	100
7	167	53	26	22	21	112	24	179	50	213	93	99
8	167	54	26	22	21	111	24	178	50	125	93	99
9	167	54	28	22	21	90	24	178	62	92	92	99
10	167	54	26	22	21	63	24	179	51	93	92	98
11	168	53	25	22	33	63	24	180	63	93	92	98
12	170	43	25	22	22	63	26	180	91	93	92	97
13	171	29	25	22	21	63	25	179	106	93	92	97
14	171	28	24	22	21	62	32	180	108	94	91	97
15	145	28	24	22	21	62	34	183	112	94	91	97
16	111	28	24	22	26	62	57	181	121	94	91	97
17	113	28	24	22	27	62	80	180	194	88	90	97
18	118	28	24	22	26	62	80	178	296	94	89	97
19	119	28	24	22	47	46	93	137	293	94	88	96
20	120	27	24	22	34	24	112	69	292	95	88	96
21	105	27	24	22	25	25	139	49	293	95	87	95
22	87	27	24	22	23	25	172	49	238	94	87	95
23	90	27	24	22	29	25	174	49	167	94	87	95
24	94	27	24	21	86	25	176	49	197	94	86	95
25	95	27	24	21	241	24	177	64	198	94	86	95
26	95	26	24	26	350	25	176	83	197	94	86	95
27	94	27	23	25	350	34	176	83	197	94	85	95
28	95	27	23	22	348	25	177	85	197	95	92	96
29	94	26	23	22	---	25	187	85	195	95	101	95
30	95	26	23	21	---	25	180	84	191	94	101	95
31	95	---	23	21	---	25	---	83	---	94	101	---
TOTAL	4051	1357	762	691	1949	2929	2541	4512	4377	3693	2832	2922
MEAN	131	45.2	24.6	22.3	69.6	94.5	84.7	146	146	119	91.4	97.4
MAX	171	96	28	26	350	346	187	258	296	233	101	103
MIN	87	26	23	21	21	24	24	49	50	88	85	95
CAL YR 1980	TOTAL	34020	MEAN 93.0	MAX 482	MIN 21							
WTR YR 1981	TOTAL	32616	MEAN 89.4	MAX 350	MIN 21							

BEAVER RIVER BASIN

03092500 WEST BRANCH MAHONING RIVER NEAR NEWTON FALLS, OH

LOCATION.--Lat 41°10'18", long 81°01'16", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, on right bank 250 ft (76 m) downstream from bridge on Newton Falls Road, 2.5 mi (4.0 km) southwest of Newton Falls, 6 mi (10 km) upstream from mouth, and 5 mi (8 km) downstream from Michael J. Kirwan Dam.

DRAINAGE AREA.--96.3 mi² (249 km²).

PERIOD OF RECORD.--June 1926 to current year (discontinued).

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

GAGE.--Water-stage recorder. Datum of gage is 912.2 ft (278.04 m) Corps of Engineers bench mark. Prior to Aug. 30, 1929, nonrecording gage at site 75 ft (23 m) upstream at same datum.

REMARKS.--Records good. Flow regulated by Michael J. Kirwan Reservoir (see station 03092450) since December 1966. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--55 years, 99.3 ft³/s (2.812 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,340 ft³/s (236 m³/s) Jan. 22, 1959, gage height, 13.60 ft (4.145 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Sept. 19, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 483 ft³/s (13.7 m³/s) Feb. 19, gage height, 4.08 ft (1.244 m); minimum daily, 22 ft³/s (0.62 m³/s) several days in Nov., Dec., Jan. and Feb.

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	122	76	31	26	27	333	38	212	86	180	81	96
2	134	76	29	25	99	328	34	249	86	180	81	112
3	165	76	31	24	58	328	32	246	86	179	81	107
4	163	76	27	22	30	301	34	245	79	178	81	107
5	163	76	25	22	24	222	108	223	51	182	81	98
6	163	71	26	22	22	163	56	223	50	202	81	96
7	163	43	27	22	22	121	42	200	49	206	81	95
8	163	42	30	22	22	119	37	186	49	125	81	96
9	163	42	49	22	23	105	35	182	169	84	81	95
10	163	42	52	22	23	70	33	182	78	83	80	95
11	161	42	36	22	104	70	35	194	62	83	80	95
12	161	40	31	22	70	70	87	203	90	83	80	95
13	163	25	30	22	44	70	57	190	113	83	81	95
14	163	24	27	22	32	68	156	186	190	83	80	95
15	148	25	25	22	28	68	79	211	126	82	82	95
16	107	25	24	22	45	67	74	197	124	82	83	94
17	105	24	24	22	148	68	124	187	161	77	82	94
18	109	25	24	22	127	67	128	181	266	83	80	94
19	107	23	22	22	296	60	112	155	263	83	80	94
20	107	23	22	22	222	32	130	82	262	84	79	94
21	100	22	22	22	114	33	142	53	262	84	79	93
22	76	22	22	23	63	36	180	52	257	83	79	93
23	74	22	22	23	121	37	188	51	171	82	79	92
24	76	24	22	23	126	35	197	50	188	82	79	92
25	79	29	22	23	229	36	194	60	192	82	79	92
26	79	25	22	30	339	36	187	87	191	83	79	92
27	77	26	22	74	335	151	184	90	187	82	79	92
28	77	33	23	47	335	62	184	97	186	84	83	92
29	77	33	24	36	---	47	251	108	184	85	95	92
30	76	30	25	30	---	49	209	92	179	82	95	92
31	76	---	25	36	---	48	---	89	---	81	94	---
TOTAL	3760	1162	843	816	3128	3300	3347	4763	4437	3332	2536	2864
MEAN	121	38.7	27.2	26.3	112	106	112	154	148	107	81.8	95.5
MAX	165	76	52	74	339	333	251	249	266	206	95	112
MIN	74	22	22	22	22	32	32	50	49	77	79	92

CAL YR 1980 TOTAL 36726 MEAN 100
WTR YR 1981 TOTAL 34288 MEAN 93.9 MAX 581 MIN 22
MAX 339 MIN 22

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 mi² (253 km²).

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

AVERAGE DISCHARGE.--52 years, 109 ft³/s (3.087 m³/s), 15.17 in/yr (385 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,150 ft³/s (231 m³/s) Sept. 15, 1979, gage height, 13.71 ft (4.179 m); minimum daily, 0.9 ft³/s (0.025 m³/s) Aug. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 20	0330	*3410 96.6	*12.27 3.740	Apr. 15	0530	1380 39.1	10.01 3.051

Minimum daily discharge, 18 ft³/s (0.51 m³/s) Sept. 29.

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	26	40	123	59	82	130	132	309	63	46	36	24
2	26	37	146	56	283	113	101	176	55	44	32	129
3	26	35	183	53	435	103	80	129	53	45	31	180
4	27	36	125	48	306	92	77	104	53	43	31	379
5	26	41	90	46	143	92	267	92	51	64	30	176
6	24	42	79	45	89	94	326	258	50	128	29	72
7	24	40	85	46	72	87	142	435	46	59	29	51
8	24	40	103	47	67	80	101	177	43	46	92	41
9	24	41	193	46	60	77	84	118	178	42	53	39
10	24	40	237	44	55	74	77	98	456	41	39	32
11	23	38	163	45	211	76	69	213	121	40	36	27
12	24	38	102	45	384	78	448	379	72	37	40	25
13	27	37	88	45	435	78	457	217	77	36	36	24
14	27	38	75	46	222	76	562	134	683	37	36	24
15	28	41	69	47	125	70	1050	200	580	36	32	23
16	30	42	50	47	149	75	324	219	150	34	45	23
17	29	41	50	46	655	74	229	146	195	34	53	23
18	29	41	48	45	1290	67	382	103	113	33	35	22
19	35	42	44	45	1600	64	235	86	77	32	28	22
20	33	43	40	46	2680	67	150	76	65	35	25	22
21	30	45	45	47	1200	80	112	68	59	52	24	23
22	29	43	38	49	516	112	96	63	87	49	23	22
23	29	42	38	51	436	149	120	59	132	37	22	21
24	30	49	38	52	750	162	214	55	69	34	21	21
25	38	103	38	50	384	132	233	55	63	31	21	20
26	74	83	38	65	219	106	191	51	72	33	21	20
27	70	65	39	246	156	478	132	53	57	52	20	20
28	56	90	38	328	134	615	112	106	51	39	21	19
29	55	130	40	235	---	210	483	204	48	139	22	18
30	49	114	52	140	---	158	888	120	47	67	22	19
31	43	---	62	105	---	183	---	77	---	44	23	---
TOTAL	1039	1557	2559	2315	13138	4052	7884	4580	3866	1489	1008	1561
MEAN	33.5	51.9	82.5	74.7	469	131	263	148	129	48.0	32.5	52.0
MAX	74	130	237	328	2680	615	1060	435	683	139	92	379
MIN	23	35	38	44	55	64	69	51	43	31	20	18
CFSM	.34	.53	.85	.77	4.81	1.34	2.70	1.52	1.32	.49	.33	.53
IN.	.40	.59	.98	.88	5.01	1.54	3.00	1.75	1.47	.57	.38	.59

CAL YR 1980 TOTAL 41327 MEAN 113 MAX 1500 MIN 18 CFSM 1.16 IN 15.75
WTR YR 1981 TOTAL 45048 MEAN 123 MAX 2680 MIN 18 CFSM 1.26 IN 17.17

BEAVER RIVER BASIN

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'22", long 80°52'56", Trumbull County, Hydrologic Unit 05030103, on left bank 10 ft (3 m) upstream from Ohio Edison Company diversion dam, 30 ft (9 m) upstream from Duck Creek, and 330 ft (101 m) upstream from gaging station at bridge on Leavitt Road in Leavittsburg.

DRAINAGE AREA.--542 mi² (1,404 km²).

PERIOD OF RECORD.--Water years 1952-53, July 1967 to September 1968 (published as "at Leavittsburg"), October 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1967 to current year.

pH: July 1967 to current year.

WATER TEMPERATURES: July 1967 to current year.

DISSOLVED OXYGEN: July 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 Leavittsburg (station 03094000).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 876 micromhos Aug. 29, 1980; minimum, 107 micromhos July 12, 1976.

pH: Maximum, 8.5 units Aug. 5, 1968; minimum, 5.2 units Jan. 8, 1973.

WATER TEMPERATURES: Maximum, 28.0°C June 29, 30, 1952; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L Dec. 31, 1972, Jan. 1-3, 1973; minimum, 4.2 mg/L June 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 597 micromhos June 7; minimum, 150 micromhos Feb. 20.

pH: Maximum recorded, 7.9 units Apr. 20-24, 27, 28; minimum, 6.9 units June 10, 14.

WATER TEMPERATURES: Maximum, 24.5°C July 10, 11; minimum, 0.0°C on many days during winter period.

DISSOLVED OXYGEN: Maximum recorded, 13.4 mg/L Dec. 18; minimum recorded, 5.1 mg/L May 31, June 3, Aug. 11.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	420	395	471	459	479	471	545	539	---	---	507	492
2	405	396	468	455	474	464	542	536	---	---	510	501
3	410	402	471	450	468	462	540	534	---	---	513	492
4	410	399	464	456	477	464	552	542	327	288	510	495
5	411	396	465	462	480	471	555	542	363	294	495	489
6	410	396	473	449	479	476	560	554	402	348	507	495
7	407	393	456	447	477	473	566	555	432	390	498	489
8	407	398	459	450	474	473	569	552	483	411	495	486
9	404	390	459	452	474	455	564	545	492	447	492	486
10	408	387	462	459	458	440	558	546	483	444	483	471
11	405	398	462	461	438	432	569	555	504	408	474	465
12	407	404	462	455	465	438	573	555	432	375	471	465
13	408	404	462	456	468	452	566	558	369	303	471	465
14	414	407	464	459	474	461	561	557	333	303	471	456
15	410	396	465	462	489	470	561	555	396	324	459	450
16	413	393	464	458	491	474	557	552	411	369	462	453
17	426	411	467	462	491	482	557	551	366	249	459	450
18	423	416	465	464	498	486	552	545	237	159	459	450
19	432	420	489	464	498	486	552	546	177	159	459	453
20	441	434	522	471	500	492	557	546	165	150	459	450
21	444	431	482	471	510	497	---	---	201	162	471	453
22	449	435	482	477	522	510	---	---	219	198	474	459
23	456	440	485	479	525	516	---	---	252	222	456	441
24	456	444	488	483	---	---	---	---	264	231	450	444
25	458	449	489	476	---	---	---	---	348	258	444	420
26	462	456	485	468	---	---	---	---	465	366	441	420
27	464	458	503	485	---	---	---	---	507	468	450	351
28	468	465	498	476	---	---	---	---	510	501	333	291
29	473	461	476	462	---	---	---	---	---	---	327	294
30	477	458	479	471	545	540	---	---	---	---	360	330
31	471	456	---	---	545	535	---	---	---	---	375	360
MONTH	477	387	522	447	545	432	573	534	510	150	513	291
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	414	372	384	318	405	393	396	390	390	366	390	378
2	414	402	408	381	408	402	396	390	384	375	381	363
3	423	402	417	402	405	402	399	390	---	---	375	360
4	459	423	426	402	411	405	399	390	---	---	375	342
5	501	420	408	399	414	405	399	390	390	384	378	354
6	402	354	402	369	417	411	405	393	390	381	387	378
7	351	339	372	357	597	411	402	309	390	381	384	378
8	369	348	390	360	420	414	411	402	396	381	384	378
9	393	372	408	387	417	369	402	399	396	387	387	378
10	408	393	417	405	372	264	405	396	390	381	390	375
11	423	408	414	402	375	270	405	345	384	378	393	381
12	447	306	399	360	390	375	363	339	387	375	390	381
13	366	294	390	363	390	378	405	348	387	375	393	381
14	363	303	396	387	375	315	405	399	387	378	387	384
15	297	270	390	375	351	315	408	399	387	381	384	381
16	393	285	375	366	393	354	402	285	384	378	387	378
17	411	393	387	363	393	387	---	---	390	375	384	378
18	396	369	396	384	399	387	---	---	402	384	381	378
19	402	372	408	393	399	396	---	---	402	387	384	375
20	417	405	417	399	408	399	---	---	393	384	387	378
21	441	417	423	396	405	402	---	---	393	381	384	375
22	444	438	408	393	402	393	---	---	396	381	408	381
23	438	432	408	396	408	393	---	---	396	381	411	402
24	432	417	408	402	402	393	---	---	390	381	414	402
25	417	405	414	402	402	378	393	357	390	381	414	405
26	414	405	417	408	387	378	396	381	393	381	417	405
27	423	411	414	408	393	378	396	387	393	381	417	411
28	429	417	414	408	390	381	405	369	390	384	411	405
29	420	351	414	375	396	387	417	405	393	384	408	402
30	351	312	390	360	396	390	420	336	387	384	408	405
31	---	---	396	390	---	---	390	351	390	381	---	---
MONTH	501	270	426	318	597	264	420	285	402	366	417	342
YEAR	597	150										

BEAVER RIVER BASIN

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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

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

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

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	18.5	17.5	7.5	7.5	3.5	3.0	.5	.5	.5	.0	4.0	3.5				
2	18.0	17.5	8.0	7.5	4.5	3.5	.5	.5	.5	.0	3.5	3.0				
3	17.5	16.5	8.0	7.5	4.0	3.0	.5	.5	.5	.0	3.0	2.5				
4	16.5	15.5	8.5	8.0	3.0	2.0	.5	.5	.0	.0	2.5	2.5				
5	15.5	14.5	8.5	8.5	2.5	2.0	.5	.5	.0	.0	2.5	2.5				
6	14.5	13.5	8.5	7.0	3.0	2.5	.5	.5	.0	.0	2.5	2.0				
7	14.5	13.5	7.5	7.0	4.0	3.0	.5	.5	.0	.0	2.5	2.0				
8	15.0	13.5	8.0	7.5	5.5	4.0	.5	.5	.0	.0	2.5	2.0				
9	15.5	14.5	8.5	7.5	6.0	5.5	.5	.5	.0	.0	3.0	2.5				
10	15.0	14.0	8.0	7.5	6.0	4.5	.5	.5	.0	.0	3.5	2.5				
11	15.0	14.0	7.5	6.0	4.5	3.0	.5	.5	.0	.0	3.5	3.0				
12	14.0	13.0	6.0	5.5	3.0	2.5	.5	.5	.0	.0	4.5	3.0				
13	13.0	12.5	6.5	5.5	2.5	2.5	.5	.5	.0	.0	4.5	3.5				
14	12.0	11.5	6.5	6.5	2.5	2.0	.5	.5	.0	.0	4.5	3.5				
15	12.0	11.0	6.5	6.0	2.0	1.0	.5	.5	.0	.0	4.5	3.5				
16	13.5	12.0	6.0	5.5	1.5	1.0	.5	.5	.0	.0	4.5	4.0				
17	14.5	13.5	5.5	4.5	1.5	1.0	.5	.5	.0	.0	4.5	3.5				
18	14.5	14.5	4.5	4.0	1.5	1.0	.5	.5	.5	.0	3.5	3.0				
19	14.5	13.5	5.0	4.0	1.5	1.0	.5	.5	1.0	.5	3.0	2.0				
20	13.5	12.5	4.5	4.5	1.0	.5	.5	.5	1.0	.5	2.5	2.0				
21	12.5	11.5	4.5	4.0	.5	.5	.5	.0	2.0	1.0	3.5	2.0				
22	12.0	11.5	4.0	3.5	.5	.5	.0	.0	4.0	2.0	4.0	2.5				
23	11.5	11.0	4.0	3.5	.5	.5	.0	.0	5.0	4.0	5.0	3.5				
24	11.0	10.0	4.5	4.0	---	---	.5	.0	4.5	4.0	6.0	4.5				
25	10.5	10.0	4.5	4.0	---	---	.5	.0	4.0	3.0	6.5	5.0				
26	10.0	8.5	4.0	3.5	---	---	.5	.5	3.0	3.0	6.5	5.0				
27	8.5	8.0	3.5	3.0	---	---	.5	.5	3.5	3.0	6.0	5.5				
28	8.0	8.0	3.0	2.5	---	---	.5	.5	4.0	3.5	6.5	5.0				
29	8.0	7.5	3.0	2.5	---	---	.5	.5	---	---	8.5	6.5				
30	8.0	7.0	3.0	2.5	.5	.5	1.0	.0	---	---	9.5	8.5				
31	7.5	7.0	---	---	.5	.5	.5	.0	---	---	11.5	9.5				
MONTH	18.5	7.0	8.5	2.5	6.0	.5	1.0	.0	5.0	.0	11.5	2.0				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN				
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER						
1	12.5	11.5	12.5	12.0	17.5	16.0	23.0	21.5	22.0	21.0	23.0	22.0				
2	13.0	11.5	12.5	11.5	17.5	17.0	22.0	21.0	22.5	21.5	23.0	22.5				
3	13.5	12.0	13.0	12.0	18.5	17.5	21.5	20.5	22.5	22.0	22.5	22.0				
4	13.5	12.5	14.5	12.5	19.5	18.5	21.5	20.0	23.5	22.0	22.0	21.0				
5	13.0	11.0	14.5	14.0	20.5	19.0	21.5	20.5	23.5	22.5	21.0	21.0				
6	11.0	9.5	14.0	12.5	20.5	19.5	22.5	20.5	23.5	23.0	21.5	21.0				
7	10.5	9.0	12.5	11.5	21.0	20.0	22.5	20.5	23.0	22.0	21.5	21.0				
8	12.0	10.0	13.5	12.0	20.5	19.5	22.0	20.0	22.5	21.5	21.5	21.0				
9	13.0	12.0	14.5	13.0	21.0	19.5	23.5	22.0	22.5	21.5	21.0	20.0				
10	13.5	12.0	15.0	14.0	20.5	19.5	24.5	23.0	23.0	22.0	20.0	19.0				
11	14.0	13.0	15.0	14.5	20.0	19.0	24.5	23.0	23.0	22.5	20.5	19.0				
12	14.5	13.5	14.5	13.0	20.5	20.0	24.0	22.5	23.5	22.5	21.5	20.5				
13	14.0	12.0	13.5	12.5	20.5	20.0	23.5	23.0	23.0	22.0	22.0	21.0				
14	12.0	11.5	14.0	13.0	21.5	20.0	23.5	23.0	23.0	22.5	22.0	21.5				
15	11.5	10.0	13.5	13.0	23.0	21.5	23.5	22.0	23.0	22.5	21.5	21.0				
16	11.5	10.5	14.0	13.0	24.0	23.0	23.0	22.0	22.5	21.5	21.0	20.0				
17	12.5	11.5	15.5	13.5	23.5	22.5	23.5	21.5	21.5	20.5	20.0	18.5				
18	14.0	12.5	14.5	13.5	22.5	21.5	23.5	22.0	20.5	19.5	18.5	17.5				
19	13.5	12.0	14.0	12.5	23.0	22.0	23.0	23.0	21.0	19.5	17.5	17.0				
20	12.5	12.0	14.5	12.0	22.5	22.0	23.0	22.5	21.5	20.0	17.5	17.0				
21	12.0	11.0	15.5	13.0	22.0	21.5	23.0	22.0	21.0	20.5	17.0	16.5				
22	12.0	11.5	16.5	14.5	22.0	21.0	23.0	22.0	21.5	20.5	17.0	16.0				
23	13.0	12.0	17.5	16.0	22.0	21.0	22.5	21.0	21.5	20.5	16.5	16.0				
24	12.5	11.5	18.5	17.0	21.5	21.5	22.0	20.5	21.5	21.0	16.0	15.0				
25	11.5	10.0	19.5	18.5	22.5	21.5	23.0	21.0	21.5	20.5	15.5	15.0				
26	11.0	10.0	19.0	18.5	21.5	20.5	22.5	22.5	21.5	20.0	16.5	15.5				
27	13.0	11.5	19.0	18.0	21.0	20.0	22.5	22.0	21.5	20.5	17.5	16.5				
28	13.0	12.5	18.0	17.5	21.5	19.5	22.5	21.5	22.0	21.5	17.5	16.5				
29	13.5	13.0	18.0	17.5	22.0	19.5	22.0	21.0	23.0	22.0	16.5	15.0				
30	13.5	12.5	18.0	17.5	22.5	21.0	21.5	20.0	22.5	22.5	15.0	14.5				
31	---	---	18.0	17.0	---	---	21.5	20.0	22.5	22.0	---	---				
MONTH	14.5	9.0	19.5	11.5	24.0	16.0	24.5	20.0	23.5	19.5	23.0	14.5				
YEAR	24.5	.0														

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	7.4	9.2	8.9	10.4	10.2	11.1	10.6	10.5	10.0	12.3	11.8
2	7.7	7.1	8.9	8.4	10.2	9.8	10.8	9.8	10.2	9.5	12.5	12.1
3	7.4	7.1	9.0	8.8	11.6	9.7	10.9	9.8	10.3	10.1	12.9	12.3
4	8.0	7.2	9.2	8.7	12.3	11.0	11.1	10.9	11.4	9.6	12.7	12.4
5	8.4	7.8	9.5	8.3	12.4	11.7	11.2	10.4	11.5	11.4	12.6	12.3
6	10.6	8.6	8.9	8.3	12.2	11.3	11.2	10.7	11.4	11.2	12.8	12.3
7	8.8	8.4	9.1	8.7	11.9	11.0	10.8	10.1	11.2	11.1	12.8	11.9
8	9.5	8.5	8.9	8.6	11.5	10.5	10.6	10.1	11.1	10.0	12.8	12.0
9	---	---	8.6	8.2	10.7	10.0	10.1	9.0	11.2	10.2	12.7	12.3
10	---	---	8.6	8.2	10.4	10.0	9.9	9.8	11.1	10.2	12.5	11.9
11	---	---	8.7	7.9	11.1	10.2	10.1	9.3	11.5	10.7	12.5	11.8
12	---	---	9.0	7.1	11.8	10.9	10.3	9.9	11.6	10.9	12.3	11.7
13	---	---	9.1	7.4	11.7	11.1	10.1	9.0	11.5	10.8	12.1	11.6
14	---	---	---	---	11.9	10.9	9.8	9.5	11.1	10.5	11.7	11.3
15	---	---	---	---	12.2	11.3	9.5	8.6	11.2	10.4	11.7	11.1
16	---	---	---	---	12.2	11.4	9.5	9.3	11.2	10.7	11.7	11.0
17	---	---	---	---	12.1	11.0	9.6	9.5	11.8	11.1	11.5	10.7
18	---	---	---	---	13.4	11.3	9.7	8.9	12.2	11.6	11.9	11.0
19	---	---	11.6	10.9	13.2	12.3	9.8	9.6	12.1	11.7	12.3	11.4
20	---	---	11.2	10.9	13.0	11.8	10.0	9.1	11.9	10.3	12.2	11.6
21	---	---	11.2	10.8	13.2	13.0	10.8	9.7	11.6	10.9	12.5	11.7
22	9.3	9.0	11.3	10.9	13.3	12.1	10.3	9.8	10.9	10.0	12.6	12.0
23	9.3	8.8	11.2	10.6	13.1	12.4	9.9	9.7	10.4	9.9	12.4	11.0
24	9.3	8.8	11.0	10.4	---	---	9.8	9.1	11.0	9.3	12.6	11.7
25	8.9	8.4	10.4	9.7	---	---	10.2	9.8	11.8	11.0	12.8	11.8
26	8.3	7.9	10.6	9.9	---	---	10.3	9.5	12.4	11.7	13.1	11.7
27	9.1	8.0	10.6	10.1	---	---	10.4	10.1	12.7	12.1	12.2	10.1
28	9.1	8.8	10.4	9.5	---	---	10.5	10.3	12.5	12.2	10.3	10.0
29	9.0	8.6	10.2	9.3	---	---	10.4	10.2	---	---	10.2	9.4
30	9.2	8.8	10.6	10.1	11.1	10.3	12.0	9.6	---	---	10.0	8.9
31	9.4	9.0	---	---	11.1	10.9	10.5	10.3	---	---	10.0	9.0
MONTH	10.6	7.1	11.6	7.1	13.4	9.7	12.0	8.6	12.7	9.3	13.1	8.9
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.2	9.0	10.5	8.5	6.0	5.3	7.3	6.4	7.1	6.1	8.9	7.7
2	10.7	8.7	11.1	9.7	5.9	5.2	7.0	6.4	7.0	6.2	8.1	7.3
3	11.2	9.6	10.4	9.3	6.2	5.1	7.2	6.4	6.5	5.8	7.5	7.2
4	10.3	9.4	10.2	9.0	6.3	5.5	6.9	6.1	6.6	5.4	7.8	7.3
5	9.2	8.1	11.8	8.7	6.3	5.6	6.7	5.9	7.3	5.7	7.6	7.5
6	9.0	8.1	10.0	8.5	6.2	5.7	6.6	5.8	7.1	6.4	7.8	7.4
7	9.4	8.9	9.8	8.8	6.2	5.5	6.7	6.0	6.9	6.1	8.1	7.5
8	9.3	8.2	9.5	8.7	6.1	5.5	8.2	6.6	6.9	6.3	8.2	7.5
9	9.1	8.8	9.3	8.9	5.9	5.4	7.7	6.8	6.5	5.9	7.7	6.2
10	9.1	8.4	10.0	8.5	6.7	5.6	7.5	6.4	6.4	5.7	6.7	5.9
11	9.1	8.1	9.4	8.1	7.1	6.2	7.3	6.1	6.2	5.5	6.5	5.9
12	9.5	8.0	8.6	7.9	7.2	6.6	7.1	6.2	5.9	5.1	---	---
13	9.7	8.0	9.1	8.2	6.9	6.6	7.0	6.2	---	---	---	---
14	9.3	8.8	9.3	8.3	6.5	5.8	7.2	6.1	---	---	---	---
15	9.9	9.0	8.5	8.3	6.2	5.3	7.2	6.1	---	---	---	---
16	10.5	9.7	8.8	8.4	6.3	6.0	7.3	6.2	---	---	---	---
17	10.3	9.7	8.6	8.2	6.5	5.9	8.1	6.6	---	---	---	---
18	10.1	9.4	8.6	8.3	6.8	6.3	8.2	6.8	---	---	---	---
19	10.2	9.4	8.7	8.3	6.5	6.2	7.4	6.6	---	---	---	---
20	10.6	9.6	8.8	8.5	6.5	5.9	7.0	6.4	---	---	---	---
21	10.3	9.8	8.6	8.3	6.4	6.2	7.3	6.2	---	---	---	---
22	10.4	9.8	8.4	7.4	6.6	5.7	7.9	6.0	---	---	---	---
23	10.6	9.1	8.1	7.2	6.2	5.9	8.0	6.6	---	---	---	---
24	10.1	9.1	7.7	6.9	6.1	5.7	7.9	6.9	---	---	---	---
25	9.8	9.0	6.9	6.1	7.8	5.7	8.0	7.0	---	---	---	---
26	12.0	9.6	6.0	5.5	7.5	7.1	7.4	6.5	9.5	6.9	---	---
27	12.2	10.3	6.2	5.3	7.4	7.1	6.8	6.0	9.0	8.0	---	---
28	11.5	9.0	5.9	5.2	7.4	7.1	6.9	6.1	8.8	7.5	---	---
29	10.7	8.4	6.4	5.4	7.0	6.8	6.8	6.2	8.6	7.5	---	---
30	8.6	8.0	6.0	5.4	7.2	6.2	6.7	5.9	8.3	7.5	---	---
31	---	---	5.9	5.1	---	---	6.9	6.2	8.7	7.4	---	---
MONTH	12.2	8.0	11.8	5.1	7.8	5.1	8.2	5.8	9.5	5.1	8.9	5.9
YEAR	13.4	5.1										

BEAVER RIVER BASIN

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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 mi² (1,489 km²).

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

AVERAGE DISCHARGE.--41 years, 577 ft³/s (16.34 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft³/s (575 m³/s) Jan. 22, 1959, gage height, 19.37 ft (5.904 m); minimum daily, 60 ft³/s (1.70 m³/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, 5,180 ft³/s (147 m³/s) Feb. 20, gage height, 11.61 ft (3.539 m); minimum daily, 170 ft³/s (4.81 m³/s) Jan. 13-23.

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	255	376	504	223	281	1420	385	1760	374	409	321	310
2	254	370	515	219	672	1380	308	1420	358	391	314	521
3	286	367	543	214	836	1350	262	1330	353	360	311	603
4	295	373	502	203	608	1320	255	1270	358	353	311	770
5	290	372	431	200	385	1240	788	1240	388	383	307	629
6	289	369	415	188	320	1150	928	1400	370	483	307	430
7	289	377	425	193	268	862	462	1780	360	555	310	382
8	288	366	464	190	247	797	332	1170	353	430	345	363
9	285	366	654	185	228	763	284	965	765	352	363	353
10	285	363	812	184	223	497	259	916	1400	332	331	342
11	282	360	684	182	576	458	279	999	1150	325	317	335
12	281	360	613	180	825	460	904	1380	1060	323	321	331
13	285	352	580	170	712	453	1570	1240	1100	323	324	328
14	290	343	548	170	511	360	1840	777	1890	320	321	324
15	300	345	507	170	343	334	2700	936	2200	318	321	324
16	381	345	492	170	399	334	1750	1010	1840	314	331	324
17	378	344	394	170	1340	335	1450	792	2020	310	338	324
18	384	346	383	170	2300	324	1740	666	2070	305	321	321
19	383	346	310	170	2790	318	1520	612	2020	308	303	321
20	383	346	256	170	4590	295	1310	513	1940	327	293	321
21	379	349	230	170	3100	261	1510	444	1740	352	289	324
22	358	349	210	170	1430	311	2180	412	1540	343	272	324
23	346	349	199	170	1120	358	2380	273	1370	324	265	321
24	347	363	193	180	1720	363	2270	242	1190	314	262	317
25	391	416	191	200	1360	319	1660	237	1180	311	262	317
26	429	430	189	261	1340	285	1440	256	1170	315	262	317
27	428	398	186	621	1460	999	1320	278	892	329	262	314
28	415	491	183	739	1440	1350	1260	346	586	335	265	310
29	408	582	188	561	---	634	1770	490	531	393	289	314
30	397	532	201	383	---	446	2500	492	514	393	296	317
31	385	---	218	299	---	466	---	405	---	338	296	---
TOTAL	10446	11445	12220	7475	31424	20242	37616	26051	33082	10968	9430	11131
MEAN	337	382	394	241	1122	653	1254	840	1103	354	304	371
MAX	429	582	812	739	4590	1420	2700	1780	2200	555	363	770
MIN	254	343	183	170	223	261	255	237	353	305	262	310

CAL YR 1980 TOTAL 223910 MEAN 612 MAX 3570 MIN 170
WTR YR 1981 TOTAL 221530 MEAN 607 MAX 4590 MIN 170

BEAVER RIVER BASIN

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 mi² (253 km²).

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

AVERAGE DISCHARGE.--41 years, 87.0 ft³/s (2.464 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s (53.5 m³/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, 578 ft³/s (16.4 m³/s) Feb. 27, gage height, 3.42 ft (1.042 m), minimum daily 9.4 ft³/s (0.27 m³/s) Apr. 2-4.

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	33	31	31	29	31	566	14	259	34	32	59	100
2	33	31	31	29	31	562	9.4	327	34	32	90	102
3	33	31	31	29	31	553	9.4	323	34	32	88	102
4	33	31	32	29	33	444	9.4	323	34	32	88	102
5	33	31	32	29	33	259	10	323	26	32	88	102
6	33	31	32	29	32	130	10	327	18	32	88	102
7	33	31	32	29	32	83	10	323	17	32	90	100
8	33	31	32	29	32	83	10	323	16	32	90	100
9	33	31	32	29	32	57	10	323	16	32	90	100
10	32	31	32	29	32	33	10	323	16	44	90	100
11	32	31	32	29	32	33	10	233	16	72	90	100
12	32	31	32	31	32	33	10	184	16	90	90	100
13	32	31	32	31	32	33	11	184	16	90	90	100
14	32	31	32	29	31	33	10	184	15	90	91	100
15	32	31	32	29	31	33	11	119	23	90	91	100
16	32	31	32	31	31	33	46	86	31	93	91	102
17	32	31	32	31	32	33	85	86	31	96	90	102
18	32	31	32	31	32	33	85	88	31	96	86	102
19	32	31	32	31	32	33	85	88	31	96	90	102
20	32	31	32	31	33	23	126	59	32	96	90	102
21	31	31	32	31	33	14	181	33	32	91	88	102
22	31	31	31	31	100	14	181	33	32	90	90	137
23	31	31	31	31	179	14	181	34	31	90	90	181
24	31	31	31	31	256	14	181	34	29	90	90	181
25	31	31	31	31	455	14	181	34	31	88	90	179
26	31	31	31	31	566	14	181	33	31	88	90	179
27	31	31	29	31	570	14	181	33	31	88	91	179
28	31	31	29	31	570	14	181	34	31	88	95	179
29	31	31	29	31	---	14	181	34	29	52	98	179
30	31	31	29	31	---	14	173	34	32	31	100	179
31	31	---	29	31	---	14	---	34	---	32	100	---
TOTAL	990	930	969	935	3366	3244	2383.2	4855	796	2069	2782	3695
MEAN	31.9	31.0	31.3	30.2	120	105	79.4	157	26.5	66.7	89.7	123
MAX	33	31	32	31	570	566	181	327	34	96	100	181
MIN	31	31	29	29	31	14	9.4	33	15	31	59	100
(+)	23.7	22.4	22.1	22.6	22.9	22.8	22.3	22.5	24.4	25.4	24.8	24.0

CAL YR 1980 TOTAL 24714.5 MEAN 67.5 MAX 570 MIN 5.7 (+) 22.5
WTR YR 1981 TOTAL 27014.2 MEAN 74.0 MAX 570 MIN 9.4 (+) 23.3

(+) 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 mi² (2,326 km²).

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

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

AVERAGE DISCHARGE.--60 years, 872 ft³/s (24.70 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s (498 m³/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 ft³/s (0.85 m³/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 ft³/s (1,200 m³/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,570 ft³/s (243 m³/s) Feb. 20, gage height, 12.43 ft (3.789 m) (backwater from Mill Creek); minimum daily discharge, 220 ft³/s (6.23 m³/s) Jan. 13.

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	353	471	734	302	330	2400	636	3060	507	563	403	490
2	338	453	737	294	1100	2320	484	2190	494	474	402	1360
3	351	442	760	284	1230	2250	396	1990	721	450	436	1330
4	384	488	720	249	897	2190	436	1900	906	422	442	1580
5	365	471	604	251	562	2070	1620	1840	728	492	438	1230
6	368	461	554	249	415	1810	1820	2130	604	576	438	810
7	371	462	568	250	356	1370	1000	2570	482	634	448	616
8	377	460	645	247	344	1080	642	2080	449	581	537	600
9	366	444	1020	235	309	1030	507	1590	2240	461	516	556
10	357	439	1270	231	344	796	420	1470	2790	399	467	523
11	353	434	1090	227	1360	623	534	1720	1780	397	458	500
12	346	430	843	222	1380	618	1530	2620	1420	420	444	490
13	355	427	781	220	1140	628	2380	2380	1420	480	486	480
14	360	423	720	226	849	552	3310	1750	2490	455	458	480
15	376	423	652	232	586	483	4070	2520	2840	442	519	481
16	424	412	636	236	798	484	2920	2460	2390	439	523	476
17	461	413	552	236	2380	484	2370	1720	2420	441	497	497
18	539	434	492	229	3670	457	2680	1190	2370	435	483	492
19	477	432	470	235	5260	442	2370	958	2300	436	449	505
20	465	427	348	237	7840	434	1910	826	2200	554	439	495
21	462	431	327	240	7310	413	1840	665	2080	712	434	488
22	447	427	314	250	3630	431	2500	555	2070	537	420	494
23	415	422	296	251	2630	520	2900	454	1850	474	407	500
24	405	500	263	262	3200	549	3050	337	1490	448	406	536
25	686	593	234	275	2780	499	2560	317	1620	442	407	557
26	677	607	241	384	2360	438	2120	318	1500	470	410	565
27	595	582	246	854	2470	1830	1920	440	1180	458	411	565
28	605	785	241	1060	2460	2220	1790	778	812	639	460	560
29	551	936	267	805	---	1280	2860	823	643	616	446	559
30	511	846	287	492	---	771	3890	796	627	574	453	567
31	488	---	288	305	---	735	---	618	---	447	466	---
TOTAL	13628	14975	17200	10070	57990	32207	57465	45065	45423	15368	14003	19378
MEAN	440	499	555	325	2071	1039	1916	1454	1514	496	452	646
MAX	686	936	1270	1060	7840	2400	4070	3060	2840	712	537	1580
MIN	338	412	234	220	309	413	396	317	449	397	402	476
CAL YR 1980	TOTAL	350976	MEAN	959	MAX	4800	MIN	200				
WTR YR 1981	TOTAL	342772	MEAN	939	MAX	7840	MIN	220				

BEAVER RIVER BASIN

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 mi² (2,779 km²).

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.--39 years, 1,099 ft³/s (31.12 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 21,000 ft³/s (595 m³/s) Jan. 21, 1959, gage height, 14.43 ft (4.398 m); minimum daily, 155 ft³/s (4.39 m³/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, 10,200 ft³/s (289 m³/s) Feb. 20, gage height, 9.48 ft (2.890 m); minimum daily, 300 ft³/s (8.50 m³/s) Jan. 12.

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	498	623	955	424	710	2680	864	3660	694	840	525	631
2	450	586	963	411	1750	2580	694	2560	670	655	511	2000
3	464	573	972	392	1610	2450	586	2240	1150	608	545	1720
4	498	670	897	346	1230	2370	639	2090	1620	573	559	2470
5	464	639	779	340	840	2270	2560	2000	1000	639	545	1560
6	457	600	710	346	586	2000	2270	2450	848	710	545	1100
7	457	586	761	352	504	1580	1360	2850	678	753	566	814
8	464	593	873	334	491	1210	930	2370	623	718	702	796
9	450	566	1300	323	418	1160	761	1740	3650	600	593	736
10	444	539	1500	317	491	980	631	1610	3360	525	579	678
11	437	532	1300	306	1810	814	694	1940	2180	504	608	639
12	424	525	1040	300	1650	787	2560	3470	1670	518	566	623
13	437	525	963	306	1380	805	3440	2880	1580	647	593	600
14	444	525	889	311	1120	727	4880	2100	2810	586	579	608
15	457	539	814	329	873	639	5150	3440	3110	552	710	608
16	491	518	787	329	963	655	3610	3030	2650	545	694	593
17	539	511	702	317	2950	647	3050	2070	2680	545	623	655
18	805	573	631	306	4190	623	3300	1470	2500	539	600	639
19	647	593	615	317	6140	600	2830	1160	2420	532	559	655
20	579	559	470	323	9120	593	2240	1010	2290	856	552	608
21	566	539	431	334	8540	593	2040	856	2290	980	545	593
22	539	532	418	346	4500	600	2680	736	2880	718	532	600
23	504	525	405	346	3750	686	3220	639	2300	615	511	608
24	491	662	375	357	4150	718	3410	504	1690	573	518	647
25	1120	796	334	375	3450	662	2980	470	2010	559	518	662
26	1100	761	334	615	2800	623	2380	470	1800	647	518	655
27	873	770	346	1240	2800	2480	2130	710	1390	600	518	655
28	1020	1040	334	1460	2780	2560	1980	1190	1000	905	573	647
29	897	1160	392	1200	---	1570	3560	1240	805	889	573	647
30	779	1060	437	873	---	1030	4480	1010	938	710	579	662
31	702	---	411	615	---	963	---	840	---	579	600	---
TOTAL	18497	19220	22138	14490	71596	38655	71909	54805	55286	20220	17739	25109
MEAN	597	641	714	467	2557	1247	2397	1768	1843	652	572	837
MAX	1120	1160	1500	1460	9120	2680	5150	3660	3650	980	710	2470
MIN	424	511	334	300	418	593	586	470	623	504	511	593
CAL YR 1980 TOTAL	442359			1209	5770		327					
WTR YR 1981 TOTAL	429664			1177	9120							

BEAVER RIVER BASIN

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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 mi² (2,784 km²).

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.

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, 1,220 micromhos Feb. 11; minimum, 342 micromhos Sept. 2.

pH: Maximum recorded, 8.2 units Oct. 30; minimum recorded, 6.7 units Aug. 29, 31.

WATER TEMPERATURES: Maximum, 31.0°C July 12; minimum, 2.0°C Feb. 12, 13.

DISSOLVED OXYGEN: Maximum recorded, 13.5 mg/L Feb. 13; minimum recorded, 0.2 mg/L July 11.

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 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	575	525	630	614	---	---	851	755	867	605	494	484
2	756	533	629	608	---	---	867	791	950	660	492	480
3	629	555	624	599	629	597	861	768	665	582	496	488
4	627	606	615	581	633	588	---	---	591	539	498	482
5	648	603	623	603	618	603	---	---	735	555	502	484
6	621	606	659	596	636	608	---	---	---	---	510	490
7	618	582	623	596	627	611	---	---	---	---	542	506
8	609	572	618	600	620	599	---	---	---	---	554	534
9	612	582	615	596	605	567	---	---	824	803	572	542
10	623	597	615	603	581	563	---	---	923	804	580	546
11	611	594	632	603	578	558	---	---	1220	600	616	576
12	635	600	621	599	572	552	---	---	722	612	626	606
13	632	596	630	605	582	552	---	---	659	594	616	602
14	632	596	636	612	573	566	---	---	702	603	622	600
15	615	581	644	612	---	---	---	---	765	620	624	610
16	606	579	642	620	---	---	---	---	743	668	666	614
17	618	567	630	617	---	---	---	---	674	564	700	622
18	590	498	702	630	662	624	---	---	557	452	774	632
19	602	569	717	630	678	659	861	809	447	435	658	628
20	594	579	666	639	726	614	867	759	---	---	667	636
21	600	576	---	---	---	---	818	789	---	---	794	640
22	599	578	---	---	---	---	861	813	---	---	807	674
23	623	593	---	---	---	---	827	819	---	---	707	666
24	611	594	653	623	---	---	855	798	426	408	700	650
25	603	515	663	614	---	---	854	824	408	398	666	638
26	612	558	650	617	---	---	860	843	412	398	652	628
27	608	567	738	629	---	---	807	782	472	418	616	512
28	603	572	782	641	---	---	803	680	496	470	522	460
29	623	605	---	---	818	755	669	623	---	---	478	444
30	693	600	---	---	975	815	642	597	---	---	518	462
31	630	603	---	---	821	764	642	588	---	---	542	512
MONTH	756	498	782	581	975	552	867	588	1220	398	807	444
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	558	536	396	372	---	---	560	382	594	572	576	516
2	588	558	430	398	---	---	586	560	602	580	534	342
3	610	578	438	426	---	---	602	570	598	582	502	468
4	634	594	458	438	---	---	594	582	596	576	510	458
5	562	506	462	448	---	---	---	---	568	554	516	504
6	512	496	456	442	---	---	---	---	588	562	514	494
7	530	494	452	426	---	---	---	---	582	556	550	518
8	548	518	434	418	---	---	568	556	574	510	556	532
9	564	548	448	426	---	---	588	558	576	542	564	544
10	618	562	472	440	480	444	608	574	570	536	574	550
11	608	542	468	394	444	408	624	594	564	534	578	562
12	586	494	434	416	478	406	624	584	566	540	582	562
13	496	406	416	402	490	442	596	534	582	560	570	556
14	426	390	430	390	466	424	574	554	602	560	576	560
15	418	376	422	396	422	400	588	558	594	508	568	550
16	404	366	422	412	416	398	584	566	568	518	572	554
17	448	410	548	414	446	402	586	560	560	530	568	528
18	462	442	---	---	452	440	580	566	566	552	568	554
19	442	434	---	---	---	---	566	544	570	554	594	530
20	472	440	---	---	450	444	558	426	574	556	582	550
21	478	466	---	---	452	404	534	466	588	562	582	546
22	468	456	---	---	480	416	544	528	592	568	592	536
23	462	454	---	---	474	448	582	540	590	566	564	534
24	462	448	---	---	468	454	622	572	570	558	562	540
25	460	450	---	---	498	370	598	570	580	556	582	534
26	464	450	---	---	488	436	592	510	590	552	542	524
27	464	450	---	---	496	472	584	514	580	558	550	512
28	480	458	---	---	520	494	576	410	586	506	524	508
29	474	436	---	---	550	518	536	442	568	518	528	504
30	450	388	---	---	558	394	574	536	568	524	528	506
31	---	---	---	---	---	---	582	562	666	536	---	---
MONTH	634	366	548	372	558	370	624	382	666	506	594	342
YEAR	1220	342										

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	7.4	7.2	7.6	7.5	---	---	7.4	7.3	7.4	7.1	7.6	7.6
2	7.4	7.3	7.6	7.5	---	---	7.4	7.3	7.6	7.3	7.7	7.6
3	7.3	7.2	7.6	7.3	7.6	7.3	7.5	7.3	7.7	7.5	7.7	7.6
4	7.4	7.3	7.5	7.3	7.6	7.5	7.7	7.4	7.6	7.4	7.7	7.6
5	7.4	7.3	7.6	7.5	7.7	7.5	7.6	7.3	7.5	7.3	7.7	7.5
6	7.5	7.3	7.6	7.5	7.7	7.5	7.5	7.3	---	---	7.8	7.2
7	7.6	7.3	7.5	7.3	7.6	7.4	7.5	7.2	---	---	7.7	7.5
8	7.5	7.2	7.5	7.3	7.5	7.1	7.6	7.4	7.3	7.3	7.6	7.5
9	7.4	7.3	7.5	7.3	7.6	7.3	7.5	7.3	7.4	7.3	7.6	7.4
10	7.4	7.2	7.5	7.3	7.7	7.5	7.4	7.2	7.4	7.3	7.6	7.3
11	7.3	7.3	7.6	7.3	7.7	7.6	---	---	7.6	7.4	7.6	7.2
12	7.4	7.3	7.6	7.4	7.7	7.4	7.4	7.4	7.8	7.5	7.5	7.4
13	7.4	7.4	7.5	7.2	7.6	7.4	7.4	7.2	7.7	7.0	7.5	7.4
14	7.5	7.4	7.5	7.4	---	---	7.5	7.3	7.7	7.1	7.5	7.3
15	7.5	7.3	7.5	7.4	---	---	7.4	7.3	7.5	7.0	7.4	7.4
16	7.4	7.1	7.6	7.4	---	---	7.5	7.1	7.6	7.3	7.4	7.2
17	7.3	7.1	7.6	7.6	---	---	7.3	7.1	7.4	7.3	7.4	7.3
18	7.3	7.2	7.7	7.6	---	---	7.3	7.2	7.6	7.2	7.4	7.3
19	7.4	7.3	7.6	7.4	---	---	7.3	7.1	7.6	7.5	7.4	7.3
20	7.4	7.3	7.6	7.4	---	---	7.3	7.1	---	---	7.3	7.1
21	7.4	7.3	---	---	---	---	7.4	7.3	---	---	7.4	7.2
22	7.4	7.3	---	---	---	---	7.4	7.3	---	---	7.4	7.3
23	7.4	7.3	---	---	---	---	7.4	7.4	---	---	7.4	7.2
24	7.5	7.4	---	---	---	---	7.4	7.3	7.7	7.4	7.4	7.2
25	7.5	7.3	7.7	7.4	---	---	7.5	7.3	7.6	7.4	7.4	7.0
26	7.6	7.4	7.6	7.4	---	---	7.4	7.4	7.4	7.4	7.4	7.1
27	7.6	7.5	7.6	7.4	---	---	7.4	7.3	7.6	7.1	7.5	7.2
28	7.7	7.6	7.6	7.4	---	---	7.4	7.3	7.7	7.5	7.6	7.1
29	7.7	7.6	---	---	---	---	7.6	7.3	---	---	7.4	7.2
30	8.2	7.6	---	---	7.3	7.2	7.6	7.4	---	---	7.4	7.2
31	7.6	7.4	---	---	7.4	7.3	7.6	7.3	---	---	7.3	7.1
MONTH	8.2	7.1	7.7	7.2	7.7	7.1	7.7	7.1	7.8	7.0	7.8	7.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	7.2	7.1	7.3	7.2	---	---	7.3	7.1	7.2	7.1	7.1	6.9
2	7.3	7.1	7.3	7.3	---	---	7.2	7.2	7.2	7.1	7.1	6.9
3	7.2	7.1	7.4	7.3	---	---	7.2	7.1	7.1	7.0	7.0	6.9
4	7.5	7.0	7.6	7.3	---	---	7.3	7.0	7.1	7.1	7.3	7.0
5	7.5	7.1	7.5	7.4	---	---	---	---	7.1	7.0	7.1	7.0
6	7.4	7.4	7.5	7.4	---	---	---	---	7.1	7.0	7.0	7.0
7	7.6	7.2	7.5	7.3	---	---	---	---	7.1	7.0	7.0	7.0
8	7.3	7.1	7.5	7.4	---	---	7.2	7.1	7.1	7.0	7.0	7.0
9	7.2	7.1	7.4	7.2	---	---	7.2	7.1	7.1	7.0	7.1	7.0
10	7.1	7.0	7.5	7.2	7.6	7.4	7.2	7.1	7.1	7.0	7.0	7.0
11	7.2	7.0	7.4	7.2	7.4	7.2	7.1	7.0	7.1	7.0	7.0	7.0
12	7.4	7.0	7.5	7.4	7.5	7.1	7.2	7.1	7.2	7.0	7.0	6.9
13	7.4	7.3	7.5	7.4	7.4	7.2	7.1	7.0	7.1	7.0	7.0	6.9
14	7.6	7.3	7.5	7.3	7.4	7.2	7.2	7.0	7.0	6.9	7.0	6.9
15	7.6	7.4	7.5	7.4	7.4	7.2	7.2	7.1	7.0	6.9	7.0	6.9
16	7.4	7.2	7.5	7.4	7.2	7.1	7.2	7.0	7.1	6.9	7.0	6.9
17	7.4	7.2	---	---	7.3	7.2	7.2	7.0	7.1	7.0	6.9	6.8
18	7.5	7.2	---	---	7.4	7.2	7.2	7.1	7.1	7.0	7.0	6.9
19	7.5	7.4	---	---	---	---	7.2	7.1	7.0	7.0	7.0	6.9
20	7.6	7.4	---	---	7.3	7.3	7.2	7.0	7.0	6.9	7.0	6.9
21	7.5	7.4	---	---	7.4	7.2	7.2	7.1	7.1	6.9	7.0	6.9
22	7.5	7.4	---	---	7.5	7.3	7.2	7.0	7.1	7.0	7.2	7.0
23	7.5	7.3	---	---	7.4	7.3	7.2	7.1	7.1	7.0	7.1	7.0
24	7.4	7.4	---	---	7.3	7.3	7.2	7.0	7.1	7.0	7.1	7.0
25	7.5	7.3	---	---	7.4	7.2	7.2	6.9	7.1	7.0	7.0	6.9
26	7.5	7.3	---	---	7.4	7.2	7.1	6.9	7.1	7.0	7.0	6.9
27	7.7	7.4	---	---	7.4	7.3	7.2	7.0	7.2	6.9	7.0	6.9
28	7.5	7.3	---	---	7.3	7.2	7.2	7.1	7.1	6.9	7.0	6.9
29	7.5	7.2	---	---	7.3	7.2	7.2	7.1	7.0	6.7	7.0	6.9
30	7.4	7.3	---	---	7.2	7.1	7.2	7.1	6.9	6.9	6.9	6.8
31	---	---	---	---	---	---	7.1	7.1	7.0	6.7	---	---
MONTH	7.7	7.0	7.6	7.2	7.6	7.1	7.3	6.9	7.2	6.7	7.3	6.8
YEAR	8.2	6.7										

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

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	23.0	20.0	12.0	11.5	---	---	8.0	7.0	5.5	5.0	6.5	5.5
2	23.0	21.0	12.5	11.0	---	---	7.0	6.0	4.5	2.5	5.5	5.5
3	21.0	20.5	13.0	11.0	8.0	8.0	6.0	5.5	3.5	2.5	5.5	5.0
4	20.5	19.5	13.0	12.5	8.0	7.5	5.5	4.5	3.5	3.0	5.5	4.5
5	19.0	18.0	12.5	12.0	8.0	7.0	5.0	4.5	3.0	2.5	5.5	5.0
6	19.0	16.5	12.5	12.0	9.5	7.0	5.5	4.5	---	---	5.5	5.0
7	19.5	17.5	13.5	12.0	11.0	9.5	5.5	4.0	---	---	6.0	5.0
8	18.5	16.5	13.5	12.5	11.5	11.0	5.0	3.5	6.5	6.0	6.5	5.5
9	19.5	17.0	14.0	12.5	11.5	10.0	5.5	4.5	8.0	6.0	7.5	6.5
10	20.0	17.5	13.5	11.5	9.5	8.0	5.5	4.5	7.5	6.5	7.5	6.5
11	19.5	18.0	11.5	11.0	8.0	7.5	---	---	7.5	3.0	8.0	7.5
12	18.0	16.5	12.0	11.0	8.0	7.5	5.0	5.0	3.0	2.0	10.5	8.0
13	16.5	16.0	12.5	11.0	8.0	7.5	6.0	5.0	4.0	2.0	9.5	8.5
14	16.0	15.5	12.5	12.0	---	---	7.0	5.5	5.0	3.0	10.0	8.5
15	17.0	15.5	12.5	11.5	---	---	8.0	7.5	5.5	3.5	10.0	9.0
16	18.5	16.5	12.0	10.0	---	---	7.5	7.0	6.0	5.0	10.0	9.0
17	18.5	17.0	10.5	10.0	---	---	7.0	6.5	5.0	4.0	10.0	9.5
18	18.5	17.5	11.5	10.0	7.5	7.0	7.5	6.5	4.0	3.5	10.5	9.0
19	17.5	16.5	12.0	10.5	7.5	6.0	9.5	8.0	3.5	3.5	10.0	9.0
20	16.5	16.0	11.5	10.5	6.0	5.5	10.5	9.0	---	---	9.5	9.0
21	17.5	16.0	---	---	6.5	5.5	9.5	9.0	---	---	11.5	9.0
22	16.5	15.5	---	---	6.0	5.0	9.5	8.5	---	---	11.5	9.5
23	16.0	14.5	---	---	7.0	6.0	9.5	9.5	---	---	12.5	10.5
24	15.5	14.5	11.5	11.0	8.0	7.0	9.5	9.0	6.0	6.0	12.5	11.0
25	15.0	12.5	10.5	10.0	7.0	5.5	10.0	9.0	6.0	5.5	12.5	11.0
26	12.0	11.0	10.5	9.5	5.5	5.5	10.5	10.5	6.0	5.5	13.0	11.5
27	12.0	11.0	9.5	8.5	6.5	6.5	8.0	6.0	6.0	5.0	13.0	9.0
28	11.5	11.0	8.5	7.5	7.5	6.5	6.0	4.5	6.5	5.5	9.5	8.0
29	12.0	11.0	---	---	8.5	7.0	4.5	3.5	---	---	11.5	8.5
30	12.0	10.5	---	---	8.0	7.0	4.0	3.5	---	---	13.0	11.0
31	12.5	11.5	---	---	7.5	7.0	4.5	3.0	---	---	16.0	13.0
MONTH	23.0	10.5	14.0	7.5	11.5	5.0	10.5	3.0	8.0	2.0	16.0	4.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	17.0	15.0	14.5	14.0	---	---	27.0	24.0	27.0	24.5	29.0	27.0
2	18.0	15.0	14.5	14.0	---	---	27.0	25.5	27.0	25.5	27.0	24.0
3	18.5	16.5	16.0	14.0	---	---	28.0	25.5	27.0	26.0	25.5	24.0
4	18.5	17.0	17.5	14.5	---	---	28.5	26.5	25.5	25.0	24.0	23.5
5	17.0	13.5	19.0	16.0	---	---	---	---	29.0	27.0	24.5	24.0
6	14.0	12.5	17.5	14.5	---	---	---	---	28.0	27.0	24.0	23.5
7	14.5	12.0	15.5	14.0	---	---	---	---	27.5	26.5	25.0	24.0
8	16.0	13.0	16.0	13.5	---	---	30.0	28.5	27.0	25.0	25.0	24.0
9	16.5	15.0	17.5	15.0	---	---	30.0	28.0	27.0	26.0	24.0	22.5
10	17.0	14.5	18.5	16.5	21.5	21.0	30.5	28.5	27.5	25.5	23.0	21.0
11	18.5	16.5	18.0	17.0	23.0	20.5	30.0	27.5	27.5	26.5	24.0	22.5
12	17.5	15.5	16.5	15.0	24.0	22.0	31.0	28.5	28.0	26.0	24.0	22.5
13	15.5	14.0	16.0	15.0	23.5	22.5	29.0	26.5	29.5	27.5	26.5	23.0
14	14.0	12.0	16.5	15.0	23.0	22.0	28.5	26.0	29.5	28.0	26.5	25.5
15	12.5	11.5	15.5	15.0	24.0	22.0	29.5	27.0	28.5	27.0	25.5	24.5
16	13.0	11.5	16.0	14.5	26.0	24.0	29.0	27.5	27.5	25.0	26.5	25.0
17	14.0	13.0	---	---	24.5	24.0	29.0	27.5	26.0	24.0	25.5	24.0
18	15.0	14.0	---	---	24.5	23.5	29.0	26.5	26.0	23.5	24.0	23.0
19	14.0	13.0	---	---	---	---	28.0	26.0	26.0	24.0	23.0	22.0
20	14.5	13.0	---	---	24.5	24.0	26.0	25.5	27.0	24.5	23.0	21.5
21	15.0	13.0	---	---	24.5	23.0	26.0	25.0	26.0	24.0	22.0	20.0
22	14.5	13.5	---	---	23.5	22.5	27.0	25.0	26.5	24.5	20.0	19.0
23	14.5	14.0	---	---	23.5	22.5	27.0	24.5	27.0	25.5	19.0	18.0
24	14.0	13.5	---	---	24.0	22.0	27.5	25.0	25.5	24.5	19.5	17.5
25	13.0	12.0	---	---	24.0	22.5	28.0	26.0	26.0	23.5	21.5	18.5
26	13.5	12.0	---	---	24.0	22.0	27.5	25.5	28.0	25.0	22.5	20.5
27	15.5	13.0	---	---	24.0	21.5	26.0	24.5	28.0	26.0	23.0	21.0
28	17.0	14.5	---	---	24.0	22.0	26.5	25.0	28.5	27.0	21.0	19.0
29	16.5	14.5	---	---	24.5	22.0	25.5	24.0	29.0	27.0	20.0	18.0
30	14.5	14.0	---	---	26.0	23.0	26.5	23.5	27.5	27.0	20.5	20.0
31	---	---	---	---	---	---	26.5	24.0	28.0	26.5	---	---
MONTH	18.5	11.5	19.0	13.5	26.0	20.5	31.0	23.5	29.5	23.5	29.0	17.5
YEAR	31.0	2.0										

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

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	5.7	4.8	8.0	7.5	---	---	8.2	7.9	10.6	10.3	10.9	10.7
2	5.3	4.3	7.8	7.3	---	---	8.9	8.3	10.6	9.2	11.0	10.7
3	5.2	4.5	7.6	7.0	10.4	10.1	9.4	8.5	9.7	9.3	11.3	10.9
4	5.8	4.8	7.2	6.3	10.3	9.9	9.8	8.4	12.7	10.8	11.3	11.0
5	5.4	4.9	7.3	6.8	10.3	10.0	10.2	9.2	12.7	12.7	11.1	10.8
6	5.6	5.1	7.1	6.6	10.2	9.1	9.8	8.9	---	---	11.1	10.9
7	5.8	4.8	6.9	6.5	9.0	8.5	9.3	8.6	---	---	11.2	10.7
8	5.9	5.5	7.1	6.3	8.8	8.0	9.7	8.7	10.4	10.2	10.9	10.4
9	5.7	5.1	7.1	6.5	9.1	7.8	9.1	8.6	11.5	9.5	10.5	10.1
10	5.4	5.0	7.2	6.4	10.1	9.0	9.3	8.7	10.0	9.6	10.4	9.8
11	5.2	4.6	7.4	6.7	10.7	10.3	---	---	12.7	9.8	9.8	9.2
12	5.5	4.8	7.4	6.7	10.4	10.0	9.2	9.1	13.4	12.7	10.6	8.9
13	5.8	5.3	---	---	10.3	10.0	9.1	8.3	13.5	13.1	10.7	10.4
14	5.8	5.4	---	---	---	---	8.6	7.4	13.2	12.8	11.4	10.3
15	5.7	5.1	---	---	---	---	7.4	7.0	13.0	12.3	10.8	9.7
16	5.7	4.6	---	---	---	---	7.8	7.3	12.3	11.9	10.7	9.5
17	5.4	4.6	---	---	---	---	7.9	7.5	12.7	12.0	9.5	8.8
18	5.9	4.2	---	---	10.4	10.1	7.9	7.1	12.7	12.2	9.3	8.7
19	6.0	5.3	---	---	10.3	9.7	7.0	6.1	12.6	12.5	9.0	8.7
20	6.0	5.2	7.3	7.0	10.5	10.1	7.3	5.5	---	---	9.0	8.7
21	5.4	4.6	---	---	10.3	10.1	8.6	7.9	---	---	8.3	8.1
22	6.6	4.4	---	---	10.7	10.1	7.3	7.0	---	---	8.3	7.7
23	6.6	6.1	---	---	10.0	9.0	7.2	7.2	---	---	10.8	7.8
24	6.7	6.0	7.4	6.6	9.0	7.9	7.4	6.8	11.2	11.0	10.6	8.0
25	7.0	5.9	8.7	7.3	8.6	8.1	---	---	11.2	10.9	---	---
26	8.9	7.3	8.7	8.3	9.1	8.6	---	---	11.2	11.0	---	---
27	8.8	8.3	9.0	8.4	8.4	8.1	10.2	9.6	11.3	10.9	---	---
28	8.3	7.3	10.9	8.6	8.5	8.0	10.7	10.1	11.0	10.6	---	---
29	8.4	7.7	---	---	8.4	7.7	11.7	10.6	---	---	---	---
30	8.2	7.6	---	---	8.6	7.8	11.9	11.5	---	---	---	---
31	7.9	7.4	---	---	8.6	8.0	11.4	10.8	---	---	---	---
MONTH	8.9	4.2	10.9	6.3	10.7	7.7	11.9	5.5	13.5	9.2	11.4	7.7
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	9.0	8.7	---	---	5.8	4.5	5.4	3.1	5.7	4.6
2	---	---	9.1	8.9	---	---	5.3	4.1	4.9	3.2	6.6	4.2
3	---	---	9.1	8.6	---	---	5.1	4.1	4.6	3.1	7.0	6.2
4	---	---	8.8	8.0	---	---	5.0	3.6	4.2	2.8	7.6	6.6
5	---	---	8.1	7.5	---	---	---	---	5.7	3.1	7.4	6.7
6	---	---	8.4	7.2	---	---	---	---	5.8	3.2	7.1	6.5
7	---	---	8.8	8.4	---	---	---	---	5.4	3.2	6.5	6.0
8	---	---	9.0	8.4	---	---	6.1	4.7	5.8	3.0	6.1	5.5
9	---	---	8.4	7.7	---	---	5.9	4.3	5.9	3.0	6.5	4.3
10	---	---	7.9	6.7	6.9	6.4	5.7	4.0	5.1	3.5	6.7	6.1
11	---	---	7.5	6.4	7.2	6.6	5.6	.2	4.9	3.7	6.3	5.8
12	---	---	8.1	7.2	7.0	6.2	4.9	.8	5.9	3.4	6.3	5.8
13	---	---	8.3	8.0	6.7	5.4	4.3	3.6	5.7	3.6	6.0	5.3
14	---	---	8.8	7.5	6.8	5.9	5.2	3.4	5.5	3.0	5.6	5.1
15	---	---	8.7	8.3	6.8	6.3	5.3	3.2	4.9	3.0	5.7	5.0
16	---	---	8.8	8.5	6.5	5.2	4.6	3.3	5.7	4.2	5.2	3.7
17	---	---	8.7	8.6	6.8	6.0	5.0	2.0	6.3	4.2	5.8	4.6
18	---	---	---	---	7.0	6.5	5.2	2.1	---	---	5.9	5.1
19	---	---	---	---	---	---	5.0	3.7	---	---	6.5	5.2
20	---	---	---	---	7.3	6.9	5.0	4.1	---	---	6.2	5.5
21	---	---	---	---	7.0	5.3	4.9	1.9	---	---	6.6	5.4
22	---	---	---	---	6.9	6.4	5.4	4.1	---	---	6.9	6.1
23	---	---	---	---	7.2	6.5	5.5	2.6	---	---	7.2	6.4
24	---	---	---	---	7.1	6.7	4.9	2.9	---	---	7.2	4.4
25	---	---	---	---	6.6	5.5	4.4	1.4	---	---	6.8	3.9
26	---	---	---	---	6.9	6.1	4.4	2.1	6.0	5.2	4.1	3.6
27	9.5	8.8	---	---	7.0	6.0	5.3	2.4	6.5	4.9	6.4	3.3
28	8.8	7.8	---	---	6.8	5.9	4.6	2.4	6.1	4.6	7.1	5.2
29	8.7	7.7	---	---	6.1	5.0	5.5	3.9	5.6	4.2	7.5	6.5
30	8.8	6.6	---	---	5.7	4.8	5.1	3.6	5.5	4.7	6.6	6.1
31	---	---	---	---	---	---	5.1	3.6	5.6	5.1	---	---
MONTH	9.5	6.6	9.1	6.4	7.3	4.8	6.1	.2	6.5	2.8	7.6	3.3
YEAR	13.5	.2										

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

BEAVER RIVER BASIN

03102950 PYMATUNING CREEK AT KINSMAN, JH

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 mi² (250 km²).

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 fair. Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--16 years, 124 ft³/s (3.512 m³/s), 17.41 in/yr (442 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft³/s (68.5 m³/s) Feb. 17, 1976, gage height, 12.27 ft (3.740 m) from rating curve extended above 800 ft³/s (22.7 m³/s); maximum gage-height, 12.32 ft (3.755 m) Sept. 15, 1979; minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 8, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 19	2300	*2350 66.6	*12.09 3.685	Sept. 4	1500	717 20.3	9.86 3.005
Apr. 30	2000	785 22.2	10.05 3.063				

Minimum daily discharge, 3.4 ft³/s (0.096 m³/s) Oct. 9.

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	5.3	68	151	66	229	221	198	714	51	7.2	232	11
2	4.0	46	149	72	339	166	160	530	34	7.4	145	137
3	3.8	34	156	71	480	132	107	314	26	7.2	58	333
4	5.8	31	143	64	398	104	72	170	25	7.4	30	653
5	7.6	32	125	56	317	89	204	93	26	12	19	631
6	6.5	30	103	49	249	82	267	109	26	19	15	546
7	5.7	27	92	44	171	78	238	146	19	15	15	463
8	4.3	28	105	36	117	73	178	127	14	11	43	372
9	3.4	26	176	32	88	73	107	94	283	8.5	57	288
10	3.9	29	220	32	71	78	69	68	465	6.7	43	205
11	4.3	29	231	32	185	95	50	67	509	5.9	90	133
12	5.5	27	236	32	315	112	70	122	500	5.2	121	78
13	7.2	24	215	32	378	116	95	136	361	4.5	78	51
14	8.8	24	162	32	363	109	284	111	249	4.6	51	37
15	9.7	26	110	32	341	99	546	180	199	4.5	42	53
16	9.4	26	90	32	335	93	455	265	170	4.1	75	83
17	9.6	25	70	32	741	90	393	232	185	4.3	109	100
18	13	26	60	32	1110	85	317	190	157	4.1	111	82
19	15	25	50	32	1730	74	211	133	82	3.9	79	61
20	14	26	42	36	2090	67	134	81	39	3.7	49	58
21	14	27	38	41	1440	65	80	54	22	11	27	65
22	13	29	32	45	950	74	56	35	20	42	16	66
23	14	28	32	49	822	125	66	26	25	42	13	58
24	14	34	32	54	856	182	156	21	31	20	11	46
25	24	73	32	57	714	221	273	21	26	11	9.7	35
26	94	86	32	75	594	236	279	21	18	16	8.4	26
27	134	90	32	238	446	339	215	21	14	32	6.4	22
28	143	110	32	321	307	378	144	40	11	40	6.4	20
29	146	143	32	333	---	308	506	51	8.5	137	6.8	20
30	130	144	42	330	---	245	766	52	7.3	209	8.8	19
31	102	---	56	295	---	232	---	62	---	259	10	---
TOTAL	974.8	1373	3078	2684	16176	4441	6696	4286	3602.8	965.2	1585.5	4752
MEAN	31.4	45.8	99.3	86.6	578	143	223	138	120	31.1	51.1	158
MAX	146	144	236	333	2090	378	766	714	509	259	232	653
MIN	3.4	24	32	32	71	65	50	21	7.3	3.7	6.4	11
CFSM	.33	.47	1.03	.90	5.98	1.48	2.31	1.43	1.24	.32	.53	1.63
IN.	.37	.53	1.18	1.03	6.22	1.71	2.58	1.65	1.39	.37	.61	1.83

CAL YR 1980	TOTAL	38505.6	MEAN 105	MAX 635	MIN 3.4	CFSM 1.09	IN 14.81
WTR YR 1981	TOTAL	50614.3	MEAN 139	MAX 2090	MIN 3.4	CFSM 1.44	IN 19.47

RESERVOIRS IN BEAVER RIVER BASIN, OH--Continued

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 mi² (217 km²). 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 hm³). 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 hm³) Jan. 21, 1959, elevation, 909.25 ft (277.139 m); minimum, 9,370 acre-ft (11.6 hm³) Feb. 28, 1954, elevation, 888.78 ft (270.900 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 37,360 acre-ft (46.1 hm³) June 9, elevation, 907.35 ft (276.560 m); minimum 25,790 acre-ft (31.8 hm³) Sept. 30, elevation, 901.40 ft (274.747 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03097000 MEANDER CREEK RESERVOIR			
Sept. 30.....	905.85	34130	---
Oct. 31.....	904.32	31090	-3040
Nov. 30.....	903.56	29650	-1440
Dec. 31.....	903.57	29670	+20
CAL YR 1980	---	---	+170
Jan. 31.....	903.24	29050	-620
Feb. 28.....	905.42	33260	+4210
Mar. 31.....	905.71	33840	+580
Apr. 30.....	906.80	36150	+2310
May 31.....	906.50	35500	-650
June 30.....	906.23	34920	-580
July 31.....	904.60	31630	-3290
Aug. 31.....	902.73	28120	-3510
Sept. 30.....	901.44	25860	-2260
WTR YR 1981	---	---	-8270

BEAVER RIVER BASIN

RESERVOIRS IN BEAVER RIVER BASIN, OH--Continued

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 mi² (208 km²). 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 hm³) 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 hm³) is in conservation pool. Dead storage below elevation 936.8 ft (285.54 m), 85 acre-ft (105,000 m³). 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 hm³) Apr. 18, 1972, elevation, 989.19 ft (301.505 m); minimum, 5,370 acre-ft (6.62 hm³) Jan. 5, 1967, elevation, 953.50 ft (290.627 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 63,500 acre-ft (78.3 hm³) June 17, elevation, 988.00 ft (301.142 m); minimum, 38,000 acre-ft (46.9 hm³) Nov. 22-24, elevation, 977.65 ft (297.988 m).

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 mi² (253 km²). 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 hm³) 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 hm³). 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 hm³) June 3, 1947, elevation, 903.65 ft (275.432 m); minimum, 8,600 acre-ft (10.6 hm³) Nov. 16, 1944, elevation, 886.97 ft (270.348 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 86,480 acre-ft (107 hm³) Apr. 30, elevation, 902.16 ft (274.978 m); minimum, 58,850 acre-ft (72.6 hm³) Nov. 23, elevation, 898.42 ft (273.838 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03092450 MICHAEL J. KIRWAN RESERVOIR				03095000 Mosquito Creek Lake			
Sept. 30.....	981.24	45980	---	Sept. 30.....	899.08	63280	---
Oct. 31.....	978.20	39160	-6820	Oct. 31.....	898.74	60980	-2300
Nov. 30.....	977.98	38680	-480	Nov. 30.....	898.58	59910	-1070
Dec. 31.....	978.92	40710	+2030	Dec. 31.....	898.81	61440	+1530
CAL YR 1980	---	---	-5270	CAL YR 1980	---	---	+660
Jan. 31.....	979.67	42370	+1660	Jan. 31.....	899.00	62710	+1270
Feb. 28.....	985.23	56230	+13860	Feb. 28.....	901.50	81200	+18490
Mar. 31.....	985.23	55940	-290	Mar. 31.....	901.28	79470	-1730
Apr. 30.....	987.46	61990	+6050	Apr. 30.....	902.16	86480	+7010
May 31.....	986.45	59210	-2780	May 31.....	901.46	80890	-5590
June 30.....	986.41	59100	-110	June 30.....	901.41	80490	-400
July 31.....	984.85	54940	-4160	July 31.....	900.83	75990	-4500
Aug. 31.....	982.94	50080	-4860	Aug. 31.....	899.87	68860	-7130
Sept. 30.....	981.11	45670	-4410	Sept. 30.....	899.55	66600	-2260
WTR YR 1981	---	---	-310	WTR YR 1981	---	---	+3320

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 mi² (642 km²). 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 hm³) 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 hm³) 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 hm³) July 9, 1943, elevation, 1,032.0 ft (375.51 m); minimum, 1,540 acre-ft (1.90 hm³) Jan. 10, 1944, elevation, 978.82 ft (298.344 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 81,330 acre-ft (100 hm³) June 11, elevation, 1,030.12 ft (313.981 m); minimum, 13,210 acre-ft (16.3 hm³) Jan. 25, 26, elevation, 1,001.27 ft (305.187 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 mi² (707 km²). 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 hm³) 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 hm³) June 29, 1924, elevation, 953.8 ft (290.72 m), of which 5,870 acre-ft (7.24 hm³) was in uncontrolled storage; minimum, 1,220 acre-ft (1.50 hm³) Jan. 23, 1954, elevation, 924.27 ft (281.717 m), from graph based on gage readings.

EXTREMES FOR CURRENT YEAR: Maximum contents, 30,460 acre-ft (37.6 hm³) Apr. 22, 23, elevation, 951.64 ft (290.060 m); minimum, 15,550 acre-ft (19.2 hm³) Jan. 25, 26, elevation, 942.70 ft (287.335 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03090000 BERLIN LAKE				01091000 MILTON RESERVOIR			
Sept. 30.....	1013.46	29120	---	Sept. 30.....	947.87	23300	---
Oct. 31.....	1009.58	22720	-6400	Oct. 31.....	946.75	21380	-1920
Nov. 30.....	1004.78	16630	-6090	Nov. 30.....	944.06	17340	-4040
Dec. 31.....	1002.63	14450	-2180	Dec. 31.....	942.92	15830	-1510
CAL YR 1980	---	---	-12990	CAL YR 1980	---	---	+2500
Jan. 31.....	1004.59	16430	+1980	Jan. 31.....	942.91	15810	-20
Feb. 28.....	1024.48	57530	+41100	Feb. 28.....	945.46	19350	+3540
Mar. 31.....	1023.74	54960	-2570	Mar. 31.....	944.35	17750	-1600
Apr. 30.....	1027.32	68510	+13550	Apr. 30.....	947.94	23420	+5670
May 31.....	1026.22	64020	-4490	May 31.....	948.08	23660	+240
June 30.....	1025.34	60650	-3370	June 30.....	948.19	23860	+200
July 31.....	1024.24	56680	-3970	July 31.....	947.91	23360	-500
Aug. 31.....	1020.64	45440	-11240	Aug. 31.....	948.09	23680	+320
Sept. 30.....	1017.48	37420	-8020	Sept. 30.....	947.90	23350	-330
WTR YR 1981	---	---	+8300	WTR YR 1981	---	---	+50

LITTLE BEAVER CREEK BASIN

03109320 STATELINE CREEK NEAR NEGLEY, OH

LOCATION.--Lat 40°47'33", long 80°31'20", Columbiana County, Hydrologic Unit 05030101, on left bank downstream side of bridge on Township Road 1024 (Darlington Road), 80 ft (24 m) downstream from confluence on East and West Fork, 500 ft (152 m) upstream from mouth, 800 ft (244 m) west of Pennsylvania State line, and 1.3 mi (2 km) east of Negley.

DRAINAGE AREA.--3.09 mi² (8.00 km²).

PERIOD OF RECORD.--

CHEMICAL QUALITY ANALYSES: August 1977 to current year (discontinued).

PERIOD OF DAILY RECORD.

DISCHARGE: January 1977 to September 1978.

SPECIFIC CONDUCTANCE: January 1977 to July 1978.

pH: January 1977 to July 1978.

WATER TEMPERATURES: January 1977 to July 1978.

DISSOLVED OXYGEN: January 1977 to June 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT												
07...	1130	2.5	3400	7.8	9.0	9.0	10.1	87	--	1500	1400	470
28...	1145	3.3	2490	7.7	6.0	7.5	11.4	95	80	1500	1400	490
NOV												
06...	1100	1.6	2600	7.9	2.0	3.0	13.0	96	75	1100	990	340
20...	1100	2.5	2900	7.9	4.0	.0	13.8	94	64	1200	1100	350
DEC												
04...	1100	2.4	2400	7.0	-4.0	.0	12.8	88	120	930	840	280
18...	1100	2.1	2620	7.6	.0	2.0	13.4	96	40	930	830	300
30...	1100	2.0	3300	7.7	-1.0	.2	13.0	90	65	1300	1200	400
JAN												
28...	1200	2.6	2510	7.7	3.0	2.0	12.6	91	44	1100	1000	320
FEB												
05...	1130	3.6	2500	7.4	-14.0	.0	13.2	90	45	860	780	260
19...	1130	11	1900	7.2	12.0	4.0	12.0	91	78	560	510	170
MAR												
12...	1100	4.9	2500	7.7	8.0	5.0	12.4	97	60	1100	1000	320
24...	1100	4.0	2700	7.6	2.0	4.0	12.2	92	53	1200	1100	360
APR												
15...	1100	17	1900	7.7	6.0	9.0	11.4	98	26	540	490	160
28...	1100	6.3	2600	7.6	19.0	12.0	10.4	96	39	810	730	230
MAY												
14...	1100	4.6	2550	7.7	18.0	13.0	9.8	92	18	880	790	250
28...	1030	4.7	2750	7.6	20.0	16.0	9.1	92	26	1000	910	310
JUN												
10...	1000	14	1750	7.5	19.0	15.5	9.2	92	<10	660	590	200
25...	1000	5.4	2350	7.5	23.0	17.0	8.5	88	67	990	900	300
JUL												
08...	1000	3.2	2850	7.4	27.0	19.0	8.2	88	110	1200	1100	370
22...	1000	2.5	2950	7.6	22.0	18.0	8.5	89	10	1100	1000	330
AUG												
05...	1100	2.0	3000	7.7	24.0	20.0	8.5	92	25	1300	1200	380
26...	1100	1.4	4100	7.7	23.0	16.0	9.1	92	86	1700	1600	540
SEP												
10...	1100	1.7	3550	7.7	18.0	13.0	9.4	89	130	1400	1300	430

LITTLE BEAVER CREEK BASIN

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03109320 STATELINE CREEK NEAR NEGLEY, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	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- 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)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT												
07...	78	126	0	103	2.8	550	823	2570	--	--	--	--
28...	74	120	0	98	3.8	390	790	2310	2440	130	1.3	3.00
NOV												
06...	69	136	0	112	2.7	440	520	1840	2070	230	1.6	2.70
20...	67	128	0	105	2.6	460	580	1970	2100	130	1.3	2.80
DEC												
04...	55	110	0	90	18	380	440	1600	1730	130	1.4	2.30
18...	44	124	0	102	5.0	400	480	1720	1930	210	1.4	2.30
30...	80	124	0	102	4.0	460	670	1940	2020	80	--	--
JAN												
28...	70	108	0	89	3.4	400	560	1630	1860	230	1.9	1.60
FEB												
05...	52	104	0	85	6.6	360	420	1500	1510	10	2.5	1.10
19...	34	66	0	54	6.7	250	320	1130	1170	40	2.8	2.20
MAR												
12...	62	112	0	92	3.6	400	510	1570	1860	290	3.7	18.0
24...	64	106	0	87	4.3	440	600	2150	2060	910	3.3	3.00
APR												
15...	34	64	0	52	2.0	260	300	1260	1260	0	3.2	2.30
28...	58	104	0	85	4.2	470	450	1560	1740	180	3.3	3.20
MAY												
14...	62	112	0	92	3.6	410	450	1560	1730	170	.53	.310
28...	59	112	0	92	4.5	440	570	1960	2140	180	3.0	1.20
JUN												
10...	39	80	0	66	3.6	270	340	1390	1400	10	2.5	1.10
25...	58	112	0	92	5.1	340	490	1620	1840	220	5.7	2.40
JUL												
08...	73	116	0	95	7.4	490	660	--	2340	30	7.5	3.30
22...	74	120	0	98	4.8	500	610	2160	2630	470	7.3	2.50
AUG												
05...	75	116	0	95	3.7	580	640	2410	2380	30	8.3	2.10
26...	77	120	0	98	3.8	21	1100	2850	3480	630	8.2	3.50
SEP												
10...	78	122	0	100	3.9	460	880	2640	2770	130	6.2	3.20

DATE	NITRO- GEN, ORGANIC 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)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT											
07...	--	--	--	--	--	--	--	--	--	.01	--
28...	.00	3.00	4.3	19	10	19	950	85	--	.00	13
NOV											
06...	.00	2.70	4.3	19	11	15	760	200	2.9	.01	14
20...	.00	2.80	4.1	18	0	13	1100	0	--	.00	11
DEC											
04...	.20	2.50	3.9	17	1	17	830	4	--	.00	9
18...	.00	2.30	3.7	16	0	7	890	2	--	.00	5
30...	--	--	--	--	0	9	750	8	--	.00	0
JAN											
28...	.50	2.10	4.0	18	0	20	970	1	--	<.01	2
FEB											
05...	1.3	2.40	4.9	22	0	46	920	0	--	<.01	0
19...	.00	2.20	5.0	22	1	--	3600	9	--	<.01	0
MAR											
12...	.00	18.0	22	96	0	5	880	4	--	<.01	0
24...	.50	3.50	6.8	30	0	--	630	16	--	<.01	4
APR											
15...	.10	2.40	5.6	25	0	9	2700	6	--	<.01	0
28...	.40	3.60	6.9	31	1	9	1700	17	--	<.01	0
MAY											
14...	3.2	3.50	4.0	18	1	22	830	1	--	.01	0
28...	1.8	3.00	6.0	27	1	--	1300	1	--	<.01	4
JUN											
10...	1.7	2.80	5.3	23	2	--	2100	2	--	<.01	0
25...	1.3	3.70	9.4	42	1	57	940	4	--	<.01	5
JUL											
08...	.00	3.30	11	48	1	0	580	4	--	<.01	0
22...	1.0	3.50	11	48	1	13	880	12	--	<.01	0
AUG											
05...	.90	3.00	11	50	1	17	590	2	--	<.01	0
26...	.00	3.50	12	53	1	16	560	23	--	<.01	3
SEP											
10...	.20	3.40	9.6	43	1	7	510	<1	--	<.01	4

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 mi² (1,285 km²).

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 and those for discharges above 530 ft³/s (15.0 m³/s) which are fair. Water-quality data collected at this site 1964-1978. Sediment data collected at this site 1969 to 1974.

AVERAGE DISCHARGE.--66 years, 523 ft³/s (14.81 m³/s), 14.32 in/yr (364 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) July 19, 1941, gage height, 17.4 ft (5.30 m), from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of slope-area measurement of peak flow; minimum, 12 ft³/s (0.34 m³/s) several days in 1918, 1930, 1932, 1936.

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

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Feb. 20	1900	6750	191	9.73	2.966	June 9	1400	8970	254	11.08	3.377
Apr. 14	0900	*10000	283	*11.48	3.499						

Minimum discharge, 61 ft³/s (1.728 m³/s) Aug. 29.

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	148	214	475	250	498	1090	548	1740	470	269	145	105
2	146	198	470	230	1710	956	486	1170	392	278	131	515
3	150	188	526	210	1450	854	442	905	777	244	131	549
4	157	197	443	180	944	765	434	754	1120	225	130	1380
5	152	219	376	160	655	788	1690	666	710	230	124	940
6	142	209	351	150	570	812	1700	749	574	332	116	462
7	136	191	346	150	474	720	1060	762	471	269	109	290
8	134	219	376	150	446	645	818	606	382	219	106	256
9	132	240	515	150	396	606	705	520	4630	194	103	271
10	132	236	748	150	389	597	620	477	4330	179	98	211
11	159	218	632	150	1320	575	566	598	2310	156	92	172
12	159	203	498	150	1450	534	2560	825	1300	144	94	150
13	140	194	458	150	998	510	4590	767	934	188	96	143
14	130	190	397	150	745	482	7470	601	1430	235	88	129
15	128	189	327	150	665	450	4940	962	1050	181	89	158
16	130	185	280	150	760	454	2530	1050	838	146	132	157
17	128	181	250	150	2350	442	1870	741	1110	135	147	199
18	170	181	230	150	3200	414	1700	582	711	124	118	203
19	284	170	220	150	3300	403	1290	505	573	115	96	206
20	200	178	220	150	5190	389	1030	457	487	213	85	173
21	155	172	210	150	4900	403	860	409	453	1080	78	143
22	138	168	210	160	2730	426	741	371	587	552	74	130
23	126	169	210	170	2990	422	818	340	549	293	71	126
24	118	235	200	200	3520	403	1020	315	420	215	68	121
25	246	406	200	266	2360	375	943	291	489	185	66	112
26	481	346	200	343	1670	354	780	276	621	174	64	105
27	324	311	200	932	1320	640	695	494	420	197	65	103
28	282	490	200	1080	1190	776	649	878	335	188	64	104
29	325	625	220	776	---	597	2160	566	292	283	64	102
30	264	520	240	526	---	584	2960	526	262	225	92	102
31	224	---	270	450	---	630	---	675	---	175	110	---
TOTAL	5740	7442	10498	8333	48190	18096	48675	20578	29027	7643	3046	7817
MEAN	185	248	339	269	1721	584	1623	664	968	247	98.3	261
MAX	481	625	748	1080	5190	1090	7470	1740	4630	1080	147	1380
MIN	118	168	200	150	389	354	434	276	262	115	64	102
CFSM	.37	.50	.68	.54	3.47	1.18	3.27	1.34	1.95	.50	.20	.53
IN.	.43	.56	.79	.62	3.61	1.36	3.65	1.54	2.18	.57	.23	.59

CAL YR 1980 TOTAL 248800 MEAN 680 MAX 4620 MIN 118 CFSM 1.37 IN 18.66
WTR YR 1981 TOTAL 215085 MEAN 589 MAX 7470 MIN 64 CFSM 1.19 IN 16.13

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)
OCT 23...	1030	126	840	7.1	6.5	--	--	--	--	--	--	168
DEC 08...	1225	353	620	8.0	8.5	--	--	--	--	--	--	122
JAN 19...	1330	151	770	7.6	.0	--	--	--	--	--	--	161
MAR 03...	1030	873	575	8.3	1.5	--	--	--	--	--	--	92
APR 20...	1100	1100	510	7.7	10.5	--	--	--	--	--	--	88
MAY 29...	1045	565	635	7.2	17.5	--	--	--	--	--	--	106
JUL 13...	1100	170	685	7.5	23.5	--	--	--	--	--	--	122
AUG 24...	1300	68	860	8.2	22.0	360	240	98	27	30	3.7	152
SEP 28...	1030	101	765	7.7	15.5	--	--	--	--	--	--	140

DATE	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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 23...	0	190	--	--	--	500	--	--	--	--	--	--
DEC 08...	0	120	--	--	--	347	--	--	--	--	--	--
JAN 19...	0	190	--	--	--	496	--	--	--	--	--	--
MAR 03...	0	130	--	--	--	342	--	--	--	--	--	--
APR 20...	0	130	--	--	--	--	--	--	--	--	--	--
MAY 29...	0	130	--	--	--	420	--	--	--	--	--	--
JUL 13...	0	180	--	--	--	511	--	--	--	--	--	--
AUG 24...	0	200	69	.3	2.4	600	2.3	.030	2	<1	100	1
SEP 28...	0	190	--	--	--	497	--	--	--	--	--	--

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 23...	--	--	--	--	--	--	1300	1200	80	--	--	--
DEC 08...	--	--	--	--	--	--	380	310	70	--	--	--
JAN 19...	--	--	--	--	--	--	180	150	30	--	--	--
MAR 03...	--	--	--	--	--	--	670	660	10	--	--	--
APR 20...	--	--	--	--	--	--	630	590	40	--	--	--
MAY 29...	--	--	--	--	--	--	910	840	70	--	--	--
JUL 13...	--	--	--	--	--	--	370	350	20	--	--	--
AUG 24...	<1	10	5	<10	3	5	260	220	40	4700	14	12
SEP 28...	--	--	--	--	--	--	150	120	30	--	--	--

DATE	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)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
OCT 23...	40	0	40	--	--	--	--	--	--	--	--
DEC 08...	80	30	50	--	--	--	--	--	--	--	--
JAN 19...	90	20	70	--	--	--	--	--	--	--	--
MAR 03...	200	70	130	--	--	--	--	--	--	--	--
APR 20...	160	80	80	--	--	--	--	--	--	--	--
MAY 29...	180	110	70	--	--	--	--	--	--	--	--
JUL 13...	100	50	50	--	--	--	--	--	--	--	--
AUG 24...	30	10	20	890	<.1	4.01	1	<1	<1	20	58
SEP 28...	20	10	10	--	--	--	--	--	--	--	--

YELLOW CREEK BASIN

53

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 mi² (381 km²).

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.--41 years, 162 ft³/s (4.588 m³/s), 14.97 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,580 ft³/s (271 m³/s) Jan. 27, 1952, gage height, 12.17 ft (3.709 m); minimum, 0.8 ft³/s (0.023 m³/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.--Peak discharge, above base of 2,000 ft³/s (56.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Feb. 20	2030	2400	68.0	6.48	1.975	June 9	2000	2260	64.0	6.31	1.923
Apr. 12	0900	*3260	92.3	*7.43	2.265						

Minimum daily discharge, 8.6 ft³/s (0.24 m³/s) Aug. 29.

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	52	31	125	48	507	334	170	490	98	405	33	30
2	87	29	117	46	897	281	152	372	90	170	31	118
3	63	28	130	42	177	236	138	305	196	130	29	98
4	34	28	103	40	150	192	138	249	758	108	35	277
5	27	35	98	38	115	220	787	192	267	98	35	108
6	25	32	89	36	105	245	559	206	206	92	29	66
7	25	29	87	36	100	202	380	192	155	82	26	48
8	24	30	95	36	95	189	305	161	146	74	30	53
9	23	34	127	36	90	173	267	143	1710	66	26	72
10	26	32	218	36	115	196	224	135	1010	62	23	43
11	34	30	180	36	189	220	443	228	599	58	20	34
12	28	28	142	36	685	213	2990	301	376	51	19	30
13	25	26	120	36	317	202	1980	277	301	74	16	49
14	23	26	93	36	253	179	1060	228	726	121	16	40
15	22	26	76	36	221	158	758	327	392	74	18	78
16	22	26	65	36	215	182	550	294	281	58	24	64
17	24	26	60	36	521	167	481	232	301	51	23	46
18	42	28	55	36	908	149	421	199	196	45	19	45
19	34	33	50	36	872	152	334	179	158	40	15	56
20	27	30	50	36	1190	138	291	161	135	43	13	48
21	25	30	48	36	2030	135	236	143	135	80	11	38
22	23	30	46	38	1020	127	209	127	319	66	12	33
23	22	30	44	42	699	132	241	116	245	45	11	30
24	22	48	44	46	971	130	263	105	158	38	10	27
25	39	117	42	68	740	121	245	98	599	35	9.8	24
26	87	76	42	89	541	113	206	92	581	40	9.4	22
27	48	79	42	277	421	179	196	146	308	56	9.0	21
28	43	186	42	325	353	189	213	176	199	48	9.0	20
29	48	172	42	257	---	179	613	127	155	84	8.6	19
30	39	137	46	174	---	199	708	113	130	54	41	18
31	34	---	50	150	---	202	---	121	---	39	45	---
TOTAL	1097	1492	2568	2256	14497	5734	15558	6235	10930	2487	655.8	1655
MEAN	35.4	49.7	82.8	72.8	518	185	519	201	364	80.2	21.2	55.2
MAX	87	186	218	325	2030	334	2990	490	1710	405	45	277
MIN	22	26	42	36	90	113	138	92	90	35	8.6	18
CFSM	.24	.34	.56	.50	3.52	1.26	3.53	1.37	2.48	.55	.14	.38
IN.	.28	.38	.65	.57	3.67	1.45	3.94	1.58	2.77	.63	.17	.42
CAL YR 1980	TOTAL	88686.0	MEAN	242	MAX	2560	MIN	22	CFSM	1.65	IN	22.44
WTR YR 1981	TOTAL	65164.8	MEAN	179	MAX	2990	MIN	8.6	CFSM	1.22	IN	16.49

YELLOW CREEK BASIN

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 23...	1245	22	585	7.7	8.5	--	--	--	--	--	--	140
DEC 08...	1430	95	440	7.6	9.0	--	--	--	--	--	--	68
JAN 19...	1625	35	570	7.2	.0	--	--	--	--	--	--	88
MAR 03...	1300	210	395	7.1	3.0	--	--	--	--	--	--	44
APR 20...	1245	306	345	7.3	11.5	--	--	--	--	--	--	52
MAY 29...	1320	124	240	7.6	18.5	--	--	--	--	--	--	75
JUL 13...	1300	72	500	7.5	23.0	--	--	--	--	--	--	72
AUG 21...	1245	12	592	7.8	21.0	280	210	78	20	22	2.6	88
SEP 28...	1300	20	590	7.4	15.5	--	--	--	--	--	--	78
DATE	CAR- BONATE FET-FLD (MG/L AS C03)	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 SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 23...	0	180	--	--	--	390	--	--	--	--	--	--
DEC 08...	0	110	--	--	--	252	--	--	--	--	--	--
JAN 19...	0	160	--	--	--	352	--	--	--	--	--	--
MAR 03...	0	96	--	--	--	224	--	--	--	--	--	--
APR 20...	0	97	--	--	--	218	--	--	--	--	--	--
MAY 29...	0	97	--	--	--	269	--	--	--	--	--	--
JUL 13...	0	150	--	--	--	346	--	--	--	--	--	--
AUG 21...	0	200	18	.2	4.5	418	.13	.010	4	<1	100	2
SEP 28...	0	190	--	--	--	396	--	--	--	--	--	--
DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 23...	--	--	--	--	--	--	390	330	60	--	--	--
DEC 08...	--	--	--	--	--	--	980	970	10	--	--	--
JAN 19...	--	--	--	--	--	--	1100	630	470	--	--	--
MAR 03...	--	--	--	--	--	--	2000	1900	100	--	--	--
APR 20...	--	--	--	--	--	--	2300	2300	10	--	--	--
MAY 29...	--	--	--	--	--	--	780	750	30	--	--	--
JUL 13...	--	--	--	--	--	--	430	410	20	--	--	--
AUG 21...	41	10	6	410	5	4	530	510	20	6200	11	8
SEP 28...	--	--	--	--	--	--	220	190	30	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

CROSS CREEK BASIN

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH

LOCATION.--Lat 40°19'18", long 80°48'49", in SE 1/4 sec. 21, T6 N., R.3 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 McIntyre Creek) and 1.6 mi (2.6 km) south of Bloomingdale.

DRAINAGE AREA.--0.98 mi² (2.54 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to current year (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 970 ft (296 m), from topographic map.

REMARKS.--

Water-year 1980: Records good, except those for periods of no gage-height record, Oct. 1 to Feb. 14, which are fair.

Water-year 1981: Records good, except those for periods of ice effect, Dec. 18 to Jan. 24, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 60 ft³/s (1.70 m³/s) June 3, 1980, gage height 14.13 ft (4.307 m); minimum daily discharge 0.13 ft³/s (0.004 m³/s) Oct. 1, 2, 1980.

EXTREMES FOR WATER YEAR 1980.--

Maximum discharge 60 ft³/s (1.70 m³/s) June 3, gage-height 14.13 ft (4.307 m); minimum daily discharge, 0.17 ft³/s (0.005 m³/s) July 3.

EXTREMES FOR WATER YEAR 1981.--

Maximum discharge 17 ft³/s (0.48 m³/s) Feb. 2, gage-height 12.44 ft (3.792 m); minimum daily discharge 0.13 ft³/s (0.004 m³/s) Oct. 1, 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.60	1.3	1.4	1.2	.66	3.0	.37	5.4	.50	.50	.58
2	1.5	.70	1.2	1.3	1.2	.62	2.1	.33	15	.24	1.1	.52
3	1.7	.60	1.1	1.2	1.1	.56	2.1	.40	31	.17	14	.56
4	1.7	.54	.98	1.1	1.1	.56	2.1	.37	21	.21	7.5	.66
5	1.6	.48	.90	.93	1.0	3.6	2.2	.46	5.6	.33	3.4	.50
6	1.5	.54	.82	.92	1.0	1.7	1.9	.31	4.2	.47	2.6	.50
7	1.3	.70	.76	.94	.98	1.3	1.8	.30	4.0	.47	1.8	.50
8	1.5	.90	.74	1.5	.94	6.3	1.7	.33	3.6	.90	1.6	.50
9	1.7	1.2	.68	2.5	.92	2.6	1.9	.37	2.5	.95	1.5	.56
10	1.5	1.6	.72	6.0	.88	1.5	1.5	.21	2.0	.95	1.3	.56
11	1.8	1.5	.90	10	.88	1.4	1.2	.26	1.5	.81	4.7	.65
12	2.0	1.4	1.1	8.0	.86	1.5	1.2	5.9	1.2	.69	6.6	.62
13	1.7	1.3	1.2	5.4	.84	1.5	1.5	12	1.0	.59	3.1	.65
14	1.6	1.2	1.3	3.7	.84	1.7	3.2	21	.86	.47	1.3	.62
15	1.5	1.1	1.3	2.5	.82	1.7	2.7	11	2.7	.39	4.3	.47
16	1.4	1.0	1.2	1.9	.82	2.9	1.6	5.0	10	.37	3.3	.65
17	1.4	.90	1.1	1.7	.81	5.0	1.1	2.0	4.8	.31	2.2	.73
18	1.3	.74	1.0	1.6	1.0	5.0	.62	1.6	2.2	.27	10	.73
19	1.2	.66	.90	1.6	1.4	4.4	.56	1.8	1.4	.27	5.4	.62
20	1.0	.62	.82	1.5	1.5	3.5	.59	1.5	1.1	.39	3.9	.59
21	.86	.74	.84	1.5	1.8	5.4	.66	2.4	.81	.39	3.2	.73
22	.80	.92	.86	1.5	3.2	4.7	1.2	1.9	.69	5.1	3.8	.50
23	.76	1.4	1.3	1.5	1.9	3.3	1.0	2.1	.65	10	2.5	.56
24	.72	1.7	2.4	1.5	1.3	3.1	.69	2.1	.65	3.7	1.7	.69
25	.68	1.9	2.7	1.8	1.1	3.6	.73	1.7	.65	1.6	1.2	.73
26	.66	2.2	2.6	1.7	.90	3.3	.90	1.2	.59	1.0	.90	.73
27	.60	2.0	2.3	1.6	.77	3.0	.81	1.0	.53	.95	.69	.77
28	.58	1.8	2.0	1.5	.77	2.5	.43	.81	.53	4.1	.59	.77
29	.56	1.7	1.9	1.4	.73	3.6	.37	.62	.53	2.0	.56	.77
30	.52	1.5	1.8	1.3	---	3.1	.33	.73	.53	1.2	.53	.73
31	.54	---	1.6	1.3	---	3.9	---	3.8	---	.77	.54	---
TOTAL	37.88	34.14	40.32	72.29	32.56	87.50	41.69	83.87	127.22	40.56	96.31	18.75
MEAN	1.22	1.14	1.30	2.33	1.12	2.82	1.39	2.71	4.24	1.31	3.11	.63
MAX	2.0	2.2	2.7	10	3.2	6.3	3.2	21	31	10	14	.77
MIN	.52	.48	.68	.92	.73	.56	.33	.21	.53	.17	.50	.47
CFSM	1.25	1.16	1.33	2.38	1.14	2.88	1.42	2.77	4.33	1.34	3.17	.64
IN.	1.44	1.29	1.53	2.74	1.23	3.32	1.58	3.18	4.82	1.54	3.65	.71

WTR YR 1980 TOTAL 713.09 MEAN 1.95 MAX 31 MIN .17 CFSM 1.99 IN 27.04

CROSS CREEK BASIN

57

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

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	.13	.14	1.3	.33	1.6	.74	.50	2.5	.26	1.0	1.1	.27
2	.13	.14	1.1	.32	1.2	.70	.43	2.2	.35	.37	.87	.54
3	.22	.15	.68	.31	4.4	.58	.43	1.1	.64	.32	1.9	.87
4	.33	.14	.58	.31	2.5	.70	.54	.92	.56	.34	2.5	.82
5	.31	.21	.48	.31	1.6	1.1	3.7	.54	1.2	.29	1.8	.43
6	.24	.24	.43	.31	1.2	1.4	4.0	.70	.98	.27	1.6	.46
7	.31	.42	.40	.31	1.0	1.4	3.5	.92	.81	.27	1.4	.40
8	.25	.50	.73	.31	.77	.97	4.7	1.0	.70	.27	1.3	.40
9	.24	.44	1.1	.31	.77	.87	2.3	1.3	1.4	.27	1.1	.46
10	.31	.19	1.3	.31	1.1	1.2	.40	1.3	2.6	.27	1.3	.34
11	.22	.21	1.3	.31	3.7	.74	2.2	2.0	2.0	.27	.54	.29
12	.24	.37	1.2	.31	2.5	.62	1.2	2.3	1.4	.27	.43	.27
13	.29	.35	1.0	.31	1.5	.46	1.2	2.0	.97	.40	.40	.43
14	.27	.35	.81	.31	1.1	.34	8.3	1.8	2.3	.54	.58	.58
15	.19	.42	.69	.31	1.2	.46	4.5	1.9	2.4	.43	.78	.54
16	.18	.37	.69	.31	2.1	.87	2.6	1.9	2.4	.29	.87	.50
17	.15	.39	.62	.31	4.7	.78	2.2	1.9	3.0	.25	.92	.58
18	.18	.42	.59	.31	3.5	.87	1.8	1.9	2.3	.25	1.3	.46
19	.18	.37	.60	.31	2.5	.87	1.3	1.7	1.6	.74	.92	.54
20	.15	.44	.54	.31	7.5	1.0	.82	1.6	1.3	1.4	.32	.54
21	.19	.47	.50	.32	7.4	1.1	2.6	.97	1.0	.27	.25	.29
22	.15	.50	.46	.32	5.7	1.3	2.3	.92	.78	.27	.25	.25
23	.14	.47	.43	.33	4.6	1.3	1.3	.87	.50	.27	.32	.25
24	.14	.59	.41	.35	5.4	.70	1.1	.87	.34	.27	.34	.25
25	.42	.77	.39	.53	4.1	.87	1.3	.87	2.8	.27	.32	.25
26	.37	.77	.37	.90	2.6	.82	1.2	.92	4.4	.70	.27	.25
27	.24	.73	.36	1.5	1.5	.70	1.8	1.1	3.1	.66	.27	.25
28	.29	1.0	.35	1.5	.70	.62	1.6	1.1	2.0	2.3	.27	.25
29	.19	1.8	.34	1.2	---	.58	1.9	1.0	.97	3.2	.27	.25
30	.19	1.6	.34	.95	---	.54	4.6	.97	.46	2.2	.25	.43
31	.17	---	.33	.77	---	.58	---	.28	---	1.6	.25	---
TOTAL	7.01	14.96	20.42	14.90	89.24	25.78	87.92	41.35	45.52	20.52	24.99	12.44
MEAN	.23	.50	.66	.48	3.19	.83	2.93	1.33	1.52	.66	.81	.41
MAX	.42	1.8	1.3	1.5	12	1.4	12	2.5	4.4	3.2	2.5	.87
MIN	.13	.14	.33	.31	.70	.34	.40	.28	.26	.25	.25	.25
CFSM	.24	.51	.67	.49	3.26	.85	2.99	1.36	1.55	.67	.83	.42
IN.	.27	.57	.77	.57	3.38	.98	3.33	1.57	1.73	.78	.95	.47
CAL YR 1980	TOTAL	643.14	MEAN	1.76	MAX	31	MIN	.13	CFSM	1.80	IN	24.39
WTR YR 1981	TOTAL	405.05	MEAN	1.11	MAX	12	MIN	.13	CFSM	1.13	IN	15.36

CROSS CREEK BASIN

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

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, 11 tons (10 tonnes) June 3, 1980, Aug. 3, 1980; minimum daily, 0.00 tons Nov. 10-15, 1980, Sept. 13, 1981.

EXTREMES FOR WATER YEAR 1980.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 395 mg/L May 27; minimum daily mean, 4 mg/L May 24.
 SEDIMENT LOADS: Maximum daily 11 tons (10 tonnes) June 3, Aug. 3; minimum daily, 0.01 tons (0.009 tonnes) May 10.

EXTREMES FOR WATER YEAR 1981:

SEDIMENT CONCENTRATIONS: Maximum daily mean, 258 mg/L Feb. 2; minimum daily mean, 3 mg/L Nov. 15.

SEDIMENT LOADS: Maximum daily, 9.1 tons (8.2 tonnes) Feb. 2; minimum daily, 0.00 tons Nov. 10-15, Sept. 13.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
20...	1030	.25	1250	7.4	10.0	20	.80	18	780	500	220	55
NOV												
17...	1015	.33	1600	7.4	5.5	2	1.2	15	740	500	200	59
DEC												
15...	1100	.42	1300	7.6	3.0	0	1.5	10	730	510	190	61
JAN												
14...	1025	.32	790	7.3	.5	<5	.90	16	780	520	210	62
FEB												
10...	1015	.45	975	7.3	.5	15	1.2	48	510	350	140	38
20...	1245	8.3	600	7.7	3.5	20	7.5	67	290	170	84	20
MAR												
18...	1640	.33	1300	7.8	2.0	5	1.0	21	730	500	200	56
APR												
23...	1100	.44	1100	7.8	10.5	5	2.5	14	630	440	170	49
MAY												
20...	1130	.47	1250	7.7	17.0	6	4.7	11	710	520	190	58
JUN												
17...	1000	.87	1050	7.8	25.0	6	.70	13	610	450	160	52
JUL												
20...	1310	.61	1300	7.6	25.5	0	1.2	16	600	440	150	54
AUG												
17...	1500	.44	1100	7.6	25.0	15	1.6	13	630	460	160	56
SEP												
03...	1100	.42	1190	8.2	23.0	5	1.4	170	610	440	150	57

DATE	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT												
20...	341	0	280	22	610	.2	6.9	.04	--	.220	--	.19
NOV												
17...	298	0	244	19	730	.2	4.5	.02	--	.110	--	.23
DEC												
15...	274	0	225	11	560	.2	4.0	.03	--	.070	--	.23
JAN												
14...	312	0	256	25	660	.2	4.6	.06	3.4	.100	21	.12
FEB												
10...	197	0	162	16	370	.2	4.1	.34	--	.050	--	.51
20...	146	0	120	4.7	200	.2	5.6	.34	--	.180	--	.56
MAR												
18...	282	0	231	7.2	650	.1	3.3	4.01	--	.010	--	.26
APR												
23...	231	0	189	5.9	490	.2	3.5	.03	--	.110	--	.26
MAY												
20...	238	0	195	7.6	540	.2	3.7	.02	--	.040	--	.25
JUN												
17...	194	0	159	4.9	420	.1	5.3	.04	1.9	.070	9.7	.35
JUL												
20...	192	0	157	7.7	490	.2	4.4	.03	--	.040	--	.36
AUG												
17...	208	0	171	8.4	480	.2	3.8	.03	--	.090	--	.25
SEP												
03...	212	0	174	2.1	470	.2	4.4	.09	--	.050	--	.68

CROSS CREEK BASIN

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03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 20...	.41	.45	2.0	.020	--	200	--	200	--	25	--	1000
NOV 17...	.34	.36	1.6	.010	--	180	--	100	--	35	--	540
DEC 15...	.30	.33	1.5	.020	--	110	--	100	--	25	--	490
JAN 14...	.22	.28	1.2	.030	540	--	11000	<50	<18	5	30	430
FEB 10...	.56	.90	4.0	.090	--	250	--	100	--	9	--	720
20...	.74	1.1	4.8	.310	--	4000	--	100	--	36	--	7700
MAR 18...	.27	--	--	.010	--	0	--	100	--	24	--	350
APR 23...	.37	.40	1.8	.030	--	80	--	100	--	14	--	310
MAY 20...	.29	.31	1.4	<.010	--	160	--	100	--	9	--	320
JUN 17...	.42	.46	2.0	.020	400	0	2800	100	62	3	10	510
JUL 20...	.40	.43	1.9	.030	--	0	--	100	--	0	--	380
AUG 17...	.34	.37	1.6	.020	--	110	--	<50	--	14	--	270
SEP 03...	.73	.82	3.6	.030	--	<10	--	<50	--	5	--	450

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	CARBON, INORG- GANIC, TOT IN BOT MAT (G/KG AS C)
OCT 20...	0	--	2600	.2	--	3	--	870	--	--	--	--
NOV 17...	1	--	880	.1	--	8	--	1200	--	--	--	--
DEC 15...	1	--	580	<.1	--	6	--	1200	--	--	--	--
JAN 14...	4	30	1000	.2	.0	4	40	1100	60	33	38	4.7
FEB 10...	1	--	780	.1	--	9	--	620	--	--	--	--
20...	10	--	650	.1	--	14	--	350	--	--	--	--
MAR 18...	7	--	900	<.1	--	4	--	1000	--	--	--	--
APR 23...	8	--	620	<.1	--	3	--	850	--	--	--	--
MAY 20...	1	--	410	--	--	6	--	930	--	--	--	--
JUN 17...	1	0	280	<.1	.0	5	0	820	20	34	36	1.8
JUL 20...	4	--	60	.1	--	6	--	120	--	--	--	--
AUG 17...	5	--	190	<.1	--	6	--	950	--	--	--	--
SEP 03...	17	--	420	<.1	--	3	--	940	--	--	--	--

CROSS CREEK BASIN

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	1.7	35	.16	.60	59	.10	1.3	35	.12
2	1.5	45	.18	.70	67	.13	1.2	29	.09
3	1.7	56	.26	.60	67	.11	1.1	22	.07
4	1.7	56	.26	.54	67	.10	.98	21	.06
5	1.6	57	.25	.48	68	.09	.90	20	.05
6	1.5	58	.23	.54	15	.02	.82	20	.04
7	1.3	61	.21	.70	19	.04	.76	19	.04
8	1.5	45	.18	.90	20	.05	.74	19	.04
9	1.7	34	.16	1.2	29	.09	.68	19	.03
10	1.5	67	.27	1.6	44	.19	.72	19	.04
11	1.8	58	.28	1.5	40	.16	.90	20	.05
12	2.0	118	.64	1.4	37	.14	1.1	60	.18
13	1.7	80	.37	1.3	35	.12	1.2	83	.27
14	1.6	60	.26	1.2	29	.09	1.3	83	.29
15	1.5	32	.13	1.1	22	.07	1.3	83	.29
16	1.4	67	.25	1.0	21	.06	1.2	83	.27
17	1.4	30	.11	.90	20	.05	1.1	83	.25
18	1.3	34	.12	.74	19	.04	1.0	21	.06
19	1.2	29	.09	.66	19	.03	.90	20	.05
20	1.0	21	.06	.62	18	.03	.82	20	.04
21	.86	19	.04	.74	19	.04	.84	20	.05
22	.80	19	.04	.92	20	.05	.86	20	.05
23	.76	18	.04	1.4	37	.14	1.3	35	.12
24	.72	18	.03	1.7	48	.22	2.4	58	.38
25	.68	15	.03	1.9	53	.27	2.7	65	.47
26	.66	15	.03	2.2	56	.33	2.6	58	.41
27	.60	14	.02	2.0	54	.29	2.3	56	.35
28	.58	14	.02	1.8	50	.24	2.0	54	.29
29	.56	14	.02	1.7	48	.22	1.9	53	.27
30	.52	14	.02	1.5	40	.16	1.8	50	.24
31	.54	20	.03	---	---	---	1.6	44	.19
TOTAL	37.88	---	4.79	34.14	---	3.67	40.32	---	5.15
JANUARY				FEBRUARY			MARCH		
1	1.4	37	.14	1.2	30	.10	.66	28	.05
2	1.3	35	.12	1.2	29	.09	.62	38	.06
3	1.2	29	.09	1.1	22	.07	.56	39	.06
4	1.1	22	.07	1.1	22	.07	.56	39	.06
5	.93	20	.05	1.0	21	.06	3.6	139	1.4
6	.92	20	.05	1.0	21	.06	1.7	49	.22
7	.94	21	.05	.98	21	.06	1.3	155	.54
8	1.5	40	.16	.94	21	.05	6.3	123	2.1
9	2.5	58	.39	.92	20	.05	2.6	38	.27
10	6.0	80	1.3	.88	20	.05	1.5	29	.12
11	10	224	6.1	.88	20	.05	1.4	40	.15
12	8.0	120	2.6	.86	20	.05	1.5	57	.23
13	5.4	99	1.4	.84	20	.05	1.5	35	.14
14	3.7	87	.87	.84	170	.39	1.7	21	.10
15	2.5	58	.39	.82	78	.17	1.7	57	.26
16	1.9	53	.27	.82	97	.21	2.9	40	.31
17	1.7	48	.22	.81	113	.25	5.0	72	.97
18	1.6	44	.19	1.0	63	.17	5.0	50	.68
19	1.6	44	.19	1.4	73	.28	4.4	40	.48
20	1.5	40	.16	1.5	102	.41	3.5	30	.28
21	1.5	40	.16	1.8	63	.31	5.4	89	1.3
22	1.5	40	.16	3.2	109	.94	4.7	60	.76
23	1.5	40	.16	1.9	48	.25	3.3	54	.48
24	1.5	40	.16	1.3	37	.13	3.1	30	.25
25	1.8	50	.24	1.1	22	.07	3.6	87	.85
26	1.7	48	.22	.90	20	.05	3.3	54	.48
27	1.6	44	.19	.77	29	.06	3.0	36	.29
28	1.5	40	.16	.77	19	.04	2.5	30	.20
29	1.4	37	.14	.73	22	.04	3.6	87	.85
30	1.3	35	.12	---	---	---	3.1	57	.48
31	1.3	35	.12	---	---	---	3.9	80	.84
TOTAL	72.29	---	16.64	32.56	---	4.58	87.50	---	15.26

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	3.0	36	.29	.37	57	.06	5.4	81	1.2
2	2.1	37	.21	.33	38	.03	15	120	4.9
3	2.1	37	.21	.40	31	.03	31	135	11
4	2.1	38	.22	.37	36	.04	21	90	5.1
5	2.2	39	.23	.46	44	.05	5.6	80	1.2
6	1.9	46	.24	.31	31	.03	4.2	70	.79
7	1.8	44	.21	.30	31	.03	4.0	60	.65
8	1.7	42	.19	.33	25	.02	3.6	50	.49
9	1.9	46	.24	.37	24	.02	2.5	40	.27
10	1.5	46	.19	.21	18	.01	2.0	28	.15
11	1.2	46	.15	.26	22	.02	1.5	25	.10
12	1.2	45	.15	5.9	56	.89	1.2	20	.06
13	1.5	44	.18	12	73	2.4	1.0	20	.05
14	3.2	109	.94	21	69	3.9	.86	20	.05
15	2.7	80	.58	11	37	1.1	2.7	55	.40
16	1.6	74	.32	5.0	25	.34	10	196	5.3
17	1.1	66	.20	2.0	20	.11	4.8	140	1.8
18	.62	56	.09	1.6	50	.22	2.2	245	1.5
19	.56	47	.07	1.8	74	.36	1.4	196	.74
20	.59	40	.06	1.5	34	.14	1.1	255	.76
21	.66	56	.10	2.4	40	.26	.81	202	.44
22	1.2	80	.26	1.9	40	.21	.69	156	.29
23	1.0	66	.18	2.1	52	.29	.65	150	.26
24	.69	55	.10	2.1	4	.02	.65	111	.19
25	.73	45	.09	1.7	71	.33	.65	100	.18
26	.90	50	.12	1.2	95	.31	.59	103	.16
27	.81	30	.07	1.0	395	1.1	.53	98	.14
28	.43	29	.03	.81	57	.12	.53	126	.18
29	.37	27	.03	.62	30	.05	.53	103	.15
30	.33	26	.02	.73	42	.08	.53	103	.15
31	---	---	---	3.8	92	.94	---	---	---
TOTAL	41.69	---	5.97	83.87	---	13.51	127.22	---	38.65
JULY				AUGUST				SEPTEMBER	
1	.50	203	.27	.50	78	.11	.58	64	.10
2	.24	109	.07	1.1	100	.30	.52	55	.08
3	.17	166	.08	14	280	11	.56	61	.09
4	.21	131	.07	7.5	124	2.5	.66	70	.12
5	.33	125	.11	3.4	106	.97	.50	37	.05
6	.47	102	.13	2.6	54	.38	.50	90	.12
7	.47	70	.09	1.8	38	.18	.50	72	.10
8	.90	123	.30	1.6	32	.14	.50	155	.21
9	.95	108	.28	1.5	30	.12	.56	74	.11
10	.95	157	.40	1.3	77	.27	.56	55	.08
11	.81	114	.25	4.7	261	3.3	.65	95	.17
12	.69	88	.16	6.6	103	1.8	.62	171	.29
13	.59	69	.11	3.1	58	.49	.65	86	.15
14	.47	56	.07	1.3	36	.13	.62	58	.10
15	.39	89	.09	4.3	131	1.5	.47	42	.05
16	.37	85	.08	3.3	75	.67	.65	45	.08
17	.31	87	.07	2.2	46	.27	.73	109	.21
18	.27	87	.06	10	132	3.6	.73	52	.10
19	.27	66	.05	5.4	58	.85	.62	67	.11
20	.39	58	.06	3.9	96	1.0	.59	69	.11
21	.39	48	.05	3.2	224	1.9	.73	110	.22
22	5.1	316	4.4	3.8	81	.83	.50	95	.13
23	10	227	6.1	2.5	36	.24	.56	71	.11
24	3.7	207	2.1	1.7	34	.16	.69	48	.09
25	1.6	194	.84	1.2	28	.09	.73	101	.20
26	1.0	66	.18	.90	21	.05	.73	120	.24
27	.95	30	.08	.69	22	.04	.77	103	.21
28	4.1	338	3.7	.59	28	.04	.77	103	.21
29	2.0	292	1.6	.56	60	.09	.77	112	.23
30	1.2	140	.45	.53	41	.06	.73	67	.13
31	.77	101	.21	.54	50	.07	---	---	---
TOTAL	40.56	---	22.51	96.31	---	33.15	18.75	---	4.20
YEAR	713.09		168.08						

CROSS CREEK BASIN

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	.13	85	.03	.14	91	.03	1.3	66	.23
2	.13	84	.03	.14	155	.06	1.1	59	.18
3	.22	69	.04	.15	47	.02	.68	46	.08
4	.33	75	.07	.14	28	.01	.58	53	.08
5	.31	49	.04	.21	60	.03	.48	80	.10
6	.24	68	.04	.24	25	.02	.43	57	.07
7	.31	52	.04	.42	25	.03	.40	46	.05
8	.25	67	.05	.50	18	.02	.73	85	.17
9	.24	58	.04	.44	10	.01	1.1	86	.26
10	.31	42	.04	.19	8	.00	1.3	90	.32
11	.22	67	.04	.21	9	.00	1.3	66	.23
12	.24	58	.04	.37	10	.00	1.2	23	.07
13	.29	81	.06	.35	5	.00	1.0	20	.05
14	.27	142	.10	.35	6	.00	.81	26	.06
15	.19	79	.04	.42	3	.00	.69	29	.05
16	.18	99	.05	.37	75	.07	.69	41	.08
17	.15	89	.04	.39	154	.16	.62	27	.05
18	.18	75	.04	.42	136	.15	.59	43	.07
19	.18	84	.04	.37	49	.05	.60	26	.04
20	.15	136	.06	.44	21	.02	.54	37	.05
21	.19	93	.05	.47	54	.07	.50	36	.05
22	.15	93	.04	.50	33	.04	.46	36	.04
23	.14	90	.03	.47	71	.09	.43	35	.04
24	.14	90	.03	.59	69	.11	.41	35	.04
25	.42	90	.10	.77	89	.19	.39	34	.04
26	.37	47	.05	.77	70	.15	.37	34	.03
27	.24	66	.04	.73	87	.17	.36	33	.03
28	.29	58	.05	1.0	183	.49	.35	33	.03
29	.19	71	.04	1.8	74	.36	.34	32	.03
30	.19	111	.06	1.6	66	.29	.34	31	.03
31	.17	84	.04	---	---	---	.33	31	.03
TOTAL	7.01	---	1.46	14.96	---	2.64	20.42	---	2.68
JANUARY				FEBRUARY			MARCH		
1	.33	30	.03	1.6	52	.38	.74	75	.15
2	.32	29	.03	12	258	.91	.70	55	.10
3	.31	25	.02	4.4	73	.91	.58	45	.07
4	.31	25	.02	2.5	56	.38	.70	35	.07
5	.31	25	.02	1.6	67	.29	1.1	70	.21
6	.31	25	.02	1.2	34	.11	1.4	36	.14
7	.31	25	.02	1.0	42	.11	1.4	42	.16
8	.31	25	.02	.77	55	.11	.97	34	.09
9	.31	25	.02	.77	49	.10	.87	38	.09
10	.31	25	.02	1.1	84	.25	1.2	39	.13
11	.31	20	.02	3.7	81	.81	.74	34	.07
12	.31	20	.02	2.5	45	.30	.62	47	.08
13	.31	20	.02	1.5	36	.15	.46	44	.05
14	.31	20	.02	1.1	28	.08	.34	40	.04
15	.31	20	.02	1.2	30	.10	.46	58	.07
16	.31	15	.01	2.1	203	1.2	.87	48	.11
17	.31	15	.01	4.7	127	1.6	.78	70	.15
18	.31	15	.01	3.5	82	.77	.87	38	.09
19	.31	15	.01	2.5	105	.71	.87	25	.06
20	.31	15	.01	7.5	218	4.4	1.0	83	.22
21	.32	25	.02	7.4	93	1.9	1.1	39	.12
22	.32	25	.02	5.7	74	1.1	1.3	54	.19
23	.33	25	.02	4.6	202	2.5	1.3	28	.10
24	.35	25	.02	5.4	55	.80	.70	34	.06
25	.53	37	.05	4.1	35	.39	.87	76	.18
26	.90	59	.14	2.6	28	.20	.82	39	.09
27	1.5	75	.30	1.5	37	.15	.70	31	.06
28	1.5	66	.27	.70	75	.14	.62	98	.16
29	1.2	59	.19	---	---	---	.58	89	.14
30	.95	46	.12	---	---	---	.54	34	.05
31	.77	40	.08	---	---	---	.58	53	.08
TOTAL	14.90	---	1.60	89.24	---	29.04	25.78	---	3.38

CROSS CREEK BASIN

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03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	.50	28	.04	2.5	56	.38	.26	33	.02
2	.43	53	.06	2.2	36	.21	.35	32	.03
3	.43	33	.04	1.1	33	.10	.64	26	.04
4	.54	56	.08	.92	19	.05	.56	40	.06
5	3.7	254	2.5	.54	35	.05	1.2	24	.08
6	4.0	62	.67	.70	59	.11	.98	17	.04
7	3.5	67	.63	.92	41	.10	.81	49	.11
8	4.7	138	1.8	1.0	67	.18	.70	80	.15
9	2.3	69	.43	1.3	42	.15	1.4	90	.34
10	.40	78	.08	1.3	37	.13	2.6	35	.25
11	2.2	83	.49	2.0	55	.30	2.0	33	.18
12	12	147	4.8	2.3	22	.14	1.4	24	.09
13	12	104	3.4	2.0	25	.14	.97	23	.06
14	8.3	78	1.7	1.8	20	.10	2.3	88	.55
15	4.5	67	.81	1.9	24	.12	2.4	24	.16
16	2.6	51	.36	1.9	18	.09	2.4	55	.36
17	2.2	58	.34	1.9	19	.10	3.0	44	.36
18	1.8	66	.32	1.9	19	.10	2.3	26	.16
19	1.3	73	.26	1.7	22	.10	1.6	21	.09
20	.82	51	.11	1.6	24	.10	1.3	16	.06
21	2.6	138	.97	.97	39	.10	1.0	38	.10
22	2.3	42	.26	.92	34	.08	.78	23	.05
23	1.3	48	.17	.87	58	.14	.50	24	.03
24	1.1	40	.12	.87	54	.13	.34	28	.03
25	1.3	36	.13	.87	49	.12	2.8	88	.67
26	1.2	32	.10	.92	24	.06	4.4	21	.25
27	1.8	64	.31	1.1	42	.12	3.1	18	.15
28	1.6	36	.16	1.1	38	.11	2.0	22	.12
29	1.9	133	.68	1.0	37	.10	.97	15	.04
30	4.6	154	1.9	.97	33	.09	.46	24	.03
31	---	---	---	.26	32	.02	---	---	---
TOTAL	87.92	---	23.72	41.35	---	3.82	45.52	---	4.65
JULY				AUGUST				SEPTEMBER	
1	1.0	72	.19	1.1	24	.07	.27	45	.03
2	.37	51	.05	.87	20	.05	.54	50	.07
3	.32	55	.05	1.9	41	.21	.87	55	.13
4	.34	59	.05	2.5	30	.20	.82	53	.12
5	.29	97	.08	1.8	88	.43	.43	35	.04
6	.27	107	.08	1.6	24	.10	.46	35	.04
7	.27	117	.09	1.4	11	.04	.40	40	.04
8	.27	67	.05	1.3	23	.08	.40	35	.04
9	.27	17	.01	1.1	32	.10	.46	40	.05
10	.27	22	.02	1.3	18	.06	.34	35	.03
11	.27	26	.02	.54	32	.05	.29	46	.04
12	.27	26	.02	.43	24	.03	.27	50	.04
13	.40	74	.08	.40	24	.03	.43	8	.00
14	.54	50	.07	.58	29	.05	.58	12	.02
15	.43	40	.05	.78	35	.07	.54	24	.03
16	.29	30	.02	.87	55	.13	.50	18	.02
17	.25	20	.01	.92	24	.06	.58	55	.09
18	.25	10	.00	1.3	27	.09	.46	13	.02
19	.74	23	.05	.92	24	.06	.54	16	.02
20	1.4	47	.18	.32	53	.05	.54	43	.05
21	.27	70	.05	.25	24	.02	.29	42	.03
22	.27	161	.12	.25	24	.02	.25	58	.04
23	.27	90	.07	.32	60	.05	.25	70	.05
24	.27	47	.03	.34	65	.06	.25	192	.13
25	.27	31	.02	.32	60	.05	.25	57	.04
26	.70	119	.22	.27	50	.04	.25	30	.02
27	.66	90	.16	.27	50	.04	.25	76	.05
28	2.3	113	.70	.27	40	.03	.25	136	.09
29	3.2	24	.21	.27	30	.02	.25	39	.03
30	2.2	33	.20	.25	30	.02	.43	57	.07
31	1.6	32	.14	.25	30	.02	---	---	---
TOTAL	20.52	---	3.09	24.99	---	2.33	12.44	---	1.48
YEAR	405.05		79.90						

SHORT CREEK BASIN

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 mi² (319 km²).

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.--40 years, 131 ft³/s (3.710 m³/s), 14.46 in/yr (367 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s (184 m³/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 ft³/s (0.079 m³/s) Sept. 21, 27, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 20	---	1500 42.5	---	June 6	---	1900 53.8	---
Apr. 12	2200	*3490 98.8	*8.10 2.469	June 9	---	2100 59.5	---

Minimum daily discharge, 36 ft³/s (1.02 m³/s) Jan. 5-24.

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	---	129	71
2	85	69	128	50	465	220	116	255	115	---	118	203
3	86	67	121	44	261	206	111	231	---	200	115	296
4	88	70	101	38	220	192	111	214	---	180	261	161
5	80	70	96	36	160	250	377	201	---	180	135	109
6	76	62	98	36	140	271	238	229	---	170	115	87
7	74	60	113	36	130	231	186	208	260	160	110	78
8	71	73	144	36	120	210	166	185	---	140	105	121
9	70	69	190	36	120	196	162	174	---	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	285	158	79	65
15	65	56	107	36	110	145	555	282	280	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	---	127	65	70
21	74	64	60	36	960	146	298	155	---	146	62	64
22	64	65	55	36	620	140	282	146	---	128	61	68
23	61	60	50	36	660	137	336	139	---	99	58	67
24	61	131	50	36	750	130	311	139	---	89	54	57
25	156	184	50	60	510	125	285	134	---	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	---	187	114	45
31	77	---	70	60	---	133	---	125	---	149	82	---
TOTAL	2525	2625	3119	1629	10810	5265	12584	5919	---	---	2749	2688
MEAN	81.5	87.5	101	52.5	386	170	419	191	---	---	88.7	89.6
MAX	156	241	243	190	1100	271	2600	295	---	---	261	296
MIN	61	55	50	36	110	122	111	125	---	---	51	45
CFSM	.66	.71	.82	.43	3.14	1.38	3.41	1.55	---	---	.72	.73
IN.	.76	.79	.94	.49	3.27	1.59	3.81	1.79	---	---	.83	.81

CAL YR 1980 TOTAL 78928 MEAN 216 MAX 2630 MIN 50 CFSM 1.76 IN 23.87

03111500 SHORT CREEK NEAR DILLONVALE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years May 1980 to. Sept. 1981 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1980 to Sept. 1981 (discontinued).

pH: November 1980 to Mar. 1981 (discontinued).

WATER TEMPERATURES: May 1980 to September 1981 (discontinued).

SUSPENDED SEDIMENT DISCHARGE: May 1980 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor and sediment-pumping sampler.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,300 micromhos Nov. 22, 1980, minimum, 330 micromhos Aug. 3, 18, 1980.

pH: Maximum, 8.2 units Nov. 16, 17, 1980; minimum, 6.8 units Feb. 26-28, Mar. 1, 2, 1981.

WATER TEMPERATURES: Maximum, 28.5°C July 16, 1980; minimum, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 12,000 mg/L Aug. 11, 1980; minimum daily mean, 27 mg/L June 5, 1980.

SEDIMENT LOADS: Maximum daily, 45,200 tons (41,000 tonnes) Aug. 11, 1980; minimum daily 4.6 tons (4.2 tonnes) Sept. 26, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,300 micromhos Nov. 22; minimum, 660 micromhos July 28.

pH: Maximum, 8.2 units Nov. 12, 16, 17; minimum, 6.8 units Feb. 26-28, Mar. 1, 2.

WATER TEMPERATURES: Maximum, 26.5°C July 09; minimum, 0.0°C on many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,840 mg/L April 12; minimum daily mean 32 mg/L Feb. 4, Sept. 25.

SEDIMENT LOADS: Maximum daily, 20,200 tons (18,300 tonnes) April 12; minimum daily, 4.6 tons (4.2 tonnes) Sept. 26.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 21...	1200	67	2200	8.1	10.5	--	--	--	--	--	--	293
DEC 09...	1025	173	1620	7.7	8.5	--	--	--	--	--	--	246
JAN 21...	1030	65	2090	7.8	.5	--	--	--	--	--	--	296
MAR 02...	1335	224	1950	8.0	5.5	--	--	--	--	--	--	259
24...	1150	129	1720	7.9	5.0	--	--	--	--	--	--	262
APR 15...	1240	549	1300	8.0	11.0	--	--	--	--	--	--	230
MAY 04...	1415	218	1900	8.1	16.0	--	--	--	--	--	--	260
JUN 11...	1445	338	1300	8.0	18.5	--	--	--	--	--	--	116
JUL 08...	1500	125	1850	7.8	25.0	--	--	--	--	--	--	252
AUG 10...	1520	86	2200	8.2	22.5	1000	790	240	100	92	5.8	255
SEP 09...	1315	108	1600	7.9	18.5	--	--	--	--	--	--	248

DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 21...	0	1200	--	--	--	2160	--	--	--	--	--	--
DEC 09...	0	730	--	--	--	1370	--	--	--	--	--	--
JAN 21...	0	990	--	--	--	1410	--	--	--	--	--	--
MAR 02...	0	730	--	--	--	1360	--	--	--	--	--	--
24...	0	910	--	--	--	1540	--	--	--	--	--	--
APR 15...	0	620	--	--	--	1110	--	--	--	--	--	--
MAY 04...	0	910	--	--	--	1500	--	--	--	--	--	--
JUN 11...	0	560	--	--	--	1120	--	--	--	--	--	--
JUL 08...	0	970	--	--	--	1660	--	--	--	--	--	--
AUG 10...	0	930	17	.3	5.6	1700	.23	<.010	2	2	<50	1
SEP 09...	0	830	--	--	--	1480	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G) (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 21...	--	--	--	--	--	--	2900	2900	50	--	--	--
DEC 09...	--	--	--	--	--	--	6700	6600	60	--	--	--
JAN 21...	--	--	--	--	--	--	8300	8000	350	--	--	--
MAR 02...	--	--	--	--	--	--	4200	4200	20	--	--	--
24...	--	--	--	--	--	--	3900	3800	110	--	--	--
APR 15...	--	--	--	--	--	--	5300	5300	10	--	--	--
MAY 04...	--	--	--	--	--	--	2500	2500	20	--	--	--
JUN 11...	--	--	--	--	--	--	4400	4400	10	--	--	--
JUL 08...	--	--	--	--	--	--	3500	3500	30	--	--	--
AUG 10...	1	10	<10	20	4	10	2600	2600	50	14000	6	20
SEP 09...	--	--	--	--	--	--	3600	3600	30	--	--	--

[illegible]

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SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2460	2420	2330	2290	1950	1880	2160	2060	1970	780	1060	1020
2	2430	2390	2360	2310	1980	1950	2160	2100	1310	660	1120	1060
3	2420	2400	2390	2340	2170	1960	2240	2130	1250	1090	1190	1110
4	2400	2380	2380	2340	2220	2160	2410	2240	1310	1090	1170	1130
5	2410	2380	2350	2330	2230	2200	2500	2420	1420	1310	1140	740
6	2440	2400	2510	2320	2220	2190	2470	2320	1440	1410	920	830
7	2460	2430	2500	2390	2210	2160	2320	2230	1470	1430	1000	930
8	2460	2430	2550	2420	2180	2070	2310	2200	1450	1330	1070	1010
9	2630	2440	2550	2410	2080	1530	2340	2270	1580	1290	1120	1060
10	2620	2570	2520	2460	1790	1500	2350	2220	1580	1220	1160	1110
11	2810	2520	2520	2340	1890	1810	2410	2240	1190	1030	1200	1160
12	2620	2590	2550	2510	1940	1890	2440	2380	1350	1130	1210	1170
13	2620	2600	2570	2540	1990	1900	2400	2300	1460	1350	1270	1200
14	2630	2610	2580	2550	2040	1940	2310	2260	1470	1400	1330	1270
15	2610	2560	2570	2550	2070	1980	2260	2250	1530	1340	1410	1300
16	2640	2580	2570	2480	2160	1900	2280	2250	1510	890	1300	1190
17	2670	2580	2540	2320	2150	2000	2280	2240	1000	870	1440	1300
18	2660	1910	2370	2210	2160	2070	2350	2250	980	920	1530	1440
19	2370	2080	2310	2260	2200	2090	2390	2260	930	410	1620	1510
20	2460	2360	2340	2300	2360	2210	2320	2230	750	470	1670	1620
21	2490	2410	2390	2310	2410	2370	2230	2150	860	750	1670	1640
22	2500	2460	2400	2290	2440	2330	2190	2120	880	830	1740	1650
23	2520	2500	2380	2310	2340	2120	2180	2150	910	740	1790	1740
24	2530	2420	2340	2190	2210	2140	2200	2130	820	750	1810	1760
25	2380	2040	2190	2170	2380	2190	2190	1960	900	830	1810	1780
26	2210	2080	2250	2180	2460	2380	1950	1530	990	900	1850	1810
27	2300	2220	2260	1700	2380	2270	1630	1470	1040	980	1830	1690
28	2330	2290	1810	1670	2460	2340	1710	1630	1050	1020	1820	1720
29	2340	2310	1850	1810	2440	2190	1770	1710	---	---	1880	1810
30	2320	2300	1890	1830	2240	2180	1860	1770	---	---	1880	1750
31	2340	2300	---	---	2210	2120	1920	1850	---	---	1930	1750
MONTH	2810	1910	2580	1670	2460	1500	2500	1470	1970	410	1930	740
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1970	1820	1900	780	1							

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	---	---	3.2	3.1	3.4	3.3	3.4	3.3	3.5	3.4	4.0	4.0
2	---	---	3.2	3.1	3.3	3.2	3.4	3.4	3.9	3.5	4.0	4.0
3	---	---	3.2	3.1	3.4	3.2	3.4	3.3	3.9	3.9	4.0	3.9
4	---	---	3.1	3.0	3.4	3.3	3.4	3.3	4.0	3.9	4.0	3.9
5	---	---	3.1	3.0	3.4	3.3	3.3	3.3	4.0	3.9	4.2	3.9
6	---	---	3.2	3.1	3.3	3.2	3.3	3.3	3.9	3.9	4.3	4.2
7	---	---	3.2	3.1	3.2	3.1	3.3	3.3	3.9	3.9	4.3	4.3
8	---	---	3.1	3.0	3.2	3.1	3.4	3.3	3.9	3.8	4.3	4.2
9	---	---	3.2	3.0	3.4	3.1	3.3	3.3	3.9	3.8	4.2	4.1
10	---	---	3.1	3.1	3.5	3.4	3.3	3.3	3.8	3.8	4.1	3.9
11	---	---	3.3	3.1	3.4	3.4	3.3	3.3	4.0	3.8	3.9	3.9
12	---	---	3.3	3.2	3.4	3.3	3.3	3.3	4.0	4.0	3.9	3.8
13	---	---	3.2	3.1	3.4	3.3	3.3	3.3	4.0	4.0	3.8	3.7
14	---	---	3.2	3.1	3.4	3.3	3.3	3.3	4.0	4.0	3.7	3.7
15	---	---	3.1	3.1	3.4	3.3	3.3	3.3	4.1	4.0	3.7	3.7
16	---	---	3.2	3.1	3.4	3.3	3.3	3.3	4.1	4.0	4.1	3.7
17	---	---	3.3	3.1	3.4	3.3	3.3	3.3	4.1	4.0	4.2	4.1
18	---	---	3.3	3.2	3.5	3.3	3.3	3.3	4.1	4.1	4.2	4.1
19	---	---	3.3	3.2	3.3	3.3	3.3	3.3	4.2	4.1	4.1	4.0
20	---	---	3.3	3.3	3.5	3.3	3.3	3.3	4.3	4.2	4.0	3.9
21	---	---	3.3	3.2	3.5	3.4	3.3	3.3	4.3	4.2	3.9	3.8
22	---	---	3.4	3.2	3.4	3.3	3.3	3.3	4.3	4.2	3.8	3.8
23	---	---	3.3	3.2	3.5	3.3	3.3	3.3	4.2	4.1	3.8	3.7
24	---	---	3.2	3.2	3.4	3.3	3.3	3.3	4.3	4.2	3.7	3.7
25	---	---	3.2	3.2	3.4	3.3	3.3	3.3	4.3	4.2	3.7	3.6
26	---	---	3.3	3.2	3.3	3.3	3.4	3.3	4.2	4.2	3.7	3.6
27	3.2	3.2	3.5	3.3	3.4	3.3	3.5	3.4	4.2	4.1	3.6	3.6
28	3.2	3.2	3.5	3.4	3.3	3.3	3.5	3.5	4.1	4.0	3.7	3.6
29	3.2	3.1	3.5	3.4	3.3	3.3	3.5	3.5	---	---	3.6	3.5
30	3.2	3.2	3.5	3.4	3.3	3.3	3.5	3.4	---	---	3.5	3.5
31	3.2	3.1	---	---	3.4	3.3	3.4	3.4	---	---	3.6	3.5
MONTH	3.2	3.1	3.5	3.0	3.5	3.1	3.5	3.3	4.3	3.4	4.3	3.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	3.6	3.5	4.1	3.7	4.1	4.0	3.7	3.6	3.1	3.0	---	---
2	3.6	3.5	4.2	4.0	3.9	3.8	3.7	3.7	3.1	3.0	---	---
3	3.5	3.5	4.0	3.8	3.8	3.7	3.7	3.7	3.1	3.0	---	---
4	3.7	3.4	3.9	3.8	3.7	3.7	3.8	3.7	3.0	3.0	---	---
5	4.2	3.8	3.8	3.7	3.7	3.7	3.8	3.7	3.0	3.0	---	---
6	4.2	4.1	3.8	3.7	4.1	3.7	3.7	3.7	3.1	3.0	---	---
7	4.1	4.0	3.9	3.8	4.1	4.0	3.7	3.7	3.1	3.0	---	---
8	4.0	3.9	3.8	3.8	4.0	3.9	3.7	3.7	3.1	3.0	---	---
9	3.9	3.7	3.8	3.7	3.9	3.8	3.7	3.7	3.1	3.0	---	---
10	3.8	3.7	3.7	3.7	4.1	3.9	3.7	3.7	3.1	3.0	---	---
11	3.7	3.6	4.2	3.7	4.1	4.0	3.7	3.7	3.2	3.0	---	---
12	4.1	3.7	4.2	4.2	4.0	3.8	3.7	3.7	3.2	3.0	---	---
13	4.1	4.0	4.2	4.1	4.0	3.8	---	---	3.2	3.1	---	---
14	3.9	3.8	4.1	3.9	4.4	4.1	---	---	3.1	3.1	---	---
15	3.8	3.8	4.1	4.0	4.4	4.3	---	---	3.3	2.9	---	---
16	3.8	3.7	4.1	4.0	4.3	4.2	3.2	3.0	3.0	2.9	---	---
17	3.7	3.7	4.0	3.9	4.2	4.1	3.1	2.9	2.9	2.9	---	---
18	3.7	3.7	3.9	3.8	4.1	4.0	3.0	2.9	2.9	2.8	---	---
19	3.7	3.7	3.8	3.8	4.0	3.9	3.0	2.9	2.9	2.8	---	---
20	3.7	3.7	3.8	3.8	3.9	3.8	3.0	2.9	2.9	2.8	---	---
21	3.7	3.7	3.7	3.7	3.8	3.8	3.0	2.9	2.8	2.8	---	---
22	3.7	3.7	3.7	3.7	3.8	3.8	3.0	3.0	2.8	2.8	---	---
23	4.1	3.7	3.7	3.6	3.8	3.8	3.1	3.0	2.8	2.7	---	---
24	4.1	4.1	3.6	3.6	3.8	3.7	3.0	2.9	2.8	2.7	---	---
25	4.1	4.0	3.6	3.5	3.8	3.7	3.0	3.0	2.7	2.7	2.5	2.4
26	4.0	3.8	3.6	3.5	3.8	3.7	3.1	2.9	2.7	2.7	2.5	2.4
27	3.8	3.7	3.8	3.6	3.8	3.7	3.1	2.9	---	---	2.5	2.4
28	3.7	3.6	4.1	3.8	3.8	3.7	3.1	3.0	---	---	2.4	2.4
29	3.7	3.6	4.1	3.9	3.7	3.7	3.1	3.0	---	---	2.4	2.3
30	3.7	3.6	4.1	3.9	3.7	3.7	3.1	3.0	---	---	2.5	2.4
31	---	---	4.1	4.0	---	---	3.1	3.0	---	---	---	---
MONTH	4.2	3.4	4.2	3.5	4.4	3.7	3.8	2.9	3.3	2.7	2.5	2.3
YEAR	4.4	2.3										

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	18.5	14.0	9.0	6.0	7.0	4.0	1.5	1.0	.0	.0	6.0	5.0
2	17.0	15.0	8.0	3.5	7.0	4.5	1.5	.0	1.0	.0	6.0	4.0
3	15.0	13.0	10.0	4.0	4.0	1.0	.5	.0	.0	.0	5.5	1.5
4	13.0	11.0	12.0	9.0	3.0	.0	.0	.0	.0	.0	3.5	2.0
5	12.0	9.0	9.0	6.5	5.5	3.0	.0	.0	.0	.0	3.5	2.5
6	12.0	7.5	8.0	4.5	8.0	5.5	.0	.0	.0	.0	5.0	2.5
7	14.5	10.5	11.5	6.5	10.5	7.5	.0	.0	.5	.0	5.0	1.5
8	15.0	10.0	11.5	8.5	11.5	9.5	.0	.0	1.5	.0	4.5	2.5
9	16.5	12.5	12.5	8.0	10.5	7.0	.0	.0	.0	.0	5.5	3.0
10	16.0	11.5	9.0	4.5	7.0	4.5	.0	.0	1.5	.0	6.5	4.0
11	15.5	12.0	5.5	2.5	4.5	3.5	.0	.0	2.0	.0	5.5	4.0
12	12.0	10.5	5.0	1.0	5.5	3.5	.0	.0	.0	.0	8.5	2.5
13	11.5	8.0	7.0	2.5	5.0	3.0	.0	.0	.0	.0	9.0	4.5
14	12.0	8.0	8.0	4.5	3.0	1.5	.0	.0	.0	.0	7.5	2.5
15	14.0	10.0	7.5	6.0	3.0	1.5	.0	.0	.5	.0	8.5	2.0
16	15.5	10.5	7.5	4.5	3.5	2.5	.0	.0	2.5	.5	7.5	4.0
17	15.5	11.5	4.5	1.0	2.5	1.5	.0	.0	4.0	1.5	5.5	2.0
18	16.0	14.5	4.5	2.5	4.0	2.0	.0	.0	6.0	2.5	6.0	1.0
19	14.0	11.5	4.0	1.5	4.0	.0	.0	.0	4.5	4.0	4.5	2.0
20	11.5	9.5	3.5	.5	.0	.0	.0	.0	4.0	3.5	5.5	1.5
21	13.5	9.0	4.0	.5	.0	.0	.0	.0	7.0	3.5	8.0	3.0
22	13.0	9.5	4.0	.5	.5	.0	.0	.0	7.5	3.5	6.5	2.5
23	11.5	7.5	5.5	2.0	.0	.0	.0	.0	7.0	5.0	10.0	4.0
24	12.0	7.0	7.0	5.5	.0	.0	.0	.0	4.5	4.0	9.5	3.5
25	11.5	7.5	6.0	3.0	.0	.0	.0	.0	7.0	3.0	11.0	4.5
26	7.0	6.0	3.0	.5	.0	.0	3.0	.0	4.5	1.5	9.0	4.5
27	7.5	4.0	4.5	2.5	.0	.0	3.0	1.5	6.0	2.0	11.5	8.0
28	8.5	7.5	5.0	4.0	.0	.0	3.0	.5	7.0	4.5	12.5	4.5
29	8.5	5.0	3.5	2.5	.0	.0	1.0	.0	---	---	15.0	7.5
30	8.0	4.0	5.0	2.5	.0	.0	.0	.0	---	---	13.5	11.5
31	8.5	3.5	---	---	1.0	.0	.0	.0	---	---	16.5	8.5
MONTH	18.5	3.5	12.5	.5	11.5	.0	3.0	.0	7.5	.0	16.5	1.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	16.0	11.0	15.0	11.0	18.5	15.0	24.0	21.5	25.0	18.0	---	---
2	16.0	9.0	15.0	10.5	20.5	16.5	23.0	20.0	25.0	19.0	---	---
3	16.5	10.0	18.0	9.5	22.0	18.0	24.0	20.5	24.0	20.0	---	---
4	15.0	12.0	19.0	11.0	21.5	19.0	23.5	20.5	26.5	21.5	---	---
5	13.0	10.5	17.5	13.5	22.5	19.0	23.0	21.0	26.0	22.0	---	---
6	13.5	8.5	16.5	11.5	21.5	19.0	24.5	20.5	23.5	22.0	---	---
7	14.5	7.0	17.0	9.5	23.5	17.5	25.5	21.5	22.5	20.5	---	---
8	16.5	9.5	18.5	10.0	23.5	17.5	26.0	22.5	23.0	19.0	---	---
9	16.5	12.5	17.0	12.0	24.5	20.0	27.5	23.5	24.0	18.5	---	---
10	14.0	9.0	18.0	14.5	22.5	18.5	26.5	23.5	25.0	18.5	---	---
11	18.0	12.5	16.0	14.0	21.5	17.5	24.5	18.5	24.5	20.5	---	---
12	17.0	14.0	15.0	12.5	23.0	18.5	24.5	19.5	23.5	17.0	---	---
13	18.5	14.0	18.0	11.5	22.5	20.0	---	---	24.0	18.0	---	---
14	16.5	13.5	17.5	14.0	24.0	20.0	---	---	24.0	19.0	---	---
15	16.0	9.5	15.0	13.0	26.0	21.0	---	---	23.0	20.5	---	---
16	15.5	8.5	17.0	12.5	25.0	21.5	24.0	23.0	24.0	19.5	---	---
17	15.5	13.0	19.0	11.5	24.0	20.0	25.5	21.0	22.0	15.0	---	---
18	19.0	14.0	16.5	12.0	25.0	18.5	27.0	20.5	21.0	14.0	---	---
19	15.5	11.5	13.0	11.5	24.0	19.0	23.5	21.5	22.5	14.0	---	---
20	15.5	11.0	18.0	9.5	24.5	20.5	25.5	22.0	22.5	14.0	---	---
21	15.0	7.5	19.0	11.0	23.0	20.5	25.0	22.5	18.5	15.0	---	---
22	13.0	9.5	20.5	13.0	24.0	20.5	24.0	20.0	22.5	15.5	---	---
23	15.0	12.0	21.0	15.0	23.5	18.5	23.0	17.0	23.0	14.5	---	---
24	13.0	9.5	22.5	16.0	23.5	18.5	25.5	19.5	23.0	15.5	---	---
25	13.0	9.0	21.5	17.5	24.0	21.0	26.0	20.5	23.5	16.5	14.5	10.0
26	14.5	8.0	20.5	17.0	22.0	18.5	25.0	22.0	23.5	15.0	19.0	12.0
27	19.5	11.0	20.0	18.0	21.5	16.0	25.0	22.0	---	---	18.5	15.0
28	20.5	14.0	18.0	17.0	22.5	16.5	25.0	22.5	---	---	16.0	11.0
29	18.5	15.0	22.0	16.5	24.0	19.0	23.5	19.5	---	---	12.5	7.5
30	16.5	13.0	20.0	17.0	25.5	21.0	22.5	16.0	---	---	15.5	11.5
31	---	---	20.5	16.5	---	---	24.0	17.0	---	---	---	---
MONTH	20.5	7.0	22.5	9.5	26.0	15.0	27.5	16.0	26.5	14.0	19.0	7.5
YEAR	27.5	.0										

SHORT CREEK BASIN

03111500 SHORT CREEK NEAR DILLONVALE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	84	58	13	73	78	15	143	58	22
2	85	82	19	69	73	14	128	63	22
3	86	92	21	67	72	13	121	74	24
4	88	73	17	70	83	16	101	67	18
5	80	65	14	70	74	14	96	58	15
6	76	66	14	62	61	10	98	53	14
7	74	73	15	60	57	9.2	113	57	17
8	71	64	12	73	64	13	144	56	22
9	70	68	13	69	71	13	190	112	57
10	66	78	14	62	69	12	243	149	98
11	88	112	27	60	64	10	169	97	44
12	76	73	15	57	59	9.1	146	86	34
13	69	67	12	56	47	7.1	134	107	39
14	65	75	13	56	73	11	116	107	34
15	65	59	10	56	51	7.7	107	79	23
16	65	78	14	56	48	7.3	100	83	22
17	64	83	14	56	67	10	90	77	19
18	85	129	35	69	75	14	80	97	21
19	88	70	17	64	75	13	75	90	18
20	71	52	10	55	69	10	65	69	12
21	74	100	20	64	66	11	60	92	15
22	64	69	12	65	70	12	55	52	7.7
23	61	68	11	60	83	13	50	59	8.0
24	61	71	12	131	217	86	50	63	8.5
25	156	160	79	184	123	64	50	64	8.6
26	149	114	46	116	66	21	50	65	8.8
27	98	109	29	171	180	99	50	74	10
28	93	114	29	241	119	81	50	74	10
29	93	98	25	180	86	42	85	73	17
30	83	91	20	153	70	29	90	72	17
31	77	83	17	---	---	---	70	71	13
TOTAL	2525	---	619	2625	---	686.4	3119	---	698.6
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)
JANUARY				FEBRUARY			MARCH		
1	60	69	11	171	63	35	240	58	38
2	50	67	9.0	465	801	1040	220	48	29
3	44	78	9.3	261	98	69	206	57	32
4	38	87	8.9	220	32	19	192	75	39
5	36	134	13	160	34	15	250	260	183
6	36	160	16	140	39	15	271	118	88
7	36	152	15	130	37	13	231	50	31
8	36	128	12	120	52	17	210	45	26
9	36	102	9.9	120	37	12	196	54	29
10	36	60	5.8	154	228	145	190	73	37
11	36	82	8.0	383	480	538	185	48	24
12	36	69	6.7	176	50	24	171	51	24
13	36	74	7.2	130	37	13	162	57	25
14	36	65	6.3	120	59	19	152	73	30
15	36	75	7.3	110	42	12	145	53	21
16	36	96	9.3	360	200	194	180	68	33
17	36	62	6.0	660	600	1070	167	45	20
18	36	53	5.2	600	190	308	150	47	19
19	36	53	5.2	800	480	1040	149	43	17
20	36	55	5.3	1100	1200	3560	145	53	21
21	36	67	6.5	960	415	1080	146	54	21
22	36	91	8.8	620	150	251	140	48	18
23	36	79	7.7	660	158	282	137	48	18
24	36	61	5.9	750	116	235	130	53	19
25	60	61	9.9	510	77	106	125	54	18
26	107	146	56	370	66	66	122	57	19
27	190	171	88	300	69	56	138	76	28
28	123	64	21	260	68	48	128	65	22
29	107	42	12	---	---	---	123	64	21
30	70	39	7.4	---	---	---	131	61	22
31	60	39	6.3	---	---	---	133	51	18
TOTAL	1629	---	405.9	10810	---	10282	5265	---	990

03111500 SHORT CREEK NEAR DILLONVALE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	123	49	16	295	102	81	120	120	39
2	116	57	18	255	93	64	115	180	56
3	111	65	19	231	69	43	170	660	303
4	111	38	11	214	60	35	760	1300	2670
5	377	366	417	201	102	55	800	780	1680
6	238	84	54	229	140	87	1300	330	1160
7	186	74	37	208	106	60	700	110	208
8	166	70	31	185	83	41	400	320	346
9	162	61	27	174	102	48	1500	1360	5510
10	154	49	20	172	97	45	450	275	334
11	205	85	71	277	192	143	320	140	121
12	2600	2840	20200	257	129	90	245	102	67
13	1590	790	3630	212	97	56	225	150	91
14	788	680	1450	195	93	49	800	410	886
15	555	261	404	282	231	178	740	210	420
16	441	142	169	223	140	84	240	115	75
17	413	154	172	193	86	45	225	182	111
18	492	228	305	176	72	34	223	110	66
19	384	129	134	171	69	32	240	98	64
20	347	104	97	163	71	31	250	93	63
21	298	97	78	155	89	37	210	120	68
22	282	67	51	146	69	27	280	345	261
23	336	115	105	139	124	47	260	200	140
24	311	86	72	139	98	37	200	100	54
25	285	74	57	134	98	35	470	1950	2470
26	252	60	41	133	95	34	450	180	219
27	252	74	50	172	98	46	280	82	62
28	267	101	73	178	930	447	220	64	38
29	387	159	168	150	700	283	190	65	33
30	355	111	106	135	380	139	170	60	28
31	---	---	---	125	210	71	---	---	---
TOTAL	12584	---	28083	5919	---	2504	12553	---	17643
JULY			AUGUST			SEPTEMBER			
1	250	175	118	129	92	32	71	80	15
2	220	85	50	118	78	25	203	606	372
3	200	108	58	115	81	25	296	610	489
4	180	62	30	261	300	251	161	129	56
5	180	64	31	135	81	30	109	86	25
6	170	95	44	115	77	24	87	76	18
7	160	51	22	110	59	18	78	66	14
8	140	42	16	105	72	20	121	245	88
9	123	70	23	95	84	22	112	74	22
10	117	90	28	89	72	17	86	56	13
11	109	88	26	91	53	13	79	46	9.8
12	105	78	22	87	60	14	72	53	10
13	155	179	92	81	57	12	66	60	11
14	158	159	70	79	43	9.2	65	45	7.9
15	115	93	29	80	50	11	106	134	43
16	105	88	25	87	40	9.4	83	72	16
17	99	90	24	75	39	7.9	108	120	37
18	92	88	22	72	38	7.4	77	70	15
19	87	83	19	65	43	7.5	87	93	22
20	127	160	64	65	38	6.7	70	68	13
21	146	143	57	62	35	5.9	64	70	12
22	128	98	34	61	53	8.7	68	66	12
23	99	82	22	58	47	7.4	67	57	10
24	89	80	19	54	45	6.6	57	44	6.8
25	85	58	13	55	51	7.6	55	32	4.8
26	187	743	425	53	55	7.9	52	33	4.6
27	282	599	581	51	51	7.0	50	45	6.1
28	380	711	948	54	56	8.5	47	38	4.8
29	331	287	263	51	55	7.6	46	49	6.1
30	187	102	51	114	386	124	45	57	6.9
31	149	83	33	82	112	25	---	---	---
TOTAL	4955	---	3259	2749	---	778.3	2688	---	1370.8
YEAR	67421		67320.0						

CAPTINA CREEK BASIN

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OH

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.

DRAINAGE AREA.--134 mi² (347 km²).

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

REVISED RECORDS.--WSP 19C7: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 739.53 ft (225.409 m) National Geodetic Vertical Datum of 1929. Aug. 20, 1926 to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good except for winter period, which is fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--32 years, 167 ft³/s (4.729 m³/s), 16.92 in/yr (430 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,900 ft³/s (620 m³/s) Aug. 11, 1980, gage height, 17.48 ft (5.328 m); no flow at times during 1929-30, 1932, 1934, 1959, 1963-66, 1972-74.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)
Feb. 2	0600	3790	107	8.25	2.515	June 10	0630	7460	211	11.10	3.383
Apr. 12	2200	5420	153	9.63	2.935	June 13	2300	5260	149	9.50	2.896
June 5	2130	*9020	255	*12.06	3.676						

Minimum discharge, 3.9 ft³/s (0.110 m³/s) Aug. 27, 28.

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	15	25	204	90	384	306	112	135	132	342	34	161
2	15	23	177	75	2060	246	100	114	110	141	27	97
3	19	19	177	65	487	206	90	96	209	110	22	914
4	26	21	127	55	296	180	87	85	861	94	51	303
5	30	28	117	46	187	388	475	77	2080	126	39	135
6	22	23	135	40	150	374	287	116	2250	92	26	78
7	18	20	273	36	130	267	201	110	677	72	25	52
8	15	21	291	32	120	220	167	78	385	55	22	77
9	15	25	428	32	120	190	146	67	552	47	20	79
10	17	19	494	32	120	170	126	64	3380	41	16	43
11	16	17	301	32	805	158	172	206	884	32	13	32
12	13	16	233	32	370	137	2920	193	483	25	13	27
13	13	15	197	32	270	124	1770	141	843	40	12	24
14	10	15	154	32	230	108	705	114	2830	56	10	23
15	11	15	135	32	230	98	434	198	785	33	11	109
16	12	17	120	32	300	182	309	144	452	26	16	63
17	12	18	110	32	898	172	306	112	377	25	14	58
18	19	73	95	32	659	144	353	94	249	22	11	35
19	43	61	90	32	573	137	261	104	190	19	8.5	30
20	22	44	80	32	1280	130	237	89	162	35	7.2	26
21	17	44	75	32	870	130	185	75	150	57	6.0	21
22	15	51	70	32	519	124	162	64	422	35	6.0	18
23	15	48	65	32	880	118	475	57	220	22	6.4	16
24	15	177	60	32	795	108	456	52	148	18	5.7	15
25	141	214	60	122	519	100	332	47	564	16	4.0	14
26	141	122	60	285	363	92	255	45	329	16	4.5	13
27	61	301	60	494	277	120	243	61	187	31	4.1	13
28	45	377	60	294	283	104	198	172	141	271	8.6	12
29	43	253	90	204	---	96	182	165	116	356	9.3	11
30	34	192	110	150	---	120	153	175	114	90	74	10
31	29	---	100	140	---	130	---	267	---	49	122	---
TOTAL	919	2294	4748	2640	14175	5179	11899	3517	20282	2394	648.3	2509
MEAN	29.6	76.5	153	85.2	506	167	397	113	676	77.2	20.9	83.6
MAX	141	377	494	494	2060	388	2920	267	3380	356	122	914
MIN	10	15	60	32	120	92	87	45	110	16	4.0	10
CFSM	.22	.57	1.14	.64	3.78	1.25	2.96	.84	5.05	.58	.16	.62
IN.	.26	.64	1.32	.73	3.94	1.44	3.30	.98	5.63	.66	.18	.70

CAL YR 1980 TOTAL 82728.0 MEAN 226 MAX 8080 MIN 10 CFSM 1.69 IN 22.97
WTR YR 1981 TOTAL 71204.3 MEAN 195 MAX 3380 MIN 4.0 CFSM 1.46 IN 19.77

CAPTINA CREEK BASIN

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03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 21...	1530	17	500	8.4	13.5	--	--	--	--	--	--	199
DEC 09...	1230	350	350	8.1	8.5	--	--	--	--	--	--	135
JAN 19...	1645	33	507	8.1	.5	--	--	--	--	--	--	180
MAR 03...	1420	206	340	8.2	4.0	--	--	--	--	--	--	133
APR 16...	1020	308	320	7.9	10.5	--	--	--	--	--	--	100
MAY 28...	1100	208	300	7.8	19.0	--	--	--	--	--	--	124
JUL 08...	1015	53	386	8.1	23.5	--	--	--	--	--	--	146
AUG 25...	1045	4.5	710	8.1	18.0	230	63	69	15	51	3.0	204
SEP 29...	1030	11	480	8.2	12.5	--	--	--	--	--	--	203

DATE	CAR- BONATE FET-FLD (MG/L AS C03)	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, TOTAL NO2+NO3 (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 21...	4	72	--	--	--	307	--	--	--	--	--	--
DEC 09...	0	48	--	--	--	207	--	--	--	--	--	--
JAN 19...	0	90	--	--	--	315	--	--	--	--	--	--
MAR 03...	0	51	--	--	--	201	--	--	--	--	--	--
APR 16...	0	48	--	--	--	202	--	--	--	--	--	--
MAY 28...	0	40	--	--	--	172	--	--	--	--	--	--
JUL 08...	0	57	--	--	--	247	--	--	--	--	--	--
AUG 25...	0	160	30	.2	2.0	455	.02	.020	2	<1	100	1
SEP 29...	0	64	--	--	--	290	--	--	--	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 21...	--	--	--	--	--	--	230	190	40	--	--	--
DEC 09...	--	--	--	--	--	--	2300	2300	30	--	--	--
JAN 19...	--	--	--	--	--	--	100	90	10	--	--	--
MAR 03...	--	--	--	--	--	--	260	240	20	--	--	--
APR 16...	--	--	--	--	--	--	560	550	10	--	--	--
MAY 28...	--	--	--	--	--	--	3900	3900	40	--	--	--
JUL 08...	--	--	--	--	--	--	350	330	20	--	--	--
AUG 25...	1	10	8	10	2	7	430	410	20	9800	11	15
SEP 29...	--	--	--	--	--	--	230	220	10	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

LITTLE MUSKINGUM RIVER BASIN

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03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OH

LOCATION.--Lat 39°33'47", long 81°12'14", in sec. 22, T.3 N., R.6 W., Washington County, Hydrologic Unit 05030201, on left bank 400 ft (122 m) upstream from bridge on State Highway 260 at Bloomfield, 2.2 mi (3.5 km) downstream from Wilson Run.

DRAINAGE AREA.--210 mi² (544 km²).

PERIOD OF RECORD.--October 1958 to September 1981 (discontinued).

REVISED RECORDS.--WSP 1705: 1959.

GAGE.--Water-stage recorder. Datum of gage is 645.99 ft (196.898 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--23 years, 266 ft³/s (7.533 m³/s), 17.20 in/yr (437 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s (600 m³/s) Mar. 5, 1963, gage height, 28.08 ft (8.559 m), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of velocity-area study and flow over road computations; no flow Sept. 18, 26, 27, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 2	---	3600 102	---	June 6	1515	5630 159	19.85 6.050
Apr. 12	---	5000 142	---	June 14	1630	*8460 240	*23.49 7.160

Minimum discharge, 2.3 ft³/s (0.07 m³/s) Aug. 29, 30.

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	9.7	23	333	75	820	615	150	175	318	491	31	20
2	9.3	21	293	60	3000	442	130	158	224	241	23	14
3	8.5	18	469	50	2100	348	110	130	211	148	18	368
4	9.7	20	315	44	980	289	100	116	467	133	75	497
5	11	29	236	42	540	787	720	105	1010	153	153	199
6	11	29	196	42	400	854	500	109	4530	143	64	84
7	9.3	24	213	42	300	476	370	130	2110	89	65	48
8	8.1	24	340	42	250	361	290	103	515	70	53	34
9	6.7	36	742	42	210	299	240	89	503	55	37	31
10	6.3	48	1370	42	190	255	220	80	1400	46	27	30
11	5.2	38	535	42	1200	231	1000	158	993	38	21	22
12	3.7	30	347	42	720	205	4000	268	423	32	16	17
13	4.9	25	265	42	460	181	1700	224	604	33	13	14
14	2.9	22	200	42	370	161	860	184	7160	41	11	12
15	2.9	20	164	42	350	140	560	494	2490	33	10	42
16	2.5	20	159	42	800	672	330	368	476	26	13	143
17	2.7	31	141	42	1920	686	500	238	557	22	12	68
18	8.5	460	121	42	1290	423	748	190	321	19	10	47
19	18	277	114	42	836	341	449	388	224	17	9.6	36
20	27	160	80	42	1460	282	375	552	178	16	7.5	29
21	15	113	73	42	1520	248	296	303	371	23	5.9	23
22	8.9	89	61	42	701	215	251	211	1640	43	4.9	19
23	6.3	73	60	42	1260	199	285	169	546	31	4.2	15
24	5.7	239	60	42	1550	178	563	135	262	20	3.6	13
25	93	563	55	110	695	161	426	109	506	16	3.0	11
26	271	269	55	300	449	145	341	93	378	16	2.7	9.6
27	109	436	55	660	348	205	292	241	211	21	2.5	8.7
28	59	978	50	780	364	208	248	335	153	28	2.5	7.2
29	47	544	50	470	---	190	224	358	116	310	2.4	6.2
30	36	404	70	270	---	170	193	255	93	121	2.9	5.9
31	28	---	85	220	---	160	---	515	---	52	11	---
TOTAL	846.8	5063	7307	3879	25083	10127	16471	6983	28990	2527	714.7	1873.6
MEAN	27.3	169	236	125	896	327	549	225	966	81.5	23.1	62.5
MAX	271	978	1370	780	3000	854	4000	552	7160	491	153	497
MIN	2.5	18	50	42	190	140	100	80	93	16	2.4	5.9
CFSM	.13	.81	1.12	.60	4.27	1.56	2.61	1.07	4.60	.39	.11	.30
IN.	.15	.90	1.29	.69	4.44	1.79	2.92	1.24	5.14	.45	.13	.33
CAL YR 1980	TOTAL	107104.8	MEAN 293	MAX 3410	MIN 2.5	CFSM 1.40	IN 18.97					
WTR YR 1981	TOTAL	109865.1	MEAN 301	MAX 7160	MIN 2.4	CFSM 1.43	IN 19.46					

LITTLE MUSKINGUM RIVER BASIN

03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 27...	1200	90	410	7.2	7.5	--	--	--	--	--	--	101
DEC 08...	1300	365	300	8.1	8.5	--	--	--	--	--	--	104
JAN 20...	1045	42	405	7.7	.5	--	--	--	--	--	--	144
MAR 03...	1130	363	250	7.6	3.5	--	--	--	--	--	--	92
APR 16...	1345	332	355	8.2	9.0	--	--	--	--	--	--	128
MAY 27...	1345	251	340	7.7	19.5	--	--	--	--	--	--	136
JUL 07...	1350	86	355	7.8	23.5	--	--	--	--	--	--	136
AUG 28...	1230	2.5	415	8.0	22.0	160	25	47	10	16	2.4	164
SEP 28...	1300	7.6	390	7.9	16.0	--	--	--	--	--	--	141
DATE	CAR- BONATE FET-FLD (MG/L AS C03)	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)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 27...	0	31	--	--	--	252	--	--	--	--	--	--
DEC 08...	0	34	--	--	--	170	--	--	--	--	--	--
JAN 20...	0	38	--	--	--	214	--	--	--	--	--	--
MAR 03...	0	36	--	--	--	152	--	--	--	--	--	--
APR 16...	0	35	--	--	--	155	--	--	--	--	--	--
MAY 27...	0	33	--	--	--	228	--	--	--	--	--	--
JUL 07...	0	29	--	--	--	194	--	--	--	--	--	--
AUG 28...	0	27	31	.1	4.3	243	.04	.030	2	<1	100	1
SEP 28...	0	33	--	--	--	240	--	--	--	--	--	--
DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 27...	--	--	--	--	--	--	590	530	60	--	--	--
DEC 08...	--	--	--	--	--	--	790	750	40	--	--	--
JAN 20...	--	--	--	--	--	--	280	210	70	--	--	--
MAR 03...	--	--	--	--	--	--	490	410	80	--	--	--
APR 16...	--	--	--	--	--	--	640	610	30	--	--	--
MAY 27...	--	--	--	--	--	--	7700	7600	60	--	--	--
JUL 07...	--	--	--	--	--	--	730	700	30	--	--	--
AUG 28...	<1	20	8	10	2	5	450	420	30	7600	8	11
SEP 28...	--	--	--	--	--	--	500	460	40	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

MUSKINGUM RIVER BASIN

03116200 CHIPPEWA CREEK AT EASTON. OH

LOCATION.--Lat 40°56'47", long 81°44'35", in SW 1/4 sec. 17, T.18 N., R.11 W., Wayne County, Hydrologic Unit 05040001, on left bank at downstream side of bridge on State Highway 585, 0.5 mi (0.8 km) southwest of Easton, and 1.5 mi (2.4 km) upstream from Red Run.

DRAINAGE AREA.--146 mi² (378 km²).

PERIOD OF RECORD.--January 1960 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 934.40 ft (284.805 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1976; water-stage recorder and prior to June 10, 1960, nonrecording gage at datum 5.32 ft (1.622 m) higher.

REMARKS.--Records poor. Low flow slightly regulated by industry at Rittman 2.5 mi (4.0 km) upstream. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--21 years, 136 ft³/s (3.852 m³/s), 12.65 in/yr (321 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s (354 m³/s) July 5, 1969, gage height, 16.02 ft (4.893 m); maximum gage height, 18.54 ft (5.651 m) Sept. 15, 1979; minimum daily, 3.2 ft³/s (0.091 m³/s) July 6, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 14.17 ft (4.319 m) revised, discharge, 10,100 ft³/s (286 m³/s), by contracted-opening measurement of peak flow.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 19	1400	*1460 41.3	*15.21 4.636	June 14	0200	1260 35.7	14.27 4.349
Apr. 14	0300	1100 31.2	13.34 4.066				

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Aug. 22-30.

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	24	27	95	70	85	177	113	376	67	183	19	16
2	23	24	99	60	482	154	98	212	60	83	18	138
3	23	24	110	55	341	147	85	143	70	58	24	116
4	23	26	80	46	222	138	96	120	80	48	24	207
5	22	24	71	42	149	134	272	96	62	88	19	73
6	22	23	66	40	120	131	182	278	116	114	18	50
7	21	23	73	38	100	120	123	211	64	66	18	41
8	21	24	98	36	90	111	106	145	53	44	18	41
9	21	22	194	36	85	116	93	100	610	33	17	39
10	21	21	223	36	80	111	83	84	708	32	17	32
11	21	21	142	34	562	106	92	138	472	26	31	28
12	21	21	107	34	394	98	771	279	199	23	21	26
13	21	21	98	34	239	93	735	177	328	24	17	24
14	21	22	86	34	159	84	1010	140	1080	29	16	28
15	23	22	73	34	110	79	760	427	797	22	17	30
16	23	21	70	34	245	78	529	314	648	21	22	26
17	22	21	65	34	539	75	392	187	636	21	17	26
18	36	24	65	34	566	71	332	143	348	21	16	26
19	27	26	60	34	1070	71	236	109	197	20	16	24
20	23	24	55	34	1320	71	195	85	141	26	15	22
21	22	20	55	34	1090	76	141	75	149	32	15	21
22	21	23	50	34	823	83	121	65	513	24	14	21
23	21	50	50	34	675	88	148	58	417	19	14	21
24	21	67	48	34	597	85	167	55	211	17	14	21
25	65	80	46	48	454	75	155	50	326	17	14	21
26	57	60	46	97	304	75	126	48	254	18	14	21
27	32	65	44	354	246	393	116	69	129	18	14	20
28	55	111	44	228	220	303	186	417	95	58	14	18
29	50	103	44	151	---	178	619	276	66	113	14	19
30	34	87	60	116	---	149	555	135	77	33	14	20
31	30	---	80	90	---	140	---	92	---	21	16	---
TOTAL	867	1127	2497	2019	11367	3810	8637	5104	8973	1352	537	1216
MEAN	28.0	37.6	80.5	65.1	406	123	288	165	299	43.6	17.3	40.5
MAX	65	111	223	354	1320	393	1010	427	1080	183	31	207
MIN	21	20	44	34	80	71	83	48	53	17	14	16
CFSM	.19	.26	.55	.45	2.78	.84	1.97	1.13	2.05	.30	.12	.28
IN.	.22	.29	.64	.51	2.90	.97	2.20	1.30	2.29	.34	.14	.31

CAL YR 1980	TOTAL	53229	MEAN 145	MAX 1220	MIN 20	CFSM .99	IN 13.56
WTR YR 1981	TOTAL	47506	MEAN 130	MAX 1320	MIN 14	CFSM .89	IN 12.10

MUSKINGUM RIVER BASIN

79

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 mi² (1,342 km²).

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 hm³), since 1939. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years, 441 ft³/s (12.49 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) July 5, 1969, gage height, 16.43 ft (5.008 m); minimum daily, 57 ft³/s (1.61 m³/s) Oct. 13, 14, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,510 ft³/s (156 m³/s) Feb. 20, gage height, 11.87 ft (3.618 m); minimum daily, 134 ft³/s (3.79 m³/s) Sept. 27, 29.

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	166	205	327	291	300	617	408	1470	405	511	187	178
2	170	196	341	260	1430	535	375	1000	347	383	169	347
3	172	197	381	230	905	520	316	554	328	304	256	469
4	159	215	318	200	547	483	349	461	421	268	251	732
5	147	208	276	190	382	459	880	400	375	318	196	383
6	148	186	263	180	325	469	702	722	492	507	176	260
7	154	181	274	170	290	435	472	715	377	467	176	217
8	158	178	340	170	260	400	394	514	289	394	166	205
9	154	177	515	170	240	419	355	483	1490	306	160	212
10	148	181	732	170	270	405	313	349	2860	272	160	187
11	147	180	550	170	1470	397	341	511	2380	236	173	171
12	143	175	419	170	1090	369	1370	1110	1210	212	205	160
13	145	177	380	170	644	352	2590	800	715	236	169	156
14	164	182	352	170	401	325	4550	551	2560	260	156	162
15	239	182	317	170	330	301	3590	1420	3000	224	164	187
16	246	176	313	170	531	299	2330	1210	2300	205	192	182
17	245	176	299	170	1580	296	1430	789	1950	199	187	182
18	261	195	286	170	1790	284	1180	607	1260	185	162	173
19	217	199	285	170	2890	277	834	489	614	180	153	164
20	186	195	251	170	5030	284	702	383	486	268	151	151
21	169	192	242	170	5130	287	532	330	498	325	149	147
22	173	182	232	170	4060	301	448	308	1180	246	145	149
23	156	172	223	170	2860	320	529	289	1440	208	138	147
24	150	238	234	170	2340	336	636	268	848	189	138	145
25	240	328	210	180	1680	306	595	253	877	173	143	143
26	300	267	215	266	1070	284	489	246	949	182	145	138
27	221	267	211	979	813	834	461	469	535	199	145	134
28	246	368	207	742	735	1040	486	1910	429	323	143	136
29	259	383	226	513	---	646	1700	1380	349	614	147	134
30	224	335	305	394	---	498	2100	610	308	320	158	138
31	210	---	308	312	---	492	---	554	---	215	182	---
TOTAL	5917	6493	9832	7797	39393	13270	31457	21355	31272	8929	5242	6289
MEAN	191	216	317	252	1407	428	1049	689	1042	288	169	210
MAX	300	383	732	979	5130	1040	4550	1910	3000	614	256	732
MIN	143	172	207	170	240	277	313	246	289	173	138	134
CAL YR 1980 TOTAL	203621			MEAN 556	MAX 3710	MIN 143						
WTR YR 1981 TOTAL	187246			MEAN 513	MAX 5130	MIN 134						

MUSKINGUM RIVER BASIN

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 mi² (1,383 km²).

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, 15.5 mg/L Aug. 1, 1979; minimum, 0.0 mg/L on many days during 1971 to 1973.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,790 micromhos Oct. 21; minimum, 380 micromhos June 14.

pH: Maximum, 8.4 units July 12, 17; minimum, 7.0 units Mar. 10.

WATER TEMPERATURES: Maximum, 28.0°C July 8, 9; minimum, 0.5°C on several days during winter periods.

DISSOLVED OXYGEN: Maximum, 13.1 mg/L July 12; minimum, 0.9 mg/L Apr. 25.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	1960	1850	1990	1730	1500	1350	2260	2060	1500	1060	970	870				
2	2000	1860	2010	1840	1620	1280	2270	2050	1430	600	1050	950				
3	1990	1910	1920	1760	1680	1390	2300	2060	1900	1460	1120	970				
4	1970	1870	1860	1700	1800	1500	2450	2260	1980	1500	1180	980				
5	2050	1850	1910	1850	1880	1660	2660	2230	2000	1480	1240	1000				
6	2020	1860	1870	1690	1680	1570	2670	2230	1880	1550	1300	1110				
7	2030	1880	2010	1870	1670	1470	2460	1860	1910	1540	1190	1020				
8	2100	1960	2510	2010	1610	1290	2440	1850	1650	1460	1260	1110				
9	2060	1950	2260	2020	1780	1140	2040	1830	1880	1450	1320	1160				
10	2030	1940	2130	2050	1500	1050	2290	1940	1910	1320	1180	1060				
11	2480	1970	2210	1950	1530	1080	2020	1770	1260	550	1480	1110				
12	2220	2030	2160	2010	1630	1160	1960	1880	1730	1080	1450	1190				
13	2150	2030	2200	2070	1870	1570	2110	1900	1740	1140	1540	1230				
14	2200	2080	2460	2060	1820	1730	2040	1900	1530	1110	1370	1240				
15	2600	1900	2200	2080	2060	1700	2120	1820	1330	1180	1430	1190				
16	2120	1960	2260	1930	2190	1840	2110	1830	1350	860	1470	1300				
17	2200	1910	2280	1950	2150	1900	1990	1720	1260	590	1580	1390				
18	2230	1870	2200	2070	2340	1990	1910	1740	1310	1150	1540	1360				
19	2580	1810	2280	1980	2580	2040	2050	1880	1320	610	1590	1410				
20	2570	2190	2070	2000	2320	2010	2100	1820	640	610	1550	1430				
21	2790	2580	2060	1900	2730	2200	1910	1740	700	630	1540	1440				
22	2770	2070	2190	1850	2670	2340	2010	1810	830	710	1560	1430				
23	2260	1840	1980	1840	2670	2330	2020	1740	890	840	1520	1340				
24	2130	1980	2130	1760	2530	1760	2430	1720	850	710	1440	1340				
25	2100	1700	2030	1720	2010	1770	1980	1720	710	670	1520	1200				
26	2260	1370	1680	1240	2080	1710	2010	1510	860	680	1450	1290				
27	1490	1330	1920	1290	2120	1800	1470	820	910	820	1600	740				
28	1780	1410	1870	1560	2080	1810	1570	890	920	840	1970	1280				
29	1890	1640	1550	1280	2050	1830	1600	1220	---	---	1870	890				
30	1750	1520	1410	1310	2460	1730	1510	1290	---	---	1120	950				
31	1790	1670	---	---	2440	1950	1660	1410	---	---	1200	1070				
MONTH	2790	1330	2510	1240	2730	1050	2670	820	2000	550	1970	740				

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	1240	1060	1420	1220	1100	920	1460	860	1360	1200	1880	1510				
2	1340	1170	1440	860	1260	1090	1170	890	1460	1360	---	---				
3	1280	1180	1070	870	1360	1220	1390	1140	1620	850	---	---				
4	1420	1200	1160	1040	1590	1080	1790	1300	1480	1000	---	---				
5	1260	820	1290	1140	1500	1030	1520	1350	1490	1260	---	---				
6	1000	790	1330	960	1370	950	1790	970	1490	1330	---	---				
7	970	910	1710	1080	1250	1120	1020	910	1640	1470	---	---				
8	1670	990	1900	930	1430	1210	1060	1000	1720	1580	---	---				
9	1370	1130	960	910	1270	490	1170	1080	1660	1530	---	---				
10	1420	1150	1390	960	900	640	1620	960	1690	1500	---	---				
11	1490	1350	1410	940	1120	910	1630	1480	1770	1590	---	---				
12	1470	480	1110	770	1270	840	1670	1440	1930	1390	---	---				
13	770	490	2070	780	1050	850	1730	1490	1400	1300	---	---				
14	650	470	1770	1040	960	380	1940	1660	1600	1330	---	---				
15	940	670	1000	570	490	440	1790	1510	1630	1530	---	---				
16	1250	940	780	620	1090	500	1810	1650	1800	1560	---	---				
17	1210	850	910	740	990	550	1870	1770	1890	1410	---	---				
18	890	780	990	880	790	660	1950	1830	1580	1400	---	---				
19	950	830	1010	920	990	780	1960	1850	1690	1550	---	---				
20	1050	950	1210	1020	1100	1010	2340	1160	1780	1620	---	---				
21	1280	1050	1350	1130	1310	900	1560	1160	1840	1640	---	---				
22	1380	1270	1450	1230	1190	530	1400	1170	1830	1670	1820	1730				
23	1370	1240	1460	1260	660	490	1370	1190	1910	1650	1950	1750				
24	1320	970	1530	1280	840	670	1570	1380	1950	1700	1900	1780				
25	1740	990	1530	1390	1190	750	1720	1440	1970	1750	1970	1810				
26	1060	970	1600	1280	810	680	1640	1370	2030	1760	1960	1840				
27	1440	1060	1530	820	1100	830	1670	1510	2100	1910	1950	1820				
28	1520	1190	780	520	1120	1060	1550	750	2020	1820	1920	1770				
29	1610	540	1300	570	1190	1090	1570	670	2100	1800	1930	1800				
30	1240	730	1300	740	1470	1190	980	690	1980	1630	1940	1810				
31	---	---	910	790	---	---	1160	930	1810	1560	---	---				
MONTH	1740	470	2070	520	1590	380	2340	670	2100	850	1970	1510				

YEAR	2790	380
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MUSKINGUM RIVER BASIN

03117100 TASCARAWAS RIVER AT NAVARRE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1							---	---	7.5	7.4	7.3	7.2
2							---	---	7.6	7.4	---	---
3							---	---	7.7	7.5	---	---
4							---	---	7.6	7.5	---	---
5							7.8	7.7	7.6	7.2	---	---
6							7.9	7.8	7.4	7.3	---	---
7							8.2	7.3	7.6	7.3	7.7	7.3
8							8.1	7.6	7.7	7.6	7.7	7.4
9							8.0	7.5	7.7	7.6	7.7	7.4
10							7.7	7.6	---	---	7.5	7.0
11							7.7	7.6	---	---	7.3	7.2
12							7.6	7.5	---	---	7.4	7.2
13							7.6	7.5	---	---	7.5	7.3
14							7.6	7.2	---	---	7.5	7.2
15							7.6	7.5	---	---	7.7	7.3
16							7.7	7.5	---	---	7.6	7.4
17							7.6	7.5	---	---	7.7	7.2
18							7.6	7.5	---	---	7.7	7.6
19							7.6	7.5	---	---	7.6	7.5
20							7.6	7.5	---	---	7.6	7.5
21							7.6	7.5	---	---	7.6	7.4
22							7.5	7.5	---	---	7.6	7.4
23							7.6	7.3	---	---	7.8	7.4
24							7.7	7.5	7.5	7.4	7.7	7.4
25							7.7	7.5	7.4	7.3	7.7	7.4
26							7.7	7.5	7.4	7.3	7.8	7.4
27							7.7	7.4	7.3	7.2	7.5	7.2
28							7.6	7.4	7.5	7.2	7.7	7.4
29							7.6	7.5	---	---	7.7	7.4
30							7.6	7.5	---	---	7.4	7.3
31							7.6	7.5	---	---	7.4	7.2
MONTH							8.2	7.2	7.7	7.2	7.8	7.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	7.1	7.6	7.6	7.3	7.3	7.5	7.3	7.6	7.5	7.6	7.5
2	7.5	7.3	7.6	7.6	7.3	7.3	7.3	7.3	7.8	7.5	---	---
3	7.5	7.1	7.6	7.2	7.5	7.2	7.3	7.3	7.6	7.3	---	---
4	7.4	7.1	7.5	7.5	7.5	7.3	7.9	7.3	7.6	7.3	---	---
5	7.7	7.2	7.7	7.4	7.5	7.3	7.8	7.3	8.0	7.5	---	---
6	7.6	7.3	7.5	7.5	7.4	7.3	7.5	7.4	7.7	7.6	---	---
7	7.6	7.3	7.5	7.4	7.4	7.3	7.4	7.4	7.7	7.6	---	---
8	7.5	7.4	7.6	7.5	7.5	7.1	7.6	7.4	7.7	7.6	---	---
9	7.7	7.3	7.6	7.5	7.4	7.3	7.8	7.4	7.8	7.6	---	---
10	7.7	7.5	7.5	7.4	7.4	7.3	7.9	7.4	7.8	7.6	---	---
11	7.6	7.3	7.5	7.4	7.4	7.3	8.2	7.5	7.7	7.6	---	---
12	7.5	7.3	7.6	7.4	7.4	7.2	8.4	7.5	7.7	7.5	---	---
13	7.5	7.4	7.6	7.5	7.4	7.4	7.9	7.5	7.6	7.5	---	---
14	7.6	7.4	7.6	7.5	7.4	7.3	7.6	7.4	7.6	7.4	---	---
15	7.8	7.3	7.6	7.5	7.2	7.2	7.6	7.5	7.4	7.3	---	---
16	7.5	7.2	7.5	7.5	7.3	7.2	8.1	7.5	7.5	7.4	---	---
17	7.6	7.5	7.5	7.3	7.3	7.2	8.4	7.6	7.8	7.4	---	---
18	7.5	7.4	7.6	7.5	7.2	7.1	8.2	7.5	7.7	7.6	---	---
19	7.5	7.3	7.6	7.6	7.3	7.2	7.9	7.5	7.7	7.5	---	---
20	7.5	7.4	7.6	7.5	7.3	7.2	7.7	7.3	7.9	7.5	---	---
21	7.6	7.4	7.5	7.4	7.4	7.2	7.5	7.4	7.9	7.6	---	---
22	7.4	7.2	7.6	7.3	7.4	7.3	7.5	7.4	7.8	7.6	7.7	7.7
23	7.5	7.2	7.5	7.3	---	---	7.4	7.3	8.0	7.6	7.8	7.7
24	7.7	7.4	7.6	7.3	7.4	7.3	7.6	7.3	8.0	7.6	7.8	7.8
25	7.8	7.7	7.5	7.4	7.4	7.4	7.6	7.5	7.8	7.6	7.8	7.7
26	7.8	7.6	7.4	7.3	7.4	7.3	7.6	7.4	7.9	7.5	7.8	7.7
27	7.7	7.6	7.3	7.2	7.4	7.3	7.5	7.3	7.8	7.6	7.7	7.6
28	7.7	7.2	7.2	7.2	7.6	7.4	7.6	7.3	7.8	7.5	7.7	7.5
29	7.5	7.4	7.3	7.2	7.6	7.5	7.5	7.4	7.6	7.5	7.5	7.5
30	7.6	7.3	7.3	7.2	7.6	7.5	7.5	7.4	7.6	7.5	7.7	7.5
31	---	---	7.3	7.1	---	---	7.5	7.5	7.5	7.5	---	---
MONTH	7.8	7.1	7.7	7.1	7.6	7.1	8.4	7.3	8.0	7.3	7.8	7.5
YEAR	8.4	7.0										

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

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

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	15.5	13.0	14.5	13.5	20.5	17.0	25.5	23.0	24.5	21.0	24.5	21.5
2	16.5	13.0	15.0	13.5	21.5	19.0	24.5	22.0	25.5	21.5	---	---
3	15.5	13.5	15.5	12.5	22.0	20.0	24.5	22.0	24.5	22.5	---	---
4	15.0	14.0	18.0	14.0	24.5	21.0	24.5	22.0	25.0	22.5	---	---
5	14.0	11.5	18.5	16.0	24.0	21.5	25.5	23.0	25.5	21.5	---	---
6	11.5	10.0	17.5	14.0	23.5	21.0	26.5	23.5	24.5	23.5	---	---
7	12.5	9.5	14.0	12.0	24.0	20.5	27.0	23.5	24.0	22.0	---	---
8	15.0	11.0	16.0	12.5	23.5	20.5	28.0	24.5	23.5	22.0	---	---
9	15.5	14.0	16.5	15.0	22.0	21.0	28.0	25.0	24.0	21.5	---	---
10	15.0	12.5	18.0	15.5	21.0	20.5	27.5	25.0	24.5	21.0	---	---
11	16.0	14.0	17.0	15.5	21.0	20.0	26.5	23.5	24.5	22.0	---	---
12	16.0	14.0	15.5	13.5	21.5	20.5	26.5	23.0	24.5	22.0	---	---
13	14.0	12.5	15.0	12.5	22.0	21.0	26.0	24.0	24.5	22.0	---	---
14	12.5	11.0	15.5	14.5	21.5	20.5	26.0	24.0	25.0	22.0	---	---
15	12.5	11.5	15.0	13.5	23.5	21.5	25.5	22.5	24.0	22.5	---	---
16	12.5	11.0	14.5	13.0	24.5	23.5	24.5	22.5	23.0	21.5	---	---
17	14.0	12.5	16.5	14.0	24.0	21.5	26.0	22.5	23.0	19.5	---	---
18	15.5	14.0	16.0	15.0	22.5	21.0	26.5	22.5	22.5	18.5	---	---
19	14.5	13.5	15.0	14.0	23.5	21.0	25.0	23.0	23.0	19.0	---	---
20	14.0	12.5	17.0	12.5	24.0	21.5	24.0	22.5	23.5	19.0	---	---
21	14.0	11.0	19.0	14.0	23.0	22.0	24.5	23.0	22.5	19.5	---	---
22	13.5	12.0	20.5	16.0	22.5	21.0	24.0	22.0	23.0	19.5	17.5	16.5
23	15.0	13.0	20.5	17.5	22.0	21.0	23.5	20.5	23.5	19.5	17.5	14.5
24	14.0	12.0	22.0	18.0	22.0	21.0	25.0	21.0	23.0	19.5	17.5	13.5
25	12.0	10.5	21.5	19.5	22.5	21.0	25.5	21.5	22.0	19.0	17.5	14.0
26	12.5	9.5	20.5	19.0	22.0	21.0	24.5	23.0	23.0	18.5	19.0	15.0
27	15.5	11.0	20.0	19.0	22.5	19.5	24.5	22.5	23.0	19.5	19.5	17.5
28	18.0	14.5	18.5	17.5	23.5	19.5	24.5	22.5	24.5	20.5	18.5	16.0
29	17.5	14.0	19.0	17.5	24.5	21.0	23.0	22.0	24.0	21.5	17.0	14.5
30	14.0	13.5	19.5	19.0	25.5	22.5	23.5	20.0	23.5	21.5	16.5	15.0
31	---	---	20.5	18.0	---	---	23.5	20.5	22.5	21.5	---	---
MONTH	18.0	9.5	22.0	12.0	25.5	17.0	28.0	20.0	25.5	18.5	24.5	13.5
YEAR	28.0	.5										

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	---	---	---	---	8.7	7.7	9.6	9.3	11.6	10.8	10.1	9.6
2	7.5	6.4	---	---	7.9	7.5	10.2	9.6	11.7	10.9	10.5	9.6
3	6.2	5.8	---	---	8.6	7.8	10.3	9.7	11.6	11.2	10.8	10.3
4	7.5	5.7	---	---	9.0	8.2	10.0	9.4	11.6	11.3	10.7	10.1
5	8.2	5.8	---	---	8.6	7.8	10.3	8.8	11.3	11.2	10.6	10.1
6	8.7	6.7	---	---	8.1	6.9	9.5	8.2	11.2	10.8	10.7	10.2
7	8.3	6.6	---	---	7.0	6.4	9.6	8.6	11.1	10.6	10.9	10.5
8	7.9	6.3	---	---	6.5	5.5	9.4	9.0	10.9	10.4	10.9	10.5
9	8.3	5.7	---	---	6.5	5.4	9.7	9.0	10.9	10.5	10.8	10.4
10	8.4	6.2	---	---	7.5	6.6	9.9	9.0	11.4	10.6	10.3	9.9
11	7.8	5.8	---	---	8.4	7.6	10.0	9.2	12.0	11.5	10.1	9.5
12	7.7	6.3	---	---	8.7	8.3	10.0	9.1	11.7	11.5	9.9	9.6
13	9.6	6.4	---	---	8.6	8.3	10.0	8.8	11.8	11.4	9.8	9.1
14	9.5	7.1	---	---	9.3	8.2	10.0	8.3	11.7	11.4	9.8	9.1
15	8.7	7.3	---	---	9.4	8.5	9.7	8.3	11.3	11.0	10.0	8.9
16	8.7	6.6	---	---	9.2	7.3	10.4	8.8	11.8	11.0	10.3	8.4
17	7.9	6.1	---	---	10.1	8.9	11.1	9.2	11.9	11.4	10.4	7.9
18	6.8	4.8	---	---	9.5	8.9	11.5	9.9	11.6	11.4	10.8	9.1
19	7.4	5.2	---	---	9.8	8.8	11.7	10.0	11.5	10.7	11.1	9.2
20	7.2	5.3	---	---	9.9	9.1	11.1	9.9	10.7	10.6	11.1	9.2
21	8.2	5.2	---	---	10.1	9.0	11.1	9.7	10.8	10.7	11.5	9.4
22	7.4	6.1	---	---	10.1	9.1	10.6	9.6	10.8	10.1	12.9	9.3
23	---	---	---	---	10.0	9.2	11.5	9.7	10.0	9.6	12.6	9.8
24	---	---	---	---	9.5	8.8	12.4	10.2	10.5	9.5	12.8	9.6
25	---	---	8.7	7.2	10.2	9.5	12.3	9.7	10.6	10.4	13.1	8.8
26	---	---	8.8	7.0	10.5	9.5	10.8	9.4	10.8	10.4	12.9	9.0
27	---	---	8.6	7.6	10.1	9.3	10.4	9.6	10.9	10.4	9.6	8.1
28	---	---	8.6	8.0	9.9	9.0	10.9	10.4	10.7	9.8	10.0	9.6
29	---	---	8.9	8.2	9.3	8.6	10.9	10.7	---	---	10.6	9.2
30	---	---	9.4	8.4	9.1	8.5	11.1	10.7	---	---	9.2	8.1
31	---	---	---	---	9.4	8.4	11.4	10.8	---	---	9.9	7.5
MONTH	9.6	4.8	9.4	7.0	10.5	5.4	12.4	8.2	12.0	9.5	13.1	7.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	10.1	6.7	7.8	7.5	5.9	4.2	5.1	2.9	6.2	3.5	4.5	2.2
2	10.9	7.0	8.5	7.6	5.5	4.3	4.3	3.3	7.7	3.6	---	---
3	10.3	6.3	8.8	7.7	4.7	3.9	5.0	3.3	5.6	2.4	---	---
4	8.5	5.4	8.3	6.9	5.1	3.6	5.0	3.5	5.3	3.2	---	---
5	8.2	6.4	8.2	6.0	5.8	3.3	6.0	3.4	7.0	3.2	---	---
6	9.9	8.3	6.8	5.0	3.8	3.4	4.1	2.9	5.8	4.2	---	---
7	11.4	9.2	7.7	6.8	3.9	2.7	4.2	3.0	5.7	3.9	---	---
8	9.9	7.8	8.4	7.2	5.1	3.2	6.1	3.2	5.2	3.8	---	---
9	8.8	6.3	8.1	6.9	5.3	3.9	6.9	2.9	6.0	3.8	---	---
10	10.1	6.6	6.9	5.7	5.4	3.8	7.7	3.0	6.7	4.0	---	---
11	8.4	5.9	6.9	5.3	5.4	5.2	10.6	3.2	5.9	4.0	---	---
12	7.2	4.5	8.0	6.6	5.2	4.8	13.1	3.8	5.4	3.8	---	---
13	8.2	7.4	8.1	6.3	5.4	4.7	8.2	3.9	8.3	3.6	---	---
14	9.0	7.3	7.5	6.7	5.9	4.1	8.2	3.7	11.7	4.2	---	---
15	8.2	7.8	7.8	7.0	5.0	4.4	9.5	3.6	6.7	3.7	---	---
16	8.6	8.2	8.1	7.6	4.6	3.8	6.4	2.6	6.2	3.4	---	---
17	8.2	7.8	8.0	7.4	4.9	4.2	8.8	2.8	6.7	4.1	---	---
18	8.0	7.4	8.5	7.3	4.9	4.5	8.5	2.8	7.2	4.2	---	---
19	8.2	7.7	8.5	7.6	5.1	4.4	6.1	2.8	8.3	4.0	---	---
20	9.0	7.8	8.2	7.0	4.7	4.0	4.8	2.6	7.9	3.9	---	---
21	9.0	8.0	7.5	6.4	4.8	4.2	4.5	3.4	7.8	3.8	---	---
22	8.1	7.1	8.3	5.4	5.5	4.5	4.2	3.0	7.7	3.7	5.4	4.8
23	7.3	6.8	7.6	4.5	5.7	5.0	4.6	3.1	8.7	3.9	5.7	5.0
24	7.3	5.1	8.9	4.7	5.3	4.8	5.3	3.2	9.2	4.1	6.1	5.1
25	8.8	.9	8.3	4.1	5.6	4.7	6.9	3.1	7.6	4.0	6.1	5.2
26	9.8	8.7	6.4	4.0	5.5	4.8	7.9	3.3	8.4	4.0	5.9	4.8
27	8.7	7.0	5.8	4.0	5.9	5.0	9.5	3.5	7.4	3.7	5.8	4.5
28	8.2	6.1	6.8	5.6	7.2	4.9	6.1	3.6	7.3	3.0	6.6	4.6
29	6.8	5.8	5.9	5.4	7.8	5.0	4.3	2.4	6.7	1.9	6.9	4.9
30	7.7	6.9	5.7	4.2	7.6	4.5	4.5	3.3	5.1	2.3	6.4	5.0
31	---	---	6.0	5.5	---	---	5.0	3.5	3.6	2.5	---	---
MONTH	11.4	.9	8.9	4.0	7.8	2.7	13.1	2.4	11.7	1.9	6.9	2.2
YEAR	13.1	.9										

MUSKINGUM RIVER BASIN

85

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 mi² (655 km²).

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

AVERAGE DISCHARGE.--43 years, 271 ft³/s (7.675 m³/s), 14.55 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) Jan. 22, 1959, gage height, 10.05 ft (3.063 m), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 6.9 ft³/s (0.20 m³/s) Sept. 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 21	0330	3220 91.2	6.66 2.030	Apr. 14	1630	*3810 108	*7.25 2.210
Apr. 5	1330	1980 56.1	4.97 1.515	June 9	2330	2050 58.1	5.07 1.545

Minimum discharge, 48 ft³/s (1.36 m³/s) Aug. 29.

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	90	131	298	110	150	549	273	821	346	460	103	65
2	90	124	292	100	843	480	230	601	275	290	98	165
3	90	120	305	100	660	425	207	458	364	230	126	210
4	92	138	238	95	520	375	222	382	614	210	149	572
5	85	150	211	95	390	371	1570	333	557	410	106	462
6	82	135	204	90	310	395	1300	370	568	640	96	296
7	80	128	215	90	230	366	864	359	388	171	94	175
8	80	127	241	90	190	334	586	283	277	133	90	152
9	77	129	343	90	180	318	437	247	1080	121	85	155
10	75	129	449	85	170	308	363	230	1810	110	80	123
11	77	125	357	85	948	304	346	304	1380	101	89	105
12	79	115	306	85	786	287	1060	501	928	97	85	97
13	78	111	286	80	640	271	1560	376	659	101	77	92
14	75	112	243	80	400	255	2870	312	1220	105	72	90
15	74	111	199	80	330	235	2120	653	924	95	79	85
16	72	108	180	80	400	225	1030	557	696	87	99	86
17	69	109	170	80	1540	219	802	425	546	82	92	97
18	125	105	150	75	1680	210	750	348	444	79	77	99
19	141	105	140	75	1820	201	577	305	338	75	69	92
20	109	105	130	75	2550	196	478	271	266	521	65	86
21	95	106	120	75	2910	193	406	238	241	1010	61	79
22	87	109	110	75	1850	207	361	215	280	386	58	75
23	80	109	110	75	1480	216	430	193	282	201	56	71
24	76	146	100	75	1530	207	519	180	221	155	55	68
25	117	245	100	83	1220	192	499	166	227	131	54	65
26	184	201	100	113	922	178	401	157	290	141	58	63
27	140	201	95	382	687	324	364	233	214	135	57	61
28	140	349	95	351	589	361	359	866	171	139	53	57
29	154	353	95	277	---	294	1110	470	155	181	51	54
30	128	296	105	204	---	285	1380	347	150	140	61	54
31	116	---	111	160	---	308	---	483	---	115	71	---
TOTAL	3057	4532	6098	3610	25925	9089	23474	11684	15911	6852	2466	3951
MEAN	98.6	151	197	116	926	293	782	377	530	221	79.5	132
MAX	184	353	449	382	2910	549	2870	866	1810	1010	149	572
MIN	69	105	95	75	150	178	207	157	150	75	51	54
CFSM	.39	.60	.78	.46	3.66	1.16	3.09	1.49	2.10	.87	.31	.52
IN.	.45	.67	.90	.53	3.81	1.34	3.45	1.72	2.34	1.01	.36	.58

CAL YR 1980 TOTAL 134314 MEAN 367 MAX 2880 MIN 69 CFSM 1.45 IN 19.75
WTR YR 1981 TOTAL 116649 MEAN 320 MAX 2910 MIN 51 CFSM 1.27 IN 17.15

MUSKINGUM RIVER BASIN

87

03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)
OCT 27...	1030	14	850	7.9	8.0	--	--	--	--	--	--	290
DEC 08...	1000	20	830	8.0	7.0	--	--	--	--	--	--	264
JAN 22...	1000	9.2	860	7.7	.5	--	--	--	--	--	--	262
MAR 03...	0935	51	650	7.3	2.5	--	--	--	--	--	--	151
APR 16...	1015	143	460	7.1	12.0	--	--	--	--	--	--	108
MAY 26...	1115	24	750	7.7	19.0	--	--	--	--	--	--	270
JUL 10...	1000	30	710	7.4	24.5	--	--	--	--	--	--	208
AUG 13...	1315	14	714	7.7	25.0	320	140	95	19	30	3.9	224
SEP 30...	1100	6.4	760	7.8	13.0	--	--	--	--	--	--	250

DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 27...	0	98	--	--	--	507	--	--	--	--	--	--
DEC 08...	0	100	--	--	--	501	--	--	--	--	--	--
JAN 22...	0	120	--	--	--	524	--	--	--	--	--	--
MAR 03...	0	93	--	--	--	396	--	--	--	--	--	--
APR 16...	0	67	--	--	--	340	--	--	--	--	--	--
MAY 26...	0	100	--	--	--	528	--	--	--	--	--	--
JUL 10...	0	74	--	--	--	438	--	--	--	--	--	--
AUG 13...	0	110	66	.2	7.2	436	.54	.040	3	5	100	<1
SEP 30...	0	110	--	--	--	499	--	--	--	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 27...	--	--	--	--	--	--	260	200	60	--	--	--
DEC 08...	--	--	--	--	--	--	210	160	50	--	--	--
JAN 22...	--	--	--	--	--	--	200	170	30	--	--	--
MAR 03...	--	--	--	--	--	--	720	630	90	--	--	--
APR 16...	--	--	--	--	--	--	3400	800	2600	--	--	--
MAY 26...	--	--	--	--	--	--	250	200	50	--	--	--
JUL 10...	--	--	--	--	--	--	690	660	30	--	--	--
AUG 13...	<1	10	<10	<10	4	<10	420	410	10	7400	17	20
SEP 30...	--	--	--	--	--	--	300	290	10	--	--	--

MUSKINGUM RIVER BASIN

03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, IN BOT- TOM MA- TERIAL (UG/G)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	CYANIDE TOTAL (MG/L AS CN)
OCT 27...	80	10	70	--	--	--	--	--	--	--	--	--
DEC 08...	110	10	100	--	--	--	--	--	--	--	--	--
JAN 22...	170	0	170	--	--	--	--	--	--	--	--	--
MAR 03...	170	30	140	--	--	--	--	--	--	--	--	--
APR 16...	150	100	50	--	--	--	--	--	--	--	--	--
MAY 26...	80	20	60	--	--	--	--	--	--	--	--	--
JUL 10...	130	60	70	--	--	--	--	--	--	--	--	--
AUG 13...	90	60	30	790	.1	<.01	<1	<1	<1	20	33	<.01
SEP 30...	50	20	30	--	--	--	--	--	--	--	--	--

TABLE OF BENTHIC INVERTEBRATES

SITE ID NUMBER	
0312180000	
7/01/81	

BENTHIC INVERTEBRATES	-STATUS-

AQUATIC EARTHWORMS	--
BEETLES	--
ADULT	--
LARVAE	--
BLACK FLIES	--
CADDISFLIES	--
FREE-LIVING	PRESENT
CASES	--
CHUBS	PRESENT
CLAMS	--
CRAYFISH	--
DAMSELFLIES	--
DRAGONFLIES	--
FISH (NUMEROUS SPECIES)	--
FLAT WORMS	PRESENT
HELLGRAMMITES	--
LEECHES	--
MAYFLIES	--
MIDGES	--
MITES	PRESENT
REDWORMS	--
SCUDS	--
SNAILS	--
STONEFLIES	--
WATER SNAKE	--
WATER STRIDERS	--

EXPLANATION

-- - 0 OBSERVATIONS OF THE ORGANISM IN THE SAMPLE.
PRESENT - 20 OR LESS OBSERVATIONS OF THE ORGANISM IN THE SAMPLE.

MUSKINGUM RIVER BASIN

89

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 mi² (453 km²).

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 1981 water year, 15.8 ft³/s (0.45 m³/s). See REMARKS for station 03124500. Water-quality data collected at this site 1964 to 1969, 1975, 1977.

AVERAGE DISCHARGE.--60 years, 183 ft³/s (5.183 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft³/s (244 m³/s) Jan. 21, 1959, gage height, 11.29 ft (3.441 m), from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s (0.10 m³/s) Sept. 2, 1934.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 20	1500	2750 77.9	6.09 1.856	Apr. 29	1700	2110 59.8	5.28 1.609
Apr. 14	0730	*4690 133	*8.18 2.493	June 9	1130	2340 66.3	5.59 1.704

Minimum daily, 89 ft³/s (2.52 m³/s) Sept. 27.

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	117	110	184	110	312	315	312	470	237	415	132	129
2	128	101	190	100	890	296	311	346	214	184	123	222
3	122	107	167	95	322	273	312	290	230	157	391	224
4	111	145	147	90	216	265	363	267	205	145	232	227
5	101	120	140	90	162	280	1010	253	237	543	150	131
6	115	114	132	90	140	274	399	399	272	681	137	117
7	113	109	186	90	130	249	274	313	184	217	133	112
8	115	108	206	90	120	231	223	252	187	172	124	134
9	111	100	339	90	120	231	201	219	1640	157	116	116
10	109	103	308	90	264	232	181	204	1390	140	117	113
11	105	105	210	90	1350	221	247	369	520	126	176	113
12	97	104	183	90	475	216	918	461	342	124	121	109
13	105	101	165	90	284	217	871	296	452	234	117	107
14	108	110	145	90	217	202	3430	330	809	199	115	111
15	107	106	140	90	180	186	1010	476	405	181	175	106
16	107	99	130	90	534	189	516	338	345	184	142	128
17	107	105	130	90	1030	197	548	255	320	178	122	128
18	325	128	120	90	765	195	474	223	244	169	115	122
19	131	114	120	90	1440	195	350	208	214	157	112	109
20	120	111	110	90	2320	203	313	193	196	631	107	98
21	118	111	110	90	1210	200	275	181	234	367	107	100
22	111	108	110	90	624	205	257	172	363	178	101	104
23	106	107	100	90	865	210	399	163	335	147	98	98
24	105	208	100	90	775	206	365	163	227	141	104	99
25	268	183	100	122	534	195	331	155	300	140	105	95
26	149	142	100	245	426	191	271	157	251	167	103	92
27	120	236	95	478	368	437	257	320	190	140	103	89
28	218	247	95	318	344	345	348	1270	166	304	101	93
29	146	211	95	252	---	294	1580	584	166	261	100	91
30	126	177	120	210	---	304	904	401	187	173	144	94
31	121	---	120	140	---	317	---	338	---	147	137	---
TOTAL	4042	3930	4597	3960	16417	7571	17250	10066	11062	7159	4160	3611
MEAN	130	131	148	128	586	244	575	325	369	231	134	120
MAX	325	247	339	478	2320	437	3430	1270	1640	681	391	227
MIN	97	99	95	90	120	186	181	155	166	124	98	89

CAL YR 1980	TOTAL	96503	MEAN 264	MAX 2280	MIN 95
WTR YR 1981	TOTAL	93825	MEAN 257	MAX 3430	MIN 89

MUSKINGUM RIVER BASIN

91

03121800 HUFF RUN AT LINDENTREE, OH

LOCATION.--Lat 40°36'14", long 81°17'39", in NW 1/4 sec. 27, T.16 N., R.7 E., Carroll County, Hydrologic Unit 05040001, on left bank on downstream side of bridge on Township Road 184 at Lindentree, 2.5 mi (4.0 km) east of Mineral City and 5.1 mi (8.2 km) above mouth.

DRAINAGE AREA.--7.57 mi² (19.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 25, 1981 to September 30, 1981 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 948.81 ft (289.197 m). National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those above 64 ft³/s (1.81 m³/s) which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64.2 ft³/s (18.2 m³/s) June 9, 1981, gage height, 5.47 ft (1.667 m); minimum daily, 0.64 ft³/s (0.018 m³/s) Aug. 27, 29, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges during period March 25 to September 30 above base of 250 ft³/s (7.08 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 5	0400	263 7.45	3.93 1.198	June 13	2315	361 10.2	4.36 1.329
June 9	0945	*642 18.2	*5.47 1.667				

Minimum daily discharge, 0.64 ft³/s (0.018 m³/s) Aug. 27, 29.

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						---	6.3	22	20	4.3	1.9	1.4
2						---	5.6	17	15	4.1	1.7	2.4
3						---	5.4	13	24	4.0	1.9	12
4						---	18	11	20	3.5	2.2	9.5
5						---	121	9.5	16	3.3	1.7	3.2
6						---	42	12	15	3.3	1.9	2.4
7						---	24	9.5	11	3.1	2.1	1.9
8						---	19	7.8	69	2.8	1.6	2.8
9						---	15	7.0	308	2.7	1.5	2.2
10						---	12	6.8	106	2.8	1.3	1.7
11						---	19	8.3	52	2.3	1.2	1.3
12						---	64	11	30	2.2	1.1	1.3
13						---	54	7.0	79	6.8	1.0	1.4
14						---	45	8.1	94	6.1	.95	1.2
15						---	30	15	43	2.9	1.4	1.1
16						---	23	12	31	2.7	1.4	1.1
17						---	24	9.2	24	2.3	1.3	1.1
18						---	20	8.3	16	2.0	1.1	1.1
19						---	15	7.5	13	1.9	.95	1.3
20						---	13	6.3	10	14	.80	1.4
21						---	11	5.2	8.9	23	.80	1.4
22						---	10	4.7	16	6.3	.72	1.3
23						---	14	4.3	8.6	4.3	.72	1.1
24						---	14	4.0	6.8	3.3	.80	.95
25						4.5	12	3.2	16	2.9	.80	.87
26						4.5	11	3.3	8.9	2.9	.72	.87
27						8.1	9.7	12	6.5	2.7	.64	.80
28						6.1	13	54	5.6	3.5	.72	.80
29						6.1	31	34	5.0	3.3	.64	.80
30						7.8	26	33	4.7	2.4	1.8	.72
31						7.0	---	30	---	2.1	1.3	---
TOTAL						---	727.0	396.0	1083.0	133.8	38.66	61.41
MEAN						---	24.2	12.8	36.1	4.32	1.25	2.05
MAX						---	121	54	308	23	2.2	12
MIN						---	5.4	3.2	4.7	1.9	.64	.72
CFSM						---	3.20	1.69	4.77	.57	.17	.27
IN.						---	3.57	1.95	5.32	.66	.19	.30

MUSKINGUM RIVER BASIN

03121800 HUFF RUN AT LINDENTREE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years May 1981 to September 1981 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1981 to September 1981 (discontinued).

pH: May 1981 to September 1981 (discontinued).

WATER TEMPERATURES: May to September 1981 (discontinued).

SUSPENDED SEDIMENT DISCHARGE: May 1981 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor since May 1981.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,820 micromhos Sept. 2, 1981; minimum, 190 micromhos June 9, 1981.

pH: Maximum, 7.5 units May 10, 11, 1981; minimum 6.0 units June 8, Aug. 29, 1981.

WATER TEMPERATURES: Maximum, 26.5°C July 9, 1981; minimum, 6.5°C May 7, 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 1,820 micromhos Sept. 2; minimum, 190 micromhos June 9.

pH: Maximum, 7.5 units May 10, 11; minimum 6.0 units June 8, Aug. 29.

WATER TEMPERATURES: Maximum, 26.5°C July 9; minimum, 6.5°C May 7.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
APR 17...	1515	25	395	7.1	12.0	--	--	--	--	--	--	40
MAY 11...	1400	8.8	570	6.7	14.5	--	--	--	--	--	--	76
JUN 08...	1445	8.9	485	7.3	19.5	--	--	--	--	--	--	55
JUL 14...	1450	3.8	550	6.6	23.5	--	--	--	--	--	--	51
AUG 13...	1000	1.0	800	6.9	17.5	290	230	76	25	31	3.4	76
SEP 17...	1115	1.1	1000	7.0	14.5	--	--	--	--	--	--	84

DATE	CAR- BONATE FET-FLD (MG/L AS C03)	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 SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
APR 17...	0	72	--	--	--	214	--	--	--	--	--	--
MAY 11...	0	120	--	--	--	319	--	--	--	--	--	--
JUN 08...	0	110	--	--	--	309	--	--	--	--	--	--
JUL 14...	0	150	--	--	--	386	--	--	--	--	--	--
AUG 13...	0	210	53	.3	8.9	560	.29	.010	2	5	<50	5
SEP 17...	0	180	--	--	--	589	--	--	--	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
APR 17...	--	--	--	--	--	--	1600	1400	240	--	--	--
MAY 11...	--	--	--	--	--	--	1600	1200	450	--	--	--
JUN 08...	--	--	--	--	--	--	1700	1600	140	--	--	--
JUL 14...	--	--	--	--	--	--	4800	4600	160	--	--	--
AUG 13...	<1	20	<10	10	5	10	3500	1900	1600	21000	17	10
SEP 17...	--	--	--	--	--	--	3300	1200	2100	--	--	--

MUSKINGUM RIVER BASIN

03121800 HUFF RUN AT LINDENTREE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	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)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	CYANIDE TOTAL (MG/L AS CN)
APR 17...	580	30	550	--	--	--	--	--	--	--	--	--
MAY 11...	1300	100	1200	--	--	--	--	--	--	--	--	--
JUN 08...	920	820	100	--	--	--	--	--	--	--	--	--
JUL 14...	2100	400	1700	--	--	--	--	--	--	--	--	--
AUG 13...	2500	0	2500	510	.2	<.01	<1	<1	<1	20	32	<.01
SEP 17...	2900	0	2900	--	--	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	458	422	734	696	---	---	1270	914
2			---	---	492	444	744	666	---	---	1820	1020
3			---	---	514	400	738	676	---	---	1200	692
4			---	---	478	434	772	736	---	---	708	506
5			---	---	494	456	768	734	---	---	850	746
6			456	426	512	462	768	752	---	---	962	786
7			468	446	506	490	---	---	---	---	1070	848
8			486	462	576	228	---	---	---	---	1030	780
9			518	468	310	190	---	---	---	---	1040	780
10			556	480	338	284	---	---	---	---	1070	776
11			584	494	382	336	---	---	---	---	1250	824
12			578	512	428	378	---	---	---	---	894	826
13			614	560	442	192	---	---	1060	772	1120	820
14			616	556	338	238	---	---	1040	750	1120	892
15			548	504	416	342	---	---	900	676	1140	922
16			540	512	468	400	---	---	744	686	1100	886
17			550	518	472	440	---	---	1190	700	1100	858
18			582	522	528	466	---	---	1080	836	1030	854
19			570	524	532	506	---	---	1100	808	894	776
20			584	552	554	530	---	---	1100	794	1140	870
21			594	564	570	542	---	---	1100	776	1070	904
22			616	574	614	434	---	---	910	806	1130	856
23			680	580	600	544	---	---	844	808	988	918
24			612	590	630	508	---	---	1170	778	950	882
25			622	596	636	450	---	---	1170	768	934	880
26			800	602	608	564	---	---	1140	790	914	880
27			682	528	632	600	---	---	1120	776	930	880
28			546	344	664	634	---	---	1080	760	926	876
29			420	408	694	664	---	---	1130	850	1160	856
30			490	328	732	678	---	---	1150	664	1250	1170
31			444	380	---	---	---	---	1040	746	---	---
MONTH			800	328	732	190	772	666	1190	664	1820	506
YEAR	1820	190										

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

MUSKINGUM RIVER BASIN

03121800 HUFF RUN AT LINDENTREE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	6.9	6.8	6.8	6.7	6.8	6.7	7.0	6.6
2			---	---	6.9	6.8	6.9	6.8	6.8	6.7	7.0	6.7
3			---	---	6.9	6.5	6.9	6.8	7.0	6.7	6.8	6.2
4			---	---	7.0	6.9	6.9	6.8	6.9	6.8	6.9	6.8
5			---	---	7.0	6.8	7.0	6.9	6.9	6.7	6.9	6.8
6			7.4	7.3	7.0	6.8	6.9	6.8	6.9	6.7	7.0	6.8
7			7.4	7.3	6.9	6.9	6.8	6.7	6.9	6.7	7.0	6.8
8			7.4	7.3	7.0	6.0	6.8	6.8	6.9	6.8	7.0	6.6
9			7.4	7.3	6.5	6.1	6.8	6.6	6.9	6.8	7.0	6.8
10			7.5	7.3	6.6	6.5	6.8	6.7	6.8	6.7	7.0	6.8
11			7.5	7.0	6.7	6.7	6.9	6.7	---	---	7.0	6.7
12			7.1	7.0	6.8	6.7	6.9	6.7	---	---	6.8	6.7
13			7.1	7.0	6.8	6.3	6.8	6.6	7.1	6.4	7.1	6.7
14			7.0	7.0	6.7	6.4	6.7	6.5	7.0	6.4	7.0	6.7
15			7.1	7.0	6.8	6.7	6.8	6.7	6.8	6.2	7.0	6.8
16			7.1	7.0	6.8	6.6	6.7	6.6	6.8	6.7	7.0	6.7
17			7.1	7.0	6.8	6.7	6.7	6.6	7.1	6.7	7.0	6.8
18			7.2	7.1	6.8	6.8	6.8	6.6	7.1	6.7	6.9	6.8
19			7.1	7.0	6.8	6.8	6.8	6.7	6.9	6.7	6.9	6.8
20			7.1	7.0	6.8	6.8	6.7	6.5	7.0	6.7	7.1	6.8
21			7.0	7.0	6.8	6.8	6.8	6.4	6.9	6.7	6.9	6.8
22			7.1	7.0	6.8	6.4	6.8	6.7	6.8	6.7	7.0	6.7
23			7.0	7.0	6.9	6.7	6.8	6.7	6.7	6.6	6.9	6.8
24			7.0	7.0	6.9	6.8	6.8	6.7	7.1	6.6	6.8	6.7
25			7.0	6.9	6.9	6.4	6.8	6.7	7.0	6.7	6.8	6.7
26			7.0	6.8	6.8	6.8	6.8	6.5	7.0	6.7	6.7	6.7
27			7.0	6.4	6.9	6.7	6.8	6.8	6.9	6.7	6.7	6.7
28			6.7	6.3	6.9	6.8	6.9	6.4	7.1	6.6	6.8	6.7
29			6.8	6.7	6.9	6.8	6.9	6.8	6.8	6.0	6.9	6.7
30			6.9	6.7	6.8	6.7	6.8	6.7	6.9	6.4	7.0	7.0
31			6.9	6.8	---	---	6.9	6.7	7.0	6.7	---	---
MONTH			7.5	6.3	7.0	6.0	7.0	6.4	7.1	6.0	7.1	6.2
YEAR	7.5	6.0										

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

MUSKINGUM RIVER BASIN

95

03121800 HUFF RUN AT LINDENTREE, OH--Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	17.5	10.0	22.0	18.5	22.0	16.0	22.0	18.0
2			---	---	17.5	14.0	21.5	18.0	23.0	17.5	22.5	20.0
3			---	---	19.0	14.5	22.0	17.5	21.5	19.5	21.0	19.0
4			---	---	20.0	15.5	22.5	17.5	23.5	19.0	21.5	19.0
5			---	---	18.5	13.5	23.5	19.0	23.0	19.5	20.0	17.0
6			11.5	9.5	19.5	15.5	24.0	19.0	22.0	19.5	21.0	17.5
7			16.0	6.5	20.5	13.0	25.5	19.0	22.0	18.5	20.0	18.0
8			18.0	8.0	20.0	13.5	25.5	19.5	21.5	18.5	19.5	17.5
9			15.5	10.5	17.0	13.5	26.5	21.0	22.0	17.5	17.5	14.0
10			18.0	12.5	16.0	13.5	25.0	21.0	22.0	17.5	17.5	12.0
11			15.0	13.5	17.0	11.5	24.0	16.5	---	---	20.5	15.0
12			13.0	10.5	18.0	13.0	24.0	18.0	---	---	20.5	16.5
13			17.0	8.5	19.5	14.5	24.0	20.0	22.0	17.0	21.0	17.0
14			16.5	11.5	18.5	15.0	23.5	20.0	22.0	18.0	19.5	17.5
15			14.0	12.0	20.5	14.0	23.0	16.5	21.0	19.0	18.5	16.0
16			16.0	10.5	20.0	15.0	22.0	18.5	20.5	17.5	17.0	14.0
17			16.5	9.5	19.5	14.5	22.5	18.0	19.5	14.0	15.5	13.0
18			13.5	11.0	20.5	13.0	24.0	17.5	19.0	12.5	12.5	11.0
19			12.0	9.5	20.5	14.0	21.5	19.0	19.0	13.0	14.5	11.5
20			17.5	7.5	21.0	16.0	22.0	20.0	19.0	13.5	15.5	12.5
21			19.0	9.5	18.5	17.0	22.0	19.0	18.0	14.0	16.0	12.0
22			20.0	11.5	21.0	16.5	20.5	17.0	19.0	14.5	14.5	11.5
23			18.5	13.0	20.0	15.0	20.5	14.5	19.0	14.0	12.5	8.0
24			22.0	13.5	20.5	14.5	22.5	16.0	19.0	14.5	12.5	7.5
25			20.5	15.0	21.0	17.5	23.0	17.5	18.5	14.0	13.5	9.0
26			18.5	13.5	20.0	15.0	22.0	20.0	19.5	13.5	16.5	11.5
27			17.5	15.5	20.5	12.5	22.5	19.0	20.0	15.0	17.0	14.0
28			16.5	14.5	22.0	13.5	23.0	19.5	21.5	18.0	14.0	11.0
29			18.0	13.0	22.0	16.0	20.5	16.5	21.5	18.0	12.0	8.0
30			16.5	13.0	23.5	18.0	21.0	14.0	20.5	19.0	13.5	11.5
31			18.0	12.5	---	---	21.5	15.5	20.0	18.0	---	---
MONTH			22.0	6.5	23.5	10.0	26.5	14.0	23.5	12.5	22.5	7.5
YEAR	26.5	6.5										

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

MUSKINGUM RIVER BASIN

03121800 HUFF RUN AT LINDENTREE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	6.3	---	---	22	28	1.7	20	19	1.0
2	5.6	---	---	17	24	1.1	15	12	.49
3	5.4	---	---	13	19	.67	24	101	7.4
4	18	---	---	11	19	.56	20	36	1.9
5	121	---	---	9.5	20	.51	16	27	1.2
6	42	---	---	12	36	1.2	15	25	1.0
7	24	---	---	9.5	21	.54	11	20	.59
8	19	---	---	7.8	20	.42	69	873	564
9	15	---	---	7.0	20	.38	308	647	660
10	12	---	---	6.8	19	.35	106	97	28
11	19	---	---	8.3	14	.31	52	47	6.6
12	64	---	---	11	25	.74	30	35	2.8
13	54	---	---	7.0	10	.19	79	1040	686
14	45	---	---	8.1	17	.37	94	958	343
15	30	---	---	15	131	5.7	43	40	4.6
16	23	---	---	12	29	.94	31	48	4.0
17	24	---	---	9.2	24	.60	24	27	1.7
18	20	---	---	8.3	18	.40	16	21	.91
19	15	---	---	7.5	17	.34	13	20	.70
20	13	---	---	6.3	16	.27	10	20	.54
21	11	---	---	5.2	15	.21	8.9	20	.48
22	10	---	---	4.7	14	.18	16	323	18
23	14	---	---	4.3	12	.14	8.6	65	1.5
24	14	---	---	4.0	11	.12	6.8	40	.73
25	12	---	---	3.2	10	.09	16	277	17
26	11	---	---	3.3	10	.09	8.9	27	.65
27	9.7	---	---	12	201	5.8	6.5	20	.35
28	13	---	---	54	540	91	5.6	20	.30
29	31	114	12	34	80	7.3	5.0	20	.27
30	26	35	2.5	33	179	24	4.7	20	.25
31	---	---	---	30	52	4.2	---	---	---
TOTAL	727.0	---	14.5	396.0	---	150.42	1083.0	---	2355.96
JULY				AUGUST				SEPTEMBER	
1	4.3	20	.23	1.9	20	.10	1.4	14	.05
2	4.1	20	.22	1.7	20	.09	2.4	17	.11
3	4.0	20	.22	1.9	25	.13	12	1430	80
4	3.5	20	.19	2.2	30	.18	9.5	138	5.5
5	3.3	20	.18	1.7	25	.11	3.2	21	.18
6	3.3	20	.18	1.9	24	.12	2.4	14	.09
7	3.1	20	.17	2.1	29	.16	1.9	14	.07
8	2.8	20	.15	1.6	20	.09	2.8	16	.12
9	2.7	20	.15	1.5	21	.09	2.2	12	.07
10	2.8	20	.15	1.3	21	.07	1.7	14	.06
11	2.3	20	.12	1.2	22	.07	1.3	26	.09
12	2.2	20	.12	1.1	26	.08	1.3	20	.07
13	6.8	192	10	1.0	35	.09	1.4	10	.04
14	6.1	253	7.2	.95	44	.11	1.2	9	.03
15	2.9	22	.17	1.4	30	.11	1.1	14	.04
16	2.7	19	.14	1.4	13	.05	1.1	10	.03
17	2.3	20	.12	1.3	12	.04	1.1	8	.02
18	2.0	20	.11	1.1	12	.04	1.1	10	.03
19	1.9	20	.10	.95	24	.06	1.3	8	.03
20	14	819	48	.80	29	.06	1.4	11	.04
21	23	407	49	.80	32	.07	1.4	7	.03
22	6.3	34	.58	.72	39	.08	1.3	7	.02
23	4.3	27	.31	.72	36	.07	1.1	10	.03
24	3.3	26	.23	.80	41	.09	.95	15	.04
25	2.9	26	.20	.80	30	.06	.87	12	.03
26	2.9	25	.20	.72	35	.07	.87	7	.02
27	2.7	25	.18	.64	40	.07	.80	9	.02
28	3.5	28	.26	.72	39	.08	.80	10	.02
29	3.3	26	.23	.64	41	.07	.80	7	.02
30	2.4	20	.13	1.8	31	.15	.72	7	.01
31	2.1	20	.11	1.3	12	.04	---	---	---
TOTAL	133.8	---	119.35	38.66	---	2.70	61.41	---	86.91
YEAR	2483.97		2729.84						

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

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 mi² (3,639 km²).

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 except those for period of missing record, Dec. 13 to Jan. 16, which are fair. 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 1981 water year, 15.8 ft³/s (0.45 m³/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.--58 years, 1,432 ft³/s (40.55 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 26, 1937, gage height, 15.51 ft (4.727 m); minimum daily, 6.5 ft³/s (0.18 m³/s) Oct. 26, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,620 ft³/s (159 m³/s) Apr. 16, gage height, 7.17 ft (2.185 m); minimum daily, 367 ft³/s (10.4 m³/s) Sept. 28.

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	576	857	1030	970	900	4190	1470	5130	2860	1650	672	532
2	584	835	1100	900	2930	2630	1300	4450	1640	1480	603	670
3	600	806	1140	820	3490	3970	1200	3840	1630	1240	591	1150
4	580	828	1060	700	2490	4830	1180	2770	2460	1130	1140	1820
5	527	835	849	630	1980	5200	3330	1960	2560	1090	754	2360
6	495	792	722	590	1440	5110	4350	2020	2830	1830	625	1580
7	502	743	715	560	1200	4940	3950	2670	2480	1710	591	1110
8	502	660	893	560	1000	4590	2990	2140	1790	1190	580	966
9	489	626	1320	550	950	4310	2620	1780	4050	1010	552	1060
10	476	613	2130	550	920	4120	2140	1470	4480	912	517	896
11	489	587	2030	550	2640	3520	1790	1480	4880	785	563	777
12	489	553	1510	550	3340	2760	3470	2690	4540	704	589	666
13	476	482	1320	550	3420	1990	4590	2680	4260	707	545	577
14	470	470	1160	550	2680	1640	4460	1980	2110	908	496	537
15	514	489	1100	550	1720	1530	5270	2780	2760	840	508	543
16	821	470	1000	550	1600	1450	5530	3460	5020	721	616	552
17	857	457	940	550	3250	1340	5460	2720	5000	667	587	608
18	1070	495	890	550	3850	1250	5220	2070	4990	623	523	553
19	1050	540	850	550	4380	1200	5090	1830	5010	581	471	542
20	893	534	810	550	3560	1190	5080	1560	4630	929	446	493
21	792	534	770	550	3640	1170	5160	1310	4360	2500	432	450
22	743	527	740	550	4900	1180	5150	1200	4720	2130	424	437
23	715	508	720	550	5160	1200	4860	1110	5110	1300	409	434
24	701	573	700	550	5230	1200	4550	1030	4170	857	393	417
25	893	937	680	550	5330	1150	3930	960	3640	746	404	404
26	1210	978	670	667	5370	1080	3360	908	3240	738	403	393
27	1040	864	660	1790	5300	1420	2360	1070	2780	838	402	386
28	991	1190	660	2190	5160	2350	2090	3360	2350	824	396	367
29	1060	1260	660	1750	---	1870	3400	4280	1940	1340	393	389
30	978	1140	1030	1350	---	1590	4970	3230	1680	1130	441	368
31	893	---	930	1060	---	1600	---	3520	---	803	514	---
TOTAL	22476	21183	30789	23887	87830	77570	110320	73458	103970	33913	16580	22017
MEAN	725	706	993	771	3137	2502	3677	2370	3466	1094	535	734
MAX	1210	1260	2130	2190	5370	5200	5530	5130	5110	2500	1140	2360
MIN	470	457	660	550	900	1080	1180	908	1630	581	393	367

CAL YR 1980 TOTAL 686350 MEAN 1875 MAX 5120 MIN 457
WTR YR 1981 TOTAL 623993 MEAN 1710 MAX 5530 MIN 367

MUSKINGUM RIVER BASIN

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 mi² (777 km²).

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. Flood flow regulated by Beach City Lake (see station 03123500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 277 ft³/s (7.845 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,520 ft³/s (213 m³/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, 1,900 ft³/s (53.8 m³/s) Feb. 19, gage height, 6.26 ft (1.908 m); minimum daily, 25 ft³/s (0.71 m³/s) Sept. 30.

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	59	76	214	115	193	609	169	1090	505	206	71	65
2	59	70	210	100	836	443	144	616	344	196	64	104
3	63	65	210	85	1420	376	128	440	336	160	69	143
4	63	67	175	75	740	329	134	358	550	144	344	349
5	58	83	144	65	411	343	729	307	421	138	332	174
6	54	74	136	65	240	390	1130	360	728	149	165	95
7	51	65	154	65	200	347	646	473	1250	135	116	69
8	52	63	239	65	170	310	416	337	1210	111	98	62
9	51	65	320	65	150	287	320	267	1270	99	87	68
10	50	61	549	65	140	278	273	234	1580	89	77	57
11	50	56	441	65	842	273	261	270	1590	80	69	47
12	52	52	298	65	1600	251	904	708	1810	75	63	43
13	48	51	247	65	879	229	1070	698	1710	79	60	48
14	46	51	204	65	483	208	1300	435	736	172	56	49
15	46	54	165	65	330	191	1490	729	994	123	58	43
16	47	56	162	65	418	190	1520	944	1440	86	70	45
17	47	54	147	65	1230	184	1370	641	1630	77	62	47
18	89	57	131	65	1760	172	774	435	1710	71	52	58
19	145	67	129	65	1650	167	522	349	1610	65	44	52
20	82	66	88	65	1490	164	413	299	1320	141	42	43
21	63	62	80	65	1490	163	342	252	471	480	41	38
22	57	62	70	65	1700	157	295	218	573	239	38	35
23	54	62	70	65	1750	152	321	193	664	130	39	34
24	51	71	70	65	1770	146	442	176	386	95	39	33
25	94	148	70	65	1790	136	406	159	439	81	37	30
26	229	139	70	101	1770	127	328	145	848	86	37	30
27	134	116	70	591	1760	155	293	191	525	116	37	30
28	108	315	70	806	1440	202	404	836	308	109	39	27
29	145	299	70	494	---	170	859	1280	239	199	46	26
30	108	224	112	278	---	165	1300	1020	205	132	53	25
31	88	---	134	150	---	195	---	727	---	87	56	---
TOTAL	2343	2751	5249	4160	28652	7509	18703	15187	27402	4150	2461	1969
MEAN	75.6	91.7	169	134	1023	242	623	490	913	134	79.4	65.6
MAX	229	315	549	806	1790	609	1520	1280	1810	480	344	349
MIN	46	51	70	65	140	127	128	145	205	65	37	25
CAL YR 1980	TOTAL	145149	MEAN	397	MAX	2600	MIN	46				
WTR YR 1981	TOTAL	120536	MEAN	330	MAX	1810	MIN	25				

MUSKINGUM RIVER BASIN

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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 mi² (805 km²).

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 1981, 15.8 ft³/s (0.45 m³/s). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--24 years (1931-32, 1935-38, 1961-81), 316 ft³/s (8.949 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft³/s (558 m³/s) Aug. 7, 1935, gage height, 14.70 ft (4.48 m) (present datum), from rating curve extended above 8,400 ft³/s (238 m³/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, 6,880 ft³/s (195 m³/s) Feb. 3, gage height, 8.99 ft (2.740 m); minimum daily, 35 ft³/s (0.99 m³/s) Sept. 29, 30.

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	67	93	243	135	213	651	193	1140	551	269	120	67
2	67	85	243	122	780	479	167	651	395	258	110	109
3	71	77	238	107	2110	415	149	482	388	218	113	147
4	73	78	204	85	3080	369	161	402	584	199	395	363
5	71	96	167	70	520	372	732	350	475	191	436	216
6	65	88	159	65	340	418	1120	382	756	199	248	123
7	60	77	173	65	250	385	651	505	1310	191	182	92
8	60	73	272	65	200	350	436	382	1270	161	157	80
9	60	76	363	65	160	326	338	311	1480	145	141	85
10	59	72	604	65	150	314	291	277	1760	132	128	75
11	59	66	501	65	746	308	283	308	1710	123	118	62
12	61	61	353	65	1510	291	915	705	1970	116	110	55
13	58	59	291	65	1030	264	1070	728	1970	119	105	57
14	56	58	243	65	505	243	1320	482	869	221	102	62
15	55	60	195	65	350	223	1540	732	1000	186	103	55
16	55	64	188	65	415	216	1550	969	1550	133	120	57
17	55	62	175	65	1160	211	1400	678	1750	120	116	58
18	91	64	157	65	1850	197	775	479	1890	113	92	70
19	177	75	151	65	1770	188	536	398	1770	106	80	66
20	105	78	109	65	1650	188	436	347	1480	180	66	56
21	78	73	85	65	1540	186	369	302	563	563	62	51
22	68	71	75	65	1780	180	323	264	613	332	48	47
23	64	71	75	65	1840	173	344	235	728	199	43	46
24	60	80	75	65	1840	169	461	216	461	151	44	44
25	96	159	75	65	1860	157	443	197	482	130	44	41
26	264	165	75	109	1840	149	372	182	884	132	44	39
27	167	133	75	592	1840	171	335	225	609	173	42	40
28	123	344	75	874	1550	225	418	838	385	167	42	37
29	167	353	75	551	---	195	848	1320	308	269	48	35
30	132	264	120	323	---	184	1340	1070	269	204	56	35
31	107	---	157	160	---	216	---	746	---	143	58	---
TOTAL	2751	3175	5991	4428	32879	8413	19316	16303	30230	5843	3573	2370
MEAN	88.7	106	193	143	1174	271	644	526	1008	188	115	79.0
MAX	264	353	604	874	3080	651	1550	1320	1970	563	436	363
MIN	55	58	75	65	150	149	149	182	269	106	42	35
CAL YR 1980	TOTAL	167755	MEAN	458	MAX	2900	MIN	55				
WTR YR 1981	TOTAL	135272	MEAN	371	MAX	3080	MIN	35				

MUSKINGUM RIVER BASIN

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 mi² (316 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft (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.--43 years, 139 ft³/s (3.936 m³/s). The figures published in the 1980 report was in error; the correct figure is 42 years, 138 ft³/s (3.908 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft³/s (41.6 m³/s) Dec. 4, 1950; maximum gage height, 11.44 ft (3.487 m) Mar. 5, 1963; minimum daily discharge, 0.2 ft³/s (0.006 m³/s) Sept. 3, 4, 10, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Apr. 13, gage height, 11.22 ft (3.420 m); minimum daily, 22 ft³/s (0.62 m³/s) Sept. 29, 30.

REVISIONS.--The maximum and minimum discharge for the water year 1980 have been revised to 1,180 ft³/s (33.4 m³/s) Aug. 11, 1980, gage height, 10.04 ft (3.060 m), maximum gage height, 10.39 ft (3.167 m) Aug. 18, 1980 (backwater from unnamed tributary); minimum daily, 31 ft³/s (0.88 m³/s) Feb. 3, 1980, superseding figures published in WRD-OH-80-1.

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	72	50	277	133	162	388	59	506	116	494	274	37
2	68	48	270	105	435	267	44	501	117	513	155	78
3	67	47	266	62	327	168	43	501	118	514	104	96
4	63	50	256	59	329	165	47	501	119	523	266	99
5	58	48	254	58	375	214	324	502	120	529	210	82
6	53	46	258	58	405	242	237	502	118	503	92	76
7	53	45	278	60	259	191	162	498	123	504	89	72
8	52	45	285	59	184	177	141	498	124	504	86	79
9	50	45	308	57	138	186	137	495	124	477	81	80
10	48	42	326	57	72	189	141	489	125	307	77	70
11	48	36	292	56	222	187	163	353	126	97	72	64
12	45	36	208	55	289	182	1000	242	127	93	65	58
13	41	37	112	36	240	143	1360	183	128	94	61	52
14	41	143	103	26	204	102	973	135	128	100	58	49
15	40	197	135	27	206	99	481	142	256	91	58	81
16	38	197	155	27	269	106	299	142	434	89	59	71
17	38	202	150	26	381	95	288	143	488	87	54	64
18	49	240	79	26	290	84	417	143	491	81	50	56
19	52	253	44	44	261	82	387	144	508	76	46	57
20	46	249	35	53	363	81	389	144	520	80	43	50
21	43	248	32	54	331	82	427	132	508	98	40	46
22	41	249	31	55	180	79	476	122	493	100	37	45
23	39	249	30	55	337	78	521	121	503	86	33	41
24	36	293	30	55	543	75	536	120	495	80	28	39
25	79	306	30	57	476	74	532	115	708	75	26	39
26	94	270	30	109	423	72	514	112	606	88	25	36
27	68	308	30	145	340	77	504	112	416	239	24	30
28	65	335	30	146	359	73	504	113	450	278	24	24
29	62	303	75	148	---	72	504	112	507	392	23	22
30	56	287	136	136	---	77	505	114	511	421	29	22
31	53	---	133	139	---	79	---	115	---	365	32	---
TOTAL	1658	4904	4678	2183	8400	4186	12115	8052	9607	7978	2321	1715
MEAN	53.5	163	151	70.4	300	135	404	260	320	257	74.9	57.2
MAX	94	335	326	148	543	388	1360	506	708	529	274	99
MIN	36	36	30	26	72	72	43	112	116	75	23	22
CAL YR 1980	TOTAL	80688	MEAN 220	MAX 1020	MIN 30							
WTR YR 1981	TOTAL	67797	MEAN 186	MAX 1360	MIN 22							

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 mi² (730 km²).

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 Clendening 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.--43 years, 323 ft³/s (9.147 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft³/s (125 m³/s) Mar. 7, 1945, Mar. 5, 1963; maximum gage height, 17.29 ft (5.270 m) Mar. 5, 1963; minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Oct. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,060 ft³/s (86.7 m³/s) Apr. 13, gage height, 16.43 ft (5.008 m); minimum daily, 44 ft³/s (1.25 m³/s) Sept. 30.

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	105	120	675	224	271	1070	167	999	297	912	442	67
2	103	113	671	221	1090	922	131	1030	269	984	333	126
3	101	107	660	153	1210	461	121	1030	278	925	233	346
4	96	114	648	125	1040	401	129	1040	360	728	623	1240
5	91	117	654	100	857	460	1020	1020	545	756	528	676
6	88	110	654	95	750	652	1270	1040	1900	694	256	257
7	86	105	688	95	580	611	842	1030	2060	653	210	191
8	84	110	768	95	440	527	544	1000	1430	640	189	186
9	81	110	804	95	350	438	460	865	828	619	167	210
10	77	103	939	94	310	387	453	815	945	555	148	172
11	78	92	867	92	633	396	541	686	1020	208	135	147
12	77	82	726	89	847	395	1770	470	1010	154	124	127
13	73	84	469	84	718	364	2880	400	1010	150	109	111
14	68	211	400	60	425	248	2690	309	955	167	102	100
15	69	434	298	60	399	229	2050	521	1040	150	98	152
16	67	433	279	61	470	239	1310	583	1060	139	105	208
17	66	437	298	58	987	239	817	463	927	136	95	163
18	79	456	275	59	1120	210	1000	401	1010	126	85	136
19	107	498	178	59	1050	197	1030	443	1040	117	77	136
20	100	492	130	82	1430	191	957	399	1030	119	72	122
21	91	488	126	87	1700	191	987	321	975	156	70	105
22	84	490	81	91	1280	185	1010	254	980	189	65	98
23	78	494	60	93	916	177	1040	235	1020	154	62	89
24	75	565	60	94	1310	170	1020	227	1010	132	58	77
25	127	703	60	95	1280	162	992	208	1330	121	53	72
26	255	628	60	154	1130	155	985	198	1710	163	51	69
27	193	625	60	473	1160	162	1030	375	1530	646	50	66
28	166	819	60	496	1030	165	1050	665	996	688	49	57
29	161	767	93	438	---	155	1030	570	856	894	49	48
30	142	682	212	321	---	169	1080	386	933	842	54	44
31	128	---	227	252	---	189	---	341	---	629	61	---
TOTAL	3196	10589	12180	4595	24783	10517	30406	18324	30354	13546	4753	5598
MEAN	103	353	393	148	885	339	1014	591	1012	437	153	187
MAX	255	819	939	496	1700	1070	2880	1040	2060	984	623	1240
MIN	66	82	60	58	271	155	121	198	269	117	49	44
CAL YR 1980	TOTAL	208521	MEAN	570	MAX	3570	MIN	60				
WTR YR 1981	TOTAL	168841	MEAN	463	MAX	2880	MIN	44				

MUSKINGUM RIVER BASIN

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 mi² (951 km²).

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.--59 years, 436 ft³/s (12.35 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,650 ft³/s (217 m³/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, 4,600 ft³/s (130 m³/s) Apr. 14, gage height, 7.85 ft (2.393 m); minimum daily discharge, 48 ft³/s (1.36 m³/s) Aug. 28, 29.

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	143	157	823	256	329	1230	257	1240	458	1070	642	77
2	130	144	814	256	1150	1190	219	1160	397	1040	486	123
3	124	133	807	228	1500	835	182	1120	417	1080	423	339
4	124	132	749	152	1400	538	193	1110	538	936	863	1600
5	126	150	735	130	1200	546	1070	1100	523	854	787	870
6	118	143	739	130	955	731	1600	1110	1500	835	516	600
7	114	132	791	130	908	806	1100	1140	2340	759	339	403
8	106	130	940	130	787	695	700	1110	1900	722	297	309
9	99	139	1040	120	660	608	600	1020	1100	704	269	321
10	99	135	1190	120	584	508	584	927	1200	669	230	280
11	113	124	1160	120	741	479	608	890	1300	494	198	230
12	111	112	977	120	1020	486	2200	677	1260	246	177	193
13	95	101	734	110	974	465	3980	546	1210	204	152	162
14	87	103	530	95	669	390	4560	458	1200	214	132	142
15	81	299	442	71	523	309	2700	584	1300	219	128	132
16	81	429	355	71	576	309	1600	768	1300	193	128	235
17	79	436	348	68	1140	333	1000	669	1260	182	128	241
18	87	446	355	65	1500	309	1230	538	1140	172	110	198
19	119	484	297	71	1400	274	1260	516	1160	157	101	172
20	126	505	201	75	1700	263	1200	516	1130	152	89	167
21	113	499	135	92	2300	257	1140	451	1120	182	81	147
22	102	499	120	103	2000	252	1130	371	1100	246	74	132
23	92	508	95	106	1300	241	1170	321	1130	235	70	119
24	87	573	80	110	1800	230	1250	303	1060	187	66	110
25	132	842	75	110	1700	219	1210	286	1720	157	59	97
26	335	825	75	148	1600	204	1150	269	2320	371	55	89
27	307	756	75	481	1470	214	1130	364	2000	740	52	89
28	243	1050	75	678	1370	225	1190	860	1300	800	48	85
29	239	1050	75	589	---	214	1220	740	1140	1180	48	74
30	209	915	130	457	---	219	1300	677	1010	1110	74	62
31	177	---	244	329	---	269	---	538	---	881	74	---
TOTAL	4198	11951	15206	5721	33256	13848	38733	22379	36533	16991	6896	7798
MEAN	135	398	491	185	1188	447	1291	722	1218	548	222	260
MAX	335	1050	1190	678	2300	1230	4560	1240	2340	1180	863	1600
MIN	79	101	75	65	329	204	182	269	397	152	48	62
(+)	1.62	1.66	1.72	1.99	2.03	1.63	1.81	1.86	1.82	1.87	1.80	1.95

CAL YR 1980 TOTAL 246351 MEAN 673 MAX 3600 MIN 75 (+) 1.78
WTR YR 1981 TOTAL 213510 MEAN 585 MAX 4560 MIN 48 (+) 1.81

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

MUSKINGUM RIVER BASIN

103

03127970 CLEAR FORK TRIBUTARY NEAR HANOVER, OH

LOCATION.--Lat 40°21'07", long 81°04'14", in NE 1/4 sec. 28, T.12 N., R.5 W., Harrison County, Hydrologic Unit 05040001, at bridge on Archer Township Road 239-A, 1.1 mi (1.8 km) south of Hanover, 1.2 mi (1.9 km) upstream from mouth and 3.6 mi (5.8 km) southwest of Jewett.

DRAINAGE AREA.--0.68 mi² (1.76 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 979 ft (298 m) from topographic map.

REMARKS.--

Water-year 1979: Records good except those for periods of no gage-height record, Apr. 26 to May 14, May 17 to 29, which are poor.

Water-year 1980.--Records good except those below 0.8 ft³/s (0.02 m³/s) which are poor.

Water-year 1981.--Records good except those below 0.7 ft³/s (0.02 m³/s) which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 731 ft³/s (20.7 m³/s), Sept. 14, 1979, gage height, 16.24 ft (4.950 m); minimum daily 0.06 ft³/s (0.002 m³/s) Aug. 23-31, 1981.

EXTREMES FOR CURRENT PERIOD.--

Water-year 1979.--Maximum discharge 731 ft³/s (20.7 m³/s), Sept. 14, gage height, 16.24 ft (4.950 m); minimum daily, 0.10 ft³/s (0.003 m³/s), July 31.

Water-year 1980.--Maximum discharge 99 ft³/s (2.80 m³/s), June 2, gage height, 14.96 ft (4.560 m); minimum daily, 0.22 ft³/s (0.005 m³/s) Nov. 19.

Water-year 1981.--Maximum discharge 35 ft³/s (0.991 m³/s), Apr. 11, gage height 12.56 ft (3.828 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Aug. 23-31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.50	.62	6.8	1.1	3.4	.96	.51	1.1	.28	.21	1.0
2	.34	.44	.55	8.1	.98	3.3	2.3	.42	1.1	.26	.36	.77
3	.50	.39	2.8	4.1	.90	4.0	2.3	.85	.90	.25	.18	.58
4	.84	.35	6.8	2.8	.83	3.5	2.1	.66	.75	1.2	.15	.49
5	.60	.31	2.8	1.8	.76	2.4	1.7	.57	.66	.84	.22	.42
6	.40	.29	1.8	1.4	.71	2.0	1.4	.51	.58	.60	.20	.36
7	.28	.26	1.4	1.1	.67	1.9	1.2	.45	.84	.45	.12	.30
8	.46	.25	7.5	.94	.64	1.8	1.3	.41	1.1	.30	.68	.27
9	.68	.24	13	.77	.61	1.7	5.1	.38	.96	.25	.80	.23
10	.45	.24	4.0	.65	.58	1.7	3.8	.35	.70	.48	.54	.21
11	.38	.23	2.3	.53	.55	1.7	2.6	.33	.74	.40	1.2	.20
12	.72	.22	1.9	.40	.53	1.6	2.2	.90	.62	.32	.84	.19
13	.96	.22	1.6	1.6	.50	1.6	1.9	.55	.47	.27	.60	.68
14	1.3	.21	1.3	2.8	.48	1.5	1.8	.45	.38	.23	.40	1.3
15	1.1	.40	1.1	2.5	.47	1.4	1.7	.41	.35	.20	.30	.92
16	1.1	.60	1.0	2.2	.46	1.4	1.7	.38	.33	.17	.25	.60
17	1.0	.88	.92	1.7	.44	1.1	1.6	.36	.31	.16	.24	.45
18	.92	.92	.85	1.4	.42	.80	1.3	.34	.28	.15	.21	.32
19	.88	.82	.76	1.4	.41	.80	1.2	.33	.27	.13	.29	.28
20	.78	.75	1.2	1.6	.40	.84	1.2	.54	.26	.12	.68	.26
21	.72	.92	1.4	2.8	2.2	.80	1.1	.45	.92	.14	1.4	1.2
22	.67	.92	1.0	2.2	2.8	.80	1.0	.39	.96	.16	.88	.96
23	.62	.73	.89	1.7	9.2	.84	.88	.36	.78	.32	1.0	.64
24	.58	.88	.81	4.7	8.5	.92	.80	1.1	.60	.47	5.4	.35
25	.54	.71	.75	4.7	20	.84	.80	4.8	.36	.62	1.9	.29
26	1.1	.56	.70	3.1	7.8	.80	1.3	3.5	.28	.80	1.2	.26
27	1.0	.70	.65	2.5	3.7	.76	1.4	4.3	.25	.56	1.4	.84
28	.96	.92	.60	2.2	3.2	.72	.90	2.6	.22	.40	1.2	2.7
29	.88	.78	.80	1.7	---	.80	.70	1.9	.37	.21	2.5	2.2
30	.70	.67	1.2	1.4	---	.80	.60	1.4	.30	.15	1.6	1.4
31	.58	---	1.9	1.2	---	.80	---	1.2	---	.10	1.2	---
TOTAL	22.24	16.31	64.90	72.79	69.84	47.32	48.84	31.70	17.74	10.99	28.15	20.67
MEAN	.72	.54	2.09	2.35	2.49	1.53	1.63	1.02	.59	.35	.91	.69
MAX	1.3	.92	13	8.1	20	4.0	5.1	4.8	1.1	1.2	5.4	2.7
MIN	.20	.21	.55	.40	.40	.72	.60	.33	.22	.10	.12	.19
CFSM	1.06	.79	3.07	3.46	3.66	2.25	2.40	1.50	.87	.52	1.34	1.02
IN.	1.21	.89	3.55	3.98	3.82	2.58	2.67	1.73	.97	.60	1.54	1.13

WTR YR 1979 TOTAL 451.49 MEAN 1.24 MAX 20 MIN .10 CFSM 1.82 IN 24.66

MUSKINGUM RIVER BASIN

03127970 CLEAR FORK TRIBUTARY NEAR HANOVER, OH--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.42	.58	.77	.34	.66	2.6	.46	1.4	.59	1.1	.82
2	2.0	.66	.54	.68	.33	.55	1.8	.46	20	.55	3.1	.78
3	1.3	.58	.46	.61	.32	.52	1.5	.43	15	.52	7.4	.70
4	1.1	.47	.48	.56	.31	.74	1.6	.41	7.6	.46	3.0	.66
5	.94	.42	.48	.50	.31	1.8	1.4	.37	3.0	.91	1.9	.62
6	.84	.40	.46	.46	.31	1.2	1.2	.36	2.3	1.0	1.5	.62
7	1.2	.39	.48	.43	.30	1.3	1.1	.35	2.6	.52	1.4	.59
8	.82	.38	.46	.41	.30	9.0	1.0	.34	3.0	1.0	1.3	.59
9	2.0	1.4	.41	.39	.30	4.3	1.0	.34	2.5	1.5	1.4	.55
10	1.4	1.1	.40	.38	.29	2.9	.91	.34	2.3	1.3	1.2	.55
11	1.1	.88	.39	6.4	.29	2.0	.82	.36	1.8	1.1	4.8	.52
12	1.0	.64	.38	5.1	.29	1.4	.87	2.4	1.4	.91	11	.52
13	.98	.55	.90	2.6	.29	1.3	1.0	2.8	1.3	.78	2.9	.52
14	.96	.45	1.1	1.8	.29	1.4	2.9	1.5	1.2	.66	1.6	.52
15	.90	.35	.70	1.4	.29	1.4	3.7	1.2	3.9	.59	5.1	.49
16	.87	.54	.57	1.1	.29	2.1	2.4	1.1	6.3	.52	3.9	.46
17	.82	.35	.51	.95	.29	4.8	1.6	1.1	2.7	.46	2.0	.38
18	.81	.30	.46	.82	.31	5.1	1.3	1.2	2.2	.43	6.6	.37
19	.72	.22	.45	.78	.33	3.0	1.2	1.2	1.8	.38	3.7	.35
20	.67	.25	.40	.70	1.1	1.9	1.2	1.2	1.6	.36	2.2	.35
21	.65	.23	.37	.66	2.2	6.8	1.1	2.3	1.4	.41	4.2	.35
22	.61	.45	.38	.59	2.7	5.4	.95	1.7	1.2	2.2	8.1	.36
23	.60	.50	.39	.55	1.4	2.8	.87	1.4	1.1	1.5	3.4	.37
24	.57	1.5	.80	.52	1.1	2.2	.78	4.9	1.0	1.2	1.8	.34
25	.62	1.8	1.8	.49	.95	1.7	.70	7.0	.95	1.0	1.5	.32
26	.55	1.4	1.7	.46	.87	1.4	.62	2.7	.82	.87	1.3	.33
27	.51	1.3	1.5	.43	.82	1.3	.59	1.8	.74	5.9	1.2	.32
28	.59	1.2	1.2	.41	.78	1.2	.59	1.3	.70	5.3	1.0	.30
29	.58	1.0	1.1	.40	.74	1.6	.52	1.2	.66	2.3	.91	.29
30	.48	.76	.94	.38	---	1.7	.49	1.3	.62	1.4	.87	.27
31	.44	---	.87	.36	---	3.9	---	1.3	---	1.2	.84	---
TOTAL	27.73	20.89	21.66	32.09	18.44	77.37	38.31	44.82	93.09	37.82	92.22	14.21
MEAN	.89	.70	.70	1.04	.64	2.50	1.28	1.45	3.10	1.22	2.97	.47
MAX	2.0	1.8	1.8	6.4	2.7	9.0	3.7	7.0	20	5.9	11	.82
MIN	.44	.22	.37	.36	.29	.52	.49	.34	.62	.36	.84	.27
CFSM	1.31	1.03	1.03	1.53	.94	3.68	1.88	2.13	4.56	1.79	4.37	.69
IN.	1.51	1.14	1.18	1.75	1.01	4.23	2.09	2.45	5.09	2.07	5.04	.78

CAL YR 1979 TOTAL 418.32 MEAN 1.15 MAX 20 MIN .10 CFSM 1.69 IN 22.85
WTR YR 1980 TOTAL 518.65 MEAN 1.42 MAX 20 MIN .22 CFSM 2.09 IN 28.33

MUSKINGUM RIVER BASIN

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03127970 CLEAR FORK TRIBUTARY NEAR HANOVER, OH--Continued

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	.27	.15	.52	.18	.33	1.5	.26	1.5	1.0	.95	.42	2.3
2	.29	.16	.62	.17	1.9	1.4	.56	1.4	1.4	.74	.34	2.4
3	.32	.17	.40	.17	2.4	1.4	1.3	1.2	1.2	.59	.31	2.0
4	.29	.27	.33	.17	1.8	1.4	2.6	1.1	1.8	.51	.34	1.8
5	.27	.20	.28	.16	1.4	1.4	4.8	1.0	1.6	.39	.31	1.2
6	.27	.17	.31	.16	1.1	1.4	3.1	1.0	1.3	.07	.28	.45
7	.27	.19	.34	.16	.80	1.1	2.5	.95	1.2	.28	.25	.31
8	.27	.22	.38	.16	.60	1.1	2.3	.87	1.4	.28	.22	.42
9	.26	.29	.43	.16	.46	.91	2.0	.82	1.7	.23	.19	.36
10	.26	.18	.59	.16	2.4	.66	1.5	.78	2.1	.26	.16	.23
11	.62	.17	.46	.16	2.4	.82	7.3	.87	1.8	.21	.14	.14
12	.49	.15	.38	.16	2.0	.78	18	1.5	1.4	.18	.12	.09
13	.43	.15	.36	.16	1.2	.82	8.2	1.4	1.9	1.2	.11	.09
14	.41	.14	.33	.16	1.1	.78	4.5	1.4	5.9	.78	.10	.07
15	.36	.14	.31	.16	1.0	.74	2.5	1.7	3.1	.42	.12	.11
16	.35	.13	.31	.16	1.7	1.1	2.1	1.5	2.3	.34	.10	.16
17	.34	.13	.29	.16	3.2	.80	1.9	1.4	1.6	.28	.09	.09
18	.33	.13	.29	.16	3.2	1.1	1.6	1.2	1.1	.17	.09	.07
19	.46	.13	.29	.16	3.1	.90	1.4	1.1	.87	.23	.08	.09
20	.27	.14	.27	.17	7.2	1.0	1.2	.95	.78	.70	.07	.07
21	.23	.15	.26	.17	4.4	1.1	1.0	.91	.82	.48	.07	.07
22	.21	.19	.24	.18	2.3	1.3	1.1	.78	.82	.34	.07	.07
23	.20	.16	.23	.18	2.8	1.1	1.4	.70	.74	.16	.06	.07
24	.19	.17	.22	.20	2.9	.82	1.7	.78	.59	.07	.06	.07
25	.18	.20	.21	.23	2.2	.60	1.5	.74	5.4	.23	.06	.07
26	.17	.17	.20	.41	1.5	.74	1.4	1.2	2.6	2.2	.06	.07
27	.16	.38	.20	.52	1.4	.94	1.4	2.3	1.4	1.0	.06	.07
28	.16	.78	.19	.38	1.5	.62	1.5	2.4	.91	1.1	.06	.07
29	.15	.70	.19	.33	---	.40	1.7	1.4	.78	1.0	.06	.07
30	.15	.60	.18	.30	---	.29	1.6	1.2	1.7	.78	.06	.07
31	.15	---	.18	.26	---	.33	---	1.1	---	.59	.06	---
TOTAL	8.78	6.91	9.79	6.42	58.29	29.35	83.92	37.15	51.21	16.76	4.52	13.15
MEAN	.28	.23	.32	.21	2.08	.95	2.80	1.20	1.71	.54	.15	.44
MAX	.62	.78	.62	.52	7.2	1.5	18	2.4	5.9	2.2	.42	2.4
MIN	.15	.13	.18	.16	.33	.29	.26	.70	.59	.07	.06	.07
CFSM	.41	.34	.47	.31	3.06	1.40	4.12	1.77	2.52	.79	.22	.65
IN.	.48	.38	.53	.35	3.18	1.60	4.58	2.03	2.80	.92	.25	.72
CAL YR 1980	TOTAL 473.85	MEAN 1.29	MAX 20	MIN .13	CFSM 1.90	IN 25.88						
WTR YR 1981	TOTAL 326.25	MEAN .89	MAX 18	MIN .06	CFSM 1.31	IN 17.82						

MUSKINGUM RIVER BASIN

03127970 CLEAR FORK TRIBUTARY NEAR HANOVER, OH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
20...	1400	.14	235	7.5	9.0	10	.90	10	110	18	34	6.4
NOV												
17...	1200	.13	265	7.3	2.5	0	.20	9	100	17	29	6.6
DEC												
15...	1000	.55	180	6.9	.5	2	.70	5	85	37	25	5.4
JAN												
14...	1350	.20	210	6.9	.0	<5	.40	<10	93	27	28	5.7
FEB												
10...	1220	.38	175	6.5	.0	<5	.80	10	75	35	22	4.9
19...	1345	6.0	130	7.2	6.0	40	24	43	51	22	15	3.3
23...	0910	4.1	145	7.2	6.0	15	5.9	400	55	30	16	3.7
MAR												
18...	1215	1.0	170	7.6	.0	<5	.80	<10	62	24	18	4.2
APR												
11...	1625	5.3	110	7.2	12.0	50	490	79	47	17	14	2.8
11...	1815	19	140	7.1	12.0	450	2600	300	51	8	16	2.8
11...	1900	14	140	7.1	12.0	150	1100	140	47	21	14	2.8
23...	1430	3.0	155	7.3	13.0	10	3.6	34	54	18	16	3.5
MAY												
20...	1430	.62	187	7.5	16.0	5	4.0	<10	81	35	24	5.1
JUN												
17...	1315	1.6	190	7.4	16.0	4	3.8	<10	78	32	23	5.1
JUL												
20...	1020	.16	240	7.4	18.5	5	1.4	<10	100	25	30	6.0
AUG												
17...	1030	.09	190	7.3	14.0	5	1.6	<10	100	18	30	6.0
SEP												
03...	1315	2.4	174	6.9	18.5	22	9.0	63	48	0	15	2.5

DATE	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN+NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT												
20...	112	0	92	5.7	26	.1	9.8	.01	--	.030	--	.10
NOV												
17...	101	0	83	8.1	29	.1	8.9	.01	--	.030	--	.01
DEC												
15...	59	0	48	12	37	.1	10	1.2	--	.020	--	.25
JAN												
14...	81	0	66	16	34	<.1	10	.67	1.4	<.010	5.7	--
FEB												
10...	49	0	40	25	33	<.1	9.9	1.2	--	.010	--	.10
19...	35	0	29	3.5	27	<.1	8.6	1.5	--	.140	--	.70
23...	31	0	25	3.1	30	<.1	9.6	1.4	--	.040	--	.50
MAR												
18...	46	0	38	1.8	34	.2	8.4	<.01	--	<.010	--	--
APR												
11...	37	0	30	3.7	22	<.1	6.8	.70	--	.150	--	1.2
11...	53	0	43	6.7	19	.1	5.5	.95	--	.410	--	3.1
11...	32	0	26	4.1	21	<.1	6.5	1.0	--	.320	--	1.8
23...	44	0	36	3.5	29	<.1	9.1	.81	--	.130	--	1.1
MAY												
20...	56	0	46	2.8	33	<.1	9.9	.74	--	<.010	--	--
JUN												
17...	56	0	46	3.6	35	<.1	14	1.2	2.3	.050	4.8	.27
JUL												
20...	92	0	75	5.9	29	<.1	12	.42	--	.020	--	.32
AUG												
17...	100	0	82	8.0	28	.1	10	.24	--	.030	--	.36
SEP												
03...	64	0	52	13	26	.1	9.5	.81	--	.040	--	.80

03127970 CLEAR FORK TRIBUTARY NEAR HANOVER, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 20...	.13	.14	.62	.000	--	70	--	100	--	21	--	260
NOV 17...	.04	.05	.22	.010	--	350	--	100	--	25	--	940
DEC 15...	.27	1.5	6.5	.000	--	40	--	100	--	24	--	170
JAN 14...	.10	.77	3.4	.020	530	--	3400	<50	92	5	10	130
FEB 10...	.11	1.3	5.8	<.010	--	110	--	100	--	11	--	320
19...	.84	2.3	10	.360	--	7000	--	100	--	36	--	16000
23...	.54	1.9	8.6	.120	--	2300	--	100	--	34	--	5400
MAR 18...	.14	--	--	<.010	--	400	--	100	--	23	--	310
APR 11...	1.30	2.0	8.9	.340	--	13000	--	200	--	1	--	30000
11...	3.50	4.5	20	3.20	--	90000	--	1400	--	0	--	160000
11...	2.10	3.1	14	.700	--	31000	--	300	--	0	--	53000
23...	1.20	2.0	8.9	.250	--	5100	--	100	--	8	--	11000
MAY 20...	<.10	--	--	<.010	--	160	--	100	--	8	--	400
JUN 17...	.32	1.5	6.7	.030	250	210	1300	100	20	2	10	800
JUL 20...	.34	.76	3.4	<.010	--	0	--	100	--	0	--	240
AUG 17...	.39	.63	2.8	.010	--	90	--	<50	--	17	--	430
SEP 03...	.84	1.7	7.3	.060	--	150	--	100	--	5	--	2100

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	CARBON, INOR- GANIC TOT IN BOT MAT (G/KG AS C)
OCT 20...	0	--	50	.2	--	0	--	80	--	--	--	--
NOV 17...	1	--	120	.2	--	7	--	110	--	--	--	--
DEC 15...	1	--	90	<.1	--	2	--	90	--	--	--	--
JAN 14...	3	10	50	<.1	.0	2	10	100	<10	4.0	4.4	.4
FEB 10...	0	--	80	<.1	--	2	--	80	--	--	--	--
19...	18	--	720	<.1	--	20	--	60	--	--	--	--
23...	9	--	300	<.1	--	8	--	60	--	--	--	--
MAR 18...	7	--	40	<.1	--	5	--	80	--	--	--	--
APR 11...	24	--	1100	<.1	--	29	--	100	--	--	--	--
11...	190	--	8200	<.1	--	270	--	200	--	--	--	--
11...	42	--	2000	<.1	--	53	--	100	--	--	--	--
23...	18	--	450	<.1	--	16	--	90	--	--	--	--
MAY 20...	1	--	70	--	--	7	--	80	--	--	--	--
JUN 17...	1	0	100	<.1	.0	5	0	90	10	2.6	2.7	.1
JUL 20...	4	--	200	<.1	--	10	--	1100	--	--	--	--
AUG 17...	4	--	50	<.1	--	7	--	110	--	--	--	--
SEP 03...	3	--	150	<.1	--	5	--	120	--	--	--	--

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 mi² (184 km²).

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 except those below 3.0 ft³/s (0.085 m³/s), which are fair. Flow completely regulated by Tappan Lake (see station 03128000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 78.0 ft³/s (2.209 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/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, 737 ft³/s (20.9 m³/s) Sept. 3, gage height, 7.03 ft (2.143 m); minimum daily, 0.97 ft³/s (0.027 m³/s) Mar. 17.

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	14	29	265	6.9	2.2	383	14	76	131	123	77	17
2	11	29	262	6.5	6.2	364	20	78	148	57	73	58
3	11	26	262	6.9	12	367	26	80	145	58	70	116
4	11	28	262	6.9	17	400	36	80	148	57	73	293
5	9.8	28	259	6.9	22	417	97	80	145	57	69	311
6	9.1	26	259	6.9	24	373	114	84	148	54	65	324
7	9.1	26	259	6.5	25	361	327	86	143	50	59	314
8	9.1	28	192	6.9	28	358	384	84	106	45	50	286
9	8.5	23	162	6.9	29	185	425	82	98	41	47	127
10	8.5	15	162	6.9	30	26	276	82	116	36	45	49
11	15	14	162	6.9	40	4.4	27	84	116	29	41	45
12	13	19	124	29	46	2.0	115	88	245	23	37	43
13	11	19	62	39	48	2.0	121	204	285	20	33	40
14	11	201	42	39	50	1.9	122	278	118	21	27	36
15	12	286	42	39	52	1.9	122	111	245	18	25	44
16	12	286	42	40	53	1.3	122	75	326	16	20	49
17	15	282	42	40	1.7	.97	123	78	325	13	15	48
18	24	282	42	40	2.0	1.6	203	79	327	9.8	12	45
19	23	279	40	39	2.0	2.1	335	78	325	7.3	9.1	45
20	22	279	40	39	4.6	2.1	421	75	319	6.6	8.5	42
21	21	275	40	39	69	2.1	435	74	303	8.9	7.9	39
22	17	275	40	39	101	2.1	435	71	284	14	7.3	36
23	20	272	40	39	116	2.1	437	69	156	16	6.9	30
24	14	272	40	39	119	2.1	436	66	53	17	6.5	25
25	34	272	40	40	167	2.3	435	64	94	19	6.5	24
26	38	268	40	40	354	2.8	434	62	240	37	5.8	24
27	38	268	40	40	393	3.7	425	75	321	69	5.5	23
28	39	268	40	40	390	4.9	140	89	318	81	5.5	19
29	39	265	19	40	---	5.8	53	92	303	90	5.5	14
30	34	265	6.5	14	---	6.5	72	92	272	88	9.1	12
31	29	---	6.9	1.6	---	9.1	---	91	---	84	13	---
TOTAL	582.1	4905	3334.4	790.7	2203.7	3297.77	6732	2807	6303	1265.6	935.1	2578
MEAN	18.8	164	108	25.5	78.7	106	224	90.5	210	40.8	30.2	85.9
MAX	39	286	265	40	393	417	437	278	327	123	77	324
MIN	8.5	14	6.5	1.6	1.7	.97	14	62	53	6.6	5.5	12
CAL YR 1980 TOTAL	52570.60	MEAN	144	MAX 748	MIN 1.7							
WTR YR 1981 TOTAL	35734.37	MEAN	97.9	MAX 437	MIN .97							

MUSKINGUM RIVER BASIN

109

03128690 MUD RUN AT TUSCARAWAS, OH

LOCATION.--Lat 40°24'24", long 81°24'26", Tuscarawas County, Hydrologic Unit 05040001, at right side of State Highway 416 bridge, 0.4 mi (0.6 km) north of Tuscarawas, 1.7 mi (2.7 km) upstream from mouth and 200 ft (61 m) downstream from Ohio Canal (abandoned).

DRAINAGE AREA.--8.42 mi² (21.81 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1980 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 841.50 ft (256.489 m). National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 2,450 ft³/s (69.4 m³/s) June 9, 1981, gage height, 8.44 ft (2.573 m); minimum daily 1.9 ft³/s (0.054 m³/s) Sept. 27-29, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)
Apr. 5	0015	617	17.5	5.26	1.603	June 9	0115	2450	69.4	8.44	2.573
Apr. 12	1730	730	20.7	5.55	1.692	June 25	0415	525	14.9	5.00	1.524
June 5	2045	461	13.1	4.80	1.463						

Minimum daily discharge, 1.9 ft³/s (0.054 m³/s) Sept. 27-29.

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	3.1	3.0	8.6	4.1	26	13	6.4	19	11	9.9	3.4	4.4
2	3.0	2.8	9.2	3.6	56	12	5.8	17	10	7.8	3.3	3.8
3	3.1	2.7	6.8	3.6	23	10	5.8	15	30	7.5	3.6	31
4	3.0	4.1	6.5	3.4	11	9.9	31	13	22	8.2	7.8	20
5	2.8	3.1	5.4	3.4	7.5	18	109	13	65	7.8	5.1	6.1
6	2.8	3.0	6.1	3.4	5.5	15	27	18	55	6.4	4.4	4.0
7	3.2	2.8	10	3.2	4.4	13	18	13	23	5.8	4.2	3.4
8	2.7	2.8	10	3.2	3.8	12	15	11	24	5.6	3.8	6.1
9	2.5	2.7	22	3.2	3.6	11	14	11	260	5.3	3.6	3.3
10	2.7	2.4	14	3.2	6.0	10	12	9.2	68	5.1	3.4	2.8
11	4.3	2.3	9.5	3.2	36	9.5	89	17	35	4.9	3.1	2.7
12	2.7	2.3	7.8	3.2	19	8.2	298	20	25	4.9	2.8	3.1
13	2.7	2.3	6.1	3.2	9.0	8.2	107	14	28	5.6	2.8	2.8
14	2.6	2.3	5.8	3.2	8.0	6.9	40	20	34	4.2	3.0	2.7
15	2.6	2.4	4.8	3.2	7.5	6.9	26	41	21	4.4	3.6	2.7
16	2.6	2.3	5.0	3.2	42	7.5	21	19	18	3.8	3.6	2.5
17	2.5	2.4	5.0	3.2	49	7.2	22	14	15	3.8	3.0	4.2
18	8.9	3.0	5.4	3.2	37	6.6	20	12	13	3.8	2.6	2.5
19	3.0	2.6	4.6	3.2	49	6.9	17	11	12	3.6	2.6	2.5
20	2.7	2.6	4.4	3.2	103	6.6	14	9.5	11	4.2	2.5	2.3
21	2.6	2.8	4.2	3.2	40	6.4	13	8.5	13	4.4	2.5	2.4
22	2.4	3.0	4.2	3.2	24	6.4	13	7.8	14	3.6	2.5	2.4
23	2.3	3.1	4.2	3.5	39	6.1	20	7.8	11	3.4	2.4	2.3
24	2.4	8.9	4.0	3.7	30	5.6	18	6.9	8.8	3.6	2.2	2.3
25	17	5.8	4.0	4.1	22	5.3	15	6.4	92	3.3	2.5	2.7
26	4.8	4.0	4.0	17	18	5.3	14	6.9	20	9.5	2.4	2.3
27	3.1	17	4.0	14	15	8.2	14	23	14	6.1	2.3	1.9
28	9.8	11	4.0	9.2	15	6.4	23	71	12	18	2.5	1.9
29	4.1	8.9	4.0	6.5	---	6.4	50	19	11	5.8	3.8	1.9
30	3.1	9.5	4.1	4.4	---	8.5	29	19	9.2	4.4	7.8	2.0
31	3.1	---	5.0	4.0	---	7.2	---	16	---	4.0	3.4	---
TOTAL	118.2	127.9	202.7	139.1	709.3	270.2	1107.0	509.0	985.0	178.7	106.5	135.0
MEAN	3.81	4.26	6.54	4.49	25.3	8.72	36.9	16.4	32.8	5.76	3.44	4.50
MAX	17	17	22	17	103	18	298	71	260	18	7.8	31
MIN	2.3	2.3	4.0	3.2	3.6	5.3	5.8	6.4	8.8	3.3	2.2	1.9

WTR YR 1981 TOTAL 4588.6 MEAN 12.6 MAX 298 MIN 1.9

MUSKINGUM RIVER BASIN

03128690 MUD RUN AT TUSCARAWAS, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years May 1980 to September 1981 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1980 to September 1981 (discontinued).

WATER TEMPERATURES: May 1980 to September 1981 (discontinued).

SUSPENDED SEDIMENT DISCHARGE: June 1980 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor and sediment pumping sampler.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,770 micromhos Mar. 27, 1981; minimum, 110 micromhos June 9, 1981.

WATER TEMPERATURES: Maximum, 25.0°C July 16, 20, 1980; minimum 0.0°C several days during 1981.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,940 mg/L Apr. 23, 1981; minimum daily mean, 59 mg/L Sept. 8, 1981.

SEDIMENT LOADS: Maximum daily, 5,020 tons (4,550 tonnes) June 9, 1981; minimum daily, 0.53 ton (0.48 tonne) Sept. 27, 1981.

EXTREME FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,770 micromhos March 27; minimum 110 micromhos June 9.

WATER TEMPERATURES: Maximum, 24.0°C July 9; minimum 0.0°C several days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,940 mg/L Apr. 23; minimum daily mean, 59 mg/L Sept. 8.

SEDIMENT LOADS: Maximum daily, 5,020 tons (4,550 tonnes) June 9; minimum daily, 0.53 ton (0.48 tonne) Sept. 27.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 27...	1330	3.7	1800	4.9	8.0	--	--	--	--	--	--	5
DEC 08...	1430	9.1	1110	5.9	11.5	--	--	--	--	--	--	12
JAN 22...	1330	3.2	1900	4.4	1.0	--	--	--	--	--	--	0
MAR 03...	1315	11	1500	4.8	6.0	--	--	--	--	--	--	4
23...	1200	6.3	1600	5.1	6.5	--	--	--	--	--	--	6
APR 17...	1115	25	1100	6.2	10.0	--	--	--	--	--	--	20
MAY 06...	1100	28	1025	6.2	11.0	--	--	--	--	--	--	21
JUN 08...	1030	17	1050	6.6	16.5	--	--	--	--	--	--	28
JUL 14...	0930	5.2	2140	3.3	18.5	--	--	--	--	--	--	0
AUG 11...	1600	3.4	2200	3.5	21.5	890	890	260	58	68	8.4	0
SEP 17...	1510	2.6	2300	3.2	15.0	--	--	--	--	--	--	0

DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 27...	0	960	--	--	--	1460	--	--	--	--	--	--
DEC 08...	0	540	--	--	--	915	--	--	--	--	--	--
JAN 22...	0	1100	--	--	--	1730	--	--	--	--	--	--
MAR 03...	0	800	--	--	--	1220	--	--	--	--	--	--
23...	0	890	--	--	--	1260	--	--	--	--	--	--
APR 17...	0	530	--	--	--	839	--	--	--	--	--	--
MAY 06...	0	510	--	--	--	930	--	--	--	--	--	--
JUN 08...	0	490	--	--	--	897	--	--	--	--	--	--
JUL 14...	0	1100	--	--	--	1690	--	--	--	--	--	--
AUG 11...	0	1100	8.2	.5	18	1710	.15	.060	2	34	<50	4
SEP 17...	0	1200	--	--	--	1970	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

MUSKINGUM RIVER BASIN

03128690 MUD RUN AT TUSCARAWAS, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	1370	1340	1900	1810	1490	1450	1760	1730	1500	280	1190	1110
2	1360	1350	1960	1890	1530	1480	1780	1740	560	260	1240	1190
3	1370	1350	2040	1960	1520	1280	1880	1750	820	570	1380	1240
4	1390	1360	2020	1440	1790	1320	2070	1900	990	840	1420	1340
5	1400	1350	1840	1680	1680	1570	2120	1980	1130	990	1330	860
6	1400	1360	1920	1840	1570	1470	2000	1850	1220	1140	1130	970
7	2180	1370	1990	1930	1480	1160	1900	1830	1300	1230	1240	1150
8	2170	2120	1970	1880	1190	1030	2030	1910	1380	1230	1290	1240
9	2170	2150	1980	1940	1250	1050	2020	1940	1380	1310	1370	1290
10	2180	1970	2070	1990	1280	1250	2020	1960	1470	450	1350	1330
11	2030	1910	2140	2050	1270	1230	2060	2010	690	380	1390	1350
12	2080	1970	2220	2150	1230	1210	2180	2060	930	720	1420	1390
13	2120	2070	2270	2210	1210	1200	2070	1980	1050	930	1490	1390
14	2140	2100	2310	2270	1220	1200	2020	1970	1110	1000	1570	1430
15	2160	2120	2320	2290	1230	1210	2000	1960	1130	740	1560	1470
16	2220	2160	2310	2290	1250	1220	2010	1970	1050	330	1480	1390
17	2270	2220	2310	2270	1280	1250	2070	2010	470	370	1510	1420
18	2270	2020	2280	2240	1310	1270	2090	2010	540	480	1620	1450
19	2020	1910	2250	2200	1340	1300	2130	2010	550	430	1530	1480
20	2030	1930	2210	2170	1390	1330	2040	1940	440	320	1580	1470
21	2040	2030	2110	1810	1470	1390	1960	1860	680	450	1500	1450
22	---	---	1860	1770	1510	1470	1920	1870	800	680	1590	1460
23	---	---	1880	1820	1540	1520	1880	1840	800	530	1580	1490
24	---	---	1840	1700	1560	1540	1890	1750	790	630	1610	1540
25	---	---	1700	1470	1610	1550	1900	1590	910	780	1580	1550
26	---	---	1550	1510	1660	1600	1600	520	1020	920	1590	1520
27	---	---	1600	990	1670	1650	820	620	1090	1020	3370	1260
28	1320	1060	1290	1110	1690	1660	990	840	1110	1060	3730	1460
29	1580	1340	1380	1300	1690	1680	1220	990	---	---	1530	1440
30	1720	1600	1450	1390	1700	1680	1460	1230	---	---	1490	1200
31	1800	1720	---	---	1790	1680	1560	1370	---	---	1350	1280
MONTH	2270	1060	2320	990	1790	1030	2180	520	1500	260	3730	860

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	1440	1330	1010	870	1010	900	730	710	1870	1770	1860	1790
2	1570	1410	1100	970	1080	1000	760	730	1920	1850	1790	1690
3	1670	1510	1150	1020	1090	610	780	760	1920	370	1690	620
4	1610	330	1240	1150	700	620	800	780	1260	740	820	620
5	630	310	1290	1240	780	240	800	790	1520	1260	1080	830
6	870	640	1260	940	760	340	820	800	1660	1510	1290	1090
7	1000	880	1300	1160	1010	770	840	820	1740	1660	1480	1300
8	1130	970	1380	1300	1110	290	860	840	1800	1750	1550	1490
9	1220	1050	1440	1340	240	110	880	860	1860	1800	1560	1530
10	1200	1120	1440	1410	280	230	900	880	1920	1860	1690	1560
11	1250	240	1410	940	340	280	900	890	1960	1920	1790	1690
12	380	210	970	840	380	330	910	900	1990	1940	1850	1790
13	690	400	1110	970	410	380	920	910	2020	1990	1860	1840
14	820	700	1160	620	430	390	1950	900	2040	2010	1880	1850
15	980	830	690	590	460	420	1910	1860	2040	1840	1910	1880
16	1070	990	780	690	490	460	1910	1880	1960	1870	1970	1900
17	1090	1000	880	780	510	490	1930	1890	2010	1960	2200	1960
18	1170	1030	950	880	530	510	1960	1910	2040	2000	2210	2170
19	1230	1110	1010	950	550	520	1980	1950	2090	2040	2210	2150
20	1320	1200	1060	1010	570	550	1980	1860	2120	2080	2250	2200
21	1380	1320	1130	1080	580	560	1880	1830	2130	2100	2290	2230
22	1400	1310	1200	1140	600	580	1930	1840	2150	2110	2340	2170
23	1260	930	1240	1190	610	590	1980	1920	2180	2130	2220	2160
24	1140	1040	1290	1240	620	600	2040	1970	2220	2170	2280	2220
25	1210	1110	1330	1290	660	520	2070	2030	2240	2160	2400	2230
26	1260	1210	1350	1330	570	520	2040	1500	2170	2140	2480	2170
27	1270	1190	1350	880	630	570	1650	1440	2200	2150	2330	2240
28	1270	770	650	340	670	640	1680	650	2210	2160	2380	2330
29	910	470	820	660	690	660	1470	1160	2220	2000	2380	2370
30	870	670	920	800	720	690	1680	1480	1940	1750	2370	2360
31	---	---	890	790	---	---	1770	1630	1840	1750	---	---
MONTH	1670	210	1440	340	1110	110	2070	650	2240	370	2480	620

YEAR	3730	110
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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	17.5	12.0	9.0	5.5	7.0	5.0	3.0	2.5	.5	.5	6.0	5.0
2	15.5	13.0	8.0	3.0	7.5	5.0	2.5	1.0	1.0	.0	6.5	3.5
3	13.5	11.5	9.5	3.5	4.5	3.0	1.0	1.0	.0	.0	8.0	2.0
4	11.5	9.5	11.0	9.0	4.0	2.0	1.0	1.0	.0	.0	4.5	2.5
5	11.0	7.5	8.5	6.5	5.0	4.0	1.0	1.0	.0	.0	4.5	3.0
6	11.0	6.5	7.5	4.5	7.0	5.0	1.0	1.0	.5	.0	6.0	2.5
7	13.5	9.5	11.0	7.0	8.5	7.0	1.0	1.0	2.0	.0	4.5	1.5
8	15.0	8.5	11.0	9.0	9.5	8.5	1.0	1.0	2.5	.5	5.5	3.0
9	14.5	11.5	12.0	8.0	9.0	7.5	1.0	1.0	1.0	.5	7.5	4.0
10	14.5	8.5	9.5	6.0	7.5	6.0	1.0	1.0	2.0	.5	7.5	4.5
11	14.0	10.5	5.5	4.5	6.0	4.5	1.0	.5	1.5	.0	7.0	3.5
12	10.5	9.0	7.0	4.5	5.5	4.5	1.0	.5	.0	.0	10.5	2.5
13	10.0	7.0	7.5	4.5	5.5	4.0	1.0	.5	.0	.0	9.0	4.0
14	9.5	6.5	8.5	7.0	4.0	3.0	1.0	.5	.5	.0	8.5	1.5
15	13.5	9.0	8.0	6.5	3.0	2.5	1.0	.5	3.5	.0	10.0	2.0
16	15.0	10.0	7.0	5.0	4.0	3.0	1.0	.5	4.5	1.0	7.5	2.0
17	15.5	11.0	5.0	1.5	3.5	2.5	.5	.5	3.5	2.0	7.0	1.5
18	15.5	13.0	4.5	2.0	4.0	3.0	.5	.5	7.0	3.5	7.0	.5
19	12.5	9.5	4.0	2.5	4.0	2.5	.5	.5	6.0	4.5	5.0	1.5
20	11.0	8.0	3.5	1.5	2.0	1.5	1.0	.5	5.0	4.5	5.5	1.0
21	10.0	8.5	4.0	1.5	1.5	1.5	1.5	1.0	6.0	4.5	7.0	3.0
22	---	---	4.5	2.0	1.5	1.5	1.5	1.0	9.0	5.0	9.0	1.5
23	---	---	6.0	3.0	1.5	1.5	2.0	1.5	7.5	5.0	12.0	3.5
24	---	---	6.5	6.0	1.5	1.5	2.5	1.5	5.5	4.5	12.0	2.5
25	---	---	6.0	4.5	1.5	1.5	2.5	1.0	8.0	3.5	11.0	3.5
26	---	---	4.5	2.0	1.5	1.5	2.5	2.0	5.5	3.5	11.5	3.0
27	---	---	4.5	3.5	1.5	1.0	3.0	2.0	8.5	3.5	9.5	5.5
28	9.0	7.5	5.0	4.0	1.5	1.0	3.5	1.5	9.5	5.0	14.5	3.0
29	8.5	4.5	4.0	3.5	1.5	1.0	2.0	1.0	---	---	16.5	6.5
30	8.5	3.0	6.0	3.5	2.5	1.5	1.0	.5	---	---	13.5	10.5
31	9.0	4.0	---	---	3.0	2.5	.5	.5	---	---	18.0	7.5
MONTH	17.5	3.0	12.0	1.5	9.5	1.0	3.5	.5	9.5	.0	18.0	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	16.0	9.5	16.0	10.0	18.5	11.5	21.0	17.5	20.0	16.5	23.5	17.5
2	16.5	7.5	15.5	8.0	19.5	15.0	21.5	17.0	20.5	17.5	22.0	19.5
3	15.5	8.5	18.0	7.5	20.5	15.5	21.5	16.5	20.0	18.5	21.0	19.0
4	15.0	11.5	20.0	9.5	21.0	16.5	22.0	16.5	22.0	19.0	22.0	19.5
5	12.0	7.5	18.0	11.5	20.0	14.5	21.5	18.0	22.0	19.0	21.5	17.0
6	13.5	6.5	14.5	10.5	20.0	16.5	22.5	17.5	21.0	19.0	21.0	17.5
7	14.5	5.0	16.5	8.0	21.5	14.0	23.0	17.5	20.0	18.0	20.0	17.5
8	18.0	8.0	18.0	8.5	21.0	14.0	23.5	17.5	20.0	18.0	19.5	17.0
9	15.0	9.0	16.5	10.5	20.5	16.5	24.0	19.0	20.5	17.5	17.5	14.5
10	14.5	6.0	18.0	12.5	18.5	15.5	22.0	19.0	21.0	17.5	18.0	12.0
11	17.5	10.5	15.0	13.5	19.0	13.5	22.0	15.5	21.5	19.0	20.5	15.5
12	14.5	11.5	13.5	11.0	19.5	14.5	22.0	16.5	20.5	16.0	21.0	16.5
13	13.0	10.5	17.0	9.5	18.5	15.5	21.5	18.5	21.5	16.5	21.5	17.0
14	14.0	9.0	16.0	12.0	21.5	17.0	21.0	18.5	21.5	17.5	19.5	17.0
15	15.5	7.0	13.5	12.0	23.0	17.0	20.5	15.5	20.5	18.5	18.5	16.0
16	16.0	6.5	16.5	11.0	22.5	17.0	20.0	17.5	19.5	17.5	17.0	14.0
17	14.5	11.5	17.5	10.0	20.5	15.5	21.5	17.0	18.5	14.0	15.5	13.0
18	19.0	10.5	13.5	11.0	21.5	14.0	22.0	17.0	18.0	12.5	12.5	11.0
19	13.0	8.0	12.5	10.0	21.5	15.0	20.5	17.5	18.5	13.5	15.0	11.5
20	16.0	7.5	17.0	8.5	20.5	16.0	21.5	18.5	19.0	13.5	16.0	13.0
21	16.5	5.5	18.5	9.5	18.5	16.5	20.5	19.0	18.0	14.5	16.5	12.5
22	12.5	7.5	19.0	11.0	21.0	16.5	19.5	17.0	19.5	14.5	15.5	12.0
23	15.5	11.0	18.5	12.5	20.5	15.0	19.0	14.5	19.5	14.5	13.0	9.5
24	11.0	8.5	20.0	13.5	20.5	14.5	20.5	16.0	19.5	15.0	13.0	8.0
25	11.5	7.5	19.5	14.5	21.0	17.5	21.5	17.0	18.5	14.5	15.0	10.0
26	15.5	6.0	18.0	14.0	20.0	15.0	20.5	19.5	19.0	14.0	18.5	12.5
27	19.5	9.5	17.5	15.5	20.5	13.0	20.5	19.0	20.0	15.0	18.5	15.0
28	19.5	11.5	17.0	15.0	21.5	13.5	21.5	19.0	21.5	18.0	14.5	11.5
29	15.0	12.0	20.0	14.5	22.0	15.0	20.5	18.0	21.0	18.0	12.5	8.5
30	14.0	11.0	18.0	14.0	23.0	16.5	19.0	15.0	20.5	18.5	14.0	12.0
31	---	---	19.5	14.5	---	---	19.5	16.0	20.0	17.5	---	---
MONTH	19.5	5.0	20.0	7.5	23.0	11.5	24.0	14.5	22.0	12.5	23.5	8.0
YEAR	24.0	.0										

MUSKINGUM RIVER BASIN

03128690 MUD RUN AT TUSCARAWAS, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	3.1	112	.94	3.0	131	1.1	8.6	97	2.3
2	3.0	119	.96	2.8	140	1.1	9.2	115	2.9
3	3.1	132	1.1	2.7	142	1.0	6.8	117	2.1
4	3.0	132	1.1	4.1	108	1.2	6.5	108	1.9
5	2.8	130	.98	3.1	110	.92	5.4	110	1.6
6	2.8	134	1.0	3.0	136	1.1	6.1	88	1.4
7	3.2	135	1.2	2.8	129	.98	10	100	2.8
8	2.7	136	.99	2.8	114	.86	10	84	2.4
9	2.5	128	.86	2.7	115	.84	22	180	11
10	2.7	127	.93	2.4	125	.81	14	117	4.8
11	4.3	128	1.5	2.3	137	.85	9.5	78	2.0
12	2.7	146	1.1	2.3	143	.89	7.8	92	1.9
13	2.7	151	1.1	2.3	136	.84	6.1	91	1.5
14	2.6	151	1.1	2.3	129	.80	5.8	100	1.6
15	2.6	142	1.0	2.4	116	.75	4.8	121	1.6
16	2.6	128	.90	2.3	128	.79	5.0	125	1.7
17	2.5	115	.78	2.4	167	1.1	5.0	127	1.7
18	8.9	155	3.6	3.0	173	1.4	5.4	123	1.8
19	3.0	126	1.0	2.6	151	1.1	4.6	121	1.5
20	2.7	132	.96	2.6	151	1.1	4.4	149	1.8
21	2.6	139	.98	2.8	153	1.2	4.2	177	2.0
22	2.4	137	.89	3.0	135	1.1	4.2	163	1.8
23	2.3	135	.84	3.1	127	1.1	4.2	147	1.7
24	2.4	135	.87	8.9	176	4.3	4.0	133	1.4
25	17	151	7.9	5.8	106	1.7	4.0	149	1.6
26	4.8	99	1.3	4.0	95	1.0	4.0	167	1.8
27	3.1	121	1.0	17	370	20	4.0	164	1.8
28	9.8	130	3.4	11	160	4.8	4.0	165	1.8
29	4.1	116	1.3	8.9	106	2.5	4.0	184	2.0
30	3.1	130	1.1	9.5	118	3.0	4.1	154	1.7
31	3.1	128	1.1	---	---	---	5.0	146	2.0
TOTAL	118.2	---	43.78	127.9	---	60.23	202.7	---	69.9
JANUARY				FEBRUARY			MARCH		
1	4.1	141	1.6	26	669	132	13	105	3.7
2	3.6	134	1.3	56	785	178	12	127	4.1
3	3.6	133	1.3	23	113	7.0	10	128	3.5
4	3.4	143	1.3	11	95	2.8	9.9	122	3.3
5	3.4	152	1.4	7.5	113	2.3	18	185	10
6	3.4	150	1.4	5.5	118	1.8	15	128	5.1
7	3.2	150	1.3	4.4	118	1.4	13	105	3.7
8	3.2	150	1.3	3.8	113	1.2	12	112	3.6
9	3.2	150	1.3	3.6	117	1.1	11	115	3.4
10	3.2	150	1.3	6.0	172	9.6	10	119	3.2
11	3.2	150	1.3	36	240	23	9.5	118	3.0
12	3.2	150	1.3	19	103	5.3	8.2	117	2.6
13	3.2	150	1.3	9.0	100	2.4	8.2	120	2.7
14	3.2	150	1.3	8.0	110	2.4	6.9	123	2.3
15	3.2	150	1.3	7.5	146	4.0	6.9	124	2.3
16	3.2	150	1.3	42	833	161	7.5	103	2.1
17	3.2	150	1.3	49	350	46	7.2	104	2.0
18	3.2	150	1.3	37	270	27	6.6	112	2.0
19	3.2	155	1.3	49	540	71	6.9	114	2.1
20	3.2	169	1.5	103	1050	325	6.6	113	2.0
21	3.2	157	1.4	40	170	18	6.4	128	2.2
22	3.2	165	1.4	24	100	6.5	6.4	114	2.0
23	3.5	164	1.5	39	241	29	6.1	107	1.8
24	3.7	161	1.6	30	105	8.5	5.6	106	1.6
25	4.1	161	1.8	22	94	5.6	5.3	105	1.5
26	17	832	53	18	96	4.7	5.3	108	1.5
27	14	313	13	15	101	4.1	8.2	108	2.4
28	9.2	92	2.3	15	103	4.2	6.4	88	1.5
29	6.5	92	1.6	---	---	---	6.4	92	1.6
30	4.4	107	1.3	---	---	---	8.5	79	1.8
31	4.0	137	1.5	---	---	---	7.2	76	1.5
TOTAL	139.1	---	107.1	709.3	---	1084.9	270.2	---	86.1

MUSKINGUM RIVER BASIN

03128690 MUD RUN AT TUSCARAWAS, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	6.4	85	1.5	19	83	4.3	11	61	1.8
2	5.8	88	1.4	17	78	3.6	10	79	2.1
3	5.8	83	1.3	15	83	3.4	30	341	51
4	31	1090	256	13	93	3.3	22	229	15
5	109	1330	897	13	92	3.2	65	1320	640
6	27	212	15	18	123	6.0	55	700	144
7	18	96	4.7	13	93	3.3	23	82	5.1
8	15	96	3.9	11	98	2.9	24	240	75
9	14	97	3.7	11	106	3.1	260	2100	5020
10	12	95	3.1	9.2	98	2.4	68	218	40
11	89	271	186	17	92	4.2	35	120	11
12	298	573	474	20	93	5.0	25	110	7.4
13	107	310	114	14	99	3.7	28	131	12
14	40	142	15	20	397	49	34	142	14
15	26	91	6.4	41	175	25	21	97	5.5
16	21	87	4.9	19	88	4.5	18	108	5.2
17	22	231	14	14	85	3.2	15	110	4.5
18	20	90	4.9	12	92	3.0	13	110	3.9
19	17	94	4.3	11	99	2.9	12	113	3.7
20	14	100	3.8	9.5	98	2.5	11	119	3.5
21	13	103	3.6	8.5	98	2.2	13	144	5.3
22	13	114	4.0	7.8	101	2.1	14	126	4.8
23	20	2940	172	7.8	98	2.1	11	120	3.6
24	18	498	24	6.9	94	1.8	8.8	108	2.6
25	15	105	4.3	6.4	95	1.6	92	257	71
26	14	104	3.9	6.9	110	2.0	20	117	6.3
27	14	99	3.7	23	680	61	14	93	3.5
28	23	129	7.8	71	258	74	12	91	2.9
29	50	208	29	19	87	4.5	11	93	2.8
30	29	108	8.5	19	372	23	9.2	85	2.1
31	---	---	---	16	390	17	---	---	---
TOTAL	1107.0	---	2275.7	509.0	---	329.8	985.0	---	6169.6
JULY				AUGUST			SEPTEMBER		
1	9.9	79	2.1	3.4	81	.74	4.4	115	2.4
2	7.8	84	1.8	3.3	86	.77	3.8	93	1.2
3	7.5	88	1.8	3.6	85	.83	31	263	28
4	8.2	102	2.3	7.8	71	1.5	20	118	8.4
5	7.8	99	2.1	5.1	68	.94	6.1	61	1.0
6	6.4	95	1.6	4.4	78	.93	4.0	68	.73
7	5.8	92	1.4	4.2	81	.92	3.4	77	.71
8	5.6	99	1.5	3.8	80	.82	6.1	59	.97
9	5.3	98	1.4	3.6	73	.71	3.3	67	.60
10	5.1	87	1.2	3.4	74	.68	2.8	90	.68
11	4.9	87	1.2	3.1	72	.60	2.7	89	.65
12	4.9	83	1.1	2.8	73	.55	3.1	82	.69
13	5.6	92	1.4	2.8	78	.59	2.8	91	.69
14	4.2	91	1.0	3.0	78	.63	2.7	96	.70
15	4.4	81	.96	3.6	95	.92	2.7	100	.73
16	3.8	85	.87	3.6	83	.81	2.5	98	.66
17	3.8	75	.77	3.0	79	.64	4.2	103	1.2
18	3.8	72	.74	2.6	89	.62	2.5	115	.78
19	3.6	77	.75	2.6	90	.63	2.5	111	.75
20	4.2	105	1.2	2.5	90	.61	2.3	116	.72
21	4.4	95	1.1	2.5	92	.62	2.4	110	.71
22	3.6	82	.80	2.5	95	.64	2.4	107	.69
23	3.4	80	.73	2.4	92	.60	2.3	118	.73
24	3.6	78	.76	2.2	92	.55	2.3	127	.79
25	3.3	82	.73	2.5	92	.62	2.7	146	1.1
26	9.5	224	5.8	2.4	90	.58	2.3	132	.82
27	6.1	134	2.5	2.3	96	.60	1.9	103	.53
28	18	240	11	2.5	90	.61	1.9	116	.60
29	5.8	108	1.9	3.8	82	.84	1.9	136	.70
30	4.4	90	1.1	7.8	82	1.7	2.0	131	.71
31	4.0	75	.81	3.4	95	.99	---	---	---
TOTAL	178.7	---	54.42	106.5	---	23.79	135.0	---	59.64
YEAR	4588.6		10364.96						

MUSKINGUM RIVER BASIN

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 mi² (6,327 km²).

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. 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.--60 years, 2,543 ft³/s (72.02 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,800 ft³/s (1,330 m³/s) Jan. 26, 1937, gage height, 20.65 ft (6.294 m), site and datum then in use; minimum daily, 170 ft³/s (4.81 m³/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 ft³/s (2,350 m³/s) computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft³/s (379 m³/s) Apr. 13, gage height, 9.58 ft (2.920 m); minimum daily, 620 ft³/s (17.6 m³/s) Sept. 30.

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	1040	1420	2960	1380	1670	9120	2340	9080	5100	4500	2020	857
2	1020	1360	2920	1320	4470	6460	2090	8240	3650	4300	1680	1090
3	1010	1310	2970	1270	6990	5790	1910	6830	3130	3900	1610	1910
4	1030	1340	2870	1030	6390	6590	1830	5970	4110	3500	2590	4820
5	988	1360	2610	750	4670	7240	5800	4660	4730	3200	2660	6320
6	929	1340	2410	740	3500	7680	8440	4370	7730	3400	2030	4860
7	901	1260	2440	730	2990	7590	8030	6000	7360	3900	1550	2710
8	897	1210	2760	730	2690	7030	6470	5600	6670	2780	1380	2170
9	884	1130	3280	730	2310	6510	4930	4800	8900	2440	1270	2070
10	869	1090	4350	730	2090	5920	4480	4100	13000	2190	1190	1790
11	957	1050	4640	730	3280	5410	3770	4000	11000	1980	1110	1500
12	910	996	3900	730	6020	4710	9320	5200	10000	1590	1120	1340
13	871	945	3150	730	6260	3660	12800	6800	9800	1450	1080	1170
14	845	876	2540	730	5090	2990	12500	6200	12000	1620	992	1070
15	832	1170	2220	730	3520	2600	12400	7000	7600	1650	950	1030
16	958	1460	2000	730	3100	2500	12300	9200	10000	1470	1020	1050
17	1240	1480	1920	730	5440	2410	11400	8800	11000	1330	1020	1130
18	1360	1520	1840	730	8130	2230	9820	7000	11000	1240	965	1120
19	1710	1570	1750	730	9370	2090	8650	6000	10800	1160	866	1040
20	1540	1620	1520	730	11600	2010	8380	5000	10400	1160	799	989
21	1350	1610	1230	730	11100	1970	8200	4000	9000	2790	751	917
22	1230	1620	1210	730	10600	1930	8240	3300	8400	3580	723	849
23	1170	1610	1180	730	11000	1930	8150	2900	9200	2440	693	808
24	1120	1710	1140	730	11200	1910	8080	2600	8200	1740	662	772
25	1390	2210	1070	840	10700	1850	7620	2300	9800	1410	639	733
26	1990	2580	950	1140	10500	1750	6730	2100	9400	1720	636	708
27	2040	2510	956	2120	10300	1800	5950	2300	8600	2750	623	687
28	1790	3100	1030	3880	10100	2790	5120	4200	7600	2940	630	659
29	1790	3550	958	3630	---	2910	5610	6660	6600	3130	630	630
30	1720	3320	1050	2720	---	2410	8200	6280	5400	3300	856	620
31	1540	---	1300	2090	---	2360	---	5540	---	2610	823	---
TOTAL	37921	49327	67124	36050	185080	124150	219560	167030	250180	77170	35568	47419
MEAN	1223	1644	2165	1163	6610	4005	7319	5388	8339	2489	1147	1581
MAX	2040	3550	4640	3880	11600	9120	12800	9200	13000	4500	2660	6320
MIN	832	876	950	730	1670	1750	1830	2100	3130	1160	623	620
CAL YR 1980 TOTAL	1425822			3896		10700						
WTR YR 1981 TOTAL	1296579			3552		13000						

MUSKINGUM RIVER BASIN

117

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 mi² (562 km²).

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.--43 years, 199 ft³/s (5.636 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft³/s (79.3 m³/s) Mar. 13, 1964 from rating curve extended above 1,900 ft³/s (53.8 m³/s); maximum gage height, 8.45 ft (2.576 m) Mar. 14, 1939; minimum daily discharge, 0.9 ft³/s (0.025 m³/s) Apr. 21, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 11,700 ft³/s (331 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,480 ft³/s (41.9 m³/s) June 18, gage height, 5.83 ft (1.777 m); minimum daily, 15 ft³/s (0.42 m³/s) Aug. 23.

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	22	36	168	44	117	1060	195	553	104	565	42	54
2	25	33	201	52	143	920	171	707	98	497	39	79
3	24	31	201	85	150	693	124	725	90	395	39	150
4	22	29	198	85	153	517	104	650	98	322	40	314
5	22	32	185	82	160	402	153	537	104	225	42	470
6	21	29	153	82	164	328	240	521	171	128	42	569
7	21	27	150	80	160	289	300	485	252	101	40	561
8	20	29	150	80	157	258	297	470	284	98	36	470
9	20	28	146	75	153	234	273	451	363	92	35	370
10	20	29	150	75	150	175	211	402	90	92	31	300
11	19	27	160	75	164	143	182	384	920	65	32	258
12	19	26	160	70	164	139	240	451	1330	52	36	150
13	17	25	160	70	175	139	370	537	953	52	36	95
14	17	25	160	70	188	132	578	611	204	54	36	52
15	16	25	160	66	211	121	789	671	594	54	35	37
16	16	25	160	50	222	121	869	676	1160	52	39	59
17	17	25	157	39	264	84	878	645	1040	47	36	160
18	25	28	157	38	345	54	892	590	1470	45	31	204
19	26	27	124	38	273	54	794	509	1440	44	29	182
20	25	27	101	36	406	54	671	417	1400	42	26	128
21	26	26	101	36	658	54	537	342	1350	50	25	90
22	26	26	76	36	808	54	424	289	1320	65	22	87
23	25	26	57	36	822	57	363	188	1270	73	15	52
24	23	29	50	36	827	59	322	132	1250	73	22	17
25	33	37	44	36	934	62	294	104	1240	65	22	17
26	32	76	44	39	1080	65	267	87	1220	57	21	17
27	28	153	44	60	1100	70	195	90	1130	54	20	18
28	33	143	44	82	1070	90	157	104	992	54	21	19
29	35	139	44	98	---	117	208	107	822	59	23	19
30	35	139	44	104	---	175	308	110	632	50	26	19
31	35	---	44	110	---	208	---	114	---	47	39	---
TOTAL	745	1357	3793	1965	11218	6928	11406	12659	23391	3669	978	5017
MEAN	24.0	45.2	122	63.4	401	223	380	408	780	118	31.5	167
MAX	35	153	201	110	1100	1060	892	725	1470	565	42	569
MIN	16	25	44	36	117	54	104	87	90	42	15	17
CAL YR 1980	TOTAL	74009	MEAN 202	MAX 1200	MIN 16							
WTR YR 1981	TOTAL	83126	MEAN 228	MAX 1470	MIN 15							

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 upstream side of bridge on State Highway 3 at Loudonville, 1.5 mi (2.4 km) downstream from Big Run.

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

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.

AVERAGE DISCHARGE.--50 years, 348 ft³/s (9.855 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,360 ft³/s (152 ft³/s) June 10, gage height, 11.97 ft (3.648 m); minimum daily, 79 ft³/s (2.24 m³/s) Aug. 24, 26, 27.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	160	270	170	273	1280	302	712	216	1020	132	250
2	113	150	330	170	718	1200	276	863	209	721	123	321
3	121	130	333	170	342	905	250	887	212	575	155	392
4	110	120	281	170	299	703	284	818	302	484	149	646
5	103	110	270	160	281	602	599	712	245	376	137	609
6	103	100	247	160	273	508	420	1170	351	270	129	693
7	103	101	247	150	264	436	370	839	342	219	123	703
8	100	103	250	150	264	389	340	693	501	206	123	636
9	100	103	302	150	253	361	310	650	4080	197	118	514
10	95	101	321	140	267	324	280	605	3190	229	113	392
11	95	99	279	140	961	273	290	839	1200	185	182	327
12	90	96	267	130	399	264	360	1220	1770	160	129	250
13	85	94	264	130	318	261	540	812	2180	191	116	168
14	90	94	240	130	270	253	760	856	3560	250	113	165
15	95	106	240	130	240	242	980	1260	1030	171	110	311
16	120	99	230	130	488	235	1000	1010	1770	160	121	171
17	130	92	210	130	853	222	1000	873	1590	155	108	200
18	140	103	200	130	815	180	960	786	1800	149	101	279
19	140	110	180	130	2100	170	920	703	1770	140	96	267
20	130	99	170	130	1440	160	860	595	1710	160	92	219
21	130	99	150	130	1110	150	740	508	1720	235	90	157
22	130	99	140	130	1170	150	660	436	1990	185	90	155
23	130	96	140	130	1320	150	612	345	1740	176	83	146
24	130	110	140	130	1290	150	549	261	1590	171	79	96
25	160	176	140	150	1240	150	481	239	1760	165	81	92
26	170	118	140	281	1340	171	415	206	1600	163	79	94
27	160	225	140	595	1380	293	354	287	1490	185	79	94
28	160	324	140	474	1340	239	345	296	1270	171	121	94
29	170	253	140	250	---	245	706	259	1090	225	110	94
30	170	239	150	232	---	293	678	245	877	155	94	96
31	170	---	170	225	---	330	---	239	---	143	376	---
TOTAL	3853	3909	6721	5627	21308	11289	16641	20224	43155	7992	3752	8631
MEAN	124	130	217	182	761	364	555	652	1439	258	121	288
MAX	170	324	333	595	2100	1280	1000	1260	4080	1020	376	703
MIN	85	92	140	130	240	150	250	206	209	140	79	92
CAL YR 1980	TOTAL	144372	MEAN	394	MAX	3050	MIN	85				
WTR YR 1981	TOTAL	153102	MEAN	419	MAX	4080	MIN	79				

MUSKINGUM RIVER BASIN

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03133500 CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYSVILLE, 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 Perrysville, and 4.7 mi (7.6 km) upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 mi² (513 km²).

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

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 1981 water year 11 ft³/s (0.312 m³/s) returned to Rocky Fork as sewage effluent. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 199 ft³/s (5.636 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft³/s (66.3 m³/s) Jan. 23, 1959, gage height, 4.89 ft (1.490 m); minimum daily, 0.6 ft³/s (0.017 m³/s) Nov. 2, 4, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,610 ft³/s (45.6 m³/s) June 15, gage height 4.12 ft (1.256 m); minimum daily, 33 ft³/s (0.935 m³/s) Aug. 25, 26.

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	51	157	152	70	114	786	40	379	143	267	69	405
2	53	157	193	70	234	783	54	340	131	242	65	306
3	53	157	193	70	324	738	59	293	125	206	63	253
4	50	157	158	70	266	668	66	252	124	183	68	335
5	47	155	89	70	166	688	162	223	135	164	65	287
6	45	154	71	70	111	482	254	296	180	152	60	188
7	44	154	71	70	116	290	254	429	177	148	57	149
8	45	154	102	69	116	289	228	411	166	139	56	133
9	45	154	162	68	116	235	202	352	530	132	56	121
10	44	154	216	68	93	208	180	307	1000	126	53	104
11	45	137	182	68	261	208	213	338	1230	113	52	90
12	42	92	139	61	463	193	407	542	1110	106	50	79
13	41	67	139	57	386	158	495	657	957	116	47	71
14	41	67	139	48	214	143	506	657	1460	122	46	66
15	114	67	92	43	210	145	501	648	1600	106	46	67
16	139	67	71	43	214	110	489	608	1550	97	46	65
17	135	67	71	43	328	60	472	592	1480	91	43	62
18	135	67	70	43	405	44	467	501	1380	85	40	60
19	135	67	70	43	557	44	453	351	1240	81	38	62
20	135	67	70	43	703	44	445	251	1010	87	36	59
21	145	67	70	43	777	44	414	237	810	96	35	56
22	159	67	70	43	792	44	318	217	799	92	35	53
23	153	67	70	43	772	37	287	196	863	82	35	49
24	145	67	70	43	782	35	304	178	906	76	35	46
25	145	67	70	43	758	35	295	164	910	72	33	43
26	143	67	70	43	730	35	265	152	879	72	33	42
27	143	67	70	174	713	36	235	155	729	90	34	42
28	160	67	70	246	780	36	216	177	417	98	45	39
29	171	68	70	143	---	36	252	187	301	97	43	38
30	165	68	70	99	---	36	364	177	243	86	40	39
31	157	---	70	114	---	36	---	162	---	76	177	---
TOTAL	3125	2990	3220	2221	11501	6726	8897	10429	22585	3700	1601	3409
MEAN	101	99.7	104	71.6	411	217	297	336	753	119	51.6	114
MAX	171	157	216	246	792	786	506	657	1600	267	177	405
MIN	41	67	70	43	93	35	40	152	124	72	33	38

CAL YR 1980 TOTAL 87584 MEAN 239 MAX 1410 MIN 24
WTR YR 1981 TOTAL 80404 MEAN 220 MAX 1600 MIN 33

MUSKINGUM RIVER BASIN

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 mi² (702 km²).

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. Flow regulated by Mohicanville Reservoir (see station 03134500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 237 ft³/s (6.712 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,490 ft³/s (155 m³/s) July 5, 1969, gage height, 14.32 ft (4.365 m); minimum daily, 1 ft³/s (0.028 m³/s) June 10, 1947, Jan. 25, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,220 ft³/s (34.6 m³/s) Feb. 11, gage height, 8.18 ft (2.493 m); minimum daily, 27 ft³/s (0.76 m³/s) Aug. 24.

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	35	46	129	76	177	1140	147	843	105	843	43	186
2	37	42	149	71	743	1100	126	734	96	834	41	434
3	42	40	175	63	487	1000	116	639	116	822	102	711
4	37	41	117	51	350	636	143	424	191	825	91	740
5	34	41	92	44	300	431	625	276	111	840	60	559
6	33	39	84	44	240	335	366	596	709	864	53	272
7	34	38	84	44	200	266	220	724	718	834	51	187
8	35	40	116	44	170	218	174	721	373	792	49	141
9	33	39	264	44	160	191	149	554	712	766	45	131
10	32	36	392	44	150	186	132	339	678	487	41	92
11	31	35	218	44	926	181	157	436	675	272	86	70
12	29	34	144	44	807	165	718	718	775	182	72	57
13	29	35	126	44	460	154	663	678	734	162	45	50
14	29	35	106	44	294	138	721	429	116	205	38	46
15	30	40	85	44	210	131	813	743	284	108	38	77
16	31	37	70	44	328	129	798	757	654	88	46	65
17	30	36	60	44	880	125	780	678	672	79	40	56
18	67	41	50	44	939	119	763	403	666	69	36	53
19	52	46	44	44	1080	116	792	296	660	63	32	84
20	39	42	36	44	1050	117	840	223	654	103	31	68
21	35	41	36	44	930	120	684	172	651	146	29	51
22	33	40	36	44	1060	120	467	157	651	125	30	44
23	33	38	36	44	1160	122	366	134	715	65	29	39
24	33	45	36	44	1150	119	353	125	831	59	27	37
25	72	87	36	50	1130	109	262	111	834	55	29	35
26	73	65	36	146	1150	103	198	103	834	56	29	34
27	51	62	36	867	1150	378	170	143	822	59	29	32
28	67	129	36	532	1150	333	381	240	831	62	50	29
29	75	146	36	292	---	202	780	182	825	105	38	28
30	59	122	88	195	---	188	861	140	822	58	48	30
31	50	---	80	130	---	177	---	126	---	48	172	---
TOTAL	1300	1558	3033	3353	18831	8849	13765	12844	17515	10076	1550	4438
MEAN	41.9	51.9	97.8	108	673	285	459	414	584	325	50.0	148
MAX	75	146	392	867	1160	1140	861	843	834	864	172	740
MIN	29	34	36	44	150	103	116	103	96	48	27	28

CAL YR 1980 TOTAL 90227 MEAN 247 MAX 1140 MIN 29
WTR YR 1981 TOTAL 97112 MEAN 266 MAX 1160 MIN 27

03136000 MOHICAN RIVER AT GREER, OH

LOCATION.--Lat 40°30'53", long 82°11'44", in NW 1/4 sec. 10, T.8 N., R.10 W., Knox County, Hydrologic Unit 05040002, on left bank 3,000 ft (914 m) downstream from bridge on State Highway 514 at Greer, 5 mi (8 km) upstream from Negro Run, and 7 mi (11 km) downstream from Lake Pork.

DRAINAGE AREA.--948 mi² (2.455 km²).

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

REVISED RECORDS.--WSP 623: 1924(M). WSP 1907: Drainage area. WRD OH-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 872.91 ft (266.063 m) National Geodetic Vertical Datum of 1929. Prior to July 22, 1931, nonrecording gage at site 3,000 ft (914 m) upstream at same datum.

REMARKS.--Records fair. Flow regulated by Charles Mill Lake on Black Fork, 30 mi (48 km) upstream, Pleasant Hill Lake on Clear Fork, 17 mi (27 km) upstream, and Mohicanville Reservoir on Lake Pork, 19 mi (31 km) upstream, beginning August 1936. (See stations 03129500, 03133000, and 03134500.) Water-quality data collected at this site 1965 to 1976.

AVERAGE DISCHARGE.--60 years, 908 ft³/s (25.71 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft³/s (581 m³/s) July 5, 1969, gage height, 14.59 ft (4.447 m) from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 73 ft³/s (2.07 m³/s) Sept. 26, 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 27.0 ft (8.23 m), discharge, 55,000 ft³/s (1,560 m³/s) (estimated).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,600 ft³/s (244 m³/s) June 9, gage height 8.22 ft (2.505 m); minimum daily, 103 ft³/s (2.92 m³/s) Aug. 31.

REVISIONS.--The maximum and minimum discharges for some water years have been revised as shown in the following table. They supersede figures published in OH-79-1.

1978 water year--Maximum discharge, 6,440 ft³/s (182 m³/s) Dec. 15, gage height, 6.94 ft (2.115 m); maximum gage height, 7.52 ft (2.292 m) Jan. 27 (ice jam); minimum daily, 160 ft³/s (4.53 m³/s) Sept. 9-12.

1979 water year--Maximum discharge, 10,400 ft³/s (295 m³/s) Sept. 14, gage height, 9.54 ft (2.908 m); maximum gage height, 11.90 ft (3.627 m) Feb. 23 (ice jam); minimum daily, 189 ft³/s (5.35 m³/s) Oct. 11.

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	246	396	591	380	700	3390	583	2030	934	2060	346	117
2	252	374	767	340	1740	3250	547	2050	811	1820	323	157
3	273	366	821	310	1320	2830	523	1870	578	1650	323	350
4	251	374	686	310	1050	2160	528	1710	772	1550	427	1260
5	239	374	555	310	842	1860	1360	1370	648	1440	388	1490
6	236	366	485	310	731	1550	1370	1940	1190	1360	338	1290
7	230	359	468	310	644	1120	1100	2290	1240	1280	316	1110
8	230	359	511	310	557	1010	998	1960	1060	1210	302	997
9	225	359	716	310	510	903	884	1800	7690	1150	287	884
10	219	345	1070	310	480	822	787	1470	6780	1040	273	771
11	219	338	876	310	1810	759	806	1550	3790	708	260	664
12	204	291	656	310	1600	722	2230	2700	4010	571	250	569
13	199	241	618	310	1300	670	2440	2430	4590	564	239	500
14	199	241	582	310	860	625	2270	2170	6980	746	228	451
15	214	241	520	310	750	595	2420	3200	3840	527	218	420
16	310	247	477	310	926	573	2460	2760	4480	460	210	395
17	291	236	452	310	2070	519	2490	2420	4320	432	202	404
18	396	247	440	310	2410	436	2540	1990	4240	404	193	406
19	404	253	380	310	4750	419	2350	1610	3990	385	185	424
20	324	253	330	310	4920	422	2250	1270	3620	401	177	425
21	297	247	330	310	3660	428	1980	1090	3330	578	168	414
22	310	247	330	310	3460	423	1600	961	3590	499	160	398
23	310	247	330	310	3780	417	1340	852	3380	433	154	383
24	304	265	330	310	3790	408	1350	703	3380	400	146	364
25	396	396	330	370	3490	395	1200	654	3810	373	138	345
26	443	338	330	529	3470	387	1020	598	3480	350	131	327
27	366	412	330	1650	3470	584	899	679	3160	379	123	308
28	396	609	330	1270	3440	793	912	1040	2560	413	118	289
29	511	591	330	868	---	578	1800	975	2200	459	114	273
30	435	537	370	631	---	571	2170	937	1920	438	108	259
31	396	---	400	540	---	638	---	934	---	389	103	---
TOTAL	9325	10149	15741	13398	58530	30257	45207	50013	96373	24469	6948	16444
MEAN	301	338	508	432	2090	976	1507	1613	3212	789	224	548
MAX	511	609	1070	1650	4920	3390	2540	3200	7690	2060	427	1490
MIN	199	236	330	310	480	387	523	598	578	350	103	117
CAL YR 1980	TOTAL	378540	MEAN	1034	MAX	5070	MIN	199				
WTR YR 1981	TOTAL	376854	MEAN	1032	MAX	7690	MIN	103				

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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	76	218	78	189	353	120	394	200	216	69	201
2	58	71	259	70	766	309	107	313	150	182	61	154
3	58	67	262	66	446	269	100	243	120	149	66	274
4	55	66	192	64	291	249	116	206	140	135	75	274
5	54	64	155	60	209	262	336	193	110	123	69	168
6	52	63	148	60	168	259	288	633	140	115	64	121
7	51	60	184	58	148	240	206	635	100	106	59	99
8	51	61	269	56	136	215	169	382	90	99	56	100
9	51	61	381	54	114	206	152	283	260	92	54	92
10	51	60	490	52	122	209	145	254	450	90	51	78
11	50	57	332	50	801	203	168	852	418	82	50	67
12	48	54	243	50	672	184	1370	1660	248	77	47	61
13	48	54	212	49	401	173	1960	828	360	87	45	55
14	48	54	181	48	259	160	881	611	2110	100	44	58
15	50	57	160	48	215	145	544	1110	1470	77	44	76
16	50	55	150	47	401	148	390	792	797	72	45	66
17	48	58	133	47	1390	140	437	527	813	68	43	56
18	76	64	124	47	1240	133	733	394	439	65	41	53
19	93	60	118	46	2510	129	528	325	301	63	41	53
20	76	58	105	46	2810	129	394	271	236	87	41	49
21	66	57	75	46	1670	129	305	232	263	101	41	47
22	61	58	68	46	1020	133	259	206	695	85	41	46
23	58	58	64	46	965	133	311	185	388	75	41	44
24	55	67	62	46	999	124	426	169	257	69	41	42
25	74	109	60	46	716	116	366	154	637	65	41	41
26	92	109	58	140	523	107	289	145	532	64	39	41
27	83	124	58	600	425	118	247	185	302	132	39	41
28	88	294	58	438	389	120	218	249	221	160	40	41
29	107	256	81	283	---	111	486	217	181	141	41	40
30	95	198	97	195	---	127	522	184	176	100	41	40
31	83	---	99	157	---	138	---	280	---	82	69	---
TOTAL	1987	2550	5096	3139	19995	5471	12573	13112	12604	3159	1539	2578
MEAN	64.1	85.0	164	101	714	176	419	423	420	102	49.6	85.9
MAX	107	294	490	600	2810	353	1960	1660	2110	216	75	274
MIN	48	54	58	46	114	107	100	145	90	63	39	40
CAL..YR 1980	TOTAL	93874	MEAN	256	MAX	3720	MIN	48				
WTR YR 1981	TOTAL	83803	MEAN	230	MAX	2810	MIN	39				

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 mi² (3,898 km²).

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.--60 years, 1,508 ft³/s (42.71 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge at site at Pomerene, 43,800 ft³/s (1,240 m³/s) Jan. 25, 1937; maximum discharge at present site since regulation began at Mohawk Dam, 24,000 ft³/s (680 m³/s) Jan. 25, 1937, gage height, 18.8 ft (5.73 m), present datum (from floodmarks), from rating curve extended above 13,000 ft³/s (368 m³/s); minimum daily discharge, 19 ft³/s (0.54 m³/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 ft³/s (2,890 m³/s), present site and datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,650 ft³/s (217 m³/s) Mar. 3, gage height, 11.50 ft (3.505 m); minimum daily, 319 ft³/s (9.03 m³/s) Aug. 27.

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	427	618	1120	830	1300	7160	991	3440	1300	3190	602	1250
2	429	594	1380	783	3890	7280	908	3300	1150	2760	558	1530
3	447	562	1550	670	2670	7390	858	2900	1100	2400	532	2170
4	437	577	1370	580	1840	7020	857	2630	1230	2210	724	4010
5	410	578	1130	520	1520	5300	2100	2180	1190	2060	640	2610
6	395	567	992	510	1300	2770	2640	2800	1360	1900	558	1980
7	388	547	993	490	1100	2120	1990	4540	1920	1790	528	1600
8	391	545	1170	480	1000	1860	1720	3450	1740	1670	512	1440
9	386	541	1440	470	900	1710	1530	2970	4100	1570	508	1330
10	381	531	2300	470	880	1580	1380	2480	4900	1490	474	1080
11	379	516	2050	460	2610	1490	1320	2730	4210	1140	452	900
12	370	492	1560	450	4610	1400	3920	4920	6180	914	553	784
13	362	442	1350	450	4260	1310	672	5000	5890	847	479	650
14	363	416	1220	450	2360	1210	1300	5520	1340	1330	437	570
15	358	634	1120	450	1600	1130	4470	6010	1820	948	428	761
16	421	691	1010	450	1890	1110	6030	6320	4740	763	433	761
17	451	692	936	450	3550	1030	5890	5560	6010	705	433	738
18	575	700	882	450	4850	929	5970	3820	5980	660	402	702
19	735	708	861	450	5370	859	6000	3010	6220	623	384	831
20	581	708	703	450	4190	843	5790	2420	6380	745	368	777
21	525	690	660	450	4110	836	5140	2060	6720	1060	356	647
22	516	487	610	450	5930	818	3550	1790	6870	904	350	555
23	518	464	550	450	6220	805	2440	1590	6860	722	346	520
24	495	482	520	470	6240	779	2590	1380	6920	658	335	479
25	592	626	510	500	6610	748	2360	1240	6100	621	326	419
26	767	696	500	810	7020	721	2030	1140	5940	625	322	404
27	656	677	500	2540	7070	764	1780	1220	6830	1040	319	398
28	652	1250	500	3620	7090	1220	1590	2070	6430	951	504	384
29	793	1350	530	2360	---	982	2650	1850	5500	1050	461	369
30	728	1150	877	1510	---	941	4020	1540	3090	853	405	371
31	658	---	893	1100	---	1050	---	1540	---	684	432	---
TOTAL	15586	19531	31787	24573	101980	65165	84486	93420	130020	38883	14161	31020
MEAN	503	651	1025	793	3642	2102	2816	3014	4334	1254	457	1034
MAX	793	1350	2300	3620	7090	7390	6030	6320	6920	3190	724	4010
MIN	358	416	500	450	880	721	672	1140	1100	621	319	369

CAL YR 1980 TOTAL 690474 MEAN 1887 MAX 6760 MIN 296
WTR YR 1981 TOTAL 650612 MEAN 1782 MAX 7390 MIN 319

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 mi² (1,202 km²), revised. Area at site used prior to Oct. 5, 1976, 462 mi² (1.197 km²).

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

REVISED RECORDS.--WSP 873: 1935. WSP 1555: 1935. WSP 1907: 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.--51 years, 413 ft³/s (11.70 m³/s), 12.14 in/yr (308 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s (1,350 m³/s) July 5, 1969, gage height, 26.40 ft (8.047 m) (from floodmarks), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow at site then in use; minimum, 23 ft³/s (0.65 m³/s) Sept. 10-15, 28-30, 1954.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 21	0300	3780 107	15.89 4.843	June 14	0630	4390 124	16.24 4.950
June 9	1700	*5160 146	*16.66 5.078				

Minimum daily discharge 60 ft³/s (1.70 m³/s) Jan. 14-17.

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	132	144	371	110	372	1080	248	1150	456	587	178	151
2	135	137	384	100	1360	947	226	1060	347	692	161	235
3	146	135	423	95	1080	838	209	937	318	687	215	560
4	137	146	369	85	540	747	227	791	317	590	347	785
5	128	153	273	80	320	712	835	638	312	493	209	493
6	125	131	215	80	250	661	791	754	605	490	176	294
7	125	109	224	75	230	560	627	855	571	411	166	205
8	120	105	262	70	220	489	481	808	492	310	158	185
9	115	109	411	70	210	440	375	717	4160	265	164	181
10	112	106	715	65	210	405	299	606	4780	245	142	150
11	114	99	611	65	1360	398	342	612	3820	223	135	131
12	111	88	439	65	1080	371	1170	1060	2710	211	145	124
13	113	85	324	65	800	336	1670	983	2040	290	143	128
14	119	87	234	60	500	292	1390	890	3540	803	126	117
15	117	106	180	60	340	258	1260	1410	3170	391	125	124
16	116	106	164	60	684	254	1340	1380	2560	265	132	128
17	115	104	146	60	1220	244	1380	1210	2610	240	127	166
18	212	117	131	65	1310	237	1290	1040	2290	212	120	158
19	195	121	127	100	2290	234	1090	912	1740	194	112	148
20	145	110	89	150	3580	231	931	770	1370	460	109	142
21	121	104	85	150	3620	229	770	621	1100	710	103	130
22	109	103	80	160	3330	216	624	500	1040	367	102	121
23	99	101	80	160	3250	217	633	403	987	257	99	115
24	95	127	75	170	3180	216	651	342	949	213	99	109
25	183	239	75	170	2800	200	589	292	1060	191	96	106
26	289	190	75	170	2040	188	505	265	983	184	96	105
27	190	226	75	872	1530	228	452	329	879	221	97	103
28	208	445	75	749	1270	360	690	895	749	249	118	98
29	227	440	80	647	---	340	1040	813	601	362	112	92
30	175	397	130	452	---	302	1230	687	484	259	107	95
31	157	---	120	250	---	294	---	664	---	204	125	---
TOTAL	4485	4670	7042	5530	38976	12524	23365	24394	47040	11276	4344	5679
MEAN	145	156	227	178	1392	404	779	787	1568	364	140	189
MAX	289	445	715	872	3620	1080	1670	1410	4780	803	347	785
MIN	95	85	75	60	210	188	209	265	312	184	96	92
CFSM	.31	.34	.49	.38	3.00	.87	1.68	1.70	3.38	.78	.30	.41
IN.	.36	.37	.56	.44	3.12	1.00	1.87	1.96	3.77	.90	.35	.46

CAL YR 1980	TOTAL	207192	MEAN 566	MAX 3490	MIN 75	CFSM 1.22	IN 16.61
WTR YR 1981	TOTAL	189325	MEAN 519	MAX 4780	MIN 60	CFSM 1.12	IN 15.18

MUSKINGUM RIVER BASIN

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03139000 KILLBUCK CREEK AT KILLBUCK, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 27...	1330	181	430	7.9	6.5	--	--	--	--	--	--	220
DEC 08...	1445	262	496	7.2	10.0	--	--	--	--	--	--	192
JAN 20...	1045	153	430	7.1	.0	--	--	--	--	--	--	168
MAR 02...	1415	877	400	7.1	5.5	--	--	--	--	--	--	118
APR 15...	1045	1280	330	7.0	10.5	--	--	--	--	--	--	98
MAY 29...	1315	744	480	7.0	17.0	--	--	--	--	--	--	170
JUN 09...	1300	264	590	7.1	26.0	--	--	--	--	--	--	190
AUG 17...	1245	127	600	7.9	19.5	240	53	65	18	21	4.4	228
SEP 28...	1320	97	560	7.4	16.0	--	--	--	--	--	--	240

DATE	CAR- BONATE FET-FLD (MG/L AS C03)	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 SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 27...	0	47	--	--	--	307	--	--	--	--	--	--
DEC 08...	0	50	--	--	--	295	--	--	--	--	--	--
JAN 20...	0	44	--	--	--	253	--	--	--	--	--	--
MAR 02...	0	50	--	--	--	243	--	--	--	--	--	--
APR 15...	0	43	--	--	--	256	--	--	--	--	--	--
MAY 29...	0	44	--	--	--	336	--	--	--	--	--	--
JUN 09...	0	57	--	--	--	247	--	--	--	--	--	--
AUG 17...	0	40	37	.2	7.5	371	2.0	.090	4	5	100	2
SEP 28...	0	53	--	--	--	347	--	--	--	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 27...	--	--	--	--	--	--	1000	930	70	--	--	--
DEC 08...	--	--	--	--	--	--	1600	1600	30	--	--	--
JAN 20...	--	--	--	--	--	--	1000	820	180	--	--	--
MAR 02...	--	--	--	--	--	--	1600	1500	80	--	--	--
APR 15...	--	--	--	--	--	--	6600	6500	60	--	--	--
MAY 29...	--	--	--	--	--	--	2100	2000	80	--	--	--
JUN 09...	--	--	--	--	--	--	350	330	20	--	--	--
AUG 17...	<1	<10	<10	10	10	<10	2300	2300	30	8500	20	10
SEP 28...	--	--	--	--	--	--	2500	2500	20	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

MUSKINGUM RIVER BASIN

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031400C0 MILL CREEK NEAR COSHOCTON, OH

LOCATION.--Lat 40°21'46", long 81°51'45", Ccshocton 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 mi² (70.4 km²).

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(F). 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. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--45 years, 29.0 ft³/s (0.821 m³/s), 14.48 in/yr (368 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft³/s (247 m³/s) July 5, 1969, gage height, 13.92 ft (4.243 m), from rating curve extended above 2,200 ft³/s (62.3 m³/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 ft³/s (19.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 12	1830	*2320 65.7	12.01 3.661	Aug. 3	1945	989 28.0	9.64 2.938
June 9	0530	781 22.1	8.88 2.707				

Minimum discharge 2.9 ft³/s (0.08 m³/s) Sept. 28-30.

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	4.9	8.0	32	12	70	46	16	41	35	21	15	6.1
2	5.1	7.2	30	11	257	39	14	33	30	17	13	5.4
3	5.3	6.8	26	9.5	91	34	14	28	125	19	250	65
4	5.1	10	22	8.5	42	32	57	24	59	14	145	25
5	4.5	8.3	21	8.0	34	42	298	22	142	15	42	17
6	4.2	7.0	22	7.5	26	42	96	35	203	13	31	11
7	3.8	6.8	48	7.5	20	34	58	25	72	11	28	8.6
8	4.2	7.7	42	7.5	19	31	44	20	48	10	24	11
9	4.0	6.5	81	7.5	18	29	42	19	337	9.4	20	8.0
10	3.9	5.9	75	7.5	18	28	35	18	188	8.8	16	6.4
11	5.3	5.3	48	7.5	188	26	99	41	102	7.7	13	5.8
12	4.2	4.9	39	7.5	72	25	642	113	72	7.5	12	5.4
13	3.8	4.9	33	7.5	39	24	298	45	125	27	11	5.1
14	3.6	4.9	27	7.5	31	21	200	52	238	63	9.4	5.1
15	3.8	5.5	25	7.5	27	20	111	130	101	14	9.1	8.1
16	3.6	4.9	24	7.5	103	22	82	70	83	12	10	5.8
17	3.3	5.9	21	7.5	160	19	82	44	66	10	8.2	5.0
18	15	6.3	19	7.5	140	17	83	36	43	8.8	7.2	5.3
19	6.1	6.3	17	7.5	251	17	59	31	35	8.0	6.5	4.9
20	4.5	5.5	14	7.5	371	17	41	26	31	63	6.1	4.4
21	4.2	5.5	11	7.5	186	16	37	22	33	43	5.6	4.2
22	3.9	5.9	8.5	7.5	124	15	33	19	64	23	5.1	4.0
23	3.5	5.7	8.0	7.5	155	14	52	17	31	15	4.9	3.6
24	3.5	14	8.0	7.5	135	13	43	15	25	13	4.6	3.5
25	38	19	8.0	9.7	96	13	36	13	96	12	4.3	3.3
26	15	13	8.0	67	72	12	31	12	39	27	4.1	3.4
27	9.4	58	8.0	88	60	18	29	51	29	111	4.0	3.3
28	21	46	8.0	42	55	14	27	207	24	37	5.8	3.0
29	13	31	12	31	---	13	85	60	21	29	5.0	3.2
30	10	28	18	21	---	19	57	53	19	22	4.5	3.2
31	8.8	---	14	16	---	17	---	72	---	17	5.3	---
TOTAL	228.5	354.7	777.5	466.2	2860	729	2801	1394	2516	708.2	729.7	253.1
MEAN	7.37	11.8	25.1	15.0	102	23.5	93.4	45.0	83.9	22.8	23.5	8.44
MAX	38	58	81	88	371	46	642	207	337	111	250	65
MIN	3.3	4.9	8.0	7.5	18	12	14	12	19	7.5	4.0	3.0
CFSM	.27	.43	.92	.55	3.75	.86	3.43	1.65	3.09	.84	.86	.31
IN.	.31	.49	1.06	.64	3.91	1.00	3.83	1.91	3.44	.97	1.00	.35

CAL YR 1980 TOTAL 15097.8 MEAN 41.3 MAX 710 MIN 3.3 CFSM 1.52 IN 20.65
WTR YR 1981 TOTAL 13817.9 MEAN 37.9 MAX 642 MIN 3.0 CFSM 1.39 IN 18.90

MUSKINGUM RIVER BASIN

03140000 MILL CREEK NEAR COSHOCTON, OH-Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 27...	1130	9.4	365	7.4	5.0	--	--	--	--	--	--	96
DEC 08...	1000	42	299	7.0	5.5	--	--	--	--	--	--	68
JAN 19...	1145	7.6	370	7.0	.0	--	--	--	--	--	--	88
MAR 02...	1045	38	260	6.8	4.0	--	--	--	--	--	--	65
APR 20...	1050	50	260	7.3	10.0	--	--	--	--	--	--	64
MAY 29...	1000	66	275	7.0	14.5	--	--	--	--	--	--	78
JUL 09...	1025	9.2	390	7.0	24.5	--	--	--	--	--	--	99
AUG 20...	1000	5.9	370	7.6	16.5	140	48	42	9.7	12	3.2	112
SEP 28...	1030	3.1	410	7.3	13.5	--	--	--	--	--	--	117

DATE	CAR- BONATE FET-FLD (MG/L AS C03)	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 SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 27...	0	66	--	--	--	231	--	--	--	--	--	--
DEC 08...	0	51	--	--	--	181	--	--	--	--	--	--
JAN 19...	0	62	--	--	--	211	--	--	--	--	--	--
MAR 02...	0	48	--	--	--	167	--	--	--	--	--	--
APR 20...	0	46	--	--	--	155	--	--	--	--	--	--
MAY 29...	0	41	--	--	--	182	--	--	--	--	--	--
JUL 09...	0	44	--	--	--	230	--	--	--	--	--	--
AUG 20...	0	44	17	.1	6.1	245	.78	.020	1	<1	100	1
SEP 28...	0	56	--	--	--	230	--	--	--	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 27...	--	--	--	--	--	--	1100	940	160	--	--	--
DEC 08...	--	--	--	--	--	--	4500	4400	110	--	--	--
JAN 19...	--	--	--	--	--	--	1200	800	400	--	--	--
MAR 02...	--	--	--	--	--	--	900	790	110	--	--	--
APR 20...	--	--	--	--	--	--	870	830	40	--	--	--
MAY 29...	--	--	--	--	--	--	2100	2000	80	--	--	--
JUL 09...	--	--	--	--	--	--	1300	1200	140	--	--	--
AUG 20...	<1	10	<10	<10	7	3	1300	1000	270	3300	19	<10
SEP 28...	--	--	--	--	--	--	1200	1000	160	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

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 mi² (12,585 km²).

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.--45 years, 4,990 ft³/s (141.3 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,700 ft³/s (2,230 m³/s) Jan. 26, 1937, gage height, 21.98 ft (6.700 m); minimum daily, 420 ft³/s (11.9 m³/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 ft³/s (5,720 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,000 ft³/s (623 m³/s) June 14, gage height, 15.56 ft (4.743 m); minimum daily, 1,200 ft³/s (34.0 m³/s) Jan. 6-21.

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	1800	2350	4700	2480	3440	18300	3970	13300	7420	7600	3370	2210
2	1750	2230	4630	2410	8190	15800	3690	12800	6130	7260	2890	2720
3	1750	2000	4900	2260	11300	14100	3420	11100	5200	6490	2730	3800
4	1760	2110	4760	1950	9450	14200	3270	9840	5760	5980	4610	8290
5	1690	2290	4350	1300	7310	13900	9350	8140	6460	5480	4070	8690
6	1610	2080	3940	1200	5820	11300	12000	7570	10300	5230	3390	7480
7	1550	2110	3880	1200	5060	10400	11000	9870	10100	5650	2800	4950
8	1540	2000	4350	1200	4780	9610	9320	9460	9240	5040	2510	4030
9	1500	1910	4930	1200	4260	8910	7510	8220	12200	4490	2360	3780
10	1470	1850	6620	1200	3910	8230	6750	7190	19500	4170	2210	3400
11	1600	1780	7510	1200	6050	7720	6000	6870	18500	3800	2060	2880
12	1510	1710	6530	1200	9490	6990	15400	10000	19100	3220	2060	2560
13	1430	1620	5410	1200	10600	6050	18400	11100	17900	2900	2030	2290
14	1360	1510	4590	1200	8500	5200	16700	11300	18000	3900	1880	2050
15	1410	1690	4030	1200	6460	4640	17800	12300	11700	3580	1800	2100
16	1430	2150	3680	1200	5920	4420	19700	13600	15000	2990	1810	2200
17	1730	2260	3410	1200	9420	4270	19100	13300	17300	2680	1840	2190
18	2050	2320	3230	1200	13500	4030	18100	10500	16800	2500	1760	2190
19	2550	2370	3110	1200	16600	3740	16500	8410	16600	2350	1650	2210
20	2420	2430	2750	1200	19500	3590	15500	7200	16500	2460	1540	2150
21	2120	2420	2280	1200	21000	3500	14400	6200	15800	4140	1470	1970
22	1940	2310	2160	1300	21100	3410	12800	5430	15400	5000	1430	1780
23	1850	2210	2340	1400	21400	3340	11300	4870	15400	3950	1390	1670
24	1780	2300	2240	1400	21700	3290	11400	4410	15000	3130	1340	1590
25	2180	2790	1980	1500	20900	3210	10900	4030	15300	2630	1290	1500
26	2940	3410	1720	1980	20500	3080	9740	3750	15000	3430	1270	1440
27	3080	3520	1800	3540	19700	3040	8790	4060	14900	6000	1260	1400
28	2850	4550	1910	6630	19000	3650	7700	6830	13500	4800	1410	1340
29	2830	5240	2000	6820	---	4580	8560	9360	11300	4950	1460	1280
30	2800	5080	2090	5190	---	4110	12400	9110	8440	4830	1550	1250
31	2610	---	2350	3920	---	4000	---	8250	---	4030	1600	---
TOTAL	60890	74600	114180	63280	334860	214610	341470	268370	399750	134660	64840	87390
MEAN	1964	2487	3683	2041	11960	6923	11380	8657	13330	4344	2092	2913
MAX	3080	5240	7510	6820	21700	18300	19700	13600	19500	7600	4610	8690
MIN	1360	1510	1720	1200	3440	3040	3270	3750	5200	2350	1260	1250

CAL YR 1980 TOTAL 2460510 MEAN 6723 MAX 18900 MIN 1360
WTR YR 1981 TOTAL 2158900 MEAN 5915 MAX 21700 MIN 1200

MUSKINGUM RIVER BASIN

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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 mi² (306 km²).

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

REVISED RECORDS.--WSP 1907: Drainage area.

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 fair. 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.--43 years, 133 ft³/s (3.767 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 985 ft³/s (27.9 m³/s) revised, Aug. 24, 1980, gage height, 9.69 ft (2.954 m); maximum gage height, 10.96 ft (3.341 m) revised, 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, 881 ft³/s (24.9 m³/s) June 10, gage height, 9.04 ft (2.755 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Feb. 21.

REVISIONS: The maximum discharge for the water year 1980 has been revised to 985 ft³/s (27.9 m³/s) Aug. 24, gage height, 9.69 ft (2.954 m), superseding figure published in the report for 1980.

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	3.0	250	210	54	33	640	2.9	2.4	355	646	134	3.3
2	3.2	232	232	54	13	633	2.5	2.4	489	707	64	2.6
3	3.2	215	79	54	2.7	637	6.0	2.5	323	708	6.2	2.9
4	3.2	228	8.5	54	142	640	8.5	2.5	229	702	2.6	100
5	3.2	165	8.5	54	526	665	3.0	2.6	263	695	2.7	172
6	3.2	37	8.9	27	522	660	3.7	2.6	134	682	6.2	185
7	3.2	8.9	8.9	3.9	517	638	3.5	26	185	670	9.2	190
8	3.4	9.2	81	3.9	515	623	3.5	46	412	588	9.2	306
9	3.5	9.2	281	3.9	509	517	3.0	47	546	168	9.2	376
10	3.5	9.2	388	3.9	510	64	3.9	46	380	2.2	9.2	317
11	3.5	9.2	395	3.9	96	2.3	4.6	109	10	2.7	7.5	115
12	3.5	5.5	327	3.7	133	1.9	32	277	77	2.4	3.9	2.7
13	3.5	2.7	161	3.9	548	2.1	4.4	412	415	2.3	3.2	2.9
14	3.5	2.7	79	3.9	563	2.1	3.4	462	78	2.7	3.1	2.7
15	87	2.7	9.6	3.9	560	1.9	89	424	8.6	2.5	3.0	2.8
16	136	2.7	9.6	40	514	2.0	304	237	101	2.4	3.0	3.0
17	210	2.7	40	59	40	2.5	466	145	436	2.8	2.9	30
18	284	2.7	118	57	2.2	2.1	467	14	581	2.9	2.9	46
19	313	2.7	111	57	106	2.3	506	2.7	657	3.1	2.5	32
20	316	2.6	8.2	41	41	3.4	531	2.2	656	2.9	2.0	5.2
21	313	40	8.2	5.5	1.4	3.4	527	2.1	670	2.5	2.1	4.2
22	319	57	8.2	5.5	111	2.5	265	2.8	521	2.4	2.0	2.7
23	310	59	8.2	5.5	361	2.5	2.0	2.7	548	2.3	2.9	2.4
24	305	59	8.2	5.5	477	4.3	34	2.5	718	2.7	4.0	2.4
25	322	57	8.2	5.5	590	6.3	126	2.3	627	2.7	2.7	2.4
26	305	57	8.2	5.7	617	6.3	214	1.8	564	2.6	2.3	2.2
27	305	57	8.2	43	623	5.0	391	3.0	735	2.6	2.6	2.3
28	289	121	8.2	89	643	3.7	519	4.4	730	2.5	2.5	2.3
29	269	161	40	40	---	2.9	241	91	710	2.4	2.8	2.2
30	269	161	54	17	---	4.5	2.5	182	698	43	3.2	2.2
31	260	---	54	33	---	4.5	---	206	---	115	3.4	---
TOTAL	4658.6	2028.7	2777.8	841.1	9316.3	5785.5	4769.4	2765.5	12856.6	5775.6	317.0	1922.4
MEAN	150	67.6	89.6	27.1	333	187	159	89.2	429	186	10.2	64.1
MAX	322	250	395	89	643	665	531	462	735	708	134	376
MIN	3.0	2.6	8.2	3.7	1.4	1.9	2.0	1.8	8.6	2.2	2.0	2.2
(+)	1.84	1.74	2.13	2.31	1.82	2.22	2.65	1.52	1.53	2.04	1.41	1.27
CAL YR 1980 TOTAL	58432.28			MEAN 160	MAX 748	MIN .18						
WTR YR 1981 TOTAL	53814.50			MEAN 147	MAX 735	MIN 1.4	(+) 2.27					
							(+) 1.87					

+ 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 mi² (1,052 km²).

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.--46 years, 454 ft³/s (12.86 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 8,500 ft³/s (241 m³/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 ft³/s (0.020 m³/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, 4,000 ft³/s (113 m³/s) June 15, gage height, 16.90 ft (5.151 m); minimum daily, 7.8 ft³/s (0.22 m³/s) Sept. 26.

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	56	348	660	165	202	975	219	246	497	745	149	28
2	54	338	510	170	1170	954	179	219	480	715	153	37
3	54	328	390	168	1500	890	162	184	636	701	101	157
4	58	334	300	157	1740	834	150	159	1170	695	61	346
5	61	338	230	149	1090	886	1280	146	1600	705	96	221
6	60	272	190	132	857	1290	2130	153	1650	718	52	204
7	55	132	160	113	670	1310	1730	272	1920	666	41	188
8	54	75	300	83	666	1100	678	244	1650	638	43	191
9	51	63	450	76	665	936	368	209	1140	569	40	294
10	50	66	590	72	639	816	303	186	1570	247	30	332
11	51	56	790	69	1010	492	250	193	2540	87	25	265
12	48	55	880	64	1240	274	1370	395	2860	62	21	126
13	50	53	580	60	1100	229	3340	512	2370	59	18	21
14	49	50	420	60	850	204	3820	542	2840	72	20	15
15	49	47	300	60	750	184	3090	923	3780	79	19	27
16	142	46	177	60	836	193	1870	1170	3820	59	20	96
17	248	49	177	60	1450	328	1040	651	3050	53	20	58
18	324	55	184	121	1850	311	1140	400	2070	52	20	53
19	401	83	292	136	1730	248	1200	252	1150	44	18	80
20	381	96	294	130	2020	232	1010	219	798	45	19	61
21	361	87	111	121	2580	231	881	180	808	53	21	21
22	353	113	90	80	2480	232	770	149	1330	70	21	13
23	340	152	80	80	1850	212	640	125	1460	54	20	12
24	330	186	80	80	1720	193	965	113	1070	43	20	9.4
25	401	353	75	80	1710	173	796	104	1030	37	12	8.2
26	584	292	75	162	1400	162	611	97	1360	36	13	7.8
27	456	265	75	683	1120	162	580	228	1110	52	14	8.2
28	396	659	75	683	977	219	646	388	833	75	14	10
29	385	680	75	473	---	208	704	335	759	346	17	11
30	372	710	107	280	---	182	525	269	722	182	27	8.2
31	351	---	162	139	---	212	---	445	---	111	28	---
TOTAL	6625	6381	8879	4966	35872	14872	32447	9708	48073	8070	1173	2908.8
MEAN	214	213	286	160	1281	480	1082	313	1602	260	37.8	97.0
MAX	584	710	880	683	2580	1310	3820	1170	3820	745	153	346
MIN	48	46	75	60	202	162	150	97	480	36	12	7.8
(+)	6.08	5.74	5.84	5.86	5.60	5.86	4.91	5.35	6.60	6.91	6.52	6.05

CAL YR 1980 TOTAL 230163.0 MEAN 629 MAX 7670 MIN 46 (+) 5.50
WTR YR 1981 TOTAL 179974.8 MEAN 493 MAX 3820 MIN 7.8 (+) 5.94

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

03142240 SUGARTREE FORK NEAR BIRMINGHAM, OH

LOCATION.--Lat 40°10'12", long 81°22'28", in T.4 N., R.1 W., Guernsey County, Hydrologic Unit 05040005, on left bank at bridge on Washington Township road 7869, 3.3 mi (5.31 km) east of Birmingham, and 3.9 mi (6.28 km) west-northwest of Londonderry.

DRAINAGE AREA.--3.45 mi² (8.94 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1981 to September 1981 (discontinued).

GAGE.--Water-stage recorder and wooden v-notch weir. Datum of gage is 897.87 ft (273.671 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum 67 ft³/s (1.90 m³/s) Sept. 3, 1981; minimum 0.025 ft³/s (0.001 m³/s) Aug. 28, 1981

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period July to September, 67 ft³/s (1.90 m³/s) Sept. 3, 3.57 ft (1.088 m); minimum 0.025 ft³/s (0.001 m³/s) Aug. 28.

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										---	.90	.37
2										---	.73	1.6
3										---	3.1	13
4										---	2.2	10
5										---	1.2	3.1
6										---	1.0	1.7
7										---	.90	1.2
8										---	.73	2.6
9										1.6	.59	1.3
10										1.5	.52	.81
11										1.2	.46	.66
12										1.0	.37	.56
13										1.4	.32	.49
14										1.1	.27	.49
15										.81	.43	1.9
16										.81	.49	.73
17										.73	.37	.56
18										.59	.23	.73
19										.56	.27	.81
20										1.6	.15	.56
21										3.3	.15	.49
22										1.6	.13	.56
23										.90	.12	.46
24										.73	.12	.43
25										.59	.07	.37
26										3.1	.07	.37
27										8.0	.07	.37
28										4.0	.05	.32
29										2.8	.05	.27
30										1.6	.20	.32
31										1.2	.32	---
TOTAL										---	16.58	47.13
MEAN										---	.53	1.57
MAX										---	3.1	13
MIN										---	.05	.27
CFSM										---	.15	.46
IN.										---	.18	.51

03142240 SUGARTREE FORK NEAR BIRMINGHAM, OH.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years July to September 1981 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July to September 1981 (discontinued).

pH: July to September 1981 (discontinued).

WATER TEMPERATURES: July to September 1981 (discontinued).

SUSPENDED SEDIMENT DISCHARGE: July to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 384 micromhos Sept. 2, 1981; minimum, 158 micromhos Sept. 3, 1981.

pH: Maximum, 8.2 units July 12, 1981: minimum, 7.1 units Sept. 3, 1981.

WATER TEMPERATURES: Maximum, 26.0°C July 9, 15, 1981; minimum, 9.0°C Sept. 24, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 384 micromhos Sept. 2; minimum, 158 micromhos Sept. 3.

pH: Maximum, 8.2 units July 12: minimum, 7.1 units Sept. 3.

WATER TEMPERATURES: Maximum, 26.0°C July 9, 15; minimum, 9.0°C Sept. 24.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
JUL 15...	1235	.90	330	8.0	21.5	--	--	--	--	--	--	156
AUG 11...	1045	.50	335	7.9	19.5	140	0	44	8.1	9.5	2.3	174
SEP 17...	1200	.58	340	8.0	15.5	--	--	--	--	--	--	151

DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
JUL 15...	0	29	--	--	--	193	--	--	--	--	--	--
AUG 11...	0	22	10	.2	6.1	196	.20	.020	2	2	<50	1
SEP 17...	0	28	--	--	--	197	--	--	--	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE D RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
JUL 15...	--	--	--	--	--	--	450	390	60	--	--	--
AUG 11...	<1	10	<10	<10	4	<10	990	960	30	5700	5	<10
SEP 17...	--	--	--	--	--	--	670	570	100	--	--	--

[illegible]

MUSKINGUM RIVER BASIN

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03142240 SUGARTREE FORK NEAR BIRMINGHAM, OH.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	322	318	370	352
2							---	---	330	322	384	230
3							---	---	334	276	356	158
4							---	---	324	276	262	196
5							---	---	326	324	284	262
6							---	---	332	326	296	284
7							---	---	336	328	308	284
8							---	---	342	336	326	284
9							340	296	344	340	328	326
10							324	290	344	340	330	328
11							326	316	346	342	334	328
12							328	320	348	344	338	334
13							334	324	346	342	344	338
14							344	336	348	344	344	328
15							342	336	356	344	348	324
16							340	336	362	356	348	344
17							342	336	362	358	348	346
18							342	340	362	358	350	338
19							344	340	360	354	356	342
20							348	328	356	352	356	354
21							348	308	354	350	356	350
22							332	322	352	350	354	350
23							336	328	352	348	356	354
24							334	330	350	346	354	352
25							338	334	348	344	356	352
26							340	276	348	344	356	354
27							280	226	346	344	358	356
28							314	276	350	344	360	356
29							302	284	354	336	358	354
30							312	284	354	338	358	354
31							316	312	358	346	---	---
MONTH							348	226	362	276	384	158
YEAR	384	158										

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

MUSKINGUM RIVER BASIN

03142240 SUGARTREE FORK NEAR BIRMINGHAM, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	8.0	7.7	7.9	7.7
2							---	---	8.0	7.7	7.8	7.6
3							---	---	8.0	7.5	7.7	7.1
4							---	---	7.9	7.6	7.6	7.2
5							---	---	8.0	7.6	7.7	7.6
6							---	---	7.9	7.7	7.8	7.6
7							---	---	7.9	7.7	7.9	7.6
8							---	---	8.0	7.7	7.8	7.7
9							---	---	8.0	7.7	7.9	7.7
10							8.1	7.9	8.0	7.7	8.0	7.7
11							8.1	7.8	8.0	7.7	8.0	7.7
12							8.2	7.7	8.0	7.7	8.0	7.7
13							8.0	7.7	8.0	7.7	8.0	7.7
14							8.1	7.7	8.0	7.7	7.9	7.7
15							8.2	7.8	7.9	7.7	7.8	7.7
16							8.1	7.8	8.0	7.7	7.9	7.7
17							8.1	7.8	8.0	7.8	8.0	7.7
18							8.1	7.8	8.0	7.8	7.9	7.8
19							8.0	7.7	8.0	7.8	8.0	7.8
20							8.0	7.7	7.9	7.7	8.0	7.8
21							7.9	7.7	7.9	7.7	8.0	7.8
22							8.0	7.7	7.9	7.7	7.9	7.7
23							8.0	7.7	7.9	7.7	8.0	7.8
24							8.0	7.7	7.9	7.7	8.0	7.8
25							8.0	7.7	7.9	7.7	8.0	7.8
26							7.9	7.7	7.9	7.7	8.0	7.8
27							7.7	7.4	7.8	7.7	8.0	7.7
28							7.8	7.6	7.8	7.5	8.0	7.7
29							7.9	7.7	7.8	7.6	8.0	7.8
30							8.0	7.7	7.8	7.5	8.0	7.8
31							8.0	7.7	7.8	7.7	---	---
MONTH							8.2	7.4	8.0	7.5	8.0	7.1
YEAR	8.2	7.1										

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

MUSKINGUM RIVER BASIN

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03142240 SUGARTREE FORK NEAR BIRMINGHAM, OH--Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	22.5	17.0	23.0	19.0
2							---	---	22.5	18.0	23.5	20.0
3							---	---	22.5	19.0	21.5	20.0
4							---	---	23.5	19.5	22.5	20.0
5							---	---	24.0	20.5	22.0	19.0
6							---	---	22.5	21.0	21.5	19.0
7							---	---	22.0	20.5	21.0	19.0
8							---	---	22.5	19.5	20.0	18.0
9							26.0	24.0	23.0	18.5	18.5	15.5
10							25.5	22.0	23.5	18.5	18.0	13.5
11							23.5	18.0	23.0	20.0	20.5	15.0
12							24.0	19.0	22.0	18.0	21.5	16.5
13							22.5	20.5	22.5	17.5	21.5	17.0
14							24.0	21.0	22.5	18.5	20.0	17.0
15							22.5	17.5	21.5	20.0	19.0	17.5
16							22.0	19.5	21.5	19.0	18.5	16.0
17							23.0	18.0	21.0	15.5	16.5	15.0
18							24.0	18.0	20.0	14.5	14.5	12.5
19							22.0	19.0	20.5	15.0	15.5	12.5
20							23.0	20.5	20.5	15.0	16.5	13.5
21							22.0	20.5	18.5	15.5	17.5	13.5
22							21.5	19.0	20.0	16.0	16.0	13.5
23							21.0	16.5	21.0	15.5	14.5	10.5
24							22.5	17.5	21.0	16.0	14.0	9.0
25							23.5	18.5	19.5	16.0	14.0	10.0
26							23.0	21.0	20.0	15.5	18.0	12.0
27							23.0	20.0	21.0	16.0	18.0	15.0
28							23.0	20.5	22.5	19.0	15.5	12.5
29							22.0	18.5	22.0	19.5	12.5	9.5
30							20.5	16.0	21.5	20.0	14.5	12.0
31							22.0	17.0	20.5	19.0	---	---
MONTH							26.0	16.0	24.0	14.5	23.5	9.0
YEAR	26.0	9.0										

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

MUSKINGUM RIVER BASIN

03142240 SUGARTREE FORK NEAR BIRMINGHAM, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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)
JULY			AUGUST			SEPTEMBER			
1	---	---	---	.90	5	.01	.37	21	.02
2	---	---	---	.73	4	.00	1.6	87	.45
3	---	---	---	3.1	87	1.7	13	587	41
4	---	---	---	2.2	62	.37	10	80	2.2
5	---	---	---	1.2	10	.03	3.1	18	.15
6	---	---	---	1.0	8	.02	1.7	11	.05
7	---	---	---	.90	9	.02	1.2	11	.04
8	---	---	---	.73	8	.02	2.6	50	.48
9	1.6	---	---	.59	10	.02	1.3	13	.05
10	1.5	5	.02	.52	9	.01	.81	9	.02
11	1.2	5	.02	.46	7	.00	.66	9	.02
12	1.0	5	.01	.37	6	.00	.56	12	.02
13	1.4	6	.02	.32	5	.00	.49	9	.01
14	1.1	5	.01	.27	5	.00	.49	10	.01
15	.81	5	.01	.43	10	.01	1.9	58	.40
16	.81	3	.00	.49	4	.00	.73	12	.02
17	.73	3	.00	.37	3	.00	.56	8	.01
18	.59	2	.00	.23	3	.00	.73	9	.02
19	.56	3	.00	.27	2	.00	.81	11	.02
20	1.6	19	.08	.15	5	.00	.56	7	.01
21	3.3	117	1.5	.15	7	.00	.49	4	.00
22	1.6	33	.14	.13	5	.00	.56	7	.01
23	.90	7	.02	.12	7	.00	.46	7	.00
24	.73	5	.00	.12	6	.00	.43	6	.00
25	.59	5	.00	.07	7	.00	.37	5	.00
26	3.1	167	2.1	.07	10	.00	.37	5	.00
27	8.0	143	4.0	.07	9	.00	.37	6	.00
28	4.0	28	.30	.05	8	.00	.32	4	.00
29	2.8	9	.07	.05	8	.00	.27	5	.00
30	1.6	6	.03	.20	10	.00	.32	4	.00
31	1.2	3	.00	.32	11	.00	---	---	---
TOTAL	40.72	---	8.33	16.58	---	2.21	47.13	---	45.01
YEAR	104.43		55.55						

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

03142240 SUGARTREE FORK NEAR BIRMINGHAM, OH--Continued

TABLE OF BENTHIC INVERTEBRATES

	SITE ID NUMBER
	0314224000
	7/01/81

BENTHIC INVERTEBRATES	-STATUS-

AQUATIC EARTHWORMS	--
BEETLES	
ADULT	PRESENT
LARVAE	PRESENT
BLACK FLIES	--
CADDISFLIES	
FREE-LIVING	--
CASE	PRESENT
CHUBS	--
CLAMS	PRESENT
CRAYFISH	PRESENT
DAMSELFLIES	--
DRAGONFLIES	--
FISH (NUMEROUS SPECIES)	COMMON
FLAT WORMS	--
HELLGRAMMITES	--
LEECHES	--
MAYFLIES	COMMON
MIDGES	--
MITES	PRESENT
REDWORMS	PRESENT
SCUDS	--
SNAILS	--
STONEFLIES	COMMON
WATER SNAKE	PRESENT
WATER STRIDERS	COMMON

EXPLANATION

-- - 0 OBSERVATIONS OF THE ORGANISM IN THE SAMPLE.
PRESENT - 20 OR LESS OBSERVATIONS OF THE ORGANISM IN THE SAMPLE.
COMMON - MORE THAN 20 OBSERVATIONS OF THE ORGANISM IN THE SAMPLE.

MUSKINGUM RIVER BASIN

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 mi² (2,181 km²).

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.--43 years, 945 ft³/s (26.76 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,930 ft³/s (196 m³/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 ft³/s (0.028 m³/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 ft³/s (632 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,150 ft³/s (146 m³/s) July 4, gage height, 15.49 ft (4.721 m); minimum daily, 74 ft³/s (2.10 m³/s) Aug. 28, 29.

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	200	484	1070	281	633	4780	523	4020	908	4570	479	167
2	192	462	975	320	1190	4730	530	2240	942	4640	384	156
3	183	445	957	350	2320	4660	499	1030	919	4590	362	183
4	175	443	937	330	2730	4640	518	723	1060	4590	360	339
5	170	443	807	300	2710	4500	1500	599	1620	3590	321	671
6	164	438	553	280	2260	3730	2900	581	2920	1910	283	687
7	163	429	434	260	1910	2610	3340	609	3330	1410	267	555
8	160	382	484	240	1600	2280	3470	636	3260	1170	243	491
9	156	296	671	230	1300	1990	2940	665	3350	1080	214	455
10	149	226	954	210	1190	1700	1940	623	2430	1010	192	438
11	146	173	1330	200	1400	1500	1560	657	1260	822	178	484
12	141	146	1480	200	1720	1210	3290	885	1800	565	159	506
13	135	132	1300	190	1830	937	1210	1150	1670	373	153	448
14	130	123	1110	180	1490	783	1470	1220	986	285	140	339
15	122	155	940	180	1410	687	3100	1590	1240	238	132	277
16	117	231	802	170	1440	665	3370	2020	3740	213	127	238
17	116	287	646	170	2080	660	3290	2220	4530	203	120	217
18	170	315	545	170	2860	715	3280	1790	4570	190	111	219
19	281	321	506	170	3480	755	3580	1330	4560	175	106	211
20	384	304	494	170	1900	709	4110	1140	4530	180	100	194
21	455	291	516	170	2010	665	4300	991	4440	221	93	186
22	462	296	450	170	2830	630	4180	878	4490	267	89	179
23	448	300	377	170	3240	609	4070	785	4670	249	85	160
24	422	341	337	170	2990	581	4240	706	4650	219	83	140
25	474	481	298	170	3750	543	4260	636	4430	197	80	124
26	553	638	274	200	4620	508	4110	592	4030	183	78	113
27	646	758	267	375	4650	489	4110	662	4670	276	79	105
28	707	908	259	707	4790	474	4130	986	4600	474	74	98
29	633	1120	249	1060	---	481	4120	1240	4550	558	74	91
30	555	1240	249	975	---	521	4250	1120	4610	518	95	87
31	511	---	254	780	---	533	---	950	---	581	132	---
TOTAL	9320	12608	20525	9548	66333	50275	88190	35274	94765	35547	5393	8558
MEAN	301	420	662	308	2369	1622	2940	1138	3159	1147	174	285
MAX	707	1240	1480	1060	4790	4780	4300	4020	4670	4640	479	687
MIN	116	123	249	170	633	474	499	581	908	175	74	87

CAL YR 1980 TOTAL 529638 MEAN 1447 MAX 5420 MIN 116
WTR YR 1981 TOTAL 436336 MEAN 1195 MAX 4790 MIN 74

MUSKINGUM RIVER BASIN

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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 Fazeysburg, 2.0 mi (3.2 km) downstream from Fivemile Run, and 2.5 mi (4.0 km) upstream from Black Run.

DRAINAGE AREA.--140 mi² (363 km²).

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.--45 years, 155 ft³/s (4.390 m³/s), 15.04 in/yr (382 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) Sept. 14, 1979, gage height, 14.07 ft (4.289 m), from rating curve extended above 7,700 ft³/s (218 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 2.0 ft³/s (0.057 m³/s) Oct. 3, 1963, gage height, 0.94 ft (0.287 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 2	0930	2080 58.9	5.98 1.823	Apr 12	1400	3710 105	8.20 2.499
Feb. 20	1530	3260 92.3	7.60 2.316	June 14	1430	*4740 134	*9.21 2.807

Minimum discharge, 24 ft³/s (0.68 m³/s) Oct. 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	48	246	84	192	255	98	211	241	285	73	90
2	29	43	226	74	1240	220	90	192	195	137	64	48
3	30	40	195	66	419	192	87	169	184	110	72	126
4	30	49	155	60	355	174	157	155	167	112	116	423
5	29	45	146	56	206	229	1190	143	143	116	75	116
6	26	41	160	52	187	252	557	330	172	92	62	78
7	26	39	211	50	174	209	324	377	139	80	59	64
8	26	41	266	45	150	184	258	266	114	69	57	66
9	26	40	310	45	122	172	223	223	192	64	54	66
10	26	37	392	45	120	164	189	198	566	59	48	51
11	38	34	285	43	423	155	282	642	344	52	54	45
12	30	33	235	42	203	143	3310	1220	223	50	44	42
13	27	33	206	40	209	139	2860	624	317	98	41	39
14	26	33	169	40	189	126	985	431	3230	164	39	38
15	26	33	153	40	187	118	552	985	758	75	38	94
16	26	33	150	40	229	132	392	590	370	60	39	87
17	25	33	129	40	507	120	392	392	385	56	38	59
18	69	37	125	40	498	112	547	307	232	50	34	50
19	56	38	125	40	1200	108	423	269	184	47	32	63
20	37	36	84	40	3040	106	344	223	155	73	30	60
21	32	35	80	40	1170	104	269	187	169	261	29	48
22	30	36	76	40	651	94	238	162	388	141	29	43
23	28	37	72	40	763	88	297	143	206	80	29	38
24	27	56	68	40	808	85	317	130	148	63	28	35
25	90	114	66	45	529	80	255	118	498	56	28	33
26	104	85	64	167	377	76	217	114	317	73	27	33
27	59	172	62	388	307	88	198	288	192	291	26	31
28	70	439	60	241	285	85	179	875	150	169	31	29
29	81	285	68	148	---	80	243	388	128	229	43	27
30	60	226	80	128	---	102	232	307	114	118	34	27
31	52	---	94	169	---	112	---	362	---	85	60	---
TOTAL	1271	2251	4758	2428	14740	4304	15705	11021	10621	3415	1433	2049
MEAN	41.0	75.0	153	78.3	526	139	524	356	354	110	46.2	68.3
MAX	104	439	392	388	3040	255	3310	1220	3230	291	116	423
MIN	25	33	60	40	120	76	87	114	114	47	26	27
CFSM	.29	.54	1.09	.56	3.76	.99	3.74	2.54	2.53	.79	.33	.49
IN.	.34	.60	1.26	.65	3.92	1.14	4.17	2.93	2.82	.91	.38	.54

CAL YR 1980	TOTAL	85774	MEAN 234	MAX 8910	MIN 25	CFSM 1.67	IN 22.79
WTR YR 1981	TOTAL	73996	MEAN 203	MAX 3310	MIN 25	CFSM 1.45	IN 19.66

MUSKINGUM RIVER BASIN

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 mi² (3.47 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

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

REMARKS.--

Water-year 1979: Records good, except those for periods of no gage-height record, Aug. 24 to Sept. 15, which are poor.

Water-year 1980: Records good, except those for periods of no gage-height record, Oct. 14 to Nov. 1, June 4 to Aug. 4, Aug. 13 to Sept. 2, which are poor.

Water-year 1981: Records good, except those for periods of no gage-height record, July 8 to Aug. 27, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 544 ft³/s (15.4 m³/s) June 13, 1981, gage height 11.87 ft (3.618 m); minimum daily 0.20 ft³/s (.006 m³/s) July 21, 1979.

EXTREMES FOR WATER YEAR 1979.--

Maximum discharge 492 ft³/s (13.9 m³/s) Sept. 14, gage height 14.01 ft (4.270 m); minimum daily 0.20 ft³/s (.006 m³/s) July 21, gage height 10.30 ft (3.139 m).

EXTREMES FOR WATER YEAR 1980.--

Maximum discharge, 173 ft³/s (4.90 m³/s) June 2, gage height 12.39 ft (3.78 m); minimum daily 0.21 ft³/s (.006 m³/s) July 21.

EXTREMES FOR WATER YEAR 1981.--

Maximum discharge 544 ft³/s (15.4 m³/s) June 13, gage height 11.87 ft (3.618 m); minimum daily 0.56 ft³/s (.016 m³/s) Jan. 13-23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.69	1.2	8.8	1.5	3.0	1.6	.69	1.4	1.1	12	1.8
2	.66	.66	1.8	13	1.5	2.2	11	.66	1.3	.96	20	1.5
3	.82	.64	20	4.5	1.6	2.1	7.2	1.9	1.1	.75	9.5	1.4
4	.75	.64	13	3.4	1.3	2.1	12	1.5	.92	.89	5.0	1.2
5	.72	.59	13	3.4	1.4	1.7	10	1.3	.78	.82	3.0	1.1
6	.72	.61	4.5	2.7	1.1	1.3	8.4	1.0	.69	.61	2.3	1.0
7	.61	.66	3.3	2.4	.82	1.2	6.2	.89	.69	.66	1.9	.95
8	.56	.64	8.8	2.3	.78	1.1	4.8	.82	1.1	.34	1.7	.90
9	.54	.54	25	1.9	.75	.92	8.6	.75	.89	1.1	1.4	.83
10	.49	.54	15	1.5	.78	.89	5.8	.72	.75	2.3	1.5	.78
11	.66	.56	6.5	1.2	.82	.96	3.4	.66	.66	1.1	3.2	.73
12	.85	.59	5.1	1.1	.75	.85	4.8	1.2	.61	1.0	2.6	.69
13	2.2	.61	3.8	1.0	.72	.96	3.6	1.5	.45	.72	1.9	5.0
14	3.1	.64	2.9	1.4	.72	.92	6.4	1.2	.41	.54	1.4	76
15	2.8	.61	2.4	3.1	.72	.92	5.3	.96	.43	.47	1.1	41
16	2.4	.59	2.4	2.2	.72	1.0	4.1	.78	.39	.43	.78	20
17	1.8	2.5	2.1	1.8	.69	.89	3.6	.78	.37	.39	.69	17
18	1.6	2.1	1.8	2.1	.66	.82	2.6	.72	.35	.37	1.8	2.8
19	1.4	1.7	1.7	2.1	.66	.75	2.2	.66	.34	.32	1.0	2.6
20	1.2	1.4	1.6	1.8	.69	.72	1.9	.66	.29	.30	.69	2.2
21	.89	1.2	1.6	2.1	1.5	.69	1.6	.61	9.0	.20	.49	2.3
22	.82	.96	1.6	2.9	4.0	.66	1.4	.56	7.1	.32	.41	2.0
23	.85	1.2	1.5	3.4	12	.66	1.2	.59	3.9	.30	2.3	1.6
24	.85	1.6	1.4	2.3	11	1.4	1.1	.64	2.5	.39	17	1.2
25	.75	1.4	1.3	11	37	2.0	.97	.66	1.9	.47	7.6	.96
26	1.0	1.1	1.3	6.5	24	1.2	.89	.64	1.4	.35	3.8	.85
27	1.1	1.5	1.2	4.5	6.5	1.2	.89	1.7	.96	.54	5.0	.72
28	.89	1.8	1.1	3.4	3.7	1.2	.82	1.3	.75	.69	3.3	6.5
29	.82	1.5	1.1	2.4	---	1.0	.75	1.8	.69	23	5.5	6.5
30	.78	1.3	1.1	2.1	---	1.1	.75	1.6	.82	14	2.5	3.7
31	.75	---	2.5	2.0	---	1.3	---	3.0	---	7.1	2.1	---
TOTAL	34.30	31.07	151.6	104.3	118.38	37.71	123.87	32.45	42.94	62.53	123.46	205.81
MEAN	1.11	1.04	4.89	3.36	4.23	1.22	4.13	1.05	1.43	2.02	3.98	6.86
MAX	3.1	2.5	25	13	37	3.0	12	3.0	9.0	23	20	76
MIN	.49	.54	1.1	1.0	.66	.66	.75	.56	.29	.20	.41	.69
CFSM	.83	.78	3.65	2.51	3.16	.91	3.08	.78	1.07	1.51	2.97	5.12
IN.	.95	.86	4.21	2.89	3.28	1.05	3.44	.90	1.19	1.73	3.42	5.71

WTR YR 1979 TOTAL 1068.42 MEAN 2.93 MAX 76 MIN .20 CFSM 2.19 IN 29.64

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	.50	1.1	.96	.34	.92	4.2	.75	.75	.53	.94	.80
2	2.1	1.0	1.1	.89	.32	.72	2.8	.72	40	.52	.80	.70
3	1.8	.72	1.0	.85	.31	.54	2.1	.72	6.0	.58	1.0	.69
4	1.5	.61	.89	.78	.30	.49	2.1	.69	5.2	.64	4.5	3.1
5	1.5	.56	.82	.78	.29	2.6	1.8	.66	4.6	.60	2.8	4.1
6	1.3	.54	.75	.72	.28	3.0	1.5	.66	4.1	.80	2.1	2.4
7	1.1	.54	.75	.69	.28	2.5	1.2	.64	3.6	.72	1.6	1.6
8	1.0	.54	.75	.66	.27	11	1.8	.64	3.2	.64	1.4	1.3
9	1.2	.89	.75	.64	.27	7.1	2.8	.64	2.8	.70	1.3	.99
10	1.6	2.3	.75	.61	.27	4.2	2.2	.64	2.5	1.5	15	.92
11	1.5	1.9	.75	4.6	.27	3.0	1.8	.75	2.1	.80	42	.86
12	1.5	1.5	.75	12	.28	2.2	2.1	6.5	1.7	.88	12	.80
13	1.0	1.1	.78	6.5	.28	1.8	2.1	7.1	1.3	1.1	6.4	.80
14	.90	1.0	1.6	3.7	.29	1.6	9.5	3.9	1.0	.50	5.0	.80
15	.75	.92	1.8	2.8	.32	1.4	9.0	2.5	.98	.40	4.0	.80
16	.76	.85	1.5	2.2	.72	1.2	5.5	1.8	1.1	.35	3.2	.74
17	.80	.78	1.2	1.8	.66	2.5	3.4	2.5	1.0	.30	3.0	.74
18	.78	.72	1.1	1.5	.75	3.7	2.5	5.0	.94	.27	3.4	.74
19	.74	.69	.82	1.2	.89	2.6	2.0	3.4	.84	.24	2.8	.69
20	.72	.66	.72	1.1	1.1	2.0	1.7	2.8	.78	.22	2.5	.64
21	.70	.64	.69	1.0	1.5	7.7	1.4	3.0	.74	.21	2.8	.64
22	.68	.66	.66	.92	3.7	5.5	1.1	2.3	.74	.45	3.0	.69
23	.66	.66	.66	.88	3.0	3.4	1.0	1.8	.78	.70	2.2	1.1
24	.63	1.5	1.4	.78	2.2	2.6	.96	1.6	.82	.40	1.7	.92
25	.61	1.5	2.3	.62	1.8	2.1	.92	1.4	.72	.36	1.4	.80
26	.58	2.2	2.6	.53	1.5	1.1	.82	.85	.66	.40	1.2	.80
27	.56	1.9	2.0	.46	1.1	1.5	.78	.75	.64	1.5	.90	.74
28	.54	.82	1.7	.43	1.0	1.5	.78	.72	.60	5.0	.80	.74
29	.53	.82	1.3	.40	.92	3.0	.75	.69	.58	3.5	.78	.74
30	.50	1.4	1.1	.37	---	3.7	.75	.64	.56	2.0	.70	.69
31	.48	---	1.0	.35	---	7.7	---	.64	---	1.2	.76	---
TOTAL	31.62	30.42	35.09	51.72	25.21	94.87	71.36	57.40	91.33	28.01	131.98	32.07
MEAN	1.02	1.01	1.13	1.67	.87	3.06	2.38	1.85	3.04	.90	4.26	1.07
MAX	2.6	2.3	2.6	12	3.7	11	9.5	7.1	40	5.0	42	4.1
MIN	.48	.50	.66	.35	.27	.49	.75	.64	.56	.21	.70	.64
CFSM	.76	.75	.84	1.25	.65	2.28	1.78	1.38	2.27	.67	3.18	.80
IN.	.88	.84	.97	1.43	.70	2.63	1.98	1.59	2.53	.78	3.66	.89
CAL YR 1979	TOTAL 948.58	MEAN 2.60	MAX 76	MIN .20	CFSM 1.94	IN 26.31						
WTR YR 1980	TOTAL 681.08	MEAN 1.86	MAX 42	MIN .21	CFSM 1.39	IN 18.89						

MUSKINGUM RIVER BASIN

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

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	.69	.99	2.1	.86	8.7	1.1	.78	1.1	1.4	2.4	2.4	2.0
2	.69	.92	2.0	.92	11	.99	.80	1.1	1.1	2.1	2.4	1.9
3	.64	.92	1.9	1.4	4.1	.92	.96	.99	1.9	2.4	2.5	4.8
4	.64	.99	1.6	1.3	3.3	.86	2.3	.99	1.6	2.8	3.7	6.4
5	.64	.99	1.5	2.0	2.1	.86	5.0	.86	2.2	3.3	2.9	5.6
6	.64	.92	1.3	1.4	1.8	.99	4.0	1.6	3.3	2.8	2.5	3.3
7	.64	.92	1.9	.99	1.3	1.1	3.5	1.5	2.5	2.5	2.3	2.2
8	.64	.92	2.0	.82	1.2	.99	2.8	1.1	1.9	2.2	2.1	1.7
9	.64	.92	2.1	.70	1.2	.92	2.2	1.1	2.2	2.0	2.0	1.2
10	.74	.92	2.2	.64	1.3	.86	1.7	1.1	7.7	1.9	2.7	.86
11	1.1	.92	1.9	.60	4.8	.86	3.5	2.0	5.0	1.8	2.3	.74
12	.86	.92	1.7	.58	6.4	.80	29	3.3	3.3	1.7	2.0	.69
13	.80	.86	1.6	.56	3.1	.74	19	2.8	25	5.0	1.8	.69
14	.74	.86	1.4	.56	2.1	.74	14	2.6	39	4.4	1.8	.80
15	.74	.86	1.2	.56	1.6	.69	5.8	3.7	15	3.4	1.9	1.4
16	.74	.80	1.1	.56	3.9	.64	4.3	2.6	11	2.9	1.9	1.2
17	.74	.80	1.1	.56	5.6	.59	3.5	2.1	7.4	2.5	1.7	1.1
18	1.8	.80	1.1	.56	4.8	.59	3.9	1.7	6.7	2.2	1.5	.99
19	1.5	.80	1.0	.56	6.0	.59	2.6	1.5	5.6	2.1	1.5	.99
20	1.1	.80	1.0	.56	7.7	.59	2.1	1.3	5.0	4.3	1.4	.92
21	1.1	.80	.96	.56	5.5	.59	1.6	1.1	4.8	9.0	1.4	1.1
22	.99	.80	.92	.56	3.9	.59	1.3	.99	5.0	4.3	1.3	1.6
23	.92	.80	.90	.56	3.5	.59	1.5	1.2	4.3	3.7	1.3	1.2
24	.86	1.1	.88	.59	2.6	.59	1.6	1.2	3.7	3.4	1.2	.80
25	2.0	1.1	.84	.64	2.1	.59	1.4	1.1	9.4	3.1	1.2	.80
26	2.0	1.1	.82	2.0	1.6	.60	1.2	1.2	10	3.1	1.1	.74
27	1.7	2.6	.82	2.4	1.4	.68	1.2	2.0	9.4	5.9	1.1	.74
28	1.6	3.1	.80	1.9	1.2	.64	1.1	3.0	8.3	7.4	1.1	.80
29	1.4	2.5	.80	1.5	---	.60	1.3	2.2	4.6	5.0	1.1	.74
30	1.2	2.1	.80	3.9	---	.68	1.2	1.9	2.9	3.5	1.1	.69
31	.99	---	.82	1.2	---	.80	---	1.7	---	2.8	1.1	---
TOTAL	31.48	33.83	41.06	32.50	104.0	23.37	125.14	52.63	211.2	105.9	56.3	48.69
MEAN	1.02	1.13	1.32	1.05	3.71	.75	4.17	1.70	7.04	3.42	1.82	1.62
MAX	2.0	3.1	2.2	3.9	11	1.1	29	3.7	39	9.0	3.7	6.4
MIN	.64	.80	.80	.56	1.2	.59	.78	.86	1.1	1.7	1.1	.69
CFSM	.76	.84	.99	.78	2.77	.56	3.11	1.27	5.25	2.55	1.36	1.21
IN.	.87	.94	1.14	.90	2.89	.65	3.47	1.46	5.86	2.94	1.56	1.35
CAL YR 1980	TOTAL	690.32	MEAN	1.89	MAX	42	MIN	.21	CFSM	1.41	IN	19.15
WTR YR 1981	TOTAL	866.10	MEAN	2.37	MAX	39	MIN	.56	CFSM	1.77	IN	24.03

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,500 mg/L Mar. 8, 1980; minimum daily mean, 3 mg/L Feb. 1-4, 1980, Sept. 11, 1980, Nov. 15, 1980.

SEDIMENT LOADS: Maximum daily, 903 tons (819 tonnes) Sept. 14, 1979; 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.

EXTREMES FOR WATER YEAR 1979.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,480 mg/L Sept. 14; minimum daily mean, 5 mg/L Aug. 22.

SEDIMENT LOADS: Maximum daily 903 tons (819 tonnes) Sept. 14; minimum daily, 0.00 tons June 14, 16-20, July 8, 18, 20, 21, Aug. 20, 21.

EXTREMES FOR WATER YEAR 1980.--

11. SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,430 mg/L Mar. 31; minimum daily mean, 3 mg/L Feb. 1-4, Sept. 11.

SEDIMENT LOADS: Maximum daily 238 tons (216 tonnes) June 2; minimum daily, 0.00 tons Oct. 27-Nov. 1, Jan. 22-Feb. 4, Feb. 6-11, 15, Sept. 10, 11.

EXTREMES FOR WATER YEAR --

SEDIMENT CONCENTRATIONS: maximum daily mean, 3,590 mg/L June 13; minimum daily mean, 3 mg/L Nov. 15.

SEDIMENT LOADS: Maximum daily, 339 tons (307 tonnes) June 14; minimum daily, 0.00 tons Nov. 13-15.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- RID- ITY (NTU)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	
OCT 16...	1245	.76	1400	7.2	14.5	5	.40	36	800	690	220	60	
NOV 13...	0905	.87	1340	7.5	5.0	0	1.0	20	670	560	170	59	
DEC 15...	0930	1.0	1220	7.4	1.0	0	2.2	16	600	500	160	49	
JAN 20...	0915	.66	1580	7.7	1.0	<5	.40	20	780	650	210	61	
FEB 18...	1200	4.7	645	7.6	3.5	20	13	27	290	240	75	24	
MAR 16...	0940	.84	1270	7.7	3.5	<5	1.4	21	610	510	160	52	
APR 22...	1045	.95	896	7.2	12.0	5	6.1	17	450	380	120	36	
MAY 06...	1230	1.5	970	7.5	12.0	15	50	13	510	430	140	39	
11...	1250	1.4	935	7.3	15.0	15	2.0	37	490	410	130	39	
19...	1515	1.4	1010	7.8	13.0	18	5.0	16	500	400	130	43	
JUN 17...	0925	7.7	583	7.2	22.0	8	24	22	300	250	78	25	
30...	1115	2.2	--	--	--	--	--	--	--	--	--	--	
JUL 20...	1100	1.8	1320	7.6	24.5	0	2.4	10	760	680	200	63	
AUG 11...	1000	1.8	1420	8.0	23.5	8	2.5	19	800	700	210	67	
31...	1000	6.2	551	6.6	21.0	10	120	71	270	240	73	21	
DATE		BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT 16...	136	0	112	14	680	.3	6.6	.22	--	.070	--	--	.25
NOV 13...	132	0	108	6.7	650	.3	7.0	.24	--	.040	--	--	.01
DEC 15...	128	0	105	8.2	450	.2	8.4	1.1	--	.190	--	--	.37
JAN 20...	154	0	126	4.9	710	.3	9.7	.50	4.3	.180	7.1	--	.17
FEB 18...	64	0	52	2.6	240	.2	5.7	.35	--	.240	--	--	.52
MAR 16...	124	0	102	4.0	580	.1	8.3	.44	--	.100	--	--	.09
APR 22...	88	0	72	8.9	380	.2	7.8	.31	--	.140	--	--	.26
MAY 06...	100	0	82	5.1	380	.2	8.4	.26	--	.070	--	--	.51
11...	100	0	82	8.0	380	.2	7.8	.22	--	.120	--	--	.88
19...	120	0	98	3.0	440	.2	7.6	.17	--	.060	--	--	.35
JUN 17...	60	0	49	6.1	230	.2	7.4	.14	--	.040	--	--	.41
30...	--	--	--	--	--	--	--	--	1.9	--	4.9	--	--
JUL 20...	100	0	82	4.0	650	.3	6.9	.14	--	.060	--	--	.52
AUG 11...	120	0	98	1.9	720	.3	6.4	.13	--	.120	--	--	.06
31...	34	0	28	14	200	.2	6.8	.38	--	.160	--	--	1.9

MUSKINGUM RIVER BASIN

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	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 IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 16...	.32	.54	2.4	.010	--	120	--	100	--	11	--	620
NOV 13...	.05	.29	1.3	.000	--	80	--	100	--	13	--	210
DEC 15...	.56	1.7	7.3	.000	--	100	--	<50	--	6	--	440
JAN 20...	.35	.85	3.8	.010	450	360	3500	<50	33	3	10	1300
FEB 18...	.76	1.1	4.9	.140	--	3400	--	100	--	12	--	4200
MAR 16...	.19	.63	2.8	.030	--	0	--	100	--	4	--	960
APR 22...	.40	.71	3.1	.030	--	170	--	100	--	8	--	900
MAY 06...	.58	.84	3.7	.030	--	280	--	100	--	13	--	630
11...	1.00	1.2	5.4	.150	--	1100	--	100	--	13	--	2800
19...	.41	.58	2.6	.030	--	180	--	100	--	6	--	530
JUN 17...	.45	.59	2.6	.040	--	0	--	100	--	1	--	1200
30...	--	--	--	--	430	--	1200	--	40	--	<10	--
JUL 20...	.58	.72	3.2	<.010	--	0	--	100	--	2	--	410
AUG 11...	.18	.31	1.4	.010	--	130	--	<50	--	17	--	480
31...	2.10	2.5	11	.340	--	1400	--	100	--	11	--	14000

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)
OCT 16...	0	--	3200	.2	--	15	--	600	--	--	--	--
NOV 13...	2	--	3800	.1	--	25	--	560	--	--	--	--
DEC 15...	0	--	5600	<.1	--	31	--	500	--	--	--	--
JAN 20...	5	10	6400	<.1	.0	35	50	700	20	4.8	5.8	1.0
FEB 18...	5	--	4200	.1	--	33	--	260	--	--	--	--
MAR 16...	8	--	4300	<.1	--	29	--	510	--	--	--	--
APR 22...	9	--	3700	<.1	--	19	--	380	--	--	--	--
MAY 06...	2	--	3000	.1	--	15	--	310	--	--	--	--
11...	29	--	3100	<.1	--	18	--	340	--	--	--	--
19...	1	--	5100	<.1	--	19	--	410	--	--	--	--
JUN 17...	1	--	3100	<.1	--	11	--	230	--	--	--	--
30...	--	<20	--	--	.0	--	<20	--	<10	2.6	3.0	.4
JUL 20...	2	--	2200	.1	--	9	--	620	--	--	--	--
AUG 11...	6	--	1900	<.1	--	9	--	700	--	--	--	--
31...	34	--	4700	<.1	--	27	--	250	--	--	--	--

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
OCTOBER				NOVEMBER			DECEMBER		
1	.92	57	.14	.69	26	.05	1.2	23	.07
2	.66	54	.10	.66	110	.20	1.8	32	.16
3	.82	52	.12	.64	26	.04	20	144	1.7
4	.75	50	.10	.64	26	.04	13	110	3.9
5	.72	47	.09	.59	26	.04	13	180	6.3
6	.72	47	.09	.61	26	.04	4.5	40	.49
7	.61	44	.07	.66	143	.25	3.3	12	.11
8	.56	42	.06	.64	26	.04	8.8	530	40
9	.54	40	.06	.54	26	.04	25	686	49
10	.49	37	.05	.54	26	.04	15	300	12
11	.66	201	.36	.56	26	.04	6.5	200	3.5
12	.85	218	.50	.59	26	.04	5.1	100	1.4
13	2.2	236	1.4	.61	26	.04	3.8	70	.72
14	3.1	705	5.9	.64	26	.04	2.9	55	.43
15	2.8	102	.77	.61	26	.04	2.4	45	.29
16	2.4	37	.24	.59	128	.20	2.4	45	.29
17	1.8	60	.29	2.5	229	1.5	2.1	40	.23
18	1.6	56	.24	2.1	101	.57	1.8	38	.18
19	1.4	74	.28	1.7	53	.24	1.7	35	.16
20	1.2	46	.15	1.4	55	.21	1.6	30	.13
21	.89	42	.10	1.2	66	.21	1.6	30	.13
22	.82	39	.09	.96	57	.15	1.6	30	.13
23	.85	36	.08	1.2	57	.18	1.5	28	.11
24	.85	32	.07	1.6	46	.20	1.4	26	.10
25	.75	29	.06	1.4	34	.13	1.3	24	.08
26	1.0	26	.07	1.1	30	.09	1.3	24	.08
27	1.1	46	.14	1.5	44	.18	1.2	23	.07
28	.89	41	.10	1.8	53	.26	1.1	22	.07
29	.82	36	.08	1.5	44	.18	1.1	22	.07
30	.78	31	.07	1.3	34	.12	1.1	22	.07
31	.75	26	.05	---	---	---	2.5	60	.41
TOTAL	34.30	---	11.92	31.07	---	5.40	151.6	---	122.38
JANUARY				FEBRUARY			MARCH		
1	8.8	110	2.6	1.5	28	.11	3.0	44	.36
2	13	300	11	1.5	28	.11	2.2	40	.24
3	4.5	85	1.0	1.6	30	.13	2.1	37	.21
4	3.4	68	.62	1.3	24	.08	2.1	37	.21
5	3.4	55	.50	1.4	26	.10	1.7	30	.14
6	2.7	50	.36	1.1	22	.07	1.3	25	.09
7	2.4	45	.29	.82	18	.04	1.2	24	.08
8	2.3	40	.25	.78	15	.03	1.1	22	.07
9	1.9	35	.18	.75	16	.03	.92	19	.05
10	1.5	30	.12	.78	15	.03	.89	18	.04
11	1.2	26	.08	.82	18	.04	.96	19	.05
12	1.1	22	.07	.75	16	.03	.85	18	.04
13	1.0	20	.05	.72	15	.03	.96	19	.05
14	1.4	28	.11	.72	15	.03	.92	19	.05
15	3.1	55	.46	.72	15	.03	.92	19	.05
16	2.2	45	.27	.72	15	.03	1.0	20	.05
17	1.8	38	.18	.69	13	.02	.89	18	.04
18	2.1	40	.23	.66	13	.02	.82	17	.04
19	2.1	42	.24	.66	13	.02	.75	16	.03
20	1.8	38	.18	.69	13	.02	.72	15	.03
21	2.1	43	.24	1.5	28	.11	.69	13	.02
22	2.9	50	.39	4.0	50	.54	.66	13	.02
23	3.4	60	.55	12	315	10	.66	13	.02
24	2.3	55	.34	11	503	15	1.4	36	.14
25	11	263	7.8	37	165	16	2.0	42	.23
26	6.5	85	1.5	24	682	44	1.2	24	.08
27	4.5	68	.83	6.5	85	1.5	1.2	24	.08
28	3.4	55	.50	3.7	50	.50	1.2	24	.08
29	2.4	50	.32	---	---	---	1.0	20	.05
30	2.1	42	.24	---	---	---	1.1	22	.07
31	2.0	40	.22	---	---	---	1.3	23	.08
TOTAL	104.3	---	31.72	118.38	---	88.65	37.71	---	2.79

MUSKINGUM RIVER BASIN

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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	1.6	30	.13	.69	14	.03	1.4	36	.14
2	11	263	7.9	.66	35	.06	1.3	36	.13
3	7.2	85	1.7	1.9	103	.53	1.1	35	.10
4	12	356	11	1.5	59	.24	.92	35	.09
5	10	253	6.8	1.3	16	.06	.78	29	.06
6	8.4	95	2.2	1.0	12	.03	.69	18	.03
7	6.2	85	1.4	.89	13	.03	.69	18	.03
8	4.8	50	.65	.82	13	.03	1.1	46	.14
9	8.6	95	2.2	.75	14	.03	.89	20	.05
10	5.8	80	1.3	.72	14	.03	.75	15	.03
11	3.4	44	.40	.66	34	.06	.66	13	.02
12	4.8	50	.65	1.2	484	1.6	.61	13	.02
13	3.6	44	.43	1.5	28	.11	.45	9	.01
14	6.4	85	1.5	1.2	22	.07	.41	9	.00
15	5.3	70	1.0	.96	17	.04	.43	9	.01
16	4.1	50	.55	.78	16	.03	.39	8	.00
17	3.6	44	.43	.78	19	.04	.37	8	.00
18	2.6	39	.27	.72	19	.04	.35	8	.00
19	2.2	37	.22	.66	18	.03	.34	8	.00
20	1.9	35	.18	.66	17	.03	.29	8	.00
21	1.6	30	.13	.61	16	.03	9.0	510	12
22	1.4	26	.10	.56	15	.02	7.1	196	3.8
23	1.2	24	.08	.59	15	.02	3.9	117	1.2
24	1.1	20	.06	.64	16	.03	2.5	39	.26
25	.97	19	.05	.66	17	.03	1.9	40	.21
26	.89	18	.04	.64	18	.03	1.4	40	.15
27	.89	18	.04	1.7	20	.09	.96	40	.10
28	.82	18	.04	1.3	35	.12	.75	26	.05
29	.75	14	.03	1.8	35	.17	.69	13	.02
30	.75	14	.03	1.6	40	.17	.82	20	.04
31	---	---	---	3.0	35	.28	---	---	---
TOTAL	123.87	---	41.51	32.45	---	4.11	42.94	---	18.69
JULY				AUGUST				SEPTEMBER	
1	1.1	36	.11	12	710	104	1.8	35	.17
2	.96	18	.05	20	520	27	1.5	28	.11
3	.75	55	.11	9.5	308	8.6	1.4	26	.10
4	.89	18	.04	5.0	85	1.1	1.2	24	.08
5	.82	17	.04	3.0	45	.36	1.1	22	.07
6	.61	10	.02	2.3	42	.26	1.0	20	.05
7	.66	10	.02	1.9	40	.21	.95	18	.05
8	.34	9	.00	1.7	33	.15	.90	17	.04
9	1.1	72	.21	1.4	26	.10	.83	16	.04
10	2.3	110	.68	1.5	28	.11	.78	15	.03
11	1.1	72	.21	3.2	45	.39	.73	14	.03
12	1.0	12	.03	2.6	40	.28	.69	13	.02
13	.72	15	.03	1.9	35	.18	5.0	100	13
14	.54	11	.02	1.4	26	.10	76	1480	903
15	.47	9	.01	1.1	22	.07	41	---	160
16	.43	14	.02	.78	15	.03	20	---	25
17	.39	16	.02	.69	13	.02	17	---	16
18	.37	9	.00	1.8	35	.17	2.8	80	.60
19	.32	21	.02	1.0	20	.05	2.6	35	.25
20	.30	9	.00	.69	13	.02	2.2	26	.15
21	.20	8	.00	.49	6	.00	2.3	30	.19
22	.32	43	.04	.41	5	.00	2.0	23	.12
23	.30	77	.06	2.3	132	6.1	1.6	20	.09
24	.39	15	.02	17	100	4.6	1.2	19	.06
25	.47	67	.09	7.6	83	1.7	.96	18	.05
26	.35	26	.02	3.8	39	.40	.85	12	.03
27	.54	34	.05	5.0	85	1.1	.72	7	.01
28	.69	110	1.8	3.3	39	.35	6.5	96	2.0
29	23	544	39	5.5	85	1.3	6.5	44	.77
30	14	124	4.7	2.5	55	.37	3.7	28	.28
31	7.1	83	1.6	2.1	45	.26	---	---	---
TOTAL	62.53	---	49.02	123.46	---	159.38	205.81	---	1122.39
YEAR	1068.42		1657.96						

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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)
OCTOBER				NOVEMBER			DECEMBER		
1	2.6	18	.13	.50	4	.00	1.1	9	.03
2	2.1	17	.10	1.0	12	.03	1.1	12	.04
3	1.8	10	.05	.72	10	.02	1.0	12	.03
4	1.5	12	.05	.61	9	.01	.89	10	.02
5	1.5	12	.05	.56	8	.01	.82	9	.02
6	1.3	12	.04	.54	7	.01	.75	8	.02
7	1.1	11	.03	.54	7	.01	.75	16	.03
8	1.0	8	.02	.54	7	.01	.75	31	.06
9	1.2	10	.03	.89	15	.04	.75	7	.01
10	1.6	9	.04	2.3	4	.02	.75	14	.03
11	1.5	12	.05	1.9	52	.27	.75	9	.02
12	1.5	10	.04	1.5	50	.20	.75	41	.08
13	1.0	9	.02	1.1	17	.05	.78	35	.07
14	.90	9	.02	1.0	11	.03	1.6	21	.09
15	.75	8	.02	.92	11	.03	1.8	22	.11
16	.76	7	.01	.85	9	.02	1.5	16	.06
17	.80	9	.02	.78	6	.01	1.2	13	.04
18	.78	8	.02	.72	11	.02	1.1	12	.04
19	.74	7	.01	.69	12	.02	.82	12	.03
20	.72	9	.02	.66	9	.02	.72	9	.02
21	.70	8	.02	.64	32	.06	.69	9	.02
22	.68	7	.01	.66	40	.07	.66	9	.02
23	.66	9	.02	.66	447	.80	.66	9	.02
24	.63	8	.01	1.5	144	.58	1.4	24	.09
25	.61	7	.01	1.5	43	.17	2.3	70	.43
26	.58	9	.01	2.2	34	.20	2.6	34	.24
27	.56	6	.00	1.9	14	.07	2.0	20	.11
28	.54	6	.00	.82	12	.03	1.7	15	.07
29	.53	6	.00	.82	26	.06	1.3	8	.03
30	.50	5	.00	1.4	15	.06	1.1	12	.04
31	.48	4	.00	---	---	---	1.0	5	.01
TOTAL	31.62	---	0.85	30.42	---	2.93	35.09	---	1.93
JANUARY				FEBRUARY			MARCH		
1	.96	97	.25	.34	3	.00	.92	17	.04
2	.89	44	.11	.32	3	.00	.72	15	.03
3	.85	22	.05	.31	3	.00	.54	13	.02
4	.78	9	.02	.30	3	.00	.49	11	.01
5	.78	10	.02	.29	172	.13	2.6	148	1.0
6	.72	9	.02	.28	11	.00	3.0	72	.58
7	.69	8	.01	.28	11	.00	2.5	164	1.1
8	.66	8	.01	.27	11	.00	11	185	6.9
9	.64	7	.01	.27	11	.00	7.1	80	1.5
10	.61	12	.02	.27	11	.00	4.2	70	.80
11	4.6	605	7.5	.27	11	.00	3.0	62	.50
12	12	107	3.5	.28	63	.05	2.2	48	.29
13	6.5	410	7.2	.28	11	.00	1.8	40	.19
14	3.7	72	.72	.29	13	.01	1.6	31	.13
15	2.8	60	.45	.32	11	.00	1.4	25	.09
16	2.2	41	.24	.72	10	.02	1.2	46	.15
17	1.8	46	.22	.66	9	.02	2.5	127	.86
18	1.5	15	.06	.75	10	.02	3.7	108	1.1
19	1.2	10	.03	.89	64	.15	2.6	80	.56
20	1.1	11	.03	1.1	48	.14	2.0	37	.20
21	1.0	11	.03	1.5	83	.34	7.7	1100	33
22	.92	4	.00	3.7	212	2.1	5.5	413	6.1
23	.88	4	.00	3.0	72	.58	3.4	373	3.4
24	.78	4	.00	2.2	56	.33	2.6	141	.99
25	.62	4	.00	1.8	47	.23	2.1	48	.27
26	.53	4	.00	1.5	40	.16	1.1	46	.14
27	.46	4	.00	1.1	40	.12	1.5	40	.16
28	.43	4	.00	1.0	41	.11	1.5	83	.34
29	.40	4	.00	.92	17	.04	3.0	182	1.5
30	.37	4	.00	---	---	---	3.7	683	26
31	.35	4	.00	---	---	---	7.7	2430	52
TOTAL	51.72	---	20.50	25.21	---	4.55	94.87	---	139.95

MUSKINGUM RIVER BASIN

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	4.2	805	9.1	.75	23	.05	.75	53	.11
2	2.8	296	2.2	.72	53	.10	40	2200	238
3	2.1	80	.45	.72	50	.10	6.0	9	.15
4	2.1	62	.35	.69	40	.07	5.2	123	1.7
5	1.8	32	.16	.66	35	.06	4.6	85	1.1
6	1.5	28	.11	.66	34	.06	4.1	61	.68
7	1.2	15	.05	.64	32	.06	3.6	57	.55
8	1.8	18	.09	.64	32	.06	3.2	55	.48
9	2.8	192	1.5	.64	31	.05	2.8	21	.16
10	2.2	424	2.5	.64	29	.05	2.5	19	.13
11	1.8	90	.44	.75	335	.68	2.1	34	.19
12	2.1	38	.22	6.5	2170	38	1.7	43	.20
13	2.1	77	.44	7.1	482	9.2	1.3	53	.19
14	9.5	670	17	3.9	236	2.5	1.0	27	.07
15	9.0	1130	27	2.5	82	.55	.98	25	.07
16	5.5	789	12	1.8	55	.27	1.1	40	.12
17	3.4	131	1.2	2.5	30	.20	1.0	35	.09
18	2.5	78	.53	5.0	567	7.7	.94	29	.07
19	2.0	77	.42	3.4	156	1.4	.84	9	.02
20	1.7	61	.28	2.8	70	.53	.78	38	.08
21	1.4	46	.17	3.0	144	1.2	.74	22	.04
22	1.1	50	.15	2.3	30	.19	.74	12	.02
23	1.0	45	.12	1.8	22	.11	.78	11	.02
24	.96	40	.10	1.6	26	.11	.82	27	.06
25	.92	35	.09	1.4	31	.12	.72	8	.02
26	.82	30	.07	.85	32	.07	.66	8	.01
27	.78	23	.05	.75	20	.04	.64	8	.01
28	.78	23	.05	.72	16	.03	.60	35	.06
29	.75	16	.03	.69	12	.02	.58	14	.02
30	.75	14	.03	.64	53	.09	.56	25	.04
31	---	---	---	.64	58	.10	---	---	---
TOTAL	71.36	---	76.90	57.40	---	63.77	91.33	---	244.46
JULY				AUGUST				SEPTEMBER	
1	.53	15	.02	.94	48	.12	.80	14	.03
2	.52	10	.01	.80	42	.09	.70	9	.02
3	.58	10	.02	1.0	168	.45	.69	40	.07
4	.64	10	.02	4.5	108	1.3	3.1	131	1.1
5	.60	15	.02	2.8	64	.48	4.1	74	.82
6	.80	22	.05	2.1	61	.35	2.4	33	.21
7	.72	9	.02	1.6	56	.24	1.6	13	.06
8	.64	9	.02	1.4	79	.30	1.3	9	.03
9	.70	21	.04	1.3	46	.16	.99	5	.01
10	1.5	34	.14	15	1600	65	.92	4	.00
11	.80	19	.04	42	1290	146	.86	3	.00
12	.88	28	.07	12	402	13	.80	12	.03
13	1.1	21	.06	6.4	115	2.0	.80	8	.02
14	.50	9	.01	5.0	73	.99	.80	12	.03
15	.40	11	.01	4.0	52	.56	.80	6	.01
16	.35	11	.01	3.2	65	.56	.74	12	.02
17	.30	46	.04	3.0	18	.15	.74	6	.01
18	.27	26	.02	3.4	37	.34	.74	14	.03
19	.24	19	.01	2.8	12	.09	.69	14	.03
20	.22	49	.03	2.5	16	.11	.64	32	.06
21	.21	46	.03	2.8	540	4.1	.64	25	.04
22	.45	162	.20	3.0	131	1.1	.69	34	.06
23	.70	18	.03	2.2	55	.33	1.1	11	.03
24	.40	24	.03	1.7	26	.12	.92	29	.07
25	.36	27	.03	1.4	17	.06	.80	14	.03
26	.40	16	.02	1.2	9	.03	.80	15	.03
27	1.5	11	.04	.90	8	.02	.74	54	.11
28	5.0	70	.95	.80	11	.02	.74	13	.03
29	3.5	30	.28	.78	9	.02	.74	17	.03
30	2.0	18	.10	.70	7	.01	.69	14	.03
31	1.2	23	.07	.76	27	.06	---	---	---
TOTAL	28.01	---	2.44	131.98	---	238.16	32.07	---	3.05
YEAR	681.08		799.49						

MUSKINGUM RIVER BASIN

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03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	.78	40	.08	1.1	46	.14	1.4	34	.13
2	.80	46	.10	1.1	22	.07	1.1	22	.07
3	.96	50	.13	.99	14	.04	1.9	772	4.0
4	2.3	140	.87	.99	18	.05	1.6	45	.19
5	5.0	90	1.2	.86	10	.02	2.2	992	5.9
6	4.0	85	.92	1.6	40	.17	3.3	76	.68
7	3.5	75	.71	1.5	16	.06	2.5	40	.27
8	2.8	45	.34	1.1	13	.04	1.9	28	.14
9	2.2	39	.23	1.1	9	.03	2.2	61	.36
10	1.7	47	.22	1.1	13	.04	7.7	372	7.7
11	3.5	489	20	2.0	119	.64	5.0	60	.81
12	29	2030	246	3.3	71	.63	3.3	46	.41
13	19	658	40	2.8	31	.23	25	3590	242
14	14	150	5.7	2.6	317	2.2	39	3220	339
15	5.8	475	7.4	3.7	60	.60	15	2000	81
16	4.3	192	2.2	2.6	65	.46	11	1000	30
17	3.5	65	.61	2.1	46	.26	7.4	52	1.0
18	3.9	70	.74	1.7	22	.10	6.7	200	3.6
19	2.6	54	.38	1.5	14	.06	5.6	170	2.6
20	2.1	46	.26	1.3	16	.06	5.0	90	1.2
21	1.6	31	.13	1.1	22	.07	4.8	173	2.2
22	1.3	26	.09	.99	23	.06	5.0	90	1.2
23	1.5	53	.21	1.2	22	.07	4.3	80	.93
24	1.6	27	.12	1.2	26	.08	3.7	74	.74
25	1.4	20	.08	1.1	26	.08	9.4	322	8.2
26	1.2	16	.05	1.2	22	.07	10	22	.59
27	1.2	53	.17	2.0	240	1.3	9.4	25	.63
28	1.1	52	.15	3.0	78	.63	8.3	20	.45
29	1.3	22	.08	2.2	40	.24	4.6	15	.19
30	1.2	26	.08	1.9	40	.21	2.9	9	.07
31	---	---	---	1.7	40	.18	---	---	---
TOTAL	125.14	---	329.25	52.63	---	8.89	211.2	---	736.26
JULY				AUGUST				SEPTEMBER	
1	2.4	7	.05	2.4	9	.06	2.0	35	.19
2	2.1	7	.04	2.4	9	.06	1.9	32	.16
3	2.4	7	.05	2.5	9	.06	4.8	522	6.8
4	2.8	247	1.9	3.7	9	.09	6.4	76	1.3
5	3.3	8	.07	2.9	9	.07	5.6	82	1.2
6	2.8	8	.06	2.5	8	.05	3.3	61	.54
7	2.5	8	.05	2.3	8	.05	2.2	38	.23
8	2.2	7	.04	2.1	8	.05	1.7	29	.13
9	2.0	7	.04	2.0	8	.04	1.2	21	.07
10	1.9	7	.04	2.7	8	.06	.86	16	.04
11	1.8	6	.03	2.3	7	.04	.74	14	.03
12	1.7	6	.03	2.0	7	.04	.69	12	.02
13	5.0	20	.27	1.8	7	.03	.69	12	.02
14	4.4	15	.18	1.8	7	.03	.80	15	.03
15	3.4	10	.09	1.9	7	.04	1.4	27	.10
16	2.9	9	.07	1.9	6	.03	1.2	21	.07
17	2.5	9	.06	1.7	6	.03	1.1	19	.06
18	2.2	9	.05	1.5	6	.02	.99	13	.03
19	2.1	9	.05	1.5	6	.02	.99	13	.03
20	4.3	20	.23	1.4	6	.02	.92	13	.03
21	9.0	40	.97	1.4	5	.02	1.1	19	.06
22	4.3	20	.23	1.3	5	.02	1.6	25	.11
23	3.7	10	.10	1.3	5	.02	1.2	21	.07
24	3.4	10	.09	1.2	5	.02	.80	15	.03
25	3.1	10	.08	1.2	5	.02	.80	15	.03
26	3.1	10	.08	1.1	4	.01	.74	14	.03
27	5.9	20	.32	1.1	4	.01	.74	14	.03
28	7.4	30	.60	1.1	4	.01	.80	15	.03
29	5.0	20	.27	1.1	4	.01	.74	14	.03
30	3.5	10	.09	1.1	4	.01	.69	12	.02
31	2.8	10	.08	1.1	217	.64	---	---	---
TOTAL	105.9	---	6.31	56.3	---	1.68	48.69	---	11.52
YEAR	866.10		1175.32						

MUSKINGUM RIVER BASIN

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	.69	14	.03	.99	10	.03	2.1	16	.09
2	.69	7	.01	.92	9	.02	2.0	16	.09
3	.64	9	.02	.92	9	.02	1.9	11	.06
4	.64	9	.02	.99	13	.03	1.6	9	.04
5	.64	9	.02	.99	8	.02	1.5	9	.04
6	.64	9	.02	.92	7	.02	1.3	22	.08
7	.64	9	.02	.92	9	.02	1.9	12	.06
8	.64	9	.02	.92	9	.02	2.0	13	.07
9	.64	9	.02	.92	18	.04	2.1	12	.07
10	.74	14	.03	.92	22	.05	2.2	11	.07
11	1.1	15	.04	.92	13	.03	1.9	10	.05
12	.86	14	.03	.92	6	.01	1.7	8	.04
13	.80	13	.03	.86	4	.00	1.6	8	.03
14	.74	15	.03	.86	4	.00	1.4	8	.03
15	.74	11	.02	.86	3	.00	1.2	13	.04
16	.74	20	.04	.80	14	.03	1.1	12	.04
17	.74	19	.04	.80	5	.01	1.1	17	.05
18	1.8	23	.11	.80	8	.02	1.1	22	.07
19	1.5	22	.09	.80	15	.03	1.0	15	.04
20	1.1	14	.04	.80	9	.02	1.0	18	.05
21	1.1	14	.04	.80	9	.02	.96	26	.07
22	.99	14	.04	.80	21	.05	.92	20	.05
23	.92	13	.03	.80	9	.02	.90	17	.04
24	.86	13	.03	1.1	7	.02	.88	11	.03
25	2.0	30	.16	1.1	14	.04	.84	32	.07
26	2.0	30	.16	1.1	16	.05	.82	19	.04
27	1.7	11	.05	2.6	47	.33	.82	12	.03
28	1.6	10	.04	3.1	48	.40	.80	8	.02
29	1.4	10	.04	2.5	25	.17	.80	20	.04
30	1.2	11	.04	2.1	22	.12	.80	35	.08
31	.99	9	.02	---	---	---	.82	27	.06
TOTAL	31.48	---	1.33	33.83	---	1.64	41.06	---	1.64
JANUARY				FEBRUARY				MARCH	
1	.86	20	.05	8.7	502	12	1.1	44	.13
2	.92	24	.06	11	950	28	.99	26	.07
3	1.4	35	.13	4.1	140	1.5	.92	54	.13
4	1.3	15	.05	3.3	75	.67	.86	54	.13
5	2.0	19	.10	2.1	50	.28	.86	38	.09
6	1.4	12	.05	1.8	47	.23	.99	26	.07
7	.99	12	.03	1.3	26	.09	1.1	38	.11
8	.82	15	.03	1.2	18	.06	.99	22	.06
9	.70	24	.05	1.2	18	.06	.92	46	.11
10	.64	12	.02	1.3	26	.09	.86	46	.11
11	.60	10	.02	4.8	136	1.8	.86	33	.08
12	.58	9	.01	6.4	300	5.2	.80	40	.09
13	.56	8	.01	3.1	95	.80	.74	36	.07
14	.56	8	.01	2.1	50	.28	.74	40	.08
15	.56	8	.01	1.8	45	.22	.69	39	.07
16	.56	8	.01	3.9	80	.84	.64	35	.06
17	.56	8	.01	5.6	170	2.6	.59	20	.03
18	.56	8	.01	4.8	117	1.5	.59	22	.04
19	.56	8	.01	6.0	235	3.8	.59	26	.04
20	.56	8	.01	7.7	320	6.7	.59	20	.03
21	.56	8	.01	5.5	175	2.6	.59	25	.04
22	.56	8	.01	3.9	80	.84	.59	28	.04
23	.56	8	.01	3.5	75	.71	.59	25	.04
24	.59	9	.01	2.6	63	.44	.59	18	.03
25	.64	10	.02	2.1	50	.28	.59	21	.03
26	2.0	132	.71	1.6	45	.19	.60	25	.04
27	2.4	86	.56	1.4	30	.11	.68	35	.06
28	1.9	45	.23	1.2	20	.06	.64	30	.05
29	1.5	29	.12	---	---	---	.60	25	.04
30	3.9	22	.23	---	---	---	.68	35	.06
31	1.2	41	.13	---	---	---	.80	46	.10
TOTAL	32.50	---	2.72	104.0	---	71.95	23.37	---	2.13

MUSKINGUM RIVER BASIN

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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 mi² (3.29 km²).

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Altitude of gage is 835 ft (255 m) from topographic map.

REMARKS.--

Water-year 1979: Records good except those for periods of ice effect, Dec. 15-31, Feb. 1-19, and no gage-height record, Jan. 9-31, Sept. 1-18, which are poor.

Water-year 1980: Records good except those for periods of no gage-height record, Sept. 12-30, which are poor.

Water year 1981: Records good except those for periods of ice effect Dec. 15 to Jan. 4, Jan. 6-28, and those for periods of no gage-height record, Oct. 1 to Nov. 26, Dec. 6-15, Feb. 20 to Apr. 10, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) Aug. 10, 1980, gage height, 17.06 ft (5.200 m); minimum daily, 0.10 ft³/s (0.003 m³/s) July 7, 8, 1979, Sept. 13, 1981.

EXTREMES FOR CURRENT PERIOD.--

Water year 1979: Maximum discharge, 731 ft³/s (20.7 m³/s) Sept. 14, gage height, 16.2 ft (4.94 m); minimum daily, 0.10 ft³/s (0.003 m³/s) July 7, 8.

Water-year 1980: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Aug. 10, gage height, 16.96 ft (5.169 m); minimum daily 0.13 ft³/s (0.004 m³/s) Feb. 17, 18.

Water year 1981: Maximum discharge, 139 ft³/s (3.94 m³/s) Apr. 12, gage height, 12.72 ft (3.877 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 13. discharge, 139 ft³/s (3.94 m³/s) Apr. 12, gage height, 12.72 ft (3.877 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.30	.71	20	1.0	7.1	2.4	.80	1.4	.80	12	1.3
2	.13	.30	.64	8.3	.94	6.8	17	.80	1.0	.39	7.0	1.1
3	.16	.30	7.1	7.4	.88	7.1	13	2.4	.80	.20	1.9	.95
4	.44	.26	17	3.0	.82	6.8	12	1.6	.71	.30	.70	.80
5	.20	.26	3.2	1.8	.77	3.8	11	1.4	.64	.16	.26	.69
6	.20	.26	2.0	1.5	.71	2.6	10	1.2	.64	.13	1.7	.60
7	.16	.26	1.5	1.2	.68	1.9	9.6	1.1	.50	.10	1.4	.54
8	.16	.23	21	1.0	.64	1.5	9.0	1.0	1.6	.10	1.2	.49
9	.13	.23	14	.87	.60	1.2	8.0	.90	.64	1.0	.20	.45
10	.13	.23	4.7	.78	.57	1.0	4.0	.90	.50	2.2	1.1	.43
11	.23	.23	3.0	.70	.55	.80	3.0	.80	.44	1.1	5.0	.40
12	.34	.23	2.6	.62	.54	.71	2.8	1.6	.39	.50	1.5	.38
13	1.7	.20	2.0	1.4	.52	.64	11	.80	.34	.44	.56	15
14	1.2	.23	1.6	4.4	.51	.56	9.8	.71	.34	.37	.34	65
15	.80	.20	1.5	2.2	.50	.56	4.5	.64	.30	.33	.23	13
16	.80	.20	1.4	1.7	.49	.56	3.0	.56	.30	.29	.20	10
17	.56	2.4	1.1	1.6	.49	.39	2.6	.56	.30	.27	.16	4.5
18	.50	1.1	1.0	1.5	.48	.34	2.0	.50	.30	.25	7.0	2.4
19	.50	.64	.90	1.0	.47	.30	1.7	.44	.26	.23	2.1	2.2
20	.44	.50	1.4	1.7	.56	.26	1.6	.44	.26	.22	1.3	2.0
21	.39	.44	1.2	3.8	17	.23	1.4	.44	3.8	.21	1.0	2.4
22	.34	.44	1.0	2.0	7.1	.20	1.2	.39	.64	.20	.96	2.0
23	.39	1.2	.86	1.7	19	.26	1.1	.44	.50	2.5	3.5	1.7
24	.34	.71	.75	6.5	17	1.0	1.0	.50	.50	.64	24	1.6
25	.34	.64	.90	3.8	53	.64	1.0	.80	.71	.56	2.4	1.6
26	1.1	.56	.72	2.6	14	.44	1.2	1.2	.90	.78	3.0	1.5
27	.56	2.0	.56	2.1	6.3	.39	1.4	1.9	.80	.66	4.1	1.4
28	.44	1.5	.47	1.7	5.7	.34	1.0	1.0	.44	25	2.6	8.3
29	.39	1.0	.41	1.5	---	.34	.90	1.5	.50	12	5.1	3.2
30	.34	.80	.70	1.3	---	.34	.90	1.4	.71	6.0	2.5	2.2
31	.34	---	9.3	1.1	---	.64	---	1.6	---	1.9	1.5	---
TOTAL	14.01	17.85	105.22	90.77	151.82	49.74	149.10	30.32	21.16	59.83	96.51	148.13
MEAN	.45	.60	3.39	2.93	5.42	1.60	4.97	.98	.71	1.93	3.11	4.94
MAX	1.7	2.4	21	20	53	7.1	17	2.4	3.8	25	24	65
MIN	.13	.20	.41	.62	.47	.20	.90	.39	.26	.10	.16	.38
CFSM	.35	.47	2.67	2.31	4.27	1.26	3.91	.77	.56	1.52	2.45	3.89
IN.	.41	.52	3.08	2.66	4.44	1.46	4.36	.89	.62	1.75	2.82	4.34

WTR YR 1979 TOTAL 934.46 MEAN 2.56 MAX 65 MIN .10 CFSM 2.02 IN 27.35

MUSKINGUM RIVER BASIN

03144450 OPOSSUM RUN TRIBUTARY NEAR WAKATOMIKA, JH--Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.64	1.0	1.4	.33	1.9	5.5	.90	1.4	1.0	1.2	.98
2	1.6	.80	.90	1.2	.30	2.2	4.5	.80	16	1.0	13	.90
3	1.5	.64	1.0	1.1	.28	2.0	4.0	.80	9.6	1.0	17	.89
4	1.5	.56	.80	1.0	.26	.50	4.2	.71	5.8	1.0	5.3	5.5
5	1.4	.56	.80	1.0	.24	7.7	3.4	.71	4.5	1.4	3.6	1.2
6	1.2	.56	.80	.90	.22	2.4	2.8	.71	7.1	1.1	2.9	.78
7	1.1	.50	.71	.90	.21	2.0	2.6	.64	5.0	1.1	2.5	.69
8	1.0	.50	.64	.84	.20	9.8	5.7	.56	4.3	3.3	2.3	.60
9	1.1	1.6	.56	.80	.19	3.8	5.7	.56	3.8	3.6	2.2	2.9
10	1.0	2.2	.56	.77	.18	3.0	4.2	.56	3.3	1.4	41	1.0
11	1.0	1.1	.56	17	.17	2.6	3.6	1.2	3.1	2.7	81	.71
12	1.0	.80	.64	4.7	.16	2.8	5.5	93	2.7	3.1	8.4	.64
13	.80	.71	2.8	2.6	.15	2.0	4.5	13	2.7	2.2	1.8	.57
14	.71	.64	1.6	2.0	.15	2.4	12	6.7	2.5	1.2	1.4	.52
15	.64	.64	1.4	1.7	.14	1.9	7.4	4.0	3.1	1.1	1.8	.48
16	.64	.56	1.4	1.5	.14	1.9	4.7	2.9	3.1	1.1	1.2	.45
17	.90	.50	1.5	1.5	.13	6.5	4.2	6.7	2.2	1.1	1.4	.42
18	.71	.50	1.9	1.2	.13	5.5	3.2	9.2	2.0	1.1	1.5	.40
19	.64	.44	1.0	1.1	2.2	3.4	2.6	6.7	1.8	1.1	1.2	.35
20	.64	.39	.80	1.0	2.6	2.8	2.4	6.4	1.5	1.1	1.2	.31
21	.71	.34	.71	.90	2.0	14	2.2	7.4	1.4	1.1	17	.33
22	.80	.50	.80	.90	6.0	5.2	1.9	4.7	1.2	3.1	13	.31
23	1.0	.50	.71	.80	1.6	3.6	1.7	3.8	1.2	1.2	3.8	.45
24	1.0	1.9	3.0	.74	1.1	3.6	1.6	3.3	1.1	1.1	2.7	.35
25	1.0	1.4	3.6	.71	.90	3.4	1.5	2.9	1.1	1.1	2.3	.30
26	.90	3.0	2.8	1.1	.85	2.8	1.4	2.3	1.1	1.1	.78	.38
27	.80	1.6	2.2	.68	.81	2.6	1.2	2.0	1.1	8.4	.70	.29
28	.90	1.6	1.9	.50	.78	3.4	1.2	1.8	1.1	5.3	.60	.25
29	.80	1.4	1.7	.45	2.4	7.4	1.1	1.7	1.1	2.5	.52	.23
30	.71	1.1	1.6	.40	---	7.7	1.0	1.5	1.1	1.7	.45	.22
31	.71	---	1.5	.36	---	12	---	1.4	---	1.4	.98	---
TOTAL	30.11	28.18	41.89	51.75	24.82	132.80	107.5	189.55	97.0	59.7	234.73	23.40
MEAN	.97	.94	1.35	1.67	.86	4.28	3.58	6.11	3.23	1.93	7.57	.78
MAX	1.7	3.0	3.6	17	6.0	14	12	93	16	8.4	81	5.5
MIN	.64	.34	.56	.36	.13	.50	1.0	.56	1.1	1.0	.45	.22
CFSM	.76	.74	1.06	1.32	.68	3.37	2.82	4.81	2.54	1.52	5.96	.61
IN.	.88	.82	1.23	1.51	.73	3.89	3.15	5.55	2.84	1.75	6.87	.68
CAL YR 1979	TOTAL	897.56	MEAN	2.46	MAX	65	MIN	.10	CFSM	1.94	IN	26.27
WTR YR 1980	TOTAL	1021.43	MEAN	2.79	MAX	93	MIN	.13	CFSM	2.20	IN	29.90

MUSKINGUM RIVER BASIN

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03144450 OPJSSUM RUN TRIBUTARY NEAR WAKATOMIKA, JH--Continued

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	.34	.25	2.0	.68	2.0	.98	.80	2.0	1.3	.84	1.2	.19
2	.34	.25	1.2	.68	3.1	.92	.76	2.0	1.1	.84	1.2	.15
3	.27	.26	1.2	.70	1.1	.88	.74	1.9	1.6	.77	1.7	1.9
4	.26	.27	1.1	.70	2.7	.82	.70	1.7	1.2	1.9	.58	.48
5	.26	.25	1.4	.79	2.1	1.1	4.5	1.7	1.0	1.2	.43	.25
6	.25	.23	1.4	1.2	1.6	.94	2.7	4.0	.92	1.0	.39	.17
7	.25	.22	1.9	1.6	1.2	.86	1.4	2.8	.77	.92	.35	.15
8	.25	.22	2.2	1.9	.94	.82	.84	2.3	.77	.77	.35	.17
9	.25	.21	2.4	1.1	1.2	.78	.62	2.0	.92	.77	.31	.13
10	.25	.21	1.9	.74	2.1	.72	.45	1.7	1.6	.70	.28	.12
11	.26	.20	1.5	.66	3.7	.70	6.2	6.5	1.2	.64	.28	.12
12	.35	.20	1.2	.64	5.0	.68	32	6.5	1.2	.58	.25	.12
13	.33	.20	.98	.60	2.5	.66	6.8	3.0	9.8	2.7	.25	.10
14	.30	.20	.80	.58	2.5	.66	6.2	4.0	10	1.2	.25	.12
15	.27	.20	.66	.54	3.1	.76	4.5	5.0	2.8	.84	.25	1.4
16	.25	.20	.60	.52	10	.66	3.6	3.0	1.7	.77	.25	1.0
17	.22	.20	.58	.50	8.0	.62	3.8	2.2	1.3	.64	.22	.84
18	.27	.20	.58	.49	5.3	.58	5.3	1.6	1.4	.58	.22	.70
19	.52	.20	.56	.48	19	.56	3.6	1.4	1.2	.58	.22	.70
20	.43	.20	.58	.47	6.5	.54	3.0	1.2	1.1	1.2	.22	.64
21	.38	.20	.58	.46	4.5	.54	2.7	1.1	1.1	1.7	.19	.53
22	.35	.21	.58	.46	2.2	.54	2.3	.92	.70	1.5	.19	.48
23	.31	.22	.60	.45	4.0	.54	3.0	.84	.48	1.4	.19	.39
24	.29	.31	.64	.45	2.6	.55	2.8	.77	.43	1.4	.19	.35
25	.27	.60	.66	.45	1.8	.56	2.5	.70	5.3	1.3	.19	.31
26	.52	.47	.68	2.0	1.5	.58	2.2	.84	1.7	1.5	.19	.28
27	.42	1.4	.70	1.6	1.3	.66	2.2	1.4	1.2	1.9	.19	.25
28	.34	1.5	.90	1.3	1.1	.62	2.0	2.0	1.0	2.7	.19	.25
29	.31	1.2	1.0	1.0	---	.58	2.3	1.2	.84	2.2	.19	.19
30	.28	1.4	.72	2.9	---	.64	2.0	3.0	.84	1.5	.19	.17
31	.26	---	.70	2.1	---	.74	---	2.0	---	1.3	.48	---
TOTAL	9.65	11.88	32.50	28.74	112.54	21.79	112.51	71.27	56.47	37.84	11.58	12.65
MEAN	.31	.40	1.05	.93	4.02	.70	3.75	2.30	1.88	1.22	.37	.42
MAX	.52	1.5	2.4	2.9	19	1.1	32	6.5	10	2.7	1.7	1.9
MIN	.22	.20	.56	.45	.94	.54	.45	.70	.43	.58	.19	.10
CFSM	.24	.32	.83	.73	3.17	.55	2.95	1.81	1.48	.96	.29	.33
IN.	.28	.35	.95	.84	3.29	.64	3.29	2.09	1.65	1.11	.34	.37

CAL YR 1980 TOTAL 975.28 MEAN 2.66 MAX 93 MIN .13 CFSM 2.09 IN 28.54
WTR YR 1981 TOTAL 519.42 MEAN 1.42 MAX 32 MIN .10 CFSM 1.12 IN 15.20

MUSKINGUM RIVER BASIN

03144450 OPOSSUM RUN TRIBUTARY NEAR WAKATOMIKA, OH--Continued

WATER-QUALITY RECORDS

PERIOD-OF RECORD.--December 1978 to current year.

REMARKS.--Water-quality records are based on once-a-month sampling data.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 16...	1530	.10	504	7.2	16.0	20	.50	16	220	100	73	9.0
NOV 13...	1140	.22	540	7.3	4.5	0	.25	12	200	82	65	8.8
DEC 15...	1250	.70	423	7.4	3.0	5	.20	13	170	65	55	7.0
JAN 20...	1215	.78	475	7.8	1.0	<5	.20	10	180	64	58	8.0
FEB 18...	1415	5.6	274	7.8	7.5	20	18	14	96	30	31	4.4
MAR 16...	1225	2.4	405	7.5	6.3	<5	.80	13	140	42	47	6.6
APR 22...	1230	1.1	363	7.3	13.5	2	1.0	18	140	42	47	6.0
MAY 06...	1045	4.3	284	7.6	10.5	40	73	25	120	48	38	5.0
11...	1025	7.2	337	7.5	13.0	50	2.0	99	130	55	44	6.0
19...	1200	1.3	376	8.0	11.5	2	2.0	<10	150	45	50	6.5
JUN 17...	1325	1.2	397	7.4	22.5	3	1.6	<10	170	58	56	6.8
30...	1330	.94	--	--	--	--	--	--	--	--	--	--
JUL 20...	1400	1.7	480	8.0	23.0	0	2.0	<10	190	85	62	7.9
AUG 11...	1215	1.8	469	8.6	24.0	10	.50	<10	170	52	55	7.4
31...	1300	.45	495	7.3	21.0	15	70	29	190	98	61	8.4

DATE	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN+NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT 16...	142	0	116	14	38	.2	5.8	.24	--	.050	--	.22
NOV 13...	144	0	118	12	35	.2	4.0	.06	--	.000	--	.19
DEC 15...	128	0	105	8.2	38	.1	7.5	.86	--	.000	--	.10
JAN 20...	142	0	116	3.6	43	.1	7.0	.69	3.5	<.010	7.7	--
FEB 18...	80	0	66	2.0	29	.1	7.9	1.3	--	.010	--	.42
MAR 16...	120	0	98	6.1	35	<.1	6.3	.78	--	.010	--	--
APR 22...	120	0	98	9.6	39	.1	7.6	.76	--	<.010	--	--
MAY 06...	88	0	72	3.5	30	.1	7.7	.64	--	.080	--	.86
11...	92	0	75	4.7	31	.1	7.6	.56	--	.140	--	2.6
19...	128	0	105	2.0	38	.1	8.9	.81	--	.010	--	.36
JUN 17...	136	0	112	8.7	34	.1	11	.97	--	.040	--	.28
30...	--	--	--	--	--	--	--	--	1.8	--	5.0	--
JUL 20...	128	0	105	2.0	37	.1	8.5	.53	--	<.010	--	--
AUG 11...	144	0	118	.6	41	.2	5.7	.10	--	.010	--	.09
31...	112	0	92	9.0	35	.2	6.2	.64	--	.060	--	.38

MUSKINGUM RIVER BASIN

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03144450 OPOSSUM RUN TRIBUTARY NEAR WAKATOMIKA, JH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 16...	.27	.51	2.3	.020	--	60	--	100	--	9	--	90
NOV 13...	.19	.25	1.1	.000	--	50	--	100	--	11	--	80
DEC 15...	.10	.96	4.3	.010	--	50	--	<50	--	10	--	100
JAN 20...	<.10	--	--	.040	300	70	4800	100	190	6	20	80
FEB 18...	.43	1.7	7.7	.110	--	1800	--	100	--	11	--	3200
MAR 16...	<.10	--	--	<.010	--	0	--	100	--	4	--	170
APR 22...	.28	1.0	4.6	.010	--	110	--	100	--	8	--	130
MAY 06...	.94	1.6	7.0	.100	--	1100	--	100	--	16	--	2700
11...	2.70	3.3	14	.160	--	10000	--	200	--	26	--	21000
19...	.37	1.2	5.2	.010	--	120	--	100	--	6	--	130
JUN 17...	.32	1.3	5.7	.020	--	0	--	100	--	1	--	350
30...	--	--	--	--	590	--	2100	--	70	--	<10	--
JUL 20...	.29	.82	3.6	<.010	--	0	--	100	--	2	--	180
AUG 11...	.10	.20	.89	<.010	--	80	--	100	--	17	--	300
31...	.44	1.1	4.8	.080	--	1400	--	100	--	10	--	3600

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)
OCT 16...	0	--	20	.2	--	0	--	200	--	--	--	--
NOV 13...	0	--	0	<.1	--	5	--	270	--	--	--	--
DEC 15...	2	--	10	.1	--	4	--	200	--	--	--	--
JAN 20...	2	10	<10	<.1	.0	3	30	240	10	4.9	5.1	.2
FEB 18...	5	--	110	<.1	--	9	--	150	--	--	--	--
MAR 16...	3	--	20	<.1	--	2	--	180	--	--	--	--
APR 22...	4	--	10	<.1	--	2	--	160	--	--	--	--
MAY 06...	5	--	80	.1	--	8	--	130	--	--	--	--
11...	35	--	710	<.1	--	25	--	160	--	--	--	--
19...	1	--	10	<.1	--	6	--	180	--	--	--	--
JUN 17...	1	--	30	<.1	--	4	--	210	--	--	--	--
30...	--	15	--	--	.0	--	30	--	<10	3.3	3.6	.3
JUL 20...	3	--	10	.1	--	6	--	260	--	--	--	--
AUG 11...	5	--	10	<.1	--	13	--	250	--	--	--	--
31...	26	--	170	.1	--	8	--	310	--	--	--	--

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 mi² (15,522 km²).

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 for the winter period, 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.--60 years, 6,370 ft³/s (180.4 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft³/s (2,830 m³/s) Aug. 9, 1935, gage height, 31.6 ft (9.63 m); minimum daily, 335 ft³/s (9.49 m³/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 ft³/s (6,460 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,200 ft³/s (827 m³/s) Apr. 13, gage height, 17.71 ft (5.398 m); minimum daily, 1,390 ft³/s (39.4 m³/s) Sept. 30.

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	2500	3370	6610	3200	4600	25600	5150	19500	9710	14000	4560	2490
2	2430	3190	6350	3170	10000	23500	4850	17400	8450	13800	3880	3060
3	2390	2970	6560	3060	15400	21100	4500	14200	7280	12800	3510	3960
4	2390	3060	6390	2500	13800	20900	4440	12200	7730	12200	5220	8370
5	2340	3190	5860	1700	11600	20800	11800	10300	8760	11000	5090	9840
6	2250	3030	5200	1600	9340	18100	16900	9460	13900	8590	4300	9310
7	2180	2980	5010	1600	7620	15300	16300	12000	14800	8140	3630	6650
8	2140	2870	5590	1600	7110	13900	14700	11700	14000	7490	3230	5160
9	2100	2700	6310	1600	6220	12700	12400	10300	15500	6640	3020	4710
10	2060	2540	8360	1600	5840	11600	10300	9170	22900	6060	2830	4310
11	2160	2410	9640	1600	7970	10700	8990	8890	21000	5540	2660	3730
12	2130	2320	8960	1600	12000	9620	20900	13500	21900	4600	2540	3390
13	2010	2210	7660	1600	13500	8360	27300	14500	21400	3960	2550	3040
14	1910	2090	6560	1600	11300	7180	21900	14400	24600	4660	2400	2640
15	1950	2150	5710	1600	8880	6350	22700	16200	18500	4690	2270	2620
16	1930	2680	5160	1600	8220	6020	24800	17600	19100	3910	2250	2760
17	2180	2930	4680	1600	12600	5800	24500	17600	23400	3480	2270	2580
18	2550	3030	4350	1600	17500	5550	24100	14900	23500	3240	2200	2540
19	3190	3080	4160	1600	21600	5270	22700	11700	23100	3040	2090	2580
20	3320	3130	3760	1600	25600	5050	21900	10000	23000	2990	1970	2540
21	3060	3130	3100	1600	26600	4880	21300	8630	22400	4370	1870	2360
22	2870	3060	2900	1700	26200	4710	19600	7610	22400	6110	1820	2140
23	2750	2930	3160	1800	26900	4600	17800	6810	22100	5250	1780	1960
24	2650	3010	3080	1800	27500	4500	17800	6170	21900	4130	1730	1870
25	3010	3630	2650	2000	26900	4390	17400	5620	22300	3450	1670	1730
26	3980	4400	2250	2550	27500	4210	16100	5200	21700	3650	1640	1630
27	4240	4710	2380	4080	26800	4130	14900	5600	21700	6610	1640	1570
28	4100	6150	2450	7390	26200	4650	13700	9510	20700	6140	1660	1500
29	4020	7050	2650	8480	---	5730	14200	12200	18300	6490	1840	1430
30	3960	7110	2790	7030	---	5320	17800	12000	15800	6160	1890	1390
31	3670	---	3040	5270	---	5180	---	10900	---	5470	2070	---
TOTAL	84420	101110	153330	81330	445300	305700	491730	355770	551830	198660	82080	103860
MEAN	2723	3370	4946	2624	15900	9861	16390	11480	18390	6408	2648	3462
MAX	4240	7110	9640	8480	27500	25600	27300	19500	24600	14000	5220	9840
MIN	1910	2090	2250	1600	4600	4130	4440	5200	7280	2990	1640	1390

CAL YR 1980 TOTAL 3496260 MEAN 9553 MAX 29400 MIN 1910
WTR YR 1981 TOTAL 2955120 MEAN 8096 MAX 27500 MIN 1390

MUSKINGUM RIVER BASIN

159

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 mi² (344 km²).

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 hm³), 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.--22 years, 155 ft³/s (4.390 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,120 ft³/s (117 m³/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 ft³/s (167 m³/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,190 ft³/s (62.0 m³/s) June 15, gage height, 10.37 ft (3.161 m); minimum daily, 7.3 ft³/s (0.21 m³/s) Oct. 12.

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	11	23	200	40	227	228	47	409	302	118	23	13
2	12	21	140	35	1000	207	38	631	236	114	19	12
3	12	76	110	32	800	146	34	332	225	72	19	21
4	11	166	65	30	600	80	94	114	251	58	95	26
5	11	166	53	27	500	191	946	88	242	55	60	24
6	11	165	51	23	380	305	522	225	477	51	42	17
7	11	163	73	22	300	159	195	285	358	47	36	15
8	11	162	152	20	224	112	121	132	246	45	51	17
9	11	158	303	19	170	96	89	92	356	41	38	16
10	10	156	453	18	57	86	77	82	967	38	26	13
11	8.5	155	245	17	420	79	187	580	989	36	23	12
12	7.3	155	198	17	280	69	1440	1170	538	34	21	12
13	8.1	155	174	16	190	61	1600	598	580	103	20	12
14	7.7	153	78	15	120	55	1040	433	1790	109	18	11
15	9.4	150	61	15	67	49	512	993	2050	46	17	14
16	10	149	58	14	205	58	360	633	1270	42	17	14
17	11	177	52	14	739	63	370	390	725	26	16	13
18	14	278	49	14	637	52	450	327	475	24	17	12
19	21	239	54	13	1120	49	340	375	404	21	16	13
20	20	160	52	13	1830	46	297	395	371	100	17	14
21	16	110	47	13	1330	46	264	294	361	188	17	14
22	12	80	44	13	578	43	188	79	517	97	14	14
23	12	70	42	13	638	41	468	61	352	57	13	13
24	10	115	40	13	668	38	642	51	95	39	13	11
25	18	150	38	13	404	35	385	45	174	30	16	10
26	26	140	36	70	297	32	319	42	174	36	17	10
27	28	150	35	722	249	37	291	101	92	57	17	9.9
28	26	240	33	433	237	38	272	452	76	51	18	9.9
29	26	230	34	202	---	37	270	334	64	54	16	9.9
30	29	190	39	146	---	47	127	188	58	42	16	11
31	26	---	45	128	---	63	---	551	---	28	15	---
TOTAL	457.0	4502	3054	2180	14267	2648	11985	10482	14815	1859	763	413.7
MEAN	14.7	150	98.5	70.3	510	85.4	400	338	494	60.0	24.6	13.8
MAX	29	278	453	722	1830	305	1600	1170	2050	188	95	26
MIN	7.3	21	33	13	57	32	34	42	58	21	13	9.9

CAL YR 1980 TOTAL 59719.0 MEAN 163 MAX 1910 MIN 7.3
WTR YR 1981 TOTAL 67425.7 MEAN 185 MAX 2050 MIN 7.3

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 mi² (300 km²).

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

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 good except those for winter periods, and below 40 ft³/s, which are fair. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--21 years, 139 ft³/s (3.936 m³/s), 16.28 in/yr (414 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft³/s (289 m³/s) Sept. 14, 1979, gage height, 15.20 ft (4.633 m); minimum, 0.60 ft³/s (0.017 m³/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 ft³/s (70.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 19	2000	3900 110	10.02 3.054	Apr. 13	0300	*4290 121	*10.44 3.182

Minimum daily discharge, 6.4 ft³/s (0.18 m³/s) Oct. 15-17.

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	11	53	210	45	221	142	53	292	79	436	39	10
2	10	45	185	37	973	120	43	226	57	82	38	13
3	10	40	165	33	219	99	38	126	59	53	37	250
4	9.8	35	99	24	139	88	52	91	64	42	52	255
5	9.6	30	82	27	100	121	456	75	50	36	44	76
6	9.0	27	111	24	86	171	181	868	61	31	40	45
7	9.0	25	312	22	79	142	105	462	49	27	35	39
8	8.8	23	328	20	62	107	79	189	38	26	30	41
9	8.6	21	471	19	64	104	68	121	95	25	26	43
10	7.8	20	442	18	76	126	65	99	361	23	23	42
11	7.4	20	210	17	814	111	82	810	193	22	20	30
12	6.8	19	146	17	237	88	1840	1380	92	24	18	18
13	6.6	18	131	16	137	78	2200	390	230	250	17	16
14	6.6	18	103	15	105	65	574	338	1270	223	16	22
15	6.4	18	86	15	103	58	294	1440	320	53	15	185
16	6.4	18	79	14	427	58	187	424	226	34	14	96
17	6.4	17	70	14	1100	53	201	219	187	33	14	46
18	6.0	17	66	14	674	49	369	146	96	31	13	34
19	6.9	17	67	14	2310	46	197	118	70	32	13	36
20	45	17	56	13	2430	46	144	92	55	158	13	34
21	30	17	49	13	773	47	105	74	140	181	13	24
22	28	17	40	13	462	48	85	64	197	79	13	19
23	25	19	38	13	740	47	129	56	111	47	12	16
24	22	35	37	13	594	43	154	51	62	40	12	14
25	25	112	35	13	349	40	111	46	508	42	11	13
26	42	74	34	20	233	38	85	42	177	43	11	12
27	43	167	33	284	177	47	73	59	81	104	11	11
28	49	375	32	252	162	49	63	101	56	70	11	9.6
29	59	191	31	160	---	44	462	87	45	105	10	8.7
30	59	146	35	120	---	58	284	88	154	53	10	9.0
31	58	---	52	104	---	67	---	137	---	40	10	---
TOTAL	754.2	1651	3835	1423	13846	2400	8779	8711	5183	2445	641	1467.3
MEAN	24.3	55.0	124	45.9	495	77.4	293	281	173	78.9	20.7	48.9
MAX	69	375	471	284	2430	171	2200	1440	1270	436	52	255
MIN	6.4	17	31	13	62	38	38	42	38	22	10	8.7
CFSM	.21	.47	1.07	.40	4.27	.67	2.53	2.42	1.49	.68	.18	.42
IN.	.24	.53	1.23	.46	4.44	.77	2.82	2.79	1.66	.78	.21	.47
CAL YR 1980	TOTAL	47437.2	MEAN 130	MAX 1830	MIN 6.4	CFSM 1.12	IN 15.21					
WTR YR 1981	TOTAL	51135.5	MEAN 140	MAX 2430	MIN 6.4	CFSM 1.21	IN 16.40					

MUSKINGUM RIVER BASIN

161

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 mi² (1,391 km²).

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 except those for winter periods, which are fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 hm³), on South Fork 15.2 mi (24.5 km) upstream. Water-quality data collected at this site 1962 to 1980.

AVERAGE DISCHARGE.--42 years, 590 ft³/s (16.71 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s (1,270 m³/s) Jan. 21, 1959, gage height, 20.3 ft (6.19 m) (from high-water mark), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of flood-routing studies from station at Toboso; minimum daily, 28 ft³/s (0.79 m³/s) Sept. 27, 1954.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 20	0730	10200 289	12.49 3.807	June 14	1000	*11500 326	*13.20 4.023
Apr. 13	0400	11400 323	13.12 3.999				

Minimum daily discharge, 96 ft³/s (2.72 m³/s) Oct. 12, 13.

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	126	173	996	253	500	927	290	1360	870	1140	232	181
2	133	157	715	238	3490	823	248	1830	621	730	213	157
3	129	149	614	213	1590	722	227	1120	600	555	223	395
4	122	290	435	169	967	587	368	700	635	442	815	761
5	119	296	362	150	730	784	3210	580	555	395	422	331
6	109	296	356	140	600	1160	1590	1360	982	362	285	223
7	112	285	678	130	539	878	839	1950	776	331	279	177
8	109	279	1030	130	563	692	614	960	523	307	301	186
9	109	274	1390	120	463	600	508	685	753	290	238	190
10	106	274	1780	120	337	580	456	587	3200	285	208	173
11	115	263	1030	110	1770	563	635	2470	2210	274	208	149
12	96	258	753	110	1100	500	7640	5060	1170	269	186	133
13	96	263	670	110	692	449	9110	2290	1450	587	177	126
14	99	258	500	100	478	395	3970	1390	9190	1580	169	126
15	99	258	415	100	408	349	2030	4750	4070	580	165	238
16	102	253	388	100	1050	382	1390	2350	2600	375	157	307
17	102	263	349	100	3190	368	1450	1340	1950	313	149	204
18	213	395	325	100	2520	331	2030	1030	1250	274	145	177
19	290	402	337	100	5580	313	1430	989	1030	253	141	165
20	186	199	274	100	8990	301	1130	919	902	707	137	161
21	153	137	248	100	4170	296	943	761	974	1130	133	149
22	133	122	218	100	2260	290	808	449	1730	737	126	137
23	119	126	218	100	2650	279	1300	356	1260	442	119	129
24	112	194	218	100	2750	263	1720	307	784	331	115	122
25	204	649	186	110	1740	243	1130	274	2100	279	119	115
26	243	621	213	200	1290	223	927	258	1400	307	119	109
27	204	800	181	1890	1060	238	823	456	792	362	119	102
28	213	1680	169	1320	982	248	745	1160	621	395	165	99
29	269	1120	190	823	---	232	1030	967	531	563	129	99
30	232	878	243	572	---	290	1170	776	471	362	126	102
31	194	---	274	463	---	349	---	1830	---	274	149	---
TOTAL	4648	11612	15755	8471	52459	14655	49761	41314	46000	15231	6269	5723
MEAN	150	387	508	273	1874	473	1659	1333	1533	491	202	191
MAX	290	1680	1780	1890	8990	1160	9110	5060	9190	1580	815	761
MIN	96	122	169	100	337	223	227	258	471	253	115	99

CAL YR 1980 TOTAL 257081 MEAN 702 MAX 7660 MIN 96
WTR YR 1981 TOTAL 271898 MEAN 745 MAX 9190 MIN 96

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 mi² (1,922 km²).

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 fair. 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.--42 years, 825 ft³/s (23.36 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,000 ft³/s (1,330 m³/s) Jan. 22, 1959, gage height, 32.46 ft (9.894 m); minimum daily, 19 ft³/s (0.54 m³/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, 4,260 ft³/s (121 m³/s) Feb. 4, gage height, 9.26 ft (2.822 m); minimum daily, 45 ft³/s (1.27 m³/s) Jan. 17, 18.

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	201	637	1050	423	559	3450	66	3340	2080	1440	316	235
2	198	679	1180	417	2120	3460	75	3390	1180	1190	316	302
3	208	698	781	358	2820	3420	75	3340	916	711	317	383
4	218	667	624	247	3610	3450	322	3330	1010	393	604	1190
5	218	679	548	165	2010	3400	1200	3310	985	472	889	657
6	214	689	472	233	902	3450	2740	2810	1000	514	549	440
7	173	682	563	276	895	3400	3930	2960	1220	513	401	271
8	173	669	1220	291	886	3390	2820	2050	1010	513	401	183
9	173	661	1370	290	844	3400	1450	1080	883	344	400	203
10	170	651	2180	257	663	2850	1010	782	553	236	278	200
11	170	624	1780	210	1350	1780	816	1930	934	255	199	220
12	169	528	1040	193	1780	881	490	3540	2660	256	199	231
13	169	378	1030	192	982	745	224	4010	2810	987	223	231
14	170	376	708	192	794	745	799	3920	650	2280	257	231
15	170	345	528	192	792	648	2300	3890	1090	1500	269	231
16	170	321	656	104	899	608	2840	3910	3170	612	268	335
17	172	323	602	45	2600	610	2830	3830	3480	343	269	397
18	210	424	398	45	3350	600	2820	3690	4030	343	266	256
19	362	502	380	81	2730	589	3190	2760	3970	344	218	221
20	445	416	423	97	531	523	3360	1940	3950	728	196	221
21	304	229	382	97	648	490	3330	1500	4000	1620	166	223
22	191	152	317	97	2030	490	3350	942	3980	1180	133	222
23	170	181	361	96	2820	486	3350	639	3960	679	133	610
24	171	282	342	97	2870	432	3390	640	3950	480	161	124
25	336	467	343	98	3480	405	3380	633	3930	421	176	100
26	347	792	266	103	3480	401	3390	601	3970	319	175	100
27	287	866	279	1590	3430	399	3350	672	3920	478	176	102
28	286	1640	281	1810	3390	399	3360	1410	2490	609	176	101
29	285	1750	262	1080	---	398	3350	1970	1430	604	196	103
30	379	1130	317	859	---	182	3380	1380	930	605	225	103
31	568	---	369	530	---	63	---	1840	---	447	236	---
TOTAL	7477	18438	21052	10765	53265	45544	66987	72039	70141	21416	8788	8426
MEAN	241	615	679	347	1902	1469	2233	2324	2338	691	283	281
MAX	568	1750	2180	1810	3610	3460	3930	4010	4030	2280	889	1190
MIN	169	152	262	45	531	63	66	601	553	236	133	100

CAL YR 1980 TOTAL 389748 MEAN 1065 MAX 4090 MIN 108
WTR YR 1981 TOTAL 404338 MEAN 1108 MAX 4030 MIN 45

MUSKINGUM RIVER BASIN

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03148150 MOXAHALA CREEK NEAR CROOKSVILLE, OH

LOCATION.--Lat 39°43'52", long 82°06'04", Perry County, Hydrologic Unit 05040004, on left bank at upstream side of bridge on county road, 0.1 mi (0.2 km) downstream from Pussy Creek, 0.2 mi (0.3 km) upstream from McLuney Creek and 4.5 mi (7.2 km) south of Crooksville.

DRAINAGE AREA.--28.9 m² (74.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1980 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 760 ft (232 m) from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 720 ft³/s (20.4 m³/s) Aug. 21, 1980, gage height 9.11 ft (2.777 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Aug. 27, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 680 ft³/s (19.3 m³/s) June 14, gage height 9.00 ft (2.743 m); minimum daily 7.0 ft³/s (0.20 m³/s) Aug. 27.

REVISIONS.--The maximum discharge for the period July to September 1980 has been revised to 720 ft³/s (20.4 m³/s) Aug. 21, 1980, gage height 9.11 ft (2.777 m), superseding figure published in the report for 1980.

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	14	10	23	11	56	45	24	176	57	33	12	12
2	14	9.2	21	13	214	42	20	124	46	26	12	10
3	16	8.6	17	16	67	36	18	77	42	24	12	25
4	19	12	17	12	43	34	29	64	40	29	14	18
5	24	10	16	10	32	113	354	55	38	26	14	13
6	21	10	16	9.5	29	82	114	73	140	25	22	10
7	17	12	18	9.0	27	57	72	61	83	23	18	9.2
8	15	17	18	8.8	30	47	57	53	53	24	15	11
9	12	15	38	8.6	34	41	47	47	57	24	13	9.8
10	12	12	41	8.5	30	36	40	43	107	22	12	8.6
11	17	10	30	8.4	59	34	39	241	68	18	14	8.6
12	14	9.2	26	8.4	72	30	178	206	50	16	12	9.2
13	12	9.2	24	8.4	46	27	102	99	92	44	12	9.2
14	12	8.6	20	8.3	37	25	72	87	517	56	12	10
15	12	8.6	20	8.3	39	25	56	136	167	28	12	21
16	12	9.8	29	8.2	57	77	46	84	113	24	11	12
17	12	12	21	8.2	105	57	56	63	102	22	9.2	11
18	35	22	18	8.3	84	42	58	59	68	20	9.8	10
19	24	16	15	8.3	136	39	47	62	57	18	9.8	12
20	17	14	14	8.3	154	37	47	50	49	20	9.2	10
21	15	12	12	8.3	94	33	40	44	53	22	9.2	9.8
22	12	12	12	8.3	69	30	38	39	58	21	9.2	9.2
23	10	12	14	8.3	92	29	140	36	41	16	8.0	9.2
24	10	18	15	9.5	82	26	113	31	35	15	7.5	8.6
25	36	19	11	17	61	24	75	29	35	15	8.0	8.6
26	22	16	11	33	49	22	59	27	31	22	8.0	8.6
27	17	41	10	39	45	31	54	62	28	20	7.0	8.6
28	15	39	9.0	27	45	28	47	119	25	18	7.5	8.6
29	12	30	8.0	24	---	25	49	58	27	18	8.0	8.6
30	11	27	10	25	---	29	43	78	25	15	13	8.6
31	10	---	10	17	---	28	---	94	---	15	15	---
TOTAL	501	461.2	564.0	405.9	1888	1231	2134	2477	2304	719	355.4	328.0
MEAN	16.2	15.4	18.2	13.1	67.4	39.7	71.1	79.9	76.8	23.2	11.5	10.9
MAX	36	41	41	39	214	113	354	241	517	56	22	25
MIN	10	8.6	8.0	8.2	27	22	18	27	25	15	7.0	8.6
CFSM	.56	.53	.63	.45	2.33	1.37	2.46	2.77	2.66	.80	.40	.38
IN.	.64	.59	.73	.52	2.43	1.58	2.75	3.19	2.97	.93	.46	.42
WTR YR 1981	TOTAL	13368.5	MEAN	36.6	MAX	517	MIN	7.0	CFSM	1.27	IN	17.21

03148150 MOXAHALA CREEK NEAR CROOKSVILLE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1980 to September 1981 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1980 to September 1981 (discontinued).

pH: October 1980 to September 1981 (discontinued).

WATER TEMPERATURES: July 1980 to September 1981 (discontinued).

SUSPENDED SEDIMENT DISCHARGE: July 1980 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor and sediment pumping sampler.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,020 micromhos Aug. 26, 1981; minimum, 250 micromhos Aug. 21, 1980.

pH: Maximum, 4.4 units June 14, 15, 1981; minimum, 2.3 units Sept. 29, 1981.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,130 mg/L June 13, 1981; minimum daily mean, 7mg/L Sept. 12, 1981.

SEDIMENT LOADS: Maximum daily, 3,650 tons (3,310 tonnes) June 14, 1981; minimum daily, 0.20 ton (0.18 tonne) Sept. 12, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,020 micromhos Aug. 26; minimum, 410 micromhos Feb. 19.

pH: Maximum, 4.4 units June 14, 15; minimum, 2.3 units Sept. 29.

WATER TEMPERATURES: Maximum, 27.5°C July 9; minimum, 0.0°C many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,130 mg/L June 13; minimum daily mean, 7 mg/L Sept. 12.

SEDIMENT LOADS: Maximum daily, 3,650 tons (3,310 tonnes) June 14; minimum daily, 0.20 ton (0.18 tonne) Sept. 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	
OCT 17...	1415	--	2800	3.1	14.0	--	--	--	--	--	--	0	
NOV 06...	1340	13	2250	3.4	6.5	--	--	--	--	--	--	0	
DEC 03...	1400	14	2420	3.3	2.5	--	--	--	--	--	--	0	
JAN 07...	1000	19	2630	3.2	.0	--	--	--	--	--	--	0	
FEB 18...	1120	86	1090	4.4	3.0	--	--	--	--	--	--	0	
MAR 09...	1140	44	1350	3.8	5.0	--	--	--	--	--	--	0	
APR 15...	1000	53	1340	3.8	10.0	--	--	--	--	--	--	0	
MAY 12...	1230	196	1000	3.7	12.5	--	--	--	--	--	--	0	
JUN 30...	1430	25	2200	3.9	20.0	--	--	--	--	--	--	0	
JUL 07...	1230	26	2100	3.3	--	--	--	--	--	--	--	0	
30...	1200	18	2440	3.5	19.5	1100	1100	190	160	62	5.8	0	
SEP 23...	1000	7.0	2820	3.6	10.5	--	--	--	--	--	--	0	
DATE		CAR- BONATE FET-FLD (MG/L AS C03)	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 SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 17...		0	1500	--	--	--	2390	--	--	--	--	--	--
NOV 06...		0	1500	--	--	--	2310	--	--	--	--	--	--
DEC 03...		0	1300	--	--	--	2010	--	--	--	--	--	--
JAN 07...		0	1400	--	--	--	2180	--	--	--	--	--	--
FEB 18...		0	500	--	--	--	799	--	--	--	--	--	--
MAR 09...		0	710	--	--	--	1130	--	--	--	--	--	--
APR 15...		0	650	--	--	--	1000	--	--	--	--	--	--
MAY 12...		0	440	--	--	--	811	--	--	--	--	--	--
JUN 30...		0	1000	--	--	--	1680	--	--	--	--	--	--
JUL 07...		0	1100	--	--	--	1750	--	--	--	--	--	--
30...		0	1400	76	.6	19	2060	.05	<.010	1	6	<50	1
SEP 23...		0	1700	--	--	--	2510	--	--	--	--	--	--

03148150 MOXAHALA CREEK NEAR CROOKSVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 17...	--	--	--	--	--	--	29000	7000	22000	--	--	--
NOV 06...	--	--	--	--	--	--	39000	11000	28000	--	--	--
DEC 03...	--	--	--	--	--	--	32000	3000	29000	--	--	--
JAN 07...	--	--	--	--	--	--	47000	7000	40000	--	--	--
FEB 18...	--	--	--	--	--	--	20000	8000	12000	--	--	--
MAR 09...	--	--	--	--	--	--	22000	3000	19000	--	--	--
APR 15...	--	--	--	--	--	--	14000	4700	9300	--	--	--
MAY 12...	--	--	--	--	--	--	16000	11000	5500	--	--	--
JUN 30...	--	--	--	--	--	--	23000	9000	14000	--	--	--
JUL 07...	--	--	--	--	--	--	19000	7000	12000	--	--	--
30...	<2	80	10	<10	12	4	21000	0	21000	35000	7	<20
SEP 23...	--	--	--	--	--	--	35000	4000	31000	--	--	--

[illegible]

MUSKINGUM RIVER BASIN

03148150 MOXAHALA CREEK NEAR CROOKSVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	1660	1630	1810	1790				
2			---	---	1650	1630	1840	1790				
3			---	---	1670	1620	1980	1860				
4			---	---	1720	1600	2070	1960				
5			---	---	1730	1710	2150	2000				
6			---	---	1720	1700	2140	2000				
7			2290	2200	1720	1600	2070	1990				
8			2250	2170	1650	1530	2010	1950				
9			2220	2160	1530	1370	2010	1930				
10			2220	2180	1390	1200	2010	1950				
11			2270	2220	1450	1360	1990	1970				
12			2280	2260	1520	1400	2040	1990				
13			2290	2260	1560	1510	2040	1930				
14			2290	2260	1600	1560	2000	1940				
15			2280	2260	1660	1600	1940	1900				
16			2270	2260	1640	1600	1950	1930				
17			2260	2140	1690	1600	1960	1940				
18			2190	2130	1720	1600	1990	1950				
19			2190	2140	1710	1650	2030	1960				
20			2240	2150	1820	1660	2010	1960				
21			2280	2150	1890	1800	---	---				
22			2300	2150	1910	1870	---	---				
23			2170	2110	1910	1810	---	---				
24			2100	1590	1810	1750	---	---				
25			1640	1510	1830	1770	---	---				
26			1790	1600	1920	1840	---	---				
27			1820	1360	1940	1890	---	---				
28			1470	1310	1940	1910	---	---				
29			1560	1410	1930	1820	---	---				
30			1660	1560	1820	1760	---	---				
31			---	---	1860	1760	---	---				
MONTH			2300	1310	1940	1200	2150	1790				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	---	---	1900	1790
2							---	---	---	---	1800	830
3							---	---	---	---	950	730
4							---	---	---	---	1060	930
5							---	---	---	---	1150	1060
6							---	---	---	---	1610	1160
7							---	---	---	---	1820	1600
8							---	---	---	---	1820	1340
9							1920	1880	---	---	1810	1350
10							1950	1900	---	---	1910	1820
11							1980	1940	1920	1900	1940	1900
12							1990	1960	1930	1870	1980	1930
13							1990	1600	1950	1910	2010	1970
14							1620	1400	1970	1930	2040	2000
15							1720	1610	1970	1920	2060	1430
16							1940	1720	1960	1920	1860	1550
17							1950	1930	1970	1930	1880	1530
18							1940	1900	2020	1960	1870	1750
19							1910	1880	2030	2000	1880	1840
20							1970	1460	2040	2010	1970	1870
21							1780	1550	2070	2020	2030	1970
22							1780	1680	2100	2050	2020	1980
23							1900	1800	2110	2080	2040	1990
24							1960	1900	2110	2080	2060	1930
25							2180	1980	2110	2090	2080	2050
26							2200	1250	2130	2100	2080	2000
27							1630	858	2140	2110	2100	1990
28							1660	660	2140	1800	2120	2090
29							---	---	2120	2090	2130	1770
30							---	---	2070	1430	2150	1950
31							---	---	1780	1520	---	---
MONTH							2200	660	2140	1430	2150	730
YEAR	2300	660										

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

MUSKINGUM RIVER BASIN

03148150 MOXAHALA CREEK NEAR CROOKSVILLE, OH--Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	6.5	4.5	1.0	.0	.0	.0	6.5	5.5
2			---	---	7.5	5.5	1.0	.0	.5	.0	5.5	5.0
3			---	---	5.0	2.0	.0	.0	.0	.0	---	---
4			---	---	2.5	.5	.0	.0	.0	.0	---	---
5			---	---	4.0	2.5	.0	.0	.0	.0	---	---
6			---	---	6.5	4.0	.0	.0	.0	.0	---	---
7			11.0	10.0	9.0	6.5	.0	.0	1.0	.0	---	---
8			11.0	9.0	11.0	9.0	.0	.0	1.0	.5	---	---
9			11.0	8.0	10.5	7.0	.0	.0	.5	.0	---	---
10			9.0	6.0	7.0	5.0	.0	.0	.5	.0	---	---
11			6.0	4.5	4.5	3.0	.0	.0	1.0	.5	---	---
12			6.5	4.0	4.5	3.0	.0	.0	.5	.0	---	---
13			7.0	3.5	4.5	3.0	.0	.0	.5	.0	---	---
14			8.0	5.0	3.0	1.5	.0	.0	.5	.0	---	---
15			8.0	6.5	2.5	.0	.0	.0	1.0	.0	---	---
16			7.5	4.5	3.0	2.0	.0	.0	2.5	.5	---	---
17			4.5	.0	2.5	1.0	.0	.0	3.0	1.5	---	---
18			2.5	.5	3.5	1.0	.0	.0	5.5	3.0	---	---
19			2.5	.5	3.5	.0	.0	.0	5.5	5.0	---	---
20			2.0	.0	.0	.0	.0	.0	5.5	4.0	---	---
21			2.0	.0	.0	.0	.0	.0	4.5	4.0	---	---
22			3.0	.5	.0	.0	.5	.0	6.5	4.5	---	---
23			4.0	1.5	.5	.0	1.0	.0	7.0	6.5	---	---
24			5.0	4.0	.5	.0	2.0	.0	6.0	5.0	---	---
25			5.5	4.5	.0	.0	2.0	.0	5.0	4.5	---	---
26			4.5	2.0	.0	.0	2.0	.0	5.0	4.0	---	---
27			4.0	3.0	.0	.0	1.0	.0	5.0	4.0	---	---
28			4.5	4.0	.0	.0	1.5	.0	6.0	5.0	---	---
29			4.0	3.0	.5	.0	1.0	.0	---	---	---	---
30			5.0	3.0	.5	.0	.0	.0	---	---	---	---
31			---	---	1.0	.0	.0	.0	---	---	---	---
MONTH			11.0	.0	11.0	.0	2.0	.0	7.0	.0	6.5	5.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	18.0	14.5	21.5	20.0	22.5	18.0	23.0	19.0
2			---	---	20.5	16.5	22.0	19.0	22.5	19.0	22.0	21.0
3			---	---	20.5	18.5	22.0	18.5	22.0	19.5	21.0	20.0
4			18.0	16.0	21.5	19.0	22.5	19.5	22.0	20.0	21.0	20.0
5			17.5	13.5	20.5	18.0	21.5	20.0	23.0	21.0	21.0	20.0
6			16.5	11.0	20.0	17.5	23.5	20.0	22.5	21.0	21.0	19.5
7			15.0	10.5	20.5	16.5	25.0	20.0	21.5	20.5	20.5	19.5
8			17.0	10.0	20.5	16.5	25.5	20.5	22.0	20.0	20.0	19.0
9			18.0	12.0	21.0	19.0	26.5	22.5	22.0	19.5	19.5	17.0
10			17.5	14.0	20.5	17.0	26.0	23.0	23.5	19.5	18.5	14.5
11			16.5	15.0	19.5	16.0	23.5	19.0	23.5	20.0	21.0	15.5
12			14.5	12.0	21.0	17.0	24.5	19.5	23.0	19.0	22.0	18.0
13			16.5	10.5	20.5	19.0	22.5	20.5	23.0	19.0	22.5	18.5
14			18.0	14.0	21.5	18.5	24.5	21.0	22.5	19.5	21.5	19.0
15			16.5	13.5	23.0	19.5	23.0	18.5	21.5	20.0	20.0	18.0
16			16.0	12.0	23.0	20.0	22.0	19.5	21.5	19.5	18.0	16.0
17			17.0	12.0	21.5	19.5	23.5	18.5	21.0	16.5	17.0	15.0
18			15.5	12.0	21.5	16.5	24.0	19.5	20.0	15.0	15.0	13.0
19			12.5	11.0	22.0	18.0	22.5	20.5	20.5	15.0	16.0	13.0
20			16.5	9.5	22.0	19.0	22.5	21.0	20.5	15.5	17.5	14.0
21			18.5	11.5	20.5	19.0	22.5	21.5	20.0	16.0	17.5	14.0
22			19.5	13.0	22.0	19.0	22.0	20.0	20.5	16.5	16.5	14.0
23			19.0	14.5	21.0	17.0	21.5	17.5	21.0	16.0	14.0	11.0
24			21.5	16.0	21.5	17.5	22.5	18.0	20.5	16.5	14.0	8.5
25			21.0	17.0	21.5	19.0	24.0	19.5	20.0	17.0	15.0	11.0
26			20.0	17.0	20.5	17.5	22.5	21.5	21.0	16.5	18.0	13.5
27			19.0	17.5	19.5	15.5	22.5	21.0	21.5	17.5	18.5	16.0
28			19.0	17.5	21.0	15.5	22.5	21.0	22.5	19.5	16.0	13.0
29			19.5	17.5	22.0	17.0	22.0	19.5	23.0	20.0	13.0	10.5
30			19.0	17.0	22.5	19.5	20.5	17.5	21.5	20.0	14.5	12.5
31			21.5	17.0	---	---	22.0	17.5	21.0	19.5	---	---
MONTH			21.5	9.5	23.0	14.5	26.5	17.5	23.5	15.0	23.0	8.5
YEAR	26.5	.0										

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

03148150 MOXAHALA CREEK NEAR CROOKSVILLE, OH--Continued
 SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	14	40	1.5	10	58	2.8	23	50	3.2
2	14	40	1.5	9.2	62	2.9	21	56	3.2
3	16	40	1.7	8.6	53	2.3	17	58	2.7
4	19	45	2.3	12	57	3.3	17	63	2.8
5	24	50	3.2	10	38	2.1	16	62	2.7
6	21	50	2.8	10	46	2.4	16	53	2.3
7	17	45	2.1	12	67	3.4	18	55	2.7
8	15	40	1.6	17	65	4.2	18	59	2.9
9	12	35	1.5	15	67	4.1	38	60	6.6
10	12	47	1.8	12	38	2.0	41	54	6.3
11	17	63	3.2	10	40	1.9	30	53	4.5
12	14	48	2.0	9.2	44	1.9	26	56	4.0
13	12	41	1.6	9.2	49	1.5	24	54	3.5
14	12	39	1.5	8.6	49	1.1	20	61	3.3
15	12	44	1.6	8.6	54	1.3	20	59	3.2
16	12	31	1.2	9.8	72	2.0	29	144	13
17	12	28	1.1	12	64	2.0	21	58	3.4
18	35	35	3.9	22	57	3.3	18	56	2.7
19	24	40	2.9	16	53	2.3	15	97	4.0
20	17	36	1.9	14	61	2.2	14	136	5.2
21	15	44	2.1	12	65	2.2	12	88	2.8
22	12	35	1.5	12	68	2.1	12	52	1.7
23	10	39	1.5	12	68	2.1	14	62	2.3
24	10	45	1.7	18	66	3.2	15	66	2.6
25	36	198	26	19	56	2.9	11	129	5.6
26	22	52	4.1	16	62	2.6	11	46	1.4
27	17	42	2.5	41	149	21	10	64	2.3
28	15	42	2.4	39	71	8.3	9.0	94	3.1
29	12	48	2.5	30	58	4.9	8.0	108	4.2
30	11	52	2.5	27	50	3.8	10	78	3.3
31	10	56	2.7	---	---	---	10	61	2.5
TOTAL	501	---	90.4	461.2	---	102.1	564.0	---	114.0
JANUARY				FEBRUARY			MARCH		
1	11	65	2.6	56	813	421	45	49	6.7
2	13	67	3.1	214	1460	1210	42	48	6.1
3	16	73	3.8	67	66	13	36	70	7.6
4	12	130	7.1	43	53	6.6	34	583	62
5	10	63	2.0	32	60	5.7	113	822	225
6	9.5	64	2.4	29	48	4.0	82	72	18
7	9.0	69	3.3	27	50	3.9	57	48	8.5
8	8.8	59	2.6	30	59	5.0	47	38	5.6
9	8.6	59	2.6	34	99	9.9	41	45	5.6
10	8.5	68	3.1	30	91	8.0	36	50	5.6
11	8.4	72	3.5	59	110	19	34	48	5.2
12	8.4	58	3.2	72	766	216	30	45	4.3
13	8.4	52	3.3	46	104	13	27	50	4.4
14	8.3	52	3.3	37	87	9.4	25	52	4.1
15	8.3	49	2.8	39	117	13	25	56	4.5
16	8.2	50	2.4	57	211	52	77	113	27
17	8.2	62	2.6	105	390	115	57	51	9.4
18	8.3	61	2.6	84	283	70	42	43	5.9
19	8.3	46	2.1	136	833	355	39	42	5.4
20	8.3	40	1.7	154	567	255	37	50	6.0
21	8.3	60	2.5	94	266	73	33	45	4.9
22	8.3	66	2.8	69	116	24	30	46	4.5
23	8.3	68	2.7	92	196	54	29	49	4.6
24	9.5	66	2.5	82	106	26	26	44	3.9
25	17	78	3.6	61	57	10	24	43	3.5
26	33	91	8.7	49	49	7.2	22	43	3.3
27	39	67	7.7	45	47	6.2	31	62	7.0
28	27	54	4.0	45	56	7.5	28	48	4.9
29	24	66	4.5	---	---	---	25	48	4.6
30	25	43	3.1	---	---	---	29	56	6.2
31	17	50	2.4	---	---	---	28	44	5.0
TOTAL	405.9	---	104.6	1888	---	3012.4	1231	---	479.3

MUSKINGUM RIVER BASIN

03148150 MOXAHALA CREEK NEAR CROOKSVILLE, OH--Continued
 SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	24	40	3.9	176	632	374	57	267	56
2	20	40	3.4	124	97	35	46	41	7.0
3	18	39	3.1	77	65	15	42	46	7.3
4	29	57	10	64	51	10	40	43	6.6
5	354	359	349	55	39	7.0	38	37	5.6
6	114	167	65	73	47	11	140	448	215
7	72	89	24	61	40	7.7	83	64	19
8	57	68	16	53	39	6.8	53	40	8.0
9	47	55	11	47	50	7.8	57	60	13
10	40	54	9.7	43	63	9.3	107	73	25
11	39	85	15	241	546	531	68	48	12
12	178	177	98	206	271	178	50	51	9.9
13	102	88	33	99	124	37	92	6130	2860
14	72	56	16	87	353	90	517	2480	3650
15	56	44	8.8	136	72	29	167	214	114
16	46	39	5.5	84	49	14	113	326	125
17	56	48	8.3	63	41	8.9	102	154	58
18	58	51	9.3	59	40	8.4	68	57	15
19	47	43	6.5	62	41	8.8	57	53	13
20	47	40	6.0	50	39	7.1	49	44	9.6
21	40	54	7.1	44	38	6.3	53	37	8.4
22	38	274	36	39	20	3.0	58	41	10
23	140	612	240	36	30	4.2	41	34	6.6
24	113	158	55	31	32	4.1	35	42	7.3
25	75	45	9.8	29	32	3.8	35	44	7.6
26	59	40	7.1	27	82	8.7	31	375	58
27	54	34	5.5	62	312	46	28	149	22
28	47	35	5.1	119	58	20	25	36	5.1
29	49	41	6.1	58	47	9.4	27	38	5.6
30	43	61	8.1	78	253	83	25	57	6.7
31	---	---	---	94	337	101	---	---	---
TOTAL	2134	---	1081.3	2477	---	1685.3	2304	---	7366.3
JULY				AUGUST				SEPTEMBER	
1	33	54	6.5	12	27	1.1	12	14	.51
2	26	45	4.2	12	31	1.1	10	10	.30
3	24	45	3.9	12	38	1.5	25	33	2.7
4	29	80	8.7	14	34	1.4	18	32	1.8
5	26	66	6.1	14	32	1.3	13	14	.54
6	25	43	3.9	22	88	5.9	10	13	.42
7	23	37	3.1	18	48	2.8	9.2	12	.31
8	24	92	8.1	15	34	1.5	11	10	.31
9	24	69	6.3	13	26	1.0	9.8	14	.40
10	22	34	2.9	12	28	.99	8.6	17	.44
11	18	32	2.4	14	26	1.1	8.6	12	.31
12	16	32	2.4	12	27	1.0	9.2	7	.20
13	44	129	29	12	23	.82	9.2	12	.35
14	56	96	23	12	20	.71	10	10	.33
15	28	43	5.5	12	24	.85	21	24	1.3
16	24	25	2.2	11	22	.71	12	28	1.1
17	22	32	2.0	9.2	29	.81	11	20	.65
18	20	29	1.6	9.8	26	.75	10	27	.83
19	18	29	1.6	9.8	26	.76	12	24	.85
20	20	40	2.3	9.2	23	.64	10	14	.44
21	22	59	3.7	9.2	22	.59	9.8	13	.39
22	21	38	2.3	9.2	21	.55	9.2	11	.30
23	16	30	1.4	8.0	20	.50	9.2	14	.39
24	15	29	1.3	7.5	23	.52	8.6	12	.32
25	15	94	4.3	8.0	23	.56	8.6	22	.57
26	22	153	9.8	8.0	22	.55	8.6	31	.81
27	20	64	4.1	7.0	22	.49	8.6	29	.77
28	18	38	2.1	7.5	18	.41	8.6	28	.75
29	18	29	1.6	8.0	13	.31	8.6	29	.78
30	15	29	1.5	13	10	.40	8.6	31	.81
31	15	27	1.3	15	14	.62	---	---	---
TOTAL	719	---	159.1	355.4	---	32.24	328.0	---	19.98
YEAR	13368.5		14247.02						

MUSKINGUM RIVER BASIN

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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 mi² (19,223 km²).

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.--60 years, 7,585 ft³/s (214.8 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126,000 ft³/s (3,570 m³/s) Jan. 26, 1937, gage height, 21.14 ft (6.443 m); minimum daily, 325 ft³/s (9.20 m³/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 ft³/s (7,650 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50,900 ft³/s (1,440 m³/s) June 14, gage height, 12.42 ft (3.786 m); minimum daily, 1,770 ft³/s (50.1 m³/s) Sept. 30.

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	2850	4470	8710	3700	6250	28400	6020	23500	13900	17000	5740	2430
2	2810	4200	8550	3500	15100	27300	5740	22900	11400	16100	4890	3140
3	2700	4110	8230	3350	18600	24700	5300	19300	10100	14500	4370	4070
4	2690	3990	7940	3200	17900	23800	5390	16900	11500	13300	5360	7890
5	2690	4090	7530	3050	15500	25100	19400	15300	11700	12700	6760	11000
6	2590	4120	6760	2900	11700	24100	20900	14200	16500	10400	5830	10600
7	2510	3960	6310	2850	9930	20300	21500	15100	18100	9260	4780	8440
8	2390	3920	7020	2800	9170	18300	19700	15800	16500	10300	4170	6180
9	2390	3780	8680	2750	8130	17100	15900	13100	16400	12500	3870	5430
10	2350	3540	10800	2700	7490	15800	13300	11600	30700	12500	3590	5030
11	2360	3380	12400	2600	9350	14000	11400	13700	25700	9590	3240	4490
12	2430	3230	11200	2500	13600	12000	25300	19900	24700	10700	3000	4070
13	2350	2930	10000	2510	14600	10500	33700	20100	26700	10900	2920	3730
14	2260	2820	8640	2520	13600	9110	25900	19600	44100	10800	2880	3390
15	2200	2690	7220	2490	11300	8000	24800	22500	25500	8080	2730	3290
16	2200	2880	6800	2410	10600	7870	27000	22600	22100	5610	2680	3360
17	2270	3400	6210	2400	16300	7570	27800	22500	26200	4440	2630	3340
18	2660	3650	5650	2400	21500	7060	27900	20400	27300	4090	2600	3210
19	3350	3830	5190	2400	26000	6780	26400	16900	26600	3830	2500	3130
20	3980	3860	4950	2400	32600	6440	25600	13800	26300	3950	2350	3110
21	3830	3820	4500	2430	29300	6160	24800	11900	26400	6000	2190	3030
22	3440	3650	4250	2540	28300	5950	23400	10100	28300	8430	2050	2800
23	3190	3490	3900	2660	30100	5750	23700	8630	26300	7080	2030	2820
24	3050	3590	3600	2710	30800	5550	23000	7920	25500	5420	2040	2520
25	3450	4250	3450	2710	30300	5340	22000	7330	27100	4560	2050	2230
26	4400	5220	3200	2970	29900	5210	20600	6810	26300	4240	1790	2090
27	4740	6420	3450	4820	29600	5250	19200	7660	25100	6900	1850	2010
28	4860	8120	3600	9320	29000	5250	18100	14100	23800	8240	1800	1930
29	4740	9720	3890	10300	---	6420	17600	15200	20800	7900	1920	1840
30	4650	9490	3850	9320	---	6620	20100	15200	18000	7510	2220	1770
31	4550	---	3800	7060	---	6180	---	14700	---	6900	2290	---
TOTAL	96930	130620	200280	112270	526520	377910	601450	479250	679600	273730	99120	122370
MEAN	3127	4354	6461	3622	18800	12190	20050	15460	22650	8830	3197	4079
MAX	4860	9720	12400	10300	32600	28400	33700	23500	44100	17000	6760	11000
MIN	2200	2690	3200	2400	6250	5210	5300	6810	10100	3830	1790	1770
CAL YR 1980 TOTAL	4131640			11290		47600		2200				
WTR YR 1981 TOTAL	3700050			10140		44100		1770				

MUSKINGUM RIVER BASIN

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, 1,590 mg/L Feb. 21; minimum daily mean, 3 mg/L Dec. 29.

SEDIMENT LOADS: Maximum daily, 126,000 tons (114,000 tonnes) Feb. 21; minimum daily, 40 tons (36 tonnes) Nov. 23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT										
15...	1230	2140	930	7.6	15.5	.80	8.8	88	20	110
NOV										
05...	1115	3940	715	--	10.5	1.0	8.8	78	18	220
DEC										
03...	1245	8290	590	8.0	5.0	3.6	12.7	99	27	1700
JAN										
07...	1205	2580	820	7.8	.0	2.5	15.2	100	16	590
FEB										
11...	1130	8760	510	7.8	.0	16	13.8	94	14	2100
MAR										
10...	1120	15600	455	7.6	6.5	.40	12.3	100	21	900
APR										
09...	1100	16100	380	6.9	13.0	11	9.7	92	33	1200
MAY										
13...	1300	20000	450	7.2	15.0	60	9.4	92	26	1700
JUN										
09...	1135	16000	400	8.2	20.0	95	9.4	100	<10	1300
JUL										
08...	0800	9100	600	8.1	19.5	33	8.7	94	38	480
AUG										
12...	1000	2960	740	8.0	20.5	17	7.4	81	12	78
SEP										
09...	1000	5440	490	7.2	22.0	29	8.7	99	27	700

DATE	STREP- TOCOCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT										
15...	720	350	200	98	26	47	4.6	170	78	.4
NOV										
05...	K33	280	140	74	23	41	5.1	130	61	.3
DEC										
03...	280	220	130	56	20	31	4.0	120	53	.2
JAN										
07...	110	290	150	80	22	42	3.9	140	87	.3
FEB										
11...	1700	220	130	58	19	28	3.3	120	45	.2
MAR										
10...	930	180	94	48	14	18	3.0	94	33	.2
APR										
09...	590	180	120	50	14	19	3.2	84	25	.2
MAY										
13...	600	190	110	49	16	16	2.9	88	26	.2
JUN										
09...	900	150	90	40	13	16	3.3	76	22	.2
JUL										
08...	K22	250	140	67	20	21	3.6	120	33	.2
AUG										
12...	11	300	170	79	24	35	4.5	150	56	.3
SEP										
09...	110	190	120	51	16	18	4.1	85	31	.2

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	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, ORGANIC 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 N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
OCT 15...	3.8	602	525	.54	.58	1.7	7.4	.070	--	--
NOV 05...	7.0	460	431	.29	.42	1.6	7.2	.150	4.6	9700
DEC 03...	7.6	386	354	.49	.66	2.2	9.6	.150	5.1	--
JAN 07...	8.0	512	475	.28	.72	2.3	10	.110	--	--
FEB 11...	7.5	389	344	.57	.82	2.5	11	.100	3.9	--
MAR 10...	7.6	309	277	.53	.73	2.7	12	.130	3.8	5500
APR 09...	8.4	253	248	1.2	1.30	2.8	12	.090	--	--
MAY 13...	8.3	285	281	1.1	1.20	6.8	30	.180	4.9	24000
JUN 09...	8.0	272	223	.75	.82	2.3	10	.230	6.5	15000
JUL 08...	7.6	421	345	--	.64	1.8	8.1	.130	--	29000
AUG 12...	6.2	463	438	.63	.64	1.6	7.2	.080	4.3	140000
SEP 09...	6.8	300	262	.54	.64	1.7	7.7	.120	5.0	20000

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 15...	1230	1	1	100	80	1	1	10	0
JAN 07...	1205	1	1	100	60	0	0	10	<10
APR 09...	1100	1	1	100	40	1	<1	20	10
JUL 08...	0800	2	2	100	50	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 15...	2	2	9	9	730	30	5	5	500
JAN 07...	0	0	10	5	760	10	5	0	620
APR 09...	3	0	11	5	4500	60	31	0	430
JUL 08...	1	0	5	5	2000	<10	13	1	310

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 15...	470	.2	.2	0	0	0	0	50	20
JAN 07...	610	.2	.1	0	0	1	0	10	10
APR 09...	120	7.4	7.4	0	0	0	0	80	20
JUL 08...	40	.2	.2	0	0	0	0	60	<4

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	2850	28	216	4470	18	217	8710	29	673
2	2810	28	212	4200	19	216	8550	22	511
3	2700	27	197	4110	20	216	8230	26	587
4	2690	27	194	3990	20	216	7940	20	419
5	2690	29	211	4090	18	200	7530	29	584
6	2590	69	477	4120	12	138	6760	17	313
7	2510	32	216	3960	12	128	6310	14	239
8	2390	21	135	3920	13	133	7020	14	259
9	2390	23	149	3780	15	152	8680	13	298
10	2350	28	180	3540	12	116	10800	27	806
11	2360	33	207	3380	9	85	12400	32	1080
12	2430	24	155	3230	10	86	11200	35	1070
13	2350	18	112	2930	10	81	10000	37	1010
14	2260	20	124	2820	14	110	8640	35	824
15	2200	21	127	2690	13	93	7220	28	544
16	2200	22	132	2880	13	102	6800	30	557
17	2270	19	117	3400	10	87	6210	27	453
18	2660	19	135	3650	6	63	5650	26	397
19	3350	23	206	3830	6	62	5190	26	361
20	3980	25	273	3860	6	63	4950	16	223
21	3830	24	250	3820	6	62	4500	6	86
22	3440	20	187	3650	6	57	4250	5	76
23	3190	17	147	3490	4	40	3900	6	83
24	3050	22	177	3590	5	53	3600	7	94
25	3450	20	181	4250	10	115	3450	7	102
26	4400	16	195	5220	10	146	3200	8	112
27	4740	15	192	6420	15	259	3450	9	125
28	4860	14	185	8120	29	640	3600	9	121
29	4740	15	197	9720	44	1150	3890	3	43
30	4650	17	210	9490	41	1060	3850	8	113
31	4550	18	215	---	---	---	3800	10	134
TOTAL	96930	---	5911	130620	---	6146	200280	---	12297
JANUARY				FEBRUARY			MARCH		
1	3700	9	125	6250	44	738	28400	57	4400
2	3500	9	125	15100	45	1850	27300	77	5710
3	3350	8	114	18600	41	2050	24700	53	3530
4	3200	8	111	17900	41	1990	23800	51	3290
5	3050	8	111	15500	43	1770	25100	51	3460
6	2900	7	97	11700	44	1380	24100	45	2910
7	2850	7	78	9930	42	1120	20300	43	2370
8	2800	8	66	9170	23	563	18300	27	1350
9	2750	10	80	8130	35	760	17100	38	1740
10	2700	12	96	7490	34	680	15800	38	1580
11	2600	15	113	9350	30	738	14000	40	1510
12	2500	18	125	13600	31	1150	12000	32	1050
13	2510	22	147	14600	36	1430	10500	27	771
14	2520	26	178	13600	34	1260	9110	29	718
15	2490	32	219	11300	87	2610	8000	21	455
16	2410	38	276	10600	366	10500	7870	31	652
17	2400	46	320	16300	393	17200	7570	26	539
18	2400	56	373	21500	411	23900	7060	15	292
19	2400	67	437	26000	592	42000	6780	17	317
20	2400	81	528	32600	935	82000	6440	19	333
21	2430	98	645	29300	1590	126000	6160	10	168
22	2540	119	815	28300	598	45700	5950	29	459
23	2660	126	904	30100	182	14600	5750	35	545
24	2710	52	380	30800	140	11600	5550	27	405
25	2710	59	429	30300	88	7240	5340	15	224
26	2970	50	398	29900	93	7500	5210	11	153
27	4820	39	503	29600	134	10700	5250	14	194
28	9320	46	1160	29000	68	5290	5250	19	275
29	10300	34	944	---	---	---	6420	43	751
30	9320	37	926	---	---	---	6620	48	858
31	7060	40	760	---	---	---	6180	48	794
TOTAL	112270	---	11583	526520	---	424319	377910	---	41803

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	6020	42	686	23500	80	5080	13900	79	2920
2	5740	35	538	22900	65	4030	11400	90	2780
3	5300	33	468	19300	58	3040	10100	88	2420
4	5390	155	2300	16900	68	3090	11500	88	2730
5	19400	212	11100	15300	70	2870	11700	130	4100
6	20900	205	11500	14200	83	3190	16500	142	6290
7	21500	199	11500	15100	91	3700	18100	132	6440
8	19700	133	7060	15800	77	3280	16500	132	5880
9	15900	124	5370	13100	77	2720	16400	190	8410
10	13300	125	4440	11600	59	1850	30700	168	13900
11	11400	331	10100	13700	55	2030	25700	112	7830
12	25300	406	27800	19900	61	3310	24700	111	7410
13	33700	391	35600	20100	109	5910	26700	188	13700
14	25900	335	23600	19600	94	4950	44100	218	25900
15	24800	178	11900	22500	108	6550	25500	209	14400
16	27000	131	9530	22600	93	5700	22100	201	11900
17	27800	125	9350	22500	60	3640	26200	169	11900
18	27900	90	6780	20400	45	2490	27300	166	12300
19	26400	77	5500	16900	45	2050	26600	118	8460
20	25600	62	4270	13800	46	1710	26300	175	12400
21	24800	59	3960	11900	46	1460	26400	87	6220
22	23400	63	3980	10100	66	1790	28300	63	4790
23	23700	65	4160	8630	75	1760	26300	66	4720
24	23000	86	5350	7920	87	1850	25500	74	5100
25	22000	98	5840	7330	84	1660	27100	60	4370
26	20600	94	5250	6810	76	1390	26300	60	4230
27	19200	99	5110	7660	78	1610	25100	71	4800
28	18100	90	4410	14100	82	3120	23800	70	4490
29	17600	92	4370	15200	69	2840	20800	67	3740
30	20100	94	5100	15200	49	2020	18000	67	3240
31	---	---	---	14700	48	1900	---	---	---
TOTAL	601450	---	246922	479250	---	92590	679600	---	227770
JULY			AUGUST			SEPTEMBER			
1	17000	157	7230	5740	26	401	2430	23	152
2	16100	146	6400	4890	24	322	3140	24	203
3	14500	132	5170	4370	24	283	4070	22	237
4	13300	152	5460	5360	24	347	7890	51	1180
5	12700	151	5180	6760	26	472	11000	65	1930
6	10400	124	3490	5830	35	540	10600	62	1770
7	9260	80	2000	4780	37	479	8440	69	1560
8	10300	285	8770	4170	35	389	6180	63	1050
9	12500	739	25000	3870	34	358	5430	56	822
10	12500	686	23100	3590	37	359	5030	60	811
11	9590	505	13000	3240	38	330	4490	57	692
12	10700	379	10600	3000	33	265	4070	61	672
13	10900	68	2060	2920	31	241	3730	59	593
14	10800	37	1090	2880	33	256	3390	24	219
15	8080	45	981	2730	33	241	3290	17	155
16	5610	50	759	2680	35	252	3360	18	163
17	4440	43	521	2630	33	232	3340	20	176
18	4090	48	532	2600	34	239	3210	20	174
19	3830	43	441	2500	44	294	3130	20	169
20	3950	44	471	2350	59	377	3110	20	168
21	6000	40	646	2190	72	428	3030	19	157
22	8430	41	931	2050	68	375	2800	20	150
23	7080	41	776	2030	66	362	2820	21	159
24	5420	42	615	2040	54	297	2520	42	283
25	4560	41	500	2050	30	168	2230	52	312
26	4240	40	456	1790	27	139	2090	53	299
27	6900	39	720	1850	25	125	2010	49	268
28	8240	42	927	1800	22	108	1930	28	148
29	7900	30	642	1920	23	120	1840	21	102
30	7510	25	511	2220	25	148	1770	22	103
31	6900	26	480	2290	26	159	---	---	---
TOTAL	273730	---	129459	99120	---	9106	122370	---	14877
YEAR	3700050		1222783						

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT McCONNELLSVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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					
15...	1230	2140	15.5	14	81
NOV					
05...	1115	3940	10.5	21	223
DEC					
03...	1245	8290	5.0	38	851
JAN					
07...	1205	2580	.0	8	56
FEB					
11...	1130	8760	.0	29	686
MAR					
10...	1120	15600	6.5	116	4890
APR					
09...	1100	16100	13.0	152	6610
MAY					
13...	1300	20000	15.0	161	8690
JUN					
09...	1135	16000	20.0	210	9070
JUL					
08...	0800	9100	19.5	64	1570
AUG					
12...	1000	2960	20.5	32	256
SEP					
09...	1000	5440	22.0	50	734

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 mi² (1,305 km²). 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 hm³) 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 m³). 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 content, 66,440 acre-ft (81.9 hm³) Mar. 8, 1979, elevation, 944.90 ft (288.006 m); minimum, 62 acre-ft (76,400 m³) Oct. 9, 1933, elevation, 896.30 ft (273.192 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 50,820 acre-ft (62.7 hm³) Mar. 2, elevation, 940.01 ft (286.515 m); minimum, 149 acre-ft (184,000 m³) Jan. 18, elevation, 897.54 ft (273.570 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 mi² (125 km²). 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 hm³) 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 hm³) is in the conservation pool. Dead storage below elevation 928.0 ft (282.85 m), 329 acre-ft (406,000 m³). 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 hm³) Apr. 17, 1948, elevation, 969.59 ft (295.531 m); minimum, 41 acre-ft (50,600 m³) 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, 24,710 acre-ft (30.5 hm³) Apr. 17, elevation, 968.12 ft (295.083 m); minimum, 13,760 acre-ft (17.0 hm³) Jan. 2, 22, 24, 25, 26, 957.10 ft (291.724 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 mi² (181 km²). 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 hm³) 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 hm³) is in the conservation pool. Dead storage below elevation 890.0 ft (271.27 m), 8 acre-ft (9,860 m³). 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 hm³) Feb. 8, 1952, elevation, 934.51 ft (284.839 m); minimum, 2.2 acre-ft (2,710 m³) Jan. 8, 9, 1940, elevation, 890.36 ft (271.382 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 31,530 acre-ft (38.9 hm³) June 16, elevation, 932.60 ft (284.256 m); minimum, 12,320 acre-ft (15.2 hm³) Feb. 19, elevation, 919.39 ft (280.230 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 mi² (3,636 km²). 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 hm³) 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 hm³) 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 hm³) July 12, 1969, elevation, 905.00 ft (275.844 m); no contents several days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 36,470 acre-ft (45.0 hm³) Feb. 23, elevation, 892.31 ft (271.976 m); minimum, 0.7 acre-ft (863 m³) Aug. 29, elevation, 865.14 ft (263.695 m).

MUSKINGUM RIVER BASIN

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

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 mi² (777 km²). 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 hm³) 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 hm³) 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 hm³) July 6, 1969, elevation, 976.25 ft (297.561 m); minimum, 1.1 acre-ft (1,360 m³) several days in September and October 1939, elevation, 931.60 ft (283.952 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 18,900 acre-ft (23.3 hm³) June 12, elevation, 963.00 ft (293.522 m); minimum, 1,910 acre-ft (2.36 hm³) Sept. 28-30, elevation, 948.46 ft (289.091 m).

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 mi² (222 km²). 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 hm³) 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 hm³) is in the conservation pool. Dead storage below elevation 881.75 ft (268.757 m), 71 acre-ft (87,500 m³). 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 hm³) Aug. 25, 1980 elevation, 921.55 ft (280.888 m); minimum, 26 acre-ft (32,100 m³) Sept. 18-25, 1939, elevation, 882.25 ft (268.910 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 44,900 acre-ft (55.4 hm³) Apr. 19, 20, elevation, 917.66 ft (279.703 m); minimum, 24,990 acre-ft (30.8 hm³) Jan. 12, 13, elevation, 908.98 ft (277.057 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 mi² (179 km²). 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 hm³) 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 hm³) is in the conservation pool. Dead storage below elevation 862.0 ft (262.74 m) 27 acre-ft (33,300 m³). 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 hm³) Aug. 23, 1980 elevation, 908.99 ft (277.060 m); minimum, 5.9 acre-ft (7,270 m³) Nov. 4, 1938, elevation, 862.33 ft (262.838 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 35,920 acre-ft (44.3 hm³) Apr. 18, 19, elevation, 902.83 ft (275.183 m); minimum, 18,440 acre-ft (22.7 hm³) Dec. 22, elevation, 892.98 ft (272.180 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 mi² (184 km²). 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 hm³) 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 hm³) is in conservation pool. Dead storage below elevation 870.0 ft (265.18 m), 46 acre-ft (56,700 m³). 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 hm³) Aug. 23, 1980, elevation, 905.55 ft (276.012 m); no contents Sept. 29, 1939.

EXTREMES FOR CURRENT YEAR: Maximum contents, 41,860 acre-ft (51.6 hm³) Apr. 18, 19, elevation, 902.04 ft (274.942 m); minimum, 23,620 acre-ft (29.1 hm³) Dec. 29, 31, elevation, 893.98 ft (272.485 m).

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

- 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 mi² (557 km²). 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 hm³) 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 hm³) is in the conservation pool. Dead storage below elevation 987.0 ft (300.84 m), 310 acre-ft (382,000 m³). 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 hm³) Jan. 25, 1959, elevation, 1,013.53 ft (308.924 m); minimum, 733 acre-ft (904,000 m³) Dec. 24, 1965, elevation, 989.89 ft (301.718 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 30,730 acre-ft (37.9 hm³) June 17, elevation, 1,007.70 ft (307.147 m); minimum, 2,640 acre-ft (3.26 hm³) Jan. 20-25, elevation, 993.06 ft (302.685 m).3
- 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 mi² (510 km²). 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 hm³) 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 hm³) is in the conservation pool. Dead storage below elevation 971.75 ft (296.189 m), 12 acre-ft (14,800 m³). 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 hm³) Jan. 23, 1959, elevation, 1,044.01 ft (318.214 m); minimum, 74 acre-ft (91,200 m³) May 8, 1938, elevation, 976.63 ft (297.677 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 30,240 acre-ft (37.3 hm³) June 15, elevation, 1,035.29 ft (315.556 m); minimum, 7,740 acre-ft (9.54 hm³) Jan. 13, elevation, 1,012.03 ft (308.467 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 mi² (702 km²). 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 hm³) 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 m³). 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 (919 hm³) July 7, 1969, elevation, 962.35 ft (293.324 m); minimum, 9.9 acre-ft (12,200 m³) 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, 22,420 acre-ft (27.6 hm³) June 17, elevation, 950.61 ft (289.746 m); minimum, 35 acre-ft (43,160 m³) Aug. 23-27, elevation, 933.23 ft (284.449 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 mi² (115 km²). 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 hm³) 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 m³). Additional flood retention capacity 13,840 acre-ft (17.1 hm³) 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 hm³) Feb. 24, 1975; elevation, 1,134.98 ft (345.942 m); minimum, 761 acre-ft (0.94 hm³) Mar. 28, 1978, elevation, 1,119.72 ft (341.291 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 2,780 acre-ft (3.43 hm³) June 14, elevation, 1,128.59 ft (343.994 m); minimum, 975 acre-ft (1.20 hm³) Aug. 27, elevation, 1,121.21 ft (341.745 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 mi² (3,895 km²). 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 hm³) 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 m³). 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 hm³) Jan. 25, 1959, elevation, 873.94 ft (266.377 m); minimum, 44 acre-ft (54,300 m³) 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, 51,070 acre-ft (63.0 hm³) Feb. 24, 25, elevation, 846.08 ft (257.885 m); minimum, 90 acre-ft (111,000 m³) Aug. 27, elevation, 801.30 ft (244.236 m).

MUSKINGUM RIVER BASIN

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 mi² (306 km²). 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 hm³) 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 hm³) is in conservation pool. Usable capacity at elevation 831.0 ft (253.29 m) (crest of spillway), 37,180 acre-ft (45.8 hm³). Dead storage below elevation 812.05 ft (247.513 m), 1,950 acre-ft (2.40 hm³). 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 hm³) Aug. 15, 16, 1980, elevation, 838.20 ft (255.483 m); minimum, 360 acre-ft (444,000 m³) Oct. 22, 23, 1939, elevation, 812.53 ft (247.659 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 62,300 acre-ft (76.8 hm³) June 17, elevation, 837.47 ft (255.261 m); minimum, 28,400 acre-ft (35.0 hm³) Nov. 11-16, Dec. 20, 21, elevation, 828.17 ft (252.426 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 mi² (412 km²). 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 hm³) 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 hm³). Additional flood-retention capacity, 28,600 acre-ft (35.3 hm³) 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 hm³) Aug. 13, 1980, elevation, 808.48 ft (246.425 m); minimum, 12,200 acre-ft (15.0 hm³) Oct. 17, 1968, elevation, 786.53 ft (239.734 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 61,790 acre-ft (76.2 hm³) Apr. 14, elevation, 805.80 ft (245.608 m); minimum, 40,090 acre-ft (49.4 hm³) Nov. 23, 24, elevation, 799.38 ft (243.651 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 mi² (2,181 km²). 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 hm³) 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 hm³) is in conservation pool. Dead storage below elevation 733.0 ft (223.42 m), 1,580 acre-ft (1.95 hm³). 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 hm³) Mar. 15, 1964, elevation, 776.73 ft (236.747 m); minimum, 300 acre-ft (370,000 m³) Oct. 22, 23, 1939, elevation, 734.10 ft (223.754 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 83,580 acre-ft (103 hm³) June 19, elevation, 766.21 ft (233.541 m); minimum, 4,130 acre-ft (5.09 hm³) Sept. 30, elevation, 741.66 ft (226.58 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 mi² (1,922 km²). 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 hm³) 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 hm³) is in conservation pool. Dead storage below elevation 704.0 ft (214.58 m), 30 acre-ft (37,000 m³). 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 hm³) Mar. 13, 1964, elevation, 772.88 ft (235.574 m); minimum observed, 208 acre-ft (256,000 m³) Mar. 31, 1961, elevation, 710.94 ft (216.694 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 81,400 acre-ft (100 hm³) Apr. 15, elevation, 759.51 ft (231.093 m); minimum, 7,640 acre-ft (9.42 hm³) Dec. 14; elevation, 729.97 ft (223.705 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.....	898.16	203	---	962.62	18790	---	927.71	23160	---
Oct. 31.....	898.51	240	+37	958.16	14660	-4130	924.46	18490	-4670
Nov. 30.....	900.76	540	+300	957.38	14000	-660	922.83	16390	-2100
Dec. 31.....	898.17	204	-336	957.17	13820	-180	922.54	16040	-350
CAL YR 1980	---	---	-1396	---	---	-890	---	---	-2050
Jan. 31.....	899.00	291	+87	957.30	13930	+110	922.84	16400	+360
Feb. 28.....	899.76	50120	+49829	965.72	22010	+8080	931.31	29150	+12750
Mar. 31.....	899.75	388	-49732	962.15	18320	-3690	927.98	23560	-5590
Apr. 30.....	912.36	5320	+4932	965.73	22020	+3700	928.78	24840	+1280
May 31.....	907.31	2700	-2620	963.04	19210	-2810	928.24	23980	-860
June 30.....	898.91	282	-2418	963.15	19320	+110	928.21	23930	-50
July 31.....	898.69	258	-24	962.78	18950	-370	927.94	23500	-430
Aug. 31.....	898.45	233	-25	962.60	18770	-180	927.71	23160	-340
Sept. 30.....	897.88	176	-57	962.66	18830	+60	927.75	23220	+60
WTR YR 1981	---	---	-27	---	---	+40	---	---	+60
03122000 DOVER LAKE				03123500 BEACH CITY LAKE			03125500 PIEDMONT LAKE		
Sept. 30.....	865.44	2.2	---	948.81	2070	---	921.90	33280	---
Oct. 31.....	866.52	16	+13.8	948.91	2120	+50	912.80	33060	-220
Nov. 30.....	867.63	51	+35	949.40	2380	+260	910.55	28160	-4900
Dec. 31.....	866.19	9.2	-41.8	949.09	2210	-170	909.14	25310	-2850
CAL YR 1980	---	---	-189.8	---	---	-340	---	---	-700
Jan. 31.....	866.48	16	+6.8	949.27	2310	+100	909.19	25410	+100
Feb. 28.....	879.32	4520	+4504	950.69	3130	+820	911.82	30880	+5470
Mar. 31.....	868.22	75	-4445	949.00	2160	-970	912.30	31950	+1070
Apr. 30.....	876.76	2350	+2275	951.95	4000	+1840	916.02	40700	+8750
May 31.....	871.09	312	-2038	950.40	2950	-1050	913.08	33690	-7010
June 30.....	868.18	73	-239	949.26	2300	-650	915.80	40150	+6460
July 31.....	866.59	18	-55	948.76	2050	-250	913.42	34470	-5680
Aug. 31.....	865.57	2.8	-15.2	948.59	1970	-80	912.83	33130	-1340
Sept. 30.....	865.19	1.0	-1.8	948.46	1910	-60	912.80	33060	-70
WTR YR 1981	---	---	-1.2	---	---	-160	---	---	-220
03126500 CLENDENING LAKE				03128000 TAPPAN LAKE			03129500 CHARLES MILL LAKE		
Sept. 30.....	897.80	26130	---	898.96	34260	---	977.12	7260	---
Oct. 31.....	897.86	26240	+110	898.98	34310	+50	997.22	7400	+140
Nov. 30.....	895.67	22540	-3700	895.70	27120	-7190	997.00	7090	-310
Dec. 31.....	893.27	18850	-3690	893.99	23640	-3480	994.72	4280	-2810
CAL YR 1980	---	---	+250	---	---	-1070	---	---	-4660
Jan. 31.....	893.39	19020	+170	894.14	23930	+290	995.26	5010	+730
Feb. 28.....	896.93	24650	+5630	900.02	36800	+12870	1000.64	12740	+7730
Mar. 31.....	897.24	25180	+530	898.81	33920	-2880	997.40	7650	-5090
Apr. 30.....	900.93	32040	+6860	899.35	35190	+1270	998.15	8720	+1070
May 31.....	898.24	26930	-5110	899.53	35630	+440	997.34	7570	-1150
June 30.....	899.05	28470	+1540	899.40	35310	-320	998.27	8900	+1330
July 31.....	898.05	26570	-1900	899.42	35360	+50	997.24	7430	-1470
Aug. 31.....	897.56	25720	-850	898.87	34060	-1300	997.29	7500	+70
Sept. 30.....	897.70	25960	+240	898.94	34220	+160	997.10	7230	-270
WTR YR 1981	---	---	-170	---	---	-40	---	---	-30
03143000 WILLS CREEK LAKE				03142290 SALT FORK RESERVOIR			03141000 SENECAVILLE LAKE		
Sept. 30.....	742.22	4640	---	800.82	44490	---	832.25	41480	---
Oct. 31.....	743.13	5550	+910	800.64	43930	-560	829.22	31480	-10000
Nov. 30.....	744.30	6960	+1410	799.74	41170	-2760	828.52	29420	-2060
Dec. 31.....	742.44	4850	-2110	800.85	44580	+3410	828.30	28780	-640
CAL YR 1980	---	---	-2220	---	---	-2130	---	---	-350
Jan. 31.....	743.43	5900	+1050	801.15	45530	+950	828.79	30200	+1420
Feb. 28.....	758.90	45100	+39200	802.41	49640	+4110	830.74	36330	+6130
Mar. 31.....	743.11	5530	-39570	801.13	45470	-4170	829.59	32630	-3700
Apr. 30.....	750.33	17480	+11950	801.05	45210	-260	832.26	41510	+8880
May 31.....	743.81	6340	+11140	801.05	45210	0	832.75	43270	+1760
June 30.....	758.19	42120	+35780	801.74	47420	+2210	834.92	51630	+8360
July 31.....	743.19	5620	-36500	800.85	44580	-2840	832.42	42090	-9540
Aug. 31.....	742.09	4510	-1110	800.29	42850	-1730	831.98	40510	-1580
Sept. 30.....	741.66	4130	-380	800.30	42880	+30	832.19	41260	+750
WTR YR 1981	---	---	-510	---	---	-1610	---	---	-220

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)
03133000 PLEASANT HILL LAKE				03134500 MOHICANVILLE RESERVOIR			03138000 MOHAWK RESERVOIR		
Sept. 30.....	1019.43	13040	---	933.47	44	---	801.89	123	---
Oct. 31.....	1015.71	10160	-2880	933.52	46	+2	803.22	215	+92
Nov. 30.....	1013.08	8400	-1760	934.06	68	+22	803.83	266	+50
Dec. 31.....	1012.38	7960	-440	933.77	56	-12	803.55	242	-23
CAL YR 1980	---	---	-1290	---	---	-150	---	---	-650
Jan. 31.....	1012.72	8170	+210	934.91	115	+59	803.86	268	+26
Feb. 28.....	1023.60	16770	+8600	946.11	8060	+7945	840.20	35140	+34872
Mar. 31.....	1018.97	12660	-4110	934.41	88	-7972	804.00	279	-34861
Apr. 30.....	1020.67	14120	+1460	944.14	4180	+4092	809.50	970	+691
May 31.....	1019.85	13390	-730	934.18	75	-4105	805.05	378	-592
June 30.....	1020.27	13760	+370	947.79	12570	+12495	808.26	773	+395
July 31.....	1019.56	13150	-610	933.45	44	-12526	802.61	170	-603
Aug. 31.....	1020.93	14350	+1200	935.31	141	+97	802.62	171	+1
Sept. 30.....	1019.40	13020	-1330	933.28	37	-104	801.56	104	-67
WTR YR 1981	---	---	-20	---	---	-7	---	---	-19

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03136300 KOKOSING RIVER LAKE				03147300 DILLON LAKE		
Sept. 30.....	1121.34	996	---	737.14	17680	---
Oct. 31.....	1121.44	1010	+14	736.96	17400	-280
Nov. 30.....	1121.74	1060	+50	730.42	8820	-8580
Dec. 31.....	1121.50	1020	-40	730.41	8810	-10
CAL YR 1980	---	---	-56	---	---	-4780
Jan. 31.....	1121.66	1050	+30	734.25	13460	+4650
Feb. 28.....	1122.08	1120	+70	753.76	59840	+46380
Mar. 31.....	1121.67	1050	-70	735.45	15140	-44700
Apr. 30.....	1122.21	1140	+90	747.46	39630	+24490
May 31.....	1121.69	1050	-90	739.02	20790	-18840
June 30.....	1121.62	1040	-10	738.30	19570	-1220
July 31.....	1121.36	999	-41	738.24	19470	-100
Aug. 31.....	1122.25	1150	+151	738.29	19550	+80
Sept. 30.....	1121.24	980	-170	738.04	19130	-420
WTR YR 1981	---	---	-16	---	---	+1450

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 mi² (231 km²).

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 fair except those for periods of no gage height record, Dec. 7 to Feb. 9 and Apr. 1 to May 4, which are poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--42 years, 89.6 ft³/s (2.537 m³/s), 13.67 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/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 ft³/s (122 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.0 ft³/s (0.085 m³/s) Dec. 29, 1947, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) June 14, gage height, unknown, no peak above base of 1,900 ft³/s (53.8 m³/s); minimum 15 ft³/s (0.42 m³/s) Aug. 27.

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	29	31	58	37	250	136	74	250	180	74	27	21
2	29	28	51	35	430	109	65	340	130	52	27	20
3	30	27	46	34	250	96	80	190	125	50	27	48
4	29	35	45	35	135	95	200	115	135	49	30	32
5	29	33	46	42	95	306	740	59	300	52	31	25
6	28	30	49	36	82	209	450	146	660	48	41	23
7	28	30	54	36	75	150	290	136	400	43	28	22
8	28	32	62	37	72	122	170	100	280	41	26	24
9	28	31	110	37	68	107	115	85	290	39	25	23
10	27	29	95	35	76	100	105	80	305	35	25	22
11	26	25	74	33	172	91	170	595	275	33	33	21
12	25	25	62	32	105	83	370	535	210	33	30	19
13	25	27	56	33	140	80	380	260	350	41	30	19
14	24	28	51	34	95	70	260	430	1030	62	23	23
15	24	27	47	35	90	70	175	740	740	34	21	40
16	24	27	43	35	200	163	135	350	430	33	23	23
17	26	30	40	34	325	115	150	260	260	33	21	21
18	38	37	36	33	340	96	160	200	138	32	20	22
19	32	33	34	33	475	88	140	165	115	30	19	23
20	28	31	40	35	560	82	120	140	96	37	19	21
21	25	35	50	36	475	77	100	117	101	44	19	21
22	24	32	54	36	340	70	150	103	133	48	19	21
23	23	32	45	34	310	67	340	91	82	33	21	21
24	30	41	36	31	330	63	330	82	74	32	20	20
25	43	47	34	50	210	67	200	74	71	30	19	20
26	41	40	38	88	150	57	145	71	62	30	18	21
27	33	106	36	115	122	106	125	129	58	31	20	21
28	29	117	33	80	134	83	110	253	57	30	23	20
29	27	77	35	55	---	79	100	145	50	30	21	19
30	25	65	37	45	---	100	165	253	48	28	25	21
31	29	---	37	90	---	86	---	293	---	27	25	---
TOTAL	886	1188	1534	1361	6106	3223	6114	6787	7185	1214	756	697
MEAN	28.6	39.6	49.5	43.9	218	104	204	219	240	39.2	24.4	23.2
MAX	43	117	110	115	560	306	740	740	1030	74	41	48
MIN	23	25	33	31	68	57	65	59	48	27	18	19
CFSM	.32	.45	.56	.49	2.45	1.17	2.29	2.46	2.70	.44	.27	.26
IN.	.37	.50	.64	.57	2.55	1.35	2.56	2.84	3.00	.51	.32	.29

CAL YR 1980 TOTAL 37155 MEAN 102 MAX 1010 MIN 23 CFSM 1.15 IN 15.53
WTR YR 1981 TOTAL 37051 MEAN 102 MAX 1030 MIN 18 CFSM 1.15 IN 15.49

HOCKING RIVER BASIN

03157500 HOCKING RIVER AT ENTERPRISE, OH

LOCATION.--Lat 39°33'54", long 82°28'29", 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 mi² (1,189 km²).

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. Flood flow affected by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm³) constructed between 1955 and 1961 upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--51 years, 462 ft³/s (13.08 m³/s), 13.67 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,000 ft³/s (736 m³/s) Mar. 10, 1964, gage height, 21.31 ft (6.495 m), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of contracted-opening and slope-area measurement of peak flow; minimum daily, 23 ft³/s (0.65 m³/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 ft³/s (1,020 m³/s), from reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s (99.1 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 19	1900	3520 99.7	8.97 2.734	May 15	0600	4180 118	10.09 3.075
Apr. 5	1000	5140 146	11.47 3.476	June 6	1600	5530 157	11.92 3.633
May 12	0100	4030 114	9.83 2.996	June 15	0800	*6070 172	12.56 3.828

Minimum daily discharge, 69 ft³/s (1.95 m³/s) Sept. 30.

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	139	131	292	165	523	698	409	1290	1050	315	124	103
2	139	129	267	152	2680	590	358	1950	706	318	118	98
3	141	124	240	150	1400	508	333	1370	610	254	116	220
4	139	147	210	148	800	461	450	831	706	238	126	243
5	135	145	207	145	550	1190	4370	633	665	284	155	149
6	131	137	212	142	472	1510	3320	896	4250	243	164	116
7	129	129	220	140	393	947	1810	938	3110	220	160	104
8	129	133	230	140	430	710	1100	649	1900	203	139	106
9	128	129	361	138	345	598	792	531	1450	195	129	103
10	124	131	625	138	354	535	610	472	1600	186	124	96
11	124	126	433	137	938	490	554	2210	1680	173	115	91
12	118	116	351	137	527	447	1950	3390	1300	168	109	86
13	118	116	315	136	846	409	2320	2710	938	182	106	86
14	118	116	276	136	562	367	1590	1620	5000	698	104	86
15	118	116	254	135	386	342	961	3740	5720	327	103	155
16	116	115	254	135	653	774	714	2240	3290	212	103	113
17	115	122	235	135	1840	766	748	1390	2120	188	99	98
18	175	155	215	135	1640	562	942	1010	1320	170	96	94
19	177	160	207	135	2390	494	787	1040	854	160	93	94
20	143	149	162	135	3150	450	685	809	673	173	91	94
21	129	143	240	135	2800	423	566	637	562	195	89	90
22	122	139	270	135	1810	383	497	531	938	200	89	85
23	118	137	188	135	1580	364	1750	465	606	166	89	82
24	116	170	170	135	1740	336	1900	413	443	149	88	79
25	196	225	160	138	1210	315	1180	373	393	141	88	77
26	235	195	184	333	858	295	824	351	358	139	86	74
27	170	364	166	714	690	436	710	516	312	191	86	73
28	153	637	155	465	669	436	586	1530	287	166	101	71
29	147	403	155	342	---	377	566	1010	267	170	91	70
30	141	339	165	259	---	436	570	877	257	145	98	69
31	133	---	170	243	---	486	---	1960	---	131	111	---
TOTAL	4316	5378	7589	5848	32236	17135	33952	38382	43365	6700	3390	3105
MEAN	139	179	245	189	1151	553	1132	1238	1446	216	109	104
MAX	235	637	625	714	3150	1510	4370	3740	5720	698	164	243
MIN	115	115	155	135	345	295	333	351	257	131	86	69
CFSM	.30	.39	.53	.41	2.51	1.21	2.47	2.70	3.15	.47	.24	.23
IN.	.35	.44	.62	.47	2.61	1.39	2.75	3.11	3.51	.54	.27	.25

CAL YR 1980 TOTAL 225574 MEAN 616 MAX 5490 MIN 115 CFSM 1.34 IN 18.28
WTR YR 1981 TOTAL 201396 MEAN 552 MAX 5720 MIN 69 CFSM 1.20 IN 16.32

HOCKING RIVER BASIN

185

03158195 SNOW FORK MONDAY CREEK AT BUCHTEL, OH

LOCATION.--Lat 39°27'51", long 82°10'16", Athens County, Hydrologic Unit 05030204, on right bank at the upstream abutment of bridge on State Route 685, at the Corporation limits of the Village of Buchtel, 0.3 mi (0.5 km) east of State Route 78.

DRAINAGE AREA.--24.4 m² (63.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1981 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 670 ft (204 m) from topographic map.

REMARKS.--Record fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) June 6, 1981, gage height, 11.36 ft (3.463 m); minimum daily, 3.3 ft³/s (0.09 m³/s) Sept. 13, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, during period April to September, 1,030 ft³/s (29.2 m³/s) June 6, gage height, 11.36 ft (3.463 m); minimum daily, 3.3 ft³/s (0.09 m³/s) Sept. 13.

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							27	157	49	22	8.1	4.6
2							26	96	42	19	7.3	4.6
3							25	61	42	18	7.3	8.6
4							40	50	243	17	7.3	8.1
5							410	44	123	17	7.3	5.2
6							91	49	620	17	9.0	4.6
7							58	46	156	14	8.1	4.3
8							47	38	81	11	7.0	4.3
9							42	33	76	15	6.6	3.8
10							37	30	80	14	6.2	3.5
11							35	312	64	13	5.9	3.5
12							101	148	54	14	5.9	3.5
13							71	73	53	17	5.9	3.3
14							54	63	380	21	5.9	3.5
15							44	110	82	13	5.9	5.6
16							31	68	80	13	5.9	4.0
17							46	54	53	12	5.6	3.5
18							63	49	42	12	5.2	3.8
19							51	55	35	11	5.2	4.6
20							46	49	30	11	5.2	4.3
21							40	43	30	10	5.2	4.3
22							38	37	32	10	5.2	4.3
23							164	35	34	11	5.2	3.8
24							108	32	28	10	4.6	3.8
25							64	31	23	9.9	4.6	3.8
26							51	29	22	9.9	4.6	3.8
27							46	70	20	9.9	4.6	3.8
28							41	169	19	11	4.3	3.8
29							38	55	18	11	4.3	3.5
30							35	56	18	9.4	4.6	3.5
31							---	70	---	8.1	5.2	---
TOTAL							1970	2212	2629	411.2	183.2	129.6
MEAN							65.7	71.4	87.6	13.3	5.91	4.32
MAX							410	312	620	22	9.0	8.6
MIN							25	29	18	8.1	4.3	3.3
CFSM							2.59	2.93	3.59	.55	.24	.18
IN.							3.00	3.37	4.01	.63	.28	.20

HOCKING RIVER BASIN

03158195 SNOW PORK MONDAY CREEK AT BUCHTEL, OH

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years April 1981 to September 1981 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1981 to September 1981 (discontinued).

pH: April 1981 to September 1981 (discontinued).

WATER TEMPERATURES: April 1981 to September 1981 (discontinued).

SUSPENDED SEDIMENT DISCHARGE: April 1981 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor since April 1981.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,250 micromhos July 13, 1981; minimum 177 May 11, 1981.

pH: Maximum, 5.3 units April 23, 1981; minimum, 2.7 units July 13, 1981.

WATER TEMPERATURES: Maximum, 23.0°C July 9, 14, Aug. 4, 5, 1981; minimum, 6.5°C April 7, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,250 micromhos July 13; minimum 177 May 11.

pH: Maximum, 5.3 units April 23; minimum 2.7 units July 13.

WATER TEMPERATURES: Maximum, 23.0°C July 9, 14, Aug. 4, 5; minimum, 6.5 April 7.

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L AS CAC03)	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)
APR 01...	1410	29	966	3.4	15.0	--	--	--	--	--	--	0
MAY 06...	1115	50	930	3.6	13.0	--	--	--	--	--	--	0
JUN 01...	1545	45	900	3.7	15.0	--	--	--	--	--	--	0
JUL 14...	1300	16	1230	3.2	20.0	--	--	--	--	--	--	0
30...	1645	8.3	1600	3.1	20.0	510	510	100	62	33	3.2	0
AUG 25...	1400	3.9	1800	3.0	20.0	550	550	110	66	36	--	0
SEP 17...	1320	3.9	1830	2.8	15.0	--	--	--	--	--	--	0
DATE	CARBONATE FET-FLD (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	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 (MG/L AS N)	PHOSPHORUS, (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
APR 01...	0	410	--	--	--	654	--	--	--	--	--	--
MAY 06...	0	370	--	--	--	610	--	--	--	--	--	--
JUN 01...	0	360	--	--	--	650	--	--	--	--	--	--
JUL 14...	0	520	--	--	--	868	--	--	--	--	--	--
30...	0	760	27	.3	40	1250	.08	<.010	1	5	100	2
AUG 25...	0	930	16	--	46	--	--	--	--	--	--	--
SEP 17...	0	730	--	--	--	1400	--	--	--	--	--	--
DATE	CADMIUM RECOV. FM BOT-TOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOT-TOM MATERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MATERIAL (UG/G AS PB)
APR 01...	--	--	--	--	--	--	8300	200	8100	--	--	--
MAY 06...	--	--	--	--	--	--	12000	2900	9100	--	--	--
JUN 01...	--	--	--	--	--	--	9400	300	9100	--	--	--
JUL 14...	--	--	--	--	--	--	12000	1000	11000	--	--	--
30...	<2	50	10	<10	17	7	18000	1000	17000	46000	10	17
AUG 25...	--	--	--	--	--	--	19000	1000	18000	--	--	--
SEP 17...	--	--	--	--	--	--	41000	23000	18000	--	--	--

03158195 SNOW FORK MONDAY CREEK AT BUCHTEL, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	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)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	CYANIDE TOTAL (MG/L AS CN)
APR 01...	3100	0	3100	--	--	--	--	--	--	--	--	--
MAY 06...	2900	0	2900	--	--	--	--	--	--	--	--	--
JUN 01...	3100	100	3000	--	--	--	--	--	--	--	--	--
JUL 14...	4000	300	3700	--	--	--	--	--	--	--	--	--
30...	5900	100	5800	54	<.1	<.01	<1	<1	<1	430	20	<.01
AUG 25...	6000	0	6300	--	--	--	--	--	--	--	--	--
SEP 17...	7000	0	7000	--	--	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1000	942	1130	357	---	---	1470	1380	---	---	---	---
2	1060	1000	732	486	1020	927	1470	1400	---	---	---	---
3	1110	1060	882	741	---	---	1490	1470	---	---	---	---
4	1120	840	987	888	---	---	1500	1470	---	---	---	---
5	---	---	1040	984	---	---	1500	1480	---	---	---	---
6	753	705	1020	888	---	---	1510	1480	---	---	---	---
7	891	762	1010	897	---	---	1530	1510	---	---	---	---
8	987	891	1090	1010	---	---	1540	1530	---	---	---	---
9	1030	993	1130	1080	---	---	1590	1540	---	---	---	---
10	1090	1040	1150	1120	---	---	1570	1560	---	---	---	---
11	1100	1040	1110	177	---	---	1590	1570	---	---	---	---
12	1030	462	---	---	---	---	1600	1590	---	---	---	---
13	744	546	---	---	---	---	2250	1450	---	---	---	---
14	870	750	---	---	---	---	1490	1160	---	---	---	---
15	987	876	735	513	---	---	---	---	---	---	---	---
16	1060	990	891	756	---	---	---	---	---	---	---	---
17	1040	804	996	894	---	---	---	---	---	---	---	---
18	810	684	1040	948	---	---	---	---	---	---	---	---
19	867	768	933	882	---	---	---	---	---	---	---	---
20	927	852	1030	921	---	---	---	---	---	---	---	---
21	1020	939	1120	1040	---	---	---	---	---	---	---	---
22	1060	1000	1170	1120	---	---	---	---	---	---	---	---
23	996	369	1230	1160	---	---	---	---	---	---	1870	1820
24	681	450	1280	1230	---	---	---	---	---	---	1880	1860
25	846	687	1320	1280	---	---	---	---	---	---	1890	1860
26	921	846	1340	1260	---	---	---	---	---	---	1870	1850
27	999	915	1240	357	---	---	---	---	---	---	1890	1870
28	1070	1000	---	---	---	---	---	---	---	---	1910	1890
29	1090	1070	---	---	---	---	---	---	---	---	1920	1900
30	1140	1100	---	---	1390	1380	---	---	---	---	1910	1890
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	1140	369	1340	177	1390	927	2250	1160	---	---	1920	1820
YEAR	2250	177	---	---	---	---	---	---	---	---	---	---

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

HOCKING RIVER BASIN

03158195 SNOW FORK MONDAY CREEK AT BUCHEL, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.5	3.5	5.2	3.3	---	---	3.2	3.1	---	---	2.8	2.8
2	3.5	3.4	4.6	3.9	3.6	3.5	3.1	3.1	---	---	2.8	2.8
3	3.4	3.4	3.9	3.6	---	---	3.1	3.1	---	---	2.9	2.8
4	3.5	3.4	3.6	3.5	---	---	3.1	3.1	2.9	2.9	2.9	2.9
5	---	---	3.5	3.4	---	---	3.1	3.1	2.9	2.9	2.9	2.8
6	4.0	3.8	3.6	3.4	---	---	3.1	3.1	2.9	2.9	2.8	2.8
7	3.8	3.6	3.6	3.4	---	---	3.1	3.0	2.9	2.9	2.8	2.8
8	3.6	3.5	3.5	3.3	---	---	3.1	3.0	2.9	2.9	2.8	2.8
9	3.5	3.4	3.4	3.3	---	---	3.0	3.0	2.9	2.9	2.8	2.8
10	3.4	3.4	3.3	3.3	---	---	3.0	3.0	2.9	2.8	2.8	2.8
11	3.4	3.4	---	---	---	---	3.1	3.0	2.9	2.8	2.8	2.8
12	5.0	3.4	---	---	---	---	3.0	3.0	2.9	2.8	2.8	2.8
13	4.5	3.9	---	---	---	---	3.1	2.7	2.9	2.8	2.8	2.8
14	3.9	3.7	---	---	---	---	3.4	3.0	2.8	2.8	2.8	2.8
15	3.6	3.5	4.8	3.9	---	---	3.1	3.0	2.8	2.8	2.8	2.8
16	3.5	3.3	3.9	3.6	---	---	3.0	3.0	2.8	2.8	2.8	2.8
17	3.8	3.5	---	---	---	---	3.1	3.0	2.9	2.8	2.8	2.8
18	4.5	3.8	---	---	---	---	---	---	2.9	2.8	2.8	2.8
19	3.8	3.7	---	---	---	---	---	---	2.9	2.8	2.8	2.8
20	4.0	3.6	3.6	3.4	---	---	---	---	2.8	2.8	2.8	2.8
21	3.6	3.5	3.4	3.3	---	---	---	---	2.9	2.8	2.8	2.8
22	3.5	3.4	3.4	3.3	---	---	---	---	2.9	2.8	2.8	2.8
23	5.3	3.5	3.3	3.2	---	---	---	---	2.8	2.8	2.8	2.8
24	4.9	4.1	3.3	3.2	---	---	---	---	2.8	2.8	2.8	2.8
25	4.1	3.7	3.2	3.2	---	---	---	---	2.8	2.8	2.8	2.8
26	3.7	3.6	3.2	3.2	---	---	---	---	2.8	2.8	2.8	2.8
27	3.6	3.4	3.4	3.2	---	---	---	---	2.8	2.8	2.8	2.8
28	3.4	3.3	---	---	---	---	---	---	2.8	2.8	2.8	2.8
29	3.4	3.4	---	---	---	---	---	---	2.8	2.8	2.8	2.8
30	3.4	3.3	---	---	3.2	3.1	---	---	2.8	2.8	2.8	2.8
31	---	---	---	---	---	---	---	---	2.8	2.8	---	---
MONTH	5.3	3.3	5.2	3.2	3.6	3.1	3.4	2.7	2.9	2.8	2.9	2.8
YEAR	5.3	2.7										

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

03158195 SNOW FORK MONDAY CREEK AT BUCHTEL, OH--Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16.0	10.0	13.5	11.0	---	---	20.0	17.0	21.5	17.0	22.5	19.5
2	16.5	9.0	13.0	9.0	18.0	14.0	19.5	17.0	22.5	18.5	22.5	20.5
3	16.0	9.0	16.5	8.5	---	---	20.0	17.0	21.5	19.0	21.5	20.5
4	15.0	12.5	17.0	10.0	---	---	20.0	17.0	23.0	19.5	22.0	20.0
5	---	---	16.0	12.5	---	---	19.0	17.5	23.0	20.0	22.5	19.0
6	12.5	9.0	14.5	11.0	---	---	20.0	17.5	21.5	20.0	21.5	18.5
7	14.0	6.5	16.0	8.5	---	---	22.0	18.0	20.5	19.0	21.0	18.5
8	16.0	9.0	17.5	9.5	---	---	22.0	19.0	21.0	18.0	21.0	18.5
9	16.5	12.5	17.0	11.0	---	---	23.0	19.5	21.5	18.5	19.0	15.5
10	13.5	8.5	16.5	13.5	---	---	22.5	20.0	22.0	18.0	18.0	13.0
11	16.5	11.5	15.0	13.0	---	---	21.0	16.0	21.0	19.0	19.5	15.0
12	16.0	13.5	---	---	---	---	21.0	17.5	20.5	17.0	21.5	17.5
13	17.5	13.0	---	---	---	---	22.5	18.5	21.0	17.0	21.5	17.0
14	15.5	12.0	---	---	---	---	23.0	19.0	21.5	18.0	20.5	18.0
15	15.5	8.5	14.0	12.0	---	---	21.5	17.0	20.5	19.5	20.0	18.0
16	15.0	8.0	15.5	11.0	---	---	20.5	18.5	21.5	19.0	18.0	15.0
17	14.5	12.5	16.5	10.5	---	---	21.0	17.5	19.5	16.0	17.0	14.0
18	18.0	12.5	14.5	11.0	---	---	22.0	17.5	19.0	14.5	14.0	12.5
19	14.0	10.5	12.0	10.5	---	---	21.5	18.5	19.5	14.5	15.5	12.0
20	14.5	10.5	16.5	9.5	---	---	21.5	19.0	19.5	15.5	16.5	13.0
21	14.5	7.5	17.5	10.5	---	---	22.0	19.5	18.5	16.0	18.0	14.5
22	13.0	9.5	18.5	11.5	---	---	21.0	18.0	20.0	15.5	20.0	15.5
23	13.5	12.0	18.5	13.0	---	---	20.0	16.0	20.0	15.5	16.0	7.5
24	12.0	9.0	20.0	14.0	---	---	21.0	17.5	20.0	16.0	14.0	9.5
25	13.0	8.0	19.5	14.5	---	---	22.0	18.5	21.0	17.0	14.0	11.0
26	13.5	8.0	18.5	14.5	---	---	22.5	20.0	20.5	16.0	17.5	13.0
27	18.5	10.5	17.5	15.5	---	---	21.5	20.0	21.0	16.5	18.0	16.0
28	18.5	13.0	---	---	---	---	22.0	20.0	22.0	18.5	16.0	13.0
29	16.5	14.0	---	---	---	---	22.0	19.0	22.0	19.0	13.0	10.0
30	15.5	12.5	---	---	20.0	19.0	20.0	15.0	21.0	19.0	16.0	12.5
31	---	---	---	---	---	---	21.0	16.0	22.0	19.0	---	---
MONTH	18.5	6.5	20.0	8.5	20.0	14.0	23.0	15.0	23.0	14.5	22.5	7.5
YEAR	23.0	6.5										

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

HOCKING RIVER BASIN

03158195 SNOW PORK MONDAY CREEK AT BUCHTEL, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	27	32	2.4	157	455	289	49	43	5.7
2	26	28	2.0	96	100	26	42	31	3.6
3	25	24	1.6	61	32	5.4	42	48	5.6
4	40	198	99	50	33	4.5	243	712	1070
5	410	1270	2140	44	40	4.8	123	20	6.8
6	91	84	20	49	35	4.7	620	1060	2080
7	58	41	6.4	46	32	4.0	156	118	50
8	47	34	4.3	38	27	2.8	81	55	12
9	42	37	4.0	33	27	2.5	76	60	13
10	37	33	3.1	30	24	2.1	80	90	20
11	35	29	2.7	312	415	592	64	47	8.4
12	101	199	59	148	125	51	54	32	4.8
13	71	50	9.3	73	52	11	53	40	5.9
14	54	34	4.8	63	48	8.6	380	630	755
15	44	34	3.9	110	105	32	82	75	14
16	31	60	5.8	68	48	9.1	80	77	14
17	46	74	9.0	54	36	5.5	53	57	9.7
18	63	140	23	49	44	6.2	42	36	5.1
19	51	42	5.8	55	42	6.6	35	34	4.4
20	46	43	5.3	49	38	5.3	30	34	4.2
21	40	49	5.3	43	36	4.4	30	38	4.7
22	38	43	4.4	37	31	3.3	32	37	5.1
23	164	480	263	35	29	2.8	34	33	4.1
24	108	100	29	32	28	2.6	28	32	3.0
25	64	48	8.3	31	29	2.6	23	30	1.9
26	51	37	5.1	29	28	2.3	22	31	1.8
27	46	30	3.7	70	167	33	20	29	1.6
28	41	30	3.3	169	390	182	19	24	1.2
29	38	30	3.1	55	48	7.5	18	22	1.1
30	35	29	2.7	56	95	---	18	21	1.0
31	---	---	---	70	92	18	---	---	---
TOTAL	1970	---	2739.3	2212	---	1331.6	2629	---	4117.7
JULY				AUGUST			SEPTEMBER		
1	22	21	1.2	8.1	4	.09	4.6	4	.06
2	19	19	.97	7.3	5	.10	4.6	4	.05
3	18	20	.92	7.3	4	.08	8.6	4	.10
4	17	18	.83	7.3	8	.15	8.1	4	.09
5	17	17	.78	7.3	8	.15	5.2	3	.04
6	17	13	.60	9.0	4	.09	4.6	3	.04
7	14	11	.45	8.1	4	.08	4.3	5	.06
8	11	11	.33	7.0	5	.09	4.3	6	.07
9	15	10	.41	6.6	12	.21	3.8	5	.06
10	14	9	.34	6.2	10	.17	3.5	6	.06
11	13	10	.38	5.9	9	.15	3.5	9	.09
12	14	9	.36	5.9	8	.13	3.5	7	.07
13	17	30	1.4	5.9	5	.08	3.3	8	.08
14	21	22	1.2	5.9	6	.09	3.5	5	.05
15	13	16	.60	5.9	7	.11	5.6	3	.04
16	13	10	.35	5.9	7	.10	4.0	3	.03
17	12	8	.26	5.6	5	.07	3.5	7	.06
18	12	8	.26	5.2	6	.08	3.8	6	.06
19	11	6	.18	5.2	5	.07	4.6	12	.15
20	11	4	.12	5.2	4	.05	4.3	7	.08
21	10	4	.12	5.2	6	.08	4.3	4	.05
22	10	3	.08	5.2	4	.05	4.3	6	.07
23	11	3	.09	5.2	7	.09	3.8	5	.05
24	10	5	.14	4.6	7	.08	3.8	6	.06
25	9.9	4	.11	4.6	4	.05	3.8	9	.09
26	9.9	5	.13	4.6	6	.07	3.8	11	.11
27	9.9	7	.19	4.6	4	.04	3.8	11	.11
28	11	8	.24	4.3	7	.08	3.8	7	.07
29	11	4	.12	4.3	8	.11	3.5	5	.05
30	9.4	3	.07	4.6	5	.07	3.5	5	.05
31	8.1	4	.09	5.2	4	.06	---	---	---
TOTAL	411.2	---	13.32	183.2	---	2.92	129.6	---	2.05
PERIOD	7535.0		8206.89						

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 (0.6 km) southeast of Burr Oak, and 3.0 mi (4.8 km) northeast of Glouster.

DRAINAGE AREA.--33.1 mi² (85.7 km²).

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 hm³), of which 9,220 acre-ft (11.4 hm³) is in water supply pool. Dead storage, 35 acre-ft (43,200 m³). 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 hm³) May 31, 1968, elevation, 731.53 ft (222.970 m); minimum, 3,450 acre-ft (4.25 hm³) Nov. 20, 1953, elevation, 709.89 ft (216.374 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 12,610 acre-ft (15.5 hm³) June 16 elevation, 725.61 ft (221.166 m); minimum, 9,160 acre-ft (11.3 hm³) Sept. 30, elevation, 720.90 ft (219.730 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	721.06	9270	---
Oct. 31.....	721.06	9270	0
Nov. 30.....	721.25	9400	+130
Dec. 31.....	721.19	9350	-50
CAL YR 1980.....	---	---	+80
Jan. 31.....	721.16	9330	-20
Feb. 28.....	721.10	9290	-40
Mar. 31.....	721.23	9380	+90
Apr. 30.....	721.16	9330	-50
May 31.....	721.97	9880	+550
June 30.....	721.60	9630	-250
July 31.....	721.51	9570	-60
Aug. 31.....	721.13	9310	-260
Sept. 30.....	720.90	9160	-150
WTR YR 1981.....	---	---	-110

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 mi² (2,479 km²).

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. 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 hm³), 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 hm³), constructed between 1955 and 1961 upstream from Lancaster, and Dow Lake capacity 1,884 acre-ft (2.3 hm³), on Strouds Run, 1.1 mi (1.8 km) upstream.

AVERAGE DISCHARGE.--5 years, 1,269 ft³/s (35.94 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s (725 m³/s) Feb. 27, 1979, gage height, 25.45 ft (7.757 m); minimum daily, 81 ft³/s (2.29 m³/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 ft³/s (932 m³/s). Flood in March 1907 reached a stage of 27 ft (8 m), site and datum then in use, discharge 50,000 ft³/s (1,420 m³/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,360 ft³/s (265 m³/s) June 7, gage height, 22.45 ft (6.843 m); minimum daily, 93 ft³/s (2.63 m³/s) Sept. 30.

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	271	231	965	345	769	1700	1220	1690	3260	820	229	143
2	285	221	776	360	5600	1540	1020	3970	1970	890	215	137
3	290	260	679	330	5700	1360	900	3080	1530	636	208	169
4	290	351	574	310	3140	1210	832	2260	1810	501	206	255
5	285	366	514	300	2370	1670	4290	1700	3420	498	203	320
6	265	366	508	295	2310	3260	7700	1480	5760	533	254	420
7	250	301	521	295	1500	2640	5350	1880	8860	498	242	290
8	234	226	578	290	1100	1870	2890	1630	7340	432	239	235
9	223	226	773	290	1060	1500	2210	1330	3570	380	222	215
10	218	223	1650	285	888	1340	1840	1180	3190	358	206	205
11	213	221	1450	285	1490	1230	1470	1810	3510	329	199	195
12	206	213	1130	285	2190	1140	1650	5900	2760	313	185	182
13	203	216	981	280	2570	1020	3670	6480	2140	686	174	180
14	193	223	802	280	2660	927	3370	3910	4660	1660	163	290
15	188	223	682	280	2510	843	2410	3960	7660	1100	161	230
16	188	226	640	280	1740	1110	1640	5010	8140	587	156	185
17	186	252	640	280	3290	2100	1500	3290	5580	426	150	154
18	218	528	598	275	4150	1630	1960	2240	3320	369	143	133
19	326	488	548	275	3940	1310	1950	2130	2380	334	139	120
20	306	378	482	275	6700	1160	1630	2190	1610	316	135	114
21	244	323	349	275	6900	1080	1540	1700	1320	324	128	114
22	211	287	392	275	4650	989	1280	1410	1500	326	126	112
23	193	271	419	275	3650	915	1720	1230	1580	326	124	106
24	193	334	395	275	4080	866	4900	1090	1130	264	122	101
25	340	450	366	280	3130	799	3420	965	912	264	120	100
26	485	453	351	350	2270	747	2230	873	809	251	118	100
27	438	725	330	934	1750	969	1730	1070	714	249	114	100
28	331	1560	320	1430	1580	1400	1500	3000	626	290	114	96
29	284	1390	310	1100	---	1150	1330	3190	568	303	116	94
30	265	1130	305	839	---	1080	1260	2230	533	290	116	93
31	247	---	320	548	---	1310	---	3210	---	254	128	---
TOTAL	8069	12662	19348	12476	83687	41865	70412	77088	92162	14807	5155	5188
MEAN	260	422	624	402	2989	1350	2347	2487	3072	478	166	173
MAX	485	1560	1650	1430	6900	3260	7700	6480	8860	1660	254	420
MIN	186	213	305	275	769	747	832	873	533	249	114	93
CAL YR 1980	TOTAL	508179	MEAN	1388	MAX	8970	MIN	186				
WTR YR 1981	TOTAL	442919	MEAN	1213	MAX	8860	MIN	93				

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 current year.

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, 5 mg/L Oct. 1-7, 1980.

SEDIMENT LOADS: Maximum daily, 52,200 tons (47,400 tonnes) Feb. 24, 1979; minimum daily 2.3 tons (2.1 tonnes) Sept. 29, 30, 1980.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,580 mg/L June 14; minimum daily mean 5 mg/L Oct. 1-7.

SEDIMENT LOADS: Maximum daily 19,900 tons (18,100 tonnes) June 14; minimum daily 2.3 tons (2.1 tonnes) Sept. 29, 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 17...	0945	184	862	7.6	13.0	.60	10.5	99	8	--
DEC 03...	1345	679	600	7.2	5.0	2.7	11.4	89	15	9300
FEB 02...	1700	6760	250	7.5	2.0	22	13.0	94	52	15000
APR 07...	1700	4310	360	7.5	11.0	16	10.0	90	34	23000
JUN 02...	1100	1930	420	7.0	17.0	65	9.8	100	<10	2600
AUG 06...	1045	251	870	7.6	24.0	15	6.7	79	25	11000

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 17...	2200	360	240	90	33	55	3.5	240	60	.3
DEC 03...	220	230	160	54	22	34	3.0	140	56	.2
FEB 02...	7500	95	60	24	8.6	16	2.9	57	26	.1
APR 07...	1000	150	120	38	14	17	3.1	75	26	.2
JUN 02...	1000	170	100	43	15	16	2.5	77	25	.2
AUG 06...	5600	320	210	80	29	55	3.8	200	81	.3

DATE	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, ORGANIC 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 N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
OCT 17...	7.9	628	570	.35	.37	1.5	6.5	.150	--	1200
DEC 03...	9.7	414	366	.21	.42	1.6	7.2	.080	3.5	--
FEB 02...	6.2	173	167	1.7	1.80	2.7	12	.650	17	--
APR 07...	10	259	224	.82	.95	3.0	13	.060	--	2300
JUN 02...	9.1	290	237	.76	.82	2.7	12	.050	--	1000
AUG 06...	6.7	586	525	.54	.63	1.3	5.8	.220	--	42000

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 17...	0945	1	1	100	60	3	3	<10	0
APR 07...	1700	1	1	100	60	190	190	20	10
JUN 02...	1100	1	1	250	50	1	<1	10	<10
AUG 06...	1045	6	6	100	60	2	2	10	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 17...	4	4	4	4	740	30	2	1	630
APR 07...	8	0	14	12	6800	50	20	0	680
JUN 02...	14	--	11	--	6900	30	6	--	540
AUG 06...	2	2	7	4	1300	10	13	8	310

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 17...	630	.2	.2	0	0	0	0	40	10
APR 07...	400	.2	.2	0	0	0	0	80	80
JUN 02...	100	.2	.2	0	0	0	0	70	10
AUG 06...	190	.1	.1	<1	<1	<1	<1	30	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 17...	0945	184	13.0	20	9.9
DEC 03...	1345	679	5.0	34	62
FEB 02...	1700	6760	2.0	789	14400
APR 07...	1700	4310	11.0	306	3560
JUN 02...	1100	1930	17.0	292	1520
AUG 06...	1045	251	24.0	42	28

HOCKING RIVER BASIN

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03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	271	5	3.7	231	11	6.9	965	43	111
2	285	5	3.8	221	9	5.1	776	38	80
3	290	5	3.9	260	37	31	679	34	63
4	290	5	3.9	351	61	58	574	30	47
5	285	5	3.8	366	43	42	514	33	45
6	265	5	3.6	366	32	31	508	33	46
7	250	5	3.4	301	16	13	521	35	49
8	234	7	4.2	226	13	8.0	578	59	92
9	223	6	3.8	226	15	8.9	773	65	135
10	218	5	3.1	223	15	9.0	1650	60	264
11	213	6	3.6	221	11	6.8	1450	60	233
12	206	7	4.1	213	11	6.5	1130	42	128
13	203	6	3.0	216	12	7.0	981	27	72
14	193	6	3.0	223	12	7.2	802	21	46
15	188	6	3.1	223	12	7.5	682	18	34
16	188	9	4.5	226	21	13	640	19	32
17	186	13	6.4	252	18	13	640	18	31
18	218	13	8.0	528	54	81	598	18	30
19	326	20	18	488	44	59	548	26	38
20	306	15	12	378	27	28	482	37	48
21	244	12	7.9	323	23	20	349	28	26
22	211	11	6.0	287	17	13	392	20	21
23	193	8	4.4	271	25	18	419	24	27
24	193	7	3.5	334	38	35	395	23	25
25	340	26	26	450	34	41	366	21	20
26	485	35	45	453	30	37	351	19	18
27	438	27	32	725	145	401	330	23	21
28	331	16	14	1560	260	1080	320	27	25
29	284	11	8.8	1390	110	423	310	28	24
30	265	10	7.4	1130	55	167	305	28	25
31	247	13	8.3	---	---	---	320	31	31
TOTAL	8069	---	266.2	12662	---	2676.9	19348	---	1887
JANUARY			FEBRUARY			MARCH			
1	345	31	32	769	54	141	1700	94	433
2	360	27	29	5600	566	9320	1540	90	377
3	330	27	28	5700	357	5790	1360	75	275
4	310	27	23	3140	149	1290	1210	60	195
5	300	19	16	2370	101	652	1670	147	718
6	295	21	19	2310	72	445	3260	299	2640
7	295	21	20	1500	70	292	2640	221	1610
8	290	22	21	1100	79	235	1870	109	560
9	290	22	21	1060	53	153	1500	70	284
10	285	22	20	888	46	110	1340	60	219
11	285	17	16	1490	131	557	1230	57	190
12	285	15	13	2190	139	828	1140	60	185
13	280	16	13	2570	65	436	1020	57	158
14	280	22	18	2660	43	309	927	52	130
15	280	23	19	2510	99	668	843	101	228
16	280	24	20	1740	92	437	1110	139	419
17	280	22	19	3290	517	5010	2100	150	850
18	275	19	16	4150	514	5790	1630	99	442
19	275	20	16	3940	485	5210	1310	55	197
20	275	22	17	6700	794	14300	1160	40	127
21	275	22	19	6900	440	8290	1080	37	106
22	275	28	26	4650	320	4050	989	35	92
23	275	32	30	3650	285	2810	915	36	89
24	275	32	29	4080	262	2880	866	39	91
25	280	34	33	3130	219	1860	799	37	81
26	350	63	79	2270	174	1070	747	35	70
27	934	190	517	1750	116	552	969	62	170
28	1430	252	980	1580	99	421	1400	74	282
29	1100	89	270	---	---	---	1150	52	163
30	839	52	118	---	---	---	1080	50	145
31	548	43	64	---	---	---	1310	56	199
TOTAL	12476	---	2561	83687	---	73906	41865	---	11725

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	1220	53	175	1690	195	990	3260	579	5250
2	1020	38	104	3970	341	3660	1970	250	1390
3	900	33	79	3080	241	2030	1530	135	558
4	832	33	75	2260	138	852	1810	225	1280
5	4290	1060	14600	1700	98	450	3420	688	6590
6	7700	539	11000	1480	75	298	5760	708	11900
7	5350	298	4330	1880	23	113	8860	443	10500
8	2890	221	1740	1630	49	209	7340	270	5600
9	2210	162	970	1330	82	295	3570	230	2320
10	1840	119	592	1180	75	238	3190	216	1960
11	1470	87	346	1810	158	1040	3510	209	2070
12	1650	144	685	5900	441	6960	2760	205	1620
13	3670	396	3940	6480	252	4450	2140	386	2670
14	3370	344	3170	3910	205	2160	4660	1580	19900
15	2410	189	1260	3960	345	3830	7660	374	7860
16	1640	115	514	5010	364	4970	8140	271	6050
17	1500	84	338	3290	219	1980	5580	305	4660
18	1960	109	580	2240	147	896	3320	358	3370
19	1950	118	623	2130	126	723	2380	263	1820
20	1630	97	430	2190	95	569	1610	165	783
21	1540	73	305	1700	75	344	1320	186	722
22	1280	68	236	1410	78	299	1500	188	821
23	1720	141	735	1230	129	423	1580	221	1020
24	4900	343	4590	1090	122	360	1130	159	538
25	3420	225	2120	965	98	255	912	98	269
26	2230	133	809	873	69	164	809	73	178
27	1730	88	414	1070	84	244	714	56	122
28	1500	73	296	3000	528	5060	626	44	84
29	1330	67	240	3190	400	3680	568	35	61
30	1260	63	215	2230	112	673	533	41	67
31	---	---	---	3210	453	4280	---	---	---
TOTAL	70412	---	55511	77088	---	52495	92162	---	102033
JULY			AUGUST			SEPTEMBER			
1	820	94	234	229	10	7.5	143	28	13
2	890	118	315	215	11	7.7	137	31	14
3	636	54	110	208	16	11	169	33	18
4	501	18	28	206	20	13	255	29	22
5	498	21	33	203	22	14	320	23	20
6	533	19	31	254	33	27	420	21	19
7	498	16	24	242	19	15	290	19	17
8	432	13	18	239	15	12	235	19	17
9	380	11	13	222	14	10	215	19	16
10	358	12	14	206	24	16	205	17	15
11	329	14	14	199	23	15	195	17	15
12	313	14	14	185	21	12	182	14	12
13	686	593	3490	174	22	12	180	17	15
14	1660	772	4570	163	26	14	290	22	19
15	1100	124	411	161	26	14	230	27	18
16	587	52	97	156	26	13	185	24	14
17	426	29	38	150	27	13	154	23	12
18	369	19	22	143	28	13	133	17	7.7
19	334	16	17	139	26	12	120	11	4.3
20	316	15	14	135	23	10	114	16	6.0
21	324	15	15	128	21	9.1	114	18	6.8
22	326	13	13	126	20	8.3	112	15	5.6
23	326	10	11	124	18	7.7	106	11	4.0
24	264	9	8.5	122	20	8.1	101	9	3.2
25	264	10	8.1	120	19	7.7	100	8	2.9
26	251	12	10	118	28	11	100	17	5.8
27	249	13	10	114	30	12	100	19	6.5
28	290	12	10	114	23	8.7	96	12	3.9
29	303	12	12	116	21	8.3	94	7	2.3
30	290	12	11	116	23	9.1	93	7	2.3
31	254	11	8.6	128	25	11	---	---	---
TOTAL	14807	---	9624.2	5155	---	362.2	5188	---	337.3
YEAR	442919		313384.8						

SHADE RIVER BASIN

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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 mi² (404 km²), 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 except those for periods of winter record which are fair. Water-quality data collected at this site 1965-77, 1979-81. Sediment data collected 1970-74.

AVERAGE DISCHARGE.--16 years, 178 ft³/s (5.041 m³/s), 15.49 in/yr (393 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft³/s (231 m³/s) May 25, 1968, gage height, 27.39 ft (8.348 m); minimum, 0.30 ft³/s (0.008 m³/s) Sept. 7, 8, 9, 10, 1966.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 3	0030	2950 83.5	18.68 5.694	June 7	0630	*3320 94.0	*19.63 5.983

Minimum discharge, 1.1 ft³/s (0.031 m³/s) Sept. 30.

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	13	24	109	58	265	591	118	344	190	228	15	5.1
2	13	22	84	80	2610	375	94	591	137	306	12	5.1
3	14	21	115	80	2050	258	78	238	150	113	9.9	12
4	17	21	90	70	476	193	74	151	272	65	9.1	35
5	17	29	69	40	363	762	689	116	266	107	8.6	13
6	15	33	71	33	247	737	525	182	2480	193	91	7.9
7	14	27	82	31	184	363	255	364	2930	78	77	6.0
8	12	23	200	29	176	252	181	190	558	56	39	5.1
9	11	22	225	29	197	199	141	123	378	46	28	4.7
10	11	21	670	28	144	169	134	94	491	39	19	4.5
11	11	19	260	27	416	146	114	146	388	33	15	4.2
12	9.1	18	146	27	461	125	134	355	219	26	11	3.4
13	8.2	17	109	27	243	109	134	196	525	91	9.5	3.1
14	7.3	16	82	26	183	93	110	130	1380	866	7.9	2.9
15	6.8	17	68	26	193	80	87	321	437	212	7.1	6.7
16	6.8	17	70	26	255	114	69	263	246	75	6.4	19
17	6.8	22	72	26	954	188	288	151	263	57	9.9	12
18	8.6	156	58	26	1220	134	780	118	156	46	10	8.2
19	36	131	57	26	641	108	351	384	107	38	6.4	6.4
20	36	59	46	26	1230	96	260	631	85	33	5.1	5.1
21	21	44	52	36	948	89	207	305	76	43	4.5	4.5
22	15	38	30	73	481	78	151	172	374	53	3.9	3.4
23	12	34	31	88	674	73	204	114	191	35	3.6	2.6
24	10	86	41	69	885	68	350	86	86	24	3.4	2.0
25	55	201	72	71	438	61	243	69	66	23	3.1	1.8
26	191	96	41	116	302	56	165	58	59	26	2.9	1.5
27	60	176	33	231	212	430	133	231	53	19	2.6	1.5
28	41	590	32	169	244	359	110	411	44	20	2.4	1.5
29	36	250	32	129	---	193	96	224	38	34	2.4	1.5
30	32	152	35	116	---	157	92	123	34	42	2.6	1.3
31	27	---	45	81	---	154	---	188	---	23	4.5	---
TOTAL	773.6	2382	3127	1920	16692	6810	6367	7069	12679	3050	432.8	191.0
MEAN	25.0	79.4	101	61.9	596	220	212	228	423	98.4	14.0	6.37
MAX	191	590	670	231	2610	762	780	631	2930	866	91	35
MIN	6.8	16	30	26	144	56	69	58	34	19	2.4	1.3
CFSM	.16	.51	.65	.40	3.82	1.41	1.36	1.46	2.71	.63	.09	.04
IN.	.18	.57	.75	.46	3.98	1.62	1.52	1.69	3.02	.73	.10	.05

CAL YR 1980	TOTAL	76783.6	MEAN 210	MAX 2480	MIN 6.8	CFSM 1.35	IN 18.31
WTR YR 1981	TOTAL	61493.4	MEAN 168	MAX 2930	MIN 1.3	CFSM 1.08	IN 14.66

SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 16...	1415	6.5	450	7.8	14.0	--	--	--	--	--	--	153
NOV 05...	1420	43	420	7.1	9.0	--	--	--	--	--	--	115
DEC 11...	1750	323	300	7.4	5.5	--	--	--	--	--	--	80
MAR 04...	1615	157	290	7.5	3.5	--	--	--	--	--	--	86
APR 09...	1230	140	303	7.4	13.5	--	--	--	--	--	--	95
MAY 05...	1315	104	335	7.7	15.0	--	--	--	--	--	--	118
JUN 02...	1015	153	325	7.1	17.0	--	--	--	--	--	--	96
JUL 31...	1230	29	410	7.0	20.5	180	88	52	11	13	3.2	112
AUG 11...	0915	16	414	7.3	22.0	--	--	--	--	--	--	85
26...	1435	3.0	450	7.3	20.5	180	72	53	11	15	--	106

DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 16...	0	73	--	--	--	257	--	--	--	--	--	--
NOV 05...	0	84	--	--	--	262	--	--	--	--	--	--
DEC 11...	0	62	--	--	--	172	--	--	--	--	--	--
MAR 04...	0	56	--	--	--	164	--	--	--	--	--	--
APR 09...	0	64	--	--	--	196	--	--	--	--	--	--
MAY 05...	0	66	--	--	--	203	--	--	--	--	--	--
JUN 02...	0	67	--	--	--	217	--	--	--	--	--	--
JUL 31...	0	90	14	.2	6.3	296	.22	.020	1	7	100	1
AUG 11...	0	100	--	--	--	262	--	--	--	--	--	--
26...	0	74	17	--	4.0	--	--	--	--	--	--	--

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 16...	--	--	--	--	--	--	960	670	290	--	--	--
NOV 05...	--	--	--	--	--	--	960	680	280	--	--	--
DEC 11...	--	--	--	--	--	--	76000	76000	90	--	--	--
MAR 04...	--	--	--	--	--	--	1600	1500	70	--	--	--
APR 09...	--	--	--	--	--	--	1300	1300	30	--	--	--
MAY 05...	--	--	--	--	--	--	1000	920	80	--	--	--
JUN 02...	--	--	--	--	--	--	2600	2300	350	--	--	--
JUL 31...	<2	50	20	20	4	3	1300	1300	10	5000	2	<20
AUG 11...	--	--	--	--	--	--	1800	1800	30	--	--	--
26...	--	--	--	--	--	--	870	860	8	--	--	--

03159540 SHADE RIVER NEAR CHESTER, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

SHADE RIVER BASIN

03159555 EAST BRANCH SHADE RIVER NEAR TUPPERS PLAINS, OH

LOCATION.--Lat 39°08'29", long 81°52'39", Meigs County, Hydrologic Unit 05030202, on right bank at upstream side of bridge on Township Road, 2.1 mi (3.4 km) downstream from Meigs Creek, 2.8 mi (4.5 km) upstream from Big Run and 2.7 mi (4.3 km) southwest of Tupperts Plains.

DRAINAGE AREA.--37.5 mi² (97.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1980 to current year (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 600 ft (183 m) from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft³/s (37.4 m³/s) Feb. 2, 1981, gage height 13.26 ft (4.042 m); minimum, 0.20 ft³/s (0.006 m³/s) Aug. 28, 30, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (15.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 2	0600	*1320	*13.26	June 6	1545	625	10.86
May 1	1415	652	11.05			17.7	3.310

Minimum discharge, 0.20 ft³/s (0.006 m³/s) Aug. 28, 30, 1981.

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	2.7	4.6	26	18	136	108	28	355	23	139	2.5	1.7
2	2.7	4.2	24	22	683	66	24	129	23	44	2.2	.98
3	2.7	3.7	33	26	135	51	22	69	20	24	1.9	1.5
4	3.0	4.6	24	25	55	43	22	51	23	18	1.7	2.8
5	3.0	7.9	21	13	35	221	168	42	19	21	1.6	2.8
6	3.0	5.7	22	11	33	106	72	48	428	23	15	1.3
7	2.5	4.6	50	10	32	66	48	51	146	16	7.9	.82
8	2.0	4.6	52	9.4	32	53	41	37	56	12	4.9	.61
9	2.0	4.4	99	9.0	32	45	36	31	96	10	3.7	.55
10	2.0	3.9	105	8.5	40	39	32	28	140	8.3	2.8	.45
11	1.9	3.2	55	8.2	113	35	30	39	68	7.0	2.2	.36
12	1.5	3.0	43	8.0	73	31	31	49	41	5.4	1.6	.36
13	1.4	2.8	35	7.9	52	29	32	35	55	48	1.4	.32
14	1.4	2.8	29	7.8	38	26	29	31	117	87	1.2	.40
15	1.4	2.8	26	7.6	49	23	24	51	45	19	1.1	5.7
16	1.4	2.8	28	7.5	63	36	21	39	32	13	1.5	7.3
17	1.4	6.7	25	7.4	273	35	113	31	31	10	1.6	3.5
18	3.5	40	22	7.4	154	31	189	29	22	7.9	1.1	1.7
19	11	21	21	7.4	141	28	69	76	18	7.0	.74	1.9
20	4.9	13	15	7.4	256	27	59	105	15	6.3	.55	2.0
21	3.2	10	12	13	146	25	46	54	24	9.7	.40	1.7
22	2.3	8.3	11	27	85	22	39	39	151	7.9	.36	1.1
23	2.3	7.3	12	26	179	22	50	31	32	5.2	.36	.74
24	2.0	35	16	22	128	20	56	26	21	4.2	.29	.50
25	29	39	22	27	73	18	44	22	17	3.9	.23	.40
26	24	22	9.7	40	55	17	36	19	19	3.5	.23	.40
27	10	76	10	46	45	54	33	63	12	3.0	.23	.32
28	7.6	65	10	36	70	45	29	41	9.7	3.2	.26	.26
29	7.3	40	11	34	---	36	27	29	8.3	9.3	.32	.23
30	6.7	32	13	24	---	34	26	22	11	5.4	.23	.23
31	5.2	---	15	18	---	32	---	25	---	3.2	2.3	---
TOTAL	155.0	480.9	896.7	541.5	3206	1424	1476	1697	1723.0	584.4	62.40	42.93
MEAN	5.00	16.0	28.9	17.5	115	45.9	49.2	54.7	57.4	18.9	2.01	1.43
MAX	29	76	105	46	683	221	189	355	428	139	15	7.3
MIN	1.4	2.8	9.7	7.4	32	17	21	19	8.3	3.0	.23	.23

WTR YR 1981 TOTAL 12289.83 MEAN 33.7 MAX 683 MIN .23

03159555 EAST BRANCH SHADE RIVER NEAR TUPPERS PLAINS, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1980 to September 1981 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1980 to September 1981 (discontinued).

pH: December 1980 to September 1981 (discontinued).

WATER TEMPERATURES: April 1980 to September 1981 (discontinued).

SUSPENDED SEDIMENT DISCHARGE: April 1980 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor and sediment-pumping sampler.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, $\geq 1,000$ micromhos June 19, 20, 21, Aug. 8, 9, 1981; minimum, 112 micromhos July 3, 1980.

pH: Maximum, 8.4 units May 9, 1981; minimum, 7.0 June 6, 1981.

WATER TEMPERATURES: Maximum, 29.5°C Aug. 31, 1981; minimum, 0.0°C many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, $\geq 1,000$ micromhos June 19, 20, 21, Aug. 8, 9; minimum, 118 micromhos Feb. 2.

pH: Maximum, 8.4 units May 9; minimum, 7.0 units June 6.

WATER TEMPERATURES: Maximum, 29.5°C Aug. 31; minimum 0.0°C many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 822 mg/L June 22; minimum daily mean, 2 mg/L March 21.

SEDIMENT LOADS: Maximum daily, 1,250 tons (1,130 tonnes) Feb. 2; minimum daily, 0.0 ton (0.0 tonne) Aug. 27, 30, Sept. 28-30.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT												
16...	1840	5.4	395	7.6	16.0	--	--	--	--	--	--	224
NOV												
05...	1720	16	420	7.6	9.0	--	--	--	--	--	--	192
DEC												
05...	1200	33	307	6.7	3.0	--	--	--	--	--	--	130
JAN												
06...	1400	17	364	7.8	.5	--	--	--	--	--	--	176
FEB												
05...	1330	35	267	7.4	.5	--	--	--	--	--	--	136
MAR												
10...	1245	40	277	7.9	5.0	--	--	--	--	--	--	124
APR												
09...	1500	35	285	8.0	14.5	--	--	--	--	--	--	136
MAY												
05...	1500	49	301	7.8	16.0	--	--	--	--	--	--	141
JUN												
02...	1400	20	326	7.9	18.0	--	--	--	--	--	--	166
JUL												
15...	1030	20	278	7.6	21.0	--	--	--	--	--	--	144
31...	1400	6.6	410	8.2	24.5	190	3	56	12	12	3.0	228
AUG												
26...	1235	.30	500	7.7	23.5	190	23	57	11	18	--	165
SEP												
15...	1045	4.2	376	7.5	21.0	--	--	--	--	--	--	200

DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT												
16...	0	32	--	--	--	241	--	--	--	--	--	--
NOV												
05...	0	35	--	--	--	242	--	--	--	--	--	--
DEC												
05...	0	42	--	--	--	207	--	--	--	--	--	--
JAN												
06...	0	48	--	--	--	234	--	--	--	--	--	--
FEB												
05...	0	38	--	--	--	173	--	--	--	--	--	--
MAR												
10...	0	37	--	--	--	174	--	--	--	--	--	--
APR												
09...	0	41	--	--	--	184	--	--	--	--	--	--
MAY												
05...	0	37	--	--	--	179	--	--	--	--	--	--
JUN												
02...	0	39	--	--	--	225	--	--	--	--	--	--
JUL												
15...	0	27	--	--	--	176	--	--	--	--	--	--
31...	0	30	15	.2	4.4	253	.11	.020	2	10	100	1
AUG												
26...	0	21	37	--	3.8	--	--	--	--	--	--	--
SEP												
15...	0	21	--	--	--	222	--	--	--	--	--	--

SHADE RIVER BASIN

03159555 EAST BRANCH SHADE RIVER NEAR TUPPERS PLAINS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 16...	--	--	--	--	--	--	990	860	130	--	--	--
NOV 05...	--	--	--	--	--	--	1200	1100	120	--	--	--
DEC 05...	--	--	--	--	--	--	640	630	10	--	--	--
JAN 06...	--	--	--	--	--	--	1000	960	40	--	--	--
FEB 05...	--	--	--	--	--	--	660	570	90	--	--	--
MAR 10...	--	--	--	--	--	--	540	520	20	--	--	--
APR 09...	--	--	--	--	--	--	960	860	100	--	--	--
MAY 05...	--	--	--	--	--	--	700	680	20	--	--	--
JUN 02...	--	--	--	--	--	--	1100	720	380	--	--	--
JUL 15...	--	--	--	--	--	--	3000	2800	180	--	--	--
31...	<3	70	30	<10	6	6	960	950	10	9400	2	<30
AUG 26...	--	--	--	--	--	--	670	660	7	--	--	--
SEP 15...	--	--	--	--	--	--	1500	1400	70	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible]

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	313	305	356	315	348	130	223	211
2	---	---	---	---	327	313	323	300	179	118	242	224
3	---	---	---	---	327	313	303	297	217	181	254	243
4	---	---	---	---	317	312	334	296	257	209	278	255
5	---	---	422	419	317	315	361	338	276	256	258	169
6	---	---	437	425	320	310	365	358	287	277	219	186
7	---	---	445	440	321	252	372	361	292	286	259	221
8	---	---	446	442	260	250	380	373	290	280	257	245
9	---	---	455	445	272	212	380	364	301	275	262	253
10	---	---	459	454	235	199	389	368	301	234	276	262
11	---	---	456	447	262	235	489	383	246	199	278	270
12	---	---	451	447	277	260	615	421	243	205	281	276
13	---	---	461	449	286	260	538	439	277	246	296	281
14	---	---	478	464	293	208	528	455	290	279	292	290
15	---	---	481	468	314	200	526	452	291	249	299	292
16	444	440	473	464	304	299	449	407	259	215	295	276
17	444	438	468	398	315	301	409	404	206	162	288	272
18	442	428	776	345	316	313	403	391	207	180	289	274
19	456	424	431	409	325	317	392	384	214	203	289	283
20	472	443	412	403	348	328	384	379	202	182	286	284
21	469	460	425	404	362	344	379	358	216	187	289	285
22	468	460	426	422	374	363	358	324	242	215	304	289
23	479	461	430	425	376	370	350	332	233	188	296	294
24	484	473	429	344	383	369	332	318	216	191	304	296
25	626	358	414	377	368	352	329	303	236	217	306	302
26	578	396	383	379	373	365	300	271	261	237	307	303
27	394	383	383	259	385	369	273	257	261	255	305	242
28	392	384	277	255	372	367	278	264	265	222	272	262
29	---	---	295	278	375	364	299	189	---	---	275	267
30	---	---	306	295	363	347	314	301	---	---	282	275
31	---	---	---	---	359	340	336	288	---	---	288	282
MONTH	626	358	776	255	385	199	615	189	348	118	307	169
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	296	289	311	140	328	317	376	163	404	401	363	315
2	299	295	234	191	333	313	301	237	406	401	378	334
3	303	298	274	235	339	321	330	303	411	406	420	371
4	307	292	277	262	338	320	347	330	415	410	419	397
5	287	194	292	277	358	330	349	336	415	367	442	421
6	244	210	298	276	285	131	359	335	409	338	427	400
7	264	245	278	274	245	183	348	332	668	386	401	382
8	278	265	285	279	282	247	360	348	1000	703	384	375
9	287	279	294	287	289	147	371	358	1000	729	378	372
10	291	288	303	294	283	194	376	371	719	559	378	357
11	294	288	301	287	269	229	382	374	557	517	382	357
12	296	292	288	278	298	271	386	381	516	497	383	369
13	303	292	288	277	302	240	390	135	499	492	387	377
14	303	300	297	287	358	194	292	170	501	496	388	343
15	308	302	309	264	294	258	306	263	498	488	391	331
16	310	306	288	270	311	295	332	307	491	484	404	309
17	309	169	299	289	312	302	353	333	484	477	404	396
18	221	168	305	291	840	309	364	354	476	471	412	402
19	250	223	295	231	1000	900	375	365	472	463	432	412
20	259	251	244	217	1000	1000	379	373	468	454	581	434
21	273	260	276	246	1000	819	393	373	462	455	627	585
22	279	273	294	277	312	171	401	380	463	451	619	588
23	300	273	305	293	376	313	406	399	460	440	588	532
24	276	265	317	304	380	374	404	396	458	447	535	497
25	275	266	327	318	402	381	406	402	457	450	503	480
26	283	276	332	327	414	383	405	400	457	446	489	467
27	292	283	354	224	394	377	402	400	455	445	486	477
28	303	293	290	257	392	375	408	399	452	438	486	461
29	308	303	308	283	402	389	401	363	441	437	484	471
30	311	307	340	310	410	347	384	361	439	433	484	472
31	---	---	328	318	---	---	401	386	435	239	---	---
MONTH	311	168	354	140	1000	131	408	135	1000	239	627	309
YEAR	1000	118										

SHADE RIVER BASIN

03159555 EAST BRANCH SHADE RIVER NEAR TUPPERS PLAINS, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1					---	---	7.9	7.8	7.8	7.4	7.7	7.7
2					---	---	7.9	7.8	7.7	7.4	7.8	7.7
3					---	---	7.9	7.8	7.5	7.4	7.8	7.7
4					---	---	7.8	7.7	7.6	7.4	7.8	7.7
5					---	---	7.8	7.7	7.6	7.4	7.8	7.6
6					---	---	7.7	7.7	7.6	7.5	7.7	7.6
7					---	---	7.7	7.7	7.6	7.6	7.7	7.7
8					---	---	7.8	7.7	7.7	7.6	7.8	7.7
9					---	---	7.7	7.7	7.7	7.5	7.8	7.8
10					---	---	7.7	7.7	7.6	7.6	7.9	7.8
11					---	---	7.7	7.7	7.6	7.5	7.9	7.8
12					---	---	7.7	7.6	7.6	7.4	8.0	7.8
13					---	---	7.6	7.6	7.5	7.4	8.0	7.8
14					---	---	7.6	7.6	7.5	7.5	8.0	7.9
15					---	---	7.7	7.6	7.6	7.5	8.1	7.9
16					---	---	7.7	7.7	7.6	7.5	8.0	7.9
17					8.1	8.0	7.7	7.7	7.6	7.5	8.0	7.9
18					8.0	7.9	7.7	7.7	7.6	7.5	8.1	7.9
19					8.1	8.0	7.7	7.7	7.7	7.6	8.1	7.9
20					8.0	7.9	7.7	7.7	7.7	7.6	8.1	7.9
21					8.0	7.8	7.8	7.7	7.6	7.6	8.2	7.9
22					7.8	7.8	7.8	7.7	7.7	7.6	8.2	8.0
23					7.8	7.8	7.8	7.7	7.7	7.6	8.3	8.0
24					7.9	7.8	7.8	7.7	7.7	7.6	8.3	8.0
25					7.9	7.8	7.8	7.7	7.7	7.6	8.3	8.0
26					7.8	7.8	7.8	7.7	7.8	7.7	8.3	8.0
27					7.8	7.8	7.8	7.7	7.8	7.7	8.0	7.9
28					7.8	7.8	7.8	7.7	7.8	7.7	8.2	7.8
29					7.8	7.8	7.8	7.7	---	---	8.3	7.8
30					7.9	7.8	7.8	7.8	---	---	8.2	7.9
31					7.9	7.9	7.8	7.8	---	---	8.3	7.9
MONTH					8.1	7.8	7.9	7.6	7.8	7.4	8.3	7.6
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.2	7.9	8.0	7.5	8.1	7.9	8.0	7.6				
2	8.3	7.9	7.8	7.6	8.2	7.9	7.9	7.7				
3	8.2	7.9	8.0	7.7	8.0	7.9	8.1	7.9				
4	8.1	7.9	8.3	7.8	8.1	7.9	8.2	7.9				
5	8.0	7.5	8.2	7.9	8.2	7.9	8.0	7.9				
6	8.1	7.8	8.0	7.9	7.8	7.0	8.2	8.0				
7	8.2	7.8	8.3	7.9	7.8	7.5	8.2	8.0				
8	8.3	7.8	8.3	7.9	7.9	7.7	8.2	7.9				
9	8.2	7.9	8.4	7.9	7.9	7.5	8.3	7.9				
10	8.3	7.9	8.2	7.9	7.9	7.6	8.2	7.9				
11	8.3	7.9	8.0	7.9	7.9	7.8	8.3	7.9				
12	8.1	7.9	8.1	7.9	8.0	7.9	8.3	8.0				
13	8.3	7.9	8.3	7.9	7.9	7.7	---	---				
14	8.2	7.9	8.2	7.9	7.9	7.7	---	---				
15	8.3	7.9	8.0	7.9	7.9	7.8	---	---				
16	8.3	8.0	8.2	7.9	8.0	7.9	---	---				
17	8.1	7.7	8.3	7.9	8.0	7.9	---	---				
18	8.0	7.8	8.1	7.9	8.1	7.9	---	---				
19	8.0	7.8	8.0	7.8	8.1	7.9	---	---				
20	8.1	7.9	7.9	7.8	8.2	7.9	---	---				
21	8.1	7.9	8.2	7.8	8.2	7.8	---	---				
22	8.1	7.9	8.2	7.9	7.9	7.6	---	---				
23	8.1	7.9	8.2	7.9	8.1	7.9	---	---				
24	8.0	7.9	8.1	7.9	8.2	7.9	---	---				
25	8.2	7.9	8.2	7.9	8.2	7.9	---	---				
26	8.2	7.9	8.1	7.9	8.3	7.9	---	---				
27	8.3	7.9	8.0	7.9	8.3	7.9	---	---				
28	8.3	7.9	8.0	7.9	8.3	7.9	---	---				
29	8.2	7.9	8.1	7.9	8.3	7.9	---	---				
30	8.2	8.0	8.1	7.9	8.3	7.8	---	---				
31	---	---	8.1	7.9	---	---	---	---				
MONTH	8.3	7.5	8.4	7.5	8.3	7.0	8.3	7.6				
YEAR	8.4	7.0										

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

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

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	14.5	12.5	16.0	11.5	19.0	17.5	23.0	19.5	26.0	20.5	27.0	20.5
2	15.0	11.5	12.0	10.0	20.0	17.0	21.0	19.5	25.0	22.0	26.5	21.5
3	15.0	11.5	13.5	10.5	21.0	19.0	22.0	20.0	26.0	22.0	24.0	22.0
4	15.5	14.0	15.5	12.0	21.5	20.0	23.5	20.5	27.5	23.0	26.0	22.0
5	14.5	11.0	16.5	14.0	23.0	20.5	22.5	21.5	28.5	23.5	27.0	22.0
6	11.0	9.0	16.5	13.0	21.0	17.5	23.0	21.0	24.5	23.5	25.5	21.5
7	11.5	7.5	13.5	10.5	19.0	16.5	25.0	22.0	23.5	22.5	26.0	21.0
8	13.5	9.5	15.0	11.5	20.0	17.5	26.0	23.0	24.5	21.5	25.0	21.0
9	15.0	13.0	17.0	13.0	21.5	19.5	27.5	24.0	25.5	22.0	24.0	18.5
10	13.5	12.0	17.5	15.5	21.0	18.0	27.0	25.0	26.5	22.0	24.5	16.5
11	16.0	12.5	16.5	15.0	19.0	17.0	26.0	23.0	26.0	22.5	26.5	17.0
12	17.5	15.5	15.0	12.5	21.0	18.5	26.0	23.0	26.5	21.5	26.5	19.0
13	19.0	16.0	15.0	11.5	21.5	20.0	25.5	22.0	26.0	21.0	26.5	18.5
14	18.0	15.5	16.5	14.5	21.5	19.5	23.5	21.0	26.0	21.5	27.5	19.0
15	16.0	13.0	16.0	14.0	23.5	21.0	23.5	20.5	24.5	22.5	21.0	20.0
16	14.0	11.5	15.0	13.0	24.5	22.0	23.5	21.0	26.0	22.5	20.0	18.5
17	13.5	13.0	17.0	13.0	23.0	21.0	24.0	21.0	25.0	20.5	19.0	17.0
18	15.5	12.5	15.5	12.5	23.0	19.5	25.0	21.5	24.5	19.0	16.5	15.5
19	15.5	12.5	12.5	11.0	23.5	20.0	24.5	23.0	23.5	18.5	18.0	14.5
20	13.0	11.5	14.0	10.5	24.0	21.5	25.5	23.5	25.5	18.0	18.5	14.5
21	12.5	9.5	16.0	12.5	23.5	21.5	25.0	23.5	22.5	18.5	20.5	15.5
22	12.0	10.5	17.5	14.0	21.0	19.5	25.0	22.5	26.5	18.0	18.0	16.0
23	14.0	12.0	19.0	15.5	22.5	20.0	24.5	21.5	27.0	18.0	17.5	13.5
24	13.5	9.5	20.5	17.0	22.5	19.5	25.5	22.0	27.0	19.0	19.5	12.0
25	11.5	8.5	21.0	18.0	24.0	20.5	26.5	22.5	27.5	19.5	17.5	13.0
26	12.0	9.5	21.5	19.0	23.0	20.5	27.0	23.5	28.5	19.0	22.0	14.0
27	16.0	11.0	20.5	18.0	22.0	18.5	27.0	24.0	27.5	20.0	20.5	16.5
28	19.5	15.0	18.5	17.5	22.5	18.0	26.5	24.0	28.5	21.0	21.5	14.0
29	19.5	17.5	19.5	17.0	23.0	19.5	24.5	22.5	28.0	21.0	19.0	12.5
30	17.5	16.0	20.5	18.0	24.5	21.5	24.0	20.0	26.0	22.0	20.0	14.5
31	---	---	20.5	18.5	---	---	25.0	20.0	29.5	20.5	---	---
MONTH	19.5	7.5	21.5	10.0	24.5	16.5	27.5	19.5	29.5	18.0	27.5	12.0
YEAR	29.5	.0										

SHADE RIVER BASIN

03159555 EAST BRANCH SHADE RIVER NEAR TUPPERS PLAINS, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	2.7	7	.06	4.6	9	.15	26	7	.56
2	2.7	7	.06	4.2	7	.10	24	15	1.1
3	2.7	7	.06	3.7	10	.13	33	19	2.0
4	3.0	8	.08	4.6	15	.24	24	11	.85
5	3.0	10	.10	7.9	17	.46	21	6	.43
6	3.0	7	.07	5.7	10	.21	22	4	.31
7	2.5	7	.06	4.6	8	.14	50	34	7.0
8	2.0	8	.06	4.6	11	.19	52	38	6.2
9	2.0	11	.08	4.4	13	.20	99	65	29
10	2.0	12	.09	3.9	8	.11	105	54	18
11	1.9	16	.10	3.2	6	.08	55	17	2.6
12	1.5	14	.07	3.0	5	.06	43	6	.70
13	1.4	10	.05	2.8	4	.05	35	4	.35
14	1.4	13	.06	2.8	6	.06	29	10	.80
15	1.4	15	.07	2.8	6	.06	26	17	1.2
16	1.4	16	.08	2.8	11	.12	28	18	1.3
17	1.4	14	.07	6.7	18	.73	25	23	1.6
18	3.5	26	.38	40	43	5.4	22	15	.89
19	11	23	.79	21	22	1.5	21	13	.77
20	4.9	15	.24	13	15	.69	15	15	.58
21	3.2	14	.15	10	7	.26	12	16	.51
22	2.3	14	.12	8.3	4	.13	11	23	.64
23	2.3	16	.14	7.3	4	.10	12	20	.64
24	2.0	18	.14	35	32	4.2	16	21	.93
25	2.9	28	2.6	39	23	2.8	22	26	1.5
26	2.4	23	1.7	22	12	.89	9.7	21	.61
27	10	19	.62	76	28	8.7	10	16	.45
28	7.6	20	.50	65	43	8.7	10	16	.45
29	7.3	14	.34	40	14	1.7	11	17	.55
30	6.7	15	.34	32	7	.69	13	16	.69
31	5.2	13	.24	---	---	---	15	11	.56
TOTAL	155.0	---	9.52	480.9	---	38.85	896.7	---	83.77
JANUARY			FEBRUARY			MARCH			
1	18	9	.65	136	173	198	108	33	10
2	22	8	.65	683	381	1250	66	18	3.2
3	26	7	.51	135	137	68	51	14	1.9
4	25	6	.60	55	50	7.4	43	16	1.9
5	13	5	.19	35	19	8.6	221	455	346
6	11	9	.30	33	12	1.2	106	101	33
7	10	7	.28	32	8	.69	66	28	5.2
8	9.4	6	.23	32	15	1.7	53	14	2.0
9	9.0	4	.14	32	38	5.0	45	15	1.8
10	8.5	5	.14	40	22	3.2	39	20	2.1
11	8.2	7	.18	113	102	33	35	18	1.7
12	8.0	7	.16	73	23	8.0	31	14	1.1
13	7.9	7	.15	52	13	1.9	29	19	1.4
14	7.8	6	.15	38	12	1.2	26	14	.99
15	7.6	4	.12	49	10	1.4	23	10	.60
16	7.5	6	.15	63	24	4.9	36	22	2.2
17	7.4	6	.15	273	336	268	35	17	1.7
18	7.4	7	.14	154	140	63	31	8	.63
19	7.4	8	.18	141	103	44	28	6	.44
20	7.4	17	.34	256	288	200	27	3	.25
21	13	13	.45	146	112	49	25	2	.15
22	27	12	.91	85	51	12	22	5	.29
23	26	8	.56	179	252	147	22	11	.65
24	22	5	.29	128	108	43	20	15	.82
25	27	8	.58	73	34	6.8	18	15	.72
26	40	25	2.8	55	21	3.1	17	15	.67
27	46	33	4.2	45	13	1.6	54	45	6.9
28	36	12	1.2	70	29	7.4	45	21	2.6
29	34	7	.64	---	---	---	36	19	1.8
30	24	4	.29	---	---	---	34	21	1.9
31	18	4	.20	---	---	---	32	21	1.8
TOTAL	541.5	---	17.53	3206	---	2439.09	1424	---	436.41

03159555 EAST BRANCH SHADE RIVER NEAR TUPPERS PLAINS, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	28	22	1.7	355	656	850	23	68	4.2
2	24	24	1.6	129	154	65	23	62	3.8
3	22	33	2.0	69	51	9.7	20	60	3.5
4	22	53	3.2	51	29	4.1	23	72	4.5
5	168	374	204	42	24	2.7	19	57	2.9
6	72	52	11	48	31	4.0	428	519	678
7	48	24	3.1	51	25	3.4	146	148	67
8	41	20	2.1	37	18	1.8	56	75	11
9	36	26	2.5	31	21	1.7	96	252	101
10	32	23	2.1	28	22	1.6	140	366	186
11	30	31	2.6	39	32	3.4	68	122	23
12	31	33	2.8	49	52	6.8	41	87	9.8
13	32	31	2.7	35	29	2.8	55	150	26
14	29	35	2.8	31	22	1.8	117	350	143
15	24	29	1.9	51	59	8.7	45	74	9.1
16	21	23	1.3	39	35	3.7	32	71	6.1
17	113	179	85	31	28	2.4	31	78	6.6
18	189	245	138	29	32	2.6	22	60	3.6
19	69	66	13	76	84	23	18	40	1.9
20	59	30	4.8	105	125	42	15	28	1.2
21	46	25	3.1	54	33	4.8	24	49	9.1
22	39	23	2.4	39	29	3.0	151	822	579
23	50	39	5.3	31	28	2.3	32	102	9.4
24	56	40	6.0	26	29	2.0	21	50	2.9
25	44	22	2.6	22	33	1.9	17	37	1.7
26	36	102	9.8	19	32	1.7	19	34	1.8
27	33	60	5.4	63	417	82	12	29	.95
28	29	27	2.1	41	131	15	9.7	23	.61
29	27	29	2.1	29	69	5.5	8.3	20	.45
30	26	30	2.1	22	65	3.9	11	22	.66
31	---	---	---	25	68	4.6	---	---	---
TOTAL	1476	---	529.1	1697	---	1167.9	1723.0	---	1898.77
JULY				AUGUST				SEPTEMBER	
1	139	687	409	2.5	19	.12	1.7	68	.38
2	44	131	17	2.2	28	.16	.98	37	.12
3	24	51	3.4	1.9	23	.11	1.5	23	.09
4	18	45	2.1	1.7	20	.09	2.8	20	.14
5	21	51	3.0	1.6	20	.09	2.8	14	.11
6	23	44	2.9	15	20	.80	1.3	15	.05
7	16	37	1.6	7.9	20	.42	.82	12	.02
8	12	31	1.0	4.9	20	.26	.61	15	.02
9	10	25	.66	3.7	21	.20	.55	13	.02
10	8.3	23	.52	2.8	21	.16	.45	18	.02
11	7.0	21	.38	2.2	21	.12	.36	17	.02
12	5.4	18	.27	1.6	21	.09	.36	16	.01
13	48	19	3.3	1.4	21	.08	.32	16	.01
14	87	123	19	1.2	21	.06	.40	11	.01
15	19	95	5.2	1.1	20	.05	5.7	35	.60
16	13	50	1.7	1.5	17	.07	7.3	41	.80
17	10	34	.93	1.6	21	.09	3.5	32	.30
18	7.9	29	.64	1.1	21	.05	1.7	23	.11
19	7.0	19	.35	.74	26	.05	1.9	20	.09
20	6.3	16	.27	.55	24	.03	2.0	15	.08
21	9.7	17	.44	.40	20	.02	1.7	13	.06
22	7.9	17	.36	.36	25	.02	1.1	15	.05
23	5.2	17	.24	.36	23	.02	.74	15	.03
24	4.2	18	.20	.29	16	.01	.50	11	.02
25	3.9	18	.19	.23	21	.01	.40	12	.02
26	3.5	18	.17	.23	19	.01	.40	11	.01
27	3.0	19	.15	.23	17	.00	.32	10	.01
28	3.2	19	.17	.26	15	.01	.26	10	.00
29	9.3	19	.48	.32	16	.01	.23	9	.00
30	5.4	20	.29	.23	13	.00	.23	8	.00
31	3.2	19	.17	2.3	17	.16	---	---	---
TOTAL	584.4	---	476.08	62.40	---	3.37	42.93	---	3.20
YEAR	12289.83		7103.59						

RACCOON CREEK BASIN

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'45", long 82°18'47", in NE 1/4, SE 1/4, sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank 250 ft (76 m) upstream from Big Four Hollow Creek, 150 ft (46 m) downstream from Morgan Hollow Creek, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--0.98 mi² (2.54 km²).

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 (230.441 m) National Geodetic Vertical Datum of 1929. Prior to October 1, 1978 at datum 17.55 ft (5.349 m) higher.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--11 years, 1.12 ft³/s (0.032 m³/s), 15.52 in/yr (394 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 990 ft³/s (28.0 m³/s) June 22, 1974, gage height, 22.56 ft (6.876 m) (current datum) from rating curve extended above 30 ft³/s (0.85 m³/s); minimum, 0.02 ft³/s (0.001 m³/s) Sept. 24, 25, 1971, June 30, July 1, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 175 ft³/s (4.96 m³/s) June 6, gage height, 20.83 ft (6.349 m), minimum, 0.03 ft³/s (0.001 m³/s) Aug. 25, 28.

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	.10	.08	.37	.29	9.5	1.5	1.1	2.6	1.8	.81	.07	.04
2	.11	.07	.38	.25	10	1.4	.84	1.7	1.4	.25	.08	.04
3	.10	.07	.24	.27	2.1	1.2	.88	1.2	1.1	.21	.07	.20
4	.12	.15	.22	.14	1.2	1.1	4.9	1.0	9.3	.21	.06	.06
5	.08	.09	.25	.05	.53	5.0	11	.91	5.1	.27	.06	.05
6	.07	.08	.22	.05	.47	4.0	2.1	1.7	18	.23	.11	.04
7	.09	.10	.37	.24	.56	2.0	1.4	1.3	5.0	.19	.09	.04
8	.07	.09	.44	.15	.80	1.4	1.2	1.0	2.5	.16	.08	.08
9	.06	.08	2.7	.13	.48	1.1	.94	.86	1.3	.16	.07	.05
10	.05	.07	1.4	.13	.92	.94	.79	.98	.90	.15	.05	.04
11	.09	.05	.74	.12	2.8	.80	.99	4.8	.64	.12	.05	.04
12	.08	.05	.65	.12	1.3	.77	1.4	3.3	.52	.12	.05	.04
13	.07	.06	.44	.11	.99	.70	1.2	2.3	5.0	.93	.05	.04
14	.08	.07	.33	.11	.95	.42	1.0	2.9	2.7	.30	.06	.19
15	.10	.07	.42	.13	1.0	.35	.71	3.0	1.7	.16	.07	.12
16	.10	.06	.32	.13	1.7	2.9	.85	1.9	1.1	.17	.06	.05
17	.14	.80	.25	.11	6.4	1.7	2.0	1.3	.83	.13	.04	.04
18	.33	.50	.25	.12	3.4	1.3	1.4	1.5	.60	.11	.04	.04
19	.08	.21	.19	.12	6.2	1.1	1.2	2.3	.45	.11	.04	.05
20	.07	.15	.10	.14	8.7	.91	1.1	2.0	.35	.13	.04	.05
21	.06	.13	.07	.19	3.2	.75	.95	1.3	2.5	.12	.04	.04
22	.06	.11	.17	.24	2.4	.69	1.0	.99	1.1	.10	.04	.04
23	.05	.14	.22	.28	5.0	.70	3.2	.75	.70	.08	.04	.04
24	.10	.51	.25	.31	2.9	.58	2.4	.59	.45	.09	.04	.04
25	.65	.29	.11	.65	2.0	.53	1.5	.47	.37	.08	.03	.04
26	.14	.20	.10	1.8	1.4	.57	1.2	.56	.24	.09	.04	.04
27	.10	2.0	.12	1.1	1.2	2.1	1.1	3.1	.20	.09	.04	.05
28	.14	.84	.11	.68	1.6	1.3	1.0	3.8	.19	.15	.03	.04
29	.09	.57	.22	.42	---	1.3	.86	1.4	.18	.12	.04	.04
30	.08	.46	.24	.31	---	1.7	.69	3.2	.28	.07	.04	.04
31	.07	---	.30	.34	---	1.2	---	2.7	---	.07	.04	---
TOTAL	3.53	8.15	12.19	9.23	79.70	42.01	50.90	57.41	66.50	5.98	1.66	1.71
MEAN	.11	.27	.39	.30	2.85	1.36	1.70	1.85	2.22	.19	.054	.057
MAX	.65	2.0	2.7	1.8	10	5.0	11	4.8	18	.93	.11	.20
MIN	.05	.05	.07	.05	.47	.35	.69	.47	.18	.07	.03	.04
CFSM	.11	.28	.40	.31	2.91	1.39	1.74	1.89	2.27	.19	.06	.06
IN.	.13	.31	.46	.35	3.02	1.59	1.93	2.18	2.52	.23	.06	.06

CAL YR 1980 TOTAL 389.70 MEAN 1.06 MAX 17 MIN .03 CFSM 1.08 IN 14.78
WTR YR 1981 TOTAL 338.97 MEAN .93 MAX 18 MIN .03 CFSM .95 IN 12.85

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT											
07...	0930	.10	1650	2.8	9.5	--	470	470	7.4	367	97
21...	0930	.01	1250	3.2	8.5	13	400	400	4.9	243	90
NOV											
05...	0930	.01	1100	3.4	5.0	--	340	340	3.9	194	74
19...	0930	.20	680	3.8	1.0	9	220	220	2.4	119	50
DEC											
04...	0930	.19	655	3.9	.5	--	200	200	1.7	84	46
19...	1100	.22	740	3.6	2.0	0	220	220	2.2	109	47
JAN											
07...	1000	.25	990	3.5	1.0	--	290	290	2.8	139	65
22...	0930	.25	755	3.7	1.0	<10	220	220	1.8	89	51
FEB											
05...	1045	.80	450	3.9	.5	--	120	120	1.6	79	28
17...	1900	5.5	255	5.1	4.0	17	74	71	.6	30	17
MAR											
11...	1000	.90	565	3.7	4.5	--	160	160	1.6	79	37
24...	0930	.55	525	3.8	3.0	<10	160	160	1.4	70	34
APR											
10...	1430	.70	375	4.5	11.5	--	120	120	.8	40	30
22...	1400	.95	545	3.9	13.0	<10	170	170	1.4	70	38
MAY											
12...	1530	3.5	235	5.2	12.0	--	79	75	.6	30	18
26...	1200	.40	710	3.5	15.0	<10	190	190	1.9	94	42
JUN											
03...	1030	1.1	445	3.9	15.5	--	150	150	1.0	50	34
22...	1000	1.4	390	4.6	17.5	<10	150	150	1.1	55	36
JUL											
09...	1030	.16	1010	3.1	18.5	--	280	280	3.5	174	61
21...	1100	.13	1100	3.2	19.0	<10	310	310	3.9	194	69
AUG											
06...	1000	.10	1200	3.2	19.0	--	390	390	5.6	278	97
19...	1100	.04	1900	3.0	14.5	--	580	580	22	1090	120
27...	0930	.04	1900	3.1	15.5	<10	660	660	10	497	140
SEP											
09...	1000	.05	1690	3.0	15.5	--	610	610	8.6	427	130
30...	0900	.04	2000	2.8	12.5	<5	670	670	8.2	407	140

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT										
07...	55	29	12	.6	3.0	0	0	0	.0	840
21...	43	24	11	.5	2.9	0	0	0	.0	540
NOV										
05...	37	25	14	.6	2.7	0	0	0	.0	480
19...	22	16	14	.5	2.3	0	0	0	.0	280
DEC										
04...	21	16	15	.5	2.2	0	0	0	.0	250
19...	24	14	12	.4	1.8	0	0	0	.0	310
JAN										
07...	30	16	11	.4	2.4	0	0	0	.0	410
22...	22	17	14	.5	1.9	0	0	0	.0	280
FEB										
05...	12	7.2	11	.3	1.6	0	0	0	.0	190
17...	7.6	8.8	20	.4	1.4	4	0	3	51	88
MAR										
11...	16	9.6	12	.3	1.8	0	0	0	.0	210
24...	18	13	15	.4	1.7	0	0	0	.0	210
APR										
10...	12	8.2	12	.3	1.8	0	0	0	.0	150
22...	19	13	14	.4	2.0	0	0	0	.0	210
MAY										
12...	8.2	5.6	13	.3	1.6	5	0	4	50	83
26...	21	13	13	.4	2.2	0	0	0	.0	250
JUN										
03...	16	11	14	.4	2.0	0	0	0	.0	190
22...	15	14	16	.5	2.3	0	0	0	.0	170
JUL										
09...	30	17	12	.4	3.1	0	0	0	.0	430
21...	33	18	11	.4	3.2	0	0	0	.0	480
AUG										
06...	35	42	19	.9	3.0	0	0	0	.0	540
19...	68	27	9	.5	2.6	0	0	0	.0	880
27...	76	30	9	.5	3.4	0	0	0	.0	920
SEP										
09...	70	28	9	.5	3.1	0	0	0	.0	860
30...	77	30	9	.5	2.9	0	0	0	.0	830

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued
 WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	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)
OCT										
07...	11	1270	1.7	--	--	--	--	--	--	--
21...	14	924	1.2	.02	.41	.43	1.9	.000	.00	17000
NOV										
05...	15	748	1.0	--	--	--	--	--	--	--
19...	11	450	.61	2.0	.30	2.3	10	.000	.00	6100
DEC										
04...	11	411	.56	--	--	--	--	--	--	--
19...	8.8	486	.66	.15	.15	.30	1.3	.000	.00	8000
JAN										
07...	12	613	.83	--	--	--	--	--	--	9000
22...	22	474	.64	.21	.19	.40	1.8	<.010	<.03	7000
FEB										
05...	6.9	283	.38	--	--	--	--	--	--	--
17...	11	158	.21	.51	.27	.78	3.5	.090	.28	2800
MAR										
11...	7.7	344	.47	--	--	--	--	--	--	--
24...	8.4	324	.44	.15	.20	.35	1.6	<.010	.03	3700
APR										
10...	7.0	245	.33	--	--	--	--	--	--	3500
22...	6.7	335	.46	.11	.17	.28	1.2	<.010	.03	4600
MAY										
12...	3.9	156	.21	--	--	--	--	--	--	--
26...	8.6	426	.58	.15	.50	.65	2.9	<.010	.03	6300
JUN										
03...	6.7	319	.43	--	--	--	--	--	--	--
22...	7.2	290	.39	.16	.46	.62	2.7	.020	.06	0
JUL										
09...	9.7	713	.97	--	--	--	--	--	--	--
21...	9.3	740	1.0	.13	.38	.51	2.3	<.010	.03	12000
AUG										
06...	13	863	1.1	.10	--	--	--	<.010	.03	--
19...	7.7	1480	2.0	--	--	--	--	--	--	--
27...	9.7	1570	2.1	.14	.60	.74	3.3	<.010	--	32000
SEP										
09...	8.6	1320	1.8	--	--	--	--	--	--	--
30...	9.0	1560	2.1	.11	.80	.91	4.0	.020	.06	26000

DATE	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)
OCT										
07...	--	--	--	--	46000	0	46000	6	4400	0
21...	--	--	--	--	--	--	24000	7	4000	0
NOV										
05...	--	--	--	--	--	--	18000	--	--	--
19...	--	--	--	--	8800	4300	4500	2	1700	0
DEC										
04...	--	--	--	--	9100	5200	3900	6	1500	100
19...	--	--	--	--	14000	4200	9800	2	1700	0
JAN										
07...	--	--	--	--	18000	1000	17000	--	2200	0
22...	--	--	--	--	9400	2400	7000	4	1600	0
FEB										
05...	--	--	--	--	7800	5500	2300	25	910	0
17...	--	--	--	--	5900	4400	1500	1	330	50
MAR										
11...	--	--	--	--	11000	4100	6900	2	1000	0
24...	--	--	--	--	7900	4100	3800	17	970	0
APR										
10...	--	--	--	--	6700	6000	710	--	810	30
22...	--	--	--	--	10000	5700	4300	6	1000	0
MAY										
12...	--	--	--	--	4100	3300	840	1	390	50
26...	--	--	--	--	9800	4800	5000	4	1500	100
JUN										
03...	--	--	--	--	7300	5400	1900	1	950	10
22...	--	--	--	--	8500	6500	2000	2	950	0
JUL										
09...	--	--	--	--	15000	3000	12000	10	2800	300
21...	--	--	--	--	15000	2000	13000	31	3300	400
AUG										
06...	1	2	20	14	14000	12000	2000	16	3700	3500
19...	--	--	--	--	33000	0	33000	10	6500	600
27...	--	--	--	--	31000	0	31000	10	7500	0
SEP										
09...	--	--	--	--	26000	1000	25000	10	6000	0
30...	--	--	--	--	30000	0	30000	5	8300	1600

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, SUS- PENDED RECOVERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT										
07...	4400	--	--	--	--	--	560	--	--	--
21...	4000	<.1	150	--	--	0	690	690	1.6	.2
NOV										
05...	3000	--	--	--	--	--	320	--	--	--
19...	1700	--	--	--	--	0	160	160	1.0	.4
DEC										
04...	1400	--	--	--	--	--	180	--	--	--
19...	1700	--	--	--	--	0	170	170	.3	.2
JAN										
07...	2200	--	--	--	--	--	470	--	--	--
22...	1600	<.1	67	--	--	0	190	190	.9	.4
FEB										
05...	910	--	--	--	--	--	120	--	--	--
17...	280	--	--	--	--	10	40	50	3.6	1.2
MAR										
11...	1000	--	--	--	--	--	100	--	--	--
24...	970	--	--	--	--	0	150	150	3.3	.0
APR										
10...	780	--	--	--	--	--	100	--	--	--
22...	1000	<.1	52	--	--	20	110	130	1.3	.3
MAY										
12...	340	--	--	--	--	--	40	--	--	--
26...	1400	--	--	--	--	10	140	150	.9	.1
JUN										
03...	940	--	--	--	--	--	110	--	--	--
22...	950	--	--	--	--	0	130	130	1.4	--
JUL										
09...	2500	--	--	--	--	--	280	--	--	--
21...	2900	<.1	120	--	--	20	270	290	1.3	.2
AUG										
06...	170	<.1	--	<1	1	--	--	350	--	--
19...	5900	--	--	--	--	--	560	--	--	--
27...	7500	--	--	--	--	0	620	620	<.3	.3
SEP										
09...	6000	--	--	--	--	--	510	--	--	--
30...	6700	--	--	--	--	0	670	670	1.0	.4

RACCOON CREEK BASIN

03201660 BIG FOUR HOLLOW CREEK BELOW EAST FORK NEAR LAKE HOPE, OH.

LOCATION.--Lat 39°22'12", long 82°19'06", in NW 1/4 NE 1/4 sec. 11, T. 11 R. 16 W., Vinton County, Hydrologic Unit 05090101, on left bank 200 ft (61 m) downstream from East Fork, and 0.6 mi (1.0 km) upstream from State Route 278, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--0.73 mi² (1.89 km²)

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 812.30 ft (247.589 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 306 ft³/s (8.68 m³/s) June 6, 1981, gage height, 53.67 ft (16.359 m), from rating curve extended above 57.0 ft³/s (1.61 m³/s); many days June through September 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 306 ft³/s (8.68 m³/s) June 6, gage height, 53.67 ft (16.359 m) from rating curve extended above 57 ft³/s (1.61 m³/s); no flow many days June through September.

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	.05	.05	.47	.23	9.0	1.0	.37	1.0	.68	.09	.00	.00
2	.05	.22	.42	.22	7.0	.96	.29	.68	.57	.03	.00	.00
3	.06	.05	.33	.18	2.5	.90	.29	.51	.37	.02	.00	.06
4	.07	.09	.20	.15	1.0	.90	2.2	.42	10	.00	.00	.03
5	.06	.07	.17	.12	.70	2.5	12	.37	1.5	.03	.00	.02
6	.06	.06	.20	.19	.64	1.5	1.3	.74	47	.02	.03	.00
7	.06	.06	.28	.20	.60	1.0	.81	.62	4.4	.00	.02	.00
8	.06	.06	.45	.18	.64	.68	.62	.47	1.8	.00	.02	.03
9	.06	.06	1.9	.17	.50	.47	.51	.42	1.7	.00	.02	.00
10	.06	.06	1.2	.16	1.1	.29	.42	.42	1.9	.00	.00	.00
11	.07	.06	.54	.15	3.0	.14	.42	13	1.1	.00	.00	.00
12	.06	.06	.35	.16	1.5	.14	.62	1.9	.83	.00	.00	.00
13	.06	.06	.20	.16	1.1	.12	.57	.81	4.5	.14	.00	.00
14	.06	.06	.15	.14	1.0	.12	.47	1.2	3.3	.03	.00	.02
15	.06	.06	.12	.13	1.0	.12	.37	1.9	1.4	.00	.00	.04
16	.06	.06	.10	.12	5.0	1.0	.33	.81	1.5	.00	.00	.03
17	.06	.88	.08	.12	7.0	.42	.81	.51	1.2	.00	.00	.02
18	.51	.47	.15	.12	4.5	.25	.68	.51	.88	.00	.00	.02
19	.06	.25	.17	.12	6.0	.22	.57	.88	.05	.00	.00	.02
20	.05	.19	.10	.12	10	.19	.51	.74	.03	.00	.00	.00
21	.05	.17	.07	.15	5.0	.17	.42	.47	.62	.00	.00	.00
22	.05	.14	.10	.20	2.5	.14	.42	.33	.29	.00	.00	.00
23	.05	.17	.12	.25	6.8	.14	6.2	.25	.09	.00	.00	.00
24	.06	.42	.15	.30	4.0	.12	1.3	.19	.00	.00	.00	.00
25	.96	.33	.11	.50	3.0	.17	3.6	.17	.04	.00	.00	.00
26	.09	.25	.10	1.2	2.2	.14	3.0	.17	.03	.00	.00	.00
27	.06	1.9	.09	.90	1.7	.62	2.6	4.3	.03	.00	.00	.00
28	.06	.88	.10	.60	1.2	.42	2.3	2.3	.02	.02	.00	.00
29	.06	.68	.09	.40	---	.33	2.0	.62	.00	.02	.00	.00
30	.05	.57	.17	.33	---	.57	.33	1.1	.02	.00	.00	.00
31	.05	---	.18	.33	---	.47	---	1.3	---	.00	.00	---
TOTAL	3.18	8.44	8.86	8.30	90.18	16.21	46.33	39.11	85.85	.40	.09	.29
MEAN	.10	.28	.29	.27	3.22	.52	1.54	1.26	2.86	.013	.003	.010
MAX	.96	1.9	1.9	1.2	10	2.5	12	13	47	.14	.03	.06
MIN	.05	.05	.07	.12	.50	.12	.29	.17	.00	.00	.00	.00
CFSM	.14	.38	.40	.37	4.41	.71	2.11	1.73	3.92	.02	.004	.01
IN.	.16	.43	.45	.42	4.59	.82	2.36	1.99	4.37	.02	.00	.01
CAL YR 1980	TOTAL 351.81	MEAN .96	MAX 9.7	MIN .05	CFSM 1.32	IN 17.90						
WTR YR 1981	TOTAL 307.24	MEAN .84	MAX 47	MIN .00	CFSM 1.15	IN 15.64						

03201660 BIG FOUR HOLLOW CREEK BELOW EAST FORK NEAR LAKE HOPE, OH--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT												
07...	1200	.01	395	6.8	12.5	--	150	140	.4	20	35	15
21...	1330	.01	350	5.5	12.0	10	160	160	.4	20	40	15
NOV												
05...	1230	.01	390	7.1	8.0	--	150	140	--	--	34	15
19...	1400	.10	350	7.7	4.0	10	130	110	--	--	29	13
DEC												
04...	1230	.10	330	7.7	2.5	--	120	100	--	--	27	12
18...	1400	.10	310	7.5	4.0	2	110	92	--	--	25	11
JAN												
07...	1400	--	340	6.3	.5	--	130	110	.4	20	32	13
22...	1330	--	325	6.3	.5	<10	120	100	.3	15	32	9.1
FEB												
05...	1500	--	240	6.4	.5	--	80	66	.3	15	20	7.3
17...	1830	.70	170	7.3	4.0	<10	61	46	--	--	14	6.2
MAR												
11...	1300	.56	225	6.5	6.0	--	91	73	.2	10	22	8.7
24...	1300	.56	260	6.5	8.0	51	99	80	.2	10	23	10
APR												
10...	1230	2.3	210	6.7	11.0	--	87	67	.2	10	21	8.5
22...	1130	2.3	240	7.0	9.5	<10	100	91	--	--	25	10
MAY												
12...	1500	6.4	185	7.2	11.5	--	68	47	--	--	16	6.8
26...	1330	1.1	270	6.3	18.0	<10	100	80	.8	40	24	9.8
JUN												
03...	1130	2.3	240	7.6	17.0	--	91	68	--	--	22	8.8
22...	1330	2.3	210	7.1	20.0	<10	83	55	--	--	20	8.0
JUL												
09...	1130	.42	320	7.0	22.0	--	110	77	--	--	27	11
22...	1130	.56	340	6.0	20.0	<10	130	120	.3	15	31	12

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 CAC03)	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											
07...	5.9	8	.2	2.2	8	0	7	2.0	170	3.3	281
21...	5.6	7	.2	2.7	4	0	3	20	180	3.4	300
NOV											
05...	6.6	9	.2	2.5	7	0	6	.9	160	4.6	255
19...	6.5	10	.3	2.3	24	0	20	.8	130	4.3	224
DEC											
04...	6.0	10	.2	1.9	24	0	20	.8	120	3.6	201
18...	6.0	11	.3	1.6	22	0	18	1.1	100	3.5	184
JAN											
07...	5.6	8	.2	1.7	22	0	18	18	120	4.0	213
22...	6.5	11	.3	1.7	20	0	16	16	130	4.3	228
FEB											
05...	3.2	8	.2	1.5	17	0	14	11	88	3.1	153
17...	3.9	12	.2	1.4	18	0	15	1.4	53	3.7	109
MAR											
11...	5.1	11	.2	1.6	22	0	18	11	86	3.4	149
24...	6.0	11	.3	1.6	23	0	19	12	93	3.5	164
APR											
10...	4.3	9	.2	1.8	24	0	20	7.7	78	2.9	173
22...	5.1	10	.2	1.7	11	0	9	1.8	88	2.8	171
MAY											
12...	3.8	11	.2	1.7	26	0	21	2.6	53	2.6	119
26...	5.2	10	.2	2.0	24	0	20	19	95	3.4	205
JUN											
03...	4.9	10	.2	1.9	28	0	23	1.1	73	3.0	169
22...	5.5	12	.3	2.0	34	0	28	4.3	59	2.5	141
JUL											
09...	4.7	8	.2	2.5	40	0	33	6.4	130	2.7	231
22...	5.1	8	.2	2.7	12	0	10	19	140	2.5	258

RACCOON CREEK BASIN

03201660 BIG FOUR HOLLOW CREEK BELOW EAST FORK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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											
07...	.38	--	--	--	--	--	--	--	2100	400	1700
21...	.41	.09	.20	.29	1.3	.010	.03	590	1600	660	940
NOV											
05...	.35	--	--	--	--	--	--	--	--	--	1700
19...	.30	.29	.09	.38	1.7	.000	.00	400	2700	500	2200
DEC											
04...	.27	--	--	--	--	--	--	--	2800	700	2100
18...	.25	.21	.11	.32	1.4	.000	.00	500	2800	1100	1700
JAN											
07...	.29	--	--	--	--	--	--	510	3200	1100	2100
22...	.31	.27	.20	.47	2.1	<.010	<.03	460	2300	1000	1300
FEB											
05...	.21	--	--	--	--	--	--	--	3200	1800	1400
17...	.15	.45	.20	.65	2.9	.070	.21	470	1700	1400	280
MAR											
11...	.20	--	--	--	--	--	--	--	2000	1100	870
24...	.22	.18	.03	.21	.93	<.010	.03	430	1700	740	960
APR											
10...	.24	--	--	--	--	--	--	30	1300	630	670
22...	.23	.15	.28	.43	1.9	<.010	.03	3300	1200	430	770
MAY											
12...	.16	--	--	--	--	--	--	--	2200	1800	450
26...	.28	.21	.38	.59	2.6	<.010	.03	300	1800	700	1100
JUN											
03...	.23	--	--	--	--	--	--	--	1200	750	450
22...	.19	.19	.33	.52	2.3	<.010	.03	0	980	570	410
JUL											
09...	.31	--	--	--	--	--	--	--	2100	700	1400
22...	.35	.18	.27	.45	2.0	<.010	.03	600	1800	600	1200

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											
07...	1	2100	0	2200	--	--	--	60	--	--	--
21...	1	3100	0	3100	<.1	19	0	50	50	1.6	.3
NOV											
05...	--	--	--	2800	--	--	--	30	--	--	--
19...	3	1900	0	1900	--	--	10	20	30	1.8	.3
DEC											
04...	7	1700	100	1600	--	--	--	20	--	--	--
18...	3	1500	200	1300	--	--	0	20	20	.3	.2
JAN											
07...	--	1500	0	1500	--	--	--	20	--	--	--
22...	4	1100	0	1100	<.1	11	0	30	30	3.4	.2
FEB											
05...	63	710	0	710	--	--	--	10	--	--	--
17...	1	380	90	290	--	--	10	10	20	1.7	.5
MAR											
11...	2	780	60	720	--	--	--	8	--	--	--
24...	17	800	0	800	--	--	20	10	30	1.5	.1
APR											
10...	--	770	30	740	--	--	--	<4	--	--	--
22...	30	760	0	760	<.1	--	30	20	50	1.3	.3
MAY											
12...	1	530	80	450	--	--	--	10	--	--	--
26...	1	1200	0	1200	--	--	30	10	40	1.0	.2
JUN											
03...	1	660	0	660	--	--	--	10	--	--	--
22...	1	570	0	570	--	--	0	30	30	1.3	.3
JUL											
09...	20	1900	200	1700	--	--	--	30	--	--	--
22...	6	2000	200	1800	<.1	13	20	20	40	.7	.3

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 mi² (2.62 km²).

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 (230.441 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.--11 years, 1.18 ft³/s (0.033 m³/s), 15.87 in/yr (403 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s (34.0 m³/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, 201 ft³/s (5.69 m³/s) June 6, gage height, 23.77 ft (7.245 m); minimum, 0.06 ft³/s (0.0002 m³/s) Aug. 18-29, gage height, 20.11 ft (6.130 m).

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	.12	.08	.58	.31	12	1.5	1.2	2.7	1.9	.70	.08	.07
2	.13	.08	.49	.32	15	1.3	.95	1.7	1.6	.26	.08	.07
3	.13	.08	.39	.27	4.4	1.1	.84	1.2	1.1	.21	.08	.22
4	.15	.12	.28	.22	1.6	1.1	6.6	.90	11	.19	.08	.15
5	.11	.09	.24	.16	1.0	5.2	14	.75	5.9	.28	.07	.12
6	.08	.07	.24	.22	.88	2.6	3.2	1.7	43	.22	.13	.11
7	.09	.08	.40	.28	.82	1.7	2.0	1.5	8.7	.18	.11	.10
8	.08	.09	.46	.25	.91	1.2	1.5	1.0	4.9	.15	.11	.12
9	.07	.08	2.7	.23	.68	1.1	1.2	.80	2.9	.14	.09	.11
10	.06	.08	1.8	.22	1.3	.93	.92	.82	2.9	.13	.08	.10
11	.09	.08	.80	.22	4.2	.81	.93	18	1.7	.11	.08	.10
12	.08	.08	.53	.21	1.9	.70	1.4	6.7	1.2	.10	.08	.09
13	.08	.08	.35	.22	1.5	.63	1.3	2.4	6.1	1.3	.07	.09
14	.08	.08	.19	.19	1.4	.50	1.1	3.8	4.3	.40	.07	.20
15	.10	.06	.16	.18	1.4	.54	.82	4.7	1.8	.21	.07	.25
16	.11	.06	.15	.17	6.1	4.1	.77	2.3	1.8	.18	.07	.15
17	.15	1.0	.11	.15	9.5	1.9	2.1	1.4	1.5	.16	.07	.13
18	.61	.83	.18	.15	5.4	1.4	1.5	1.5	.96	.14	.06	.13
19	.15	.35	.23	.14	9.4	1.1	1.3	2.9	.52	.12	.06	.13
20	.10	.24	.13	.14	18	1.0	1.2	2.4	.42	.12	.06	.12
21	.08	.19	.10	.18	5.7	.89	.96	1.3	2.9	.12	.06	.12
22	.07	.16	.11	.27	3.4	.74	.93	.95	1.8	.12	.06	.12
23	.07	.16	.17	.34	11	.67	5.1	.71	.68	.11	.06	.12
24	.10	.44	.21	.40	5.4	.62	3.5	.55	.47	.10	.06	.12
25	1.0	.41	.16	.82	4.3	.57	1.9	.44	.37	.10	.06	.12
26	.25	.29	.12	2.7	3.3	.54	1.4	.49	.28	.10	.06	.11
27	.15	3.0	.13	1.5	2.3	2.5	1.2	4.6	.23	.10	.06	.11
28	.13	1.2	.12	.91	1.6	1.4	1.0	6.6	.20	.13	.06	.11
29	.10	.75	.16	.58	---	1.2	.88	1.9	.18	.13	.06	.10
30	.09	.70	.24	.45	---	1.8	.68	3.8	.20	.10	.07	.10
31	.08	---	.25	.39	---	1.5	---	3.9	---	.09	.08	---
TOTAL	4.69	11.01	12.18	12.79	134.39	42.84	62.38	84.41	111.51	6.50	2.29	3.69
MEAN	.15	.37	.39	.41	4.80	1.38	2.08	2.72	3.72	.21	.074	.12
MAX	1.0	3.0	2.7	2.7	18	5.2	14	18	43	1.3	.13	.25
MIN	.06	.06	.10	.14	.68	.50	.68	.44	.18	.09	.06	.07
CFSM	.15	.37	.39	.41	4.75	1.37	2.06	2.69	3.68	.21	.07	.12
IN.	.17	.41	.45	.47	4.94	1.58	2.30	3.11	4.10	.24	.08	.14
CAL YR 1980	TOTAL 463.00	MEAN 1.27	MAX 20	MIN .06	CFSM 1.26	IN 17.04						
WTR YR 1981	TOTAL 488.68	MEAN 1.34	MAX 43	MIN .06	CFSM 1.33	IN 17.98						

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, 3,170 micromhos Sept. 2; minimum, 87 micromhos June 6.

pH: Maximum recorded, 7.7 units June 5 and 6; minimum, 2.4 units many days in August and September.

WATER TEMPERATURES: Maximum, 29.0°C July 09; minimum 0.0°C Mar. 15-17.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 893 mg/L June 6; minimum daily mean, 4.0 mg/L on Nov. 1, 4.

SEDIMENT LOADS: Maximum daily, 170 tons (69.9 tonnes) June 6; minimum daily, 0.0 tons many days during October through January and July through September.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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												
07...	1100	.18	1100	3.4	10.5	--	420	420	3.2	159	100	41
21...	1200	.03	1050	3.6	12.0	21	440	440	3.0	149	110	40
NOV												
05...	1130	.06	950	3.6	7.5	--	390	390	3.1	154	93	38
19...	1300	.20	740	4.4	5.0	18	260	260	1.5	74	62	26
DEC												
04...	1130	.24	610	4.5	1.0	--	220	220	1.5	74	51	23
18...	1200	.30	565	4.4	4.0	6	200	200	1.0	50	46	20
JAN												
07...	1230	.28	660	4.4	.5	--	240	240	1.4	70	58	24
22...	1230	.25	600	4.2	1.0	33	190	190	1.1	55	52	15
FEB												
05...	1400	1.5	410	5.2	.5	--	120	120	.8	40	30	12
17...	1730	7.5	230	6.1	4.0	10	75	68	.4	20	17	7.8
MAR												
11...	1130	.77	370	4.9	5.0	--	140	140	.7	35	34	14
24...	1200	.60	520	4.6	6.5	<10	170	170	1.1	55	39	18
APR												
10...	1330	.88	430	4.5	11.5	--	150	150	1.0	50	37	15
22...	0930	.86	410	4.6	8.5	<10	180	180	1.2	60	41	18
MAY												
12...	1400	3.8	250	6.7	11.5	--	100	93	.4	20	24	10
26...	1230	.38	730	3.7	16.0	150	240	240	2.8	139	57	24
JUN												
03...	1100	1.1	425	4.9	16.5	--	160	160	1.0	50	37	16
22...	1230	1.6	350	5.3	20.5	15	140	140	.8	40	33	14
JUL												
09...	1330	.14	1400	3.0	24.5	--	420	420	6.5	323	96	44
21...	1200	.14	1550	3.1	21.5	14	360	360	8.5	422	82	38
AUG												
19...	1130	.05	2700	2.9	15.0	--	1000	1000	23	1140	230	110
27...	1100	.04	3000	2.9	18.0	170	1300	1300	24	1190	280	140
SEP												
09...	1130	.11	2600	2.9	14.5	--	1100	1100	20	993	240	110
30...	1130	.10	2850	3.2	13.5	<5	1100	1100	18	894	240	120

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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											
07...	8.8	4	.2	3.5	0	0	0	.0	580	3.1	905
21...	8.4	4	.2	3.8	0	0	0	.0	500	3.3	875
NOV											
05...	9.1	5	.2	3.6	0	0	0	.0	480	4.1	760
19...	7.0	5	.2	3.0	0	0	0	.0	320	4.0	512
DEC											
04...	7.2	7	.2	2.5	0	0	0	.0	260	3.2	417
18...	6.6	7	.2	2.1	0	0	0	.0	240	3.6	390
JAN											
07...	6.9	6	.2	2.1	0	0	0	.0	280	3.9	446
22...	7.5	8	.2	2.1	0	0	0	.0	270	3.6	433
FEB											
05...	4.5	7	.2	1.8	3	0	2	30	180	3.1	271
17...	3.6	9	.2	1.7	9	0	7	11	81	3.3	138
MAR											
11...	5.4	8	.2	1.8	2	0	2	40	180	3.2	270
24...	6.5	8	.2	2.0	0	0	0	.0	210	3.1	330
APR											
10...	5.0	6	.2	2.2	0	0	0	.0	190	2.7	246
22...	5.6	6	.2	2.1	0	0	0	.0	200	2.9	333
MAY											
12...	4.3	8	.2	1.8	9	0	7	2.9	110	2.3	182
26...	5.5	5	.2	2.6	0	0	0	.0	320	2.7	555
JUN											
03...	5.6	7	.2	2.1	2	0	2	40	190	2.9	329
22...	5.4	8	.2	2.2	4	0	3	32	140	2.2	260
JUL											
09...	6.7	3	.1	4.0	0	0	0	.0	690	2.5	1150
21...	5.7	3	.1	3.1	0	0	0	.0	690	2.5	1120
AUG											
19...	13	3	.2	4.2	0	0	0	.0	1800	3.3	2800
27...	15	2	.2	5.6	0	0	0	.0	2100	12	3280
SEP											
09...	13	3	.2	4.6	0	0	0	.0	1600	6.5	2550
30...	13	3	.2	4.4	0	0	0	.0	1900	6.4	2900

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											
07...	1.2	--	--	--	--	--	--	9000	17000	0	17000
21...	1.1	.09	.29	.38	1.7	.010	.03	10000	13000	0	13000
NOV											
05...	1.0	--	--	--	--	--	--	--	--	--	9600
19...	.70	1.5	.22	1.7	7.6	.000	.00	5800	5100	0	5100
DEC											
04...	.57	--	--	--	--	--	--	--	5600	1100	4500
18...	.53	.27	.28	.55	2.4	.010	.03	4100	7600	2800	4800
JAN											
07...	.61	--	--	--	--	--	--	5300	4900	400	4500
22...	.59	.26	.22	.48	2.1	<.010	<.03	4300	3900	600	3300
FEB											
05...	.37	--	--	--	--	--	--	--	5600	2700	2900
17...	.19	.48	.22	.70	3.1	.070	.21	1600	2700	2000	750
MAR											
11...	.37	--	--	--	--	--	--	--	4500	1900	2600
24...	.45	.19	.17	.36	1.6	<.010	.03	3500	52000	48000	3700
APR											
10...	.33	--	--	--	--	--	--	3100	5700	1800	3900
22...	.45	.18	.21	.39	1.7	<.010	.03	3900	8800	2100	6700
MAY											
12...	.25	--	--	--	--	--	--	--	4100	1400	2700
26...	.75	.21	.34	.55	2.4	<.010	.03	9400	19000	2000	17000
JUN											
03...	.45	--	--	--	--	--	--	220	8500	300	8200
22...	.35	.21	.35	.56	2.5	.010	.03	0	7200	700	6500
JUL											
09...	1.5	--	--	--	--	--	--	--	45000	5000	40000
21...	1.5	.09	.37	.46	2.0	<.010	.03	27000	55000	18000	37000
AUG											
19...	3.8	--	--	--	--	--	--	--	140000	0	140000
27...	4.4	.11	.90	1.0	4.5	<.010	--	72000	150000	0	150000
SEP											
09...	3.4	--	--	--	--	--	--	--	88000	1000	87000
30...	3.9	.12	.81	.93	4.1	<.010	--	35000	110000	0	110000

RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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											
07...	--	14000	0	14000	--	--	--	340	--	--	--
21...	1	15000	0	15000	<.1	160	0	360	360	1.2	.2
NOV											
05...	--	--	--	12000	--	--	--	300	--	--	--
19...	1	7500	0	7500	--	--	20	170	190	1.4	.2
DEC											
04...	6	6200	500	5700	--	--	--	130	--	--	--
18...	4	5400	200	5200	--	--	10	120	130	.8	.2
JAN											
07...	--	6300	100	6200	--	--	--	210	--	--	--
22...	5	5000	100	4900	<.1	62	40	100	140	3.4	.1
FEB											
05...	12	3200	100	3100	--	--	--	100	--	--	--
17...	0	1100	190	910	--	--	20	20	40	1.8	.8
MAR											
11...	4	2900	200	2700	--	--	--	60	--	--	--
24...	16	3600	0	3600	--	--	10	100	110	1.8	.2
APR											
10...	--	3400	100	3300	--	--	--	110	--	--	--
22...	7	3500	0	3500	<.1	54	0	120	120	1.4	.4
MAY											
12...	1	1600	100	1500	--	--	--	60	--	--	--
26...	1	6400	100	6300	--	--	0	230	230	6.7	.1
JUN											
03...	--	3200	0	3200	--	--	--	120	--	--	--
22...	1	2600	0	2600	--	--	0	90	90	1.0	.8
JUL											
09...	11	15000	1000	14000	--	--	--	520	--	--	--
21...	79	18000	7000	11000	<.1	390	210	490	700	.8	.2
AUG											
19...	16	42000	0	42000	--	--	--	1400	--	--	--
27...	62	52000	0	52000	--	--	0	1600	1600	4.9	.3
SEP											
09...	6	39000	0	38000	--	--	--	1100	--	--	--
30...	3	40000	0	40000	--	--	0	1800	1800	2.2	.3

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	1130	1060	1020	990	498	438	555	534	579	216	318	309
2	1140	1020	1040	1010	528	483	579	537	324	219	327	318
3	1090	1010	1070	1020	567	525	639	558	372	330	342	327
4	1010	945	1080	879	615	564	750	615	438	372	348	333
5	1050	1010	969	942	612	603	891	765	450	408	342	237
6	1100	1040	1040	999	645	594	843	681	429	417	282	258
7	1130	1060	1070	1010	693	474	684	615	453	429	303	285
8	1130	1090	1070	990	564	474	735	684	468	417	318	303
9	1160	1120	1070	954	567	258	744	729	495	447	333	318
10	1180	1130	1080	1020	381	306	801	744	510	387	342	33
11	1120	1050	1070	1020	423	378	819	789	384	300	348	342
12	1130	1100	1080	1040	444	423	837	801	396	354	348	345
13	1150	1120	1080	1030	474	432	825	780	423	375	348	345
14	1170	1140	1090	1010	504	459	783	762	426	393	348	345
15	1210	1130	1090	1010	519	471	783	756	426	381	348	342
16	1250	1180	1090	1040	528	453	810	771	432	252	348	345
17	1220	1160	1140	429	564	513	837	807	1120	231	345	342
18	1260	537	606	477	594	546	849	825	1480	1120	345	303
19	1010	858	684	606	699	585	855	837	1950	939	336	306
20	1060	1010	729	687	744	675	840	807	1090	228	345	327
21	1100	1060	759	714	894	750	807	681	264	240	357	339
22	1100	1070	798	729	822	720	675	567	291	264	372	354
23	1140	1080	819	756	714	642	558	546	306	210	387	366
24	1250	1110	795	558	672	618	609	486	267	237	525	384
25	1040	603	618	558	804	672	555	417	288	267	543	519
26	840	711	657	621	882	729	411	366	303	288	555	534
27	912	834	774	297	762	723	432	372	327	300	564	423
28	906	879	429	351	828	738	471	426	348	309	453	441
29	948	897	486	420	747	636	549	438	---	---	---	---
30	984	942	462	423	639	594	570	471	---	---	---	---
31	1020	975	---	---	594	558	603	510	---	---	---	---
MONTH	1260	537	1140	297	894	258	891	366	1550	210	564	237
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	558	294	366	336	942	453	2160	2080	3140	2770
2	495	480	384	336	429	363	1080	927	2220	2150	3170	3040
3	510	486	432	378	486	429	1190	1070	2250	2150	3120	1970
4	534	351	480	429	492	135	1310	1160	2270	2200	2440	2020
5	390	351	522	474	345	153	1280	939	2330	2240	2580	2410
6	405	246	495	348	204	87	1250	1120	2230	1850	2730	2540
7	321	258	426	363	306	207	1380	1220	2130	2070	2780	2620
8	366	285	477	426	399	306	1440	1330	2140	2070	2740	2460
9	390	333	525	471	450	285	1520	1410	2300	2130	2670	2550
10	429	366	585	378	---	---	1580	1440	2360	2260	2770	2640
11	486	390	324	117	465	381	1670	1530	2440	2360	2850	2710
12	426	354	303	231	546	453	1730	1590	2490	2400	2880	2760
13	414	378	351	300	558	129	1730	312	2570	2480	2900	2760
14	435	399	423	198	360	204	1150	720	2640	2550	2920	1420
15	468	429	294	216	453	342	1360	1140	2660	2550	2190	1490
16	489	432	348	294	480	309	1380	1240	2580	2450	2380	2190
17	498	321	405	348	501	369	1500	1350	2670	2530	2470	2320
18	381	330	450	354	600	477	1590	1440	2760	2650	2480	2450
19	399	366	384	291	684	567	1590	1520	2820	2710	2510	2420
20	411	372	375	303	774	678	1580	1490	2820	2470	2580	2510
21	453	411	435	375	807	192	1740	1490	2870	2740	2650	2590
22	474	411	504	435	495	270	1750	1490	2840	2740	2660	2640
23	456	237	576	504	630	489	1850	1730	2890	2800	2680	2620
24	312	270	660	576	747	606	1880	1780	2900	2780	2730	2680
25	357	315	738	645	846	738	1920	1830	2950	2860	2770	2710
26	393	357	801	483	963	840	1960	1900	3040	2930	2830	2770
27	438	393	666	189	1060	936	1950	1830	3050	2960	2870	2810
28	471	429	321	204	1150	1030	1910	1570	3020	2920	2880	2850
29	504	456	420	324	1250	1130	1880	1600	3080	2960	2900	2800
30	540	504	495	210	1280	1140	2030	1890	3100	3020	2930	2820
31	---	---	336	267	---	---	2100	2000	3080	2990	---	---
MONTH	540	237	801	117	1280	87	2100	312	3100	1850	3170	1420
YEAR	3170	87										

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	3.5	3.2	3.4	3.3	4.4	3.9	4.9	4.5	6.3	4.3	5.5	5.3
2	3.5	3.4	3.5	3.0	4.3	4.0	4.9	4.8	6.2	6.0	5.4	5.1
3	3.5	3.4	3.4	3.0	4.3	4.1	4.8	4.6	6.1	5.8	5.4	5.0
4	3.6	3.5	3.3	3.1	4.5	3.9	4.8	4.6	5.8	5.5	5.3	5.0
5	3.6	3.4	3.4	3.3	4.6	4.3	4.6	4.2	5.5	5.2	6.1	5.3
6	3.6	3.4	3.5	3.2	4.4	4.1	4.4	4.1	5.3	5.0	5.9	5.6
7	3.6	3.4	3.4	3.0	4.6	4.0	4.7	4.2	5.2	4.7	5.6	5.3
8	3.6	3.2	3.2	3.0	4.7	4.2	4.8	4.4	5.4	5.0	5.4	5.2
9	3.5	3.3	3.2	3.0	6.5	4.3	4.6	4.4	5.1	4.9	5.2	5.0
10	3.4	3.4	3.3	3.2	6.4	6.1	4.5	4.4	5.3	4.2	5.1	4.8
11	3.6	3.5	3.4	3.2	6.1	5.5	4.5	4.3	6.1	5.3	5.2	4.8
12	3.6	3.5	3.4	3.0	5.5	5.2	4.4	4.2	6.0	5.7	5.2	4.9
13	3.6	3.5	3.3	2.8	5.3	5.0	4.2	4.0	5.9	5.5	5.1	4.9
14	3.6	3.5	3.2	2.9	5.0	4.9	4.3	3.8	5.7	4.9	5.2	5.0
15	3.5	3.4	3.2	3.0	4.9	4.6	4.1	4.1	5.8	4.8	5.2	4.9
16	3.4	3.2	3.3	3.2	4.8	4.7	4.3	4.0	5.7	5.0	5.0	4.9
17	3.3	3.2	4.9	3.2	4.8	4.4	4.3	4.2	6.1	5.6	5.0	4.9
18	3.8	3.3	4.5	4.0	4.5	4.1	4.3	3.9	5.8	5.3	5.6	4.9
19	3.5	3.4	4.0	3.8	4.5	4.1	4.2	3.7	5.8	5.4	5.4	5.2
20	3.5	3.2	3.9	3.4	4.6	4.5	4.0	3.7	5.9	5.7	5.2	4.9
21	3.5	3.2	3.8	3.6	4.6	4.3	4.1	3.9	5.8	5.5	4.9	4.7
22	3.5	3.4	3.8	3.3	4.5	4.1	4.3	4.1	5.7	5.2	4.8	4.5
23	3.5	3.4	3.6	3.3	4.3	4.1	4.5	4.4	6.2	5.3	4.7	4.4
24	3.5	3.3	3.9	3.4	4.7	4.3	5.4	4.0	6.1	5.9	4.6	4.3
25	4.3	3.5	4.0	3.9	4.7	4.4	5.9	4.2	6.0	5.6	4.5	4.3
26	3.9	3.7	4.0	3.8	4.5	4.1	6.0	5.4	5.8	5.4	4.4	4.2
27	3.7	3.4	5.6	3.6	4.4	4.2	5.8	5.3	5.6	5.1	5.9	4.2
28	3.5	3.4	5.4	4.8	4.4	3.9	5.6	5.1	5.5	5.1	5.4	5.3
29	3.6	3.4	4.8	4.3	4.2	3.9	5.5	4.8	---	---	---	---
30	3.6	3.2	4.7	4.3	4.4	4.2	5.2	4.9	---	---	---	---
31	3.6	3.2	---	---	4.5	4.3	4.9	4.6	---	---	---	---
MONTH	4.3	3.2	5.6	2.8	6.5	3.9	6.0	3.7	6.3	4.2	6.1	4.2

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	6.3	4.3	5.3	5.0	4.2	3.3	2.7	2.5	2.6	2.4
2	4.8	4.5	5.8	5.1	5.2	4.7	3.3	3.2	2.6	2.5	2.6	2.4
3	4.7	4.5	5.3	4.7	4.8	4.4	3.2	3.1	2.6	2.5	2.6	2.5
4	5.8	4.3	4.9	4.5	6.5	4.5	3.1	3.0	2.6	2.5	2.6	2.5
5	5.9	5.7	4.6	4.4	7.7	6.1	3.2	3.0	2.8	2.5	2.6	2.5
6	6.6	5.2	6.0	4.5	7.7	7.2	3.0	2.9	2.9	2.8	2.5	2.4
7	5.6	5.1	5.6	4.9	7.5	6.8	2.9	2.8	3.0	2.9	2.5	2.5
8	5.6	4.8	5.1	4.6	6.9	2.5	2.9	2.8	3.0	2.8	2.5	2.4
9	5.6	4.6	4.8	4.4	2.9	2.4	3.0	2.8	2.9	2.7	2.7	2.4
10	4.7	4.5	5.3	4.3	---	---	2.9	2.8	2.8	2.7	2.7	2.6
11	4.6	4.3	6.2	5.7	4.4	4.3	2.9	2.8	2.7	2.6	2.7	2.5
12	4.9	4.5	6.0	5.6	4.3	4.0	2.8	2.7	2.7	2.6	2.6	2.5
13	4.8	4.6	5.7	5.1	6.1	4.0	4.9	2.7	2.6	2.5	2.5	2.5
14	4.7	4.6	6.3	4.8	6.1	4.6	3.5	3.0	2.6	2.5	2.8	2.4
15	4.6	4.4	6.1	5.7	4.8	4.3	3.1	3.0	2.5	2.5	2.8	2.6
16	4.5	4.3	5.7	5.1	5.5	4.0	3.2	2.9	2.6	2.5	2.6	2.5
17	5.9	4.4	5.3	4.8	4.8	4.2	3.3	2.9	2.6	2.4	2.6	2.5
18	5.4	4.8	5.4	4.7	4.2	3.8	3.3	2.7	2.5	2.4	2.6	2.6
19	5.1	4.7	6.1	5.2	3.8	3.6	3.2	2.7	2.5	2.4	2.7	2.6
20	5.0	4.7	5.8	4.7	3.6	3.5	3.3	2.6	2.8	2.4	2.6	2.4
21	4.9	4.5	4.9	4.3	6.0	3.4	3.2	2.6	2.7	2.7	2.7	2.4
22	4.8	4.5	4.5	4.1	5.8	4.2	3.0	2.9	2.7	2.6	2.6	2.5
23	6.4	4.8	4.1	3.8	4.2	3.8	3.0	2.9	2.7	2.6	2.6	2.5
24	6.1	5.8	3.8	3.5	3.8	3.5	2.9	2.8	2.7	2.6	2.6	2.4
25	5.7	5.2	3.6	3.3	3.6	3.4	2.9	2.8	2.6	2.5	3.3	2.4
26	5.4	4.9	3.9	3.2	3.4	3.2	2.8	2.7	2.6	2.5	3.1	2.4
27	5.1	4.7	6.0	3.6	3.3	3.2	2.7	2.7	2.7	2.4	2.5	2.4
28	4.8	4.6	5.9	5.4	3.3	3.1	2.7	2.6	2.7	2.6	2.5	2.4
29	4.6	4.5	5.4	4.7	3.2	3.1	2.7	2.6	2.7	2.7	2.9	2.4
30	4.5	4.3	6.1	4.2	3.2	3.1	2.7	2.6	2.7	2.6	2.6	2.5
31	---	---	6.0	5.2	---	---	2.7	2.6	2.7	2.6	---	---
MONTH	6.6	4.3	6.3	3.2	7.7	2.4	4.9	2.6	3.0	2.4	3.3	2.4
YEAR	7.7	2.4										

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

[illegible]

RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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)
OCTOBER				NOVEMBER			DECEMBER		
1	.12	22	.00	.08	4	.00	.58	15	.02
2	.13	20	.00	.08	7	.00	.49	15	.02
3	.13	19	.00	.08	5	.00	.39	10	.01
4	.15	18	.00	.12	7	.00	.28	9	.00
5	.11	14	.00	.09	8	.00	.24	10	.00
6	.08	15	.00	.07	10	.00	.24	10	.00
7	.09	20	.00	.08	8	.00	.40	15	.02
8	.08	14	.00	.09	9	.00	.46	70	.09
9	.07	20	.00	.08	11	.00	2.7	68	.41
10	.06	21	.00	.08	13	.00	1.8	20	.10
11	.09	16	.00	.08	12	.00	.80	25	.05
12	.08	17	.00	.08	9	.00	.53	33	.05
13	.08	19	.00	.08	9	.00	.35	40	.04
14	.08	18	.00	.08	9	.00	.19	14	.00
15	.10	16	.00	.06	8	.00	.16	15	.00
16	.11	14	.00	.06	7	.00	.15	15	.00
17	.15	13	.00	1.0	293	2.4	.11	14	.00
18	.61	28	.07	.83	111	.33	.18	13	.00
19	.15	12	.00	.35	7	.00	.23	12	.00
20	.10	36	.00	.24	4	.00	.13	11	.00
21	.08	32	.00	.19	5	.00	.10	10	.00
22	.07	12	.00	.16	8	.00	.11	8	.00
23	.07	10	.00	.16	11	.00	.17	11	.00
24	.10	17	.02	.44	25	.03	.21	10	.00
25	1.0	105	.27	.41	10	.01	.16	10	.00
26	.25	50	.03	.29	8	.00	.12	10	.00
27	.15	10	.00	3.0	364	4.5	.13	10	.00
28	.13	5	.00	1.2	15	.05	.12	10	.00
29	.10	5	.00	.75	14	.03	.16	10	.00
30	.09	7	.00	.70	18	.03	.24	10	.00
31	.08	22	.00	---	---	---	.25	11	.00
TOTAL	4.69	---	0.39	11.01	---	7.38	12.18	---	0.81
JANUARY				FEBRUARY			MARCH		
1	.31	11	.00	12	799	57	1.5	11	.04
2	.32	11	.00	15	441	35	1.3	10	.04
3	.27	10	.00	4.4	20	.24	1.1	10	.03
4	.22	10	.00	1.6	25	.11	1.1	12	.04
5	.16	10	.00	1.0	15	.04	5.2	95	1.1
6	.22	11	.00	.88	10	.02	2.6	11	.08
7	.28	11	.00	.82	10	.02	1.7	10	.05
8	.25	11	.00	.91	10	.02	1.2	10	.03
9	.23	11	.00	.68	10	.02	1.1	9	.03
10	.22	11	.00	1.3	91	.40	.93	9	.02
11	.22	10	.00	4.2	46	.53	.81	10	.02
12	.21	10	.00	1.9	30	.15	.70	50	.09
13	.22	10	.00	1.5	17	.07	.63	100	.17
14	.19	9	.00	1.4	15	.06	.50	90	.12
15	.18	8	.00	1.4	15	.06	.54	40	.06
16	.17	8	.00	6.1	59	2.2	4.1	412	4.7
17	.15	7	.00	9.5	40	1.0	1.9	15	.08
18	.15	6	.00	5.4	15	.22	1.4	14	.05
19	.14	6	.00	9.4	144	11	1.1	14	.04
20	.14	7	.00	18	144	12	1.0	14	.04
21	.18	7	.00	5.7	15	.23	.89	14	.03
22	.27	8	.00	3.4	13	.12	.74	13	.03
23	.34	8	.00	11	81	3.6	.67	17	.03
24	.40	25	.03	5.4	15	.22	.62	11	.02
25	.82	33	.08	4.3	13	.15	.57	13	.02
26	2.7	88	.52	3.3	11	.10	.54	13	.02
27	1.5	10	.04	2.3	12	.07	2.5	48	.31
28	.91	11	.03	1.6	17	.07	1.4	18	.07
29	.58	20	.03	---	---	---	1.2	25	.08
30	.45	15	.02	---	---	---	1.8	43	.20
31	.39	12	.01	---	---	---	1.5	15	.06
TOTAL	12.79	---	0.76	134.39	---	124.72	42.84	---	7.70

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	1.2	13	.04	2.7	56	.44	1.9	48	.25
2	.95	14	.04	1.7	36	.17	1.6	33	.14
3	.84	13	.03	1.2	30	.10	1.1	22	.07
4	6.6	814	.90	.90	22	.05	11	359	18
5	14	847	.60	.75	21	.04	5.9	85	2.0
6	3.2	20	.17	1.7	141	.82	43	893	170
7	2.0	17	.09	1.5	35	.14	8.7	50	1.2
8	1.5	15	.06	1.0	20	.05	4.9	53	.65
9	1.2	16	.05	.80	20	.04	2.9	130	1.2
10	.92	15	.04	.82	40	.14	2.9	161	1.4
11	.93	15	.04	18	154	7.4	1.7	45	.21
12	1.4	34	.13	6.7	47	.85	1.2	40	.13
13	1.3	13	.05	2.4	40	.26	6.1	260	9.6
14	1.1	14	.04	3.8	77	1.0	4.3	35	.47
15	.82	16	.04	4.7	60	.83	1.8	20	.10
16	.77	15	.03	2.3	29	.18	1.8	106	.84
17	2.1	42	.28	1.4	26	.10	1.5	25	.10
18	1.5	19	.08	1.5	53	.24	.96	29	.08
19	1.3	17	.06	2.9	96	.89	.52	30	.04
20	1.2	14	.05	2.4	55	.36	.42	30	.03
21	.96	65	.17	1.3	37	.13	2.9	143	2.9
22	.93	16	.04	.95	30	.08	1.8	50	.24
23	5.1	56	.77	.71	28	.05	.68	30	.06
24	3.5	20	.19	.55	27	.04	.47	26	.03
25	1.9	18	.09	.44	26	.03	.37	30	.03
26	1.4	15	.06	.49	50	.09	.28	33	.02
27	1.2	13	.04	4.6	151	2.5	.23	36	.02
28	1.0	18	.05	6.6	45	.86	.20	39	.02
29	.88	17	.04	1.9	28	.14	.18	42	.02
30	.68	16	.03	3.8	164	3.4	.20	37	.02
31	---	---	---	3.9	55	.56	---	---	---
TOTAL	62.38	---	152.80	84.41	---	21.98	111.51	---	209.87
JULY				AUGUST			SEPTEMBER		
1	.70	33	.06	.08	50	.01	.07	58	.01
2	.26	60	.04	.08	53	.01	.07	58	.01
3	.21	40	.02	.08	54	.01	.22	67	.04
4	.19	30	.02	.08	55	.01	.15	33	.01
5	.28	30	.02	.07	65	.01	.12	38	.01
6	.22	29	.02	.13	50	.02	.11	42	.01
7	.18	29	.01	.11	56	.02	.10	47	.01
8	.15	28	.01	.11	64	.02	.12	51	.02
9	.14	29	.01	.09	61	.01	.11	42	.01
10	.13	30	.01	.08	58	.01	.10	58	.02
11	.11	30	.00	.08	55	.01	.10	40	.01
12	.10	30	.00	.08	52	.01	.09	46	.01
13	1.3	106	1.1	.07	50	.00	.09	41	.00
14	.40	40	.04	.07	50	.00	.20	78	.07
15	.21	35	.02	.07	50	.00	.25	45	.04
16	.18	36	.02	.07	50	.00	.15	26	.01
17	.16	37	.02	.07	51	.00	.13	31	.01
18	.14	38	.01	.06	52	.00	.13	31	.01
19	.12	39	.01	.06	53	.00	.13	32	.01
20	.12	40	.01	.06	55	.00	.12	28	.00
21	.12	41	.01	.06	57	.00	.12	31	.01
22	.12	42	.01	.06	59	.00	.12	25	.00
23	.11	43	.01	.06	59	.00	.12	29	.00
24	.10	44	.01	.06	58	.00	.12	34	.01
25	.10	45	.01	.06	63	.01	.12	45	.01
26	.10	46	.01	.06	68	.01	.11	47	.01
27	.10	47	.01	.06	72	.01	.11	49	.01
28	.13	48	.02	.06	71	.01	.11	50	.01
29	.13	49	.02	.06	68	.01	.10	37	.00
30	.10	50	.01	.07	65	.01	.10	39	.01
31	.09	51	.01	.08	62	.01	---	---	---
TOTAL	6.50	---	1.58	2.29	---	0.22	3.69	---	0.39
YEAR	488.68		528.60						

RACCOON CREEK BASIN

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'32", long 82°19'05" in SW 1/4 SE1/4 sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank 60 ft (18 m) upstream from Sandy Run, 3.0 mi (4.8 km) southwest of Carbondale and 3.2 mi (5.1 km) northeast of Lake Hope.

DRAINAGE AREA.--0.22 mi² (0.57 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 763.22 ft (232.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55 ft³/s (1.56 m³/s) June 6, 1981, gage height, 6.56 ft (1.999 m); no flow many days during 1979-81.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 55 ft³/s (1.56 m³/s) June 6, gage height, 6.56 ft (1.999 m); no flow many days.

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	.00	.03	.09	.13	1.5	.33	.11	1.3	.36	.16	.01	.00
2	.00	.03	.07	.15	3.2	.30	.09	.39	.24	.00	.00	.00
3	.00	.02	.07	.12	1.0	.25	.07	.20	.21	.00	.00	.00
4	.00	.04	.06	.08	.40	.24	1.5	.13	5.3	.00	.00	.00
5	.00	.04	.07	.04	.25	1.5	4.2	.11	4.2	.00	.00	.00
6	.00	.06	.06	.05	.20	.60	.53	.61	16	.00	.00	.00
7	.00	.06	.09	.10	.18	.40	.24	.33	5.9	.00	.00	.00
8	.00	.04	.09	.09	.20	.30	.16	.20	1.3	.00	.00	.00
9	.00	.04	1.1	.07	.15	.25	.13	.13	.82	.11	.00	.00
10	.00	.03	.39	.06	.35	.20	.11	.33	.82	.11	.00	.00
11	.00	.03	.16	.05	.90	.04	.21	6.6	.70	.11	.00	.00
12	.00	.03	.11	.05	.50	.04	.53	1.7	.61	.10	.00	.00
13	.00	.02	.07	.04	.35	.04	.39	.30	2.6	.17	.00	.00
14	.00	.02	.06	.04	.31	.03	.28	.83	.68	.13	.00	.00
15	.00	.02	.06	.04	.30	.03	.16	.83	.19	.12	.00	.00
16	.00	.02	.06	.04	1.0	.70	.16	.23	.17	.12	.00	.00
17	.00	.33	.04	.03	2.0	.16	.61	.20	.17	.12	.00	.00
18	.00	.13	.04	.03	1.2	.11	.28	.20	.15	.11	.00	.00
19	.04	.06	.03	.03	1.8	.07	.20	.55	.15	.11	.00	.00
20	.04	.04	.02	.03	4.0	.06	.16	.30	.14	.11	.00	.00
21	.04	.03	.02	.04	2.0	.06	.11	.20	.21	.06	.00	.00
22	.03	.03	.02	.05	.76	.04	.11	.17	.17	.10	.00	.00
23	.02	.02	.02	.08	3.0	.04	1.7	.17	.16	.10	.00	.00
24	.02	.09	.03	.10	1.3	.03	.70	.16	.13	.10	.00	.00
25	.33	.07	.03	.15	1.0	.03	.28	.16	.13	.00	.00	.00
26	.09	.06	.03	1.0	.80	.03	.16	.16	.13	.00	.00	.00
27	.06	.70	.03	.50	.60	.39	.13	1.0	.12	.00	.00	.00
28	.06	.24	.03	.30	.40	.13	.11	2.9	.12	.00	.00	.00
29	.06	.13	.03	.15	---	.11	.11	.55	.12	.04	.00	.00
30	.06	.11	.09	.10	---	.24	.09	1.9	.12	.05	.00	.00
31	.04	---	.11	.09	---	.16	---	2.1	---	.11	.00	---
TOTAL	.89	2.57	3.18	3.83	29.65	6.91	13.62	24.94	42.12	2.14	.01	.00
MEAN	.029	.086	.10	.12	1.06	.22	.45	.80	1.40	.069	.000	.000
MAX	.33	.70	1.1	1.0	4.0	1.5	4.2	6.6	16	.17	.01	.00
MIN	.00	.02	.02	.03	.15	.03	.07	.11	.12	.00	.00	.00
CFSM	.13	.39	.46	.55	4.82	1.00	2.05	3.64	6.36	.31	.000	.000
IN.	.15	.43	.54	.64	4.99	1.16	2.29	4.20	7.09	.36	.00	.00
CAL YR 1980	TOTAL	81.21	MEAN	.22	MAX 10	MIN	.00	CFSM 1.00	IN 13.67			
WTR YR 1981	TOTAL	129.86	MEAN	.36	MAX 16	MIN	.00	CFSM 1.64	IN 21.86			

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1981

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 21...	1115	.01	170	7.9	11.0	7	60	39	--	--	15
NOV 19...	1100	.30	170	7.9	4.0	4	61	40	--	--	15
DEC 18...	1500	.10	153	6.5	5.0	4	58	45	.1	5.0	14
JAN 22...	1030	.11	200	6.0	1.5	<10	73	62	.1	5.0	18
FEB 17...	1600	1.7	100	6.2	4.0	10	39	28	.2	10	9.4
MAR 24...	1030	.04	160	6.5	6.0	<10	55	40	.2	10	13
APR 22...	1330	.09	150	8.0	12.5	<10	60	40	--	--	15
MAY 26...	1100	.03	140	7.4	14.5	<10	51	34	--	--	13
JUN 22...	1145	.39	135	6.7	19.0	<10	56	36	.1	5.0	14

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 21...	5.4	2.5	8	.1	1.8	26	0	21	.5	51	.9
NOV 19...	5.8	2.7	8	.2	1.7	26	0	21	.5	52	1.5
DEC 18...	5.6	2.6	9	.1	1.3	16	0	13	8.1	46	1.1
JAN 22...	6.9	2.8	8	.1	1.5	14	0	11	22	64	1.2
FEB 17...	3.7	1.5	8	.1	1.2	14	0	11	14	33	.9
MAR 24...	5.5	2.8	10	.2	1.4	18	0	15	9.1	51	1.3
APR 22...	5.5	2.4	8	.1	1.7	24	0	20	.4	45	1.1
MAY 26...	4.6	2.1	8	.1	1.6	21	0	17	1.3	45	1.2
JUN 22...	5.1	2.5	9	.1	1.9	24	0	20	7.7	40	1.0

RACCOON CREEK BASIN

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	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 P04)	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)
OCT 21...	100	.14	.05	.15	.20	.89	.010	.03	70	110	80
NOV 19...	99	.13	3.1	.07	3.2	14	.000	.00	70	150	140
DEC 18...	98	.13	.36	.12	.48	2.1	.000	.00	70	70	70
JAN 22...	123	.17	.35	<.10	--	--	<.010	<.03	90	190	--
FEB 17...	72	.10	.41	.14	.55	2.4	.080	.25	270	480	--
MAR 24...	96	.13	.16	.01	.17	.75	<.010	.03	140	60	10
APR 22...	107	.15	.09	.30	.39	1.7	.010	.03	80	80	60
MAY 26...	101	.14	.15	.19	.34	1.5	<.010	.03	170	80	--
JUN 22...	97	.13	.16	.28	.44	1.9	<.010	.03	0	860	830

DATE	IRON, DIS- SOLVED (UG/L AS FE)	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)	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 21...	30	0	20	10	10	10	0	10	1.7	.3
NOV 19...	10	0	20	0	20	4	6	10	1.0	.2
DEC 18...	0	2	20	10	10	4	6	10	1.2	.2
JAN 22...	<10	0	30	20	10	40	5	40	3.0	.2
FEB 17...	<10	1	30	20	10	10	9	20	2.8	.4
MAR 24...	50	19	20	10	10	10	20	30	3.3	.1
APR 22...	20	17	20	10	10	--	<4	50	1.7	--
MAY 26...	<10	2	20	0	20	10	10	20	1.2	.2
JUN 22...	30	1	50	30	20	10	10	20	1.8	2.0

03201722 SANDY RUN BELOW HULL HOLLOW CREEK NEAR LAKE HOPE, CH

LOCATION.--Lat 39°21'30", long 82°19'04", in SW 1/4 SE 1/4, sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, 100 ft (30 m) downstream from Hull Hollow Creek at State Highway 278, 3.0 mi (4.8 km) southwest of Carbondale and 3.3 mi (5.3 km) northeast of Lake Hope.

DRAINAGE AREA.--2.30 mi² (5.96 km²).

PERIOD OF RECORD.--October 1978 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 to SEPTEMBER 1981

DATE	TIME	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 CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT											
07...	1030	1000	3.3	10.0	--	340	340	2.9	144	76	37
21...	1100	1000	3.5	9.5	13	360	360	3.0	149	86	36
NOV											
05...	1030	1000	3.5	6.0	--	340	340	3.2	159	76	36
19...	1115	725	4.0	2.0	16	240	240	1.6	79	55	25
DEC											
04...	1030	660	4.2	1.0	--	210	210	1.5	74	47	22
18...	1600	695	3.6	4.0	9	210	210	1.6	79	46	22
JAN											
07...	1500	780	3.8	.5	--	270	270	2.0	99	62	27
22...	1115	675	3.6	.5	<10	190	190	1.6	79	50	15
FEB											
05...	1130	446	4.4	.5	--	130	130	1.1	55	31	12
17...	1630	225	5.6	4.0	14	80	77	.4	20	19	7.8
MAR											
11...	1030	435	4.0	3.5	--	130	130	1.0	50	30	14
24...	1100	480	4.2	3.5	<10	160	160	1.0	50	36	17
APR											
10...	1400	380	4.6	10.5	--	130	130	.7	35	32	13
22...	1300	500	4.1	10.0	<10	170	170	1.2	60	40	18
MAY											
12...	1330	230	5.6	11.0	--	86	83	.4	20	20	8.8
26...	1030	665	3.6	15.0	<10	190	190	1.8	89	44	20
JUN											
03...	1430	440	4.4	17.5	--	150	150	.8	40	34	15
22...	1100	360	5.2	18.0	<10	140	140	.7	35	33	14
JUL											
09...	1300	1010	3.3	22.5	--	300	300	3.1	154	69	30
21...	1000	1010	3.3	21.0	<10	390	390	4.3	214	89	41
AUG											
19...	1000	1250	3.4	16.5	--	580	580	15	745	130	63
27...	1300	1550	3.4	19.5	16	630	630	8.9	442	140	68
SEP											
09...	1230	1800	3.3	17.0	--	730	730	9.3	462	160	80
30...	1030	1900	3.5	13.0	24	720	720	7.6	377	160	78

RACCOON CREEK BASIN

03201722 SANDY RUN BELOW HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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											
07...	18	--	.4	--	0	0	0	.0	450	9.5	733
21...	16	9	.4	3.4	0	0	0	.0	450	9.5	756
NOV											
05...	19	11	.5	3.2	0	0	0	.0	440	13	696
19...	12	10	.3	2.8	0	0	0	.0	320	8.2	488
DEC											
04...	12	11	.4	2.3	0	0	0	.0	260	7.6	419
18...	11	10	.3	1.9	0	0	0	.0	280	6.9	438
JAN											
07...	12	9	.3	2.3	0	0	0	.0	340	7.6	521
22...	12	12	.4	2.0	0	0	0	.0	280	12	453
FEB											
05...	6.0	9	.2	1.8	0	0	0	.0	190	5.7	290
17...	6.4	15	.3	1.5	4	0	3	16	85	7.7	146
MAR											
11...	8.0	11	.3	1.7	0	0	0	.0	200	6.3	294
24...	9.7	12	.3	1.8	0	0	0	.0	200	6.6	321
APR											
10...	6.7	10	.3	1.9	0	0	0	.0	170	5.5	254
22...	9.3	10	.3	2.0	0	0	0	.0	210	5.5	337
MAY											
12...	4.5	10	.2	1.7	4	0	3	16	92	3.4	158
26...	14	14	.4	2.4	0	0	0	.0	260	6.7	421
JUN											
03...	8.0	10	.3	2.0	0	0	0	.0	180	4.8	280
22...	8.6	12	.3	2.2	5	0	4	50	150	4.3	263
JUL											
09...	11	7	.3	3.5	0	0	0	.0	350	8.3	735
21...	15	8	.3	3.9	0	0	0	.0	560	8.6	900
AUG											
19...	20	7	.4	3.5	0	0	0	.0	880	9.1	1280
27...	20	6	.3	4.4	0	0	0	.0	900	8.4	1350
SEP											
09...	20	6	.3	4.2	0	0	0	.0	880	7.8	1560
30...	20	6	.3	3.7	0	0	0	.0	1100	7.8	1680

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											
07...	1.0	--	--	--	--	--	--	--	2200	--	2200
21...	1.0	.09	.09	.18	.80	.000	.00	13000	3100	0	3100
NOV											
05...	.95	--	--	--	--	--	--	--	--	--	3800
19...	.66	1.0	.21	1.2	5.4	.010	.03	6500	2500	600	1900
DEC											
04...	.57	--	--	--	--	--	--	--	3300	1300	2000
18...	.60	.20	.19	.39	1.7	.000	.00	6000	7000	2500	4500
JAN											
07...	.71	--	--	--	--	--	--	8000	6900	500	6400
22...	.62	.23	.14	.37	1.6	<.010	<.03	6000	2900	700	2200
FEB											
05...	.39	--	--	--	--	--	--	--	3300	1900	1400
17...	.20	.45	.15	.60	2.7	.080	.25	2000	3700	2700	1000
MAR											
11...	.40	--	--	--	--	--	--	--	5600	3000	2600
24...	.44	.18	.15	.33	1.5	<.010	.03	4100	4800	2500	2300
APR											
10...	.35	--	--	--	--	--	--	3100	3300	1900	1400
22...	.46	.13	.33	.46	2.0	<.010	.03	5000	6800	3300	3500
MAY											
12...	.21	--	--	--	--	--	--	--	3300	1800	1500
26...	.57	.23	.18	.41	1.8	<.010	.03	2700	6400	2900	3500
JUN											
03...	.38	--	--	--	--	--	--	--	5000	2300	2700
22...	.36	.20	.31	.51	2.3	.010	.03	0	4800	1800	3000
JUL											
09...	1.0	--	--	--	--	--	--	--	4000	600	3400
21...	1.2	.17	.24	.41	1.8	<.010	.03	19000	5500	800	4700
AUG											
19...	1.7	--	--	--	--	--	--	--	2000	100	1900
27...	1.8	.10	.30	.40	1.8	<.010	--	31000	2100	400	1700
SEP											
09...	2.1	--	--	--	--	--	--	--	3900	500	3400
30...	2.2	.17	.34	.51	2.3	.010	.03	30000	4100	1100	3000

03201722 SANDY RUN BELOW HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE D 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 D 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 D TOTAL (MG/L AS C)
OCT											
07...	2	6900	--	6400	--	--	--	270	--	--	--
21...	1	7200	0	7200	<.1	130	0	320	320	1.6	.2
NOV											
05...	--	--	--	6800	--	--	--	260	--	--	--
19...	0	4900	0	4900	--	--	20	150	170	1.3	.2
DEC											
04...	5	4300	500	3800	--	--	--	140	--	--	--
18...	6	3700	100	3600	--	--	10	140	150	.3	.3
JAN											
07...	--	4400	0	4400	--	--	--	190	--	--	--
22...	4	3800	300	3500	.1	69	50	110	160	3.2	--
FEB											
05...	14	2400	0	2400	--	--	--	90	--	--	--
17...	2	730	20	710	--	--	0	50	50	1.7	1.0
MAR											
11...	8	1900	200	1700	--	--	--	70	--	--	--
24...	18	2300	0	2300	--	--	0	110	110	4.0	.1
APR											
10...	--	2100	100	2000	--	--	--	90	--	--	--
22...	7	2200	0	2200	<.1	56	0	110	110	3.5	.3
MAY											
12...	1	1000	60	940	--	--	--	40	--	--	--
26...	2	3500	200	3300	--	--	0	180	180	1.2	.2
JUN											
03...	1	2100	100	2000	--	--	--	100	--	--	--
22...	2	2100	0	2100	--	--	0	120	120	1.0	.3
JUL											
09...	12	7800	1000	6800	--	--	--	310	--	--	--
21...	15	9700	800	8900	<.1	260	20	410	430	1.5	.2
AUG											
19...	16	19000	0	19000	--	--	--	750	--	--	--
27...	50	20000	0	20000	--	--	50	610	660	2.1	.2
SEP											
09...	10	22000	0	22000	--	--	--	700	--	--	--
30...	6	24000	1000	23000	--	--	50	750	800	.7	.8

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 mi² (1,515 km²).

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).

SAGE.--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.--63 years, 654 ft³/s (18.52 m³/s), 15.18 in/yr (386 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s) May 28, 1968, gage height 28.69 ft (8.745 m), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-conveyance estimate of peak flow; minimum, 1.1 ft³/s (0.031 m³/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 ft³/s (453 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage (ft)	height (m)
Feb. 2	0800	*3870	110	14.94	4.554
Feb. 23	1400	3760	106	14.75	4.496

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage (ft)	height (m)
June 11	0200	3850	109	*15.38	4.688

Minimum discharge, 22 ft³/s (0.62 m³/s) Sept. 28-30.

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	88	121	592	237	745	1200	631	544	1660	161	81	48
2	85	111	462	269	3610	1240	562	549	1500	208	76	44
3	82	103	406	283	3330	1020	484	675	1230	338	73	46
4	81	101	353	258	3160	835	436	610	984	283	69	54
5	78	108	305	248	2870	1350	1060	486	1030	308	66	63
6	74	111	279	217	2130	1720	1730	456	2150	705	242	5
7	72	106	263	182	1620	1580	1920	576	2700	474	309	56
8	73	110	264	175	879	1250	1790	662	2830	288	187	52
9	73	120	384	159	722	935	1520	596	3300	216	147	45
10	71	115	755	155	622	771	951	470	3660	182	110	38
11	68	109	968	143	792	662	779	531	3690	175	89	33
12	65	103	895	133	993	580	680	908	2050	150	80	28
13	60	101	662	128	1210	518	620	1320	956	173	74	25
14	60	100	493	130	879	460	596	1390	1510	280	69	45
15	58	98	403	136	722	410	564	1170	1930	239	65	85
16	56	98	359	141	665	412	493	1200	2100	285	62	64
17	53	115	332	142	1320	558	571	1170	2200	217	60	40
18	60	232	305	136	2260	779	1090	1020	1240	154	61	32
19	95	319	277	130	2740	792	1240	1430	705	127	59	30
20	111	353	242	127	3340	624	1040	1770	518	115	57	31
21	114	289	178	168	3640	538	858	1610	423	122	54	33
22	115	222	210	223	3670	476	712	1140	522	209	54	32
23	94	179	176	234	3680	434	643	776	578	163	51	29
24	79	204	178	242	3350	393	824	573	518	129	49	27
25	127	271	190	250	2470	357	1130	450	372	110	47	25
26	213	305	190	286	1780	325	1150	370	285	98	46	24
27	256	405	169	395	1180	508	858	610	236	91	46	24
28	228	735	153	512	951	957	653	1400	208	88	44	22
29	188	946	145	523	---	887	562	1680	182	97	44	22
30	151	829	166	470	---	786	505	1700	160	91	43	22
31	132	---	199	362	---	682	---	1980	---	84	42	---
TOTAL	3160	7119	10953	7194	55330	24039	26652	29822	41427	6360	2556	1177
MEAN	102	237	353	232	1976	775	888	962	1381	205	82.5	39.2
MAX	256	946	968	523	3680	1720	1920	1980	3690	705	309	85
MIN	53	98	145	127	622	325	436	370	160	84	42	22
CFSM	.17	.41	.60	.40	3.38	1.33	1.52	1.64	2.36	.35	.14	.07
IN.	.20	.45	.70	.46	3.52	1.53	1.69	1.90	2.63	.40	.16	.07
CAL YR 1980	TOTAL	270104	MEAN	738	MAX	5430	MIN	53	CFSM	1.26	IN	17.18
WTR YR 1981	TOTAL	215789	MEAN	591	MAX	3690	MIN	22	CFSM	1.01	IN	13.72

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, 702 micromhos Sept. 15; minimum, 102 micromhos Feb. 2.

pH: Maximum, 7.2 units Oct. 6, Sept. 15; minimum, 5.1 units Aug. 7.

WATER TEMPERATURES: Maximum, 27.0°C July 9, 10, 11; minimum, 0.0°C several days during the winter period.

DISSOLVED OXYGEN: Maximum, 15.2 mg/L Dec. 21; minimum, 4.6 mg/L Oct. 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	BICAR- BONATE FET-FLD (MG/L AS HC03)
OCT 16...	1000	--	510	6.7	12.0	--	--	--	--	--	--	27
NOV 05...	1040	89	446	6.2	8.0	--	--	--	--	--	--	10
DEC 11...	1015	946	342	6.2	7.0	--	--	--	--	--	--	15
MAR 04...	1100	786	270	6.2	4.0	--	--	--	--	--	--	11
APR 10...	0945	954	246	6.6	12.5	--	--	--	--	--	--	14
MAY 04...	1039	592	324	6.0	14.0	--	--	--	--	--	--	22
JUN 03...	1600	--	246	6.3	19.0	--	--	--	--	--	--	35
JUL 31...	0900	510	490	6.7	21.5	160	150	42	14	25	3.4	18
SEP 15...	1345	53	480	7.0	20.5	--	--	--	--	--	--	40

DATE	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 16...	0	160	--	--	--	324	--	--	--	--	--	--
NOV 05...	0	180	--	--	--	343	--	--	--	--	--	--
DEC 11...	0	130	--	--	--	226	--	--	--	--	--	--
MAR 04...	0	95	--	--	--	177	--	--	--	--	--	--
APR 10...	0	78	--	--	--	162	--	--	--	--	--	--
MAY 04...	0	110	--	--	--	205	--	--	--	--	--	--
JUN 03...	0	81	--	--	--	183	--	--	--	--	--	--
JUL 31...	0	160	33	.2	11	325	.45	.010	1	14	100	1
SEP 15...	0	130	--	--	--	298	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
OCT 16...	--	--	--	--	--	--	680	590	90	--	--	--
NOV 05...	--	--	--	--	--	--	890	620	270	--	--	--
DEC 11...	--	--	--	--	--	--	5900	5800	70	--	--	--
MAR 04...	--	--	--	--	--	--	1600	1200	440	--	--	--
APR 10...	--	--	--	--	--	--	1800	1800	50	--	--	--
MAY 04...	--	--	--	--	--	--	1600	1600	40	--	--	--
JUN 03...	--	--	--	--	--	--	2000	1900	80	--	--	--
JUL 31...	<2	10	10	20	7	10	910	850	60	17000	2	21
SEP 15...	--	--	--	--	--	--	2700	2600	120	--	--	--

[illegible]

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	450	441	---	---	357	306	393	381	384	126	---	---
2	471	453	---	---	357	318	483	390	186	102	279	216
3	471	459	---	---	336	315	396	384	204	120	285	264
4	480	468	---	---	351	312	405	396	201	105	288	270
5	480	468	---	---	363	348	420	405	213	123	282	210
6	486	480	---	---	357	348	417	411	237	216	279	216
7	489	483	---	---	381	348	426	417	249	237	264	249
8	492	474	---	---	363	351	426	417	270	252	285	261
9	486	480	---	---	369	321	423	414	297	270	276	255
10	492	483	552	390	342	306	435	420	306	297	297	255
11	501	486	570	519	345	318	435	426	312	291	279	270
12	513	492	555	501	357	315	435	429	366	294	309	276
13	501	492	516	468	360	330	435	429	354	321	312	288
14	507	498	525	489	339	324	435	429	330	315	324	312
15	513	504	597	504	327	318	435	432	321	306	330	315
16	525	510	621	480	324	318	435	423	321	297	336	309
17	534	519	522	417	330	321	441	426	297	252	324	288
18	---	---	417	378	345	330	444	438	276	213	327	291
19	---	---	393	369	357	345	441	438	219	201	321	297
20	---	---	444	381	378	357	447	438	207	198	300	285
21	---	---	447	399	402	381	444	390	---	---	285	279
22	---	---	447	390	393	384	399	390	---	---	---	---
23	---	---	411	387	387	378	396	387	---	---	---	---
24	---	---	459	381	399	384	408	393	213	207	---	---
25	---	---	420	351	396	390	---	---	234	216	---	---
26	---	---	414	327	399	387	---	---	234	207	312	306
27	---	---	420	291	420	405	393	345	234	201	309	264
28	---	---	360	282	414	399	411	378	---	---	297	255
29	---	---	345	279	405	396	414	393	---	---	294	270
30	---	---	339	264	396	387	---	---	---	---	297	177
31	---	---	---	---	393	381	---	---	---	---	303	192
MONTH	534	441	621	264	420	306	483	345	384	102	336	177
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	300	294	282	264	252	225	342	330	495	477	645	537
2	297	294	300	273	270	231	345	333	495	486	549	507
3	297	282	315	288	252	240	387	327	507	492	579	537
4	---	---	318	288	252	240	375	366	519	504	573	534
5	255	213	318	285	270	192	381	294	666	507	570	528
6	288	237	315	303	237	195	384	288	510	375	555	528
7	246	192	315	297	213	174	327	297	453	348	558	546
8	207	198	315	294	174	159	315	294	411	393	561	546
9	---	---	312	300	156	138	342	318	426	408	564	504
10	---	---	318	303	165	141	342	336	585	417	579	525
11	---	---	318	288	204	165	357	342	600	504	576	546
12	---	---	312	279	252	207	375	354	507	483	582	555
13	---	---	306	255	261	246	378	201	504	489	630	561
14	---	---	264	246	270	213	330	234	519	507	666	612
15	---	---	273	249	282	168	366	309	516	507	702	450
16	---	---	294	264	174	141	435	369	513	504	582	510
17	---	---	291	267	189	180	435	396	516	504	600	552
18	285	261	288	246	---	---	423	390	528	510	546	525
19	288	258	249	234	252	231	456	426	531	519	552	534
20	276	258	261	240	267	243	456	411	546	534	543	480
21	282	258	261	252	282	267	426	408	549	525	480	468
22	282	267	267	258	267	252	426	363	549	525	531	483
23	282	276	285	267	324	264	423	384	531	501	555	534
24	294	276	285	279	321	288	426	411	528	507	588	546
25	309	285	294	285	324	303	456	417	543	504	591	576
26	306	267	306	294	318	306	492	450	570	522	615	582
27	273	264	300	240	333	318	489	453	594	558	627	597
28	276	264	306	240	345	333	471	435	582	546	603	564
29	282	267	303	255	342	327	462	423	594	552	612	576
30	288	276	288	225	336	327	468	450	594	552	609	591
31	---	---	237	213	---	---	480	471	585	543	---	---
MONTH	309	192	318	213	345	138	72	201	666	348	702	450
YEAR	702	102										

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	6.6	6.5	---	---	6.8	6.6	6.6	6.6	6.9	6.5	6.3	6.3
2	6.5	6.5	---	---	6.8	6.4	6.7	6.6	6.8	6.3	6.3	6.3
3	6.6	6.5	---	---	6.9	6.7	6.7	6.6	6.4	6.2	6.3	6.3
4	6.7	6.6	---	---	6.9	6.8	6.6	6.6	6.2	6.1	6.4	6.2
5	6.7	6.6	6.5	6.4	6.8	6.7	6.6	6.4	6.3	6.0	6.5	6.2
6	7.2	6.7	6.8	6.4	6.8	6.8	6.5	6.3	6.2	6.0	6.3	6.0
7	7.0	6.7	6.9	6.4	6.8	6.7	6.5	6.3	6.2	6.0	6.4	6.2
8	7.1	6.7	6.5	6.4	6.9	6.7	6.4	6.3	6.4	6.2	6.3	6.1
9	6.9	6.7	6.8	6.4	7.0	6.7	6.4	6.3	6.3	6.1	6.2	6.1
10	6.9	6.7	6.9	6.4	6.9	6.5	6.4	6.3	6.6	6.2	6.2	6.0
11	6.9	6.7	6.6	6.4	6.5	6.3	6.4	6.3	6.6	6.4	6.3	6.1
12	7.1	6.8	6.6	6.4	6.5	6.4	6.3	6.3	6.4	6.0	6.2	6.0
13	7.1	6.9	6.9	6.5	---	---	6.4	6.3	6.5	6.3	6.4	6.0
14	7.1	6.7	6.8	6.5	---	---	6.4	6.3	6.4	6.2	6.4	6.3
15	7.1	6.8	6.5	6.5	---	---	6.4	6.3	6.3	6.2	6.4	6.3
16	6.9	6.7	6.5	6.5	---	---	6.3	6.3	6.5	6.2	---	---
17	6.9	6.7	7.0	6.6	---	---	6.3	6.3	6.6	6.3	---	---
18	---	---	7.0	6.8	6.6	6.4	6.3	6.2	6.6	6.3	---	---
19	---	---	7.0	6.7	6.7	6.6	6.3	6.2	6.7	6.5	---	---
20	---	---	6.8	6.1	6.7	6.6	6.4	6.3	6.7	6.6	---	---
21	---	---	6.9	6.7	6.6	6.5	6.7	6.3	---	---	---	---
22	---	---	6.9	6.9	6.5	6.3	6.7	6.5	---	---	---	---
23	---	---	6.9	6.7	6.5	6.4	6.6	6.5	---	---	---	---
24	---	---	7.0	6.7	6.5	6.5	---	---	---	---	---	---
25	---	---	6.9	6.8	6.6	6.4	---	---	6.3	6.3	---	---
26	---	---	6.8	6.4	6.5	6.3	---	---	6.3	6.2	---	---
27	---	---	7.0	6.4	6.4	6.3	6.7	6.5	6.3	6.3	---	---
28	---	---	6.9	6.4	6.4	6.3	6.7	6.5	6.3	6.3	---	---
29	---	---	6.8	6.1	6.5	6.4	---	---	---	---	---	---
30	---	---	6.8	6.7	6.6	6.5	---	---	---	---	---	---
31	---	---	---	---	6.6	6.5	6.5	6.4	---	---	---	---
MONTH	7.2	6.5	7.0	6.1	7.0	6.3	6.7	6.2	6.9	6.0	6.5	6.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	6.9	6.8	6.7	6.6	6.8	6.7	6.8	6.6	7.0	6.8
2	---	---	7.0	6.8	6.7	6.6	6.8	6.7	6.7	6.6	7.0	6.9
3	---	---	7.0	6.8	---	---	6.8	6.6	6.7	6.6	6.9	6.7
4	---	---	7.0	6.8	---	---	6.7	6.6	6.7	6.6	7.0	6.9
5	---	---	6.9	6.8	---	---	7.0	6.7	6.8	6.5	7.0	6.8
6	---	---	6.9	6.8	---	---	6.9	5.6	7.1	6.7	6.9	6.7
7	---	---	7.0	6.9	---	---	6.5	5.9	6.7	5.1	6.9	6.7
8	---	---	6.9	6.8	---	---	6.6	6.5	6.6	5.2	7.0	6.9
9	6.6	6.4	7.0	6.9	---	---	6.7	6.6	6.6	6.5	7.1	6.9
10	6.9	6.5	7.0	6.8	---	---	6.7	6.6	6.5	5.8	7.1	6.9
11	6.9	6.5	7.1	6.8	---	---	6.8	6.6	5.9	5.5	7.1	6.9
12	6.6	6.5	7.0	6.7	---	---	6.8	6.7	6.2	5.9	7.1	6.9
13	6.6	6.5	7.0	6.8	6.7	6.3	6.9	6.6	6.3	6.2	7.0	6.9
14	6.7	6.6	6.8	6.7	6.8	6.5	6.9	6.7	6.5	6.3	7.1	6.8
15	6.7	6.6	6.9	6.8	6.7	6.4	6.9	6.7	6.5	6.4	7.2	6.9
16	6.7	6.6	6.8	6.6	6.6	6.3	6.7	6.3	6.6	6.5	7.1	6.8
17	7.1	6.6	6.9	6.7	6.5	6.4	6.9	6.6	6.7	6.5	7.0	6.8
18	6.9	6.6	7.1	6.8	6.5	6.3	6.9	6.8	6.7	6.6	6.8	6.7
19	6.8	6.6	7.0	6.7	6.7	6.5	6.9	6.7	6.7	6.6	6.8	6.7
20	6.9	6.8	6.8	6.7	6.7	6.6	6.8	6.7	6.8	6.6	6.9	6.7
21	6.9	6.7	6.8	6.7	6.8	6.7	6.8	6.7	6.8	6.6	7.0	6.8
22	6.8	6.7	6.8	6.6	6.9	6.8	7.0	6.7	6.8	6.5	7.0	6.7
23	6.9	6.7	6.8	6.6	6.9	6.6	6.8	6.6	6.9	6.6	6.9	6.7
24	6.9	6.7	6.7	6.6	6.8	6.6	6.6	6.3	6.9	6.7	6.9	6.7
25	7.0	6.7	6.7	6.6	6.8	6.6	6.7	6.2	6.9	6.8	6.8	6.7
26	6.9	6.7	6.8	6.6	6.8	6.6	6.6	6.5	6.9	6.8	6.9	6.7
27	6.8	6.7	6.9	6.7	6.7	6.5	6.7	6.5	6.9	6.7	6.9	6.8
28	6.7	6.6	6.8	6.6	6.7	6.5	6.8	6.5	6.9	6.7	6.9	6.8
29	6.9	6.7	6.7	6.5	6.7	6.6	6.9	6.8	6.9	6.7	6.9	6.7
30	6.8	6.7	6.8	6.5	6.8	6.6	6.8	6.7	6.9	6.7	6.9	6.7
31	---	---	6.8	6.6	---	---	6.8	6.6	7.1	6.7	---	---
MONTH	7.1	6.4	7.1	6.5	6.9	6.3	7.0	5.6	7.1	5.1	7.2	6.7
YEAR	7.2	5.1										

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	15.5	8.5	7.0	5.5	4.5	.5	.5	1.0	1.0	5.0	4.5
2	17.0	16.0	8.0	6.5	5.5	5.0	.5	.5	1.5	.5	5.0	4.5
3	16.0	15.0	9.0	6.0	5.0	4.0	.5	.0	2.0	.5	5.0	4.0
4	15.0	13.5	10.0	8.5	4.0	3.5	.5	.0	2.5	2.0	6.5	3.5
5	13.5	12.5	9.0	8.0	4.0	3.5	.5	.0	2.5	1.5	6.5	5.5
6	13.0	11.0	8.5	6.5	5.5	4.0	1.0	.0	2.0	1.5	6.0	5.5
7	13.5	11.5	10.0	7.5	7.0	5.5	1.5	1.0	2.0	1.5	6.0	5.0
8	14.0	11.5	11.0	9.5	8.5	6.5	1.0	1.0	2.0	1.5	5.5	5.0
9	15.0	13.0	11.5	9.5	9.0	8.0	1.0	1.0	2.0	2.0	6.5	5.0
10	16.0	13.5	10.5	8.5	8.5	7.5	1.0	1.0	2.0	1.5	7.0	6.0
11	15.5	14.5	8.5	7.0	7.5	6.5	1.0	1.0	1.5	1.5	7.5	7.0
12	14.5	12.5	7.0	5.5	6.5	6.0	1.0	.5	2.0	1.5	8.5	6.5
13	13.0	11.5	6.5	5.0	6.0	5.0	1.0	1.0	2.0	1.5	9.0	6.5
14	12.5	10.5	7.0	5.5	5.0	4.0	1.5	1.0	2.0	1.5	6.5	5.5
15	13.0	11.0	6.5	6.5	4.0	3.0	1.0	1.0	2.0	1.5	7.0	5.0
16	14.5	12.0	6.5	5.5	3.5	3.0	1.0	1.0	2.0	1.5	6.5	6.0
17	15.0	12.5	6.0	5.0	3.0	2.5	1.0	1.0	2.0	1.5	6.0	5.0
18	---	---	5.0	4.5	3.0	2.5	1.5	1.0	2.5	2.0	5.0	4.5
19	---	---	4.5	3.5	3.0	1.5	1.0	1.0	3.5	2.5	5.0	4.0
20	---	---	4.0	3.0	1.5	.0	1.0	.5	4.5	3.5	4.0	3.5
21	---	---	3.5	2.5	.5	.0	1.5	1.0	---	---	4.5	3.5
22	---	---	3.0	2.0	.5	.0	1.0	1.0	---	---	---	---
23	---	---	3.0	2.0	.5	.5	1.0	1.0	---	---	---	---
24	---	---	4.0	3.0	.5	.0	1.0	1.0	---	---	---	---
25	---	---	4.5	3.5	.5	.0	---	---	---	---	---	---
26	---	---	3.5	3.0	.5	.0	1.5	1.0	5.0	4.0	8.5	8.0
27	8.0	8.0	4.5	3.0	.5	.5	1.5	1.0	5.0	3.5	10.0	8.0
28	8.5	8.0	4.5	4.0	1.0	.0	1.5	.5	5.0	4.0	11.0	8.5
29	9.0	8.0	4.5	4.0	.5	.5	.5	.5	---	---	12.0	9.5
30	8.5	7.0	5.0	4.0	.5	.5	---	---	---	---	13.0	11.0
31	8.5	6.5	---	---	.5	.5	1.0	.0	---	---	14.5	11.5
MONTH	17.5	6.5	11.5	2.0	9.0	.0	1.5	.0	5.0	.5	14.5	3.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	12.5	17.0	15.5	20.5	19.0	23.5	22.0	25.0	21.5	24.5	23.0
2	14.5	12.5	15.5	14.5	21.0	19.0	22.5	21.5	24.5	22.5	24.5	23.0
3	15.0	12.5	16.0	13.5	21.0	19.0	23.5	21.5	24.5	22.0	24.0	23.0
4	15.5	14.5	17.0	14.0	20.0	19.0	24.0	21.5	26.0	23.0	25.0	23.0
5	14.5	13.0	17.0	15.0	21.0	19.0	23.0	22.0	26.5	24.0	25.0	22.0
6	13.0	12.0	17.0	15.0	20.5	19.5	23.0	21.5	25.0	23.5	24.0	22.0
7	12.0	10.5	15.5	14.0	20.5	19.0	24.0	21.5	23.5	22.0	24.0	21.0
8	12.5	11.0	16.0	13.5	21.5	19.0	25.5	23.0	23.5	21.0	23.0	21.5
9	13.5	12.5	17.0	14.5	23.0	21.0	27.0	24.0	24.0	21.5	21.5	19.5
10	13.5	12.5	---	---	22.5	21.5	27.0	25.0	24.5	21.5	21.0	18.0
11	15.5	13.0	---	---	23.5	21.5	27.0	24.0	24.0	22.5	21.5	18.0
12	16.5	15.0	---	---	22.5	20.5	26.5	23.5	24.5	21.5	22.5	19.5
13	18.0	15.5	---	---	21.5	20.0	26.5	24.0	24.0	21.5	22.0	19.5
14	18.0	17.0	---	---	22.5	20.5	26.0	24.0	24.0	21.5	22.5	20.5
15	17.0	15.5	---	---	23.5	21.0	25.5	23.5	23.5	22.0	21.5	20.0
16	16.0	14.0	---	---	24.0	22.5	24.5	23.0	24.5	22.0	20.5	18.5
17	16.0	15.0	---	---	24.0	22.5	25.0	22.5	23.5	21.0	19.0	17.5
18	17.0	15.5	---	---	22.5	18.0	26.0	22.5	22.0	19.5	17.0	15.5
19	16.5	15.5	---	---	23.0	21.0	25.5	23.0	21.5	19.0	16.5	14.5
20	15.5	14.5	---	---	22.5	21.5	26.0	23.5	22.0	18.5	17.5	15.0
21	14.5	13.0	---	---	23.5	21.5	25.5	24.0	21.0	19.0	18.5	16.0
22	14.0	12.5	---	---	23.5	21.5	24.5	22.5	22.5	19.0	17.5	16.5
23	14.5	13.5	---	---	23.5	21.5	24.0	21.5	22.5	19.0	16.5	14.0
24	14.5	12.5	---	---	23.5	21.5	25.0	21.5	22.0	19.5	15.5	13.0
25	13.0	12.0	---	---	24.0	22.0	26.0	22.5	23.0	20.0	15.0	13.5
26	13.0	12.0	23.5	21.5	23.0	21.5	26.5	24.0	23.0	20.0	17.5	14.5
27	14.5	12.0	23.0	22.0	22.5	20.0	26.0	24.5	23.0	20.5	18.0	16.5
28	17.0	14.0	22.0	20.5	23.0	19.5	26.5	24.5	23.5	21.5	17.0	15.5
29	18.0	16.5	22.0	20.0	23.5	20.5	25.0	23.5	23.5	22.0	15.5	13.0
30	17.5	17.0	20.5	19.5	24.5	21.5	24.0	21.0	23.0	22.0	16.5	14.0
31	---	---	20.5	20.0	---	---	22.0	21.0	24.5	21.5	---	---
MONTH	18.0	10.5	23.5	13.5	24.5	18.0	27.0	21.0	26.5	18.5	25.0	13.0
YEAR	27.0	.0										

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	6.1	4.7	9.9	9.7	---	---	14.6	14.1	13.9	12.3	10.4	9.3
2	5.0	4.7	9.9	9.8	---	---	14.5	14.3	13.3	11.8	10.3	7.5
3	5.1	4.9	9.9	9.6	---	---	14.7	14.4	13.5	11.8	8.1	7.0
4	5.3	4.9	9.6	9.4	---	---	14.9	14.4	11.9	11.5	12.0	8.0
5	5.4	5.2	9.9	9.3	---	---	15.1	14.4	11.8	10.9	11.4	9.0
6	5.4	5.3	9.8	9.6	---	---	14.9	14.1	11.2	10.7	11.5	9.6
7	5.4	5.3	9.6	9.3	---	---	14.1	13.7	11.1	9.5	10.3	9.2
8	5.3	5.1	9.3	9.1	---	---	13.9	13.8	11.9	9.5	10.5	9.7
9	5.1	5.0	9.1	9.0	---	---	13.8	13.4	12.7	11.9	10.3	9.2
10	5.0	4.7	9.3	9.0	---	---	13.7	13.5	12.7	11.8	---	---
11	4.9	4.6	9.6	9.3	14.1	13.7	13.7	13.4	12.4	11.7	---	---
12	4.9	4.7	9.8	9.6	15.1	13.1	13.4	12.8	13.0	10.7	---	---
13	5.0	4.7	10.0	9.8	13.8	13.4	12.8	12.4	13.1	10.6	---	---
14	5.1	4.9	9.9	9.7	14.6	13.3	12.4	12.2	---	---	---	---
15	7.0	4.8	9.7	9.6	14.6	14.4	12.2	12.1	---	---	---	---
16	6.9	6.7	9.8	9.6	14.6	14.2	12.6	12.2	---	---	10.8	10.7
17	6.7	6.2	9.8	9.5	14.6	14.3	12.7	12.5	---	---	11.7	10.8
18	---	---	9.8	9.5	14.7	14.4	12.8	12.6	---	---	11.9	11.7
19	---	---	10.2	9.8	14.4	14.2	12.7	12.5	---	---	12.5	11.8
20	---	---	10.2	10.1	15.0	14.3	12.7	12.3	---	---	12.1	11.9
21	---	---	10.2	9.9	15.2	14.8	13.0	12.6	---	---	---	---
22	---	---	10.1	9.9	14.9	14.5	13.1	13.0	---	---	---	---
23	---	---	10.0	9.6	15.0	14.1	13.4	13.1	---	---	---	---
24	---	---	9.7	9.2	14.3	14.1	13.5	13.4	10.5	9.9	---	---
25	---	---	9.8	9.4	14.6	14.3	---	---	11.1	10.0	---	---
26	---	---	9.8	9.7	14.6	14.3	---	---	11.5	10.9	10.6	10.5
27	---	---	9.7	9.5	14.7	14.4	14.0	13.8	11.4	9.9	10.5	10.0
28	9.7	9.5	---	---	15.2	14.4	14.1	11.5	10.9	8.4	10.1	9.7
29	9.8	9.6	---	---	14.5	13.9	14.6	13.1	---	---	9.9	9.3
30	9.8	9.7	---	---	14.3	14.1	15.1	12.2	---	---	9.2	8.9
31	9.9	9.7	---	---	14.5	13.8	14.7	13.9	---	---	9.2	8.7
MONTH	9.9	4.6	10.2	9.0	15.2	13.1	15.1	11.5	13.9	8.4	12.5	7.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	9.7	8.7	8.8	8.2	---	---	---	---	8.4	7.2	6.7	5.5
2	9.7	9.2	8.9	8.6	---	---	---	---	8.1	7.2	6.2	5.2
3	9.2	8.4	8.9	8.8	8.5	8.4	---	---	8.0	6.9	6.1	5.3
4	8.4	8.0	8.9	8.8	8.8	7.5	---	---	8.3	7.1	7.5	5.6
5	8.6	7.8	8.6	8.2	8.7	7.5	---	---	8.5	6.8	7.8	6.2
6	8.9	8.6	8.3	8.2	8.2	7.5	---	---	7.5	5.3	7.5	6.1
7	9.0	8.4	8.7	8.3	8.0	7.2	---	---	7.5	5.6	7.5	6.3
8	9.0	8.7	---	---	7.2	6.4	---	---	7.8	7.4	7.1	6.1
9	9.6	8.4	---	---	6.7	6.1	---	---	7.8	7.4	7.4	6.1
10	9.7	9.3	---	---	6.1	5.8	---	---	8.0	7.4	7.8	6.8
11	9.8	8.4	---	---	6.3	5.8	---	---	8.2	7.4	7.9	6.7
12	9.1	8.3	---	---	6.8	5.5	---	---	8.3	7.7	7.8	6.6
13	8.4	8.1	---	---	7.4	6.8	---	---	8.3	7.7	7.5	6.4
14	8.4	7.4	---	---	7.5	6.8	---	---	8.4	7.4	7.5	6.3
15	8.0	7.6	---	---	7.5	6.8	7.5	7.0	7.8	7.3	7.0	5.0
16	8.0	7.7	---	---	---	---	8.0	7.4	7.7	6.8	7.1	6.4
17	9.7	7.4	---	---	---	---	7.9	7.4	7.9	6.9	7.9	6.9
18	9.7	9.2	---	---	---	---	7.9	7.3	8.2	7.3	7.7	6.9
19	9.7	8.0	---	---	---	---	7.8	7.1	8.3	7.3	8.4	7.1
20	10.0	7.5	---	---	---	---	7.5	6.7	8.3	7.5	8.4	7.2
21	10.0	8.6	---	---	---	---	7.2	6.6	8.5	7.4	8.0	6.8
22	10.5	8.4	---	---	---	---	7.1	6.7	8.5	7.6	7.7	6.8
23	9.9	9.2	---	---	---	---	7.4	6.9	8.3	7.4	7.5	6.9
24	9.5	9.2	---	---	---	---	7.6	7.2	8.4	7.1	8.7	6.3
25	9.7	9.3	---	---	---	---	8.0	7.1	8.2	7.0	8.5	7.5
26	9.6	9.2	---	---	---	---	7.5	7.0	8.1	6.9	8.4	7.3
27	9.5	9.3	---	---	---	---	7.9	6.9	8.2	6.9	8.0	7.1
28	9.3	8.2	---	---	---	---	7.3	6.5	7.8	6.5	7.6	6.7
29	9.5	8.4	---	---	---	---	7.7	6.7	7.4	6.3	8.1	7.1
30	8.5	8.4	---	---	---	---	8.0	6.9	7.1	6.0	8.1	7.2
31	---	---	---	---	---	---	7.5	7.2	7.1	5.9	---	---
MONTH	10.5	7.4	8.9	8.2	8.8	5.5	8.0	6.5	8.5	5.3	8.7	5.0
YEAR	15.2	4.6										

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

03219500 SCIOTO RIVER NEAR PROSPECT, JH

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 mi² (1,469 km²).

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. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1951 to 1953.

AVERAGE DISCHARGE.--49 years, 455 ft³/s (12.89 m³/s), 10.90 in/yr (277 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s (286 m³/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 ft³/s (0.099 m³/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 ft³/s (765 m³/s), computed by Franklin County Conservancy District, at site and datum used 1925-32.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, above base of 3,600 ft³/s (102 m³/s), 5,420 ft³/s (153 m³/s) June 16, gage height 10.93 ft (3.331 m); minimum discharge 17 ft³/s (0.48 m³/s) Oct. 6, 7, 15.

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	21	33	75	45	235	520	100	654	349	707	90	556
2	21	32	72	49	298	460	98	473	287	736	64	724
3	24	28	72	52	457	391	90	380	232	623	49	884
4	23	29	66	52	428	339	96	324	217	380	61	860
5	20	31	56	56	333	321	133	278	189	284	45	879
6	18	27	52	54	217	318	143	386	173	225	38	719
7	17	23	53	52	158	324	143	556	171	182	36	388
8	17	23	63	47	123	309	128	654	194	161	36	259
9	18	19	92	46	135	287	119	486	327	140	34	201
10	18	20	149	41	105	281	111	374	695	120	31	156
11	18	20	173	38	574	304	106	903	985	100	42	114
12	17	20	167	37	1040	298	345	1740	801	90	40	88
13	17	20	143	37	1160	267	990	1930	703	83	32	66
14	17	21	119	36	893	227	1170	1620	3030	75	38	59
15	17	23	102	36	527	194	912	1780	4210	64	36	78
16	18	23	90	36	463	176	639	2170	5330	61	31	377
17	19	23	76	36	856	163	520	2470	4780	56	26	409
18	39	23	69	36	1350	152	631	2070	3260	50	24	434
19	37	24	61	37	2020	142	654	1140	1520	45	23	851
20	26	25	60	37	2410	135	503	639	666	52	23	753
21	22	25	56	38	2320	127	386	479	545	93	21	466
22	22	25	50	39	2120	119	321	388	600	198	20	287
23	23	25	43	39	1860	111	318	321	524	201	18	189
24	23	26	41	45	1740	103	333	270	434	133	19	138
25	35	31	39	52	1490	98	301	227	745	95	21	111
26	41	32	39	104	1060	93	251	196	1060	75	19	93
27	32	34	39	227	732	96	205	333	1740	67	18	76
28	33	69	40	412	593	93	180	549	1900	117	18	61
29	42	70	41	496	---	93	217	658	1070	119	21	51
30	39	75	44	409	---	102	460	593	490	109	34	48
31	35	---	45	327	---	106	---	444	---	119	130	---
TOTAL	769	899	2287	3048	25697	6749	10603	25485	37227	5560	1138	10375
MEAN	24.8	30.0	73.8	98.3	918	218	353	822	1241	179	36.7	346
MAX	42	75	173	496	2410	520	1170	2470	5330	736	130	884
MIN	17	19	39	36	105	93	90	196	171	45	18	48
CFSM	.04	.05	.13	.17	1.62	.38	.62	1.45	2.19	.32	.07	.61
IN.	.05	.06	.15	.20	1.69	.44	.70	1.67	2.44	.36	.07	.68
CAL YR 1980 TOTAL	188623			MEAN 515	MAX 7460	MIN 17	CFSM .91	IN 12.38				
WTR YR 1981 TOTAL	129837			MEAN 356	MAX 5330	MIN 17	CFSM .63	IN 8.52				

SCIOTO RIVER BASIN

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 mi² (461 km²).

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.--39 years, 154 ft³/s (4.361 m³/s) 11.75 in/yr (298 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft³/s (575 m³/s) Jan. 21, 1959, gage height, 13.85 ft (4.221 m), from rating curve extended above 14,000 ft³/s (396 m³/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 ft³/s (70.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 12	2015	3160 89.5	7.10 2.164	June 15	0545	*4550 129	*8.22 2.505
May 11	2230	3140 88.9	7.08 2.158				

Minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Sept. 29, 30.

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	9.3	28	137	26	202	130	34	279	81	58	11	14
2	9.8	20	141	23	870	109	31	375	60	48	9.8	15
3	9.4	17	116	19	453	88	28	178	109	38	8.2	17
4	10	16	87	17	287	73	32	108	81	60	8.2	50
5	9.6	17	61	16	257	101	101	84	52	63	11	27
6	9.4	16	50	15	214	162	130	428	91	38	11	15
7	7.8	15	84	15	176	146	77	517	72	31	12	11
8	8.2	15	180	15	135	125	56	187	48	28	11	10
9	8.2	14	308	14	106	141	49	109	342	21	9.0	8.6
10	7.8	13	561	14	146	178	42	104	1510	18	7.5	9.8
11	7.5	12	290	13	875	146	116	2000	1070	15	7.5	8.6
12	6.9	13	139	13	854	106	1890	2510	234	14	9.4	8.2
13	6.9	12	104	13	371	84	2470	683	656	13	9.4	8.2
14	5.7	12	87	13	282	66	824	726	3720	13	8.2	9.8
15	5.5	14	70	13	168	55	355	2160	3290	13	8.2	56
16	6.6	13	62	13	214	50	187	1170	368	13	8.6	56
17	7.2	13	49	13	794	49	150	368	196	13	7.2	23
18	41	14	44	13	849	44	285	189	111	12	5.7	28
19	38	15	38	13	1650	41	170	139	76	12	5.7	109
20	27	17	42	13	1730	38	113	104	61	37	7.8	58
21	20	14	30	13	885	35	90	80	58	85	10	24
22	14	15	28	14	521	32	74	66	760	85	9.4	14
23	11	15	23	15	901	30	191	55	509	44	7.5	10
24	11	18	22	16	740	29	205	48	137	21	6.9	8.2
25	13	55	21	24	425	29	122	39	482	16	6.0	6.9
26	53	50	19	95	249	27	84	39	1020	15	6.6	6.3
27	50	74	18	411	166	29	73	229	178	17	9.0	6.0
28	38	246	20	446	141	28	66	317	90	14	10	5.2
29	63	189	24	214	---	25	252	246	61	14	11	4.0
30	58	127	27	137	---	33	285	150	48	13	9.8	4.0
31	39	---	27	123	---	37	---	146	---	11	14	---
TOTAL	611.8	1109	2909	1812	14661	2266	8582	13833	15571	893	276.6	630.8
MEAN	19.7	37.0	93.8	58.5	524	73.1	286	446	519	28.8	8.92	21.0
MAX	63	246	561	446	1730	178	2470	2510	3720	85	14	109
MIN	5.5	12	18	13	106	25	28	39	48	11	5.7	4.0
CFSM	.11	.21	.53	.33	2.94	.41	1.61	2.51	2.92	.16	.05	.12
IN.	.13	.23	.61	.38	3.06	.47	1.79	2.89	3.25	.19	.06	.13
CAL YR 1980	TOTAL	78143.0	MEAN	214	MAX	5410	MIN	5.5	CFSM	1.20	IN	16.33
WTR YR 1981	TOTAL	63155.2	MEAN	173	MAX	3720	MIN	4.0	CFSM	.97	IN	13.20

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 mi² (2,538 km²).

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.--60 years, 788 ft³/s (22.32 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s (1,560 m³/s) Jan. 22, 1959, gage height, 22.04 ft (6.718 m), from floodmark; minimum daily, 0.4 ft³/s (0.011 m³/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 ft³/s (2,110 m³/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, 11,500 ft³/s (326 m³/s) June 15, gage height, 10.91 ft (3.325 m); minimum daily, 33 ft³/s (0.93 m³/s) Oct. 13-16, Aug. 26-30.

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	63	122	304	111	460	852	211	1160	585	742	137	249
2	92	92	309	105	1070	762	194	1100	487	807	111	603
3	54	84	319	105	729	646	186	769	465	814	95	792
4	37	90	344	81	561	561	202	597	454	603	84	860
5	42	87	309	78	431	579	309	521	376	471	87	807
6	37	68	262	81	355	658	408	959	460	386	81	807
7	37	70	240	81	281	658	349	1390	392	314	68	515
8	37	75	215	74	253	609	290	1110	334	262	63	355
9	40	63	198	68	198	597	276	852	615	232	58	249
10	37	87	194	63	232	665	240	665	2340	202	52	198
11	38	56	219	62	1160	696	295	3500	2480	161	54	166
12	37	38	360	61	1810	621	3230	6530	1380	145	56	129
13	33	42	515	62	1470	550	5230	3890	1830	137	58	101
14	33	61	924	64	1140	448	3170	2900	9840	137	54	125
15	33	75	749	65	814	392	1880	5590	10300	98	56	324
16	33	61	504	67	807	397	1240	5000	6840	105	73	349
17	37	70	355	67	1900	314	959	3600	5430	101	48	498
18	54	81	295	69	2850	309	1130	2780	3800	90	42	454
19	98	38	232	70	4940	300	1110	1790	2170	90	40	968
20	98	52	194	73	6010	278	868	1050	1010	137	38	933
21	87	58	130	75	4260	262	646	762	762	207	37	646
22	78	61	110	81	3310	250	555	615	2260	276	37	431
23	58	63	100	84	3600	240	640	521	1980	300	37	281
24	58	98	98	87	3340	202	755	454	933	245	38	211
25	98	115	94	90	2790	202	615	397	1620	174	35	166
26	98	122	90	153	1810	194	498	360	3260	157	33	137
27	133	170	90	526	1260	207	437	555	2440	125	33	122
28	161	386	90	852	986	190	386	891	2220	115	33	101
29	125	420	90	769	---	186	640	1200	1550	157	33	78
30	149	319	92	573	---	219	762	986	799	133	33	75
31	133	---	100	431	---	219	---	814	---	133	37	---
TOTAL	2148	3224	8125	5228	48827	13263	27711	53308	69412	8056	1741	11730
MEAN	69.3	107	262	169	1744	428	924	1720	2314	260	56.2	391
MAX	161	420	924	852	6010	852	5230	6530	10300	814	137	968
MIN	33	38	90	61	198	186	186	360	334	90	33	75
CAL YR 1980	TOTAL	335655	MEAN	917	MAX	18800	MIN	33				
WTR YR 1981	TOTAL	252773	MEAN	693	MAX	10300	MIN	33				

SCIOTO RIVER BASIN

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 mi² (407 km²).

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 winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--34 years, 151 ft³/s (4.276 m³/s), 13.06 in/yr 332 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s (422 m³/s) Jan. 22, 1959, gage height, 16.77 ft (5.111 m), from rating curve extended above 4,700 ft³/s (133 m³/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 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 20	2000	2000 56.6	9.50 2.896	June 14	0630	*7800 221	*14.36 4.377
June 10	1830	2970 84.1	10.97 3.344	Sept. 1	2200	1560 44.2	8.49 2.588

Minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Oct. 15-16.

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	12	22	75	19	92	160	55	220	54	52	17	1450
2	11	18	88	18	299	139	47	126	49	45	14	1410
3	11	16	103	18	325	117	44	91	44	40	14	825
4	10	15	96	18	196	102	49	74	54	38	16	907
5	9.4	14	67	18	145	100	212	67	71	36	16	615
6	9.0	14	53	17	95	100	255	205	277	33	16	264
7	8.7	13	49	17	72	99	126	370	158	47	14	158
8	8.3	13	53	17	60	86	90	177	76	31	13	123
9	7.6	13	112	17	54	77	74	107	1050	28	13	138
10	7.2	12	257	17	49	76	62	87	2400	26	12	94
11	7.0	12	205	17	639	76	65	445	2160	27	14	62
12	6.8	11	116	17	740	74	457	966	766	26	17	45
13	6.4	11	88	17	504	74	604	504	766	22	19	36
14	6.2	10	80	17	242	66	347	264	6550	20	14	33
15	6.0	10	69	17	147	61	242	699	3650	19	12	206
16	6.0	10	59	16	234	60	154	670	1370	18	12	165
17	7.2	13	48	16	785	57	149	323	490	17	12	74
18	15	16	44	16	966	54	292	178	301	16	12	76
19	29	14	40	16	1430	52	223	124	204	16	11	158
20	26	13	35	16	1880	50	140	98	150	18	9.2	88
21	16	12	30	16	1720	49	101	81	129	76	8.4	59
22	12	11	26	16	818	47	87	69	383	42	8.1	45
23	10	11	25	16	627	47	96	60	702	23	8.2	36
24	9.2	10	24	16	697	46	125	54	254	18	8.0	31
25	9.7	11	23	16	484	44	114	49	274	16	7.4	28
26	13	16	22	50	286	44	87	56	385	15	7.3	26
27	20	22	21	539	207	46	74	152	169	81	6.9	24
28	22	69	20	561	185	57	67	161	105	110	6.8	22
29	26	101	20	290	---	60	164	125	69	39	7.1	21
30	35	76	20	164	---	55	396	87	58	27	9.7	20
31	28	---	19	114	---	55	---	68	---	20	528	---
TOTAL	410.7	609	1987	2139	13978	2230	4998	6757	23168	1042	883.1	7239
MEAN	13.2	20.3	64.1	69.0	499	71.9	167	218	772	33.6	28.5	241
MAX	35	101	257	561	1880	160	604	966	6550	110	528	1450
MIN	6.0	10	19	16	49	44	44	49	44	15	6.8	20
CFSM	.08	.13	.41	.44	3.18	.46	1.06	1.39	4.92	.21	.18	1.54
IN.	.10	.14	.47	.51	3.31	.53	1.18	1.60	5.49	.25	.21	1.72

CAL YR 1980 TOTAL 57576.6 MEAN 157 MAX 3930 MIN 6.0 CFSM 1.00 IN 13.64
WTR YR 1981 TOTAL 65440.8 MEAN 179 MAX 6550 MIN 6.0 CFSM 1.14 IN 15.51

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 m² (1,018 km²).

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.--54 years, 351 ft³/s (9.940 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Mar. 21, 1927, gage height, 16.9 ft (5.15 m), site and datum then in use; minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 14-29, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,170 ft³/s (118 m³/s) Feb. 20, gage height, 86.62 ft (26.402 m); minimum daily, 2.0 ft³/s (0.06 m³/s) Oct. 23.

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	25	506	225	100	60	694	20	674	246	114	49	350
2	26	30	436	77	690	368	19	499	212	141	49	1500
3	26	24	431	67	1280	178	20	286	190	141	31	1500
4	26	22	348	67	767	248	21	141	156	141	32	1480
5	25	22	217	67	298	415	25	171	99	141	40	1470
6	25	21	173	68	170	319	22	394	83	78	40	607
7	26	21	176	69	135	251	21	1040	81	49	40	145
8	17	22	177	51	135	251	18	685	497	49	40	145
9	21	18	218	39	135	251	17	506	549	49	40	145
10	21	19	543	39	139	251	17	504	996	49	40	204
11	19	21	679	39	716	251	19	622	1910	49	40	207
12	19	21	365	39	1270	169	70	188	3460	49	40	197
13	19	22	175	39	758	135	1350	2070	1640	49	40	197
14	19	22	173	39	483	135	2050	3030	89	49	40	119
15	18	22	202	39	483	135	1990	270	28	32	40	85
16	18	22	215	39	254	218	745	436	1640	24	40	110
17	18	181	215	39	1200	198	56	1770	3320	24	40	270
18	18	364	185	39	2040	147	344	2110	3900	24	40	214
19	18	409	102	39	2780	135	916	1940	4000	24	40	163
20	18	403	26	39	3530	62	1100	1220	3980	24	40	316
21	18	363	26	39	3410	24	516	375	3330	24	36	133
22	11	341	44	40	3320	24	471	85	1780	24	35	25
23	2.0	338	53	40	2910	32	249	62	1040	42	35	8.7
24	19	120	53	40	2290	36	434	62	825	50	35	252
25	19	18	53	40	1420	36	507	62	1010	50	35	24
26	18	17	53	67	918	36	356	125	1200	50	35	21
27	19	21	53	716	482	36	240	630	645	50	35	16
28	22	42	53	1210	346	274	240	798	376	50	35	17
29	149	49	53	516	---	399	243	313	72	69	35	19
30	779	48	121	49	---	25	699	146	52	78	35	19
31	106	---	116	49	---	20	---	145	---	58	50	---
TOTAL	1584.0	3549	5959	3840	32419	5753	12795	21359	37406	1845	1202	9958.7
MEAN	51.1	118	192	124	1158	186	427	689	1247	59.5	38.8	332
MAX	779	506	679	1210	3530	694	2050	3030	4000	141	50	1500
MIN	2.0	17	26	39	60	20	17	62	28	24	31	8.7
CAL YR 1980	TOTAL	147799.0	MEAN	404	MAX	3970	MIN	2.0				
WTR YR 1981	TOTAL	137669.7	MEAN	377	MAX	4000	MIN	2.0				

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 mi² (1,287 km²).

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

REVISED RECORDS.--WSP 1625: 1952(M). WSP 1908: Drainage area. WRD Ohio 1972: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 743.20 ft (226.527 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. 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 current year.

AVERAGE DISCHARGE.--26 years, 457 ft³/s (12.94 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) Jan. 21, 1959, gage height, 15.68 ft (4.779 m), from high-water mark in well; minimum daily, 8.5 ft³/s (0.24 m³/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 ft³/s (428 m³/s), from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,070 ft³/s (200 m³/s) June 13, gage height, 9.60 ft (2.926 m); minimum daily 18 ft³/s (0.51 m³/s) Sept. 30.

REVISIONS.--The maximum discharges for the water years 1976 and 1978 have been revised to 6,890 ft³/s (195 m³/s) Feb. 18, 1976, gage height, 8.65 ft (2.637 m) and 6,360 ft³/s (180 m³/s) Mar. 26, 1978, gage height 8.24 ft (2.512 m), superseding figures published in reports for 1976 and 1978.

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	31	405	108	133	121	530	44	1020	182	83	58	185
2	32	174	431	121	552	622	40	615	240	148	50	1290
3	33	48	444	89	1280	171	38	493	204	148	50	1260
4	33	42	431	59	991	215	44	189	192	145	47	1290
5	32	36	317	73	374	380	98	185	154	145	31	1280
6	31	32	211	89	270	500	83	731	182	139	36	924
7	32	30	270	93	148	328	63	933	118	73	37	136
8	32	27	301	87	139	301	53	952	240	59	37	139
9	29	26	431	68	127	295	48	545	584	56	36	130
10	22	26	622	56	139	295	47	545	1160	56	36	133
11	21	23	747	54	683	285	73	1710	1280	54	36	185
12	23	22	607	61	1170	248	2460	1660	3150	54	36	174
13	22	23	248	68	991	161	1670	1320	3400	56	36	174
14	23	24	219	66	465	151	2180	3820	2150	56	36	200
15	22	24	219	66	458	145	1940	1550	418	53	36	151
16	21	24	253	63	537	164	1320	424	715	45	36	89
17	23	24	244	58	1030	219	211	1420	2870	32	36	139
18	59	248	236	54	2040	174	240	1890	3420	29	37	275
19	50	356	196	56	3500	139	764	1900	3660	27	38	174
20	37	356	91	58	4660	133	1050	1250	3630	50	36	189
21	31	350	48	58	3570	70	807	675	3420	77	36	275
22	31	317	47	58	3350	48	451	164	2220	51	36	59
23	30	311	59	56	3500	45	380	98	1100	37	36	31
24	29	295	71	56	2540	45	418	89	781	36	34	116
25	45	100	58	59	1680	50	515	85	860	48	34	116
26	54	58	68	133	1040	50	472	89	1090	61	34	36
27	44	83	77	815	691	51	266	339	878	63	34	25
28	48	148	68	1340	411	136	257	781	392	59	37	21
29	68	121	77	905	---	411	545	552	142	58	38	19
30	675	103	81	103	---	142	568	306	83	64	40	18
31	178	---	151	70	---	59	---	219	---	68	59	---
TOTAL	1841	3856	7431	5125	36457	6563	17155	26549	38915	2130	1199	9233
MEAN	59.4	129	240	165	1302	212	572	856	1297	68.7	38.7	308
MAX	675	405	747	1340	4660	622	2460	3820	3660	148	59	1290
MIN	21	22	47	54	121	45	38	85	83	27	31	18
CAL YR 1980	TOTAL	185033	MEAN 506	MAX 4260	MIN 21							
WTR YR 1981	TOTAL	156454	MEAN 429	MAX 4660	MIN 18							

SCIOTO RIVER BASIN

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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 1.60 mi (2.6 km) upstream of confluence with Olentangy River.

DRAINAGE AREA.--1.65 mi² (4.27 km²).

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--October 1978 to current year (discontinued).

GAGE.--Water stage recorder. Altitude of gage is 850 ft (259 m) from topographic map.

REMARKS.--Records good. Daily suspended-sediment data October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 443 ft³/s (12.5 m³/s) Sept. 14, 1979; gage height, 42.88 ft (13.070 m); minimum daily 0.01 ft³/s (0.0003 m³/s) several days during 1981 water year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 237 ft³/s (6.71 m³/s) June 13, gage height, 40.74 ft (12.418 m); minimum daily, 0.01 ft³/s (0.0003 m³/s) Nov. 1-3, 6-14, 16, 22, Dec. 4, 22, 27, Jan. 10-18.

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	.19	.01	.56	.13	11	1.1	.24	12	2.4	2.0	3.4	5.1
2	2.6	.01	1.2	.10	4.0	1.1	.22	2.8	2.0	2.2	3.4	4.5
3	.18	.01	.30	.08	11	.77	.48	1.7	6.2	3.7	4.5	11
4	.19	.35	.21	.18	2.4	1.3	5.5	1.1	2.0	2.4	3.7	4.3
5	.08	.02	.41	.13	.56	6.2	2.0	3.1	6.6	2.2	4.0	3.4
6	.10	.01	.62	.10	.35	2.0	.56	9.0	6.2	2.2	4.3	3.1
7	.04	.01	4.0	.10	2.4	1.5	.30	2.8	2.4	2.0	3.4	3.1
8	.04	.01	4.3	.03	.41	1.3	.26	1.3	2.8	2.2	3.7	8.4
9	.08	.01	3.7	.03	.41	1.1	3.1	1.1	7.7	4.8	3.4	3.4
10	.85	.01	.85	.01	.58	.94	.94	2.4	9.0	3.1	3.4	3.1
11	.30	.01	.26	.01	3.3	.85	5.5	22	2.2	2.0	3.1	3.1
12	.06	.01	.22	.01	2.4	.62	56	12	1.5	2.0	2.8	3.1
13	.06	.01	.13	.01	1.5	.48	9.8	7.7	55	3.4	2.8	3.1
14	.04	.01	.06	.01	.69	.35	3.7	18	25	2.2	2.6	19
15	.13	.02	.04	.01	.69	.35	2.6	14	11	2.0	3.7	9.1
16	.30	.01	.48	.01	7.0	.62	2.6	8.7	20	2.2	2.8	6.2
17	2.0	.13	.10	.01	4.0	.41	2.8	6.2	9.8	2.0	2.6	5.5
18	9.1	1.3	.06	.01	3.3	.35	1.7	9.8	6.2	2.8	2.6	13
19	.35	.13	.06	.06	19	.30	1.5	7.0	5.1	4.8	2.4	6.2
20	.26	.03	.03	1.5	14	.41	1.5	6.2	5.1	13	2.4	5.1
21	.24	.02	.04	1.3	4.0	.30	1.1	5.1	7.0	9.1	2.4	4.8
22	.22	.01	.01	.19	4.0	.26	2.6	4.3	5.8	4.8	2.4	4.8
23	.21	.10	.02	.08	5.8	.26	6.6	4.3	4.8	3.7	2.4	4.5
24	4.0	3.1	.04	.18	2.8	.26	2.4	3.1	4.3	3.1	2.4	4.5
25	3.7	.35	.03	.85	1.8	.26	1.3	2.8	5.8	2.8	2.4	4.3
26	.04	.03	.02	1.7	1.2	.22	1.3	17	3.1	8.7	2.4	4.3
27	.26	5.5	.01	.69	.94	1.1	1.2	18	2.6	4.3	3.1	4.3
28	1.9	1.7	.35	.30	.94	.35	2.2	13	2.2	7.7	3.1	4.0
29	.02	3.1	2.2	.13	---	.30	9.0	7.7	1.9	4.0	2.2	4.3
30	.02	.94	.22	.35	---	2.8	2.2	33	2.4	3.7	4.0	5.8
31	.02	---	.08	.08	---	.26	---	5.5	---	3.4	10	---
TOTAL	27.58	16.96	20.61	8.38	115.69	28.42	131.20	262.7	228.1	118.5	101.8	168.4
MEAN	.89	.57	.66	.27	4.13	.92	4.37	8.47	7.60	3.82	3.28	5.61
MAX	9.1	5.5	4.3	1.7	19	6.2	56	33	55	13	10	19
MIN	.02	.01	.01	.01	.35	.22	.22	1.1	1.5	2.0	2.2	3.1
CFSM	.54	.35	.40	.16	2.50	.56	2.55	5.13	4.61	2.32	1.99	3.40
IN.	.62	.38	.46	.19	2.61	.64	2.96	5.92	5.14	2.67	2.29	3.79

CAL YR 1980 TOTAL 1031.31 MEAN 2.82 MAX 54 MIN .01 CFSM 1.71 IN 23.24
WTR YR 1981 TOTAL 1228.34 MEAN 3.37 MAX 56 MIN .01 CFSM 2.04 IN 27.68

SCIOTO RIVER BASIN

03226865 RUSH RUN AT WORTHINGTON, OH--Continued

WATER-QUALITY RECORD

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
JUL 28...	1110	68	115	8.1	25.0	49	35	9	11	1.9
28...	1145	20	212	8.0	24.0	33	68	15	20	4.3

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)
JUL 28...	4.6	21	.3	1.1	32	0	26	.4	13	5.2
28...	9.5	23	.5	1.4	64	0	52	1.0	24	12

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
JUL 28...	72	194	266	.59	.030	.62	.150	.71	.86	1.5
28...	135	106	241	.52	.040	.56	.110	1.2	1.30	1.9

DATE	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
JUL 28...	6.6	.210	.64	.080	<1	4	4100	99	15	0
28...	8.2	.170	.52	.080	<1	5	2400	32	13	0

03226870 LINWORTH ROAD CREEK AT COLUMBUS, OH

LOCATION.--Lat 40°04'34", long 83°02'47", Franklin County, Hydrologic Unit 05060001, on left bank, northwest corner of culvert, 10 ft (3.0 m) upstream of Linworth Road, 0.1 mi (0.2 km) south of Rocky Hill Rd, 0.7 mi (1.1 km) north of Old 315 and Linworth Rd split, 0.84 mi (1.4 km) upstream from mouth.

DRAINAGE AREA.--2.03m² (5.26 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 749.36 ft (228.405 m) National Geodetic Vertical Datum of 1929 (levels by Franklin County Engineering Dept.) Daily suspended-sediment data collected October 1978 to current year.

REMARKS.--Record good except those below 0.9 ft³/s, (0.02 m³/s) which are poor.

EXREMES FOR PERIOD OF RECORD.--Maximum discharge, 449 ft³/s (12.72 m³/s) Sept. 14, 1979, gage height 39.29 ft (11.976 m); no flow for many days in 1980, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 447 ft³/s (12.66 m³/s) June 13, gage height 39.27 ft (11.970 m); no flow many days throughout year.

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	.00	.12	.80	.71	1.2	1.2	.56	9.5	2.5	.50	.12	.00
2	.00	.00	.90	.50	2.4	1.1	.50	2.3	1.7	.37	.00	.00
3	.00	.00	.50	.32	2.7	.90	.56	1.1	4.0	.37	.00	.20
4	.00	.17	.37	.27	2.7	1.2	2.3	.63	1.9	.37	.00	.10
5	.00	.00	.50	.23	2.7	4.2	1.9	1.1	4.2	.32	.00	.00
6	.00	.00	.43	.27	3.0	3.0	.90	6.5	11	.32	.00	.00
7	.00	.00	1.4	.50	3.0	1.9	.71	1.9	2.5	.27	.00	.00
8	.00	.00	1.2	.56	3.2	1.4	.71	.90	1.9	.27	.00	.14
9	.00	.00	7.6	.56	2.7	1.2	.90	.63	4.2	.27	.00	.00
10	.00	.00	5.2	.63	2.5	1.2	.50	1.4	12	.27	.00	.00
11	.00	.00	2.4	.56	4.0	1.1	14	20	2.5	.23	.00	.00
12	.00	.00	1.6	.56	4.9	.98	30	9.5	1.6	.27	.00	.00
13	.00	.00	1.2	.63	4.7	.90	11	2.9	62	.80	.00	.00
14	.00	.00	.80	.98	4.4	.71	5.4	8.8	27	.37	.00	.00
15	.00	.00	.98	.98	4.7	.71	2.6	7.6	2.0	.23	.00	.17
16	.00	.00	.98	.80	20	.80	.71	2.7	2.7	.23	.00	.00
17	.00	.00	.63	.63	16	.71	1.1	1.6	1.2	.20	.00	.00
18	3.2	.37	.63	.50	6.8	.63	.71	2.3	.80	.17	.00	.00
19	.27	.23	.50	.43	25	.63	.50	1.7	.56	.43	.00	.00
20	.12	.12	.32	.43	20	.63	.43	1.2	.63	1.7	.00	.00
21	.00	.12	.23	.56	5.4	.56	.32	.98	4.9	1.2	.00	.00
22	.00	.10	.43	.80	4.0	.50	.56	.90	3.2	.37	.00	.00
23	.00	.10	.71	1.1	9.1	.50	2.0	.80	1.2	.20	.00	.00
24	.10	2.4	.50	1.1	4.7	.50	.80	.63	.80	.20	.00	.00
25	2.1	.71	.27	1.2	2.7	.43	.43	.56	3.0	.17	.00	.00
26	.23	.32	.12	2.3	1.9	.43	.43	1.9	.80	1.7	.00	.00
27	.12	6.0	.10	3.2	1.5	.63	.32	5.2	.56	.23	.00	.00
28	1.1	1.9	.00	3.6	1.5	.43	.37	8.5	.43	.98	.00	.00
29	.50	1.5	.10	3.2	---	.43	6.2	2.5	.43	.23	.00	.00
30	.14	.98	.43	1.7	---	1.2	1.4	30	.37	.17	.00	.00
31	.12	---	.56	.98	---	.63	---	8.2	---	.14	.00	---
TOTAL	8.00	15.14	32.39	30.79	167.4	31.34	88.82	144.43	162.58	13.55	.12	.61
MEAN	.26	.50	1.04	.99	5.98	1.01	2.96	4.66	5.42	.44	.004	.020
MAX	3.2	6.0	7.6	3.6	25	4.2	30	30	62	1.7	.12	.20
MIN	.00	.00	.00	.23	1.2	.43	.32	.56	.37	.14	.00	.00
CFSM	.13	.25	.51	.49	2.95	.50	1.46	2.30	2.67	.22	.002	.01
IN.	.15	.28	.59	.56	3.07	.57	1.63	2.65	2.98	.25	.00	.01
CAL YR 1980	TOTAL	558.16	MEAN	1.53	MAX	25	MIN	.00	CFSM	.75	IN	10.22
WTR YR 1981	TOTAL	695.17	MEAN	1.90	MAX	62	MIN	.00	CFSM	.94	IN	12.73

SCIOTO RIVER BASIN

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 mi² (0.57 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year (discontinued).

GAGE.--Water stage recorder. Altitude of gage is 770 ft (235 m), from topographic map.

REMARKS.--Records good except those for winter periods and those below 0.1 ft³/s (0.003 m³/s), which are fair. Daily suspended data collected Oct. 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 199 ft³/s (5.636 m³/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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 199 ft³/s (5.636 m³/s) June 13, gage height 47.49 ft (14.475 m); no flow July 31, Aug. 1-4, 23-26, Sept. 16, 17, 19-26.

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	.01	.06	.08	.13	1.9	.13	.06	7.3	.17	.02	.00	.02
2	.27	.03	.17	.08	.62	.10	.06	6.8	.10	.01	.00	.02
3	.01	.03	.08	.06	.22	.10	.17	6.8	.75	.02	.00	1.6
4	.13	.13	.08	.30	.22	.47	1.2	6.8	.13	.02	.00	.22
5	.01	.03	.22	.03	.40	1.2	.30	8.6	1.3	.02	.03	.10
6	.01	.02	.08	.06	.17	.35	.10	5.1	1.4	.02	.01	.08
7	.01	.03	.47	.06	.40	.17	.13	.22	.22	.02	.01	.35
8	.01	.02	.35	.06	.10	.13	.10	.10	.40	.02	.01	1.6
9	.01	.03	1.1	.13	.06	.13	.30	.10	.62	.02	.01	.13
10	.01	.06	.35	.03	1.3	.10	.30	1.3	2.2	.03	.02	.02
11	.01	.06	.13	.22	.82	.10	2.5	3.0	.17	.02	.03	.01
12	.01	.08	.13	.30	.17	.10	7.9	.68	.06	.01	.01	.01
13	.01	.08	.08	.10	.13	.10	1.8	.13	22	.01	.01	.01
14	.02	.08	.06	.06	.40	.10	.75	.10	1.9	.54	.01	.35
15	.01	.13	.35	.03	.22	.10	.47	.35	.54	.02	.01	.02
16	.01	.03	.13	.03	1.6	.13	.35	.17	2.6	.03	.01	.00
17	.62	.30	.08	.02	.82	.08	1.3	.08	.62	.01	.01	.00
18	1.3	.62	.08	.03	.62	.06	.62	.62	.35	.01	.01	.13
19	.06	.13	.13	.22	4.5	.08	.40	.08	.17	.02	.01	.00
20	.03	.10	.30	.75	1.9	.08	.22	.03	.13	.90	.01	.00
21	.02	.10	.17	1.1	.62	.06	.10	.02	.99	.13	.01	.00
22	.02	.08	.17	.10	.68	.06	.54	.02	.30	.08	.01	.00
23	.02	.10	.10	.08	1.1	.06	.75	.02	.17	.01	.00	.00
24	.75	.90	.10	.47	.54	.06	.13	.02	.13	.01	.00	.00
25	.54	.13	.08	.68	.30	.06	.03	.02	1.2	.01	.00	.00
26	.10	.10	.10	.68	.17	.06	.17	1.2	.22	.68	.00	.00
27	.13	.99	.10	.35	.17	.17	.40	1.6	.17	.08	.17	.04
28	.75	.17	.30	.17	.17	.06	1.4	.47	.17	1.2	.03	.04
29	.08	.40	.62	.10	---	.06	3.7	.08	.13	.01	.01	.04
30	.06	.10	.13	.08	---	.54	3.2	4.4	.90	.01	.54	.21
31	.06	---	.10	.10	---	.08	---	.62	---	.00	.03	---
TOTAL	5.09	5.12	6.42	6.61	20.32	5.08	29.45	56.83	40.21	3.99	1.01	5.00
MEAN	.16	.17	.21	.21	.73	.16	.98	1.83	1.34	.13	.033	.17
MAX	1.3	.99	1.1	1.1	4.5	1.2	7.9	8.6	22	1.2	.54	1.6
MIN	.01	.02	.06	.02	.06	.06	.03	.02	.06	.00	.00	.00
CFSM	.73	.77	.96	.96	3.32	.73	4.46	8.32	6.09	.59	.15	.77
IN.	.86	.86	1.08	1.11	3.42	.86	4.96	9.57	6.77	.67	.17	.84
CAL YR 1980	TOTAL 107.89	MEAN .29	MAX 3.9	MIN .00	CFSM 1.32	IN 18.16						
WTR YR 1981	TOTAL 185.13	MEAN .51	MAX 22	MIN .00	CFSM 2.32	IN 31.16						

03226875 BETHEL ROAD CREEK AT COLUMBUS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
JUL 28...	1100	--	120	6.9	24.5	60	44	11	13	2.9
28...	1130	3.8	166	6.4	24.5	23	43	7	13	2.5

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 (MG/L AS HCO3)	CAR- BONATE (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)
JUL 28...	9.4	31	.6	1.5	40	0	33	8.1	13	9.6
28...	9.2	31	.6	1.4	44	0	36	28	12	8.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	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)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
JUL 28...	82	502	584	.78	.050	.83	.190	.91	1.10	1.9
28...	93	143	236	.69	.040	.73	.150	.72	.87	1.6

DATE	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
JUL 28...	8.5	.390	1.2	.150	<1	3	9100	110	15	0
28...	7.1	.180	.55	.110	<1	8	2400	27	10	0

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 mi² (1342 km²).

PERIOD OF RECORD.--October 1978 to current year (discontinued).

GAGE.--Water-stage recorder, altitude of gage is 740 ft (226 m) from topographic map.

REMARKS.--Records good. Flow regulated by Delaware Dam 25.6 mi (41 km) upstream (see station 03225000). Daily suspended-sediment data collected 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft³/s (381.19 m³/s) June 13, 1981, gage height, 76.27 ft (23.247 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 1-10, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,500 ft³/s (381.19 m³/s) June 13, gage height, 76.27 ft (23.247 m); minimum daily, 24 ft³/s (0.68 m³/s) Oct. 11, 1980.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	440	113	145	248	619	59	1310	225	116	83	106
2	37	253	455	127	657	818	47	729	315	206	64	1470
3	37	58	494	94	1640	234	46	598	322	209	61	1490
4	34	53	450	113	1380	296	96	231	244	206	68	1530
5	32	40	333	137	1090	543	145	244	241	206	54	1480
6	30	38	212	148	1070	668	103	875	349	212	51	1180
7	31	38	292	162	680	422	75	1020	162	127	66	174
8	30	36	326	137	374	382	63	1190	234	81	61	183
9	30	35	484	129	258	374	68	652	768	87	58	159
10	27	35	674	87	231	365	56	697	1390	74	56	148
11	24	32	823	81	818	357	171	1910	1360	72	58	251
12	27	34	697	90	3350	326	3310	2370	3350	85	58	218
13	26	25	266	103	3880	209	2140	1260	4160	94	56	218
14	25	26	225	106	1490	193	2590	4350	3050	75	58	337
15	26	28	228	101	708	187	2290	2390	619	66	54	221
16	25	31	266	101	758	203	1700	573	849	61	54	106
17	30	32	251	96	1170	296	326	1670	3260	47	58	142
18	180	266	244	87	2420	225	330	2310	3880	47	48	378
19	56	422	200	82	4140	180	870	2270	4260	61	53	221
20	39	413	209	70	5680	177	1220	1460	4230	159	53	190
21	33	399	74	66	4150	116	991	808	4140	148	50	361
22	30	349	58	63	3810	74	543	218	2470	81	46	87
23	29	345	61	60	4070	68	563	134	1370	59	40	37
24	39	395	79	62	3000	68	534	127	991	58	39	27
25	94	134	103	87	2100	74	652	116	1110	87	39	206
26	54	68	94	177	1240	74	604	228	1320	159	40	47
27	42	159	94	646	870	85	337	399	1140	108	50	35
28	63	193	77	2350	524	129	333	952	524	150	50	28
29	72	153	103	1170	---	489	753	708	228	103	46	26
30	795	127	94	168	---	284	663	714	142	83	58	25
31	283	---	174	137	---	94	---	349	---	96	87	---
TOTAL	2310	4657	8253	7182	51806	8629	21678	32862	46703	3423	1717	11081
MEAN	74.5	155	266	232	1850	278	723	1060	1557	110	55.4	369
MAX	795	440	823	2350	5680	818	3310	4350	4260	212	87	1530
MIN	24	25	58	60	231	68	46	116	142	47	39	25
CFSM	.14	.30	.51	.45	3.57	.54	1.40	2.05	3.01	.21	.11	.71
IN.	.17	.33	.59	.52	3.72	.62	1.56	2.36	3.35	.25	.12	.80

CAL YR 1980 TOTAL 204295 MEAN 558 MAX 4670 MIN 24 CFSM 1.08 IN 14.67
WTR YR 1981 TOTAL 200301 MEAN 549 MAX 5680 MIN 24 CFSM 1.06 IN 14.38

03226885 OLENTANGY RIVER AT HENDERSON ROAD AT COLUMBUS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
JUL 28...	1315	314	469	8.8	25.0	36	190	46	51	15
28...	1350	258	445	8.7	25.5	34	190	52	50	15

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 (MG/L AS HC03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
JUL 28...	20	18	.6	3.2	176	144	.4	47	30	328
28...	17	16	.5	3.1	168	138	.5	46	27	291

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)
JUL 28...	149	477	1.5	.040	1.5	.080	.81	.89	2.4	11
28...	248	539	1.5	.050	1.5	.080	1.0	1.10	2.6	12

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
JUL 28...	.300	.92	.140	<1	6	5900	42	12	0
28...	.390	1.2	.140	<1	6	7500	33	13	0

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 mi² (4,219 km²).

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.--61 years, 1,393 ft³/s (39.45 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,200 ft³/s (1,930 m³/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 ft³/s (1,300 m³/s); minimum daily, 47 ft³/s (1.33 m³/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 ft³/s (3,910 m³/s), estimated by Franklin County Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,500 ft³/s (694 m³/s) June 14, gage height, 21.39 ft (6.520 m); minimum daily, 137 ft³/s (3.88 m³/s) Oct. 12.

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	170	190	571	381	1900	1600	377	2900	1310	996	300	249
2	185	180	766	340	2600	1300	349	2340	1120	1150	272	1210
3	188	170	904	309	2700	1200	327	1750	1300	1210	273	2460
4	179	170	808	269	2000	1100	548	1230	1050	1130	255	2350
5	159	180	707	265	1500	1500	846	1010	917	874	227	2260
6	164	200	542	270	1200	1700	662	1960	1750	730	344	2180
7	162	188	639	290	1000	1380	595	2420	1060	612	239	1040
8	162	182	760	260	800	1240	531	2490	790	461	205	872
9	159	179	1150	246	700	1180	508	1690	1570	410	191	553
10	159	182	1660	218	680	1210	450	1550	3540	378	195	428
11	145	182	1840	208	1000	1260	766	4450	3910	323	181	449
12	137	150	1500	214	1400	1190	6340	10000	4140	287	174	431
13	148	148	976	204	1900	995	8940	5650	5010	288	181	384
14	150	148	760	214	1600	846	6550	6930	17000	369	180	435
15	150	148	707	221	1200	742	4540	8570	11100	270	187	884
16	150	156	730	225	1500	784	3520	6020	8450	240	190	582
17	148	190	626	221	2100	713	1870	4860	8730	239	188	599
18	201	220	565	221	2470	695	1900	5180	8040	204	172	927
19	208	200	536	228	5300	626	2060	4250	6750	207	172	1070
20	173	180	386	232	12400	577	2350	3010	5270	851	173	1320
21	164	170	273	250	9270	519	1960	2050	4750	566	178	1240
22	170	160	285	265	7530	425	1250	1180	4520	561	178	812
23	179	150	269	246	7410	410	1780	910	3870	453	171	464
24	180	160	301	254	7090	372	1580	784	2350	430	174	348
25	200	208	273	265	5260	363	1500	713	2110	356	174	446
26	190	261	254	372	3600	340	1340	742	3880	527	173	288
27	180	724	261	796	2700	640	1050	1290	3700	374	167	244
28	170	707	257	1950	2100	680	897	2330	2730	523	213	214
29	170	814	318	2160	---	660	1580	2140	2280	376	175	192
30	160	684	349	1110	---	680	1540	2280	1410	312	228	191
31	180	---	327	1300	---	435	---	2220	---	308	241	---
TOTAL	5240	7581	20300	14004	90910	27362	58506	94899	124407	16015	6371	25122
MEAN	169	253	655	452	3247	883	1950	3061	4147	517	206	837
MAX	208	814	1840	2160	12400	1700	8940	10000	17000	1210	344	2460
MIN	137	148	254	204	680	340	327	713	790	204	167	191
CAL YR 1980	TOTAL	628089	MEAN	1716	MAX	20400	MIN	137				
WTR YR 1981	TOTAL	490717	MEAN	1344	MAX	17000	MIN	137				

03227500 SCIOTO RIVER AT COLUMBUS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	NITROGEN, DISSOLV (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)
AUG 25...	0945	944	7.4	24.0	3.1	36	15	.0	.0	290	140	77
DATE	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)	ALKALINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	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)	
AUG 25...	23	59	8.0	188	0	154	12	170	80	1.1	7.6	
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+N03 TOTAL (MG/L AS N)	NITROGEN, NO2+N03 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	
AUG 25...	590	550	6.0	.180	6.2	5.6	4.80	4.90	6.3	4.6	4.9	
DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N03)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P04)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
AUG 25...	9.40	.00	9.8	16	69	2.70	8.3	2.70	50	60	9.2	

SCIOTO RIVER BASIN

03228500 BIG WALNUT CREEK AT CENTRAL COLLEGE, OH

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.

DRAINAGE AREA.--190 mi² (492 km²).

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

REVISED RECORDS.--WSP 873: 1938. WSP 1435: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.16 ft (248.461 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow completely regulated by Hoover Reservoir since September 1954. (see station 03228400). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 189 ft³/s (5.352 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft³/s (674 m³/s) Jan. 21, 1959, gage height, 19.75 ft (6.020 m), from rating curve extended above 7,200 ft³/s (204 m³/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, 3,230 ft³/s (91.5 m³/s) June 13, gage height, 9.66 ft (2.944 m); minimum daily, 78 ft³/s (2.21 m³/s) Nov. 13.

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	149	158	126	125	130	340	132	666	243	169	148	142
2	149	158	126	125	128	267	133	507	163	168	162	140
3	149	158	126	125	127	189	133	266	164	167	163	162
4	149	158	126	125	126	156	157	175	192	167	162	168
5	148	158	126	123	126	275	172	157	175	167	161	133
6	147	158	126	122	126	243	144	676	193	165	154	131
7	147	158	127	124	126	268	130	910	161	167	136	135
8	147	158	128	123	126	227	130	343	158	189	138	136
9	147	158	133	119	126	199	133	227	155	181	145	135
10	147	156	130	120	139	183	133	195	720	189	157	135
11	147	156	129	120	144	195	155	1100	550	187	144	129
12	147	142	130	121	128	162	887	1770	281	202	156	140
13	147	78	129	123	128	185	935	1320	758	193	152	158
14	147	149	128	122	128	170	608	635	2000	171	160	161
15	147	191	129	122	128	160	442	1590	1500	168	153	177
16	147	117	128	123	146	314	275	738	1520	167	141	145
17	148	132	128	123	169	162	270	385	648	172	141	145
18	186	126	128	123	156	160	1160	246	205	185	151	127
19	195	125	127	123	226	160	148	196	143	185	152	128
20	195	114	126	123	579	159	144	166	143	179	174	129
21	196	125	126	123	1110	158	139	151	168	172	166	132
22	168	126	126	123	901	158	141	148	196	146	193	140
23	180	126	126	123	1030	160	158	148	348	157	183	143
24	194	128	126	123	1080	152	141	150	183	154	173	143
25	197	126	126	124	826	125	142	151	226	156	175	143
26	193	126	126	130	582	125	140	154	427	151	181	143
27	193	175	125	126	447	141	140	157	176	132	160	143
28	194	139	125	126	412	131	151	151	154	157	166	143
29	167	126	125	120	---	131	419	141	154	129	148	143
30	153	127	125	120	---	132	710	181	159	138	141	143
31	158	---	125	120	---	132	---	335	---	145	137	---
TOTAL	5078	4232	3937	3812	9600	5719	8702	14135	12263	5175	4873	4272
MEAN	164	141	127	123	343	184	290	456	409	167	157	142
MAX	197	191	133	130	1110	340	1160	1770	2000	202	193	177
MIN	147	78	125	119	126	125	130	141	143	129	136	127

CAL YR 1980 TOTAL 97436 MEAN 266 MAX 2010 MIN 78
WTR YR 1981 TOTAL 81798 MEAN 224 MAX 2000 MIN 78

03228750 ALUM CREEK NEAR KILBOURNE, OH

LOCATION.--Lat 40°21'24", long 82°55'18", T.5 N., R.17 W., Delaware County, Hydrologic Unit 05060001, on left bank at upstream side of bridge on County Road 34, 100 ft (30 m) downstream from West Branch Alum Creek, and 2.6 mi (4.2 km) northeast of Kilbourne.

DRAINAGE AREA.--64.9 mi² (168 km²).

PERIOD OF RECORD.--November 1973 to current year (discontinued).

REVISED RECORDS.--WRD OH-75-1: 1974(M).

GAGE.--Water-stage recorder. Datum of gage is 900.99 ft (274.622 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1973 to 1977.

AVERAGE DISCHARGE.--7 years, 71.6 ft³/s (2.028 m³/s) 15.13 in/yr (384 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,850 ft³/s (137 m³/s) Feb. 24, 1975, gage height, 12.05 ft (3.673 m); minimum, 0.40 ft³/s (0.011 m³/s) Aug. 26, 1981.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 11	1100	1110 31.4	6.55 1.996	Apr. 12	2215	1430 40.5	7.27 2.216
Feb. 17	0200	1370 38.8	7.18 2.188	May 11	2345	1170 33.1	6.69 2.039
Feb. 19	0730	*1510 42.8	*7.51 2.289	June 13	2300	1270 36.0	6.93 2.112

Minimum discharge, 0.40 ft³/s (0.11 m³/s) Aug. 26.

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	5.2	9.5	43	28	60	70	22	85	14	63	5.0	25
2	5.4	9.1	33	26	780	61	17	63	13	45	4.0	18
3	5.6	8.3	27	23	500	49	15	46	12	42	4.0	12
4	5.3	7.8	26	21	280	46	27	38	12	35	6.0	13
5	5.0	7.4	19	19	150	65	102	37	11	30	6.0	9.6
6	4.7	7.0	21	19	90	84	54	360	22	26	5.0	7.3
7	4.5	6.6	37	18	58	67	36	156	9.6	20	5.0	6.0
8	4.5	6.2	52	17	38	53	29	69	5.5	16	5.0	8.8
9	4.5	5.8	134	16	27	51	26	48	65	14	4.5	13
10	4.4	5.6	128	15	30	51	26	44	66	13	3.5	7.3
11	4.3	5.2	47	15	200	46	33	441	34	12	2.7	5.0
12	4.4	5.0	33	14	800	42	653	664	18	11	2.3	3.5
13	4.4	4.8	32	14	370	37	597	154	237	12	2.0	2.0
14	4.9	4.6	26	14	200	33	184	186	604	12	2.0	2.3
15	5.2	4.5	25	13	109	29	98	553	147	9.6	1.8	16
16	5.1	6.0	23	13	447	30	69	208	98	8.8	2.3	18
17	5.2	9.0	24	12	1040	27	123	98	84	8.8	1.1	12
18	12	11	21	12	700	25	214	72	50	7.3	.74	13
19	8.5	9.6	22	12	1170	24	104	65	37	8.0	.64	20
20	6.2	8.8	24	11	1030	24	79	45	29	18	.60	15
21	5.6	8.0	21	11	375	25	57	38	58	19	.55	9.6
22	5.7	7.2	22	11	211	25	46	36	206	19	.55	6.6
23	5.6	8.0	22	10	435	22	129	30	92	12	.55	4.5
24	5.7	20	21	10	384	22	129	22	48	8.8	.55	3.5
25	12	35	21	10	176	18	79	14	342	7.3	.51	2.7
26	14	21	23	80	106	18	57	15	132	8.8	.47	2.0
27	9.9	45	24	400	84	22	48	32	57	28	.47	1.5
28	14	87	24	280	81	20	40	42	34	16	.84	1.3
29	18	40	26	190	---	19	152	33	22	12	1.3	1.3
30	12	31	33	120	---	28	92	26	88	8.8	1.0	1.8
31	11	---	30	70	---	27	---	22	---	6.0	18	---
TOTAL	222.8	444.0	1064	1524	9931	1160	3337	3742	2647.1	557.2	88.97	261.6
MEAN	7.19	14.8	34.3	49.2	355	37.4	111	121	88.2	18.0	2.87	8.72
MAX	18	87	134	400	1170	84	653	664	604	63	18	25
MIN	4.3	4.5	19	10	27	18	15	14	5.5	6.0	.47	1.3
CFSM	.11	.23	.53	.76	5.47	.58	1.71	1.86	1.36	.28	.04	.13
IN.	.13	.25	.61	.87	5.69	.66	1.91	2.14	1.52	.32	.05	.15

CAL YR 1980 TOTAL 29090.60 MEAN 79.5 MAX 2450 MIN 4.3 CFSM 1.23 IN 16.67
WTR YR 1981 TOTAL 24979.67 MEAN 68.4 MAX 1170 MIN .47 CFSM 1.05 IN 14.32

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 mi² (316 km²).

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 ft³/s (3.257 m³/s), 8 years (water years 1974-81), 109 ft³/s (3.087 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,160 ft³/s (174 m³/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 ft³/s (183 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 894 ft³/s (25.3 m³/s) May 14, gage height, 26.47 ft (8.068 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Oct. 22.

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	33	7.1	118	4.6	6.2	5.1	3.0	4.8	42	31	3.2	3.2
2	5.2	6.7	118	4.6	5.6	5.1	3.9	2.9	42	31	3.2	3.0
3	4.3	6.7	71	4.6	5.1	5.3	4.3	2.4	70	31	3.4	3.4
4	3.2	6.1	26	4.6	4.8	5.3	4.3	4.8	81	31	3.4	3.4
5	3.2	6.1	26	4.6	4.8	5.9	4.1	6.8	81	31	3.4	3.4
6	3.2	6.1	26	4.6	4.8	5.9	4.3	9.0	85	31	3.6	3.4
7	3.2	6.1	24	4.3	4.8	5.6	5.6	5.3	85	31	3.6	3.2
8	2.8	6.1	83	4.3	4.8	5.6	4.1	4.6	67	23	3.4	3.2
9	2.7	6.1	301	4.6	4.8	5.1	2.4	4.8	31	15	3.6	3.6
10	2.7	5.7	440	4.8	5.6	5.1	2.1	5.6	57	15	4.6	3.2
11	2.7	5.7	169	4.6	6.2	5.1	2.9	112	159	11	3.4	3.0
12	2.7	5.4	34	4.6	5.1	4.8	16	630	191	4.8	3.4	3.2
13	2.5	5.4	33	4.6	4.8	4.6	3.9	878	188	5.3	3.2	3.4
14	2.5	5.4	33	4.6	4.8	4.6	2.7	794	14	5.9	3.2	4.6
15	2.5	5.4	33	4.3	4.8	4.6	2.9	271	10	6.2	3.2	4.3
16	2.5	5.4	34	4.3	6.5	4.6	2.4	9.0	126	6.2	3.2	3.9
17	2.1	5.4	21	4.1	4.8	4.3	2.4	435	488	6.2	3.4	4.3
18	1.5	5.4	5.1	3.9	4.8	4.1	3.2	675	669	6.2	3.4	4.6
19	1.5	5.4	5.6	3.4	10	5.1	1.8	669	669	6.5	3.2	3.9
20	1.4	5.4	9.8	4.3	7.8	5.6	2.4	317	321	6.8	3.4	3.4
21	1.4	5.4	4.6	4.6	5.3	5.6	2.7	61	161	6.5	4.1	3.4
22	1.1	5.2	4.3	4.6	5.1	5.3	1.9	13	274	6.5	3.0	3.4
23	3.8	5.2	4.3	4.6	6.2	5.3	1.9	13	387	6.8	3.2	3.6
24	6.4	5.4	4.8	4.6	5.9	5.1	2.7	13	196	6.8	3.2	3.4
25	7.5	118	4.6	4.8	5.3	5.1	2.4	13	110	6.8	2.7	3.6
26	7.1	104	4.3	5.6	3.9	5.1	2.4	13	154	6.8	2.7	3.0
27	7.1	12	4.3	4.3	5.6	5.1	2.7	14	154	6.5	2.9	2.9
28	7.1	77	4.3	4.8	5.3	4.8	2.4	27	154	6.5	3.0	3.6
29	7.1	118	4.3	4.6	---	4.3	3.9	41	67	7.5	3.0	4.1
30	7.1	118	4.6	4.6	---	6.8	2.1	45	31	6.8	3.2	3.2
31	7.1	---	4.6	4.6	---	6.5	---	43	---	4.8	3.2	---
TOTAL	148.2	685.3	1659.5	140.0	153.5	160.4	103.8	5137.0	5164	407.4	102.6	105.8
MEAN	4.78	22.8	53.5	4.52	5.48	5.17	3.46	166	172	13.1	3.31	3.53
MAX	33	118	440	5.6	10	6.8	16	878	669	31	4.6	4.6
MIN	1.1	5.2	4.3	3.4	3.9	4.1	1.8	2.4	10	4.8	2.7	2.9

CAL YR 1980 TOTAL 69967.7 MEAN 191 MAX 1160 MIN 1.1
WTR YR 1981 TOTAL 13967.5 MEAN 38.3 MAX 878 MIN 1.1

03229000 ALUM CREEK AT COLUMBUS, OH

LOCATION.--Lat 39°56'42", long 82°56'28", in NW 1/4 sec. 24, T.5 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on left bank 0.2 mi (0.3 km) downstream from Livingston Avenue bridge in Columbus, and 6 mi (10 km) upstream from mouth.

DRAINAGE AREA.--189 mi² (490 km²).

PERIOD OF RECORD.--July 1923 to December 1935, January 1938 to current year.

REVISED RECORDS.--WSP 758: 1933. WSP 1305: 1928 (M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.69 ft (223.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Alum Creek Lake 19 mi (31 km) upstream, since Aug. 1973. Water-quality data collected at this site 1960 to 1977. Sediment data collected 1960 to 1965.

AVERAGE DISCHARGE.--55 years, 172 ft³/s (4.871 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 22, 1959, gage height, 19.59 ft (5.971 m) (from high-water mark in well), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of contracted-opening measurement of peak flow; no flow Sept. 21-29, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,100 ft³/s (201 m³/s) June 14, gage height, 11.39 ft (3.472 m); minimum daily, 8.9 ft³/s (0.25 m³/s) Aug. 25.

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	112	21	202	26	165	51	27	471	146	67	18	49
2	34	21	202	25	327	44	23	186	98	59	20	34
3	21	20	194	21	158	38	23	81	294	69	21	138
4	17	40	72	18	67	38	112	54	190	100	64	54
5	16	25	59	17	36	151	237	59	183	64	42	21
6	13	21	61	16	29	146	64	427	476	59	33	18
7	12	23	130	16	22	72	42	179	190	54	19	17
8	12	24	115	15	20	59	33	81	155	54	16	80
9	14	24	427	14	20	51	46	54	294	38	15	22
10	14	24	648	14	31	49	36	98	721	30	14	19
11	15	23	467	14	223	44	179	1010	301	30	14	17
12	19	20	92	14	134	38	1970	1040	312	25	13	16
13	17	23	75	14	75	34	1460	1130	891	64	13	16
14	18	20	69	14	31	30	232	1290	3910	56	12	75
15	16	20	69	14	31	29	103	1080	284	21	12	155
16	16	20	78	14	172	33	61	179	210	20	12	25
17	17	21	67	14	305	29	64	301	530	21	12	20
18	339	40	46	14	206	27	142	891	793	18	11	44
19	29	36	30	16	1140	26	59	850	776	20	11	34
20	21	25	25	18	1030	26	49	607	627	275	11	19
21	19	21	21	25	301	26	38	210	294	122	10	15
22	18	20	19	29	183	24	49	51	350	59	9.6	15
23	18	20	18	21	374	24	210	42	503	26	9.6	12
24	27	78	23	20	246	23	78	38	467	23	9.6	12
25	210	61	19	26	142	23	46	36	219	21	8.9	12
26	36	320	19	98	84	23	38	119	251	75	9.6	12
27	25	241	20	134	64	31	36	287	241	33	13	12
28	81	134	18	59	56	25	30	280	237	115	25	14
29	33	237	36	40	---	21	305	134	206	42	18	13
30	25	215	44	36	---	59	112	607	84	23	29	19
31	24	---	26	26	---	36	---	370	---	20	49	---
TOTAL	1288	1838	3391	842	5672	1330	5904	12242	14233	1703	574.3	1009
MEAN	41.5	61.3	109	27.2	203	42.9	197	395	474	54.9	18.5	33.6
MAX	339	320	648	134	1140	151	1970	1290	3910	275	64	155
MIN	12	20	18	14	20	21	23	36	84	18	8.9	12
CAL YR 1980	TOTAL	109489.0	MEAN	299	MAX	1800	MIN	12				
WTR YR 1981	TOTAL	50026.3	MEAN	137	MAX	3910	MIN	8.9				

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 mi² (1,409 km²).

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 fair. 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.--57 years, 521 ft³/s (14.75 m³/s) (adjusted for diversion).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,800 ft³/s (1,690 m³/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 ft³/s (368 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 5 ft³/s (0.14 m³/s) Sept. 4, 5, 10-12, 1925; minimum daily since 1956, 9.4 ft³/s (0.266 m³/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, 14,400 ft³/s (408 m³/s) June 14, gage height, 15.71 ft (4.788 m); minimum daily, 53 ft³/s (1.50 m³/s) Sept. 29.

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	171	120	230	148	361	447	165	1100	583	247	93	120
2	146	114	210	122	1370	361	150	1440	355	189	96	113
3	116	125	187	109	330	345	139	1000	472	203	118	206
4	102	127	166	99	213	728	140	740	415	226	167	231
5	109	122	170	98	158	825	410	680	358	312	146	133
6	91	107	189	92	134	502	355	1000	1400	203	247	81
7	84	102	220	89	110	404	350	1300	544	171	127	72
8	82	113	279	83	99	339	245	990	358	152	104	178
9	81	106	663	79	96	287	205	600	650	140	90	127
10	76	97	1040	77	113	247	180	690	2440	133	90	84
11	74	102	699	77	532	229	200	4000	1410	127	81	68
12	74	93	281	74	287	221	600	4200	685	123	88	66
13	91	88	218	74	169	189	4500	2390	1170	114	72	60
14	79	64	194	68	138	180	5010	2230	10700	315	72	82
15	81	67	189	66	148	170	3400	3960	3090	131	81	418
16	85	131	208	66	339	168	1500	1600	1580	111	79	150
17	82	97	176	67	1080	165	1250	709	1780	107	76	93
18	599	129	158	68	784	162	1100	1170	1070	106	66	111
19	270	101	138	71	3290	160	950	1100	891	97	63	136
20	169	93	120	68	3820	160	800	885	774	476	55	82
21	150	76	109	85	1930	159	700	404	387	443	60	72
22	134	71	100	100	1350	158	540	239	624	309	63	67
23	109	154	90	88	2020	155	1210	189	650	162	82	58
24	107	267	78	85	1810	152	1100	178	654	134	81	59
25	528	342	88	104	1190	150	940	167	432	118	67	70
26	253	620	84	267	820	148	700	194	528	213	59	70
27	189	551	79	676	536	140	550	667	439	185	64	54
28	261	371	77	321	495	139	450	1550	327	245	144	58
29	226	300	130	206	---	150	510	637	293	250	90	53
30	167	265	205	148	---	162	700	768	203	136	104	55
31	127	---	160	120	---	170	---	1740	---	101	120	---
TOTAL	4913	5115	6935	3895	23722	7972	29059	38517	35262	5979	2945	3227
MEAN	158	171	224	126	847	257	969	1242	1175	193	95.0	108
MAX	599	620	1040	676	3820	825	5010	4200	10700	476	247	418
MIN	74	64	77	66	96	139	139	167	203	97	55	53
(+)	125	117	113	116	116	116	119	117	120	132	134	123
CAL YR 1980 TOTAL	214744			MEAN 587	MAX 5850	MIN 64						
WTR YR 1981 TOTAL	167541			MEAN 459	MAX 10700	MIN 53						

+ Diversion, equivalent in cubic feet per second, for city of Columbus.

SCIOTO RIVER BASIN

257

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 mi² (1,383 km²).

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 fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--57 years, 454 ft³/s (12.86 m³/s), 11.55 in/yr (293 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,000 ft³/s (1,390 m³/s) Jan. 22, 1959, gage height, 17.94 ft (5.468 m) from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of contracted-opening measurement of peak flow; minimum observed, 1.4 ft³/s (0.040 m³/s) Sept. 17, 1932.

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

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)
Feb. 20	2330	4540	129	8.99	2.740	May 12	1930	5300	150	9.76	2.975
Apr. 13	2130	*7130	202	*11.02	3.359	May 16	0900	4840	137	9.30	2.835

Minimum discharge, 39 ft³/s (1.10 m³/s) Aug. 26-30, Sept. 30.

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	71	111	320	110	350	620	163	1150	1460	250	99	45
2	71	100	270	110	900	540	151	1530	909	220	92	47
3	70	90	250	100	1300	461	141	1150	821	200	88	51
4	70	86	230	100	800	400	154	794	868	190	84	63
5	70	80	226	100	500	540	402	617	670	180	82	116
6	70	78	200	98	330	697	355	821	2360	170	81	85
7	68	74	190	96	230	661	334	1460	1950	160	82	69
8	65	72	280	96	210	577	260	1040	1050	150	82	63
9	57	70	450	94	200	505	223	728	801	145	81	55
10	58	68	658	92	210	486	203	593	2120	137	77	51
11	57	66	801	90	700	510	196	1800	2330	130	73	47
12	55	66	554	88	540	471	1830	4900	1190	121	70	45
13	54	64	419	86	400	416	5330	3720	850	113	65	44
14	54	64	338	84	300	361	5780	1640	3200	110	63	44
15	55	64	291	84	230	303	2450	3130	2300	107	59	48
16	59	66	273	82	430	293	1400	4270	1500	104	56	75
17	63	70	243	82	800	273	1140	1910	900	97	54	105
18	91	78	214	80	1740	248	1090	1240	660	94	53	75
19	126	70	202	78	2090	231	947	1190	580	90	53	66
20	127	66	165	78	4010	214	774	984	520	107	48	64
21	116	64	160	76	3660	199	627	767	470	224	47	64
22	97	62	150	76	2020	183	534	621	450	390	46	61
23	90	62	150	76	1670	172	1120	523	420	308	44	55
24	81	130	140	76	1870	166	1100	448	390	203	43	52
25	106	400	140	90	1380	160	891	387	370	155	42	46
26	130	300	140	150	1030	154	634	346	340	137	41	44
27	113	600	130	270	810	161	535	445	320	137	40	42
28	120	980	130	440	691	156	468	1070	300	141	39	42
29	128	660	130	310	---	150	531	1070	280	154	39	40
30	123	450	120	250	---	161	994	983	260	125	42	39
31	117	---	120	180	---	170	---	2270	---	110	42	---
TOTAL	2632	5211	8084	3822	29401	10639	30757	43597	30639	4959	1907	1743
MEAN	84.9	174	261	123	1050	343	1025	1406	1021	160	61.5	58.1
MAX	130	980	801	440	4010	697	5780	4900	3200	390	99	116
MIN	54	62	120	76	200	150	141	346	260	90	39	39
CFSM	.16	.33	.49	.23	1.97	.64	1.92	2.63	1.91	.30	.12	.11
IN.	.18	.36	.56	.27	2.05	.174	2.14	3.04	2.13	.35	.13	.12
CAL YR 1980	TOTAL	238771	MEAN 652	MAX 9060	MIN 54	CFSM 1.22	IN 16.63					
WTR YR 1981	TOTAL	173391	MEAN 475	MAX 5780	MIN 39	CFSM .89	IN 12.08					

SCIOTO RIVER BASIN

03230800 DEER CREEK AT MOUNT STERLING, OH

LOCATION.--39°42'54", long 83°15'26", Madison County, Hydrologic Unit 05060002, on left bank at downstream side of 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 Mount Sterling, and 4.9 mi (7.9 km) upstream from Duffs Fork.

DRAINAGE AREA.--228 mi² (591 km²).

PERIOD OF RECORD.--October 1966 to September 1981 (discontinued).

REVISED RECORDS.--WDR OH-75-1: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 836.25 ft (254.889 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 1967 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--15 years, 213 ft³/s (6.768 m³/s), 14.24 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s (329 m³/s) May 24, 1968, gage height, 11.87 ft (3.618 m); minimum, 5.1 ft³/s (0.14 m³/s) Nov. 24, 1970, July 28, 29, and Aug. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1900 ft³/s (53.8 m³) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)
May 12	0030	2130	60.3	7.91	2.411	June 14	1100	2590	73.3	8.29	2.527
June 6	1530	*5380	152	*9.97	3.039						

Minimum discharge 11 ft³/s (0.31 m³/s) Sept. 28-30.

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	36	65	170	72	110	269	74	508	730	97	46	28
2	36	60	152	65	413	240	69	890	455	85	43	26
3	77	54	126	60	194	210	65	503	664	79	42	28
4	83	54	102	54	160	191	79	340	535	77	41	48
5	83	54	102	52	120	329	272	269	409	77	41	48
6	77	49	103	52	100	459	197	468	3650	76	46	49
7	74	46	100	52	96	347	145	618	1490	69	48	37
8	74	46	105	52	92	285	125	393	680	63	40	33
9	70	46	171	52	89	250	113	295	472	58	36	32
10	67	43	352	52	87	240	101	262	459	57	32	26
11	62	41	253	52	312	223	106	1410	494	54	31	22
12	58	38	197	52	191	197	1320	1710	344	49	30	21
13	55	37	172	54	160	180	1210	859	421	48	28	19
14	54	38	144	54	113	145	708	633	2260	54	27	19
15	51	40	135	54	104	125	451	1640	1280	48	26	22
16	48	40	132	54	163	135	329	1110	517	43	25	26
17	45	40	113	52	490	113	326	593	401	43	24	20
18	106	46	108	51	472	106	351	468	295	41	23	19
19	130	43	100	52	846	99	333	713	240	40	21	20
20	76	40	81	52	1650	93	278	526	204	62	19	19
21	62	38	78	52	1130	87	216	373	180	247	18	17
22	57	40	78	52	702	79	194	298	185	168	17	17
23	51	40	76	51	633	77	1020	250	165	115	17	17
24	46	55	76	51	618	74	973	216	135	87	17	14
25	108	174	76	57	472	70	535	188	125	72	17	13
26	142	117	74	122	377	70	366	171	115	65	16	13
27	89	168	74	191	318	81	295	253	101	63	16	13
28	85	370	72	140	298	76	247	675	93	63	18	11
29	95	253	72	104	---	72	285	618	87	83	18	11
30	83	197	72	85	---	83	318	598	87	65	24	11
31	74	---	72	83	---	83	---	1540	---	52	32	---
TOTAL	2254	2372	3738	2078	10510	5088	11101	19388	17273	2300	879	699
MEAN	72.7	79.1	121	67.0	375	164	370	625	576	74.2	28.4	23.3
MAX	142	370	352	191	1650	459	1320	1710	3650	247	48	49
MIN	36	37	72	51	87	70	65	171	87	40	16	11
CFSM	.32	.35	.53	.29	1.65	.72	1.62	2.74	2.53	.33	.13	.10
IN.	.37	.39	.61	.34	1.71	.83	1.81	3.16	2.82	.38	.14	.11

CAL YR 1980 TOTAL 97446 MEAN 266 MAX 3160 MIN 36 CFSM 1.17 IN 15.90
WTR YR 1981 TOTAL 77680 MEAN 213 MAX 3650 MIN 11 CFSM .93 IN 12.67

SCIOTO RIVER BASIN

259

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 mi² (717 km²).

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.--15 years 275 ft³/s (7.788 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s (552 m³/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, 1,720 ft³/s (48.7 m³/s) May 15, gage height, 73.38 ft (22.366 m); minimum daily, 11 ft³/s (0.31 m³/s) Sept. 28-30.

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	17	155	460	72	20	379	39	417	1180	79	57	17
2	17	155	482	72	182	379	39	339	1160	81	57	17
3	38	155	257	72	447	271	40	339	1150	81	57	17
4	74	155	150	72	443	222	40	585	1150	83	57	29
5	74	155	150	72	332	324	40	682	717	83	57	36
6	142	155	150	62	152	486	40	682	33	83	57	36
7	174	155	147	48	98	532	31	677	600	83	57	36
8	174	155	129	48	98	434	16	667	1320	83	57	58
9	174	152	120	48	127	309	16	662	1300	83	57	69
10	219	155	200	48	145	309	16	662	1270	83	57	55
11	253	155	275	48	250	309	17	662	1250	83	57	31
12	253	155	290	48	286	275	18	672	1240	83	55	22
13	253	200	290	48	142	226	18	988	1230	54	55	22
14	253	219	286	50	142	226	17	1210	1220	38	29	22
15	250	213	194	50	142	226	18	820	638	38	16	23
16	250	174	145	67	142	194	18	13	15	38	16	23
17	250	174	145	76	447	179	19	856	811	38	16	23
18	246	174	145	76	605	129	18	1350	1360	38	16	22
19	246	174	145	66	980	107	18	1340	1250	38	16	22
20	246	174	120	50	1240	107	216	1430	1230	50	16	22
21	243	174	86	50	1270	107	317	1570	1210	257	16	22
22	243	174	86	48	1260	107	317	1370	1020	343	16	22
23	239	174	86	48	1250	107	532	758	408	194	16	18
24	239	174	104	48	1230	77	628	286	165	98	16	13
25	236	203	118	48	1210	41	628	268	163	96	16	12
26	236	243	118	102	921	41	624	216	139	96	16	12
27	239	239	118	182	430	39	624	246	118	69	16	12
28	182	320	118	197	383	39	619	500	118	57	17	11
29	157	400	88	109	---	39	614	605	107	57	17	11
30	157	396	72	20	---	39	614	605	84	57	17	11
31	157	---	72	20	---	39	---	869	---	57	17	---
TOTAL	5931	5856	5346	2065	14374	6298	6211	22346	23656	2701	1042	746
MEAN	191	195	172	66.6	513	203	207	721	789	87.1	33.6	24.9
MAX	253	400	482	197	1270	532	628	1570	1360	343	57	69
MIN	17	152	72	20	20	39	16	13	15	38	16	11

CAL YR 1980 TOTAL 119551 MEAN 327 MAX 1490 MIN 15
WTR YR 1981 TOTAL 96572 MEAN 265 MAX 1570 MIN 11

SCIOTO RIVER BASIN

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 mi² (862 km²).

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. 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.--46 years (1926-35, 1938-56, 1962-81), 301 ft³/s (8.524 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s (1,120 m³/s) Jan. 22, 1959, gage height, 17.6 ft (5.36 m) (from floodmarks), from rating curve extended above 25,000 ft³/s (708 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 1.8 ft³/s (0.051 m³/s) July 25, 1934, Oct. 1-4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,090 ft³/s (116 m³/s) June 6, gage height, 10.33 ft (3.149 m); minimum daily, 13 ft³/s (0.37 m³/s) Sept. 28-30.

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	28	180	470	76	36	448	62	583	1320	111	62	22
2	27	178	510	76	190	431	62	415	1280	106	62	22
3	27	178	306	78	470	355	61	392	1280	102	64	32
4	78	180	190	78	450	261	77	539	1320	102	67	31
5	83	178	160	76	384	435	383	738	1180	102	68	40
6	126	175	160	70	210	607	175	858	2630	97	91	42
7	195	178	160	63	126	641	129	845	680	95	73	42
8	197	178	150	52	124	587	93	771	1500	97	68	54
9	199	175	132	52	136	373	77	751	1470	97	67	78
10	217	175	200	52	157	364	61	742	1440	97	62	70
11	259	175	310	50	227	352	60	1040	1420	91	62	41
12	261	170	310	50	361	335	223	975	1370	87	62	25
13	261	195	310	52	186	261	152	1030	1360	93	60	24
14	261	227	300	52	157	247	116	1340	1690	65	50	22
15	261	225	240	54	161	244	87	1520	1150	53	25	25
16	261	195	170	60	210	236	75	438	116	50	23	25
17	261	192	150	76	411	208	70	599	563	48	23	24
18	264	190	150	78	609	175	65	1420	1410	47	23	24
19	261	190	150	74	1060	129	56	1450	1400	47	22	24
20	261	190	140	60	1670	126	146	1460	1360	53	22	24
21	259	187	100	52	1400	122	358	1610	1340	226	22	24
22	255	185	96	52	1340	122	364	1500	1240	373	21	23
23	253	185	96	52	1340	122	616	1070	628	281	21	22
24	253	185	100	52	1310	114	797	315	203	129	21	18
25	257	195	120	52	1250	53	738	293	203	122	21	15
26	253	233	130	110	1130	53	721	258	185	116	21	14
27	251	247	130	200	587	58	707	332	142	99	21	14
28	223	300	120	210	462	60	703	698	139	68	21	13
29	182	400	100	110	---	61	707	763	135	68	21	13
30	180	440	86	21	---	65	694	819	118	61	22	13
31	182	---	76	22	---	65	---	1010	---	62	25	---
TOTAL	6336	6281	5822	2212	16154	7710	8635	26574	30272	3245	1293	860
MEAN	204	209	188	71.4	577	249	288	857	1009	105	41.7	28.7
MAX	264	440	510	210	1670	641	797	1610	2630	373	91	78
MIN	27	170	76	21	36	53	56	258	116	47	21	13
CFSM	.61	.63	.57	.21	1.73	.75	.87	2.57	3.03	.32	.13	.09
IN.	.71	.70	.65	.25	1.80	.86	.96	2.97	3.38	.36	.14	.10
CAL YR 1980	TOTAL	136362	MEAN 373	MAX 1720	MIN 27	CFSM 1.12	IN 15.23					
WTR YR 1981	TOTAL	115394	MEAN 316	MAX 2630	MIN 13	CFSM .95	IN 12.89					

SCIOTO RIVER BASIN

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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 mi² (9,969 km²).

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 except those for winter period which are fair. Flow regulated by 6 reservoirs 36 mi (58 km) to 91 mi (146 km) upstream from station (see stations 03220500, 03221500, 03225000, 03228400, 03228850, 03230890).

AVERAGE DISCHARGE.--61 years, 3,444 ft³/s (97.5 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 144,000 ft³/s (4,080 m³/s) Jan. 23, 1959, gage height, 32.5 ft (9.906 m), (from high-water mark in well); minimum daily, 166 ft³/s (4.70 m³/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 ft³/s (7,360 m³/s) (estimated by Franklin County Conservancy District).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,700 ft³/s (869 m³/s) June 16, gage height, 13.67 ft (4.167 m); minimum daily, 561 ft³/s (15.9 m³/s) Sept. 30.

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	878	1650	2660	1100	1620	4890	1580	5260	10900	3210	1050	680
2	875	1160	2250	1100	3890	4380	1390	9490	6510	2800	1010	720
3	865	1390	2290	1060	6270	4180	1280	7600	5130	2580	965	1910
4	835	1100	2190	965	5010	3240	1230	5050	5700	2590	971	2860
5	853	1010	1900	889	4110	3380	5580	4000	5770	2650	946	2890
6	836	1000	1710	900	2670	5400	7050	4090	13900	2590	1020	2740
7	879	951	1550	920	2040	5300	3560	7610	14700	2090	1180	2540
8	904	917	1570	880	1750	4280	2570	8100	7670	1840	997	1590
9	891	893	1870	840	1570	3640	2080	6210	5620	1610	910	1400
10	882	889	3000	820	1450	3290	1810	4670	7220	1490	848	1170
11	911	867	4490	820	1700	3180	1670	6220	13300	1400	800	936
12	931	855	4310	800	3430	3130	4260	14000	12300	1300	773	881
13	912	842	3290	800	4880	2920	14400	19400	9950	1240	741	852
14	918	844	2540	780	4480	2590	20100	18900	13700	1510	728	804
15	926	873	2150	780	3270	2330	18600	16900	21900	1630	703	888
16	920	857	1940	770	2910	2270	10200	18500	29800	1310	676	1550
17	918	830	1880	748	4490	2290	6920	17300	26500	1080	667	1140
18	958	961	1710	743	7900	2180	5340	11800	18600	1030	663	1070
19	2070	1010	1580	731	10800	1970	6340	11700	14900	1020	648	1320
20	1460	1290	1480	739	16600	1790	5240	10600	12300	990	606	1490
21	1160	1290	1270	731	21800	1700	4790	8280	10200	1840	586	1650
22	1090	1260	1050	756	22300	1610	4070	6190	8960	2320	593	1570
23	1040	1230	1070	831	17200	1480	4320	4610	8800	2210	594	1230
24	1030	1220	1060	855	15600	1430	9110	3340	7380	1700	605	917
25	1020	1420	1030	834	15200	1360	6370	2760	5170	1410	597	771
26	1820	1750	976	905	11500	1280	4750	2500	4440	1260	588	781
27	1470	1590	968	1460	7860	1330	4020	3190	6260	1400	580	716
28	1250	2540	972	2950	5870	1440	3480	5860	6070	1480	575	629
29	1320	3240	970	3560	---	1380	3200	9490	4680	1400	631	583
30	1310	2960	999	3380	---	1450	4520	7120	3950	1550	698	561
31	1260	---	1170	2110	---	1860	---	9810	---	1200	646	---
TOTAL	33392	38689	57895	35557	208170	82950	169830	270550	322280	53730	23595	38839
MEAN	1077	1290	1868	1147	7435	2676	5661	8727	10740	1733	761	1295
MAX	2070	3240	4490	3560	22300	5400	20100	19400	29800	3210	1180	2890
MIN	835	830	968	731	1450	1280	1230	2500	3950	990	575	561

CAL YR 1980 TOTAL 1647941 MEAN 4503 MAX 30900 MIN 830
WTR YR 1981 TOTAL 1335477 MEAN 3659 MAX 29800 MIN 561

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-51, 1965 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1965 to current year.

pH: May 1965 to current year.

WATER TEMPERATURES: October 1950 to September 1951, October 1953 to current year.

DISSOLVED OXYGEN: May 1965 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, 1,210 micromhos Jan. 13, 1976; minimum, 150 micromhos June 29, 1972.

pH: Maximum, 9.3 units Aug. 24-26, 1981; minimum, 6.3 units Mar. 6, 1979.

WATER TEMPERATURES: Maximum, 32.0°C July 14, 1954, Aug. 2, 3, 1955, July 20, 1977; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, ≥ 20.0 mg/L on several days during 1978 and 1981; minimum, 0.0 mg/L Apr. 27 Aug. 12, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 890 micromhos Jan. 21; minimum, 364 micromhos Apr. 14.

pH: Maximum, 9.3 units Aug. 24, 25, 26; minimum, 7.5 units Oct. 19, 20, Nov. 2, 30, Dec. 1.

WATER TEMPERATURES: Maximum, 26.5°C July 9, 10, 11; minimum, 0.0°C many times during winter months.

DISSOLVED OXYGEN: Maximum, ≥ 20.0 mg/L Mar. 27, Aug. 19, 20, 24, 25; minimum, 4.5 mg/L Oct. 20.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	698	672	622	568	576	546	766	702	734	556	578	560
2	714	648	640	594	598	576	714	688	608	536	584	578
3	718	704	624	584	616	592	722	700	552	476	592	580
4	700	692	668	614	646	616	722	706	602	500	622	584
5	704	698	662	614	642	630	746	724	602	576	600	562
6	718	696	620	604	654	642	752	738	598	578	568	550
7	714	686	638	620	660	632	752	734	606	586	568	544
8	688	676	654	636	672	640	758	738	648	616	586	566
9	702	684	666	650	670	614	758	748	662	640	604	584
10	706	690	670	656	658	624	762	750	848	652	616	602
11	700	678	666	652	618	566	800	762	694	622	630	614
12	678	668	660	648	586	566	812	800	676	622	---	---
13	672	662	660	648	600	578	814	788	664	554	---	---
14	666	654	656	646	614	600	822	774	564	522	---	---
15	680	666	648	638	608	598	794	768	570	540	---	---
16	686	672	642	634	622	610	786	776	686	568	---	---
17	684	678	640	510	640	620	786	776	612	514	---	---
18	682	598	642	628	704	640	782	762	512	484	658	648
19	770	672	650	642	678	650	844	770	482	418	666	646
20	774	608	652	640	674	638	810	768	428	404	666	658
21	606	590	672	634	660	638	890	778	466	386	678	656
22	600	590	662	630	660	652	802	776	404	390	678	662
23	616	598	686	636	668	658	804	774	434	404	692	662
24	626	600	668	652	684	640	834	800	444	428	702	682
25	616	562	652	620	666	656	884	836	474	442	692	682
26	660	610	622	596	664	656	882	858	500	476	776	682
27	654	566	596	486	678	666	858	806	538	500	696	636
28	564	516	618	590	694	678	806	722	560	540	704	696
29	566	520	616	500	812	694	720	676	---	---	710	698
30	596	566	544	502	776	694	700	624	---	---	738	706
31	602	576	---	---	814	698	654	638	---	---	764	720
MONTH	774	516	686	486	814	546	890	624	848	386	776	544

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	734	702	622	550	490	426	572	548	648	628	784	760
2	722	692	554	438	556	492	604	566	708	652	774	752
3	738	716	538	456	590	558	614	580	722	710	762	520
4	732	426	584	534	614	496	624	616	736	722	762	600
5	658	450	614	584	---	---	622	576	732	390	602	572
6	526	408	612	596	---	---	622	548	724	702	586	568
7	550	432	598	544	---	---	632	612	710	626	572	558
8	626	554	550	520	522	466	660	630	708	690	590	564
9	688	626	590	554	570	522	688	658	706	682	620	590
10	698	666	604	422	600	574	700	690	682	670	644	608
11	716	680	600	510	578	404	712	698	706	670	---	---
12	718	480	498	430	---	---	712	704	710	686	---	---
13	456	400	464	414	---	---	714	484	728	708	---	---
14	430	364	500	466	---	---	692	640	730	712	---	---
15	526	438	460	442	---	---	708	666	712	664	---	---
16	542	524	---	---	---	---	712	690	738	704	---	---
17	580	538	---	---	---	---	690	666	748	738	---	---
18	580	566	---	---	426	408	676	660	752	744	---	---
19	564	482	---	---	444	440	700	644	768	744	---	---
20	538	474	512	474	454	440	742	692	796	740	642	618
21	586	540	536	508	460	444	748	712	758	726	644	622
22	604	542	572	538	456	440	730	568	738	726	620	600
23	600	536	596	570	492	448	580	568	744	722	604	590
24	582	430	---	---	544	484	636	622	738	722	614	590
25	532	448	---	---	574	546	662	636	758	738	626	612
26	584	534	---	---	582	568	678	658	758	744	666	628
27	614	574	---	---	568	544	684	612	776	758	694	662
28	634	610	540	498	554	544	862	684	790	770	700	692
29	658	632	512	466	578	552	696	650	782	714	696	682
30	664	610	534	482	582	560	676	646	774	758	698	614
31	---	---	534	458	---	---	670	646	782	754	---	---
MONTH	738	364	622	414	614	404	862	484	796	390	784	520
YEAR	890	364										

03231500 SCIOTO RIVER AT CHILLOCOTHE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	7.7	7.7	7.6	8.0	7.5	---	---	8.4	8.3	8.1	8.1
2	8.0	7.7	7.7	7.5	8.0	8.0	---	---	8.3	8.1	8.1	8.1
3	7.8	7.8	7.7	7.7	8.0	8.0	---	---	8.1	8.0	8.1	8.1
4	7.8	7.7	7.7	7.6	7.9	7.9	---	---	8.3	8.1	8.1	8.1
5	7.8	7.7	7.8	7.6	7.9	7.8	---	---	8.3	8.2	8.1	8.1
6	7.7	7.7	7.8	7.7	7.8	7.8	---	---	8.3	8.3	8.1	8.0
7	7.7	7.6	7.8	7.7	7.9	7.8	---	---	8.3	8.2	8.1	8.0
8	7.8	7.7	7.9	7.7	7.9	7.8	---	---	8.3	8.2	8.1	8.1
9	7.9	7.7	7.9	7.7	7.8	7.8	---	---	8.2	8.2	8.1	8.1
10	8.0	7.7	7.9	7.8	7.9	7.8	---	---	8.2	8.2	8.1	8.1
11	8.0	7.9	7.9	7.8	7.8	7.7	---	---	8.3	8.2	8.2	8.1
12	8.0	7.9	7.9	7.8	7.9	7.8	---	---	8.2	8.1	---	---
13	8.0	7.8	7.9	7.8	---	---	---	---	8.2	8.2	---	---
14	8.0	7.9	7.9	7.7	---	---	---	---	8.3	8.2	---	---
15	7.9	7.8	7.8	7.7	---	---	---	---	8.3	8.2	---	---
16	7.9	7.8	8.0	7.7	---	---	---	---	8.3	8.2	---	---
17	8.0	7.9	7.8	7.7	---	---	---	---	8.3	8.2	---	---
18	8.0	7.9	7.8	7.6	---	---	---	---	8.3	8.2	8.2	8.1
19	8.0	7.5	7.8	7.6	---	---	---	---	8.2	8.1	8.2	8.2
20	7.8	7.5	7.8	7.6	---	---	---	---	8.1	8.0	8.3	8.2
21	7.9	7.7	7.8	7.7	---	---	---	---	8.1	8.0	8.4	8.2
22	7.9	7.7	8.0	7.7	---	---	---	---	8.1	8.0	8.4	8.2
23	7.9	7.7	7.9	7.7	---	---	8.3	8.2	8.1	8.1	8.4	8.3
24	7.8	7.7	7.8	7.7	---	---	8.3	8.1	8.1	8.0	8.4	8.2
25	7.8	7.7	7.8	7.7	---	---	8.3	8.1	8.1	8.1	8.6	8.2
26	7.8	7.6	7.9	7.7	---	---	8.3	8.2	8.2	8.1	8.7	8.4
27	7.7	7.6	8.0	7.8	---	---	8.3	8.2	8.2	8.1	8.7	8.4
28	7.7	7.6	7.9	7.7	---	---	8.3	8.2	8.2	8.1	8.8	8.4
29	7.7	7.6	7.7	7.6	---	---	8.4	8.3	---	---	9.0	8.6
30	7.7	7.6	7.6	7.5	---	---	8.4	8.3	---	---	8.8	8.5
31	7.7	7.6	---	---	---	---	8.4	8.3	---	---	8.7	8.4
MONTH	8.2	7.5	8.0	7.5	8.0	7.5	8.4	8.1	8.4	8.0	9.0	8.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.6	8.2	8.1	8.0	8.0	7.7	7.9	7.9	8.4	8.1	8.7	8.3
2	8.6	8.3	8.0	7.9	8.0	7.9	7.9	7.8	8.5	8.0	8.5	8.3
3	8.5	8.2	8.0	7.9	8.0	8.0	7.9	7.9	8.4	8.1	8.3	8.0
4	8.3	8.1	8.1	8.0	8.0	8.0	7.9	7.9	8.4	8.0	7.9	7.8
5	8.1	7.8	8.1	8.1	---	---	7.9	7.9	8.4	8.1	8.0	7.8
6	7.8	7.7	8.1	8.0	---	---	7.9	7.9	8.3	8.1	8.1	7.9
7	7.9	7.8	8.0	8.0	---	---	8.0	7.9	8.2	8.1	8.1	8.0
8	8.1	7.9	8.1	8.0	7.9	7.8	8.0	7.9	8.3	8.0	8.2	8.0
9	8.1	8.0	8.1	8.0	8.0	7.9	8.1	8.0	8.6	8.0	8.3	8.1
10	8.2	8.0	8.1	8.0	8.0	7.8	8.2	8.0	8.7	8.2	8.3	8.1
11	8.3	8.0	8.0	7.9	7.9	7.8	8.4	8.0	8.6	8.3	---	---
12	8.2	7.7	7.9	7.8	---	---	8.6	8.1	8.6	8.3	---	---
13	7.8	7.7	7.9	7.8	---	---	8.5	8.2	8.5	8.3	---	---
14	7.9	7.8	7.9	7.9	---	---	8.3	8.0	8.5	8.2	---	---
15	7.9	7.9	7.9	7.9	---	---	8.2	7.9	8.6	8.3	---	---
16	7.9	7.9	---	---	---	---	8.5	8.1	8.6	8.2	---	---
17	7.9	7.9	---	---	---	---	8.4	8.1	8.8	8.3	---	---
18	7.9	7.6	---	---	7.8	7.8	8.5	8.1	8.8	8.5	---	---
19	7.9	7.8	---	---	7.8	7.8	8.3	8.0	9.1	8.7	---	---
20	8.0	7.9	7.9	7.9	7.9	7.8	8.2	7.8	9.2	8.8	8.0	7.9
21	8.0	8.0	8.0	7.9	7.9	7.9	8.1	7.9	9.1	8.9	8.1	7.9
22	8.0	8.0	8.0	7.9	7.9	7.9	8.1	7.8	9.1	8.7	8.1	8.0
23	8.0	7.9	8.0	7.9	7.9	7.9	8.2	8.0	9.2	8.8	8.1	8.0
24	7.9	7.9	---	---	7.9	7.9	8.1	8.0	9.3	8.9	8.2	8.0
25	8.0	7.9	---	---	7.9	7.9	8.2	8.0	9.3	9.0	8.2	8.0
26	8.0	8.0	---	---	8.0	7.9	8.2	8.0	9.3	9.0	8.3	8.1
27	8.1	8.0	---	---	8.0	7.9	8.2	8.0	9.2	9.0	8.4	8.1
28	8.1	8.1	7.8	7.8	8.0	8.0	8.1	7.9	9.1	9.0	8.4	8.1
29	8.1	8.0	7.8	7.7	8.0	7.9	8.2	8.0	9.0	8.8	8.4	8.2
30	8.0	8.0	7.9	7.8	8.0	7.9	8.1	8.0	8.8	8.5	8.4	8.1
31	---	---	7.8	7.7	---	---	8.4	7.9	8.8	8.3	---	---
MONTH	8.6	7.6	8.1	7.7	8.0	7.7	8.6	7.8	9.3	8.0	8.7	7.8
YEAR	9.3	7.5										

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	20.0	19.0	10.5	9.0	5.5	4.5	3.0	2.5	1.5	.5	5.5	5.5
2	19.5	18.5	10.5	9.0	6.0	5.0	2.5	2.0	1.5	1.0	6.0	5.0
3	19.0	18.0	11.0	9.0	5.0	4.5	2.0	1.0	1.0	.0	5.5	4.5
4	18.0	17.5	12.0	10.5	5.0	4.0	1.0	.0	.5	.0	5.0	4.5
5	17.5	17.0	11.5	10.5	5.0	4.5	.5	.0	.5	.0	4.5	4.0
6	17.5	16.5	10.5	9.5	7.0	5.0	.0	.0	.5	.0	4.5	3.5
7	17.5	16.5	11.5	10.0	8.5	7.0	.0	.0	1.5	.5	4.5	3.5
8	18.0	17.0	12.5	11.5	9.5	8.0	.5	.0	2.0	2.0	4.0	3.5
9	18.5	17.5	13.0	11.5	9.5	9.0	.0	.0	1.5	.5	5.0	3.5
10	18.5	17.5	12.5	10.5	9.0	7.5	.5	.0	3.0	1.5	5.5	4.5
11	18.5	17.5	10.5	9.0	7.0	5.5	.5	.0	3.5	.5	6.0	5.0
12	17.5	17.0	9.0	7.5	5.5	5.0	.5	.0	.5	.0	---	---
13	17.0	16.5	9.0	7.5	5.5	5.0	.0	.0	.5	.0	---	---
14	17.0	16.5	9.5	8.5	4.5	3.5	.0	.0	1.0	.0	---	---
15	17.5	16.5	9.0	8.5	4.0	3.5	.0	.0	2.5	.5	---	---
16	18.0	17.0	9.0	8.5	4.0	3.5	1.0	.5	3.0	2.0	---	---
17	18.0	17.5	8.5	7.0	4.0	3.0	1.0	.5	3.0	2.5	---	---
18	18.5	18.0	7.5	6.5	4.0	3.5	1.0	.0	2.5	2.0	7.0	6.0
19	18.0	17.5	7.0	6.0	4.0	2.0	1.5	.5	3.5	2.5	6.0	5.0
20	18.0	17.0	7.0	5.5	2.0	1.0	2.0	1.0	4.0	3.5	5.0	4.5
21	17.5	16.5	7.0	6.0	1.0	.0	2.5	2.0	4.0	4.0	7.0	4.5
22	17.5	16.5	6.5	5.0	1.0	.0	3.5	2.5	4.0	3.5	6.5	5.5
23	17.0	13.0	7.0	6.0	2.0	1.0	3.0	3.0	5.0	4.0	8.0	5.5
24	14.0	12.5	7.5	7.0	2.0	.5	4.0	2.5	5.0	4.5	9.0	6.5
25	14.0	11.0	7.5	6.5	.5	.0	4.5	3.0	4.5	4.0	10.5	7.5
26	11.0	10.5	6.5	5.5	.0	.0	5.5	4.0	4.5	4.0	10.5	8.5
27	10.0	9.5	5.5	5.0	.5	.0	5.5	4.5	5.0	4.0	11.5	9.5
28	10.0	9.5	5.5	5.0	1.0	.0	4.0	2.5	5.5	4.5	12.5	9.5
29	9.5	8.5	5.5	4.0	1.5	1.0	2.5	1.5	---	---	13.5	11.0
30	10.0	8.5	5.0	3.5	2.0	1.5	1.5	.5	---	---	14.5	12.5
31	10.0	8.5	---	---	3.0	2.0	1.0	.0	---	---	15.5	13.0
MONTH	20.0	8.5	13.0	3.5	9.5	.0	5.5	.0	5.5	.0	15.5	3.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	16.0	14.0	15.5	14.0	18.0	17.5	23.0	22.0	24.5	21.5	24.0	22.5
2	16.0	13.5	14.0	12.5	18.5	17.5	23.0	22.0	25.0	22.5	23.5	23.0
3	16.0	14.0	14.5	12.5	19.5	18.5	23.0	21.5	25.0	23.5	23.0	22.5
4	16.0	14.5	15.5	13.5	20.5	19.0	24.0	22.0	25.5	23.5	23.5	22.0
5	15.0	12.0	16.0	15.0	---	---	23.0	22.5	26.0	24.0	23.5	22.0
6	12.0	11.0	15.5	13.5	---	---	23.5	22.0	25.0	23.5	23.5	22.0
7	12.0	9.5	14.5	13.0	---	---	25.0	22.5	24.0	22.5	23.0	22.0
8	13.5	11.0	14.5	13.0	20.5	19.5	25.5	23.5	23.5	22.0	23.0	22.0
9	15.0	13.0	15.5	14.0	22.0	20.5	26.5	24.5	24.5	22.0	22.0	20.5
10	14.5	13.5	16.0	14.5	21.5	21.0	26.5	25.0	24.5	22.5	21.5	19.0
11	16.0	14.5	15.0	13.5	21.0	20.0	26.5	23.5	24.5	23.0	---	---
12	16.5	15.5	13.5	13.0	---	---	26.0	23.5	24.5	22.0	---	---
13	15.5	14.5	14.0	13.0	---	---	26.0	24.0	24.5	22.0	---	---
14	14.5	14.0	14.5	14.0	---	---	26.0	24.0	24.5	22.5	---	---
15	13.5	13.0	14.0	13.5	---	---	25.5	23.5	24.0	23.0	---	---
16	13.5	12.5	---	---	---	---	25.0	23.5	24.0	22.5	---	---
17	14.5	13.0	---	---	---	---	25.5	23.0	23.5	21.5	---	---
18	16.0	14.0	---	---	22.5	22.0	26.0	23.0	22.5	20.5	---	---
19	15.0	14.0	---	---	22.5	22.0	25.5	24.0	24.0	20.5	---	---
20	14.0	13.0	13.5	12.0	22.5	21.5	25.0	23.5	24.0	21.5	18.0	16.0
21	14.0	12.0	15.0	13.0	22.0	22.0	25.0	23.5	22.5	21.0	19.0	17.0
22	14.0	12.5	16.5	14.5	23.0	21.5	25.0	23.0	24.0	20.0	18.5	17.0
23	14.0	13.5	17.5	15.5	22.5	21.5	24.0	22.5	24.5	21.5	17.5	15.5
24	13.5	12.0	---	---	23.0	21.5	24.0	22.5	24.5	21.5	17.5	15.5
25	12.0	11.0	---	---	23.0	22.0	25.0	22.5	24.5	22.5	17.0	15.5
26	12.0	11.0	---	---	23.0	21.5	25.5	23.5	25.0	22.5	18.5	16.0
27	14.0	11.5	---	---	22.5	21.0	25.5	24.0	25.0	22.5	19.5	18.0
28	16.0	14.0	17.5	17.0	22.5	20.5	25.0	24.0	25.5	22.5	18.5	17.0
29	17.0	16.0	18.0	17.0	23.5	21.0	24.0	22.5	24.5	23.0	17.5	16.0
30	16.5	15.5	18.5	18.0	23.0	22.0	23.5	21.0	23.0	22.0	18.0	16.0
31	---	---	19.0	18.0	---	---	24.0	21.0	24.0	22.0	---	---
MONTH	17.0	9.5	19.0	12.0	23.5	17.5	26.5	21.0	26.0	20.0	24.0	15.5
YEAR	26.5	.0										

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILlicothe, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	12.0	7.8	8.9	7.9	11.4	10.7	9.8	9.1	11.8	11.0	10.9	10.8
2	11.0	7.2	9.1	7.7	11.0	10.9	10.8	9.3	11.1	10.7	10.9	10.8
3	8.8	7.7	9.2	8.4	11.5	10.9	11.1	9.5	11.0	10.7	11.2	10.9
4	8.4	7.3	8.2	7.3	11.3	10.8	12.0	10.6	11.5	10.9	11.0	10.8
5	9.3	7.5	9.1	7.5	11.5	10.9	12.5	11.5	11.7	11.5	11.1	10.7
6	9.4	7.9	9.4	8.0	11.0	10.1	13.3	11.7	11.5	11.2	11.3	11.0
7	8.8	7.6	9.2	8.0	10.5	9.7	13.0	12.1	11.2	10.8	11.4	11.0
8	8.1	7.2	9.7	7.8	10.0	9.1	12.8	12.0	10.8	10.3	12.2	11.3
9	8.9	7.6	8.5	7.4	9.1	8.5	12.7	11.8	14.1	10.5	11.8	10.8
10	8.2	7.0	9.2	7.4	9.4	8.7	12.3	11.5	13.7	11.8	11.8	10.6
11	8.4	6.8	10.1	7.9	10.6	8.8	12.5	11.5	13.2	11.6	11.3	10.5
12	8.7	7.3	11.2	8.9	11.2	10.7	12.9	11.8	13.6	13.1	---	---
13	9.8	7.7	11.8	9.4	11.3	11.0	11.9	11.5	14.1	13.7	---	---
14	10.1	8.6	11.4	9.5	11.6	11.1	11.8	11.4	13.9	13.2	---	---
15	8.9	7.9	10.6	9.3	11.6	11.2	11.7	11.1	13.2	12.0	---	---
16	8.5	7.5	12.1	9.3	11.4	11.0	12.0	11.0	12.4	12.1	---	---
17	8.3	7.4	10.4	9.3	11.5	10.9	11.5	10.7	12.2	11.5	---	---
18	8.8	7.1	11.3	9.1	11.4	10.9	11.6	10.5	12.0	11.5	12.0	10.6
19	8.1	5.0	11.7	9.5	11.6	10.9	12.2	11.0	12.1	11.4	12.1	10.9
20	8.4	4.5	11.8	9.9	11.9	11.2	12.3	11.3	11.8	11.3	12.5	11.6
21	8.8	7.1	11.5	10.2	12.3	11.5	11.4	10.6	11.8	11.4	12.9	11.7
22	9.2	7.2	13.1	10.6	12.4	11.6	11.9	10.3	12.4	11.7	12.6	11.4
23	9.0	7.4	12.0	10.5	12.0	11.2	10.5	9.8	11.9	11.1	13.8	11.5
24	8.7	7.5	11.0	9.9	11.3	10.8	11.1	9.5	11.4	11.1	15.1	12.1
25	8.3	7.4	11.2	9.9	11.8	11.0	11.3	9.4	11.8	11.5	16.7	12.0
26	7.9	6.9	11.1	10.1	12.0	11.2	10.8	9.4	12.0	11.8	18.9	12.6
27	8.4	6.2	11.0	10.2	12.1	11.2	10.0	9.0	12.0	11.7	20.0	13.6
28	8.3	7.8	10.3	9.8	12.0	11.1	10.6	9.8	11.7	10.7	19.1	14.3
29	9.2	8.0	10.6	9.5	11.3	10.6	11.3	10.5	---	---	16.9	13.7
30	9.0	8.4	10.9	10.6	10.5	10.1	11.8	11.3	---	---	15.8	12.2
31	9.1	8.3	---	---	10.0	9.5	12.0	11.4	---	---	14.6	12.0
MONTH	12.0	4.5	13.1	7.3	12.4	8.5	13.3	9.0	14.1	10.3	20.0	10.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	13.3	10.5	---	---	7.8	5.7	7.0	6.5	11.7	7.5	13.2	7.8
2	14.7	10.8	---	---	7.8	6.9	6.5	6.3	12.4	7.1	10.6	7.7
3	12.5	10.2	---	---	6.9	6.3	6.8	6.4	11.9	7.0	8.4	5.9
4	---	---	---	---	6.5	6.0	6.9	6.7	11.4	6.8	5.9	4.7
5	---	---	---	---	---	---	6.8	6.3	11.1	6.8	6.4	4.7
6	---	---	---	---	---	---	6.3	6.1	9.7	6.4	6.5	5.6
7	---	---	---	---	---	---	6.6	6.3	8.5	6.6	6.9	6.2
8	---	---	---	---	---	---	6.7	6.2	10.2	6.0	7.7	6.4
9	---	---	---	---	---	---	7.3	6.1	12.9	6.5	8.8	6.9
10	---	---	---	---	---	---	8.3	5.9	13.8	7.8	9.9	7.2
11	---	---	---	---	---	---	10.8	6.3	13.0	8.1	---	---
12	---	---	---	---	---	---	12.9	7.1	13.4	8.0	---	---
13	---	---	---	---	---	---	11.3	7.4	12.6	7.8	---	---
14	---	---	---	---	---	---	7.8	5.7	11.7	7.4	---	---
15	---	---	---	---	---	---	8.1	5.6	12.6	8.0	---	---
16	---	---	---	---	---	---	11.2	6.6	13.4	7.1	---	---
17	---	---	---	---	---	---	11.0	6.7	15.5	8.1	---	---
18	---	---	---	---	7.7	7.0	11.6	6.5	16.9	9.3	---	---
19	---	---	---	---	6.9	6.6	9.1	6.4	20.0	11.2	---	---
20	---	---	9.0	8.6	6.8	6.6	10.4	5.2	20.0	10.5	8.3	7.5
21	---	---	8.7	8.2	7.0	6.6	7.8	5.6	18.5	12.2	9.6	7.2
22	---	---	8.1	7.9	7.0	6.4	6.7	4.8	18.4	10.9	9.3	8.7
23	---	---	7.9	7.7	6.8	6.3	7.6	5.8	19.1	11.1	10.0	9.0
24	---	---	---	---	6.8	6.5	8.5	7.2	20.0	12.6	10.8	9.2
25	---	---	---	---	7.2	6.6	8.9	6.4	20.0	12.7	10.9	9.3
26	---	---	---	---	7.3	6.4	8.8	6.2	17.5	11.4	11.4	9.2
27	---	---	---	---	7.5	6.6	8.3	6.1	16.2	10.9	11.2	8.9
28	---	---	---	---	7.9	7.5	7.6	5.8	15.1	9.8	12.4	9.1
29	---	---	---	---	7.7	7.2	8.2	6.0	13.5	9.2	13.0	9.7
30	---	---	---	---	7.2	7.0	8.2	6.3	11.8	6.4	13.2	10.3
31	---	---	---	---	---	---	10.8	6.5	14.4	6.8	---	---
MONTH	14.7	10.2	9.0	7.7	7.9	5.7	12.9	4.8	20.0	6.0	13.2	4.7
YEAR	20.0	4.5										

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

03232000 PAINT CREEK NEAR GREENFIELD, OH

LOCATION.--Lat 39°22'45", long 83°22'32", Fayette County, Hydrologic Unit 05060003, on right bank at upstream side of 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.

DRAINAGE AREA.--249 mi² (645 km²).

PERIOD OF RECORD.--August 1926 to November 1935, October 1939 to September 1956; water years 1962-66 (occasional low-flow measurements), (annual maximums), water years 1963-66. October 1966 to September 1981 (discontinued).

REVISED RECORDS.--WSP 743: 1926(M). WSP 758: 1926-33. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 844.27 ft (257.333 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 14, 1940 nonrecording gage, Feb. 14, 1940 to June 3, 1955 water-stage recorder, June 4, 1955 to Sept. 30, 1956 nonrecording gage, at same site at datum 1.00 ft (0.305 m) higher.

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

AVERAGE DISCHARGE.--41 years (1926-35, 1939-56, 1966-81), 235 ft³/s (6.655 m³/s), 12.82 in/yr (326 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,700 ft³/s (615 m³/s) May 24, 1969, gage height, 14.28 ft (4.353 m); no flow Sept. 10, 18, 27, 29, 30, Oct. 1, 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,180 ft³/s (260 m³/s) June 7, gage height, 11.21 ft (3.417 m), above base of 2,000 ft³/s (56.64 m³/s); minimum 1.8 ft³/s (0.051 m³/s) Sept. 28, 29.

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	34	90	243	71	213	285	121	395	1150	108	41	7.4
2	34	82	209	62	491	251	110	721	789	81	36	5.6
3	34	75	179	47	361	216	101	610	739	72	34	4.6
4	33	71	148	39	313	196	276	412	959	67	32	5.3
5	31	68	136	37	242	377	985	309	725	72	52	3.2
6	31	65	130	37	182	534	623	654	2380	78	207	2.6
7	30	61	120	36	146	430	398	970	7350	66	110	1.7
8	29	59	114	35	126	328	294	672	2850	58	69	1.3
9	32	57	142	34	126	273	234	449	1150	53	51	1.1
10	32	57	236	34	121	242	191	367	649	52	42	8.2
11	32	51	272	34	272	224	172	995	510	48	36	6.9
12	30	48	222	34	247	201	391	1240	409	43	33	5.7
13	30	46	189	34	210	188	618	1100	364	43	29	5.1
14	29	45	160	33	190	168	510	870	506	48	24	4.6
15	29	44	144	33	176	150	344	1210	725	43	22	5.8
16	29	44	143	33	199	179	259	1130	494	43	20	5.5
17	28	48	126	33	436	165	248	827	309	40	20	5.1
18	49	56	113	34	531	150	237	672	242	38	21	5.4
19	89	54	107	34	895	138	208	841	198	36	19	4.5
20	157	48	83	34	1300	126	216	822	172	41	16	4.2
21	109	45	82	35	1150	117	186	605	152	52	15	3.9
22	81	43	80	37	870	106	168	430	150	188	14	3.9
23	66	43	80	52	690	101	605	334	130	145	13	3.9
24	60	49	90	74	649	96	924	273	113	103	12	3.6
25	85	134	101	79	538	91	734	232	101	82	11	3.4
26	200	198	82	94	423	89	460	487	96	67	12	3.1
27	198	224	76	148	341	140	344	676	89	56	11	3.4
28	143	408	70	177	309	128	279	919	81	59	13	2.6
29	118	417	68	140	---	119	282	975	77	51	18	2.6
30	109	305	70	120	---	132	253	850	75	44	15	2.6
31	99	---	70	106	---	132	---	1340	---	45	9.8	---
TOTAL	2090	3035	4085	1830	11747	6072	10771	22387	23734	2022	1057.8	305.0
MEAN	67.4	101	132	59.0	420	196	359	722	791	65.2	34.1	10.2
MAX	200	417	272	177	1300	534	985	1340	7350	188	207	53
MIN	28	43	68	33	121	89	101	232	75	36	9.8	2.6
CFSM	.27	.41	.53	.24	1.69	.79	1.44	2.90	3.18	.26	.14	.04
IN.	.31	.45	.61	.27	1.75	.91	1.61	3.34	3.55	.30	.16	.05

CAL YR 1980 TOTAL 104827.0 MEAN 286 MAX 2750 MIN 28 CFSM 1.15 IN 15.66
WTR YR 1981 TOTAL 89135.8 MEAN 244 MAX 7350 MIN 2.6 CFSM .98 IN 13.32

SCIOTO RIVER BASIN

03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OH

LOCATION.--Lat 39°19'44", long 83°28'32", Highland County, Hydrologic Unit 05060003, on right bank 600 ft (183 m) upstream from county road bridge at Centerfield, 0.6 mi (1.0 km) upstream from Walnut Creek, 1.5 mi (2.4 km) downstream from Lees Creek, and 2.4 mi (3.9 km) southeast of East Monroe.

DRAINAGE AREA.--209 mi² (541 km²).

PERIOD OF RECORD.--October 1971 to September 1981 (discontinued).

GAGE.--Water stage recorder. Datum of gage is 822.32 ft (250.643 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period which are fair. Water-quality data collected at this site December 1973 to September 1978.

AVERAGE DISCHARGE.--10 years, 245 ft³/s (6.938 m³/s), 15.92 in/yr (404 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,550 ft³/s (214 m³/s) Sept. 14, 1979, gage height, 13.57 ft (4.136 m); maximum gage-height 15.02 ft (4.578 m) Feb. 28, 1979; backwater from Paint Creek Lake; minimum, 1.8 ft³/s (0.051 m³/s) Aug. 22-24, 1972, Sept. 24-26, 1976.

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

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Apr. 4	2345	2180	61.7	7.04	2.146	June 7	1845	*2590	73.3	*7.58	2.310

Minimum discharge, 0.9 ft³/s (0.025 m³/s) Sept. 28.

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	16	38	164	53	151	200	117	270	1130	156	18	2.1
2	14	35	137	48	215	184	101	560	755	74	16	3.4
3	14	30	113	35	175	170	91	403	602	62	14	22
4	14	29	87	26	144	156	358	280	680	55	13	18
5	14	27	83	23	118	260	1100	221	640	67	15	21
6	13	27	80	22	104	400	621	431	789	84	144	16
7	12	23	74	22	94	300	358	736	2070	66	70	11
8	12	21	71	21	91	240	256	509	1600	54	47	8.5
9	11	21	86	21	91	210	198	333	634	46	37	6.1
10	11	21	201	21	89	201	154	287	363	81	27	4.5
11	9.7	18	195	21	164	183	137	774	277	58	22	3.6
12	8.9	17	146	21	139	161	227	794	221	46	18	3.1
13	8.9	15	123	20	130	151	329	584	189	42	16	2.7
14	8.9	15	101	20	124	130	259	566	189	61	14	2.3
15	8.9	15	89	20	119	113	183	859	206	52	12	2.3
16	8.9	15	89	20	134	156	144	794	161	45	12	1.9
17	8.1	18	80	20	172	151	212	548	141	40	11	1.9
18	20	23	72	20	498	132	422	572	121	36	8.9	1.9
19	33	22	70	21	896	117	221	824	103	31	8.1	1.9
20	55	22	58	20	1110	105	298	736	92	36	7.0	1.6
21	40	18	57	20	891	96	227	531	86	42	6.5	1.6
22	29	17	56	21	627	86	186	358	84	63	6.1	1.4
23	23	17	56	32	531	83	1060	270	75	60	5.3	1.3
24	20	19	60	54	525	78	829	218	64	45	4.2	1.2
25	34	101	72	57	426	75	548	183	60	36	3.9	1.2
26	109	123	59	81	329	71	354	346	56	30	3.4	1.2
27	91	134	53	107	277	123	270	755	53	27	3.1	1.0
28	60	329	51	103	230	149	218	1490	47	26	3.1	1.0
29	47	291	52	89	---	123	201	1460	45	26	4.2	1.0
30	46	203	53	81	---	137	195	1000	58	23	4.5	1.0
31	41	---	53	77	---	141	---	1120	---	22	3.6	---
TOTAL	841.3	1704	2741	1217	8594	4882	9874	18812	11591	1592	577.9	147.7
MEAN	27.1	56.8	88.4	39.3	307	157	329	607	386	51.4	18.6	4.92
MAX	109	329	201	107	1110	400	1100	1490	2070	156	144	22
MIN	8.1	15	51	20	89	71	91	183	45	22	3.1	1.0
CFSM	.13	.27	.42	.19	1.47	.75	1.57	2.90	1.85	.25	.09	.02
IN.	.15	.30	.49	.22	1.53	.87	1.76	3.35	2.06	.28	.10	.03

CAL YR 1980 TOTAL 76240.3 MEAN 208 MAX 1540 MIN 8.1 CFSM 1.00 IN 13.57
WTR YR 1981 TOTAL 62573.9 MEAN 171 MAX 2070 MIN 1.0 CFSM .82 IN 11.14

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 mi² (1,476 km²).

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. Flow regulated by Paint Creek Lake (see station 03232460). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--14 years, 590 ft³/s (16.71 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 45,000 ft³/s (1,270 m³/s) Mar. 10, 1964, gage height, 27.3 ft (8.32 m), site and datum then in use; minimum daily, 4.7 ft³/s (0.13 m³/s) Sept. 1, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,170 ft³/s (118 m³/s) June 10, gage height, 53.15 ft (16.200 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Sept. 21.

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	46	420	821	205	373	705	23	998	3200	577	73	30
2	46	382	849	159	1270	690	26	1110	3670	337	62	30
3	46	289	855	104	1020	577	29	1150	3360	150	62	274
4	46	260	523	87	511	529	32	1110	2230	159	62	271
5	46	260	264	86	472	535	32	833	1700	196	38	109
6	46	260	211	86	396	1110	346	907	878	243	217	95
7	45	285	211	86	333	1090	1400	872	816	227	373	80
8	45	301	243	86	321	890	1820	1430	3530	150	264	74
9	44	289	285	86	317	636	998	1300	4080	127	132	42
10	44	289	342	86	297	603	523	884	4100	150	117	27
11	46	267	500	86	547	642	420	1030	4040	102	117	27
12	46	253	649	86	725	456	410	1630	2020	100	89	28
13	45	253	462	86	559	456	943	2350	736	100	43	28
14	45	253	386	86	489	435	961	2100	462	100	27	28
15	78	236	386	86	386	350	821	1180	297	84	28	28
16	115	230	368	86	373	420	559	17	25	78	31	28
17	111	230	350	86	872	517	656	967	14	78	28	28
18	104	253	250	86	1170	425	1010	1720	1030	78	28	28
19	100	285	214	86	1820	346	725	1870	1650	78	28	28
20	174	285	174	86	2540	321	756	2390	506	99	28	15
21	297	271	82	86	2530	309	778	2590	256	104	28	8.0
22	274	260	76	86	2310	264	622	2350	240	80	28	8.4
23	134	250	174	123	1340	246	973	1290	256	211	28	8.8
24	97	260	243	138	1420	246	1180	884	256	236	28	9.2
25	95	260	260	138	998	211	1170	506	208	138	28	9.2
26	136	282	145	138	967	193	1180	446	75	123	28	9.2
27	271	333	92	285	767	196	1160	913	15	121	28	10
28	382	396	92	396	725	199	1160	1200	24	121	28	12
29	321	762	132	386	---	199	1160	1960	82	119	29	13
30	253	833	188	223	---	87	1070	2590	138	97	29	13
31	406	---	205	152	---	28	---	2610	---	95	29	---
TOTAL	3984	9487	10032	4082	25848	13911	22943	43187	39894	4658	2158	1398.8
MEAN	129	316	324	132	923	449	765	1393	1330	150	69.6	46.6
MAX	406	833	855	396	2540	1110	1820	2610	4100	577	373	274
MIN	44	230	76	86	297	28	23	17	14	78	27	8.0

CAL YR 1980 TOTAL 230899.0 MEAN 631 MAX 3140 MIN 19
WTR YR 1981 TOTAL 181582.8 MEAN 497 MAX 4100 MIN 8.0

SCIOTO RIVER BASIN

03232500 ROCKY FORK NEAR BARRETT'S 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 mi² (363 km²).

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 fair. 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 hm³). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--42 years, 155 ft³/s (4.39 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s (379 m³/s) Mar. 10, 1964 from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of velocity-area studies; maximum gage height, 15.56 ft (4.743 m) Mar. 6, 1945; minimum daily discharge, 0.90 ft³/s (0.025 m³/s) Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,120 ft³/s (60.0 m³/s) Apr. 4, gage height, 6.64 ft (2.024 m); minimum daily, 10 ft³/s (0.28 m³/s) Nov. 6, 11, 12.

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	26	11	90	74	115	190	83	188	507	181	26	28
2	28	11	146	74	152	170	77	156	380	231	27	25
3	66	11	142	64	120	150	81	130	306	181	26	48
4	262	11	142	50	90	142	1680	132	267	148	26	32
5	28	11	144	40	78	205	1500	174	241	424	31	23
6	27	10	144	31	68	165	950	160	420	312	47	21
7	27	11	146	27	64	152	546	146	682	212	32	20
8	27	11	146	23	58	146	380	134	455	156	30	20
9	28	12	174	20	54	144	278	150	330	121	28	20
10	28	12	165	17	51	142	217	115	281	100	28	20
11	28	10	154	16	154	140	185	336	224	86	30	20
12	29	10	161	16	188	136	163	295	183	67	27	19
13	29	13	205	15	188	136	148	234	158	57	26	19
14	29	13	202	15	188	132	140	234	142	66	26	20
15	30	12	202	15	176	134	115	417	121	51	26	22
16	39	13	202	15	169	130	101	336	113	45	26	20
17	38	54	198	15	217	39	226	262	103	39	25	20
18	64	92	198	15	231	35	298	431	84	35	25	20
19	42	87	210	15	358	34	262	800	77	33	24	20
20	41	84	244	15	434	34	295	546	69	34	24	20
21	39	84	230	16	270	34	254	393	93	34	24	19
22	39	83	210	16	254	32	226	289	124	31	24	19
23	35	84	200	16	257	34	766	226	81	28	23	19
24	32	93	210	17	246	40	724	183	67	28	23	18
25	48	90	210	24	239	39	477	152	62	28	23	19
26	38	86	190	25	234	38	345	167	53	28	23	19
27	34	128	160	24	231	48	275	871	43	29	26	19
28	35	103	120	20	220	38	222	1640	39	30	31	19
29	34	93	96	16	---	80	193	902	37	28	26	19
30	25	89	80	15	---	89	167	595	42	27	27	20
31	15	---	74	18	---	86	---	678	---	26	26	---
TOTAL	1290	1432	5195	779	5104	3114	11374	11472	5784	2896	836	647
MEAN	41.6	47.7	168	25.1	182	100	379	370	193	93.4	27.0	21.6
MAX	262	128	244	74	434	205	1680	1640	682	424	47	48
MIN	15	10	74	15	51	32	77	115	37	26	23	18
CAL YR 1980	TOTAL	58941	MEAN 161	MAX 1250	MIN 10							
WTR YR 1981	TOTAL	49923	MEAN 137	MAX 1680	MIN 10							

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 mi² (2,090 km²).

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 hm³) and Rocky Fork Lake 23 mi (37 km) upstream since 1952, capacity, 34,100 acre-ft (42.0 hm³). Water-quality data collected at this site 1965 to 1977. Sediment data 1956 to 1962.

AVERAGE DISCHARGE.--58 years (1921-36, 1939-81), 805 ft³/s (22.8 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,900 ft³/s (1,610 m³/s) Mar. 10, 1964, gage height, 20.50 ft (6.248 m), from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of contracted-opening measurement at gage height 20.08 ft (6.120 m); minimum daily, 5 ft³/s (0.1 m³/s) Oct. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,550 ft³/s (157 m³/s) May 30, gage height, 7.93 ft (2.417 m); minimum daily, 43 ft³/s (1.22 m³/s) Sept. 28, 29.

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	95	423	849	278	304	1080	179	1380	4100	594	140	78
2	95	390	881	245	1760	1020	169	1490	4800	824	115	69
3	95	359	926	199	1270	855	158	1500	4520	398	111	138
4	209	288	776	181	635	752	196	1420	3310	355	111	436
5	172	278	440	170	520	953	2960	1180	2470	668	113	189
6	95	275	344	160	450	1240	1630	1130	1950	662	158	140
7	92	278	344	150	400	1610	1880	1240	1240	564	382	134
8	92	304	352	140	350	1180	2580	1560	4300	398	363	118
9	92	307	423	124	320	980	1820	1810	5080	320	217	111
10	92	301	497	120	320	788	953	1250	5020	331	172	73
11	92	294	549	120	620	824	746	1890	4960	272	172	66
12	90	272	679	110	907	723	673	2130	3370	223	158	65
13	90	269	673	110	874	614	973	3030	1230	209	122	64
14	89	266	544	110	635	625	1370	2940	815	234	84	64
15	90	266	549	110	589	559	1040	2860	684	196	78	68
16	138	251	540	110	516	604	849	729	286	165	75	65
17	165	251	516	110	913	635	960	1010	239	158	72	64
18	181	297	453	110	1520	564	1480	2550	579	151	70	62
19	172	334	398	110	2220	457	1310	3270	2350	147	69	62
20	162	352	402	110	4180	402	1230	3500	760	151	68	62
21	260	348	352	110	3470	386	1240	3590	520	181	68	53
22	331	341	310	110	3290	359	1040	3320	430	149	66	47
23	260	334	378	110	2140	317	2120	2010	430	179	66	46
24	158	334	448	120	1960	317	2530	1370	400	294	65	45
25	174	341	475	156	1610	304	2020	883	380	231	65	45
26	172	338	415	172	1350	272	1840	697	260	176	64	45
27	226	375	317	204	1230	334	1660	1790	136	181	65	44
28	359	470	314	359	1070	348	1600	3530	120	179	78	43
29	406	609	344	359	---	307	1560	3160	134	174	75	43
30	291	868	371	307	---	301	1450	4090	207	158	68	44
31	324	---	281	176	---	201	---	4250	---	147	66	---
TOTAL	5359	10413	15140	5060	35423	19911	40216	66559	55080	9069	3596	2583
MEAN	173	347	488	163	1265	642	1341	2147	1836	293	116	86.1
MAX	406	868	926	359	4180	1610	2960	4250	5080	824	382	436
MIN	89	251	281	110	304	201	158	697	120	147	64	43
CAL YR 1980	TOTAL	337462	MEAN 922	MAX 4080	MIN 89							
WTR YR 1981	TOTAL	268409	MEAN 735	MAX 5080	MIN 43							

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 mi² (13,289 km²).

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 hm³).

AVERAGE DISCHARGE.--51 years, 4,596 ft³/s (130 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177,000 ft³/s (5,010 m³/s) Jan. 23, 1937, from rating curve extended above 112,000 ft³/s (3,170 m³/s); maximum gage height, 26.4 ft (8.05 m) Jan. 23, 1937, from floodmarks, and Jan. 23, 1959; minimum daily discharge, 244 ft³/s (6.91 m³/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, 31,000 ft³/s (878 m³/s) June 7, gage height, 15.17 ft (4.624 m); minimum daily, 757 ft³/s (21.4 m³/s) Sept. 30.

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	1200	2310	3770	1650	2670	6420	2300	6890	14900	3830	1420	947
2	1180	1830	3510	1620	7240	5810	2020	10400	11100	3920	1350	960
3	1180	1950	3570	1550	8050	5540	1860	9520	9580	3330	1190	1340
4	1170	1700	3510	1370	6230	4540	1850	6870	9740	3220	1260	2980
5	1330	1540	2860	1040	5010	5240	12300	5740	9420	3260	1260	3140
6	1200	1510	2470	1150	3780	7150	10100	5450	17600	3470	1410	2870
7	1200	1460	2250	1230	3070	7440	6050	9540	25000	2930	1650	2730
8	1230	1400	2190	1070	2740	5940	5800	9660	11800	2580	1620	1970
9	1230	1400	2650	1140	2420	5220	4960	8360	10600	2270	1460	1620
10	1230	1400	3850	1090	2260	4610	3560	6420	11200	2080	1290	1510
11	1220	1370	5210	984	2970	4510	3140	10000	16500	2020	1210	1240
12	1250	1310	5170	940	4240	4440	3430	15000	16300	1870	1160	1130
13	1250	1280	4410	940	5920	4080	10300	23000	11100	1830	1110	1100
14	1220	1260	3520	984	5510	3770	20100	22600	13700	2190	1050	1050
15	1220	1300	3110	984	4390	3460	20500	22200	20900	2090	984	1020
16	1230	1280	2920	998	3970	3800	11700	20600	28300	1780	960	1670
17	1280	1250	2810	1010	5960	3770	8210	18800	27900	1530	911	1410
18	1420	1430	2610	998	9780	3520	7090	17500	19000	1470	899	1280
19	2210	1520	2350	984	14200	3140	7900	16300	16000	1430	887	1410
20	1980	1810	2190	998	23300	2840	6790	14400	12700	1390	839	1610
21	1620	1860	1970	998	25900	2700	6440	12100	10200	2050	815	1790
22	1620	1830	1630	1030	26900	2520	5620	9780	8940	2620	792	1760
23	1570	1800	1650	1120	20800	2310	6290	7610	8820	2460	792	1530
24	1430	1760	1730	1170	17700	2230	9880	5450	7360	2100	792	1210
25	1380	1910	1730	1180	17400	2140	9220	4250	5470	1860	792	1030
26	1650	2380	1670	1420	13100	1980	7130	3680	4800	1680	792	972
27	1780	2330	1600	2050	9460	2450	6180	5310	6330	1690	780	972
28	1800	3380	1540	3590	7320	2590	5580	9580	5920	1830	780	851
29	1880	4020	1540	4150	---	2300	5170	12600	4720	1690	803	780
30	1910	4020	1590	4050	---	2330	5920	11200	4170	1860	923	757
31	1710	---	1800	2780	---	2700	---	15200	---	1570	863	---
TOTAL	44780	55600	83380	46268	262290	121490	217390	356010	380070	69900	32844	44639
MEAN	1445	1853	2690	1493	9368	3919	7246	11480	12670	2255	1059	1488
MAX	2210	4020	5210	4150	26900	7440	20500	23000	28300	3920	1650	3140
MIN	1170	1250	1540	940	2260	1980	1850	3680	4170	1390	780	757
CAL YR 1980 TOTAL	2083570			5693		29400		1160				
WTR YR 1981 TOTAL	1714661			4698		28300		757				

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 current year.

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, 9.2 units May 28, June 4, 1977; 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, 19.0 mg/L Aug. 18, 20, 1981; 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, 950 micromhos Aug. 25; minimum, 212 micromhos Apr. 5.

pH: Maximum, 9.1 units Mar. 29, 30, 31; minimum 7.5 units Apr. 5.

WATER TEMPERATURES: Maximum, 26.5°C July 26, Aug. 4, 5; minimum, 0.0°C several days during winter periods.

DISSOLVED OXYGEN: Maximum, 19.0 mg/L Aug. 18, 20; minimum, 5.2 mg/L Sept. 5.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 989 mg/L Apr. 5; minimum daily mean, 1.0 mg/L Dec. 21-24, 28, 29.

SEDIMENT LOADS: Maximum daily, 49,000 tons (44,500 tonnes) June 6; minimum daily, 4.9 tons (4.4 tonnes) Dec. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 15...	0945	1220	696	8.2	13.5	.70	10.0	74	25	7800
NOV 04...	1530	1850	650	8.1	12.0	.50	9.0	83	26	10000
DEC 04...	1030	3510	652	8.2	4.5	1.7	10.2	78	39	3300
JAN 05...	1315	869	806	8.0	.5	1.9	11.7	81	31	1700
FEB 05...	1030	5100	700	8.0	.5	5.3	12.6	88	35	5500
MAR 03...	1230	5620	622	8.2	6.0	3.8	9.4	75	32	3000
APR 08...	1430	5740	574	8.2	14.0	3.8	10.6	100	34	30000
MAY 13...	1200	22200	444	7.7	14.5	60	8.4	82	36	5700
JUN 03...	1030	9540	530	7.9	19.5	50	9.7	100	<10	1900
JUL 14...	1130	2210	680	8.0	26.0	20	8.4	100	19	1600
AUG 05...	1030	1260	733	8.1	25.5	10	8.3	100	27	2500
SEP 09...	0930	1560	620	8.0	21.0	23	7.4	78	57	2700

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 15...	6600	290	63	76	25	32	4.1	79	42	.6
NOV 04...	10000	290	68	71	27	35	4.2	91	40	.5
DEC 04...	2400	260	43	64	25	29	3.7	70	42	.4
JAN 05...	2800	350	88	90	30	48	4.7	110	69	.5
FEB 05...	6700	290	88	71	27	35	4.4	89	50	.4
MAR 03...	2100	250	56	59	24	18	3.0	66	34	.3
APR 08...	47000	310	110	77	28	19	2.6	65	30	.3
MAY 13...	5400	190	110	49	16	16	2.9	88	26	.2
JUN 03...	420	240	60	60	22	11	2.6	43	22	.3
JUL 14...	840	310	96	78	27	28	3.8	75	33	.4
AUG 05...	75	320	98	81	28	39	4.4	98	45	.5
SEP 09...	140	280	100	71	25	29	4.3	85	35	.4

DATE	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, ORGANIC 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)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
OCT 15...	4.6	466	415	.35	.63	3.5	16	.610	--	--
NOV 04...	4.5	454	414	.59	.75	2.7	12	.570	7.1	80000
DEC 04...	4.0	422	383	.93	1.10	4.0	18	.450	5.5	--
JAN 05...	5.6	557	529	.16	.69	3.9	17	.570	--	--
FEB 05...	5.5	491	418	.85	1.00	4.3	19	.350	6.4	--
MAR 03...	6.7	448	349	.73	.93	6.3	28	.240	6.0	1300
APR 08...	3.7	356	359	1.2	1.30	4.1	18	.140	--	--
MAY 13...	6.9	285	261	1.1	1.20	2.7	12	.180	4.9	5900
JUN 03...	6.8	347	297	.93	1.00	5.7	25	.180	10	13000
JUL 14...	5.6	443	389	--	.97	3.8	17	.320	--	75000
AUG 05...	5.8	502	445	.84	.89	3.4	15	.520	9.6	3500
SEP 09...	4.6	387	373	.91	.95	3.3	14	.360	7.0	60000

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 15...	0945	3	2	90	90	0	0	10	0
JAN 05...	1315	2	2	100	90	0	0	10	<10
APR 08...	1430	1	1	100	80	1	<1	20	10
JUL 14...	1130	3	2	100	90	39	39	70	70

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 15...	0	0	16	16	720	50	6	6	80
JAN 05...	0	0	10	10	290	220	5	1	70
APR 08...	2	0	12	8	2800	30	76	0	140
JUL 14...	4	1	7	5	920	<10	11	1	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 15...	50	.2	.2	0	0	0	0	30	30
JAN 05...	70	.2	.2	0	0	0	0	40	40
APR 08...	20	<.1	<.1	0	0	0	0	60	30
JUL 14...	4	.6	.6	0	0	0	0	40	<4

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	648	618	608	586	738	724	766	424	596	576
2	---	---	666	628	632	606	748	734	558	346	610	594
3	---	---	656	632	638	634	784	744	598	564	624	608
4	---	---	654	640	658	638	784	778	666	570	632	620
5	---	---	690	670	682	658	828	784	704	668	630	524
6	704	702	680	654	696	682	834	814	656	648	582	548
7	722	708	666	654	694	686	822	804	670	648	602	576
8	726	712	670	668	686	682	816	806	688	666	626	604
9	708	702	678	670	682	656	832	814	710	690	642	626
10	714	708	680	676	656	644	838	824	720	702	652	642
11	714	708	686	676	662	602	846	826	718	638	662	648
12	716	710	686	680	618	600	860	848	716	646	672	662
13	712	702	696	686	626	620	874	860	746	704	680	672
14	706	702	702	692	650	626	874	860	694	620	690	680
15	700	694	704	698	652	648	868	844	638	622	698	690
16	700	696	698	690	664	652	842	836	668	638	688	502
17	700	696	692	676	676	664	842	832	664	572	634	578
18	696	662	684	668	696	676	850	840	564	552	668	632
19	722	658	692	684	712	698	856	842	550	396	682	670
20	750	708	698	694	700	690	866	846	440	392	698	682
21	700	626	698	686	714	692	858	850	442	432	708	696
22	626	604	716	692	736	696	854	848	446	434	720	704
23	616	604	700	686	730	720	852	846	456	446	718	712
24	638	618	716	690	726	694	850	836	476	458	720	710
25	646	638	718	694	700	694	848	830	506	476	720	712
26	674	644	694	674	710	686	856	806	534	506	718	712
27	690	676	674	602	720	688	808	774	560	534	710	576
28	672	592	632	612	732	712	812	750	578	558	648	608
29	588	578	652	592	720	712	798	716	---	---	666	650
30	628	590	588	562	720	714	802	728	---	---	672	628
31	656	630	---	---	722	708	764	728	---	---	678	634
MONTH	750	578	718	562	736	586	874	716	766	346	720	502
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	688	670	646	584	---	---	---	---	692	656	786	760
2	696	672	580	486	---	---	---	---	672	648	784	762
3	708	690	546	482	---	---	---	---	718	678	770	712
4	720	478	596	548	---	---	---	---	734	720	736	654
5	436	212	622	598	---	---	---	---	732	720	632	590
6	478	424	626	564	---	---	---	---	---	---	600	580
7	524	424	584	556	---	---	---	---	---	---	596	574
8	590	524	572	552	---	---	---	---	---	---	596	578
9	602	592	598	558	---	---	---	---	---	---	614	596
10	644	606	608	600	---	---	---	---	---	---	630	614
11	660	634	---	---	---	---	---	---	706	700	654	632
12	698	656	---	---	---	---	---	---	764	702	652	630
13	676	430	466	444	---	---	---	---	732	700	666	640
14	472	394	516	460	---	---	---	---	744	720	680	668
15	534	424	452	384	---	---	---	---	746	730	692	682
16	564	538	456	412	---	---	---	---	730	718	---	---
17	574	566	490	414	---	---	---	---	766	720	---	---
18	---	---	524	496	---	---	---	---	838	734	---	---
19	---	---	496	484	---	---	---	---	752	738	---	---
20	---	---	522	494	---	---	---	---	814	802	---	---
21	---	---	542	524	---	---	---	---	812	792	---	---
22	---	---	562	542	---	---	---	---	802	792	---	---
23	---	---	592	564	---	---	612	600	808	778	---	---
24	---	---	600	594	---	---	644	614	788	768	682	672
25	---	---	---	---	---	---	662	644	950	772	710	684
26	---	---	---	---	---	---	686	662	804	788	720	712
27	---	---	---	---	---	---	700	688	808	788	740	716
28	610	606	---	---	---	---	714	696	796	770	744	732
29	626	608	---	---	---	---	722	696	798	776	762	744
30	648	626	---	---	---	---	696	682	796	772	---	---
31	---	---	---	---	---	---	708	690	784	766	---	---
MONTH	720	212	646	384	---	---	722	600	950	648	786	574
YEAR	950	212	---	---	---	---	---	---	---	---	---	---

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

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	8.2	8.2	8.6	8.5	8.1	8.0	8.2	7.9	8.2	8.1
2	---	---	8.2	8.1	8.5	8.4	8.1	8.0	8.0	7.9	8.2	8.1
3	---	---	8.2	8.1	8.5	8.4	8.1	8.0	8.0	7.9	8.2	8.1
4	---	---	8.2	8.1	8.5	8.2	8.0	7.9	8.0	8.0	8.1	8.1
5	---	---	8.2	8.1	8.2	8.2	8.0	7.9	8.0	8.0	8.1	8.1
6	8.2	8.1	8.2	8.1	8.2	8.1	8.0	8.0	8.1	8.0	8.2	8.1
7	8.2	8.1	8.3	8.2	8.1	8.0	8.1	8.0	8.1	8.0	8.3	8.1
8	8.2	8.1	8.3	8.2	8.0	8.0	8.0	7.9	8.1	8.0	8.4	8.3
9	8.2	8.1	8.2	8.2	8.0	7.9	8.0	7.9	8.2	8.1	8.6	8.4
10	8.3	8.1	8.2	8.2	8.0	7.9	8.0	7.9	8.3	8.2	8.6	8.5
11	8.2	8.1	8.2	8.2	8.0	7.9	7.9	7.9	8.4	8.2	8.4	8.4
12	8.2	8.2	8.3	8.2	8.1	8.0	7.9	7.9	8.2	8.1	8.5	8.3
13	8.2	8.2	8.3	8.2	8.1	8.1	7.9	7.9	8.3	8.1	8.5	8.4
14	8.3	8.2	8.3	8.2	8.2	8.1	8.0	7.9	8.4	8.1	8.4	8.3
15	8.3	8.2	8.3	8.2	8.2	8.1	8.0	7.9	8.4	8.1	8.3	8.2
16	8.3	8.2	8.3	8.2	8.2	8.1	7.9	7.9	8.3	8.2	8.2	8.1
17	8.2	8.2	8.3	8.2	8.2	8.1	8.0	7.9	8.4	8.2	8.3	8.2
18	8.2	8.2	8.3	8.2	8.2	8.2	7.9	7.9	8.1	7.9	8.3	8.2
19	8.3	8.2	8.4	8.3	8.2	8.1	8.0	7.9	8.1	8.0	8.3	8.2
20	8.1	7.9	8.4	8.3	8.2	8.1	8.0	8.0	8.0	7.9	8.4	8.2
21	8.3	8.0	8.5	8.4	8.2	8.1	8.0	7.9	8.0	8.0	8.4	8.2
22	8.3	8.2	8.5	8.3	8.2	8.1	8.0	7.9	8.1	8.0	8.3	8.2
23	8.3	8.2	8.5	8.4	8.2	8.2	8.0	7.9	8.1	8.0	8.4	8.2
24	8.3	8.2	8.5	8.3	8.2	8.1	8.0	7.9	8.1	8.0	8.4	8.2
25	8.2	8.1	8.4	8.2	8.1	8.1	8.0	8.0	8.2	8.1	8.6	8.3
26	8.1	8.1	8.4	8.3	8.2	8.1	8.1	8.0	8.1	8.1	8.7	8.5
27	8.1	8.0	8.4	8.4	8.2	8.1	8.2	8.0	8.2	8.1	8.7	8.5
28	8.1	8.0	8.5	8.4	8.2	8.1	8.1	8.0	8.2	8.2	8.9	8.5
29	8.2	8.1	8.4	8.3	8.2	8.1	8.1	8.0	---	---	9.1	8.6
30	8.2	8.1	8.5	8.4	8.1	8.1	8.2	8.1	---	---	9.1	8.8
31	8.2	8.1	---	---	8.1	8.1	8.2	8.1	---	---	9.1	8.6
MONTH	8.3	7.9	8.5	8.1	8.6	7.9	8.2	7.9	8.4	7.9	9.1	8.1
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.9	8.5	8.0	7.9			---	---	8.3	7.9	8.6	8.3
2	8.5	8.3	8.0	7.8			---	---	8.3	8.0	8.4	8.2
3	8.4	8.2	7.9	7.8			---	---	8.2	8.0	8.3	8.0
4	8.2	7.9	8.0	7.9			---	---	8.2	7.9	7.9	7.8
5	7.8	7.5	8.0	8.0			---	---	8.1	7.8	7.8	7.7
6	8.0	7.8	8.0	7.9			---	---	8.1	7.9	7.9	7.8
7	8.1	8.0	8.0	7.8			---	---	---	---	7.9	7.8
8	8.1	8.1	7.9	7.8			---	---	---	---	7.9	7.8
9	8.1	8.1	7.9	7.9			---	---	---	---	8.1	7.9
10	8.1	8.0	7.9	7.9			---	---	---	---	8.2	7.9
11	8.1	8.0	---	---			---	---	8.8	8.7	8.4	7.9
12	8.2	7.9	---	---			---	---	8.9	8.7	8.8	8.2
13	7.8	7.6	7.8	7.7			---	---	8.9	8.7	8.9	8.4
14	7.7	7.7	7.8	7.8			---	---	8.8	8.7	8.8	8.5
15	7.8	7.7	7.8	7.7			---	---	8.7	8.5	8.6	8.4
16	7.8	7.8	7.8	7.7			---	---	8.7	8.5	---	---
17	7.8	7.8	7.7	7.7			---	---	8.8	8.6	---	---
18	---	---	7.8	7.7			---	---	8.7	8.5	---	---
19	---	---	7.8	7.8			---	---	8.8	8.6	---	---
20	---	---	7.9	7.8			---	---	8.9	8.7	---	---
21	---	---	7.9	7.9			---	---	8.8	8.7	---	---
22	---	---	7.9	7.9			---	---	8.8	8.6	---	---
23	---	---	7.9	7.9			8.1	8.1	8.9	8.5	---	---
24	---	---	7.9	7.8			8.1	7.9	8.8	8.6	7.9	7.9
25	---	---	---	---			8.0	7.8	9.0	8.5	7.9	7.8
26	---	---	---	---			8.0	7.9	9.0	8.7	8.0	7.8
27	---	---	---	---			8.0	7.9	8.9	8.7	8.1	7.8
28	7.9	7.7	---	---			8.0	7.9	8.9	8.6	8.2	8.0
29	8.0	7.9	---	---			7.9	7.8	8.8	8.6	8.1	8.1
30	8.0	7.9	---	---			8.0	7.8	8.6	8.5	---	---
31	---	---	---	---			8.0	7.8	8.7	8.3	---	---
MONTH	8.9	7.5	8.0	7.7			8.1	7.8	9.0	7.8	8.9	7.7
YEAR	9.1	7.5										

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

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	---	---	10.5	9.5	6.5	5.0	3.5	3.0	2.0	1.0	---	---
2	---	---	10.5	9.0	6.5	6.0	3.5	3.0	1.0	.5	---	---
3	---	---	11.0	9.0	6.0	5.0	3.0	2.0	1.0	.0	---	---
4	---	---	11.5	11.0	5.5	4.0	2.0	.5	.5	.0	---	---
5	---	---	11.5	10.5	6.0	5.0	.5	.5	.0	.0	---	---
6	14.5	14.0	10.5	9.5	7.5	6.0	1.0	.5	1.0	.0	---	---
7	15.5	14.0	11.5	10.0	9.5	7.5	1.0	1.0	2.5	.5	---	---
8	16.5	14.5	12.5	12.0	10.5	9.0	1.0	.5	3.0	2.0	---	---
9	17.5	15.5	13.0	11.5	10.5	9.5	1.5	.5	2.5	1.0	---	---
10	18.0	16.5	13.0	11.0	9.5	8.0	1.0	.5	3.0	2.0	---	---
11	17.5	16.5	10.5	9.0	8.0	6.5	1.0	.5	3.5	1.5	---	---
12	16.0	14.0	9.0	8.0	6.5	6.0	1.0	.5	1.0	.0	---	---
13	14.5	13.0	8.5	7.5	6.0	5.5	1.5	.5	1.0	.0	---	---
14	14.0	13.0	9.0	8.5	5.5	5.0	2.0	.5	1.0	.0	---	---
15	15.0	13.0	9.5	9.0	5.0	4.5	2.0	1.5	2.0	.0	---	---
16	16.0	14.5	9.0	8.5	4.5	4.5	2.0	1.0	2.5	1.0	7.0	6.5
17	16.5	15.5	8.5	7.5	4.5	4.0	1.5	1.0	---	---	6.5	5.5
18	17.0	16.5	7.5	7.0	5.0	4.0	2.0	.5	---	---	7.5	5.5
19	16.5	15.5	7.0	6.0	5.0	3.0	2.0	1.0	---	---	7.0	5.5
20	15.5	14.0	6.5	5.5	3.0	1.5	3.0	2.0	---	---	6.0	4.0
21	15.0	13.5	6.5	5.5	1.5	.5	3.5	3.0	---	---	7.5	4.5
22	15.0	14.0	6.5	5.5	2.0	.5	4.0	3.5	---	---	7.5	6.5
23	14.5	13.0	6.5	6.0	2.5	2.0	4.0	3.5	---	---	9.5	7.0
24	14.0	13.0	7.5	6.5	2.5	2.0	4.5	3.0	---	---	10.0	7.5
25	13.5	11.5	7.5	6.5	1.5	.5	5.0	3.5	---	---	11.0	8.5
26	11.0	9.5	6.5	5.5	.5	.0	5.5	5.0	---	---	10.5	9.5
27	9.5	9.0	6.0	6.0	1.5	.5	5.0	4.5	---	---	12.0	10.5
28	9.5	9.0	6.0	5.5	2.0	.5	5.0	4.0	---	---	12.5	9.5
29	9.5	8.5	5.5	5.0	2.5	1.5	4.0	2.0	---	---	14.0	11.5
30	9.5	8.5	5.5	4.5	2.5	2.5	2.5	1.5	---	---	15.0	13.5
31	10.0	8.5	---	---	3.0	3.0	2.0	.5	---	---	16.5	13.5
MONTH	18.0	8.5	13.0	4.5	10.5	.0	5.5	.5	3.5	.0	16.5	4.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	17.0	15.0	17.0	15.0	---	---	---	---	25.5	23.0	25.0	23.5
2	17.0	14.5	15.0	14.0	---	---	---	---	26.0	23.5	24.5	24.0
3	16.5	15.0	15.5	13.0	---	---	---	---	25.5	24.5	24.0	23.0
4	16.5	14.5	17.0	14.5	---	---	---	---	26.5	24.5	24.5	22.5
5	13.5	12.0	17.0	16.0	---	---	---	---	26.5	25.5	24.5	22.5
6	13.0	11.5	17.0	14.5	---	---	---	---	26.0	25.0	24.5	22.5
7	13.0	10.5	15.5	13.5	---	---	---	---	---	---	24.0	22.5
8	14.5	12.0	16.0	14.0	---	---	---	---	---	---	23.5	22.5
9	15.5	14.0	16.5	15.0	---	---	---	---	---	---	22.5	21.0
10	15.0	14.0	16.0	16.0	---	---	---	---	---	---	22.0	20.0
11	17.0	14.5	---	---	---	---	---	---	25.0	24.5	22.5	20.5
12	17.5	16.5	---	---	---	---	---	---	25.0	23.0	23.5	21.5
13	17.0	16.0	15.0	14.0	---	---	---	---	25.0	23.0	24.0	22.0
14	16.0	15.0	15.5	15.0	---	---	---	---	25.0	23.5	23.5	22.5
15	15.0	14.0	15.0	14.0	---	---	---	---	24.5	24.0	23.0	19.0
16	14.5	13.5	15.0	13.5	---	---	---	---	25.0	23.0	---	---
17	14.0	14.0	15.5	14.5	---	---	---	---	24.5	22.5	---	---
18	---	---	15.5	14.0	---	---	---	---	23.5	21.5	---	---
19	---	---	14.0	13.0	---	---	---	---	22.5	21.0	---	---
20	---	---	15.0	12.5	---	---	---	---	24.5	21.5	---	---
21	---	---	16.0	14.0	---	---	---	---	23.5	21.5	---	---
22	---	---	17.5	15.0	---	---	---	---	24.0	21.0	---	---
23	---	---	18.5	16.0	---	---	24.5	24.5	24.0	21.5	---	---
24	---	---	18.0	17.5	---	---	25.5	23.0	24.0	22.0	18.0	17.5
25	---	---	---	---	---	---	26.0	23.5	25.0	22.5	17.5	16.5
26	---	---	---	---	---	---	26.5	25.0	24.5	22.0	19.0	17.0
27	---	---	---	---	---	---	26.0	25.0	25.0	22.5	20.0	18.5
28	17.5	17.0	---	---	---	---	26.0	25.0	25.0	23.0	20.5	18.0
29	18.0	17.0	---	---	---	---	25.5	23.5	25.0	23.5	18.0	16.5
30	17.5	16.0	---	---	---	---	24.5	22.0	24.0	23.0	---	---
31	---	---	---	---	---	---	25.0	22.5	25.0	23.0	---	---
MONTH	18.0	10.5	18.5	12.5	---	---	26.5	22.0	26.5	21.0	25.0	16.5
YEAR	26.5	.0	---	---	---	---	---	---	---	---	---	---

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

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1			---	---	10.8	10.4	11.1	10.8	14.2	13.6	12.0	9.3
2			---	---	10.7	10.2	12.1	10.9	13.9	13.2	12.0	9.0
3			---	---	11.1	10.3	12.4	11.4	13.2	11.7	11.7	8.8
4			9.4	9.0	11.0	10.5	11.8	11.3	13.3	11.6	10.6	9.8
5			9.3	8.1	10.5	9.8	12.4	11.4	13.2	12.7	11.2	10.3
6			9.9	9.0	10.5	9.9	12.0	11.5	---	---	11.0	10.2
7			9.9	9.2	10.4	9.5	11.8	11.6	---	---	11.4	10.3
8			9.6	8.5	9.8	9.3	11.8	11.5	---	---	11.6	10.8
9			9.2	8.4	9.5	8.7	11.8	11.4	---	---	11.5	10.4
10			9.0	8.3	9.6	8.9	11.6	11.4	---	---	10.8	10.0
11			9.9	8.9	9.7	8.9	11.5	11.2	---	---	10.6	10.3
12			10.5	9.8	10.6	9.7	11.3	11.2	---	---	10.3	10.0
13			10.6	10.0	10.7	10.4	11.4	11.1	---	---	10.2	9.2
14			10.6	9.9	10.9	10.3	11.3	11.0	---	---	10.6	9.2
15			10.0	9.2	12.4	10.5	11.6	11.3	---	---	9.9	8.6
16			10.8	9.3	12.3	11.9	11.5	11.3	---	---	11.2	10.5
17			10.8	9.8	12.5	12.1	11.6	11.1	13.4	12.9	12.4	11.3
18			10.3	9.3	12.4	11.8	11.3	10.9	13.3	9.7	12.2	11.8
19			10.8	10.0	12.4	11.7	11.3	10.9	13.2	12.8	12.6	11.8
20			10.9	10.1	13.2	12.1	11.5	11.1	13.3	11.2	12.7	12.0
21			11.0	10.2	13.2	12.6	11.2	10.6	12.3	10.3	13.3	12.4
22			11.2	10.0	13.1	12.5	10.7	10.4	12.3	11.2	12.8	12.2
23			11.5	10.6	12.6	12.1	10.9	10.3	11.8	11.2	13.2	12.1
24			10.6	9.6	12.3	11.6	10.5	10.3	11.9	11.4	14.1	12.6
25			10.7	9.6	12.6	12.1	11.3	10.6	13.2	10.1	15.3	13.0
26			10.7	10.0	12.7	12.3	11.3	10.7	12.4	8.4	15.9	13.8
27			10.8	10.0	12.9	12.3	11.6	10.6	12.2	11.3	15.5	13.6
28			10.4	10.0	12.8	12.5	11.7	11.0	12.0	11.2	16.6	13.4
29			10.2	9.6	12.8	12.0	13.4	11.6	---	---	17.5	14.0
30			10.7	10.2	12.2	11.6	14.2	13.4	---	---	17.0	13.5
31			---	---	11.7	11.1	14.4	13.9	---	---	16.8	12.8
MONTH			11.5	8.1	13.2	8.7	14.4	10.3	14.2	8.4	17.5	8.6
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	15.9	12.3	7.1	5.4			---	---	11.9	7.4	13.9	8.0
2	15.0	11.5	7.1	6.8			---	---	13.4	8.3	12.0	7.8
3	13.7	11.7	7.3	6.8			---	---	12.3	8.2	9.5	6.7
4	12.1	10.7	7.3	7.0			---	---	13.6	8.2	6.4	5.3
5	10.9	9.3	7.3	6.9			---	---	11.2	7.5	5.8	5.2
6	10.2	9.1	7.1	6.6			---	---	---	---	6.7	5.8
7	10.6	10.0	6.9	6.5			---	---	---	---	7.1	6.3
8	10.7	9.8	7.0	6.4			---	---	---	---	7.9	6.6
9	10.7	9.9	7.0	6.6			---	---	---	---	9.4	6.6
10	11.1	9.8	6.8	6.7			---	---	---	---	10.8	7.7
11	11.6	9.8	---	---			---	---	---	---	12.0	7.8
12	12.1	8.5	---	---			---	---	13.0	10.4	16.3	9.0
13	8.0	6.5	9.8	8.9			---	---	14.5	10.3	17.4	10.1
14	8.9	7.8	10.4	9.9			---	---	13.1	10.0	16.1	10.0
15	9.3	8.8	10.8	10.5			---	---	11.2	9.0	---	---
16	9.6	9.2	10.7	10.5			---	---	12.4	8.6	---	---
17	9.5	9.1	10.9	10.6			---	---	17.2	9.8	---	---
18	---	---	11.2	10.6			---	---	19.0	11.6	---	---
19	---	---	11.6	11.2			---	---	16.5	12.7	---	---
20	---	---	11.7	11.2			---	---	19.0	12.0	---	---
21	---	---	11.4	11.2			---	---	16.1	11.6	---	---
22	---	---	11.2	10.8			---	---	16.8	9.6	---	---
23	---	---	10.9	10.4			10.0	9.1	17.8	10.3	---	---
24	---	---	10.3	10.1			10.1	7.5	17.7	11.1	---	---
25	---	---	---	---			8.9	6.9	17.1	10.7	---	---
26	---	---	---	---			8.9	6.8	17.4	9.7	---	---
27	---	---	---	---			8.2	6.6	15.6	9.2	---	---
28	8.0	7.8	---	---			7.8	6.5	15.9	8.1	---	---
29	7.9	7.5	---	---			7.0	5.8	12.1	7.5	---	---
30	7.8	6.0	---	---			7.7	5.9	12.7	7.3	---	---
31	---	---	---	---			9.3	6.1	15.2	7.5	---	---
MONTH	15.9	6.0	11.7	5.4			10.1	5.8	19.0	7.3	17.4	5.2
YEAR	19.0	5.2										

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

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	1200	77	301	2310	23	145	3770	33	337
2	1180	44	170	1830	29	155	3510	33	311
3	1180	32	125	1950	19	109	3570	29	276
4	1170	24	90	1700	16	79	3510	37	357
5	1330	23	97	1540	16	73	2860	20	153
6	1200	21	82	1510	14	65	2470	21	145
7	1200	20	78	1460	13	59	2250	37	233
8	1230	16	63	1400	21	89	2190	34	211
9	1230	15	59	1400	18	77	2650	36	260
10	1230	14	57	1400	18	77	3850	40	421
11	1220	16	65	1370	13	55	5210	43	599
12	1250	16	65	1310	12	49	5170	42	581
13	1250	16	64	1280	9	38	4410	22	270
14	1220	17	69	1260	10	42	3520	14	137
15	1220	19	75	1300	13	52	3110	14	117
16	1230	16	64	1280	14	57	2920	49	384
17	1280	16	66	1250	15	59	2810	55	416
18	1420	22	96	1430	12	52	2610	10	73
19	2210	30	192	1520	12	56	2350	6	37
20	1980	28	159	1810	15	81	2190	2	14
21	1620	18	89	1860	14	79	1970	1	5.7
22	1620	23	110	1830	15	83	1630	1	4.9
23	1570	23	111	1800	15	77	1650	1	5.0
24	1430	19	84	1760	18	91	1730	1	5.9
25	1380	18	76	1910	20	109	1730	3	16
26	1650	17	84	2380	20	132	1670	2	12
27	1780	16	83	2330	22	142	1600	3	15
28	1800	14	77	3380	37	344	1540	1	5.8
29	1880	15	84	4020	40	435	1540	1	5.5
30	1910	13	71	4020	38	415	1590	4	20
31	1710	14	73	---	---	---	1800	7	38
TOTAL	44780	---	2979	55600	---	3376	83380	---	5465.8
JANUARY			FEBRUARY			MARCH			
1	1650	8	38	2670	16	128	6420	50	866
2	1620	8	40	7240	185	3850	5810	43	682
3	1550	6	30	8050	194	4270	5540	58	874
4	1370	7	28	6230	75	1280	4540	62	758
5	1040	12	43	5010	41	553	5240	222	3190
6	1150	7	28	3780	33	339	7150	100	1910
7	1230	6	24	3070	27	227	7440	62	1260
8	1070	6	22	2740	43	316	5940	43	690
9	1140	6	24	2420	28	189	5220	46	647
10	1090	9	32	2260	32	201	4610	50	617
11	984	6	21	2970	43	351	4510	48	588
12	940	4	14	4240	62	716	4440	33	391
13	940	7	23	5920	64	1020	4080	33	367
14	984	28	96	5510	56	831	3770	28	286
15	984	14	48	4390	40	481	3460	22	209
16	998	10	34	3970	45	478	3800	78	844
17	1010	9	32	5960	102	1700	3770	33	343
18	998	10	34	9780	237	6370	3520	23	220
19	984	10	34	14200	497	19500	3140	24	203
20	998	12	41	23300	597	37500	2840	16	122
21	998	15	52	25900	405	28200	2700	14	100
22	1030	14	48	26900	230	16800	2520	21	148
23	1120	13	49	20800	144	8140	2310	18	120
24	1170	12	46	17700	142	6760	2230	19	120
25	1180	13	50	17400	97	4600	2140	19	112
26	1420	20	90	13100	77	2740	1980	31	180
27	2050	29	175	9460	70	1790	2450	52	358
28	3590	45	437	7320	60	1190	2590	34	244
29	4150	53	598	---	---	---	2300	27	174
30	4050	31	339	---	---	---	2330	26	172
31	2780	16	124	---	---	---	2700	29	210
TOTAL	46268	---	2694	262290	---	150520	121490	---	17005

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	2300	27	175	6890	101	1880	14900	386	15700
2	2020	22	126	10400	347	10200	11100	220	6680
3	1860	24	134	9520	256	6740	9580	157	4070
4	1850	23	126	6870	122	2290	9740	157	4140
5	12300	989	37200	5740	141	2180	9420	180	4570
6	10100	395	11400	5450	143	2120	17600	765	49000
7	6050	160	2660	9540	193	5030	25000	637	44500
8	5800	84	1320	9660	170	4470	11800	373	12000
9	4960	74	989	8360	123	2800	10600	267	7660
10	3560	61	586	6420	102	1760	11200	235	7090
11	3140	59	502	10000	446	9940	16500	374	17000
12	3430	72	691	15000	794	15500	16300	354	15700
13	10300	355	11800	23000	486	19000	11100	593	17700
14	20100	501	26900	22600	442	27100	13700	611	22800
15	20500	286	16100	22200	406	24400	20900	631	35300
16	11700	159	5160	20600	399	22200	28300	520	39700
17	8210	125	2770	18800	391	19900	27900	381	28800
18	7090	138	2640	17500	151	7160	19000	301	15500
19	7900	154	3290	16300	308	13300	16000	257	11100
20	6790	174	3210	14400	229	9020	12700	238	8170
21	6440	99	1730	12100	186	6060	10200	225	6180
22	5620	126	1900	9780	112	2990	8940	206	4970
23	6290	268	4650	7610	67	1400	8820	192	4580
24	9880	287	7650	5450	68	994	7360	178	3570
25	9220	180	4580	4250	68	774	5470	114	1700
26	7130	99	1910	3680	266	2620	4800	152	1970
27	6180	49	817	5310	237	3300	6330	178	3040
28	5580	63	947	9580	321	8530	5920	156	2510
29	5170	67	937	12600	290	9850	4720	133	1700
30	5920	94	1510	11200	293	8880	4170	119	1350
31	---	---	---	15200	448	18500	---	---	---
TOTAL	217390	---	154410	356010	---	270888	380070	---	398750
JULY			AUGUST			SEPTEMBER			
1	3830	154	1590	1420	33	128	947	35	89
2	3920	172	1820	1350	33	120	960	35	91
3	3330	124	1120	1190	31	109	1340	41	158
4	3220	98	855	1260	29	99	2980	82	657
5	3260	92	808	1260	32	108	3140	53	452
6	3470	97	908	1410	34	130	2870	41	319
7	2930	118	928	1650	52	236	2730	40	292
8	2580	92	644	1620	61	269	1970	39	208
9	2270	73	447	1460	47	187	1620	39	169
10	2080	57	319	1290	45	155	1510	38	155
11	2020	50	272	1210	46	150	1240	38	126
12	1870	49	247	1160	46	144	1130	37	113
13	1830	59	294	1110	43	128	1100	37	110
14	2190	99	593	1050	40	112	1050	36	102
15	2090	108	610	984	37	100	1020	36	99
16	1780	82	395	960	37	95	1670	35	160
17	1530	63	259	911	37	91	1410	35	133
18	1470	51	201	899	37	90	1280	35	120
19	1430	44	170	887	37	89	1410	34	129
20	1390	41	156	839	36	82	1610	34	148
21	2050	61	374	815	36	79	1790	33	160
22	2620	79	563	792	36	77	1760	33	157
23	2460	62	411	792	36	77	1530	33	135
24	2100	54	308	792	36	77	1210	32	104
25	1860	53	269	792	36	77	1030	32	90
26	1680	47	212	792	36	77	972	31	82
27	1690	47	214	780	36	76	972	31	81
28	1830	46	229	780	36	76	851	31	71
29	1690	48	217	803	36	78	780	30	64
30	1860	52	259	923	35	88	757	30	61
31	1570	41	174	863	35	81	---	---	---
TOTAL	69900	---	15866	32844	---	3485	44639	---	4835
YEAR	1714661		1030273.8						

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--Water years 1954-74, January to current year.

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 15...	0945	1220	13.5	24	79
NOV 04...	1530	1850	12.0	26	130
DEC 04...	1030	3510	4.5	66	625
JAN 05...	1315	869	.5	18	42
FEB 05...	1030	5100	.5	42	578
MAR 03...	1230	5620	6.0	72	1090
APR 08...	1430	5740	14.0	153	2370
MAY 13...	1200	22200	14.5	272	16300
JUN 03...	1030	9540	19.5	179	4610
JUL 14...	1130	2210	26.0	76	453
AUG 05...	1030	1260	25.5	36	122
SEP 09...	0930	1560	21.0	76	320

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 mi² (2,536 km²). 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 hm³), 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 hm³), 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 m³). 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 hm³) Jan. 22, 1959, elevation, 854.40 ft (260.421 m); minimum, 43 acre-ft (53,000 m³) Feb. 11, 1945, elevation, 791.97 ft (241.392 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 19,680 acre-ft (24.3 hm³) June 15, elevation, 850.53 ft (259.242 m); minimum, 16,870 acre-ft (20.8 hm³) Aug. 27, elevation, 847.79 ft (258.406 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 mi² (2,704 km²). 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 hm³) 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 m³), 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 m³). 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 hm³) Jan. 22, 1959, elevation, 763.91 ft (232.840 m); minimum, 38 acre-ft (46,900 m³) Jan. 24, 1945, elevation, 735.78 ft (224.266 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 5,750 acre-ft (7.09 hm³) June 14, elevation, 759.22 ft (231.410 m); minimum, 3,930 acre-ft (4.85 hm³) Aug. 29, elevation, 754.09 ft (229.847 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 mi² (1,000 km²). 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 hm³) 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 hm³). Normal conservation pool storage 8,400 acre-ft (10.4 hm³), elevation, 910.0 ft (277.37 m) winter, and 14,000 acre-ft (17.3 hm³), 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 hm³) Jan. 25, 1959, elevation, 944.75 ft (287.960 m); minimum, 2,070 acre-ft (2.55 hm³) Feb. 13, 1970, elevation, 899.43 ft (274.146 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 50,530 acre-ft (62.3 hm³) June 14, elevation, 932.79 ft (284.314 m); minimum, 7,870 acre-ft (9.70 hm³) Nov. 24, elevation, 909.41 ft (277.188 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 mi² (492 km²). 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 hm³) 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 hm³). Dead storage below elevation 830.0 ft (252.98 m), 214 acre-ft (264,000 m³). 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 km³), revised, Feb. 24, 1975, elevation, 897.26 ft (273.485 m); minimum, 19,010 acre-ft (23.4 hm³) Mar. 1, 1964, elevation, 868.58 ft (264.743 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 75,010 acre-ft (92.5 hm³) June 14, elevation, 894.92 ft (272.772 m); minimum, 34,600 acre-ft (42.7 hm³) Jan. 26, elevation, 879.17 ft (267.971 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 mi² (316 km²). 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 hm³) 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 hm³). Normal conservation pool storage 71,120 acre-ft (87.7 hm³) elevation 885.0 ft (269.75 m) winter, and 80,860 acre-ft (99.7 hm³) elevation 888.0 ft (270.66 m) summer. Dead storage 879 acre-ft (1.08 hm³) 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 hm³) Sept. 17, 1979, elevation, 892.40 ft (272.004 m); minimum, 5,860 acre-ft (7.23 hm³) Jan. 25, 1975, elevation, 849.59 ft (258.955 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 86,910 acre-ft (107 hm³) June 16, elevation, 889.74 ft (271.193 m); minimum, 31,950 acre ft (39.4 hm³) Oct. 17, elevation, 869.88 ft (265.139 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 Panoastburg. DRAINAGE AREA, 277 mi² (717 km²). 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 hm³) 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 hm³). Normal conservation pool storage 6,420 acre-ft (7.92 hm³), elevation, 796.0 ft (242.62 m) winter, and 21,030 acre-ft (25.9 hm³), elevation, 810.0 ft (246.89 m) summer. Dead storage 2 acre-ft (2,470 m³) 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 hm³) May 31, 1968, elevation, 835.25 ft (254.584 m); minimum, 1,140 acre-ft (1.41 hm³) Jan. 8, 1970, elevation, 784.75 ft (239.192 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 34,210 acre-ft (42.2 hm³) June 7, elevation, 818.99 ft (249.622 m); minimum, 6,400 acre-ft (7.89 hm³) Dec. 29, elevation, 795.97 ft (242.612 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 mi² (1,476 km²). 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 hm³) 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 hm³). Seasonal pool storage 20,310 acre-ft (25.0 hm³) elevation, 798.0 ft (243.23 m). Dead storage 5 acre-ft (6,170 m³) 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 hm³) 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 hm³) Mar. 28, 1975, elevation, 786.03 ft (239.582 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 41,550 acre-ft (51.2 hm³) June 8, elevation, 812.32 ft (247.595 m); minimum, 9,930 acre-ft (12.2 hm³) Dec. 5, elevation, 787.38 ft (239.993 m).

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 mi² (2,536 km²). 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 hm³), 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 hm³), 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 m³). 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 hm³) Jan. 22, 1959, elevation, 854.40 ft (260.421 m); minimum, 43 acre-ft (53,000 m³) Feb. 11, 1945, elevation, 791.97 ft (241.392 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 20,710 acre-ft (25.5 hm³) June 3, elevation, 851.45 ft (259,522 m); minimum, 17,060 acre-ft (21.0 hm³) Sept. 27, elevation, 847.99 ft (258.467 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 mi² (2,704 km²). 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 hm³) 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 m³), 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 m³). 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 hm³) Jan. 22, 1959, elevation, 763.91 ft (232.840 m); minimum, 38 acre-ft (46,900 m³) Jan. 24, 1945, elevation, 735.78 ft (224.266 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 6,080 acre-ft (7.50 hm³) June 2, elevation, 760.11 ft (231.682 m); minimum, 4,330 acre-ft (5.34 hm³) Sept. 30, elevation, 755.26 ft (230.203 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 mi² (1,000 km²). 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 hm³) 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 hm³). Normal conservation pool storage 8,400 acre-ft (10.4 hm³), elevation, 910.0 ft (277.37 m) winter, and 14,000 acre-ft (17.3 hm³), 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 hm³) Jan. 25, 1959, elevation, 944.75 ft (287.960 m); minimum, 2,070 acre-ft (2.55 hm³) Feb. 13, 1970, elevation, 899.43 ft (274.146 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 66,780 acre-ft (82.3 hm³) June 5, elevation, 936.93 ft (285.576 m); minimum, 7,880 acre-ft (9.71 hm³) Jan. 21, elevation, 909.42 ft (277.191 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 mi² (492 km²). 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 hm³) 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 hm³). Dead storage below elevation 830.0 ft (252.98 m), 214 acre-ft (264,000 m³). 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 km³), revised, Feb. 24, 1975, elevation, 897.26 ft (273.485 m); minimum, 19,010 acre-ft (23.4 hm³) Mar. 1, 1964, elevation, 868.58 ft (264.743 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 71,140 acre-ft (87.7 hm³) Aug. 4, elevation, 893.77 ft (272.421 m); minimum, 50,570 acre-ft (62.4 hm³) Sept. 30, elevation, 886.37 ft (270.166 m).

RESERVOIRS IN SCIOTO RIVER BASIN--Continued

03228804 ALUM CREEK LAKE NEAR WORTHINGTON.--Lat 40°11'03", long 82°57'56", 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 mi² (316 km²). 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 hm³) 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 hm³). Normal conservation pool storage 71,120 acre-ft (87.7 hm³) elevation 885.0 ft (269.75 m) winter, and 80,860 acre-ft (99.7 hm³) elevation 888.0 ft (270.66 m) summer. Dead storage 879 acre-ft (1.08 hm³) 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 hm³) Sept. 17, 1979, elevation, 892.40 ft (272.004 m); minimum, 5,860 acre-ft (7.23 hm³) Jan. 25, 1975, elevation, 849.59 ft (258.955 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 95,170 acre-ft (117 hm³) June 6, elevation, 891.99 ft (271.879 m); minimum, 33,390 acre-ft (41.2 hm³) Sept. 30, elevation, 870.10 ft (265.206 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 mi² (717 km²). 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 hm³) 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 hm³). Normal conservation pool storage 6,420 acre-ft (7.92 hm³), elevation, 796.0 ft (242.62 m) winter, and 21,030 acre-ft (25.9 hm³), elevation, 810.0 ft (246.89 m) summer. Dead storage 2 acre-ft (2,470 m³) 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 hm³) May 31, 1968, elevation, 835.25 ft (254.584 m); minimum, 1,140 acre-ft (1.41 hm³) Jan. 8, 1970, elevation, 784.75 ft (239.192 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 33,460 acre-ft (41.3 hm³) Oct. 1, elevation, 818.54 ft (249.491 m); minimum, 6,380 acre-ft (7.87 hm³) Dec. 10, elevation, 795.94 ft (242.603 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 mi² (1,476 km²). 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 hm³) 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 hm³). Seasonal pool storage 20,310 acre-ft (25.0 hm³) elevation, 798.0 ft (243.23 m). Dead storage 5 acre-ft (6,170 m³) 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 hm³) 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 hm³) Mar. 28, 1975, elevation, 786.03 ft (239.582 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 35,130 acre-ft (43.3 hm³) Aug. 8, elevation, 808.63 ft (246.470 m); minimum, 9,960 acre-ft (12.3 hm³) Dec. 27, elevation, 787.42 ft (240.006 m).

RESERVOIRS IN SCIOTO RIVER BASIN--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)
03220500 O'SHAUGHNESSY RESERVOIR				03221500 GRIGGS RESERVOIR			03225000 DELAWARE LAKE		
Sept. 30.....	848.01	17070	---	755.28	4340	---	915.14	14180	---
Oct. 31.....	848.11	17170	+100	755.52	4420	+80	914.16	12910	-1270
Nov. 30.....	848.23	17290	+120	755.72	4490	+70	911.30	9700	-3210
Dec. 31.....	848.11	17170	-120	755.55	4430	-60	910.12	8520	-1180
CAL YR 1980	---	---	-400	---	---	-150	---	---	-120
Jan. 31.....	848.07	17130	-40	756.11	4620	+190	911.76	10160	+1640
Feb. 28.....	848.55	17610	+480	756.08	4610	-10	910.60	9000	-1160
Mar. 31.....	848.16	17220	-390	755.63	4460	-150	910.73	9130	+130
Apr. 30.....	848.55	17610	+390	756.12	4620	+160	915.66	14860	+5730
May 31.....	848.51	17570	-40	756.28	4680	+60	915.37	14480	-380
June 30.....	848.45	17510	-60	756.01	4590	-90	915.28	14360	-120
July 31.....	848.13	17190	-320	755.52	4420	-170	915.17	14220	-140
Aug. 31.....	848.01	17070	-120	754.26	3990	-430	914.43	13260	-960
Sept. 30.....	848.06	17120	+50	755.46	4400	+410	914.96	13950	+690
WTR YR 1981	---	---	+50	---	---	+60	---	---	-230
03228400 HOOVER RESERVOIR				03228804 ALUM CREEK LAKE			03230890 DEER CREEK LAKE		
Sept. 30.....	886.37	50570	---	870.10	33390	---	810.24	21340	---
Oct. 31.....	882.64	41580	-8990	870.12	33430	+40	804.07	14010	-7330
Nov. 30.....	880.58	37290	-4290	870.23	33660	+230	797.76	7800	-6210
Dec. 31.....	881.51	39170	+1880	870.39	33990	+330	796.12	6510	-1290
CAL YR 1980	---	---	-21200	---	---	-37860	---	---	-10
Jan. 31.....	880.54	37220	-1950	871.61	36540	+2550	796.83	7050	+540
Feb. 28.....	890.27	60870	+23650	880.91	59150	+22610	796.45	6760	-290
Mar. 31.....	888.89	57150	-3720	882.16	62660	+3510	797.46	7550	+790
Apr. 30.....	893.22	69370	+12220	886.83	76960	+14300	810.29	21400	+13850
May 31.....	893.22	69370	0	888.38	82160	+5200	812.65	24550	+3150
June 30.....	892.97	68570	-800	888.23	81650	-510	810.14	21210	-3340
July 31.....	889.74	59430	-9140	887.99	80820	-830	810.22	21310	+100
Aug. 31.....	886.17	50050	-9380	887.61	79550	-1270	810.09	21140	-170
Sept. 30.....	883.52	43570	-6480	887.63	79620	+70	810.01	21040	-100
WTR YR 1981	---	---	-7000	---	---	+46230	---	---	-300
03232460 PAINT CREEK LAKE									
Sept. 30.....	798.37	20750	---						
Oct. 31.....	797.73	19990	-760						
Nov. 30.....	790.77	12750	-7240						
Dec. 31.....	787.77	10230	-2520						
CAL YR 1980	---	---	+20						
Jan. 31.....	787.55	10060	-170						
Feb. 28.....	787.94	10360	+300						
Mar. 31.....	790.23	12270	+1910						
Apr. 30.....	799.42	22040	+9770						
May 31.....	806.97	32480	+10440						
June 30.....	799.01	21530	-10950						
July 31.....	798.35	20730	-800						
Aug. 31.....	798.68	21220	+490						
Sept. 30.....	798.20	20550	-670						
WTR YR 1981	---	---	-200						

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 mi² (31.6 km²).

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 ft³/s which are poor.

AVERAGE DISCHARGE.--18 years, 14.0 ft³/s (0.396 m³/s), 15.58 in/yr (396 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s (99.1 m³/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 ft³/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 ft³/s (205 m³/s), on basis of contracted-opening and flow over road measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 463 ft³/s (13.1 m³/s) May 27, gage height, 3.19 ft (0.972 m), above base of 450 ft³/s (12.7 m³/s); minimum, 0.02 ft³/s (0.001 m³/s) Oct. 16-18, 21-23.

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	.12	.30	1.6	.52	63	48	12	12	7.7	3.3	.36	.06
2	.14	.24	1.6	.52	120	27	11	10	12	1.1	.33	.10
3	.10	.19	2.0	.50	42	17	10	9.3	20	.58	.27	.83
4	.12	.24	2.0	.46	22	13	13	8.1	39	1.7	.24	.68
5	.10	.21	1.6	.42	10	42	72	7.0	35	7.6	.46	.44
6	.08	.21	1.1	.42	7.0	32	35	6.6	36	5.0	2.6	.35
7	.08	.21	.97	.40	4.2	22	24	6.6	21	2.9	13	.26
8	.06	.21	.75	.40	4.0	15	18	5.7	15	1.4	10	.23
9	.06	.21	14	.40	3.8	11	11	5.1	9.7	.75	3.1	.19
10	.10	.19	13	.38	5.4	9.7	12	7.7	54	.59	1.2	.18
11	.10	.19	6.6	.38	29	8.5	13	65	16	.50	.59	.16
12	.10	.19	4.6	.36	14	7.3	10	38	27	.39	.39	.14
13	.06	.16	3.3	.36	7.4	7.0	10	21	32	.39	.30	.13
14	.04	.16	2.4	.36	6.3	6.3	11	17	15	1.6	.27	.13
15	.04	.16	2.0	.36	6.1	5.7	9.3	18	7.7	1.0	.24	.15
16	.02	.16	2.0	.34	6.8	16	8.9	16	2.9	.69	.21	.12
17	.02	.30	1.8	.34	15	18	49	12	.85	.50	.19	.13
18	.10	3.9	1.7	.34	27	16	51	29	2.6	.39	.16	.14
19	.08	3.1	1.6	.34	40	15	32	92	2.8	.33	.16	.14
20	.04	1.4	1.3	.38	65	15	33	42	1.2	.30	.14	.14
21	.02	1.1	1.1	.62	28	12	24	26	1.4	.33	.12	.14
22	.02	.64	1.0	.46	18	11	18	17	2.0	.30	.12	.14
23	.02	.55	.92	.42	20	11	18	12	.70	.27	.08	.13
24	.08	.75	.86	.42	19	11	17	8.5	.47	.27	.08	.12
25	.30	.97	.80	.44	16	9.7	15	5.7	.41	.24	.06	.11
26	1.2	.97	.74	.74	12	9.3	13	6.3	.83	.24	.06	.08
27	.97	3.1	.64	.60	10	9.3	11	70	.54	.21	.04	.08
28	.85	6.6	.60	.50	30	9.3	9.3	51	.39	.30	.04	.06
29	.64	4.1	.56	.50	---	9.3	5.7	24	.30	1.0	.04	.06
30	.43	2.4	.52	.50	---	12	8.9	10	.14	.55	.04	.06
31	.33	---	.52	.52	---	12	---	1.9	---	.46	.04	---
TOTAL	6.42	33.11	74.18	13.70	651.0	467.4	585.1	660.5	364.63	35.18	34.93	5.68
MEAN	.21	1.10	2.39	.44	23.3	15.1	19.5	21.3	12.2	1.13	1.13	.19
MAX	1.2	6.6	14	.74	120	48	72	92	54	7.6	13	.83
MIN	.02	.16	.52	.34	3.8	5.7	5.7	1.9	.14	.21	.04	.06
CFSM	.02	.09	.20	.04	1.91	1.24	1.60	1.75	1.00	.09	.09	.02
IN.	.02	.10	.23	.04	1.98	1.43	1.78	2.01	1.11	.11	.11	.02
CAL YR 1980 TOTAL	3796.28			MEAN 10.4	MAX 158	MIN .02	CFSM .85	IN 11.57				
WTR YR 1981 TOTAL	2931.83			MEAN 8.03	MAX 120	MIN .02	CFSM .66	IN 8.94				

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 several days during winter period in 1973, 1978, 1979 to 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 33.0°C July 27; minimum, 0.0°C Dec. 21, 22, Jan. 5, 6, 12, 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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)
OCT 21...	1330	.03	145	7.9	13.5	10.2	97	16
NOV 03...	1300	.19	120	--	8.5	10.2	87	10
DEC 10...	1230	12	80	7.4	8.5	10.4	89	95
JAN 06...	1315	.42	120	7.8	1.0	13.0	92	3
FEB 09...	1515	3.9	110	7.5	1.5	12.9	92	3
MAR 10...	1130	11	80	7.3	6.0	13.2	106	3
APR 06...	1215	34	80	8.0	10.5	12.7	120	32
MAY 04...	1130	7.3	95	6.8	14.5	9.9	96	28
JUN 02...	1200	13	95	6.5	17.0	--	--	75
JUL 07...	1100	2.9	110	7.4	22.5	8.4	95	220
AUG 04...	1245	.23	128	7.3	26.5	8.7	110	17
SEP 01...	1315	.03	150	6.8	26.0	8.5	100	K12

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)	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...	3.3	.1	8.3	102	88	.29	.020	.00
NOV 03...	3.4	.1	9.1	86	84	.07	.020	--
DEC 10...	2.1	.1	9.9	68	69	.80	.010	--
JAN 06...	3.7	.0	8.7	80	83	.51	.010	--
FEB 09...	1.9	<.1	7.9	74	62	.72	.020	--
MAR 10...	1.6	<.1	8.9	57	57	.47	<.010	--
APR 06...	1.3	<.1	9.6	48	58	.47	<.010	<.01
MAY 04...	1.2	<.1	11	55	62	.22	<.010	--
JUN 02...	1.6	<.1	11	63	60	.29	.030	--
JUL 07...	1.8	<.1	12	91	70	.59	.050	--
AUG 04...	2.9	<.1	12	89	82	.42	.040	--
SEP 01...	3.3	<.1	11	93	84	.26	.660	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	STREP- TOCOC FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	ALKA- LINITY LAB (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 21...	130	53	31	9.2	7.2	4.4	2.1	22	39
NOV 03...	58	48	30	7.7	7.0	5.2	1.9	18	38
DEC 10...	250	35	15	6.1	4.8	2.7	1.6	20	26
JAN 06...	6	47	30	8.0	6.5	4.1	1.5	17	38
FEB 09...	14	32	19	5.0	4.7	3.8	1.4	13	27
MAR 10...	3	27	16	4.3	4.0	2.9	1.5	11	25
APR 06...	75	29	16	4.5	4.3	3.4	1.5	13	23
MAY 04...	28	32	23	5.2	4.7	3.8	1.7	9.0	28
JUN 02...	150	32	24	5.3	4.6	3.1	2.0	8.0	26
JUL 07...	820	40	25	6.8	5.6	3.6	2.0	15	26
AUG 04...	200	45	28	7.9	6.2	4.3	2.5	17	34
SEP 01...	98	48	27	8.0	6.9	4.6	2.6	21	34

RADIOCHEMICAL ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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...	1330	.03	<1.3	<.4	2.7	<.4	2.6	<.4	.15
NOV 03...	1300	.19	--	--	--	--	--	--	--
DEC 10...	1230	12	--	--	--	--	--	--	--
JAN 06...	1315	.42	--	--	--	--	--	--	--
FEB 09...	1515	3.9	--	--	--	--	--	--	--
MAR 10...	1130	11	--	--	--	--	--	--	--
APR 06...	1215	34	--	--	--	--	--	--	--
MAY 04...	1130	7.3	--	--	--	--	--	--	--
JUN 02...	1200	13	--	--	--	--	--	--	--
JUL 07...	1100	2.9	--	--	--	--	--	--	--
AUG 04...	1245	.23	--	--	--	--	--	--	--
SEP 01...	1315	.03	--	--	--	--	--	--	--

PESTICIDE ANALYSES

PROCESS DATE 12/08/81
DISTRICT CODE 39

[illegible][illegible]

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

[illegible][illegible]

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	22.0	15.0	10.5	4.5	9.5	5.0	2.0	1.0	2.5	.5	6.0	5.5
2	19.5	14.0	9.0	3.0	8.5	5.0	2.5	.5	3.0	1.0	6.5	4.5
3	17.0	12.5	13.5	4.0	6.0	3.5	2.0	.5	1.0	.5	7.0	3.5
4	15.0	10.5	12.0	7.5	5.5	2.0	.5	.5	1.5	.5	4.5	3.5
5	14.5	8.5	8.5	5.5	8.0	5.0	.5	.0	1.5	.5	5.0	4.5
6	14.5	7.0	8.0	2.0	9.5	6.0	.5	.0	2.0	1.0	6.0	3.5
7	17.0	9.5	14.0	4.5	12.0	7.5	.5	.5	3.0	.5	6.5	3.0
8	19.0	9.0	14.0	9.0	12.5	7.5	.5	.5	2.5	.5	5.5	3.5
9	21.0	12.5	15.0	8.5	10.5	9.0	1.0	.5	1.5	.5	5.5	3.5
10	20.0	12.5	10.0	4.5	8.5	6.5	.5	.5	3.0	1.0	8.0	4.0
11	16.0	11.0	5.5	2.5	6.5	5.5	.5	.5	3.0	.5	6.5	4.0
12	12.5	7.5	5.5	1.0	7.5	5.0	.5	.0	1.0	.5	9.5	3.5
13	12.0	6.0	9.5	2.5	7.5	4.0	1.0	.5	1.0	.5	10.5	4.5
14	14.5	6.0	10.5	4.0	6.0	3.0	1.0	.5	1.5	.5	9.5	3.5
15	17.0	8.5	8.5	6.5	5.5	3.0	1.0	.5	3.0	.5	10.0	2.5
16	18.5	9.5	6.5	4.0	4.5	3.5	1.0	.5	2.5	1.0	6.5	3.5
17	19.0	10.5	5.5	5.0	4.0	2.0	1.0	.5	3.0	1.0	6.0	2.5
18	18.0	13.5	6.5	5.0	6.0	2.5	.5	.5	6.0	3.0	6.0	3.0
19	15.5	9.5	7.0	3.5	5.0	.5	1.0	.0	6.0	5.0	5.0	2.5
20	13.0	5.5	6.5	2.5	1.5	.5	1.5	.5	7.5	5.0	4.0	3.0
21	14.0	7.0	6.5	2.5	.5	.0	1.0	.5	8.0	5.0	7.0	2.5
22	13.5	7.5	6.5	2.0	1.5	.0	.5	.5	7.0	4.0	5.0	3.5
23	13.0	7.0	6.0	3.5	2.0	1.0	1.0	.5	7.0	5.5	10.5	4.0
24	14.5	7.0	7.5	6.0	1.5	.5	2.0	.5	5.5	4.0	10.0	4.0
25	12.5	8.0	7.0	3.5	.5	.5	3.0	.5	7.0	3.0	11.0	4.0
26	11.5	7.0	5.5	2.5	1.0	.5	5.0	1.5	7.5	3.0	9.5	4.5
27	10.0	6.0	6.5	4.0	1.0	.5	4.5	1.5	7.5	2.5	12.5	7.0
28	10.5	8.5	5.5	4.0	1.0	.5	3.5	1.0	6.5	4.5	13.5	5.5
29	11.5	6.0	5.0	4.0	1.0	.5	3.0	1.0	---	---	14.0	7.5
30	10.5	4.5	7.0	3.5	1.0	1.0	2.5	.5	---	---	14.0	10.0
31	10.5	3.5	---	---	1.5	1.0	1.0	.5	---	---	15.5	8.0
MONTH	22.0	3.5	15.0	1.0	12.5	.0	5.0	.0	8.0	.5	15.5	2.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	15.5	10.0	16.5	12.5	16.5	14.5	27.5	21.0	30.0	19.0	28.5	19.5
2	15.5	8.5	15.5	11.0	20.5	14.5	24.0	19.5	31.0	20.0	27.5	20.5
3	15.0	8.5	17.5	9.5	18.5	14.5	26.5	19.5	30.0	20.5	23.0	21.0
4	14.5	11.0	18.5	11.0	15.5	14.5	28.5	19.0	28.5	21.0	26.0	21.0
5	11.5	9.0	18.5	13.0	16.5	14.0	21.0	19.5	32.5	22.0	27.0	19.5
6	12.0	7.5	15.0	11.5	16.0	15.0	22.0	19.0	25.0	22.0	26.5	19.0
7	12.5	6.0	18.0	10.0	19.0	14.5	26.0	19.0	23.0	19.5	26.5	19.0
8	14.0	8.0	19.5	10.0	20.0	14.0	27.0	20.5	23.0	19.0	24.5	18.5
9	15.5	11.0	19.0	11.5	22.5	17.0	30.5	21.0	24.0	19.0	24.5	16.0
10	13.0	9.0	19.0	13.5	19.0	15.5	29.0	22.0	26.5	19.5	25.0	14.5
11	16.5	11.0	14.0	11.0	19.0	15.0	31.0	19.5	27.5	20.5	27.0	15.5
12	16.5	13.0	12.5	10.5	19.5	15.5	31.0	19.5	29.5	18.5	27.0	17.0
13	18.5	13.0	14.5	10.5	18.5	15.5	31.5	21.0	28.0	18.5	28.0	17.0
14	16.0	11.5	14.0	12.0	21.0	16.0	29.0	22.5	28.0	19.5	27.0	17.0
15	16.0	9.5	12.5	11.5	22.5	17.0	27.5	20.5	27.5	19.5	22.0	18.0
16	14.5	8.5	15.5	10.5	22.0	18.0	26.5	21.0	28.0	20.5	23.0	15.0
17	13.0	12.0	17.5	11.0	22.5	17.5	29.5	20.5	26.0	17.5	20.0	13.5
18	15.5	11.5	13.5	11.0	24.0	16.0	30.0	20.0	29.0	15.5	16.0	12.5
19	13.0	10.5	11.0	10.5	22.5	17.0	31.0	20.5	25.5	17.0	20.0	12.5
20	13.0	10.0	15.0	10.5	24.5	18.5	29.0	21.5	29.5	16.0	22.5	12.5
21	13.5	8.0	16.0	10.0	25.0	18.5	30.5	21.5	24.5	16.5	22.5	13.0
22	12.5	9.0	17.0	11.0	27.0	19.0	28.0	20.5	29.5	16.0	20.5	12.5
23	13.5	11.5	19.0	12.0	27.0	18.0	30.0	19.0	30.5	15.0	18.0	9.0
24	11.5	9.5	19.5	13.0	27.0	17.5	32.5	19.5	29.0	17.0	18.5	8.5
25	15.0	9.0	21.5	14.5	29.0	20.0	30.5	21.0	29.0	17.5	21.0	10.0
26	16.0	10.0	21.0	15.5	28.0	18.0	31.5	22.0	30.0	15.5	23.0	12.5
27	19.0	12.0	16.0	13.5	28.5	16.0	33.0	22.0	29.5	17.5	22.0	14.0
28	20.0	13.0	14.0	13.0	29.5	16.5	31.0	22.0	29.0	19.0	17.5	10.0
29	19.5	15.0	17.0	13.0	31.0	18.5	24.5	21.0	28.5	19.0	18.0	8.0
30	17.5	14.0	18.0	13.5	30.5	19.5	28.0	18.0	31.0	18.5	22.0	13.0
31	---	---	18.5	15.0	---	---	28.5	18.5	31.5	19.0	---	---
MONTH	20.0	6.0	21.5	9.5	31.0	14.0	33.0	18.0	32.5	15.0	28.5	8.0
YEAR	33.0	.0										

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SUSPENDED SEDIMENT DISCHARGE

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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...	1330	.03	13.5	1	.00
NOV					
03...	1300	.19	8.5	2	.00
DEC					
10...	1230	12	8.5	3	.10
JAN					
06...	1315	.42	1.0	1	.00
FEB					
09...	1515	3.9	1.5	1	.01
MAR					
10...	1130	11	6.0	1	.03
APR					
06...	1215	34	10.5	2	.18
MAY					
04...	1130	7.3	14.5	1	.02
JUN					
02...	1200	13	17.0	1	.04
JUL					
07...	1100	2.9	22.5	3	.02
AUG					
04...	1245	.23	26.5	5	.00
SEP					
01...	1315	.03	26.0	0	.00

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 mi² (1,002 km²).

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.--50 years, 458 ft³/s (12.97 m³/s), 16.07 in/yr (408 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,200 ft³/s (1,680 m³/s) Mar. 10, 1964, gage height, 27.91 ft (8.507 m), from rating curve extended above 22,000 ft³/s (623 m³/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.--Maximum discharge, 16,300 ft³/s (462 m³/s) Apr. 5, gage height, 16.43 ft (5.008 m), above base of 11,000 ft³/s (312 m³/s); minimum, 3.6 ft³/s (0.10 m³/s) Sept. 30.

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	21	36	135	60	1340	965	289	775	782	1620	28	20
2	20	33	112	62	4040	545	213	342	1020	328	24	20
3	19	30	98	56	700	371	169	231	1160	163	22	79
4	20	30	83	50	363	289	301	175	820	894	20	458
5	19	30	76	45	233	1540	7210	146	622	1900	18	124
6	18	29	75	40	187	1080	1390	972	801	847	117	61
7	17	27	75	37	153	579	678	887	1430	310	678	41
8	16	26	77	37	168	387	452	356	476	175	847	32
9	16	26	966	37	148	301	352	227	280	117	152	27
10	16	25	1270	36	151	260	301	203	2480	91	79	23
11	15	24	390	36	1440	227	245	2260	726	77	53	19
12	15	24	233	36	910	200	217	1340	1240	61	40	17
13	15	23	179	35	489	178	207	627	2370	54	33	15
14	14	22	144	35	264	157	187	650	1550	87	33	12
15	14	22	120	35	196	136	152	2620	464	136	29	193
16	13	23	122	34	268	381	124	958	280	67	27	92
17	13	35	126	34	1200	470	833	507	616	49	24	39
18	37	188	112	34	1160	289	3350	1600	231	43	22	27
19	49	154	101	34	2910	293	880	4300	157	38	20	21
20	71	93	86	34	4020	241	1530	1690	126	37	19	17
21	43	66	60	37	1410	203	756	756	166	36	17	14
22	30	53	60	166	782	184	452	470	579	40	16	12
23	25	47	59	128	950	169	3780	324	231	41	16	9.8
24	23	69	70	97	853	154	1810	245	122	33	14	8.0
25	194	125	68	95	600	134	840	193	92	30	14	6.9
26	165	132	64	190	408	122	513	163	102	27	13	6.2
27	101	589	58	301	306	256	371	2220	74	26	12	5.6
28	70	694	53	185	430	579	284	4730	60	29	12	4.6
29	54	273	54	137	---	293	231	1350	53	67	12	4.6
30	44	180	54	102	---	476	482	763	48	53	12	3.9
31	40	---	58	70	---	519	---	1180	---	36	18	---
TOTAL	1227	3128	5238	2315	26079	11978	28599	33260	19158	7512	2441	1412.6
MEAN	39.6	104	169	74.7	931	386	953	1073	639	242	78.7	47.1
MAX	194	694	1270	301	4040	1540	7210	4730	2480	1900	847	458
MIN	13	22	53	34	148	122	124	146	48	26	12	3.9
CFSM	.10	.27	.44	.19	2.41	1.00	2.46	2.77	1.65	.63	.20	.12
IN.	.12	.30	.50	.22	2.51	1.15	2.75	3.20	1.84	.72	.23	.14

CAL YR 1980 TOTAL 182162.0 MEAN 498 MAX 14800 MIN 13 CFSM 1.29 IN 17.51
WTR YR 1981 TOTAL 142347.6 MEAN 390 MAX 7210 MIN 3.9 CFSM 1.01 IN 13.68

WHITEOAK CREEK BASIN

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 mi² (565 km²).

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.--54 years, 260 ft³/s (7.363 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s (634 m³/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 ft³/s (156 m³/s), and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Apr. 5	1100	*10800	306	*7.84	2.390	Apr. 23	2030	6490	184	6.93	2.112

Minimum daily, 1.0 ft³/s (0.03 m³/s) Aug. 23, 25.

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	17	17	64	29	350	475	116	119	270	669	11	35
2	17	12	47	28	2440	231	82	109	390	432	7.0	53
3	12	12	38	25	880	138	55	70	218	116	9.0	390
4	10	14	26	21	196	95	835	53	146	116	5.2	328
5	8.5	12	24	19	200	961	7570	50	179	2760	7.0	91
6	10	12	24	18	174	526	532	245	998	1050	55	40
7	10	17	28	17	102	196	209	373	2180	213	559	37
8	12	17	30	17	91	123	130	130	270	109	285	18
9	17	19	166	17	95	95	98	85	130	67	85	26
10	17	14	546	17	112	79	88	67	724	55	45	24
11	17	10	174	17	790	70	79	187	285	40	26	21
12	12	10	95	16	450	61	67	166	119	29	29	7.0
13	5.3	10	67	16	270	50	61	109	1930	50	24	3.7
14	4.0	10	53	17	158	42	61	142	579	138	16	3.7
15	4.0	10	45	16	98	38	47	1220	196	37	9.0	16
16	10	8.5	42	17	174	61	37	345	105	35	9.0	7.0
17	1.2	14	47	17	861	138	213	166	255	24	7.0	7.0
18	19	22	47	16	906	91	2320	749	112	18	3.7	5.2
19	105	40	45	16	2470	79	450	3060	67	21	2.8	5.2
20	45	38	38	17	2610	67	774	552	53	70	1.5	7.0
21	26	28	32	19	565	55	323	218	45	24	2.0	5.2
22	19	19	30	31	280	55	154	127	307	16	2.8	5.2
23	17	17	28	58	494	61	3440	91	130	11	1.0	3.7
24	14	26	26	55	408	53	1620	70	67	14	2.0	7.0
25	28	47	27	64	241	47	285	55	47	11	1.0	3.7
26	55	58	27	166	154	40	158	50	37	7.0	2.0	2.8
27	45	123	26	231	116	50	109	450	29	9.0	5.2	2.0
28	33	350	26	142	166	162	88	1330	24	18	11	2.0
29	24	154	26	95	---	109	76	733	18	14	3.6	11
30	17	91	26	64	---	183	88	307	16	11	24	2.0
31	17	---	28	45	---	231	---	606	---	11	14	---
TOTAL	648.0	1231.5	1948	1343	15851	4662	20165	12034	9926	6195.0	1264.8	1169.4
MEAN	20.9	41.1	62.8	43.3	566	150	672	388	331	200	40.8	39.0
MAX	105	350	546	231	2610	961	7570	3060	2180	2760	559	390
MIN	1.2	8.5	24	16	91	38	37	50	16	7.0	1.0	2.0

CAL YR 1980 TOTAL 93538.0 MEAN 256 MAX 7250 MIN 1.2
WTR YR 1981 TOTAL 76437.7 MEAN 209 MAX 7570 MIN 1.0

LITTLE MIAMI RIVER BASIN

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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 mi² (334 km²).

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 fair, except those for the winter period, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--29 years, 117 ft³/s (3.313 m³/s), 12.32 in/yr (313 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s (419 m³/s) Jan. 21, 1959, gage height, 12.20 ft (3.719 m), from rating curve extended above 4,400 ft³/s (125 m³/s) on basis of slope-area measurements of peak flow; minimum, 5.4 ft³/s (0.15 m³/s) July 29, 1954, result of temporary storage at rock dam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage (ft)	height (m)
Feb. 20	1230	948 26.8	4.65	1.417	May 28	0015	1690 47.9	6.13	1.868
May 12	0630	817 23.1	4.34	1.323	May 30	1645	842 23.8	4.40	1.341
May 15	1215	1190 33.7	5.18	1.579	June 6	0430	*7350 208	*11.03	3.362

Minimum discharge, 23 ft³/s (0.65 m³/s) Sept. 26.

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	61	64	94	40	70	137	59	377	319	112	66	53
2	63	60	89	40	208	124	56	534	243	96	64	50
3	61	58	79	38	82	110	55	299	259	106	62	65
4	62	58	70	37	75	106	64	214	216	101	60	165
5	59	55	70	36	68	156	121	174	1150	102	130	89
6	57	52	68	35	62	199	97	285	5390	94	400	64
7	56	51	67	35	59	168	80	352	1360	87	170	54
8	54	50	68	35	57	145	73	222	524	82	100	54
9	53	49	98	35	56	132	68	176	376	79	75	49
10	52	47	162	35	70	131	65	163	372	76	70	44
11	51	46	122	35	220	127	70	525	294	73	85	42
12	50	44	101	35	100	115	466	682	247	70	60	40
13	49	44	92	35	90	107	358	374	265	78	53	38
14	50	44	81	38	84	96	224	394	545	84	50	41
15	49	44	74	40	80	91	157	1010	312	71	48	48
16	48	44	65	40	172	94	128	555	231	68	48	53
17	53	46	60	40	320	85	148	334	199	66	45	46
18	108	48	56	40	245	81	163	323	174	63	43	42
19	92	45	53	40	421	78	130	443	157	70	42	39
20	73	43	50	40	845	75	120	297	147	177	41	38
21	64	42	48	41	527	72	102	225	152	364	39	39
22	60	44	46	41	351	68	99	186	197	189	37	36
23	56	44	46	41	329	67	465	162	148	120	37	34
24	56	57	45	42	295	64	412	145	131	105	37	34
25	111	87	45	43	237	63	238	132	126	90	36	34
26	102	70	45	70	191	61	177	125	116	86	33	32
27	78	102	45	93	162	67	148	312	108	86	34	31
28	81	171	44	72	152	63	130	729	103	88	37	31
29	81	125	44	60	---	61	189	329	99	88	33	29
30	73	101	43	50	---	69	177	466	100	80	51	31
31	68	---	43	49	---	65	---	594	---	70	65	---
TOTAL	2031	1835	2113	1351	5628	3077	4839	11138	14060	3121	2151	1445
MEAN	65.5	61.2	68.2	43.6	201	99.3	161	359	469	101	69.4	48.2
MAX	111	171	162	93	845	199	466	1010	5390	364	400	165
MIN	48	42	43	35	56	61	55	125	99	63	33	29
CFSM	.51	.47	.53	.34	1.56	.77	1.25	2.78	3.64	.78	.54	.37
IN.	.59	.53	.61	.39	1.62	.89	1.40	3.21	4.05	.90	.62	.42

CAL YR 1980 TOTAL 73677 MEAN 201 MAX 4800 MIN 42 CFSM 1.56 IN 21.25
WTR YR 1981 TOTAL 52789 MEAN 145 MAX 5390 MIN 29 CFSM 1.12 IN 15.22

LITTLE MIAMI RIVER BASIN

0324150C MASSIES 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 mi² (164 km²).

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, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--29 years, 62.6 ft³/s (1.773 m³/s), 13.45 in/yr (342 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s (207 m³/s) Jan. 21, 1959, Mar. 4, 1963, gage height, 11.25 ft (3.429 m), from rating curve extended above 3,100 ft³/s (87.8 m³/s); minimum, 0.3 ft³/s (0.008 m³/s) Sept. 3-7, 1954.

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

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
May 27	2330	1170	33.1	6.17	1.881	June 6	1200	3320	94.0	9.21	2.807
June 5	2300	*3600	102	*9.52	2.902						

Minimum, 7.6 ft³/s (0.22 m³/s) Sept. 22, 30.

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	17	47	77	24	45	74	36	150	192	58	28	16
2	18	41	67	21	80	68	34	203	140	36	27	19
3	17	37	56	20	35	60	33	134	157	79	24	56
4	17	37	49	18	40	57	39	100	132	43	24	60
5	17	36	48	18	35	100	73	79	609	42	93	32
6	17	33	46	17	30	139	60	137	2860	38	56	23
7	17	32	44	16	27	109	50	161	1150	33	33	18
8	17	32	44	15	25	90	46	110	317	30	28	19
9	17	30	67	15	24	79	43	85	220	28	24	16
10	16	28	100	15	45	77	39	84	170	27	22	13
11	16	25	77	15	80	72	44	256	140	25	22	13
12	16	24	67	15	50	67	176	277	120	23	20	12
13	15	24	59	15	40	62	142	174	150	27	18	11
14	15	24	51	15	35	55	96	216	250	32	18	11
15	15	24	45	15	35	52	69	497	130	24	16	11
16	15	23	40	16	60	54	59	303	100	23	16	10
17	18	23	35	17	100	50	58	184	85	21	15	9.9
18	159	26	30	17	150	47	61	176	70	20	14	9.6
19	139	23	30	17	252	45	53	225	65	28	13	9.2
20	80	21	27	17	392	44	52	161	56	143	13	9.2
21	59	21	25	17	261	42	47	125	60	226	12	9.2
22	48	21	25	17	184	39	47	98	70	112	12	8.1
23	39	22	25	17	170	39	355	83	60	70	11	8.1
24	37	52	25	17	162	37	328	71	55	55	11	8.0
25	133	96	25	25	134	37	176	65	50	47	10	8.0
26	113	65	25	35	104	36	128	63	41	42	10	8.0
27	75	115	25	40	90	39	100	232	39	40	10	8.1
28	68	176	25	30	85	36	80	613	37	40	11	8.4
29	66	116	25	25	---	36	80	242	35	49	11	8.1
30	56	88	25	20	---	40	77	225	36	38	22	7.7
31	51	---	25	35	---	39	---	358	---	32	16	---
TOTAL	1403	1362	1334	616	2770	1821	2681	5887	7596	1531	660	459.6
MEAN	45.3	45.4	43.0	19.9	98.9	58.7	89.4	190	253	49.4	21.3	15.3
MAX	159	176	100	40	392	139	355	613	2860	226	93	60
MIN	15	21	25	15	24	36	33	63	35	20	10	7.7
CFSM	.72	.72	.68	.32	1.57	.93	1.42	3.01	4.00	.78	.34	.24
IN.	.83	.80	.79	.36	1.63	1.07	1.58	3.47	4.47	.90	.39	.27

CAL YR 1980 TOTAL 34558.0 MEAN 94.4 MAX 1880 MIN 15 CFSM 1.49 IN 20.34
WTR YR 1981 TOTAL 28120.6 MEAN 77.0 MAX 2860 MIN 7.7 CFSM 1.22 IN 16.55

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 mi² (948 km²).

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.--35 years (1925-35, 1939-51, 1969-81), 393 ft³/s (11.13 m³/s), 14.58 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s (521 m³/s) Feb. 26, 1929, gage height, 16.8 ft (5.12 m) site and datum then in use; minimum, 23 ft³/s (0.65 m³/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 ft³/s (1,030 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 6	2030	*9890 280	*14.53 4.429	July 1	1200	4200 119	10.19 3.106

Minimum 114 ft³/s (3.23 m³/s) Jan. 4, 5. Result of freezeup.

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	163	226	334	170	306	434	220	776	1140	2590	225	526
2	174	210	317	160	380	396	203	1150	844	550	217	290
3	169	198	289	140	319	365	196	779	887	506	209	821
4	163	208	255	120	290	348	258	599	771	547	207	671
5	163	199	245	120	260	600	576	508	763	575	264	386
6	156	185	239	120	220	542	389	731	5880	452	1670	293
7	155	179	230	120	200	472	311	869	7450	372	656	248
8	154	176	228	120	170	466	279	621	2200	331	375	259
9	152	172	346	120	150	406	256	517	1070	305	297	232
10	149	163	456	120	222	414	239	493	896	290	266	211
11	143	162	409	120	432	399	245	1120	783	268	347	198
12	138	157	345	120	337	374	1400	1520	679	250	250	190
13	136	155	306	120	300	351	1100	984	767	254	232	181
14	139	155	220	120	260	321	700	1220	1410	440	219	177
15	141	154	200	120	250	297	500	2670	1060	271	213	250
16	139	152	190	120	484	316	350	1660	694	245	207	194
17	144	153	170	120	968	292	400	985	604	232	198	190
18	380	181	160	120	771	275	450	1180	526	223	190	183
19	360	175	150	120	1020	264	400	1390	477	290	173	177
20	330	160	140	120	2010	255	370	961	439	950	168	168
21	253	157	130	120	1360	245	330	728	464	1110	164	162
22	219	154	130	120	909	232	600	608	540	767	162	162
23	199	157	130	130	850	223	1500	530	430	483	155	157
24	189	230	130	140	756	219	1400	473	380	392	155	153
25	428	338	130	150	586	212	900	426	386	339	157	155
26	417	296	130	195	552	210	600	436	347	290	153	152
27	311	449	130	261	473	268	500	829	318	308	152	141
28	313	592	130	239	466	230	430	2970	300	323	160	138
29	293	484	140	202	---	211	550	1230	290	320	155	140
30	265	385	160	177	---	276	542	1870	283	273	234	141
31	243	---	170	152	---	247	---	2190	---	245	275	---
TOTAL	6778	6762	6739	4396	15301	10160	16194	33023	33078	14791	8505	7346
MEAN	219	225	217	142	546	328	540	1065	1103	477	274	245
MAX	428	592	456	261	2010	600	1500	2970	7450	2590	1670	821
MIN	136	152	130	120	150	210	196	426	283	223	152	138
CFSM	.60	.62	.59	.39	1.49	.90	1.48	2.91	3.01	1.30	.75	.67
IN.	.69	.69	.68	.45	1.56	1.03	1.65	3.36	3.36	1.50	.86	.75
CAL YR 1980 TOTAL	204475	MEAN 559	MAX 7560	MIN 130	CFSM 1.53	IN 20.78						
WTR YR 1981 TOTAL	163073	MEAN 447	MAX 7450	MIN 120	CFSM 1.22	IN 16.57						

LITTLE MIAMI RIVER BASIN

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 mi² (185 km²).

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 and Apr. 2 to June 3, 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 mi² (28.2 km²). Summer storage is about 1,100 acre-ft (1.36 hm³) more than winter. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--13 years, 81.3 ft³/s (2.302 m³/s) 15.46 in/yr (393 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,170 ft³/s (146 m³/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 ft³/s (0.012 m³/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 ft³/s (354 m³/s) result of contracted opening estimate.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,380 ft³/s (124 m³/s) June 6, gage height 13.33 ft (4.063 m) peak above base of 1,000 ft³/s (28.3 m³/s); minimum daily 0.90 ft³/s (0.025 m³/s) Sept. 30.

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	5.2	74	78	20	70	85	24	150	130	29	14	6.6
2	5.2	60	67	19	110	68	21	200	80	22	13	7.7
3	5.2	50	54	19	70	45	35	130	278	24	13	9.5
4	5.1	46	51	19	55	44	55	80	187	24	13	14
5	5.0	40	51	19	50	206	100	65	254	24	13	8.0
6	4.8	35	46	18	40	164	75	100	2870	24	32	6.0
7	4.6	31	44	17	40	102	60	150	478	21	18	5.2
8	4.5	29	43	16	35	78	50	100	221	20	15	4.6
9	4.4	26	85	16	30	67	45	70	158	19	13	4.3
10	4.3	22	116	16	45	62	37	50	95	18	12	3.8
11	4.2	20	82	16	130	57	55	100	75	18	12	3.3
12	4.2	17	68	16	100	51	130	200	78	17	11	2.8
13	4.1	17	59	17	80	46	100	150	146	17	10	2.4
14	4.1	17	50	18	50	37	75	200	153	20	9.3	2.6
15	4.1	17	46	18	45	36	55	300	82	18	8.8	3.1
16	4.1	15	40	20	105	40	52	200	60	17	8.1	2.3
17	4.9	17	35	20	160	35	55	120	50	17	7.9	2.2
18	227	20	30	20	148	33	60	130	42	15	7.0	2.1
19	76	18	29	20	294	30	60	160	38	15	6.3	2.1
20	44	16	28	20	377	29	80	130	36	28	5.7	1.9
21	32	16	28	20	213	26	70	100	34	120	5.1	1.9
22	25	16	27	20	170	23	65	85	34	84	4.9	1.7
23	20	17	27	20	178	22	160	70	30	30	4.6	1.5
24	18	84	25	20	172	20	150	55	27	23	4.3	1.5
25	148	112	24	30	141	20	110	45	26	20	4.1	1.3
26	85	65	23	58	112	18	75	75	26	18	4.1	1.3
27	98	196	23	57	95	27	55	130	24	17	3.9	1.2
28	162	192	23	37	92	24	45	230	23	17	3.6	1.1
29	137	125	22	34	---	23	70	130	21	17	4.2	1.0
30	110	93	22	27	---	33	100	160	22	17	5.5	.90
31	90	---	21	37	---	28	---	200	---	15	7.4	---
TOTAL	1350.0	1503	1367	724	3207	1579	2124	4065	5778	785	293.8	107.90
MEAN	43.5	50.1	44.1	23.4	115	50.9	70.8	131	193	25.3	9.48	3.60
MAX	227	196	116	58	377	206	160	300	2870	120	32	14
MIN	4.1	15	21	16	30	18	21	45	21	15	3.6	.90
CFSM	.61	.70	.62	.33	1.61	.71	.99	1.84	2.70	.35	.13	.05
IN.	.70	.78	.71	.38	1.67	.82	1.11	2.12	3.01	.41	.15	.06
CAL YR 1980	TOTAL	33540.00	MEAN	91.6	MAX	2500	MIN	4.1	CFSM	1.28	IN	17.47
WTR YR 1981	TOTAL	22883.70	MEAN	62.7	MAX	2870	MIN	.90	CFSM	.88	IN	11.92

LITTLE MIAMI RIVER BASIN

301

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 mi² (202 km²).

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 except those for winter periods and no gage-height record, Oct. 1-9, Apr. 26-June 1, which are poor. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--13 years, 85.7 ft³/s (2.427 m³/s), 14.96 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,510 ft³/s (156 m³/s) Feb. 24, 1975, gage height, 12.76 ft (3.889 m); minimum, 0.08 ft³/s (0.002 m³/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 ft³/s (266 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,220 ft³/s (34.6 m³/s) July 1, gage height 7.91 ft (2.411 m) above base of 1,000 ft³/s (28.3 m³/s); minimum, 0.38 ft³/s (0.011 m³/s) Sept. 29, 30.

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	6.2	14	56	12	49	95	42	110	200	280	8.5	2.1
2	6.2	13	48	12	66	74	33	150	212	44	7.7	2.5
3	6.2	11	35	12	43	63	35	120	427	31	6.9	8.9
4	6.2	11	29	11	40	62	50	90	236	26	6.9	8.5
5	6.2	11	29	11	35	247	271	60	224	49	6.6	5.3
6	6.0	11	27	10	33	192	148	90	513	37	7.7	3.7
7	5.8	9.8	25	10	30	111	97	200	348	26	6.6	2.6
8	5.6	9.8	25	10	29	97	77	150	168	22	6.6	2.1
9	5.3	9.4	58	10	27	79	68	90	116	19	5.9	1.8
10	5.0	9.4	92	10	25	70	55	50	93	19	6.2	1.6
11	4.4	8.5	66	10	177	66	56	85	77	18	6.9	1.7
12	3.9	7.7	53	10	80	60	146	150	67	18	4.7	1.8
13	3.7	7.3	45	10	60	56	105	100	63	20	3.9	1.8
14	3.5	7.3	34	10	50	46	84	130	63	41	3.5	2.1
15	3.2	7.3	31	10	45	44	64	200	55	25	3.5	4.7
16	2.8	7.3	31	11	74	56	55	160	46	19	3.2	4.2
17	2.1	8.1	25	11	202	50	63	120	45	15	3.0	3.0
18	33	11	23	11	170	46	67	140	39	13	2.8	2.8
19	23	9.8	20	11	341	44	63	180	35	12	3.2	2.5
20	13	8.5	20	11	522	39	84	150	34	18	3.2	2.1
21	9.4	8.5	19	11	275	35	75	110	33	42	2.8	1.8
22	7.7	11	19	11	189	33	68	85	34	36	2.3	1.2
23	6.6	13	18	11	175	32	430	65	29	23	2.0	1.0
24	6.2	49	18	11	180	33	284	50	25	17	1.6	.67
25	60	81	17	17	144	30	152	35	25	14	1.6	.67
26	50	50	16	37	107	30	100	70	22	12	1.4	.67
27	26	114	15	46	90	40	65	150	21	11	1.4	.54
28	24	166	14	30	102	48	40	340	20	23	1.3	.54
29	19	93	14	23	---	39	50	275	20	17	1.3	.37
30	16	67	13	20	---	44	75	210	20	11	1.7	.37
31	13	---	13	25	---	49	---	250	---	10	2.3	---
TOTAL	389.2	844.7	948	455	3360	2010	3002	4165	3310	968	127.2	73.63
MEAN	12.6	28.2	30.6	14.7	120	64.8	100	134	110	31.2	4.10	2.45
MAX	60	166	92	46	522	247	430	340	513	280	8.5	8.9
MIN	2.1	7.3	13	10	25	30	33	35	20	10	1.3	.37
CFSM	.16	.36	.39	.19	1.54	.83	1.29	1.72	1.41	.40	.05	.03
IN.	.19	.40	.45	.22	1.61	.96	1.44	1.99	1.58	.46	.06	.04
CAL YR 1980	TOTAL	27533.90	MEAN	75.2	MAX	973	MIN	2.1	CFSM	.97	IN	13.17
WTR YR 1981	TOTAL	19652.73	MEAN	53.8	MAX	522	MIN	.37	CFSM	.69	IN	9.40

LITTLE MIAMI RIVER BASIN

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 mi² (3,116 km²).

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 except those for winter period, which are fair. Some regulation since 1948 by Cowan Lake, capacity 12,000 acre-ft (14.8 hm³), 45 mi (72 km) upstream on Cowan Creek, tributary to Todd Fork, and Caesar Creek Lake capacity 242,200 acre-ft (298.6 hm³) 41.3 mi (66.4 km) upstream on Caesar Creek.

AVERAGE DISCHARGE.--56 years, (1915-17, 1925-36, 1938-81), 1,244 ft³/s (35.23 m³/s), 14.04 in/yr (357 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,100 ft³/s (2,380 m³/s) Jan. 22, 1959, gage height, 27.30 ft (8.321 m) present datum, from rating curve extended above 60,000 ft³/s (1,700 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 27 ft³/s (0.76 m³/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.--Maximum discharge, 13,900 ft³/s (394 m³/s) Apr. 23, gage height, 12.96 ft (3.950 m), no peak above base of 15,000 ft³/s (425 m³/s); minimum daily discharge, 179 ft³/s (5.07 m³/s) Sept. 30.

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	296	497	1180	300	801	1850	643	1320	3710	1100	376	509
2	279	486	1010	290	3190	1470	544	1810	3940	2230	358	762
3	263	469	915	260	1290	992	469	1810	3910	1820	348	1570
4	263	421	724	230	778	915	1100	1370	3230	1470	317	1440
5	259	400	605	210	710	3230	5510	1060	2350	2370	309	841
6	255	348	562	210	669	2590	1730	1570	6150	1770	1490	550
7	243	279	526	210	636	2080	1160	2120	8890	940	1730	437
8	240	275	509	210	611	1510	907	2030	7110	643	932	390
9	236	263	710	210	574	1340	747	1310	2710	532	568	405
10	236	259	1210	210	592	1110	636	1140	3380	475	447	386
11	232	292	1060	210	2490	1010	592	2250	3180	437	630	367
12	221	300	958	210	1630	949	1130	3280	3700	400	492	313
13	217	271	793	210	966	817	1680	2770	2580	381	376	279
14	213	243	682	210	984	739	1290	2350	1830	453	339	251
15	213	243	598	210	907	688	984	6130	1950	592	317	283
16	213	240	605	210	1250	770	770	4050	1590	480	304	344
17	224	292	598	210	3150	890	1950	2430	1080	442	296	300
18	636	416	538	210	2840	702	4800	4020	915	390	283	267
19	778	526	497	210	5340	643	1670	5570	801	358	271	251
20	605	532	464	224	6710	586	2930	3850	762	509	259	236
21	492	492	358	267	4020	544	1600	3430	849	1480	251	232
22	437	437	322	344	2990	520	1160	3160	1020	1570	247	224
23	400	405	320	376	3110	497	9300	1840	833	1250	240	217
24	386	568	320	362	2950	475	5740	1200	662	873	228	210
25	710	1010	320	339	2530	469	3290	1050	562	550	221	203
26	809	923	310	395	2150	447	2400	1180	538	453	221	199
27	649	1580	300	520	1940	580	2020	2960	497	458	224	192
28	550	1970	300	568	1890	890	1810	7790	458	497	236	192
29	562	1560	300	480	---	702	1480	5580	447	503	240	182
30	568	1310	300	410	---	890	1400	3790	431	469	271	179
31	532	---	300	372	---	915	---	5680	---	416	313	---
TOTAL	12217	17307	18194	8887	57698	31810	61442	89900	70065	26311	13134	12211
MEAN	394	577	587	287	2061	1026	2048	2900	2336	849	424	407
MAX	809	1970	1210	568	6710	3230	9300	7790	8890	2370	1730	1570
MIN	213	240	300	210	574	447	469	1050	431	358	221	179
CFSM	.33	.48	.49	.24	1.71	.85	1.70	2.41	1.94	.71	.35	.34
IN.	.38	.54	.56	.27	1.78	.98	1.90	2.78	2.17	.81	.41	.38
CAL YR 1980	TOTAL	506532	MEAN	1384	MAX	16200	MIN	213	CFSM	1.15	IN	15.66
WTR YR 1981	TOTAL	419176	MEAN	1148	MAX	9300	MIN	179	CFSM	.95	IN	12.96

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, 1947; 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 3.8 mg/L July 21, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,730 mg/L July 10, 1980; minimum daily mean, 1.0 mg/L several days in 1979 and 1980.
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, 924 micromhos Feb. 19; minimum, 194 micromhos July 10.
pH: Maximum, 8.9 units Sept. 29, 30; minimum, 6.6 units Mar. 5.
WATER TEMPERATURES: Maximum, 30.5°C July 20; minimum, 0.0°C on many days during winter period.
DISSOLVED OXYGEN: Maximum, 18.0 mg/L Mar. 3; minimum, 5.5 mg/L June 29.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,730 mg/L July 10, 1980; minimum daily mean, 1.0 mg/L Feb. 13, 14.
SEDIMENT LOADS: Maximum daily, 173,000 tons (157,000 tonnes) July 10; minimum daily, 1.2 tons (1.1 tonnes) Feb. 13, 14.

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 20...	1230	630	695	8.3	13.5	.90	8.8	84	19	560
NOV 04...	1245	410	672	8.7	11.0	.50	11.7	100	10	7400
DEC 11...	0930	1100	640	8.5	6.0	.90	13.0	100	16	4400
JAN 07...	0900	279	810	8.8	.0	.50	15.0	100	11	4000
FEB 10...	1215	520	752	8.3	.5	.50	13.4	93	10	2600
MAR 11...	0830	1020	650	8.2	5.0	1.0	12.0	94	<10	3200
APR 07...	1200	1160	548	8.0	11.0	30	10.9	99	31	3800
MAY 05...	0845	1070	640	8.0	16.0	24	8.9	89	13	1600
JUN 03...	1130	4500	560	8.0	17.0	65	8.9	92	<10	K5200
JUL 08...	1100	675	600	--	25.5	55	7.2	87	14	1900
AUG 05...	1100	304	768	8.5	26.5	15	8.4	100	10	K40
SEP 02...	0845	675	800	8.2	23.0	35	7.1	82	32	800

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 20...	50	270	45	72	23	25	5.2	42	50	.3
NOV 04...	360	300	48	73	28	24	3.2	40	39	.3
DEC 11...	900	290	72	74	26	21	3.3	54	40	.2
JAN 07...	1100	330	53	84	30	36	3.0	54	72	.3
FEB 10...	400	340	91	87	30	23	2.8	48	48	.2
MAR 11...	600	330	86	83	29	18	2.4	48	37	.2
APR 07...	170	240	69	61	21	23	3.5	47	37	.2
MAY 05...	600	310	89	76	29	20	2.8	45	34	.2
JUN 03...	K11000	260	64	66	24	13	2.6	40	27	.2
JUL 08...	360	270	69	68	24	20	2.8	38	33	.2
AUG 05...	63	260	44	66	24	25	2.3	35	42	.2
SEP 02...	530	330	73	84	30	39	3.5	41	63	.3

DATE	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, ORGANIC 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)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
OCT 20...	5.0	427	372	.52	.63	3.0	13	.490	--	--
NOV 04...	3.4	400	373	.34	.42	3.0	13	.310	4.0	550
DEC 11...	5.0	417	370	.56	.92	3.9	17	.520	5.0	--
JAN 07...	.8	491	462	.31	.53	3.5	16	.440	--	--
FEB 10...	3.7	428	406	.25	.57	.58	2.6	.330	2.6	--
MAR 11...	4.3	387	381	.31	.43	3.7	17	.180	2.7	750
APR 07...	6.3	373	315	.74	.95	4.1	18	.310	--	--
MAY 05...	6.2	388	368	1.0	1.10	8.2	36	.230	5.4	2900
JUN 03...	5.9	376	322	.80	.87	5.8	26	.310	7.3	66000
JUL 08...	6.9	383	332	.62	.64	7.5	33	.250	--	18000
AUG 05...	4.6	360	341	.40	.41	2.6	12	.380	3.8	55000
SEP 02...	5.1	491	435	.48	.63	3.5	16	.170	9.3	--

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 20...	1230	3	2	100	80	1	1	10	0
JAN 07...	0900	3	3	100	80	0	0	20	10
APR 07...	1200	0	0	100	60	<1	<1	<10	<10
JUL 08...	1100	2	2	100	70	1	<1	10	<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 20...	0	0	6	4	2500	30	6	0	70
JAN 07...	0	0	5	3	200	10	3	0	30
APR 07...	0	0	8	8	880	70	17	0	100
JUL 08...	1	--	4	--	2800	<10	13	--	120

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 20...	10	.2	.1	0	0	0	0	40	20
JAN 07...	20	.2	.2	0	0	1	0	20	5
APR 07...	40	.3	.1	0	0	0	0	70	30
JUL 08...	8	.1	.1	0	0	0	0	40	<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 20...	1230	630	13.5	23	39
NOV 04...	1245	410	11.0	13	14
DEC 11...	0930	1100	6.0	14	42
JAN 07...	0900	279	.0	4	3.0
FEB 10...	1215	520	.5	5	7.0
MAR 11...	0830	1020	5.0	16	44
APR 07...	1200	1160	11.0	37	116
MAY 05...	0845	1070	16.0	53	153
JUN 03...	1130	4500	17.0	261	3170
JUL 08...	1100	675	25.5	98	179
AUG 05...	1100	304	26.5	46	38
SEP 02...	0845	675	23.0	77	140

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	766	722	682	656	602	586	790	770	692	584	604	592
2	760	734	688	664	614	596	796	768	556	454	624	598
3	764	732	690	664	634	598	778	750	590	480	642	616
4	762	740	692	662	636	620	798	758	624	582	690	634
5	802	760	686	654	650	620	814	770	642	622	692	476
6	810	778	708	674	674	652	804	780	682	628	552	476
7	808	794	718	692	686	666	826	788	690	680	602	556
8	800	766	740	710	694	680	874	832	700	686	620	584
9	794	766	770	736	700	676	880	850	710	694	538	616
10	800	770	788	764	692	652	896	858	706	692	650	632
11	800	776	798	754	668	648	892	824	760	504	674	642
12	798	774	790	756	660	642	860	828	642	514	680	662
13	802	780	782	740	654	642	858	832	560	538	688	662
14	808	778	758	720	670	644	864	834	568	546	706	668
15	814	780	752	722	688	670	848	828	628	566	700	682
16	818	776	772	742	702	678	854	838	712	622	694	674
17	820	740	792	772	706	686	856	818	654	526	682	662
18	828	606	766	696	704	684	854	808	554	506	696	644
19	744	704	762	742	706	688	838	798	538	430	668	648
20	726	590	744	658	716	694	830	798	484	414	690	660
21	628	576	662	624	728	710	878	796	532	488	690	666
22	636	618	642	626	746	718	896	820	566	528	702	676
23	680	628	658	636	754	724	824	784	576	568	698	680
24	694	670	654	634	768	748	788	744	588	572	710	676
25	698	580	684	634	788	758	772	726	596	586	712	678
26	666	642	660	628	778	750	746	714	602	590	710	680
27	704	658	660	520	786	758	726	698	602	592	706	682
28	694	640	560	508	784	748	732	698	604	590	692	672
29	666	654	574	554	758	732	708	690	---	---	686	658
30	684	664	592	570	810	758	704	682	---	---	672	626
31	682	664	---	---	808	778	698	672	---	---	650	630
MONTH	828	576	798	508	810	586	896	672	760	414	712	476

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	676	640	670	608	540	472	742	692	750	710	806	760
2	702	672	654	622	574	544	736	310	752	720	800	544
3	702	676	622	578	576	490	552	340	742	702	532	358
4	718	430	632	576	582	492	576	530	756	738	626	390
5	480	342	664	632	574	536	582	378	774	722	572	436
6	---	---	672	598	564	348	576	470	780	480	566	468
7	600	540	606	590	332	242	580	540	642	232	658	568
8	656	606	610	590	420	256	656	578	448	316	698	656
9	680	654	620	588	580	422	722	654	526	448	712	678
10	702	680	668	632	600	580	752	720	616	518	732	698
11	716	698	652	536	596	586	762	742	644	556	748	722
12	722	594	570	526	594	342	766	748	724	610	740	722
13	672	552	562	532	588	394	770	740	746	726	754	716
14	612	556	586	420	660	582	768	740	750	720	758	728
15	654	600	470	370	660	540	758	740	736	712	806	750
16	686	656	502	448	542	510	766	736	770	738	816	788
17	686	456	590	498	640	540	738	620	788	768	800	770
18	540	254	618	384	700	640	680	628	802	782	806	788
19	564	414	472	382	720	698	694	658	812	772	814	778
20	564	466	556	470	736	716	710	680	798	770	796	740
21	564	478	574	556	736	622	748	498	818	780	808	754
22	626	574	580	574	682	634	494	464	824	770	802	796
23	616	300	622	578	702	678	540	466	816	788	812	806
24	496	368	672	622	700	672	572	524	812	780	844	812
25	562	498	690	674	712	678	642	570	808	752	858	824
26	604	564	698	526	728	698	682	640	798	758	852	820
27	614	602	608	420	756	726	742	688	790	714	844	826
28	622	606	474	386	764	740	762	720	770	750	858	834
29	636	610	510	418	766	722	766	726	792	762	866	842
30	668	642	564	518	740	702	768	752	804	758	880	844
31	---	---	518	400	---	---	764	732	798	740	---	---
MONTH	722	254	698	370	766	242	770	310	824	232	880	358
YEAR	896	232										

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PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.9	8.6	8.7	8.6	8.7	8.5	8.8	8.6	9.0	8.7	8.1	8.1
2	8.9	8.5	8.7	8.7	8.6	8.5	8.9	8.6	8.7	8.4	8.2	8.1
3	8.9	8.6	8.7	8.6	8.7	8.5	8.9	8.7	8.4	8.4	8.3	8.2
4	8.8	8.6	8.7	8.6	8.8	8.6	9.0	8.7	8.5	8.4	8.3	8.2
5	8.9	8.7	8.8	8.6	8.7	8.6	9.0	8.8	8.6	8.5	8.2	8.0
6	8.9	8.7	8.9	8.7	8.8	8.6	9.0	8.8	8.6	8.5	8.1	8.0
7	8.9	8.6	8.9	8.7	8.7	8.6	9.0	8.8	8.7	8.6	8.2	8.1
8	9.0	8.7	8.9	8.7	8.7	8.6	8.9	8.8	8.7	8.6	8.2	8.2
9	9.0	8.7	8.9	8.7	8.6	8.5	8.9	8.7	8.7	8.7	8.5	8.1
10	9.0	8.7	9.0	8.7	8.6	8.5	8.9	8.7	8.7	8.3	8.5	8.2
11	9.0	8.7	9.0	8.7	8.6	8.5	8.9	8.7	8.3	8.0	8.3	8.2
12	9.0	8.7	9.0	8.8	8.7	8.5	8.8	8.7	8.1	8.0	8.4	8.2
13	9.0	8.8	9.1	8.8	8.8	8.6	8.9	8.7	8.0	8.0	8.4	8.2
14	9.0	8.8	9.0	8.8	8.8	8.7	8.9	8.7	8.1	8.0	8.4	8.3
15	9.0	8.8	8.9	8.8	8.8	8.7	8.8	8.6	8.2	8.1	8.4	8.3
16	9.0	8.8	8.9	8.8	8.8	8.7	8.8	8.6	8.2	8.1	8.5	8.2
17	9.0	8.8	8.8	8.7	8.9	8.7	8.8	8.6	8.1	8.0	8.5	8.3
18	8.8	8.4	8.8	8.6	8.9	8.8	8.9	8.6	8.0	7.9	8.6	8.3
19	8.5	8.2	8.8	8.7	8.9	8.8	8.9	8.7	8.0	7.8	8.6	8.5
20	8.4	8.3	8.9	8.8	9.0	8.8	8.9	8.7	7.9	7.7	8.6	8.4
21	8.5	8.3	8.9	8.8	9.0	8.8	8.9	8.7	8.0	7.8	8.7	8.5
22	8.6	8.4	8.9	8.8	9.0	8.8	8.9	8.7	7.9	7.9	8.5	8.4
23	8.7	8.4	8.9	8.7	8.9	8.8	8.9	8.7	8.1	7.9	8.7	8.2
24	8.6	8.5	8.7	8.6	8.9	8.8	9.0	8.7	8.1	8.0	---	---
25	8.5	8.4	8.6	8.5	8.9	8.7	9.0	8.8	8.1	8.1	---	---
26	8.5	8.4	8.7	8.5	8.9	8.7	9.0	8.7	8.2	8.1	---	---
27	8.6	8.5	8.7	8.5	8.9	8.7	9.0	8.8	8.2	8.1	---	---
28	8.5	8.4	8.5	8.4	9.0	8.8	9.0	8.8	8.2	8.1	---	---
29	8.6	8.5	8.5	8.5	8.9	8.8	9.0	8.8	---	---	---	---
30	8.7	8.6	8.6	8.5	8.8	8.7	9.0	8.9	---	---	---	---
31	8.7	8.6	---	---	8.8	8.7	9.1	8.9	---	---	---	---
MONTH	9.0	8.2	9.1	8.4	9.0	8.5	9.1	8.6	9.0	7.7	8.7	8.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.1	7.9	8.0	7.9	8.6	8.2	8.3	8.2	8.4	8.3
2	---	---	8.1	8.0	8.0	8.0	8.1	7.6	8.4	8.2	8.3	8.0
3	---	---	8.0	8.0	8.0	7.9	8.0	7.6	8.4	8.2	8.0	7.8
4	---	---	8.0	8.0	8.0	7.9	8.0	7.9	8.5	8.2	8.0	7.8
5	---	---	8.1	8.0	8.0	7.9	8.0	7.8	8.5	8.2	8.0	7.9
6	---	---	8.1	8.0	8.0	7.7	7.9	7.8	8.4	7.8	8.1	7.9
7	---	---	8.0	8.0	7.7	7.6	8.0	7.9	8.0	7.6	8.1	8.0
8	---	---	8.1	8.0	7.8	7.7	8.0	7.9	7.9	7.7	8.2	8.1
9	---	---	8.1	8.0	8.0	7.8	8.1	8.0	8.0	7.8	8.2	8.1
10	---	---	8.1	8.0	8.0	7.9	---	---	8.1	7.9	8.3	8.2
11	---	---	8.0	8.0	8.0	8.0	---	---	8.1	7.9	8.2	8.1
12	---	---	8.0	7.9	8.1	7.8	---	---	8.2	8.0	8.2	8.1
13	---	---	8.0	8.0	8.0	7.8	---	---	8.2	8.1	8.3	8.1
14	---	---	8.1	7.9	8.0	7.9	---	---	8.2	8.1	8.2	8.1
15	---	---	7.9	7.8	8.0	7.9	---	---	8.2	8.1	8.2	8.1
16	---	---	7.9	7.5	7.9	7.9	---	---	8.4	8.2	8.2	8.1
17	---	---	8.0	7.6	8.1	7.9	---	---	8.5	8.2	8.3	8.1
18	---	---	8.1	7.9	8.1	8.1	---	---	8.5	8.3	8.3	8.2
19	---	---	8.0	7.8	8.1	8.1	---	---	8.6	8.4	8.3	8.2
20	---	---	8.0	7.8	8.2	8.1	---	---	8.7	8.4	8.4	8.2
21	---	---	8.0	7.9	8.2	8.1	---	---	8.6	8.4	8.3	8.2
22	---	---	8.0	8.0	8.1	8.1	---	---	8.6	8.4	---	---
23	---	---	8.0	7.9	8.2	8.1	---	---	8.6	8.4	---	---
24	---	---	8.1	8.0	8.2	8.1	---	---	8.7	8.5	---	---
25	---	---	8.1	8.0	8.3	8.2	---	---	8.6	8.5	---	---
26	---	---	8.1	7.9	8.3	8.2	8.2	8.1	8.6	8.4	---	---
27	8.1	7.9	8.0	7.9	8.4	8.2	8.2	8.1	8.5	8.4	---	---
28	8.0	7.9	7.9	7.8	8.4	8.3	8.2	8.1	8.4	8.2	---	---
29	8.1	8.0	7.9	7.8	8.5	8.3	8.2	8.1	8.4	8.2	---	---
30	8.1	8.0	8.0	7.9	8.6	8.4	8.3	8.2	8.4	8.2	---	---
31	---	---	7.9	7.8	---	---	8.3	8.2	8.4	8.1	---	---
MONTH	8.1	7.9	8.1	7.5	8.6	7.6	8.6	7.6	8.7	7.6	8.4	7.8
YEAR	9.1	7.5										

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

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.0	15.0	16.5	15.0	19.0	16.5	27.0	25.0	26.5	23.0	25.0	24.0
2	17.5	14.5	16.0	14.0	17.0	15.5	24.5	22.5	27.5	24.5	24.0	22.5
3	17.0	15.0	16.0	13.5	18.5	16.5	23.5	21.5	27.0	24.5	23.0	22.0
4	16.0	14.0	17.5	14.0	19.0	17.5	22.5	20.5	28.0	25.0	23.0	22.0
5	14.0	12.5	17.5	16.0	20.5	18.5	22.5	21.5	28.0	25.5	24.0	21.5
6	---	---	17.0	15.5	20.5	20.0	23.5	21.5	27.0	24.0	24.5	22.0
7	13.0	10.5	15.5	14.0	21.5	20.0	26.5	22.5	24.0	22.0	24.5	22.5
8	14.5	11.5	16.0	14.0	22.0	21.5	28.0	25.0	24.0	22.0	24.5	22.5
9	16.5	14.0	16.0	14.5	23.5	21.5	29.0	26.5	25.0	22.5	23.5	21.5
10	16.5	14.5	16.0	15.5	22.5	18.5	29.5	27.5	26.0	23.0	23.0	20.5
11	18.0	16.0	15.5	14.0	18.5	17.5	28.5	26.0	25.5	24.0	23.5	20.5
12	19.0	17.0	14.5	13.5	20.5	17.5	28.0	25.5	25.5	23.0	24.5	21.5
13	19.0	17.0	14.5	13.5	20.5	19.5	29.5	26.0	25.5	23.0	25.0	22.0
14	18.5	17.0	15.0	14.0	23.5	20.0	29.5	27.0	26.0	23.5	24.5	23.0
15	17.5	15.0	15.0	14.0	25.0	23.0	27.5	26.0	26.0	24.0	23.5	21.5
16	16.0	14.5	16.0	12.0	25.5	23.5	27.0	25.0	25.0	24.0	21.5	19.0
17	16.5	15.0	20.5	13.0	24.5	22.5	28.0	25.0	24.5	22.0	19.0	18.0
18	18.0	16.0	17.0	12.5	25.0	22.0	28.5	25.5	24.0	21.0	18.0	16.5
19	17.5	16.0	13.0	11.5	24.0	22.0	27.0	25.5	24.5	21.0	18.0	16.0
20	15.5	13.0	16.0	10.0	25.0	22.0	26.5	25.0	25.0	21.5	19.5	16.5
21	14.0	12.0	15.0	11.0	24.0	23.0	25.5	24.0	24.0	22.0	20.0	17.5
22	14.0	12.5	15.5	13.0	25.0	22.5	24.5	23.5	25.0	21.5	19.5	18.5
23	16.0	14.0	21.0	15.0	25.5	22.5	24.0	22.5	25.0	22.0	18.5	16.5
24	15.0	13.0	21.5	17.0	25.0	22.5	25.5	22.5	25.5	22.5	18.5	16.0
25	17.5	12.0	22.0	19.0	26.5	24.0	26.0	24.0	26.0	23.0	18.0	16.5
26	16.0	12.5	21.0	19.5	26.0	23.5	27.0	25.0	26.0	23.5	20.0	17.0
27	16.0	13.0	19.5	18.0	25.5	22.5	27.0	25.5	25.5	24.0	21.0	19.0
28	17.5	15.0	18.0	16.5	25.5	22.5	26.5	25.5	25.5	23.5	20.0	18.0
29	17.0	16.0	17.5	16.0	26.5	23.5	25.0	23.5	25.0	24.0	19.0	17.0
30	17.5	15.5	17.0	16.5	27.5	25.0	24.5	21.5	25.0	23.5	19.5	16.5
31	---	---	20.0	17.5	---	---	25.0	22.0	26.5	23.5	---	---
MONTH	19.0	10.5	22.0	10.0	27.5	15.5	29.5	20.5	28.0	21.0	25.0	16.0
YEAR	29.5	.0										

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	12.9	8.4	12.5	11.4	13.4	12.7	16.2	14.8	14.2	12.9	11.4	10.8
2	12.7	8.1	12.8	11.2	13.0	12.3	17.9	15.1	13.0	12.4	13.8	10.6
3	12.4	8.1	12.8	11.2	13.6	12.0	17.9	15.6	13.0	12.6	14.2	12.8
4	12.4	8.9	12.3	11.1	14.2	12.8	19.1	16.0	13.1	12.7	13.9	13.3
5	13.1	9.5	13.1	11.2	14.0	12.5	19.3	16.7	13.7	13.0	13.4	12.0
6	14.3	10.1	13.8	11.6	14.9	12.7	18.0	16.2	13.4	12.9	13.9	12.0
7	14.3	9.7	13.8	11.4	14.3	12.5	18.2	15.4	13.3	12.8	14.2	12.8
8	14.7	9.6	13.9	10.8	13.9	12.0	18.0	16.2	13.9	12.7	13.5	13.0
9	14.4	9.3	13.8	10.6	12.1	11.3	18.3	16.1	14.2	13.1	14.7	12.8
10	14.1	9.0	13.9	10.4	13.1	11.4	18.5	16.1	13.5	12.9	14.6	13.3
11	12.9	8.8	14.6	11.2	14.1	12.3	18.1	15.7	12.8	12.4	---	---
12	13.1	9.1	15.0	11.8	15.4	13.3	18.5	16.0	12.9	12.5	---	---
13	14.3	9.7	15.3	12.1	15.8	13.7	19.7	15.7	13.0	12.6	---	---
14	14.2	9.8	14.6	11.7	16.4	14.0	19.5	15.4	13.0	12.7	---	---
15	14.1	9.6	13.4	11.6	15.3	14.4	19.1	15.8	13.1	12.7	---	---
16	13.4	9.2	14.6	11.4	15.9	14.3	19.4	15.7	12.7	12.1	---	---
17	10.9	8.7	12.8	11.8	17.3	14.1	19.3	15.4	12.5	11.9	---	---
18	8.9	7.2	13.7	11.4	17.0	14.8	19.5	15.8	12.3	11.8	14.1	12.6
19	9.0	6.9	14.5	12.2	16.8	14.7	19.9	15.7	---	---	14.2	11.8
20	9.9	8.4	14.8	12.9	18.0	15.3	19.3	16.1	---	---	14.1	11.7
21	10.6	8.8	15.0	13.3	18.6	16.1	17.4	14.6	---	---	16.2	12.2
22	11.1	9.0	15.3	13.1	18.8	16.1	16.2	14.0	---	---	15.4	12.6
23	11.4	9.3	13.9	12.8	17.5	16.1	15.7	13.7	---	---	16.7	12.5
24	10.5	9.4	13.1	12.2	17.2	15.7	16.4	13.7	---	---	16.9	13.6
25	10.1	9.1	13.2	12.0	18.6	15.8	16.4	13.8	---	---	16.5	12.6
26	10.9	9.7	13.7	12.3	18.0	16.0	15.9	13.6	---	---	14.9	12.0
27	11.6	10.6	12.4	11.6	17.9	15.8	15.7	13.6	13.9	12.2	14.1	10.9
28	11.0	10.4	12.3	11.4	18.5	16.3	15.5	13.0	12.7	11.7	13.8	10.4
29	11.8	10.7	12.5	12.2	16.7	15.5	15.9	13.1	---	---	12.5	9.8
30	12.6	11.5	13.5	12.5	16.4	15.1	16.2	13.4	---	---	10.3	8.3
31	12.6	11.4	---	---	16.0	15.0	16.5	13.9	---	---	12.6	8.0
MONTH	14.7	6.9	15.3	10.4	18.8	11.3	19.9	13.0	14.2	11.7	16.9	8.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	12.4	8.5	9.4	8.4	8.6	7.6	14.2	7.7	9.8	7.6	9.3	7.0
2	12.5	8.2	9.7	9.1	9.1	8.6	7.3	6.3	10.0	7.3	7.5	7.0
3	10.7	7.5	9.3	8.7	9.0	8.3	8.0	6.7	9.8	6.9	7.4	7.1
4	8.9	7.0	9.7	8.7	8.8	8.2	7.9	7.5	11.1	7.1	7.5	7.1
5	---	---	9.4	8.8	8.4	7.5	7.6	7.2	11.6	7.0	7.6	7.2
6	---	---	9.1	8.4	8.1	7.3	7.5	7.2	7.6	6.6	7.8	7.2
7	11.1	10.2	9.1	8.5	7.5	6.8	7.4	7.1	7.4	6.7	8.1	7.2
8	11.2	9.8	9.4	8.5	7.7	6.8	7.7	7.0	7.4	7.2	8.2	7.2
9	11.1	9.2	8.9	7.9	7.8	7.3	8.0	7.0	7.6	7.1	8.9	7.3
10	10.7	8.9	9.2	7.8	8.3	7.5	8.9	7.0	8.1	7.3	9.3	7.8
11	10.4	8.4	8.6	7.8	8.7	8.2	10.2	7.2	8.1	6.8	9.4	7.8
12	8.8	6.8	9.3	8.1	8.5	8.2	11.1	7.5	8.3	7.2	9.6	7.7
13	7.8	6.3	9.7	7.7	8.8	8.1	12.0	7.7	8.6	7.3	9.7	7.5
14	8.5	6.9	---	---	8.4	7.8	12.1	7.2	8.6	7.2	9.1	7.2
15	10.0	8.0	---	---	7.8	7.2	10.0	7.0	8.8	7.1	8.7	7.1
16	10.3	8.9	---	---	7.6	7.2	9.8	7.0	9.4	7.1	8.8	7.5
17	9.0	7.9	---	---	8.2	7.4	9.8	7.0	11.0	7.5	9.7	8.0
18	---	---	---	---	8.4	7.9	10.1	6.9	12.0	7.9	10.0	8.6
19	---	---	---	---	8.7	8.1	10.6	7.3	12.7	8.2	10.5	8.9
20	---	---	---	---	8.9	8.1	9.0	6.5	13.2	8.1	10.7	8.8
21	---	---	---	---	8.8	7.5	7.7	7.0	11.8	7.9	10.5	8.5
22	---	---	---	---	8.2	7.5	7.2	6.9	12.7	8.0	9.3	8.1
23	---	---	---	---	8.9	7.4	7.5	7.2	11.7	7.8	11.3	9.7
24	---	---	8.4	6.4	8.9	7.8	7.8	7.3	12.6	7.7	11.3	8.5
25	---	---	9.4	6.5	9.6	7.5	7.8	7.2	13.2	7.5	10.8	8.5
26	---	---	9.1	7.7	10.3	7.9	8.1	7.0	11.9	7.2	11.0	8.4
27	10.0	8.7	8.6	8.0	11.4	8.0	8.0	6.9	10.1	6.9	10.7	7.7
28	9.5	8.3	8.9	8.4	12.2	8.5	8.0	6.9	9.4	6.3	11.2	7.8
29	9.2	8.4	9.1	8.4	13.2	8.4	8.2	7.0	8.7	6.3	11.1	8.0
30	9.4	8.5	9.4	9.1	14.5	8.4	9.2	7.7	8.5	6.2	11.7	8.5
31	---	---	8.7	7.2	---	---	9.5	7.7	9.5	5.7	---	---
MONTH	12.5	6.3	9.7	6.4	14.5	6.8	14.2	6.3	13.2	5.7	11.7	7.0
YEAR	19.9	5.7										

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	296	15	12	497	15	21	1180	20	63
2	279	14	11	486	14	18	1010	22	61
3	263	13	9.2	469	17	22	915	19	47
4	263	12	8.5	421	15	17	724	7	14
5	259	10	7.0	400	14	15	605	6	10
6	255	9	6.2	348	12	11	562	8	12
7	243	10	6.6	279	12	8.8	526	9	12
8	240	14	8.7	275	10	7.7	509	12	17
9	236	14	9.2	263	12	8.6	710	18	36
10	236	14	9.1	259	13	9.1	1210	26	86
11	232	12	7.2	292	9	7.2	1060	14	40
12	221	13	7.6	300	7	5.3	958	7	19
13	217	12	6.8	271	9	6.6	793	4	9.2
14	213	9	5.2	243	12	7.8	682	4	7.9
15	213	13	7.3	243	9	6.1	598	5	8.7
16	213	15	8.4	240	8	5.2	605	4	6.6
17	224	11	6.8	292	10	8.2	598	3	5.2
18	636	49	91	416	15	17	538	3	4.6
19	778	52	111	526	11	15	497	4	5.4
20	605	25	41	532	8	12	464	4	5.0
21	492	22	29	492	8	11	358	5	4.4
22	437	20	24	437	9	10	322	5	4.4
23	400	21	22	405	7	7.2	320	5	5.2
24	386	20	21	568	24	42	320	6	6.2
25	710	47	92	1010	31	85	320	6	6.1
26	809	27	61	923	20	49	310	5	4.4
27	649	18	32	1580	180	858	300	5	4.6
28	550	15	22	1970	120	650	300	5	4.5
29	562	14	22	1560	44	186	300	5	4.4
30	568	16	24	1310	23	81	300	4	3.6
31	532	14	21	---	---	---	300	4	3.8
TOTAL	12217	---	749.8	17307	---	2207.8	18194	---	521.2
JANUARY			FEBRUARY			MARCH			
1	300	4	3.5	801	13	54	1850	24	119
2	290	2	2.1	3190	441	4150	1470	24	93
3	260	2	1.9	1290	171	626	992	22	59
4	230	2	1.8	778	88	184	915	21	51
5	210	3	1.7	710	45	85	3230	59	585
6	210	3	2.1	669	23	42	2590	59	416
7	210	4	2.9	636	13	21	2080	45	254
8	210	4	2.7	611	9	15	1510	34	141
9	210	4	3.0	574	7	11	1340	26	95
10	210	4	3.0	592	7	12	1110	20	61
11	210	4	2.8	2490	193	1440	1010	16	44
12	210	4	2.6	1630	161	728	949	15	39
13	210	4	2.4	966	90	233	817	15	33
14	210	4	2.5	984	50	133	739	13	27
15	210	4	2.5	907	27	67	688	11	21
16	210	4	2.6	1250	27	106	770	12	24
17	210	4	2.6	3150	140	1210	890	6	14
18	210	4	2.5	2840	121	939	702	8	15
19	210	4	2.3	5340	465	7380	643	5	9.2
20	224	4	2.4	6710	1090	21200	586	2	2.4
21	267	4	2.9	4020	367	4140	544	4	6.0
22	344	4	3.7	2990	127	1030	520	3	4.4
23	376	4	4.0	3110	68	569	497	4	5.2
24	362	4	3.9	2950	44	354	475	5	6.6
25	339	4	3.8	2530	34	234	469	6	8.1
26	395	5	5.6	2150	29	167	447	7	9.1
27	520	6	8.5	1940	23	121	580	6	9.4
28	568	5	7.2	1890	22	110	890	6	15
29	480	3	4.0	---	---	---	702	10	19
30	410	8	6.9	---	---	---	890	15	35
31	372	7	7.2	---	---	---	915	15	37
TOTAL	8887	---	109.6	57698	---	45361	31810	---	2257.4

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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	643	15	26	1320	61	217	3710	328	3370
2	544	16	23	1810	86	427	3940	172	1840
3	469	15	19	1810	120	588	3910	235	2570
4	1100	29	233	1370	90	336	3230	274	2430
5	5510	790	13000	1060	61	174	2350	207	1310
6	1730	182	924	1570	85	375	6150	311	5990
7	1160	48	155	2120	129	738	8890	1060	28000
8	907	32	78	2030	130	715	7110	576	12000
9	747	26	53	1310	69	248	2710	215	1610
10	636	27	46	1140	76	236	3380	141	1290
11	592	21	33	2250	174	1090	3180	94	807
12	1130	59	245	3280	218	1930	3700	145	1860
13	1680	104	472	2770	169	1290	2580	189	1360
14	1290	81	284	2350	180	1550	1830	230	1220
15	984	48	128	6130	554	9690	1950	287	1530
16	770	42	87	4050	265	2950	1590	251	1050
17	1950	184	1190	2430	137	920	1080	136	417
18	4800	982	15500	4020	347	5960	915	96	247
19	1670	183	870	5570	335	5460	801	79	177
20	2930	178	1440	3850	140	1480	762	74	158
21	1600	82	366	3430	109	1030	849	77	185
22	1160	43	136	3160	82	700	1020	99	281
23	9300	1000	30400	1840	59	298	833	72	168
24	5740	456	7590	1200	42	135	662	55	103
25	3290	173	1570	1050	37	107	562	41	64
26	2400	109	707	1180	58	201	538	41	61
27	2020	71	390	2960	246	2210	497	38	51
28	1810	68	334	7790	793	17200	458	32	41
29	1480	60	239	5580	393	6230	447	25	31
30	1400	66	250	3790	179	1910	431	22	26
31	---	---	---	5680	898	14100	---	---	---
TOTAL	61442	---	76788	89900	---	80495	70065	---	70247
JULY			AUGUST			SEPTEMBER			
1	1100	573	4420	376	45	47	509	73	118
2	2230	1230	8460	358	48	47	762	125	282
3	1820	518	2600	348	51	49	1570	428	1980
4	1470	414	1690	317	42	37	1440	183	736
5	2370	620	4270	309	38	32	841	151	358
6	1770	381	1940	1490	578	3490	550	121	187
7	940	163	442	1730	574	2820	437	84	102
8	643	98	177	932	244	654	390	73	79
9	532	84	123	568	181	292	405	67	75
10	475	76	100	447	95	116	386	60	64
11	437	52	63	630	108	189	367	55	55
12	400	55	61	492	94	130	313	50	44
13	381	58	61	376	68	71	279	54	40
14	453	52	65	339	59	55	251	54	37
15	592	48	79	317	61	53	283	55	42
16	480	53	71	304	53	45	344	51	48
17	442	45	55	296	52	42	300	54	44
18	390	39	42	283	70	53	267	51	38
19	358	35	35	271	117	86	251	48	33
20	509	75	117	259	71	50	236	36	24
21	1480	228	958	251	48	33	232	32	20
22	1570	236	1030	247	55	37	224	36	22
23	1250	138	487	240	53	35	217	34	20
24	873	113	278	228	60	37	210	33	19
25	550	85	130	221	49	29	203	34	19
26	453	75	94	221	51	31	199	30	16
27	458	61	78	224	53	32	192	33	17
28	497	53	74	236	48	31	192	30	16
29	503	60	83	240	48	32	182	28	14
30	469	54	71	271	57	42	179	27	13
31	416	46	53	313	58	50	---	---	---
TOTAL	26311	---	28207	13134	---	8747	12211	---	4562
YEAR	419176		320252.8						

LITTLE MIAMI RIVER BASIN

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 mi² (505 km²).

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 good except those for the winter periods and July 9 to Sept. 30, which are fair. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--13 years, 251 ft³/s (7.11 m³/s), 17.48 in/yr (444 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,800 ft³/s (362 m³/s) July 10, 1980; gage height, 19.54 ft (5.956 m); minimum discharge, 0.50 ft³/s (0.014 m³/s) Oct. 15, 16, 17, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)
Feb. 2	0330	3010	85.2	11.12	3.389	May 27	2330	4700	133	13.04	3.975
Apr. 5	0300	4750	135	13.10	3.993	Jan. 6	1900	*5850	166	*14.22	4.334
Apr. 18	0500	3380	95.7	11.58	3.530	Jul. 1	1930	4040	114	12.35	3.764
Apr. 23	1430	4530	128	12.87	3.923						

Minimum daily 3.2 ft³/s (0.091 m³/s) Sept. 30.

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	4.7	12	63	18	267	311	112	90	388	2220	7.6	11
2	5.0	11	47	18	1700	196	78	103	493	457	7.0	16
3	4.5	10	38	16	318	140	59	76	339	139	6.6	100
4	4.5	10	32	14	172	114	618	57	272	109	6.2	96
5	4.7	26	29	12	161	859	3460	48	319	1020	6.0	62
6	5.0	31	25	11	97	498	495	269	2730	497	6.0	22
7	5.4	31	26	11	65	224	254	219	1920	165	22	12
8	5.2	30	28	11	61	150	174	112	279	81	20	8.2
9	5.2	29	126	11	65	119	131	71	152	48	15	6.4
10	5.2	29	313	11	71	105	103	65	109	37	11	6.0
11	5.2	29	151	11	894	94	86	176	92	29	24	5.4
12	4.3	29	82	11	396	84	103	194	521	21	12	5.0
13	3.9	28	58	11	202	73	140	124	447	18	9.4	4.7
14	3.9	28	47	11	154	63	111	137	179	17	8.2	4.4
15	3.9	26	38	11	106	54	93	502	84	19	6.4	4.3
16	5.0	28	37	11	269	100	67	303	50	16	6.0	4.1
17	6.1	29	40	11	993	147	526	165	43	13	5.6	4.0
18	14	32	38	11	763	101	1720	804	35	12	5.2	3.9
19	21	42	37	11	1590	80	376	1400	31	11	5.0	3.8
20	30	51	40	11	1470	65	728	472	29	11	4.7	3.7
21	19	39	31	13	505	57	326	230	27	16	4.5	3.6
22	12	34	26	35	303	53	192	141	22	27	4.4	3.7
23	9.0	32	21	55	491	48	3100	100	19	19	4.2	3.6
24	8.7	32	22	42	475	43	850	78	18	13	4.0	3.6
25	17	23	20	45	303	38	318	59	16	10	3.8	3.6
26	35	39	19	119	202	35	211	213	14	9.0	3.6	3.5
27	47	102	18	174	148	78	154	2910	12	8.6	3.5	3.4
28	25	321	16	112	196	159	121	3200	11	8.0	3.6	3.4
29	17	147	17	59	---	105	98	669	9.8	8.0	25	3.4
30	14	90	18	43	---	190	86	520	9.3	8.6	46	3.2
31	12	---	18	32	---	208	---	1380	---	8.2	18	---
TOTAL	362.4	1400	1521	972	12437	4591	14890	14887	8670.1	5075.4	314.5	417.9
MEAN	11.7	46.7	49.1	31.4	444	148	496	480	289	164	10.1	13.9
MAX	47	321	313	174	1700	859	3460	3200	2730	2220	46	100
MIN	3.9	10	16	11	61	35	59	48	9.3	8.0	3.5	3.2
CFSM	.06	.24	.25	.16	2.28	.76	2.54	2.46	1.48	.84	.05	.07
IN.	.07	.27	.29	.19	2.37	.88	2.84	2.84	1.65	.97	.06	.08

CAL YR 1980 TOTAL 71291.9 MEAN 195 MAX 7770 MIN 3.9 CFSM 1.00 IN 13.60
WTR YR 1981 TOTAL 65538.3 MEAN 180 MAX 3460 MIN 3.2 CFSM .92 IN 12.50

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).

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. 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.--16 years, 441 ft³/s (12.49 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s (813 m³/s) Apr. 2, 1970, gage height, 20.31 ft (6.190 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Sept. 23, 27, 1967. Maximum discharge since start of construction of East Fork Dam 31,000 ft³/s (878 m³/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 ft³/s (906 m³/s), from flood study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,130 ft³/s (174 m³/s) June 4, gage height, 12.70 ft (3.871 m); minimum daily, 27 ft³/s (0.76 m³/s) Aug. 4, 5.

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	40	43	214	50	145	375	37	94	3110	184	32	38
2	40	54	214	50	271	492	36	113	2340	1380	32	43
3	40	71	211	50	417	492	36	165	2160	1450	32	92
4	39	130	169	49	911	389	173	170	1670	349	27	247
5	39	211	52	47	1350	399	323	92	940	423	27	418
6	39	211	51	34	1030	713	1330	291	1160	1210	37	291
7	40	211	76	34	423	906	2480	503	380	1970	247	220
8	40	137	101	33	353	779	2440	503	202	599	268	268
9	40	67	113	33	181	413	2040	389	882	80	404	220
10	40	67	106	33	83	199	1060	157	1000	74	224	58
11	35	67	153	33	230	99	336	268	1830	48	217	54
12	35	67	211	34	434	99	160	389	2330	34	173	52
13	35	67	211	33	434	99	105	230	1980	34	38	52
14	36	68	211	33	423	126	152	178	1010	46	37	52
15	37	67	298	33	349	135	173	287	319	80	37	52
16	38	62	241	33	240	140	99	487	162	74	37	50
17	40	53	98	32	319	230	349	481	119	47	37	50
18	50	54	97	32	678	230	772	562	176	32	32	50
19	41	56	97	32	1110	160	923	638	97	33	32	49
20	40	83	88	33	1380	88	1120	1450	75	94	32	49
21	41	83	50	37	1360	115	1830	2410	50	130	32	50
22	44	83	50	40	1340	99	1550	1880	49	43	32	49
23	51	84	55	63	1330	68	1010	735	47	32	32	49
24	54	89	82	64	1330	36	1660	176	32	32	32	49
25	62	86	84	64	1290	35	2390	82	32	32	32	49
26	52	84	66	74	1310	35	1970	152	32	32	32	49
27	65	131	50	137	1330	40	1280	678	32	33	33	48
28	99	166	48	202	857	37	932	1160	32	32	34	32
29	97	212	51	201	---	36	357	3050	32	32	46	66
30	88	214	51	172	---	48	157	3580	32	32	58	72
31	43	---	50	95	---	39	---	3500	---	32	41	---
TOTAL	1480	3078	3649	1890	20908	7151	27280	24850	22312	8703	2406	2918
MEAN	47.7	103	118	61.0	747	231	909	802	744	281	77.6	97.3
MAX	99	214	298	202	1380	906	2480	3580	3110	1970	404	418
MIN	35	43	48	32	83	35	36	82	32	32	27	32
CAL YR 1980	TOTAL	129566	MEAN	354	MAX	2390	MIN	26				
WTR YR 1981	TOTAL	126625	MEAN	347	MAX	3580	MIN	27				

LITTLE MIAMI RIVER BASIN

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 mi² (1,233 km²).

PERIOD OF RECORD.--May 1915 to September 1917, October 1917 to May 1920 (gage heights only), January 1925 to current year.

3AGE.--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 Creek 14 mi (23 km) upstream. Surface area at spillway level, 171 acres (69 hm²). 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.--58 years (1915-17, 1925-81), 550 ft³/s 15.58 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft³/s (1,200 m³/s) Mar. 10, 1964, gage height, 23.84 ft (7.266 m); minimum daily, 0.4 ft³/s (0.011 m³/s) July 24, 1930, Sept. 11, 12, 23, 1939; minimum gage height, -0.57 ft (-0.055 m) Oct. 3-7, 1917. Maximum discharge since start of construction of East Fork Dam 23,200 ft³/s (657 m³/s) Aug. 30, 1974, gage height, 19.52 ft (5.950 m), result of failure of cofferdam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,170 ft³/s (231 m³/s) June 6, gage height, 11.17 ft (3.405 m); minimum daily, 30 ft³/s (0.85 m³/s) Jan. 11, 12, 14, 18, 19.

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	51	50	249	53	563	486	76	152	3290	101	31	56
2	50	49	243	53	1270	603	56	129	2610	1240	32	101
3	49	72	241	51	649	565	49	168	2510	1770	41	859
4	48	93	228	48	939	502	1400	219	2730	383	32	361
5	48	233	69	44	1450	1030	2140	99	1470	629	38	513
6	47	233	53	36	1310	994	1390	677	4000	1140	91	370
7	47	236	58	32	440	1130	2410	691	1300	2120	927	263
8	47	193	105	32	416	1030	2360	559	402	850	379	296
9	46	65	182	32	233	529	2200	455	867	106	502	273
10	47	61	201	32	101	270	1340	230	1180	96	273	63
11	44	61	173	30	440	141	425	460	1850	66	392	57
12	40	61	254	30	547	127	273	590	2580	45	257	56
13	40	61	246	31	465	121	206	299	2490	38	65	53
14	40	61	241	30	445	125	175	571	1360	43	48	53
15	41	61	302	31	425	170	239	884	416	84	45	52
16	40	61	314	33	349	173	127	698	251	92	43	52
17	42	53	120	32	892	299	976	571	127	130	41	52
18	76	64	115	30	1060	273	1890	1760	239	64	37	51
19	52	53	113	30	2300	230	1250	1710	131	64	34	49
20	42	73	106	31	2180	104	1870	1540	119	180	33	49
21	42	81	61	41	1680	135	1960	2450	69	260	33	50
22	41	80	50	64	1570	129	1970	2190	66	57	34	50
23	46	83	51	78	1630	92	2900	982	62	43	33	49
24	52	108	78	81	1660	50	2040	266	50	34	33	48
25	95	111	83	87	1530	42	2410	108	43	33	33	48
26	64	90	78	115	1480	39	2180	266	40	33	34	48
27	54	215	49	166	1480	59	1490	2350	38	38	42	48
28	103	243	47	251	1200	86	1220	2660	37	43	45	34
29	108	265	46	241	---	63	455	2820	35	35	92	47
30	106	257	52	233	---	161	239	3220	35	33	225	65
31	63	---	53	113	---	123	---	3270	---	31	99	---
TOTAL	1711	3427	4261	2191	28704	9881	37716	33044	30397	9881	4044	4166
MEAN	55.2	114	137	70.7	1025	319	1257	1066	1013	319	130	139
MAX	108	265	314	251	2300	1130	2900	3270	4000	2120	927	859
MIN	40	49	46	30	101	39	49	99	35	31	31	34
CAL YR 1980	TOTAL	183183	MEAN	501	MAX	5560	MIN	40				
WTR YR 1981	TOTAL	169423	MEAN	464	MAX	4000	MIN	30				

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 (5.0 km) upstream from confluence with Little Miami River. DRAINAGE AREA, 237 mi² (613.8 km²). 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 hm³) 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 km³) is in conservation pool. Dead storage below elevation 739.0 ft (225.25 m) is 8 acre-ft (986.40 m³). 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 hm³) Mar. 3, 1979, elevation 859.90 ft (261.793 m), minimum 68,040 acre-ft (83.9 hm³) Jan. 15, 1979, elevation 835.88 ft (254.776 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents 112,700 acre-ft (139 hm³) June 8, 9, elevation 852.68 ft (259.897 m). minimum 93,390 acre-ft (115 hm³) Dec. 29, Jan. 6, 11-15, elevation 845.89 ft (257.827 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	847.95	99070	---
Oct. 31.....	847.15	96850	-2220
Nov. 30.....	846.33	94600	-2250
Dec. 31.....	845.93	93500	-1100
CAL YR 1980.....	---	---	-110
Jan. 31.....	845.94	93530	+30
Feb. 28.....	846.12	94020	+490
Mar. 31.....	846.12	94020	0
Apr. 30.....	849.13	102400	+8380
May 31.....	850.37	105900	+3500
June 30.....	849.14	102400	-3500
July 31.....	849.14	102400	0
Aug. 31.....	848.83	101500	-900
Sept. 30.....	848.08	99440	-2060
WTR YR 1981.....	---	---	+370

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 mi² (886 km²). 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 hm³) 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 hm³) elevation 733.0 ft (223.42 m). Dead storage 4 acre-ft (4,930 m³) 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 hm³) Mar. 2, 1979, elevation 761.64 ft (232.148 m); minimum, 24,820 acre-ft (30.6 hm³) Oct. 26, 1978, elevation 690.09 ft (210.339 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 112,300 acre-ft (138 hm³/s) May 29, elevation 742.68 ft (226.369 m); minimum, 81,840 acre-ft (101 hm³) Jan. 14-20, elevation 728.84 (221.150 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	731.38	87010	---
Oct. 31.....	730.54	85280	-1730
Nov. 30.....	729.68	83530	-1750
Dec. 31.....	728.90	81960	-1570
CAL YR 1980.....	---	---	-5290
Jan. 31.....	729.09	82340	+380
Feb. 28.....	729.33	82820	+480
Mar. 31.....	730.43	85050	+2230
Apr. 30.....	732.96	90310	+5260
May 31.....	738.50	102500	+12190
June 30.....	732.93	90250	-12250
July 31.....	732.91	90200	-50
Aug. 31.....	732.96	90310	+110
Sept. 30.....	732.01	88310	-2000
WTR YR 1981.....	---	---	+1300

MILL CREEK BASIN

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 mi² (189 km²).

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 and periods of no-gage height record Oct. 14 to Dec. 2, 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 ft³/s (164 m³/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 ft³/s (48.1 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)
Apr. 23	0600	2370	67.1	10.71	3.264	May 27	2000	2460	69.7	10.85	3.307
May 18	1500	1850	52.4	9.82	2.993	June 12	1600	*3250	42.0	*12.48	3.804
May 26	1630	2040	57.8	10.14	3.091						

Minimum daily 5.6 ft³/s (0.16 m³/s) Oct. 12.

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	10	20	65	14	293	53	36	77	93	59	11	30
2	18	15	42	10	228	44	30	43	74	26	9.4	228
3	13	60	26	8.0	41	39	28	34	65	44	13	275
4	8.5	150	22	8.0	48	59	311	35	60	60	14	39
5	6.1	90	22	7.5	48	385	315	51	63	358	17	17
6	7.5	45	19	7.5	42	121	80	190	305	65	43	11
7	7.0	25	16	7.0	22	70	55	63	70	35	226	10
8	8.5	17	27	7.0	18	52	45	46	49	30	49	34
9	8.5	15	119	7.0	17	48	39	36	44	25	17	17
10	8.5	15	59	7.0	72	46	38	95	44	20	56	13
11	7.0	15	33	7.0	437	42	35	168	35	17	78	11
12	5.6	15	28	7.0	154	38	60	85	867	15	26	7.9
13	6.1	15	25	7.0	146	36	40	55	349	19	18	6.0
14	6.5	15	19	7.0	90	29	49	333	162	23	17	10
15	7.0	13	33	7.0	39	27	32	336	93	19	13	20
16	7.0	12	43	7.0	135	56	28	116	101	18	9.6	9.2
17	40	35	25	7.0	217	34	392	69	59	18	13	8.0
18	350	110	22	9.0	139	30	560	668	44	16	15	7.1
19	100	60	20	11	358	28	163	312	38	46	14	6.9
20	25	35	14	14	327	26	340	149	34	96	14	11
21	20	32	11	41	115	24	111	95	148	126	13	12
22	17	25	13	36	100	21	146	78	82	37	8.9	14
23	15	20	14	24	233	22	1290	64	40	25	6.4	14
24	60	120	20	17	115	23	259	51	33	23	12	13
25	300	100	12	17	78	23	122	42	32	14	14	14
26	125	70	10	26	61	23	83	389	28	11	15	11
27	35	120	9.6	26	50	89	71	585	25	52	19	11
28	35	220	9.6	22	64	39	60	255	19	69	17	14
29	38	150	15	18	---	26	69	98	22	46	11	15
30	33	100	25	15	---	124	92	116	23	21	51	16
31	25	---	18	12	---	46	---	123	---	16	25	---
TOTAL	1352.8	1734	836.2	420.0	3687	1723	4979	4857	3101	1449	865.3	905.1
MEAN	43.6	57.8	27.0	13.5	132	55.6	166	157	103	46.7	27.9	30.2
MAX	350	220	119	41	437	385	1290	668	867	358	226	275
MIN	5.6	12	9.6	7.0	17	21	28	34	19	11	6.4	6.0

CAL YR 1980 TOTAL 30880.1 MEAN 84.4 MAX 2790 MIN 5.6
WTR YR 1981 TOTAL 25909.4 MEAN 71.0 MAX 1290 MIN 5.6

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 mi² (77.4 km²).

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 hm³) 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 hm³) is in conservation pool. Dead storage below elevation 655.0 ft (199.64 m), 65 acre-ft (80,100 m³). 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 hm³) Jan. 22, 1959, elevation, 698.95 ft (213.040 m); minimum, 714 acre-ft (0.88 hm³) Jan. 18, 1979, elevation, 669.86 ft (204.173 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,300 acre-ft (4.07 hm³) June 13, elevation, 682.72 ft (208.093 m); minimum, 733 acre-ft (0.90 hm³) Nov. 26, elevation, 670.03 ft (204.225 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	675.11	1490	---
Oct. 31.....	675.14	1490	0
Nov. 30.....	670.24	758	-732
Dec. 31.....	670.19	752	-6
CAL YR 1980.....	---	---	+1
Jan. 31.....	670.15	747	-5
Feb. 28.....	675.34	1530	+783
Mar. 31.....	675.14	1490	-40
Apr. 30.....	675.42	1550	+60
May 31.....	675.26	1520	-30
June 30.....	675.14	1490	-30
July 31.....	675.24	1510	+20
Aug. 31.....	675.22	1510	0
Sept. 30.....	675.02	1470	-40
WTR YR 1981.....	---	---	-20

MILL CREEK BASIN

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 mi² (83.4 km²).

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 below 5.0 ft³/s (0.14 m³/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.--28 years (1953-81), 32.4 ft³/s (0.918 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/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, 1,540 ft³/s (43.6 m³/s) June 12, gage height, 7.17 ft (2.185 m); minimum daily, 0.05 ft³/s (0.001 m³/s) Oct. 12-16, Sept. 30.

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	.26	1.3	13	3.5	57	26	10	39	20	4.7	5.5	1.8
2	.36	1.4	6.4	2.5	174	15	8.0	26	22	6.4	2.5	2.4
3	.28	82	22	1.7	72	13	2.5	13	9.0	19	.71	27
4	.20	136	4.5	1.7	26	14	30	14	4.0	11	.56	32
5	.20	64	1.8	1.7	24	108	194	15	5.3	189	.61	6.3
6	.15	11	3.6	1.7	1.3	57	101	87	289	33	12	2.4
7	.15	2.8	5.1	1.7	1.3	25	30	41	232	7.8	125	.68
8	.09	2.8	5.7	1.7	1.3	13	15	22	30	2.0	73	1.0
9	.08	2.8	68	1.7	1.0	13	17	14	11	2.0	12	1.7
10	.08	1.0	39	1.7	2.8	13	13	17	14	2.0	14	1.8
11	.06	.63	3.2	1.7	148	13	13	87	13	2.0	16	1.9
12	.05	.63	7.2	1.7	44	13	8.0	45	78	1.1	2.9	1.8
13	.05	.63	7.2	1.7	38	9.6	23	26	443	.90	1.6	1.4
14	.05	.71	6.4	1.7	18	3.6	15	36	448	4.6	1.6	1.1
15	.05	.71	5.1	1.7	11	5.1	15	200	101	12	1.6	4.5
16	.05	.80	27	1.7	26	26	14	108	41	8.3	1.6	2.5
17	1.6	6.4	11	2.0	112	21	92	30	35	3.6	1.6	1.8
18	205	61	8.0	5.1	14	2.5	81	42	19	1.6	.98	.54
19	57	19	2.8	9.6	32	5.1	37	198	11	2.0	.71	.27
20	15	6.4	3.6	6.4	87	5.1	128	264	9.0	86	.70	.20
21	9.6	11	3.6	25	43	5.1	38	24	17	54	.80	.18
22	1.1	4.0	2.5	30	42	3.6	23	32	144	13	.80	.22
23	.90	2.5	2.2	9.6	107	3.6	186	12	23	5.3	.71	.17
24	13	40	4.0	7.2	53	5.1	365	11	14	1.8	.63	.15
25	139	65	13	2.5	20	5.1	46	7.0	6.7	1.8	.60	.15
26	5.7	17	6.4	18	17	5.1	31	15	2.0	1.8	.62	.13
27	5.1	110	2.2	14	14	27	15	203	2.0	8.6	.49	.11
28	19	124	2.0	3.2	16	21	16	201	1.8	13	.49	.08
29	9.6	28	2.5	4.5	---	4.5	30	42	1.8	64	.49	.06
30	4.0	5.1	10	3.6	---	47	20	26	1.8	8.7	.49	.05
31	1.3	---	10	2.8	---	28	---	21	---	6.6	.78	---
TOTAL	489.06	808.61	309.0	173.3	1202.7	556.1	1616.5	1918.0	2048.4	577.60	282.07	94.39
MEAN	15.8	27.0	9.97	5.59	43.0	17.9	53.9	61.9	68.3	18.6	9.10	3.15
MAX	205	136	68	30	174	108	365	264	448	189	125	32
MIN	.05	.63	1.8	1.7	1.0	2.5	2.5	7.0	1.8	.90	.49	.05
CAL YR 1980	TOTAL	11863.15	MEAN	32.4	MAX	502	MIN	.05				
WTR YR 1981	TOTAL	10075.73	MEAN	27.6	MAX	448	MIN	.05				

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 Avenue 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 mi² (298 km²).

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, Aug. 1 to Sept. 17, 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 ft³/s (256 m³/s) Sept. 14, 1979, gage height, 21.82 ft (6.651 m) present datum; from rating curve extended above 4,000 ft³/s (79.3 m³/s) on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,390 ft³/s (96.0 m³/s) June 12, gage height 14.66 ft (4.468 m); minimum daily, 5.3 ft³/s (0.150 m³/s) Oct. 12, 13.

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	7.6	25	80	23	342	88	43	118	196	73	18	40
2	10	19	50	20	428	65	39	77	156	35	15	234
3	12	60	45	16	136	57	31	36	73	66	19	511
4	9.1	198	30	15	53	88	306	42	58	82	21	60
5	6.2	118	30	14	30	539	490	64	59	518	24	25
6	6.2	33	27	14	25	192	215	275	675	120	39	16
7	7.1	25	23	14	26	110	115	116	306	52	288	15
8	6.6	22	60	13	25	69	65	66	93	32	328	50
9	7.1	21	180	13	22	64	63	43	54	29	20	22
10	7.1	21	121	13	92	61	45	105	60	27	35	15
11	6.6	19	44	13	584	55	42	245	51	22	100	13
12	5.3	19	43	13	101	51	83	143	813	21	30	10
13	5.3	19	38	13	77	46	63	77	669	22	22	9.0
14	6.6	19	32	13	54	33	67	277	546	24	20	17
15	7.1	16	50	13	47	34	43	536	196	31	15	27
16	7.1	15	82	13	160	86	38	223	147	29	11	18
17	7.1	82	43	13	331	63	449	98	115	25	15	14
18	490	169	40	13	169	33	565	598	69	20	18	11
19	113	78	31	16	398	33	215	493	52	61	17	9.7
20	38	45	24	25	420	32	502	395	38	211	17	9.3
21	32	39	21	67	175	30	221	213	158	243	15	9.8
22	22	33	23	82	160	26	182	151	219	67	11	12
23	19	25	23	38	342	27	1320	105	73	37	8.0	12
24	83	184	31	30	192	30	648	73	43	26	15	11
25	434	160	25	23	115	29	275	57	42	20	17	11
26	136	95	23	46	86	29	211	362	31	17	20	16
27	46	311	20	41	70	138	152	942	27	61	24	7.8
28	50	342	19	27	95	73	115	505	22	101	22	11
29	51	220	25	25	---	32	104	179	25	117	20	13
30	38	130	41	24	---	182	118	160	26	60	60	13
31	32	---	30	21	---	86	---	282	---	27	33	---
TOTAL	1772.0	2562	1354	724	4755	2481	6825	7056	5092	2276	1317.0	1242.6
MEAN	57.2	85.4	43.7	23.4	170	80.0	228	228	170	73.4	42.5	41.4
MAX	490	342	180	82	584	539	1320	942	813	518	328	511
MIN	5.3	15	19	13	22	26	31	36	22	17	8.0	7.8
CAL YR 1980	TOTAL	44120.2	MEAN 121	MAX 2680	MIN 5.3							
WTR YR 1981	TOTAL	37456.6	MEAN 103	MAX 1320	MIN 5.3							

GREAT MIAMI RIVER BASIN

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 mi² (94.0 km²).

PERIOD OF RECORD>--October 1957 to current year. Prior to October 1962, published as Buckongahelas Creek near Degraff.

REVISED RECORDS.--WSP 1980: 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 Dec. 15 to Feb. 10, 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 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--24 years, 32.7 ft³/s (0.926 m³/s), 12.23 in/yr (311 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s (50.4 m³/s) Jan. 21, 1959, gage height, 6.83 ft (2.082 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 29, 30, Oct. 7, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 10	0930	361 10.2	4.39 1.338	June 21	2045	505 14.3	4.98 1.518
June 14	0445	*1220 34.6	*6.12 1.865	June 25	1000	389 11.0	4.46 1.359

Minimum daily discharge, 5.0 ft³/s (0.14 m³/s) Feb. 20-25 (ice effect).

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	7.7	13	15	10	10	27	14	35	34	42	13	17
2	10	12	15	9.0	13	25	13	34	30	35	14	11
3	9.5	12	13	8.4	16	22	14	27	28	35	17	15
4	8.6	16	13	7.8	20	22	19	24	25	32	15	27
5	8.0	14	13	7.2	15	26	18	23	24	31	14	14
6	8.0	14	12	6.6	13	24	16	100	36	31	17	11
7	8.9	13	19	6.0	11	22	15	60	25	28	15	10
8	8.9	13	18	5.8	9.4	20	14	39	24	26	14	15
9	8.6	12	34	5.6	8.6	21	18	32	136	25	13	11
10	8.9	12	35	5.4	12	21	17	32	229	23	12	9.3
11	8.9	12	24	5.2	315	21	19	148	107	21	12	8.4
12	9.2	12	20	5.2	92	20	116	109	70	20	12	8.0
13	10	12	18	5.2	47	20	113	66	239	22	11	7.6
14	11	12	15	5.2	34	18	67	90	1030	21	11	8.4
15	12	12	12	5.4	24	17	45	216	326	18	11	11
16	12	12	11	5.4	53	20	36	124	172	18	11	8.6
17	12	12	10	5.4	78	18	53	74	128	17	10	8.1
18	18	13	9.0	5.2	75	16	46	59	98	16	9.7	9.6
19	12	12	8.2	5.2	77	16	34	53	74	17	9.6	9.1
20	12	13	7.6	5.0	124	16	32	44	62	36	9.0	7.9
21	13	12	6.8	5.0	75	16	27	38	207	32	8.7	7.7
22	12	12	6.4	5.0	38	15	25	34	228	23	8.5	7.0
23	12	12	6.2	5.0	60	15	32	30	113	18	8.3	6.8
24	13	13	6.0	5.0	54	15	26	28	78	17	8.3	6.9
25	27	14	6.4	5.0	42	15	22	25	227	16	8.1	6.6
26	15	12	7.0	14	34	14	22	24	98	21	8.0	6.4
27	13	18	6.8	50	30	15	22	30	68	18	7.9	6.2
28	22	20	6.6	33	30	14	20	40	55	18	8.2	6.1
29	16	14	7.0	20	---	14	43	32	45	17	8.7	6.5
30	14	13	12	15	---	17	32	31	40	15	28	7.0
31	13	---	11	11	---	15	---	52	---	14	13	---
TOTAL	374.2	393	404.0	292.2	1410.0	577	990	1753	4056	723	366.0	294.2
MEAN	12.1	13.1	13.0	9.43	50.4	18.6	33.0	56.5	135	23.3	11.8	9.81
MAX	27	20	35	50	315	27	116	216	1030	42	28	27
MIN	7.7	12	6.0	5.0	8.6	14	13	23	24	14	7.9	6.1
CFSM	.33	.36	.36	.26	1.39	.51	.91	1.56	3.72	.64	.33	.27
IN.	.38	.40	.41	.30	1.44	.59	1.01	1.80	4.16	.74	.38	.30
CAL YR 1980 TOTAL	12959.4			MEAN 35.4	MAX 531	MIN 5.7	CFSM .98	IN 13.28				
WTR YR 1981 TOTAL	11632.6			MEAN 31.9	MAX 1030	MIN 5.0	CFSM .88	IN 11.92				

GREAT MIAMI RIVER BASIN

321

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 mi² (1,401 km²).

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 (281.848 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 4.4 ft³/s (0.12 m³/s) in 1981 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 hm³) prior to 1926; 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 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--56 years (1925-81) 476 ft³/s (13.48 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft³/s (586 m³/s) Mar. 20, 1927, gage height 14.4 ft (4.39 m), from rating curve extended above 8,700 ft³/s (195 m³/s) on basis of velocity-area studies; maximum gage height, 15.91 ft (4.849 m) Jan. 21, 1959; minimum discharge, 1.5 ft³/s (0.041 m³/s) Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 ft³/s (0.23 m³/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 ft³/s (1,250 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,580 ft³/s (271 m³/s) June 14, gage height, 11.78 ft (3.591 m), above base of 4,000 ft³/s (113 m³/s); minimum daily discharge, 43 ft³/s (1.22 m³/s) Jan. 23-25 (ice effect).

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	51	71	99	269	160	299	105	1120	776	449	101	199
2	54	70	102	256	230	264	96	1550	471	428	95	137
3	57	68	96	207	300	233	104	1030	362	350	98	110
4	60	67	93	121	370	214	134	617	308	314	99	152
5	59	66	88	90	340	240	172	449	288	378	96	203
6	57	65	85	76	280	288	185	1370	341	512	96	135
7	54	65	95	66	180	274	152	1790	381	317	104	106
8	53	65	112	60	110	243	132	1160	347	245	104	104
9	52	65	144	56	92	223	127	625	1560	209	96	103
10	52	62	209	54	120	226	143	467	2120	191	89	93
11	52	62	187	52	1530	221	176	1020	1790	180	84	81
12	50	67	150	50	1000	204	1270	1720	1020	152	77	73
13	52	64	130	48	600	189	2040	1150	2010	146	77	67
14	54	62	113	50	428	180	1320	985	8410	158	73	115
15	55	65	100	50	442	160	801	2290	6380	152	72	199
16	54	66	90	48	682	156	489	2180	4110	130	68	185
17	59	70	80	47	1370	174	467	1640	2740	118	70	134
18	64	104	72	46	1320	141	660	1200	1820	112	68	125
19	68	218	64	45	1340	132	485	856	1130	116	61	114
20	62	218	56	45	1620	130	369	612	625	350	60	102
21	59	218	50	44	1340	125	359	435	1080	559	57	86
22	56	218	48	44	957	116	256	353	2360	366	56	75
23	56	221	50	43	872	110	266	308	1320	218	53	70
24	67	223	52	43	872	108	280	280	692	158	52	70
25	82	226	50	43	728	104	274	248	1350	135	52	66
26	92	221	49	88	583	101	228	238	1850	146	51	63
27	82	202	48	400	408	102	193	317	1590	162	52	61
28	89	135	47	250	332	104	180	1300	1140	152	52	56
29	91	120	46	200	---	102	394	1270	660	141	56	55
30	86	107	90	160	---	113	669	796	442	146	109	57
31	77	---	274	130	---	115	---	856	---	115	159	---
TOTAL	1956	3551	2969	3181	18606	5391	12526	30232	49473	7305	2437	3196
MEAN	63.1	118	95.8	103	665	174	418	975	1649	236	78.6	107
MAX	92	226	274	400	1620	299	2040	2290	8410	559	159	203
MIN	50	62	46	43	92	101	96	238	288	112	51	55

CAL YR 1980 TOTAL 181186 MEAN 495 MAX 7640 MIN 46
WTR YR 1981 TOTAL 140823 MEAN 386 MAX 8410 MIN 43

GREAT MIAMI RIVER BASIN

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 mi² (394 km²).

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) (Revised) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor prior to Feb. 10 (no gage-height record Oct. 1 to Dec. 10, Dec. 20-29), fair thereafter. Some regulation by Lake Loramie 5 mi (8 km) upstream, capacity, 13,000 acre-ft (16.0 hm³). Sediment data collected at this site 1967 to 1975.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--17 years, 130 ft³/s (3.682 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,600 ft³/s (102 m³/s) June 14, 1981, maximum gage height, 14.08 ft (4.292 m) Feb. 24, 1975; minimum daily, 0.10 ft³/s (0.003 m³/s) Aug. 15, 16, 1965, Sept. 10-12, 14, 15, 1966.

EXTREMES FOR 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 state of 14.2 ft (4.33 m), from flood profile furnished by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,600 ft³/s (102 m³/s) June 14, gage height 13.77 ft (4.197 m) above base of 1,500 ft³/s (42.5 m³/s); minimum daily discharge 0.60 ft³/s (0.017 m³/s) Oct. 11.

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	1.3	1.2	2.2	1.3	21	61	25	577	100	125	11	2.3
2	.90	1.2	2.0	1.3	43	51	21	1220	70	54	8.6	2.6
3	1.0	1.3	1.9	1.3	35	42	20	793	53	38	7.2	2.6
4	.92	1.2	1.8	1.1	20	38	35	321	44	50	6.9	5.2
5	1.0	1.1	1.7	1.0	14	66	68	177	38	39	5.6	3.5
6	1.1	.96	1.7	.86	12	120	54	771	249	52	5.3	2.3
7	1.0	.80	1.9	.84	10	94	38	860	132	34	6.0	1.7
8	.90	1.1	2.2	.84	9.4	71	31	339	52	24	5.1	2.0
9	.80	1.2	3.5	.84	8.6	60	35	176	246	19	4.9	2.1
10	.70	1.1	29	.82	8.0	56	31	117	487	16	3.9	1.3
11	.60	1.0	17	.82	763	54	38	176	436	12	3.7	1.2
12	1.0	1.0	8.3	.82	493	42	454	231	216	9.0	3.8	1.2
13	.86	1.1	6.0	.82	155	43	760	172	431	7.6	3.5	1.2
14	.76	1.0	4.3	.80	79	37	451	303	3030	8.4	3.2	.97
15	.82	1.0	3.2	.80	73	29	239	1180	3340	7.6	2.7	1.1
16	.82	1.0	3.0	.80	211	36	142	1030	2030	7.6	3.1	1.2
17	.86	1.1	2.7	.80	454	27	211	435	788	7.3	3.1	1.3
18	.96	1.4	2.4	.80	364	27	324	211	270	6.7	2.6	1.5
19	1.0	1.4	2.2	.86	351	24	191	176	146	7.2	2.2	1.4
20	1.1	1.3	1.9	.92	452	21	130	101	92	91	2.2	1.3
21	1.0	1.2	1.6	.96	361	21	75	70	389	210	2.0	1.2
22	.94	1.1	1.3	1.1	245	20	59	55	1250	132	2.0	1.3
23	.90	1.0	1.1	1.2	253	19	62	47	792	54	1.8	1.4
24	1.0	1.1	1.2	1.3	231	17	65	40	267	30	1.8	1.6
25	1.5	1.2	1.3	1.5	170	15	53	35	793	21	1.8	1.5
26	2.1	1.2	1.1	25	112	13	41	32	629	46	1.5	1.3
27	1.8	1.6	1.0	165	78	15	39	112	216	85	1.4	1.2
28	1.7	2.3	.96	105	68	16	32	529	103	50	1.5	1.3
29	1.5	3.6	.94	59	---	14	260	378	64	37	1.6	1.1
30	1.4	2.7	1.1	34	---	25	303	193	65	24	2.0	1.1
31	1.3	---	1.3	21	---	31	---	152	---	16	2.1	---
TOTAL	33.54	39.46	111.80	433.50	5094.0	1205	4287	11009	16818	1320.4	114.1	50.97
MEAN	1.08	1.32	3.61	14.0	182	38.9	143	355	561	42.6	3.68	1.70
MAX	2.1	3.6	29	165	763	120	760	1220	3340	210	11	5.2
MIN	.60	.80	.94	.80	8.0	13	20	32	38	6.7	1.4	.97

CAL YR 1980 TOTAL 40707.40 MEAN 111 MAX 2500 MIN .60
WTR YR 1981 TOTAL 40516.77 MEAN 111 MAX 3340 MIN .60

GREAT MIAMI RIVER BASIN

323

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 mi² (666 km²).

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 good, except those for winter periods, which are fair. Slight regulation by Lake Loramie 18 mi (29 km) upstream, capacity, 13,000 acre-ft (16.0 hm³). 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.--66 years, 208 ft³/s (5.891 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) May 7, 1916, gage height, 86.4 ft (26.33 m), present datum, from rating curve extended above 5,400 ft³/s (153 m³/s); minimum daily, 1.7 ft³/s (0.048 m³/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 ft³/s (725 m³/s), at site upstream from Turtle Creek, drainage area, 211 mi² (546 km²), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,410 ft³/s (125 m³/s) June 14, gage height, 83.33 ft (25.399 m); minimum daily, 4.3 ft³/s (0.12 m³/s) Oct. 11.

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	9.1	10	16	9.6	60	122	49	1150	251	180	44	30
2	6.9	9.6	15	9.5	119	102	40	1560	175	129	39	20
3	7.6	10	15	8.8	60	88	35	1200	136	93	33	16
4	7.2	9.4	14	7.2	40	78	57	590	108	122	32	30
5	8.3	8.7	13	6.8	31	111	117	311	96	133	32	30
6	8.5	7.3	13	6.6	28	202	109	1290	707	198	39	21
7	8.2	5.2	14	6.6	25	173	80	1280	401	106	34	18
8	7.2	9.1	18	6.4	22	138	65	704	158	77	48	15
9	7.0	9.2	23	6.2	21	116	54	351	444	61	39	14
10	6.0	8.8	47	6.0	23	107	60	256	734	51	30	13
11	4.3	8.4	41	6.0	1410	98	77	388	724	44	23	12
12	8.3	8.5	28	6.0	1020	89	1080	467	383	38	21	11
13	6.9	8.8	20	6.0	329	75	1200	351	600	34	21	9.4
14	6.1	8.4	17	6.0	156	74	832	613	4010	32	19	11
15	6.7	7.9	15	5.8	119	59	420	1590	3720	30	18	19
16	6.7	8.6	14	5.8	323	54	257	1430	2880	27	17	16
17	6.8	8.7	12	5.8	728	58	251	843	1260	26	19	12
18	8.0	11	11	5.8	625	46	421	394	455	25	15	12
19	8.1	11	9.8	5.8	628	43	290	335	249	28	15	10
20	8.9	10	8.8	5.8	829	39	210	232	179	568	13	11
21	8.0	9.2	8.2	6.0	568	36	153	163	591	478	13	9.9
22	7.4	9.2	7.8	6.2	388	34	119	131	2000	304	13	8.8
23	7.4	8.6	7.8	6.4	411	32	156	109	1250	148	12	8.7
24	8.0	9.0	8.2	6.4	387	30	148	94	507	90	13	8.1
25	13	10	7.6	8.0	281	27	121	83	1390	68	13	7.9
26	14	9.7	7.4	48	206	25	96	77	981	71	11	7.9
27	15	12	7.2	253	156	24	84	160	397	169	11	7.3
28	14	18	7.0	195	135	24	77	1040	213	178	11	6.9
29	13	26	7.4	125	---	24	297	792	147	123	10	6.5
30	11	19	8.2	81	---	29	454	383	111	80	14	7.4
31	11	---	9.2	57	---	49	---	503	---	58	15	---
TOTAL	268.6	309.3	450.6	924.5	9128	2206	7409	18870	25257	3769	687	409.8
MEAN	8.66	10.3	14.5	29.8	326	71.2	247	609	842	122	22.2	13.7
MAX	15	26	47	253	1410	202	1200	1590	4010	568	48	30
MIN	4.3	5.2	7.0	5.8	21	24	35	77	96	25	10	6.5

CAL YR 1980 TOTAL 84190.4 MEAN 230 MAX 4450 MIN 4.3
WTR YR 1981 TOTAL 69688.8 MEAN 191 MAX 4010 MIN 4.3

GREAT MIAMI RIVER BASIN

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 mi² (2,398 km²).

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 hm³), 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 4.9 ft³/s (0.14 m³/s) in 1981 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 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--19 years, 797 ft³/s (22.57 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft³/s (490 m³/s) Mar. 6, 1963, gage height, 14.66 ft (4.468 m); minimum, 0.50 ft³/s (0.014 m³/s) July 12, 13, 1963, result of temporary storage during repair of dam upstream; minimum daily discharge, 4.3 ft³/s (0.122 m³/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 ft³/s (595 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,200 ft³/s (430 m³/s) June 14, gage height, 13.18 ft (4.017 m); minimum daily, 66 ft³/s (1.87 m³/s) Oct. 24.

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	69	108	144	305	283	515	212	2470	1570	693	187	237
2	80	104	142	290	395	451	192	4200	987	694	168	200
3	87	100	138	275	324	398	183	2970	693	572	157	167
4	89	98	134	166	424	363	238	1730	575	657	159	166
5	93	96	131	114	388	401	303	1070	593	639	170	229
6	92	88	122	114	374	536	362	2820	1300	892	170	213
7	93	84	131	114	341	552	322	3940	1140	580	158	150
8	88	87	140	103	224	478	266	2460	667	420	170	153
9	87	89	178	99	155	417	239	1380	1630	351	175	137
10	84	91	235	96	193	398	234	950	2850	321	147	133
11	74	91	272	89	1900	390	305	1440	2860	287	138	125
12	71	91	222	85	1950	367	2730	2660	1850	259	127	112
13	70	89	188	87	1170	335	4370	2070	2120	240	125	106
14	79	89	165	94	653	311	3010	1740	13500	237	115	148
15	84	90	151	88	631	294	1800	4520	11800	233	119	245
16	85	91	150	86	857	273	1120	4450	7920	216	114	203
17	92	91	136	84	2290	278	889	3150	4820	199	108	205
18	114	98	131	82	2460	260	1310	2120	2880	190	105	161
19	99	162	124	82	2190	232	1060	1690	1820	211	94	155
20	98	215	98	80	2860	222	743	1230	1130	810	88	143
21	97	217	84	80	2370	211	645	836	1160	1160	84	135
22	92	217	83	80	1750	201	509	654	4930	879	92	112
23	103	216	94	80	1570	190	553	562	3490	468	96	104
24	66	228	99	78	1560	196	561	505	1690	319	84	87
25	150	242	95	78	1300	188	515	451	2780	253	83	84
26	121	242	93	120	983	179	438	418	3260	249	87	82
27	123	273	90	530	733	176	387	572	2340	356	82	83
28	136	210	88	694	562	171	357	2500	1640	369	76	81
29	127	172	86	483	---	173	704	2510	1050	314	84	73
30	119	158	84	315	---	187	1430	1760	693	266	125	73
31	115	---	160	239	---	197	---	1790	---	224	161	---
TOTAL	2977	4227	4188	5310	30890	9540	25987	61618	85738	13558	3848	4302
MEAN	96.0	141	135	171	1103	308	866	1988	2858	437	124	143
MAX	150	273	272	694	2860	552	4370	4520	13500	1160	187	245
MIN	66	84	83	78	155	171	183	418	575	190	76	73
CAL YR 1980	TOTAL	309780	MEAN 846	MAX 13000	MIN 66							
WTR YR 1981	TOTAL	252183	MEAN 691	MAX 13500	MIN 66							

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 mi² (2,976 km²).

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 (18.263 m) lower, October 1921 to September 1978 at site 650 ft (198 m) downstream at datum 59.92 ft (18.263 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 hm³).

COOPERATION.--Base data furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--63 years, 996 ft³/s (28.21 m³/s), 11.77 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft³/s (889 m³/s) Jan. 22, 1959, gage height, 75.44 ft (22.994 m) at site and datum then in use; minimum daily, 25 ft³/s (0.71 m³/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 ft³/s (3,600 m³/s) computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,900 ft³/s (422 m³/s) June 15, gage height, 18.32 ft (5.584 m); minimum daily, 108 ft³/s (3.06 m³/s) Dec. 29.

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	113	165	213	510	325	736	289	2370	1960	1030	286	618
2	118	154	213	506	466	656	265	4900	1350	960	255	423
3	126	151	208	484	699	579	257	3410	1030	918	249	554
4	133	153	197	693	1460	538	329	2140	867	797	242	461
5	136	148	198	424	1260	615	416	1400	1340	1030	268	360
6	133	143	191	253	1160	771	467	2330	6540	1060	384	347
7	133	137	191	240	1010	796	434	4240	2450	861	278	267
8	132	136	208	210	632	700	369	2860	1410	654	260	269
9	130	140	279	180	314	620	340	1740	1680	535	262	235
10	127	138	344	170	260	592	318	1230	2860	481	237	217
11	120	138	405	160	2070	578	399	1610	3010	431	214	207
12	113	138	349	160	2340	551	2840	3130	2190	392	199	187
13	111	138	294	160	1550	507	5630	2520	1990	365	198	170
14	115	137	254	170	981	455	3750	1950	10800	371	182	433
15	128	139	233	160	786	431	2280	4680	14200	349	188	971
16	132	139	228	160	1100	403	1530	4850	11100	335	174	455
17	147	143	209	150	2410	382	1250	3520	6460	300	173	375
18	210	155	203	150	2690	392	1460	2490	3360	270	163	307
19	167	168	189	140	2490	347	1370	2190	2190	368	152	271
20	150	273	165	140	3290	328	1040	1620	1510	707	144	242
21	150	274	142	130	2750	316	875	1210	1140	1400	140	242
22	144	274	135	130	2090	297	757	973	4790	1130	143	207
23	148	274	141	130	1850	287	1000	836	3990	717	147	191
24	135	290	148	127	1850	272	957	750	2090	493	148	172
25	201	300	139	132	1580	266	796	680	2390	382	138	158
26	195	301	137	157	1260	260	688	613	3240	363	138	156
27	182	362	124	433	1010	264	598	735	2510	462	138	154
28	202	340	123	796	822	269	541	2200	1850	536	126	151
29	195	261	108	588	---	271	896	2640	1340	499	120	145
30	179	243	118	398	---	292	1600	2140	959	388	192	138
31	174	---	145	292	---	286	---	2360	---	344	244	---
TOTAL	4579	5952	6231	8533	40505	14057	33741	70317	102596	18928	6182	9083
MEAN	148	198	201	275	1447	453	1125	2268	3420	611	199	303
MAX	210	362	405	796	3290	796	5630	4900	14200	1400	384	971
MIN	111	136	108	127	260	260	257	613	867	270	120	138
CFSM	.13	.17	.18	.24	1.26	.39	.98	1.97	2.98	.53	.17	.26
IN.	.15	.19	.20	.28	1.31	.46	1.09	2.28	3.32	.61	.20	.29
CAL YR 1980 TOTAL	400466			1094	MAX 14200	MIN 108	CFSM .95	IN 12.97				
WTR YR 1981 TOTAL	320704			879	MAX 14200	MIN 108	CFSM .77	IN 10.38				

GREAT MIAMI RIVER BASIN

03264000 GREENVILLE CREEK NEAR BRADFORD, OH

LOCATION (revised).---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 mi² (500 km²).

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 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--51 years, 172 ft³/s (4.871 m³/s), 12.10 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,320 ft³/s (264 m³/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 ft³/s (0.14 m³/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 ft³/s (515 m³/s), at site with drainage area of 213 mi² (552 km²), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,520 ft³/s (71.4 m³/s) June 7, gage height 6.62 ft (2.018 m); above base of 1,500 ft³/s (42.5 m³/s); minimum daily 20 ft³/s (0.57 m³/s) Jan. 15, 16. Result of ice effect.

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	31	39	52	25	50	133	77	383	288	298	73	58
2	34	36	50	24	99	116	69	462	234	159	65	53
3	40	34	47	24	66	100	62	302	200	116	60	51
4	39	36	45	23	89	93	87	225	172	101	58	67
5	34	37	44	23	55	104	112	187	250	161	69	60
6	32	34	46	22	46	125	115	491	1940	163	571	52
7	32	32	47	22	42	128	95	478	2320	95	268	45
8	32	33	48	22	40	119	84	302	870	78	289	40
9	31	33	60	21	38	111	81	229	479	70	210	37
10	30	33	94	21	45	107	84	196	366	73	126	34
11	30	35	91	21	666	102	234	255	282	62	96	31
12	29	32	72	21	561	98	1160	369	229	54	80	29
13	29	32	61	21	283	92	1010	266	267	51	70	27
14	32	34	53	21	196	81	602	342	851	109	63	33
15	29	32	47	20	171	75	381	998	432	77	59	48
16	29	34	43	20	256	75	276	837	267	63	57	60
17	33	33	40	21	645	71	249	481	202	62	54	48
18	49	35	37	21	393	67	232	418	165	56	49	41
19	37	36	33	21	322	67	185	677	146	57	41	34
20	35	35	30	22	389	64	165	431	131	245	37	30
21	34	34	29	23	294	59	144	299	127	281	35	28
22	33	33	28	23	229	55	133	233	147	170	34	27
23	32	32	28	23	280	54	227	195	126	114	34	26
24	36	33	31	23	304	54	292	168	102	92	31	26
25	71	35	30	32	237	53	204	163	103	80	31	27
26	52	37	29	52	187	54	160	179	100	75	31	27
27	41	47	28	70	155	52	142	277	86	114	33	29
28	54	77	27	63	146	52	129	848	77	187	34	28
29	55	72	27	48	---	51	282	529	75	156	37	28
30	45	59	28	40	---	82	347	365	73	107	68	29
31	41	---	26	41	---	87	---	375	---	87	78	---
TOTAL	1161	1144	1351	874	6284	2581	7420	11960	11107	3613	2841	1153
MEAN	37.5	38.1	43.6	28.2	224	83.3	247	386	370	117	91.6	38.4
MAX	71	77	94	70	666	133	1160	998	2320	298	571	67
MIN	29	32	26	20	38	51	62	163	73	51	31	26
CFSM	.19	.20	.23	.15	1.16	.43	1.28	2.00	1.92	.61	.48	.20
IN.	.22	.22	.26	.17	1.21	.50	1.43	2.31	2.14	.70	.55	.22
CAL YR 1980	TOTAL	78316	MEAN 214	MAX	3530	MIN 26	CFSM 1.11	IN 15.10				
WTR YR 1981	TOTAL	51489	MEAN 141	MAX	3230	MIN 20	CFSM .73	IN 9.92				

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 mi² (1,303 km²).

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.--59 years, 444 ft³/s (12.57 m³/s), 11.99 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 14, 1937, from rating curve extended above 14,500 ft³/s (396 m³/s) on basis of velocity-area study; maximum gage height, 18.46 ft (5.627 m) June 29, 1980; minimum discharge observed, 4 ft³/s (0.11 m³/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 ft³/s (1,460 m³/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 ft³/s (142 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 6	1730	*7180 203	*10.87 3.313	June 14	1730	5620 159	9.34 2.847

Minimum discharge 27 ft³/s (0.765 m) Jan. 4 (result of freezeup).

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	42	62	86	33	89	290	144	1050	670	1030	163	171
2	45	58	81	32	144	251	124	1910	498	508	141	155
3	55	56	75	31	104	216	114	952	404	321	131	126
4	56	57	72	30	91	196	147	609	335	727	127	131
5	52	57	71	29	75	235	247	458	391	1200	119	123
6	48	53	73	28	66	369	267	1870	5850	1140	742	102
7	48	52	74	28	62	340	199	1890	5110	447	469	86
8	50	52	77	28	60	276	171	881	2060	286	524	87
9	50	53	94	28	58	247	164	589	1100	227	462	84
10	44	55	141	28	56	241	158	466	796	221	259	74
11	42	57	166	28	1540	231	273	718	589	196	191	67
12	42	56	127	28	1850	213	3090	1170	458	156	158	62
13	43	54	102	28	1100	196	3630	736	743	146	136	59
14	45	58	88	28	382	176	1830	921	5040	197	123	86
15	45	57	80	28	308	158	1060	3830	2660	184	114	110
16	44	57	70	28	482	155	699	2570	932	148	108	140
17	50	60	62	29	1500	148	590	1280	597	137	103	90
18	64	66	56	30	1050	137	546	980	432	123	93	75
19	62	66	50	30	981	133	420	1690	354	122	82	65
20	57	65	45	31	1270	126	361	1060	302	1120	75	56
21	56	60	43	32	863	116	305	680	308	1250	69	52
22	53	59	45	32	630	109	278	512	1880	594	67	49
23	49	58	45	32	799	103	431	413	785	339	65	46
24	53	60	43	32	848	99	592	349	377	243	62	46
25	111	62	41	52	605	98	412	310	1020	197	60	46
26	93	63	40	86	451	99	310	319	599	188	60	44
27	75	75	39	226	350	97	270	443	306	296	58	42
28	80	112	37	196	321	92	246	2540	236	486	60	45
29	89	119	36	117	---	91	784	1570	203	392	66	43
30	75	101	35	84	---	129	1020	969	186	256	92	48
31	66	---	34	71	---	164	---	978	---	196	130	---
TOTAL	1784	1920	2128	1543	16135	5531	18882	34713	35221	13073	5109	2410
MEAN	57.5	64.0	68.6	49.8	576	178	629	1120	1174	422	165	80.3
MAX	111	119	166	226	1850	369	3630	3830	5850	1250	742	171
MIN	42	52	34	28	56	91	114	310	186	122	58	42
CFSM	.11	.13	.14	.10	1.15	.35	1.25	2.23	2.33	.84	.33	.16
IN.	.13	.14	.16	.11	1.19	.41	1.40	2.57	2.60	.97	.38	.18
CAL YR 1980	TOTAL	207695	MEAN 567	MAX 17200	MIN 34	CFSM 1.13	IN 15.36					
WTR YR 1981	TOTAL	138449	MEAN 379	MAX 5850	MIN 28	CFSM .75	IN 10.24					

GREAT MIAMI RIVER BASIN

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 (2 km) southeast of Englewood, and at mile 8.9 (14.3 km).

DRAINAGE AREA.--650 mi² (1,684 km²).

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 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--56 years, 579 ft³/s (16.40 m³/s), 12.10 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,980 ft³/s (283 m³/s) June 15, 1958, gage height, 80.88 ft (24.652 m); minimum, 3.7 ft³/s (0.10 m³/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 ft³/s (2,420 m³/s) at site 1 mi (2 km) downstream, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,340 ft³/s (180 m³/s) June 7, gage height, 78.64 ft (23.969 m); minimum, 50 ft³/s (1.42 m³/s) Oct. 13, gage height, 72.00 ft (21.946 m), may have been less during period of ice effect.

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	72	96	136	70	150	398	210	1280	1230	890	236	271
2	72	89	127	68	183	352	187	2540	835	871	210	239
3	72	87	117	66	211	309	176	1670	579	422	200	253
4	79	89	109	64	186	284	198	999	491	515	198	203
5	79	87	107	64	149	330	266	691	941	1420	214	182
6	77	84	106	62	128	455	330	1210	5070	1450	896	159
7	74	82	110	62	120	517	280	2950	6240	678	847	140
8	73	83	114	62	110	417	243	1480	5780	376	489	140
9	73	78	134	62	100	369	235	907	4390	293	635	130
10	72	78	170	60	125	357	222	665	1770	263	367	119
11	66	77	206	60	1160	346	270	772	1020	257	271	113
12	61	77	196	60	1930	320	2470	1750	736	222	227	105
13	62	79	169	60	657	299	4170	1250	873	220	201	93
14	64	79	147	60	429	270	3160	999	3680	269	184	206
15	67	80	135	60	363	248	1720	3280	4450	269	174	324
16	67	80	120	60	475	248	1080	3830	2230	228	163	224
17	73	85	110	62	1570	235	891	2220	963	204	158	187
18	91	91	100	62	1640	222	810	1430	650	189	149	151
19	85	90	92	62	1520	210	616	2260	496	244	138	129
20	84	90	84	62	2100	202	503	1860	420	840	126	114
21	80	89	80	64	1590	195	417	1110	373	2270	118	105
22	78	85	78	64	1080	184	375	791	1620	1070	111	100
23	74	83	76	64	1100	173	632	600	1420	529	105	91
24	75	90	78	64	1400	169	973	496	543	355	103	89
25	97	90	78	68	1010	166	700	429	725	286	98	86
26	128	87	78	100	709	163	468	404	1090	255	94	85
27	118	114	76	160	510	166	392	462	427	301	91	80
28	117	134	76	248	442	159	352	1990	319	497	93	76
29	110	158	74	176	---	156	700	2630	278	528	94	78
30	111	149	76	144	---	173	1650	1610	256	358	141	80
31	108	---	74	124	---	202	---	1930	---	275	196	---
TOTAL	2559	2760	3433	2524	21147	8294	24696	46495	49895	16844	7327	4352
MEAN	82.5	92.0	111	81.4	755	268	823	1500	1663	543	236	145
MAX	128	158	206	248	2100	517	4170	3830	6240	2270	896	324
MIN	61	77	74	60	100	156	176	404	256	189	91	76
CFSM	.13	.14	.17	.13	1.16	.41	1.27	2.31	2.56	.84	.36	.22
IN.	.15	.16	.20	.14	1.21	.47	1.41	2.66	2.86	.96	.42	.25

CAL YR 1980 TOTAL 283940 MEAN 776 MAX 8150 MIN 61 CFSM 1.19 IN 16.25
WTR YR 1981 TOTAL 190326 MEAN 521 MAX 6240 MIN 60 CFSM .80 IN 10.89

GREAT MIAMI RIVER BASIN

329

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 mi² (420 km²).

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 fair except those for winter periods, which are poor. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--48 years, 144 ft³/s (4.078 m³/s), 12.07 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s (227 m³/s) Jan. 22, 1959, gage height, 12.05 ft (3.673 m), from rating curve extended above 4,000 ft³/s (113 m³/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 mi² (609 km²) adjusted to gage site by 0.8 power of the drainage-area ratio; minimum, 2.1 ft³/s (0.059 m³/s) Jan. 21, 1963, gage height, 2.33 ft (0.710 m), result of freezeup; minimum daily, 24 ft³/s (0.68 m³/s) Feb. 2, 3, 1945, Jan. 13, 1964.

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

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 11	0700	1490 42.2	5.58 1.701	May 15	0030	1500 42.5	5.60 1.707
Apr. 12	2130	1660 47.0	5.83 1.777	June 14	0630	*4260 121	*9.05 2.758

Minimum daily discharge 68 ft³/s (1.93 m³/s) Jan. 22-25 (Result of ice effect).

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	115	110	110	78	112	168	97	261	202	217	141	132
2	115	107	112	76	179	160	94	248	194	208	127	107
3	115	107	107	76	112	150	97	198	190	205	127	115
4	115	110	104	74	110	150	102	175	182	201	129	132
5	112	107	104	74	100	153	107	168	179	190	127	112
6	112	104	102	74	92	150	99	312	202	193	128	104
7	112	104	110	72	88	144	97	248	179	182	125	99
8	112	102	115	72	84	138	97	202	171	175	124	104
9	110	102	132	72	82	141	94	182	393	171	120	97
10	110	99	160	72	90	144	94	179	425	164	118	92
11	110	99	138	72	775	141	102	560	262	158	117	92
12	107	97	129	70	179	135	787	586	219	153	106	89
13	107	97	123	70	150	132	665	321	640	154	107	87
14	107	97	118	70	132	123	346	485	2700	151	112	99
15	107	97	118	70	129	123	252	798	633	149	112	160
16	104	97	100	70	288	123	214	444	429	149	110	112
17	110	97	98	70	372	120	218	331	348	145	107	110
18	126	97	94	70	312	118	202	331	304	140	104	104
19	115	94	90	70	351	115	179	284	281	152	97	102
20	110	94	88	70	427	115	171	252	258	191	89	97
21	107	94	86	70	298	112	157	235	434	204	89	94
22	104	94	86	68	248	110	153	222	478	182	89	89
23	104	94	86	68	261	110	164	210	307	172	94	87
24	107	97	84	68	252	107	157	202	265	170	94	84
25	132	97	84	68	222	104	144	194	494	163	92	78
26	120	94	82	90	198	104	141	186	295	168	94	76
27	112	104	82	171	182	104	138	214	250	166	94	74
28	120	120	84	123	179	102	135	326	234	163	94	78
29	118	112	86	107	---	102	206	235	221	153	97	86
30	112	107	86	97	---	104	182	218	218	149	107	99
31	110	---	82	94	---	99	---	235	---	146	104	---
TOTAL	3477	3031	3180	2466	6004	3901	5691	9004	11587	5284	3375	2991
MEAN	112	101	103	79.5	214	126	190	290	386	170	109	99.7
MAX	132	120	160	171	775	168	787	798	2700	217	141	160
MIN	104	94	82	68	82	99	94	168	171	140	89	74
CFSM	.69	.62	.64	.49	1.32	.78	1.17	1.79	2.38	1.05	.67	.62
IN.	.80	.70	.73	.57	1.38	.90	1.31	2.07	2.66	1.21	.77	.69

CAL YR 1980	TOTAL	78380	MEAN 214	MAX 2380	MIN 82	CFSM 1.32	IN 18.00
WTR YR 1981	TOTAL	59991	MEAN 164	MAX 2700	MIN 68	CFSM 1.01	IN 13.78

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 mi² (803 km²).

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 good. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, just upstream from station. Recharge to the well field is largely by induced infiltration from Mad River and Moore Run. Pumpage, averaging 23.9 ft³/s (0.68 m³/s) in 1981, 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.--16 years, 312 ft³/s (8.836 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft³/s (275 m³/s) June 26, 1971, gage height, 16.00 ft (4.877 m), from rating curve extended above 3,060 ft³/s (86.7 m³/s); minimum daily, 60 ft³/s (1.70 m³/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 ft³/s (90.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage (ft)	height (m)
Feb. 11	0700	2670	75.6	9.67	2.947	May 27	2300	2940	83.3	10.02	3.054
Apr. 12	1930	4040	114	11.31	3.447	June 6	0100	4020	114	11.29	3.441
May 15	0030	2550	72.2	9.51	2.899	June 14	0400	*6400	181	*13.60	4.145

Minimum daily discharge, 147 ft³/s (4.16 m³/s) Jan. 18, 24.

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	227	185	205	173	262	328	193	1140	540	391	226	205
2	223	179	213	169	388	314	189	766	478	357	223	203
3	216	177	208	166	223	296	193	516	486	399	224	493
4	213	180	199	157	216	295	216	426	443	364	222	310
5	205	174	199	172	201	324	239	389	596	358	289	235
6	203	170	191	166	185	315	216	766	1470	349	304	212
7	199	168	202	165	180	303	206	575	610	325	232	201
8	197	166	220	161	177	291	202	437	491	313	220	211
9	193	162	283	163	168	295	206	387	652	305	212	195
10	190	161	326	157	252	307	200	400	732	299	206	185
11	189	160	272	159	1520	297	307	1080	539	290	202	179
12	189	159	249	156	401	284	1900	1130	461	285	197	174
13	189	161	233	154	313	274	1390	663	1730	289	194	171
14	188	161	217	152	274	258	768	1040	4340	283	192	321
15	186	161	216	152	272	255	549	1570	1290	273	189	373
16	182	159	211	151	668	255	457	900	889	270	188	239
17	212	165	200	149	740	248	442	679	726	265	184	217
18	253	168	200	147	607	242	424	700	625	256	180	207
19	211	162	192	150	742	239	373	695	563	279	174	201
20	203	160	179	149	972	235	355	566	519	405	171	191
21	196	159	176	150	720	229	326	504	585	351	168	187
22	191	157	177	150	560	222	329	464	773	300	165	181
23	185	157	180	149	580	220	463	433	543	273	162	176
24	190	169	181	147	489	216	390	409	474	264	162	173
25	238	167	170	149	442	212	339	390	651	255	160	169
26	215	163	171	216	392	209	317	384	493	265	160	167
27	202	199	171	322	361	210	307	726	429	271	160	166
28	216	223	170	235	349	203	293	1110	402	259	159	164
29	205	214	175	200	---	200	520	618	383	250	164	164
30	197	198	175	181	---	213	415	898	376	240	190	166
31	190	---	175	172	---	200	---	747	---	231	177	---
TOTAL	6293	5144	6336	5239	12654	7989	12724	21508	23289	9314	6056	6436
MEAN	203	171	204	169	452	258	424	694	776	300	195	215
MAX	253	223	326	322	1520	328	1900	1570	4340	405	304	493
MIN	182	157	170	147	168	200	189	384	376	231	159	164
CFSM	.66	.55	.66	.55	1.46	.83	1.37	2.24	2.50	.97	.63	.69
IN.	.76	.62	.76	.63	1.52	.96	1.53	2.58	2.79	1.12	.73	.77

CAL YR 1980	TOTAL	148881	MEAN 407	MAX 4600	MIN 157	CFSM 1.31	IN 17.87
WTR YR 1981	TOTAL	122982	MEAN 337	MAX 4340	MIN 147	CFSM 1.09	IN 14.76

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 mi² (212 km²).

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 hm³) 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 m³). 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 hm³) Feb. 28, 1975, elevation, 1,014.60 ft (309.250 m); minimum, 7,160 acre-ft (8.83 hm³) Oct. 25, 1979, elevation, 991.93 ft (302.340 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 40,330 acre-ft (49.7 hm³) June 15, elevation, 1,013.57 ft (308.936 m); minimum, 30,770 acre-ft (37.9 hm³) Jan. 5, 6, elevation, 1,008.96 ft (307.531 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1011.40	35670	---
Oct. 31.....	1010.33	33480	-2190
Nov. 30.....	1009.57	31960	-1520
Dec. 31.....	1009.10	31040	-920
CAL YR 1980.....	---	---	+18060
Jan. 31.....	1009.04	30920	-120
Feb. 28.....	1009.92	32650	+1730
Mar. 31.....	1010.31	33440	+790
Apr. 30.....	1012.47	37930	+4490
May 31.....	1012.30	37570	-360
June 30.....	1012.09	37120	-450
July 31.....	1012.04	37010	-110
Aug. 31.....	1012.28	37530	+520
Sept. 30.....	1011.18	35210	-2320
WTR YR 1981.....	---	---	-460

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 mi² (1,269 km²).

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 good except those for periods of no gage-height record June 18 to Aug. 13, which are 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.--68 years, (1904-05, 1914-81), 490 ft³/s (13.88 m³/s), 13.50 in/yr (345 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,500 ft³/s (864 m³/s) Jan. 21, 1959, gage height, 15.76 ft (4,804 m), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft³/s (0.85 m³/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 ft³/s (1,570 m³/s) computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,730 ft³/s (219 m³/s) June 14, gage height, 9.90 ft (3.018 m); minimum daily, 227 ft³/s (6.43 m³/s) Aug. 28.

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	320	357	411	328	511	578	265	2050	992	750	330	310
2	350	349	454	322	663	556	255	1390	852	500	320	349
3	400	357	436	320	376	527	267	952	903	620	310	1260
4	410	359	421	303	407	532	346	794	785	560	300	750
5	400	349	434	287	377	629	374	710	1500	520	580	464
6	390	346	414	288	369	600	312	1360	3630	500	880	396
7	385	341	445	285	365	565	291	1250	1210	480	450	366
8	384	336	467	273	355	534	281	1020	930	460	370	410
9	379	330	580	264	341	531	285	885	1040	440	350	397
10	371	329	616	267	483	525	280	792	1270	400	340	382
11	338	331	535	259	2150	449	487	1770	1160	380	330	357
12	334	328	481	260	700	425	2550	1810	1000	380	320	314
13	339	327	426	266	572	409	2020	1300	2060	410	281	307
14	334	328	389	263	508	383	1060	1880	5810	390	276	549
15	335	329	362	263	499	374	771	2830	1810	370	271	717
16	332	324	353	261	1060	375	640	1640	1570	360	269	490
17	470	338	337	257	1230	355	689	1240	1480	350	265	442
18	500	356	333	253	1020	327	646	1190	1300	390	258	419
19	382	334	323	257	1310	320	552	1180	1100	600	253	405
20	364	332	304	261	1660	317	645	953	980	1100	252	380
21	356	333	300	263	1100	306	494	836	800	800	255	433
22	350	327	303	260	883	297	502	766	1000	500	249	536
23	342	328	304	257	940	295	928	712	800	460	244	529
24	386	376	304	256	866	287	776	656	700	430	247	440
25	461	361	285	265	772	283	646	592	720	410	237	281
26	387	345	289	352	684	279	591	596	660	400	230	271
27	371	478	299	481	635	292	571	1280	600	420	230	263
28	418	450	322	400	612	274	555	1860	560	400	227	261
29	384	435	339	392	---	269	998	1030	520	390	242	260
30	369	398	331	367	---	311	772	1900	500	370	355	264
31	365	---	331	333	---	277	---	1470	---	350	314	---
TOTAL	11706	10611	11928	9163	21448	12481	19849	38694	38242	14890	9835	13002
MEAN	378	354	385	296	766	403	662	1248	1275	480	317	433
MAX	500	478	616	481	2150	629	2550	2830	5810	1100	880	1260
MIN	320	324	285	253	341	269	255	592	500	350	227	260
CFSM	.77	.72	.79	.60	1.56	.82	1.35	2.55	2.60	.98	.65	.88
IN.	.89	.81	.91	.70	1.63	.95	1.51	2.94	2.90	1.13	.75	.99
CAL YR 1980	TOTAL	248725	MEAN 680	MAX 5830	MIN 285	CFSM 1.39	IN 18.88					
WTR YR 1981	TOTAL	211849	MEAN 580	MAX 5810	MIN 227	CFSM 1.18	IN 16.08					

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	413	463	381	483	669	368	2020	1420	987	440	517
2	410	405	487	377	828	637	360	2220	1150	685	427	514
3	427	404	496	373	486	609	370	1290	1160	825	423	1520
4	448	409	477	356	540	603	434	998	1030	747	419	1600
5	443	400	476	340	520	739	561	856	1750	733	605	723
6	438	396	473	330	431	764	458	1360	8000	675	1070	583
7	436	390	480	320	417	693	424	1600	2770	666	555	523
8	434	385	493	310	414	646	403	1200	1610	638	484	535
9	429	380	608	310	391	622	392	1050	1460	624	471	523
10	425	374	720	310	453	623	403	859	1660	555	453	502
11	400	373	630	310	2410	567	499	1880	1590	528	457	487
12	387	373	578	300	935	531	2490	2380	1350	510	432	439
13	385	373	511	300	752	513	2850	1650	1410	546	402	424
14	389	373	478	300	601	489	1450	1830	5510	550	385	623
15	386	373	444	300	576	474	1000	4020	3170	497	377	1400
16	383	373	430	290	979	475	799	2300	2000	492	373	714
17	438	381	408	290	1740	464	865	1680	1840	484	369	598
18	681	402	400	290	1260	439	810	1520	1660	475	356	543
19	463	393	393	290	1460	427	702	1700	1530	573	352	520
20	428	383	368	290	2060	421	680	1270	1070	1420	348	489
21	415	381	362	290	1440	414	688	1070	1070	1180	344	454
22	406	379	362	290	1090	403	603	952	1420	762	344	592
23	397	377	360	300	1080	394	1210	877	1070	680	340	568
24	404	412	363	300	1050	385	1130	813	894	633	340	561
25	524	435	350	310	921	381	845	724	969	569	336	395
26	460	412	346	362	812	375	737	709	924	546	337	373
27	430	530	344	499	741	392	692	939	786	564	332	354
28	467	552	364	454	705	378	660	2590	735	564	326	346
29	449	508	377	431	---	371	1130	1370	699	523	326	340
30	431	485	391	412	---	409	999	1890	642	523	427	340
31	416	---	381	393	---	388	---	2680	---	501	444	---
TOTAL	13487	12224	13813	10408	25575	15695	25012	48297	52349	20255	13094	18100
MEAN	435	407	446	336	913	506	834	1558	1745	653	422	603
MAX	681	552	720	499	2410	764	2850	4020	8000	1420	1070	1600
MIN	383	373	344	290	391	371	360	709	642	475	326	340
CFSM	.69	.64	.70	.53	1.44	.80	1.31	2.45	2.75	1.03	.67	.95
IN.	.79	.72	.81	.61	1.50	.92	1.47	2.83	3.07	1.19	.77	1.06
CAL YR 1980	TOTAL	310396		MEAN 848	MAX 7930	MIN 344	CFSM 1.34	IN 18.18				
WTR YR 1981	TOTAL	268309		MEAN 735	MAX 8000	MIN 290	CFSM 1.16	IN 15.72				

GREAT MIAMI RIVER BASIN

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 mi² (6,503 km²).

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 periods of no gage-height record (Oct. 1 to Jan. 27, Mar. 17 to May 11), which are poor. 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 1957.

COOPERATION.--Gage-height charts, tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--52 years (1929-81). 2,143 ft³/s (60.69 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,900 ft³/s (1,720 m³/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 ft³/s (3.09 m³/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 ft³/s (7,080 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,500 ft³/s (637 m³/s) June 15, gage height 30.53 ft (9.306 m); minimum daily, 460 ft³/s (13.0 m³/s) Jan. 12.

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	628	674	812	620	1120	1940	800	5800	5270	3370	1100	1620
2	583	648	827	660	1610	1760	780	8400	4010	2980	990	1490
3	616	642	821	680	1120	1610	760	6000	3290	2640	955	2590
4	660	651	783	600	989	1510	800	4300	2800	2270	926	2740
5	658	635	781	540	1050	1810	1300	3400	8000	3340	1210	1480
6	648	623	770	540	1050	2050	1200	3600	20200	3300	2520	1260
7	643	609	781	520	989	2130	1100	7600	12800	2600	2030	1040
8	639	604	815	500	927	1910	1100	5200	9650	1960	1500	1060
9	632	598	1020	500	712	1730	1000	3800	8450	1700	1580	1000
10	624	590	1230	500	846	1660	900	2900	6930	1450	1300	879
11	586	588	1240	500	4970	1580	1200	5200	6310	1350	1120	866
12	561	588	1120	460	5050	1460	5000	7310	4950	1250	976	795
13	558	590	974	470	3250	1390	10000	6040	4310	1420	887	729
14	568	589	879	490	2350	1300	7000	5310	17300	1450	797	1220
15	581	592	812	490	1910	1210	5000	11600	20800	1280	774	3220
16	582	592	790	490	2520	1160	3600	11700	15700	1150	745	1700
17	658	609	742	490	5390	1120	3200	8440	10200	1080	724	1350
18	982	650	721	490	5580	980	3000	6040	6540	1000	692	1150
19	715	651	696	500	5460	940	2800	6440	4910	1390	656	996
20	662	746	629	520	7270	900	2400	5310	3580	3070	627	939
21	645	744	590	520	6000	880	2100	3840	2990	5220	604	857
22	630	738	590	540	4470	860	1900	3100	7160	3340	591	962
23	619	734	599	540	4050	840	4800	2670	7460	2280	574	912
24	692	792	610	540	4290	820	3500	2410	4320	1760	580	910
25	822	825	572	560	3680	800	2600	2160	4080	1420	567	688
26	783	800	566	690	3000	800	2200	2070	5970	1250	551	630
27	730	1010	559	1200	2470	840	1800	2440	4480	1420	538	608
28	786	1030	573	1530	2130	820	1700	6120	3420	1730	520	586
29	754	927	576	1320	---	800	2500	7480	2720	1700	521	574
30	721	877	605	1030	---	880	4000	5890	2120	1430	838	568
31	698	---	600	826	---	860	---	7740	---	1280	950	---
TOTAL	20664	20946	23683	19856	84253	39350	80040	170310	220720	62880	28943	35413
MEAN	667	698	764	641	3009	1269	2668	5494	7357	2028	934	1180
MAX	982	1030	1240	1530	7270	2130	10000	11700	20800	5220	2520	3220
MIN	558	588	559	460	712	800	760	2070	2120	1000	520	568

CAL YR 1980 TOTAL 982399 MEAN 2684 MAX 27200 MIN 558
WTR YR 1981 TOTAL 807058 MEAN 2211 MAX 20800 MIN 460

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.

PERIOD OF RECORD.--October 1962 to current year.

REMARKS.--Records fair except those for Dec. 18 to Mar. 20, which are poor.

AVERAGE DISCHARGE.--19 years, 22.1 ft³/s (0.626 m³/s), 13.22 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,970 ft³/s (84.1 m³/s) May 24, 1968, gage height, 6.47 ft (1.972 m), from rating curve extended above 1,000 ft³/s (28.3 m³/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 ft³/s (110 m³/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 mi² (125 km²), 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.--Maximum discharge, 1,040 ft³/s (29.5 m³/s) June 5, gage height 3.68 ft (1.122 m) above base of 700 ft³/s (19.8 m³/s); minimum discharge, 0.30 ft³/s (0.008 m³/s) Sept. 26.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	1.8	7.1	7.0	85	24	6.3	81	38	14	3.2	13
2	1.6	1.8	8.0	6.0	29	19	5.7	50	26	6.4	3.1	16
3	1.6	1.8	7.3	5.5	24	16	5.8	32	21	8.1	3.3	37
4	1.2	2.8	6.1	5.0	20	14	22	25	17	6.9	3.6	17
5	1.2	2.6	6.0	4.8	16	56	37	22	175	16	12	6.2
6	1.1	2.1	5.8	4.5	14	40	18	44	342	10	35	3.7
7	1.1	2.0	5.6	9.0	12	27	14	33	95	8.0	12	2.6
8	1.2	2.1	5.4	7.8	11	23	12	24	49	7.3	8.1	3.3
9	1.1	2.3	26	6.4	10	20	11	20	28	7.2	5.9	2.0
10	1.2	2.1	27	6.0	210	18	9.2	25	25	7.2	4.9	1.3
11	1.1	2.0	16	6.2	230	16	72	55	16	7.0	4.4	1.1
12	1.1	2.1	13	6.0	120	18	192	60	13	7.2	4.0	.98
13	1.5	2.1	11	5.8	50	14	55	34	54	8.0	3.6	.87
14	1.7	2.1	9.0	5.8	20	12	33	93	80	11	3.3	12
15	1.9	2.3	8.8	6.0	14	11	21	137	35	5.5	3.2	15
16	2.0	2.3	8.7	6.2	16	12	18	62	19	4.8	3.1	4.3
17	4.9	2.9	7.2	6.6	70	10	35	37	13	4.4	2.4	2.8
18	8.5	3.6	6.8	6.2	140	9.2	32	98	10	3.5	2.0	2.0
19	1.8	3.9	6.2	6.0	110	8.6	22	87	8.9	23	1.7	1.3
20	1.3	2.9	6.0	5.6	190	8.0	22	43	8.2	25	1.5	1.0
21	1.4	2.5	7.2	5.3	100	7.5	17	30	8.2	31	1.3	.89
22	1.5	2.5	5.6	5.0	66	7.0	20	23	8.4	17	1.3	.83
23	1.6	2.6	5.0	4.7	94	7.2	205	19	5.8	8.1	1.2	.73
24	3.3	4.2	4.4	5.2	66	6.6	73	17	5.1	5.9	1.1	.51
25	9.1	5.3	5.6	8.4	54	6.3	38	15	14	4.8	1.1	.54
26	3.2	3.6	5.0	7.0	42	6.1	27	17	6.8	4.5	1.0	.54
27	1.9	25	4.6	6.2	29	8.3	21	30	5.1	7.4	1.2	.60
28	4.2	20	4.3	8.0	34	6.1	19	42	4.6	9.3	1.2	.60
29	3.1	12	4.2	6.4	---	6.1	41	26	4.4	6.2	1.4	.91
30	2.1	8.5	5.0	6.0	---	12	28	101	4.4	4.3	8.1	.97
31	1.8	---	6.0	5.8	---	7.5	---	88	---	3.5	8.5	---
TOTAL	71.27	133.8	253.9	190.4	1876	456.5	1132.0	1470	1139.9	292.5	147.7	150.57
MEAN	2.30	4.46	8.19	6.14	67.0	14.7	37.7	47.4	38.0	9.44	4.76	5.02
MAX	9.1	25	27	9.0	230	56	205	137	342	31	35	37
MIN	.97	1.8	4.2	4.5	10	6.1	5.7	15	4.4	3.5	1.0	.51
CFSM	.10	.20	.36	.27	2.95	.65	1.66	2.09	1.67	.42	.21	.22
IN.	.12	.22	.42	.31	3.07	.75	1.86	2.41	1.87	.48	.24	.25
CAL YR 1980	TOTAL	9629.00	MEAN	26.3	MAX	487	MIN	.78	CFSM	1.16	IN	15.78
WTR YR 1981	TOTAL	7314.54	MEAN	20.0								

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 mi² (7,021 km²).

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 RECCRDS.--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 and July 9 to Sept. 30, 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 6 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--44 years, 2,418 ft³/s (68.48 m³/s), 12.11 in/yr (308 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 ft³/s (1,750 m³/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 floodmarks; minimum daily, 148 ft³/s (4.19 m³/s) Sept. 7, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1913 reached a discharge of 257,000 ft³/s (7,280 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,400 ft³/s (634 m³/s) June 15, gage height, 12.55 ft (3.825 m); minimum daily, 580 ft³/s (16.4 m³/s) Jan. 12, 13 (Result of ice effect).

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	821	804	1080	760	1460	2120	989	4770	5130	3720	1100	1910
2	872	778	1080	820	2020	1970	938	9080	3910	3050	1000	1900
3	778	762	1060	820	1330	1810	889	6720	3270	2830	960	2520
4	812	829	1010	760	1170	1740	1200	4610	2910	2410	920	3180
5	812	770	1100	660	1220	2340	1630	3430	3160	3340	920	1710
6	778	753	980	680	1240	2430	1390	3900	19700	3210	2500	1410
7	787	720	970	640	1180	2360	1320	8420	13900	2730	2000	1200
8	778	736	980	620	1130	2130	1190	6130	9470	2110	1700	1210
9	787	736	1200	620	955	1940	1080	4170	7820	1800	1500	1180
10	795	695	1500	620	1090	1870	1050	3290	6560	1600	1400	1040
11	787	678	1400	600	5390	1790	1580	4260	5830	1400	1300	993
12	728	687	1400	580	5060	1690	6480	6740	4760	1300	1100	927
13	703	678	1200	580	3320	1580	11800	5860	4240	1300	1000	805
14	728	687	1200	600	2450	1440	8990	5400	14700	1600	900	1260
15	678	678	1010	600	2060	1350	5480	11300	21300	1300	850	3130
16	695	678	994	600	2920	1320	3780	11700	16600	1200	820	1950
17	898	711	950	600	5390	1240	3310	8320	10600	1100	800	1510
18	1540	812	924	600	5610	1210	3340	6470	6410	1000	761	1320
19	898	787	872	620	5630	1150	3120	6610	4760	1200	809	1130
20	770	795	804	640	7340	1110	2680	5250	3640	3000	1250	1060
21	778	898	745	640	6140	1060	2360	3920	3100	4400	1320	979
22	778	872	740	680	4570	1000	2200	3240	6030	3400	1240	1020
23	753	872	720	660	4230	973	5070	2790	7110	2500	1190	1020
24	787	1000	740	660	4350	955	3720	2520	4200	1800	1220	1010
25	1090	1020	700	680	3770	935	2880	2290	3650	1500	1130	834
26	950	968	680	740	3130	932	2360	2210	5430	1400	985	755
27	872	1530	660	961	2650	1040	2130	2810	4180	1300	901	722
28	994	1450	660	1580	2320	964	1960	5940	3320	1600	836	694
29	941	1220	700	1490	---	939	2940	6990	2760	1800	716	702
30	872	1140	720	1220	---	1090	3950	6270	2260	1500	1040	691
31	838	---	700	1020	---	1020	---	7660	---	1300	1200	---
TOTAL	26098	25744	29479	23351	89125	45498	91806	173070	210710	63700	35368	39772
MEAN	842	858	951	753	3183	1468	3060	5583	7024	2055	1141	1326
MAX	1540	1530	1500	1580	7340	2430	11800	11700	21300	4400	2500	3180
MIN	678	678	660	580	955	932	889	2210	2260	1000	716	691
CFSM	.31	.32	.35	.28	1.17	.54	1.13	2.06	2.59	.76	.42	.49
IN.	.36	.35	.40	.32	1.22	.62	1.26	2.37	2.89	.87	.49	.55
CAL YR 1980 TOTAL	1166870			3188		28000	660	1.18		16.01		
WTR YR 1981 TOTAL	853721			2339		21300	580	.86		11.71		

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 mi² (7.027 km²).

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 213 micromhos June 3, 1980.

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.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L July 12, 1978; minimum, 0.4 mg/L Aug. 27, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 1,080 micromhos Nov. 9; minimum, 276 micromhos June 6.

pH: Maximum, 8.6 units Aug. 20; minimum, 7.3 units July 20, Sept. 1.

WATER TEMPERATURES: Maximum, 28.5°C July 10; minimum, 0.5°C Feb. 12, 13.

DISSOLVED OXYGEN: Maximum 15.8 mg/L Aug. 20; minimum, 0.4 mg/L Aug. 27.

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	945	816	954	894	864	831	940	870	854	720	740	716
2	927	822	927	891	882	834	920	858	744	702	750	724
3	912	885	945	897	843	822	880	858	752	694	756	732
4	924	894	936	885	790	756	874	856	792	740	768	736
5	909	876	939	891	800	784	896	856	834	792	820	710
6	912	873	936	894	---	---	932	884	828	796	778	724
7	933	906	936	915	---	---	934	890	830	802	---	---
8	924	819	930	903	---	---	1020	936	828	782	---	---
9	951	558	1080	885	---	---	944	904	846	798	---	---
10	960	846	960	882	---	---	928	878	910	700	---	---
11	933	897	960	888	772	738	900	872	760	468	---	---
12	930	897	954	891	784	760	906	872	524	458	---	---
13	951	882	975	900	800	768	932	888	540	476	---	---
14	981	891	966	915	808	784	938	892	586	536	---	---
15	960	882	957	909	820	792	946	860	626	582	---	---
16	993	867	933	903	836	798	900	828	706	624	---	---
17	972	663	966	900	828	808	926	878	632	548	---	---
18	759	615	1000	921	844	814	932	894	560	526	---	---
19	801	735	999	885	846	806	916	882	572	536	---	---
20	855	762	945	885	832	814	942	894	564	554	---	---
21	909	858	903	873	842	818	942	914	604	560	---	---
22	930	903	900	873	856	832	936	906	632	604	---	---
23	1010	909	921	879	864	804	942	900	662	634	818	782
24	969	858	918	879	854	796	924	898	664	650	834	782
25	927	762	888	852	884	798	924	890	674	658	836	788
26	828	783	855	822	858	788	910	866	690	662	836	770
27	900	792	852	702	844	786	900	828	702	678	814	786
28	918	837	771	693	854	814	836	774	722	700	826	792
29	906	849	792	753	862	814	788	758	---	---	822	768
30	900	852	828	792	912	836	788	758	---	---	812	768
31	915	852	---	---	926	866	788	778	---	---	824	790
MONTH	1010	558	1080	693	926	738	1020	758	910	458	836	710

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	830	782	674	588	660	604	678	458	792	754	740	558
2	834	796	568	520	702	660	684	596	1000	762	696	534
3	850	806	604	548	712	694	642	558	1040	790	614	562
4	854	628	658	604	730	698	668	608	1060	808	544	412
5	750	680	674	646	738	540	668	606	842	712	664	534
6	766	732	678	650	560	276	632	578	810	518	714	668
7	804	760	646	552	438	318	662	590	846	616	820	718
8	808	764	610	568	476	438	670	642	906	656	768	744
9	820	780	648	610	580	478	720	672	712	682	840	584
10	836	788	668	550	604	570	756	714	976	714	790	772
11	844	610	660	602	612	582	778	746	782	746	906	786
12	578	472	610	588	624	590	776	752	798	756	812	796
13	560	478	632	592	642	510	784	746	810	768	818	788
14	580	506	636	540	592	316	730	590	828	784	832	608
15	640	582	552	516	364	314	774	728	828	784	618	466
16	680	642	540	514	398	368	798	768	832	790	612	472
17	686	656	590	540	---	---	794	758	836	804	742	618
18	690	614	602	502	---	---	794	738	884	818	762	732
19	694	672	636	580	---	---	764	624	862	830	774	756
20	716	688	664	638	---	---	610	468	864	824	774	748
21	724	708	696	664	---	---	600	474	872	840	802	758
22	734	670	720	694	---	---	612	522	864	832	804	776
23	650	444	726	712	480	420	694	616	862	804	804	762
24	680	604	738	724	584	484	720	690	848	788	798	762
25	714	684	748	730	620	584	738	714	868	798	796	768
26	734	712	752	710	616	514	754	728	862	806	822	796
27	764	734	728	558	548	508	870	676	878	834	838	790
28	766	750	612	512	598	546	744	708	876	838	840	804
29	714	592	614	570	650	600	752	716	882	844	874	826
30	674	644	610	340	696	594	920	744	864	734	876	832
31	---	---	598	488	---	---	1010	756	760	686	---	---
MONTH	854	444	752	340	738	276	1010	458	1060	518	906	412
YEAR	1080	276										

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	8.4	7.9	7.9	7.7	7.8	7.8	7.8	7.6	8.1	7.8	7.6	7.3
2	8.5	8.0	7.8	7.7	7.8	7.8	7.9	7.7	8.0	7.8	7.6	7.4
3	8.2	7.9	7.8	7.7	7.8	7.8	7.8	7.8	8.1	7.8	7.7	7.4
4	8.0	7.8	7.8	7.8	7.8	7.7	7.8	7.7	8.2	7.8	7.7	7.5
5	7.8	7.7	7.8	7.7	7.9	7.8	7.8	7.8	8.2	7.8	7.8	7.5
6	8.1	7.7	7.8	7.7	7.8	7.4	7.8	7.7	8.1	7.6	7.9	7.7
7	8.3	7.8	7.9	7.7	7.6	7.4	7.8	7.7	7.6	7.5	8.1	7.8
8	8.4	7.9	7.8	7.8	7.6	7.5	7.8	7.7	7.6	7.5	8.0	7.9
9	8.4	8.0	7.8	7.7	7.7	7.6	7.8	7.7	7.7	7.5	8.1	7.9
10	8.3	7.9	7.8	7.8	7.7	7.6	7.9	7.8	8.1	7.6	8.1	7.8
11	8.2	7.8	7.8	7.7	7.7	7.6	8.0	7.8	8.2	7.9	8.2	7.8
12	7.9	7.5	7.8	7.7	7.7	7.6	8.1	7.9	8.4	7.8	8.3	7.9
13	7.6	7.5	7.8	7.8	7.8	7.6	8.3	7.9	8.4	7.9	8.5	8.0
14	7.7	7.6	7.8	7.7	7.7	7.4	8.1	7.6	8.3	7.8	8.1	7.6
15	7.8	7.7	7.8	7.7	7.5	7.4	8.1	7.8	8.3	7.7	7.9	7.6
16	7.8	7.8	7.8	7.7	7.5	7.5	8.2	7.9	8.1	7.8	7.7	7.6
17	7.8	7.8	7.8	7.7	---	---	8.4	7.9	8.4	7.7	7.9	7.7
18	7.9	7.6	7.8	7.8	---	---	8.4	7.8	8.4	7.8	7.9	7.8
19	7.9	7.8	7.8	7.8	---	---	7.9	7.4	8.5	7.9	8.0	7.7
20	7.9	7.8	7.9	7.8	---	---	7.7	7.3	8.6	7.9	8.1	7.9
21	8.0	7.9	7.9	7.8	---	---	7.9	7.6	8.4	7.9	8.0	7.8
22	7.9	7.8	7.9	7.8	---	---	7.7	7.6	8.5	7.8	8.0	7.7
23	7.8	7.6	7.9	7.8	7.6	7.5	7.8	7.7	8.3	7.8	8.0	7.9
24	7.9	7.7	8.0	7.8	7.7	7.6	7.8	7.7	8.3	7.7	8.2	7.8
25	8.0	7.9	8.1	7.9	7.8	7.5	7.9	7.5	8.5	7.6	8.0	7.8
26	8.0	7.9	8.0	7.9	7.8	7.6	7.9	7.7	8.4	7.7	8.1	7.7
27	8.0	7.9	7.9	7.8	7.7	7.7	7.8	7.7	8.1	7.6	8.2	7.8
28	7.9	7.8	7.8	7.7	7.8	7.7	7.8	7.6	8.1	7.7	8.1	7.8
29	7.9	7.7	7.8	7.7	7.8	7.8	7.9	7.8	7.9	7.6	8.0	7.8
30	7.9	7.8	7.7	7.5	7.9	7.7	7.9	7.8	7.8	7.6	8.0	7.7
31	---	---	7.8	7.6	---	---	8.0	7.8	7.6	7.4	---	---
MONTH	8.5	7.5	8.1	7.5	7.9	7.4	8.4	7.3	8.6	7.4	8.5	7.3
YEAR	8.6	7.3										

GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	24.5	20.5	11.0	8.5	8.5	5.0	5.5	4.0	4.0	3.0	7.5	7.0
2	23.5	21.5	11.0	8.0	9.0	6.5	4.0	3.0	3.5	2.0	7.5	6.5
3	21.0	18.0	12.5	8.5	7.0	6.5	4.0	2.5	2.0	1.0	8.0	6.0
4	18.0	15.0	13.5	12.0	9.0	7.5	2.5	2.0	4.0	1.5	7.5	6.5
5	16.5	13.5	13.5	11.5	9.5	9.0	3.5	1.5	4.5	2.5	7.0	6.0
6	15.0	12.0	12.5	10.0	---	---	5.0	3.5	4.0	2.5	6.5	5.0
7	17.0	13.0	13.5	11.5	---	---	5.0	3.5	3.0	2.0	---	---
8	19.0	14.0	14.5	13.0	---	---	5.0	3.5	3.0	2.5	---	---
9	21.0	18.0	16.0	13.0	---	---	5.0	4.0	4.5	2.0	---	---
10	20.5	17.0	14.0	10.5	---	---	4.5	3.0	4.5	4.0	---	---
11	19.5	16.0	12.5	10.0	8.0	7.0	3.0	2.0	4.0	1.0	---	---
12	16.0	13.5	12.0	9.5	8.0	7.0	2.5	1.5	2.0	.5	---	---
13	15.5	11.5	12.0	10.0	8.0	6.5	5.5	2.5	2.5	.5	---	---
14	16.5	14.0	11.5	10.0	6.5	5.5	6.0	5.0	3.0	1.0	---	---
15	18.0	15.0	10.5	7.5	6.5	5.5	6.5	5.5	4.0	2.0	---	---
16	20.0	16.5	8.5	7.0	7.0	6.0	6.0	4.5	4.5	3.5	---	---
17	19.0	18.0	7.5	6.0	6.0	5.0	6.0	3.5	4.0	3.5	---	---
18	18.5	16.5	8.0	6.5	7.0	6.0	4.0	2.0	5.0	3.5	---	---
19	16.5	14.0	8.0	6.5	6.5	4.0	5.5	3.0	6.5	4.5	---	---
20	14.5	12.5	9.0	6.5	4.0	2.5	7.0	5.5	6.5	6.0	---	---
21	15.5	12.0	8.5	7.0	4.5	3.5	6.5	6.0	7.0	6.0	---	---
22	15.5	13.0	7.5	6.0	5.5	4.0	6.5	5.5	7.0	6.5	---	---
23	16.0	13.0	8.0	6.5	6.0	4.5	6.5	5.0	7.5	7.0	11.0	9.0
24	14.5	13.5	8.5	7.5	5.0	3.5	7.5	5.5	7.0	6.0	13.0	10.0
25	14.0	10.0	8.5	7.5	3.0	2.0	7.5	5.5	7.0	5.5	13.5	11.0
26	10.0	8.0	8.0	7.0	2.5	2.0	8.5	7.0	7.0	6.0	12.5	11.0
27	9.0	7.0	7.0	5.0	3.5	2.5	9.0	7.0	7.0	5.5	14.0	12.0
28	9.5	9.0	4.5	4.0	4.0	2.5	7.0	4.5	7.5	6.5	14.5	11.0
29	11.0	8.0	4.0	3.5	4.5	4.0	4.5	3.0	---	---	15.5	13.0
30	11.5	7.5	5.0	3.0	5.0	4.5	3.5	2.5	---	---	16.0	14.5
31	12.0	8.0	---	---	5.0	4.5	4.0	2.5	---	---	18.0	15.0
MONTH	24.5	7.0	16.0	3.0	9.5	2.0	9.0	1.5	7.5	.5	18.0	5.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	18.0	16.5	15.5	14.0	18.5	17.0	25.5	23.0	25.5	22.5	23.5	22.5
2	18.5	15.5	14.0	12.5	18.5	17.0	24.5	23.0	26.0	23.5	23.0	22.5
3	18.0	16.5	15.0	12.5	20.0	18.5	23.0	22.0	25.5	24.5	23.5	22.0
4	16.5	15.5	16.5	14.0	21.5	19.5	22.5	21.5	26.5	24.5	23.0	21.5
5	15.5	12.5	17.0	16.5	22.5	20.5	22.5	21.5	27.5	25.5	23.5	21.5
6	14.0	11.5	16.5	15.0	21.5	20.0	23.5	22.0	26.5	23.5	23.0	22.0
7	15.0	12.5	15.0	13.0	20.5	19.5	25.5	23.0	24.0	23.0	23.0	21.5
8	16.0	13.5	15.5	13.0	21.0	19.5	27.0	25.0	24.0	22.0	23.0	21.5
9	17.0	15.0	15.5	14.5	22.0	20.5	28.0	26.5	24.5	22.5	22.0	20.5
10	17.5	15.5	16.0	15.0	21.5	21.0	28.5	27.0	25.5	23.0	22.0	20.0
11	18.0	16.5	15.5	14.0	21.0	19.5	27.0	25.0	25.0	24.0	22.5	20.5
12	17.0	16.0	14.5	13.5	20.5	19.5	26.5	24.5	25.0	23.0	24.0	21.5
13	15.5	14.0	16.0	13.5	22.0	20.0	27.5	25.0	25.0	23.0	24.5	22.0
14	14.5	14.0	15.0	14.5	22.5	21.0	28.0	26.0	25.0	23.5	24.0	22.5
15	14.5	12.5	14.5	13.0	24.0	22.5	27.0	25.5	25.0	23.5	22.5	20.5
16	14.0	13.0	14.0	12.0	23.5	23.5	26.5	24.5	24.0	23.0	20.5	19.0
17	15.5	14.0	15.5	13.5	---	---	27.0	24.5	23.5	21.0	18.5	17.5
18	17.0	15.5	15.0	13.0	---	---	27.0	25.0	23.0	20.5	17.5	16.5
19	17.0	15.0	13.0	12.5	---	---	26.0	24.0	23.5	20.5	17.0	15.5
20	15.5	14.0	15.0	12.5	---	---	24.0	23.0	24.0	21.0	18.0	16.0
21	14.5	12.5	17.5	14.5	---	---	24.5	23.0	23.0	21.5	19.5	17.5
22	14.5	13.5	19.0	16.5	---	---	24.0	22.5	24.0	21.0	19.0	17.5
23	16.0	14.0	19.5	17.5	22.5	21.0	24.0	22.5	24.5	21.5	18.0	16.0
24	15.5	12.5	21.0	18.5	23.0	21.0	24.0	22.0	25.0	22.5	18.0	16.0
25	13.5	11.5	22.0	20.0	23.5	22.5	25.0	23.5	26.0	23.5	18.0	17.0
26	14.0	12.5	21.5	21.0	23.0	21.5	25.5	24.0	26.5	23.5	19.5	17.0
27	17.0	13.5	21.0	19.5	22.0	20.0	25.0	24.0	26.5	25.5	21.0	19.0
28	19.5	16.5	19.0	18.0	22.0	20.5	24.5	23.5	26.0	25.0	19.5	17.5
29	19.0	17.0	18.5	16.5	24.0	21.5	23.5	22.0	26.0	24.5	18.5	17.0
30	17.0	15.5	19.0	18.0	25.5	23.5	23.5	21.0	25.0	23.5	19.0	17.0
31	---	---	19.5	18.0	---	---	24.0	21.5	24.5	23.0	---	---
MONTH	19.5	11.5	22.0	12.0	25.5	17.0	28.5	21.0	27.5	20.5	24.5	15.5
YEAR	28.5	.5										

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	10.2	4.0	9.0	7.3	12.0	9.7	10.5	7.4	12.1	11.0	13.2	12.3
2	9.1	3.6	9.0	7.1	9.8	8.7	12.6	9.3	12.3	11.1	14.5	12.3
3	5.8	3.4	8.9	7.1	8.6	8.5	11.9	9.5	12.9	11.4	14.2	12.6
4	6.9	3.9	7.4	6.2	11.1	8.7	12.7	9.5	13.8	11.4	13.1	11.6
5	7.8	5.3	7.8	5.5	9.3	8.0	12.5	9.9	14.5	11.2	12.9	11.6
6	8.4	6.1	8.5	5.7	---	---	10.6	8.3	13.9	11.7	14.0	12.6
7	8.3	6.2	8.2	6.2	---	---	11.5	7.6	14.0	11.7	---	---
8	7.8	5.6	7.9	5.5	---	---	11.2	8.2	14.0	11.0	---	---
9	6.9	4.7	8.4	5.5	---	---	11.4	7.6	14.2	11.2	---	---
10	7.4	4.4	8.2	5.7	---	---	12.0	8.2	11.5	10.6	---	---
11	6.9	4.4	9.3	3.6	10.2	9.0	12.5	9.2	12.5	10.6	---	---
12	6.4	4.8	9.5	6.0	11.3	8.9	11.9	9.7	13.1	12.5	---	---
13	7.9	5.1	9.4	4.9	10.4	8.9	11.2	7.8	13.1	12.6	---	---
14	8.7	5.6	8.7	6.5	11.3	9.0	10.6	7.1	13.0	12.4	---	---
15	8.3	5.3	8.2	6.2	10.7	9.1	10.3	5.3	12.5	11.9	---	---
16	8.4	4.7	10.2	7.1	11.0	8.3	10.4	7.3	12.0	11.5	---	---
17	6.1	4.0	9.3	7.2	12.0	9.0	11.3	7.0	12.1	11.8	---	---
18	5.9	4.2	10.6	6.5	11.2	8.8	12.9	9.2	13.3	12.1	---	---
19	5.9	4.8	10.9	7.4	11.8	8.8	12.0	9.1	13.7	13.2	---	---
20	7.2	4.4	10.5	7.3	13.1	10.2	---	---	13.5	13.2	---	---
21	7.9	5.9	11.5	7.7	13.1	9.9	---	---	13.8	13.4	---	---
22	7.8	5.8	12.1	8.1	12.7	9.8	12.3	11.1	13.6	13.3	---	---
23	7.3	5.3	10.1	8.5	11.6	8.4	12.1	8.8	13.4	13.0	13.9	8.9
24	6.9	5.3	9.4	7.5	11.4	8.9	12.9	8.6	13.7	13.2	14.1	6.7
25	7.3	5.8	10.2	7.2	13.0	9.8	13.0	8.7	14.3	13.5	12.6	7.0
26	8.3	6.6	11.1	8.2	12.9	10.4	11.9	8.3	14.2	13.2	10.9	6.9
27	8.3	7.3	10.5	8.7	13.1	9.9	12.0	7.1	14.3	13.0	12.5	4.5
28	8.4	7.0	10.8	9.9	13.3	10.0	12.4	9.5	13.1	12.5	12.4	6.1
29	9.0	7.0	11.0	9.8	11.7	9.4	13.7	11.2	---	---	10.8	5.8
30	8.9	7.5	12.3	10.2	9.8	8.4	14.3	11.8	---	---	10.3	4.8
31	8.7	7.2	---	---	9.2	7.7	14.5	11.5	---	---	12.0	4.9
MONTH	10.2	3.4	12.3	3.6	13.3	7.7	14.5	5.3	14.5	10.6	14.5	4.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	11.6	4.5	8.3	7.7	8.0	7.7	6.4	5.7	7.8	5.4	5.7	2.2
2	13.0	4.5	9.0	8.4	8.2	7.4	7.2	6.4	7.0	4.3	5.1	4.3
3	9.3	4.0	9.1	8.6	7.6	7.0	7.6	6.7	6.5	3.5	7.9	4.5
4	6.8	3.6	8.8	7.8	7.0	6.1	7.1</					

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 mi² (510 km²).

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 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--19 years, 192 ft³/s (5.437 m³/s) 13.23 in/yr (336 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s (547 m³/s) Mar. 4, 1963, gage height, 14.40 ft (4.389 m), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of contracted-opening measurement at gage height 18.8 ft (5.73 m); minimum daily, 2.5 ft³/s (0.071 m³/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 ft³/s (858 m³/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.--Maximum discharge 5,260 ft³/s (149 m³/s) June 6, gage height 7.77 ft (2.368 m), above base of 4,700 ft³/s (133 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 28.

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	19	31	56	25	46	150	77	490	454	91	42	34
2	20	29	54	25	120	130	66	437	287	102	38	28
3	20	28	55	24	290	110	61	271	225	70	36	56
4	21	28	49	24	50	106	90	205	184	61	33	60
5	20	28	47	23	42	216	184	176	403	63	32	34
6	20	27	45	22	35	284	130	383	4050	65	333	25
7	22	27	43	23	32	213	101	395	1210	53	177	21
8	19	27	44	25	31	171	90	243	495	44	139	20
9	18	26	85	26	35	169	82	192	287	39	96	20
10	18	25	189	27	114	176	74	174	219	36	58	18
11	18	25	120	31	1410	166	154	268	171	35	44	17
12	17	24	89	31	181	141	1290	533	141	33	36	16
13	17	24	77	31	130	130	547	308	222	31	32	15
14	18	24	63	33	96	104	312	450	472	32	29	17
15	19	24	57	36	80	92	202	1180	208	33	27	22
16	19	24	54	38	619	94	166	598	145	31	26	18
17	24	25	47	37	712	80	222	329	116	29	24	17
18	30	28	44	35	437	77	284	582	95	27	22	17
19	28	28	41	33	701	71	200	880	87	38	20	16
20	25	27	38	37	1010	67	184	403	79	448	20	14
21	23	26	36	36	495	63	150	268	74	555	18	13
22	22	26	34	34	348	57	143	211	74	275	17	13
23	21	26	32	32	542	55	1000	179	64	136	17	13
24	25	28	30	31	415	52	518	154	56	87	16	13
25	42	30	29	28	308	50	277	139	63	64	16	13
26	43	30	32	31	231	50	205	128	70	53	16	12
27	34	55	34	38	186	56	171	197	56	57	15	11
28	34	145	27	34	176	52	150	723	50	158	15	10
29	36	92	32	30	---	49	403	363	47	105	15	11
30	36	68	26	32	---	85	322	1020	44	67	18	12
31	34	---	25	30	---	103	---	1240	---	51	27	---
TOTAL	762	1055	1634	942	8872	3419	7855	13119	10148	2969	1454	606
MEAN	24.6	35.2	52.7	30.4	317	110	262	423	338	95.8	46.9	20.2
MAX	43	145	189	38	1410	284	1290	1240	4050	555	333	60
MIN	17	24	25	22	31	49	61	128	44	27	15	10
CFSM	.13	.18	.27	.15	1.61	.56	1.33	2.15	1.72	.49	.24	.10
IN.	.14	.20	.31	.18	1.68	.65	1.48	2.48	1.92	.56	.27	.11
CAL YR 1980	TOTAL	82950	MEAN 227	MAX 4070	MIN 17	CFSM 1.15	IN 15.66					
WTR YR 1981	TOTAL	52835	MEAN 145	MAX 4050	MIN 10	CFSM .74	IN 9.98					

GREAT MIAMI RIVER BASIN

343

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 mi² (712 km²).

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.--63 years (1914-23, 1927-81), 263 ft³/s (7.448 m³/s), 12.99 in/yr (330 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,390 ft³/s (266 m³/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 ft³/s (0.042 m³/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 ft³/s (1,870 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,370 ft³/s (124 m³/s) June 6, gage height 24.89 ft (7.586 m); minimum, 12.0 ft³/s (0.34 m³/s) Sept. 29.

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	21	46	92	57	103	224	107	571	679	72	61	200
2	22	42	83	48	267	193	92	606	406	144	53	130
3	22	40	81	43	1060	167	84	368	304	107	48	151
4	22	41	75	40	684	159	104	272	245	98	46	105
5	22	40	70	38	588	394	252	227	201	147	44	64
6	21	38	68	38	506	482	191	414	3540	111	260	40
7	21	37	64	38	364	327	144	555	1960	89	268	32
8	21	36	63	40	324	255	128	328	702	73	161	29
9	21	36	94	43	363	228	117	251	439	62	144	26
10	20	35	227	50	538	233	107	228	315	55	92	24
11	20	33	178	52	2090	223	141	326	252	51	68	21
12	20	32	134	54	390	194	1690	601	206	49	54	19
13	20	32	115	54	258	176	877	418	222	46	46	18
14	21	32	97	58	227	152	472	605	637	45	40	595
15	21	32	87	62	163	134	296	1640	310	46	36	151
16	23	32	86	66	776	136	228	882	207	46	34	38
17	27	35	78	62	1270	123	242	467	169	42	32	28
18	50	39	71	58	713	114	446	990	142	39	29	24
19	38	39	67	58	912	107	297	1460	127	42	27	22
20	35	37	65	68	1630	100	279	675	118	370	25	19
21	32	36	60	66	808	95	220	403	112	652	24	17
22	30	35	56	60	552	88	200	302	116	395	23	16
23	29	36	53	56	842	83	2280	245	100	197	22	16
24	31	42	50	51	667	30	1000	209	88	127	21	15
25	56	50	47	46	489	77	491	182	86	97	20	15
26	71	48	52	57	358	74	333	167	101	79	19	14
27	56	100	58	77	282	84	265	195	86	78	19	14
28	54	206	43	70	256	80	222	680	76	145	18	13
29	55	157	54	53	---	74	483	480	71	144	18	13
30	54	113	65	58	---	93	480	1030	68	100	52	13
31	51	---	63	55	---	135	---	1820	---	76	110	---
TOTAL	1007	1557	2496	1676	17480	5084	12268	17597	12085	3824	1914	1882
MEAN	32.5	51.9	80.5	54.1	624	164	409	568	403	123	61.7	62.7
MAX	71	206	227	77	2090	482	2280	1820	3540	652	268	595
MIN	20	32	43	38	103	74	84	167	68	39	18	13
CFSM	.12	.19	.29	.20	2.27	.60	1.49	2.07	1.47	.45	.22	.23
IN.	.14	.21	.34	.23	2.36	.69	1.66	2.38	1.63	.52	.26	.25
CAL YR 1980	TOTAL	113430	MEAN 310	MAX 4920	MIN 20	CFSM 1.13	IN 15.34					
WTR YR 1981	TOTAL	78870	MEAN 216	MAX 3540	MIN 13	CFSM .79	IN 10.67					

GREAT MIAMI RIVER BASIN

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 mi² (179 km²).

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 Dec. 4-Feb. 15, Apr. 17-23, which are poor. at this site 1972 to 1974.

COOPERATION.--Gage-height charts, tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--10 years (1972-81), 73.0 ft³/s (2.067 m³/s), 14.37 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,210 ft³/s (176 m³/s) June 22, 1974, gage height 13.25 ft (4.039 m), present datum from rating curve extended above 2,200 ft³/s (62.3 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) July 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,180 ft³/s (33.4 m³/s) Feb. 11, gage height 7.21 ft (2.167 m), no peak above base of 1,500 ft³/s (42.5 m³/s); minimum daily, 2.6 ft³/s (0.074 m³/s) Sept. 28.

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	5.5	8.5	42	8.2	53	58	25	173	154	20	10	9.4
2	6.7	7.8	31	8.0	59	51	22	96	110	20	9.6	8.8
3	6.9	7.4	17	7.8	19	44	20	71	86	18	9.2	47
4	6.4	8.9	15	7.8	13	46	49	58	71	17	8.9	23
5	6.1	8.1	15	7.6	10	132	72	56	63	49	9.6	13
6	6.1	7.8	15	7.6	9.5	123	45	116	136	29	50	8.8
7	5.5	7.8	15	8.0	9.0	83	32	83	87	19	23	7.2
8	4.6	7.4	14	8.6	8.6	65	33	64	61	15	48	7.1
9	4.6	6.7	32	9.2	8.2	58	29	55	51	13	21	6.5
10	4.4	6.7	74	10	115	57	26	61	47	13	14	5.4
11	4.4	6.4	48	11	441	53	95	103	38	13	12	4.8
12	4.4	6.4	37	11	46	46	416	92	36	11	10	4.3
13	4.4	6.4	30	11	30	37	183	71	71	10	9.2	4.0
14	4.9	6.7	25	12	24	30	115	143	82	13	8.6	32
15	5.2	7.1	21	13	27	29	72	309	45	13	8.1	11
16	5.2	6.7	18	13	297	29	59	169	36	11	8.0	5.7
17	8.1	7.4	16	12	229	25	70	109	32	9.7	7.6	4.8
18	18	9.3	15	12	155	24	90	387	25	8.4	6.9	4.6
19	7.4	8.5	14	11	278	23	66	334	23	16	6.3	4.3
20	6.1	7.8	13	13	291	22	62	177	22	65	5.9	3.6
21	5.8	7.4	12	12	157	20	56	119	24	79	5.1	3.6
22	5.8	7.4	11	11	128	18	52	92	23	38	4.9	3.6
23	6.1	7.4	11	11	191	17	500	75	19	23	4.6	3.4
24	8.1	11	10	10	148	17	224	64	17	17	4.3	3.4
25	24	17	9.6	9.6	115	16	126	57	19	14	4.4	3.4
26	11	19	11	11	89	15	89	54	20	13	4.1	3.4
27	8.9	69	9.0	9.0	73	20	70	84	16	20	3.9	3.0
28	14	69	11	8.0	68	16	58	100	14	28	3.8	2.6
29	12	58	8.8	7.0	---	15	134	83	13	18	4.2	2.7
30	10	47	8.6	6.2	---	37	109	269	13	14	11	3.1
31	8.9	---	8.4	6.0	---	34	---	295	---	12	9.8	---
TOTAL	239.5	462.0	617.4	302.6	3091.3	1260	2999	4019	1454	659.1	346.0	247.5
MEAN	7.73	15.4	19.9	9.76	110	40.6	100	130	48.5	21.3	11.2	8.25
MAX	24	69	74	13	441	132	500	387	154	79	50	47
MIN	4.4	6.4	8.4	6.0	8.2	15	20	54	13	8.4	3.8	2.6
CFSM	.11	.22	.29	.14	1.59	.59	1.45	1.88	.70	.31	.16	.12
IN.	.13	.25	.33	.16	1.67	.68	1.62	2.17	.78	.36	.19	.13
CAL YR 1980	TOTAL	27473.1	MEAN	75.1	MAX	952	MIN	4.4	CFSM	1.09	IN	14.81
WTR YR 1981	TOTAL	15697.4	MEAN	43.0	MAX	500	MIN	2.6	CFSM	.62	IN	8.46

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 (60.0 km).

DRAINAGE AREA.--3,630 mi² (9,402 km²).

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 0.62 ft³/s (0.018 m³/s) in 1981 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.--50 years (1931-81), 3,269 ft³/s (92.58 m³/s), 12.23 in/yr (311 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352,000 ft³/s (9,970 m³/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 ft³/s (3,059 m³/s) Jan. 21, 1959, gage height 79.47 ft (24.222 m); minimum daily discharge, 155 ft³/s (4.39 m³/s) Sept 27, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,000 ft³/s (708 m³/s) June 7, gage height, 66.68 ft (20.324 m); minimum daily, 721 ft³/s (20.4 m³/s) Jan. 18, 19.

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	995	1020	1380	980	1560	3440	1480	5980	7880	3900	1570	1730
2	1020	989	1290	1100	3350	3170	1400	9630	5870	3750	1370	2310
3	1010	945	1310	1100	1980	2890	1310	8800	4770	3320	1280	2910
4	958	960	1190	1040	1490	2580	1530	6400	4260	3320	1260	4270
5	962	940	1130	930	1440	4610	3310	4880	3790	5210	1240	2400
6	968	910	1140	887	1470	4350	2410	5310	16900	4440	2390	1750
7	968	903	1110	918	1410	3710	2140	9000	19400	3970	3170	1500
8	965	875	1120	888	1370	3310	1870	8240	11400	2920	2420	1390
9	967	847	1640	864	1200	2940	1700	5810	9430	2420	2000	1390
10	969	852	2030	839	1310	2770	1600	4540	8290	2150	2020	1260
11	958	829	1970	814	9320	2660	1700	5440	7110	1870	1810	1160
12	911	833	1820	780	7010	2490	7710	7840	6320	1740	1490	1110
13	885	821	1640	742	4780	2310	12600	7870	5310	1680	1300	1040
14	888	813	1420	745	3510	2130	11300	7090	11300	2310	1200	1020
15	873	798	1300	747	2930	1940	7540	14500	20800	1780	1090	4330
16	882	769	1240	750	4170	1940	5280	14400	18200	1640	1050	2650
17	971	787	1190	742	8330	1830	4410	10900	12400	1530	997	1870
18	2260	881	1110	721	8060	1730	6020	10800	8120	1410	987	1610
19	1360	926	1080	721	8140	1660	4780	11700	6040	1330	956	1380
20	1040	896	1000	738	10900	1560	4620	8660	4820	3560	889	1250
21	1000	934	900	765	9050	1500	3690	6220	4080	5830	892	1170
22	979	972	865	800	6830	1420	3320	4990	5100	5130	878	1070
23	947	957	884	818	6830	1360	13900	4230	8570	3500	860	1160
24	960	1040	928	814	6600	1320	8170	3760	5790	2640	840	1110
25	1430	1290	877	802	5890	1290	5360	3380	4190	2130	847	1090
26	1270	1140	823	843	4930	1270	4160	3150	5870	1800	838	886
27	1130	1960	826	969	4210	1470	3530	3900	5390	1750	827	875
28	1200	2450	829	1390	3760	1410	3160	7480	4270	2220	829	844
29	1240	1880	865	1710	---	1290	3940	8940	3570	2350	872	810
30	1120	1570	929	1440	---	1570	5220	8240	2960	2080	908	827
31	1060	---	934	1210	---	1620	---	11700	---	1760	1370	---
TOTAL	33146	31787	36770	28607	131830	69540	139160	233780	242200	85440	40450	48172
MEAN	1069	1060	1186	923	4708	2243	4639	7541	8073	2756	1305	1606
MAX	2260	2450	2030	1710	10900	4610	13900	14500	20800	5830	3170	4330
MIN	873	769	823	721	1200	1270	1310	3150	2960	1330	827	810
CFSM	.29	.29	.33	.25	1.30	.62	1.28	2.08	2.22	.76	.36	.44
IN.	.34	.33	.38	.29	1.35	.71	1.43	2.40	2.48	.88	.41	.49
CAL YR 1980 TOTAL	1545356			4222	29800	769	1.16	15.84				
WTR YR 1981 TOTAL	1120882			3071	20800	721	.85	11.49				

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 mi² (9,878 km²).

PERIOD OF RECORD.--July 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1966 to current year.

pH: March 1975 to current year.

WATER TEMPERATURES: July 1966 to current year.

DISSOLVED OXYGEN: July 1966 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Samples were collected each month as part of the National Stream Quality Accounting Network. See records of daily discharge for station at Hamilton (station 0327400).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,160 micromhos Mar. 18, 1970; minimum, 230 micromhos May 24, 1968.

pH: Maximum recorded, 9.2 units Aug. 4, 1977; minimum recorded, 7.0 units June 19, 1975.

WATER TEMPERATURES: Maximum, 36.5°C July 15, 16, 21, 1977; minimum, 0.0°C on several days during winter months in 1970, 1971, 1976-1979, 1981.

DISSOLVED OXYGEN: Maximum, ≥20.0 mg/L Aug. 15, Sept. 24, 1978, July 18, Aug. 13, 18-20, 22-24, 1981; minimum, 0.0 mg/L June 27, 1971.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 962 micromhos Jan. 22; minimum, 244 micromhos June 15.

pH: Maximum, 9.1 units Aug. 18, 20, 22-29; minimum, 7.5 units June 6-7, 16.

WATER TEMPERATURES: Maximum, 30.5°C July 10; minimum, 0.0°C Jan. 12, Feb. 3-5, 11-13.

DISSOLVED OXYGEN: Maximum, ≥20.0 mg/L July 18, Aug. 13, 18-20, 22-24; minimum, 4.2 mg/L August 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 15...	1100	911	914	8.3	10.0	.50	10.2	90	25	53
NOV 04...	1330	977	842	8.1	13.5	.50	10.0	95	23	25000
DEC 10...	1700	2040	765	8.1	10.0	.80	9.6	85	18	4800
JAN 07...	1330	919	865	8.1	2.0	.70	14.0	100	12	2100
FEB 10...	1015	1170	836	8.0	3.0	4.8	10.6	78	19	3300
MAR 11...	1100	2500	752	8.2	6.5	1.3	11.4	93	<10	1100
APR 07...	1100	2170	690	8.1	12.5	21	9.8	92	33	1270
MAY 05...	1045	4890	618	8.1	16.5	35	9.0	92	34	1200
JUN 03...	0920	5340	680	7.8	19.5	11	8.7	94	<10	K7000
JUL 08...	0830	3020	636	8.1	25.5	130	7.2	87	27	4900
AUG 05...	0930	1240	790	8.7	26.0	17	8.0	98	52	2500
SEP 02...	1045	2310	762	8.0	24.5	40	6.0	71	40	2800

GREAT MIAMI RIVER BASIN

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03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 15...	170	340	88	84	31	46	4.9	76	76	.6
NOV 04...	53	330	66	76	33	51	5.4	74	67	.6
DEC 10...	1120	310	68	77	28	32	4.2	79	60	.4
JAN 07...	430	340	93	83	33	47	5.1	79	81	.6
FEB 10...	340	350	96	84	33	45	4.5	80	66	.5
MAR 11...	380	370	122	93	34	27	3.0	72	51	.4
APR 07...	125	280	74	69	27	32	3.4	66	55	.4
MAY 05...	980	290	100	71	28	19	3.1	54	33	.3
JUN 03...	240	310	78	77	28	18	2.9	52	35	.3
JUL 08...	430	280	62	70	26	22	3.5	42	36	.4
AUG 05...	290	340	87	82	32	38	4.4	72	60	.4
SEP 02...	1400	280	74	66	29	39	4.1	65	61	.5

DATE	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, ORGANIC 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)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
OCT 15...	4.0	558	490	.93	.95	4.8	21	.620	--	--
NOV 04...	4.6	515	485	.82	1.10	4.8	21	.660	5.8	11000
DEC 10...	3.7	477	440	.41	.55	2.9	13	.290	5.9	--
JAN 07...	1.9	527	495	.00	.94	4.1	18	.510	--	--
FEB 10...	4.0	526	473	.36	1.30	4.8	21	.560	5.7	--
MAR 11...	4.5	461	453	.62	1.20	5.2	23	.330	3.2	1100
APR 07...	2.5	439	394	.47	.76	3.5	15	.420	--	--
MAY 05...	6.8	483	362	1.3	1.40	9.0	40	.240	6.9	22000
JUN 03...	7.7	452	376	.71	.76	4.8	21	.280	6.0	42000
JUL 08...	7.8	444	368	.66	.69	4.8	21	.350	--	9900
AUG 05...	4.4	517	459	1.1	1.10	4.7	21	.500	5.7	110000
SEP 02...	4.1	451	407	.88	1.20	4.0	18	.410	6.6	48000

GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

ANALYSES OF MINOR ELEMENTS

03274600 - G MIAMI R AT NEW BALTIMORE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

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 15...	1100	3	2	100	100	0	0	30	20
JAN 07...	1330	5	3	100	100	1	1	10	10
APR 07...	1100	0	0	100	70	2	2	<10	10
JUL 08...	0830	3	2	100	70	1	<1	20	10

DATE	TIME	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 15...	0	0	0	8	4	740	40	4	0	90
JAN 07...	0	0	0	9	9	240	110	28	2	50
APR 07...	0	0	0	5	3	120	0	12	0	30
JUL 08...	1	--	--	9	--	5100	30	21	--	160

DATE	TIME	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 15...	6	<.1	<.1	<.1	1	1	0	0	40	7
JAN 07...	40	.3	.2	.2	0	0	1	0	60	50
APR 07...	8	.1	<.1	<.1	1	1	0	0	40	3
JUL 08...	3	.6	.6	.6	0	0	0	0	150	10

SUSPENDED SEDIMENT DISCHARGE

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 15...	1100	911	10.0	30	74
NOV 04...	1330	977	13.5	24	63
DEC 10...	1700	2040	10.0	58	319
JAN 07...	1330	919	2.0	7	17
FEB 10...	1015	1170	3.0	15	47
MAR 11...	1100	2500	6.5	26	175
APR 07...	1100	2170	12.5	40	234
MAY 05...	1045	4890	16.5	97	1280
JUN 03...	0920	5340	19.5	114	1640
JUL 08...	0830	3020	25.5	252	2060
AUG 05...	0930	1240	26.0	65	218
SEP 02...	1045	2310	24.5	114	711

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	---	---	840	823	728	704	872	868	822	742	698	688
2	---	---	844	832	758	726	876	862	726	678	712	694
3	---	---	844	834	762	758	878	862	722	710	720	704
4	---	---	853	844	806	778	888	864	758	718	746	716
5	---	---	862	856	812	800	896	866	762	746	732	634
6	---	---	862	856	812	802	880	864	810	762	684	642
7	855	844	864	858	818	798	866	858	842	810	726	688
8	863	855	862	854	820	804	880	864	846	830	730	718
9	859	846	864	856	808	778	882	876	838	830	732	722
10	864	855	866	858	770	766	884	876	842	814	740	726
11	874	859	866	856	774	752	918	884	754	438	756	734
12	866	863	858	846	754	742	934	918	530	476	760	752
13	882	864	878	850	770	752	920	908	526	484	762	756
14	882	872	876	864	784	770	938	904	554	500	772	756
15	874	842	896	878	794	780	932	924	598	556	774	762
16	868	857	898	882	806	784	934	928	644	512	772	762
17	885	855	898	860	810	796	936	926	558	524	776	760
18	857	606	892	870	824	810	950	930	556	536	774	768
19	811	768	884	878	826	818	950	944	554	544	780	770
20	804	707	876	870	832	822	948	928	550	532	786	772
21	---	---	906	874	838	830	942	928	572	550	790	776
22	749	722	924	904	852	836	962	940	608	572	794	780
23	787	750	902	884	858	850	944	934	624	604	796	786
24	817	788	882	832	856	846	942	936	644	620	802	788
25	834	732	854	836	860	850	946	940	658	642	800	782
26	840	802	836	824	864	854	---	---	670	656	808	796
27	849	832	838	706	868	858	---	---	674	670	812	766
28	834	766	714	662	872	864	918	910	690	676	808	768
29	781	766	714	706	892	872	906	882	---	---	798	766
30	825	777	678	670	884	864	862	818	---	---	792	746
31	828	819	---	---	876	866	826	814	---	---	802	768
MONTH	885	606	924	662	892	704	962	814	846	438	812	634
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	790	778	652	642	552	462	698	668	770	754	874	856
2	796	774	652	546	606	554	698	548	784	772	860	666
3	814	790	560	532	646	608	696	590	782	764	710	520
4	816	710	606	562	660	642	700	656	790	774	618	592
5	742	620	616	608	656	624	654	540	806	784	614	528
6	734	700	644	632	668	256	---	---	812	796	588	516
7	724	690	652	622	380	250	652	644	804	588	682	594
8	744	726	614	556	414	380	694	626	652	588	732	686
9	754	740	616	572	462	416	708	692	680	644	756	732
10	778	754	632	610	550	464	726	700	688	680	772	758
11	776	758	626	600	550	522	754	724	708	636	778	772
12	760	520	618	578	548	422	766	742	714	700	790	776
13	558	498	590	572	544	436	772	752	744	692	800	780
14	536	494	592	528	558	364	774	736	740	686	826	800
15	594	538	538	482	348	244	766	738	774	722	820	558
16	630	594	512	500	438	292	732	664	802	736	638	598
17	666	596	530	508	480	440	744	712	816	752	594	546
18	670	542	546	530	522	440	774	708	812	746	622	554
19	654	606	526	458	594	466	762	660	798	724	704	624
20	660	648	566	528	624	590	788	674	790	728	758	710
21	684	652	618	566	630	556	734	532	804	738	792	758
22	702	686	652	614	676	600	618	540	812	754	794	776
23	696	396	666	648	660	490	596	564	812	754	784	772
24	570	406	678	666	526	468	684	598	812	774	798	772
25	636	574	676	666	600	528	728	686	822	788	810	798
26	676	638	674	650	642	604	748	726	824	794	804	792
27	700	676	664	630	624	558	748	726	822	794	816	804
28	716	698	650	488	572	556	754	678	832	802	814	808
29	732	714	568	492	616	574	754	686	854	830	812	806
30	710	614	562	512	670	618	762	726	870	840	820	810
31	---	---	534	442	---	---	764	726	882	850	---	---
MONTH	816	396	678	442	676	244	788	532	882	588	874	316
YEAR	962	244										

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	8.2	8.0	8.2	8.1	8.1	8.0	8.2	8.0	8.1	8.1
2	---	---	8.2	8.0	8.2	8.1	8.2	8.0	8.0	7.8	8.2	8.1
3	---	---	8.2	8.0	8.2	8.1	8.2	8.0	7.9	7.8	8.2	8.1
4	---	---	8.2	8.0	8.2	8.1	8.2	7.9	7.9	7.9	8.2	8.1
5	---	---	8.3	8.0	8.1	8.0	8.2	7.9	8.0	7.8	8.1	8.0
6	---	---	8.3	8.0	8.2	8.0	8.2	8.0	8.0	7.9	8.1	8.1
7	8.5	8.4	8.2	8.0	8.2	8.1	8.2	8.0	8.0	8.0	8.2	8.1
8	8.5	8.2	8.2	8.0	8.2	8.0	8.2	8.0	8.2	8.0	8.2	8.1
9	8.5	8.2	8.3	8.0	8.1	8.0	8.2	8.0	8.2	8.0	8.2	8.2
10	8.4	8.2	8.2	8.0	8.1	8.0	8.2	7.9	8.2	8.0	8.2	8.2
11	8.4	8.1	8.3	8.1	8.1	8.0	8.2	8.0	8.0	7.6	8.2	8.2
12	8.4	8.1	8.3	8.1	8.2	8.0	8.1	7.9	7.8	7.6	8.2	8.1
13	8.4	8.1	8.4	8.1	8.2	8.1	8.2	8.0	7.9	7.7	8.3	8.1
14	8.5	8.2	8.4	8.1	8.2	8.1	8.2	8.1	7.9	7.8	8.3	8.2
15	8.5	8.2	8.2	8.1	8.2	8.1	8.2	8.0	8.0	7.9	8.3	8.2
16	8.5	8.2	8.2	8.0	8.1	8.1	8.2	8.0	8.0	7.9	8.3	8.2
17	8.4	8.2	8.1	7.9	8.2	8.0	8.2	8.0	8.0	7.9	8.3	8.1
18	8.2	7.9	8.1	7.9	8.2	8.0	8.2	8.1	8.0	7.9	8.4	8.2
19	8.2	8.0	8.2	7.9	8.2	8.0	8.2	8.1	8.0	8.0	8.3	8.2
20	8.1	7.9	8.2	8.0	8.2	7.9	8.2	8.1	8.1	8.0	8.3	8.2
21	8.0	7.9	8.2	8.0	8.2	7.9	8.1	8.1	8.1	8.0	8.4	8.2
22	8.3	8.0	8.2	8.0	8.2	8.0	8.2	8.0	8.1	8.1	8.4	8.2
23	8.3	8.0	8.2	8.0	8.2	8.1	8.3	8.0	8.1	8.1	8.5	8.2
24	8.2	8.0	8.1	8.0	8.2	8.1	8.3	8.0	8.1	8.1	8.6	8.2
25	8.0	7.9	8.2	8.0	8.2	8.0	8.3	8.1	8.2	8.1	8.8	8.3
26	8.0	7.9	8.2	8.0	8.2	8.1	---	---	8.2	8.1	8.7	8.3
27	8.0	7.9	8.2	8.0	8.2	8.1	---	---	8.2	8.1	8.9	8.3
28	8.0	7.9	8.1	8.0	8.2	8.0	8.1	7.9	8.2	8.1	8.9	8.4
29	8.1	7.9	8.1	8.0	8.3	8.1	8.0	7.8	---	---	9.0	8.4
30	8.1	7.9	8.1	8.0	8.2	8.1	8.2	7.9	---	---	8.8	8.5
31	8.1	7.9	---	---	8.2	8.0	8.3	7.9	---	---	8.7	8.2
MONTH	8.5	7.9	8.4	7.9	8.3	7.9	8.3	7.8	8.2	7.6	9.0	8.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.7	8.4	8.2	8.1	8.1	8.0	8.2	8.1	8.8	8.3	8.4	8.0
2	8.7	8.3	8.2	8.0	8.2	8.1	8.2	8.0	8.8	8.2	8.2	8.0
3	8.8	8.2	8.1	8.0	8.2	8.1	8.2	8.0	8.8	8.3	8.1	7.8
4	8.4	8.1	8.2	8.1	8.2	8.1	8.2	8.1	9.0	8.5	8.0	7.9
5	8.1	8.0	8.1	8.1	8.2	8.1	8.1	8.0	9.0	8.6	8.2	8.0
6	8.3	---	8.1	8.1	8.1	7.5	---	---	8.8	8.6	8.2	8.0
7	8.5	8.0	8.1	8.1	7.9	7.5	8.2	8.2	8.7	8.0	8.4	8.0
8	8.7	8.2	8.1	8.0	8.0	7.9	8.2	8.1	8.2	8.0	8.5	8.2
9	9.0	8.3	8.1	8.1	8.0	8.0	8.2	8.2	8.4	8.0	8.8	8.3
10	8.9	8.4	8.1	8.1	8.1	8.0	8.3	8.2	8.5	8.2	8.9	8.4
11	8.9	8.4	8.1	8.1	8.1	8.0	8.4	8.2	8.7	8.1	8.9	8.5
12	8.6	7.9	8.1	8.1	8.1	7.9	8.8	8.4	9.0	8.3	8.9	8.5
13	7.9	7.8	8.1	8.1	8.1	7.9	9.0	8.4	9.0	8.2	8.8	8.3
14	7.9	7.8	8.1	8.1	8.1	7.8	9.0	8.5	8.4	7.6	8.7	8.1
15	8.1	7.9	8.1	8.0	7.8	7.6	8.8	8.5	9.0	7.6	8.5	7.9
16	8.1	8.0	8.1	8.0	7.9	7.5	8.9	8.2	9.0	8.5	8.1	7.9
17	8.2	8.0	8.1	8.1	8.0	7.9	9.0	8.3	9.0	8.5	8.0	7.9
18	8.1	8.0	8.1	8.1	8.0	7.9	8.9	8.4	9.1	8.5	8.1	7.9
19	8.2	8.1	8.1	8.0	8.1	8.0	8.7	8.3	9.0	8.5	8.2	8.0
20	8.3	8.2	8.2	8.1	8.1	8.1	8.5	8.3	9.1	8.6	8.3	8.1
21	8.3	8.2	8.2	8.1	8.1	8.1	8.2	7.9	9.0	8.5	8.3	8.2
22	8.3	8.2	8.2	8.2	8.2	8.1	8.1	7.9	9.1	8.6	8.3	8.1
23	8.2	7.9	8.3	8.2	8.1	7.9	8.1	8.0	9.1	8.4	8.5	8.1
24	8.1	7.9	8.4	8.2	8.0	7.9	8.2	8.0	9.1	8.3	8.5	8.2
25	8.2	8.1	8.6	8.2	8.1	8.0	8.2	8.1	9.1	8.6	8.5	8.2
26	8.3	8.1	8.5	8.3	8.2	8.1	8.3	8.2	9.1	8.6	8.6	8.1
27	8.4	8.2	8.4	8.2	8.2	8.0	8.4	8.2	9.1	8.6	8.5	8.1
28	8.5	8.2	8.2	8.0	8.1	8.0	8.3	8.2	9.1	8.7	8.5	8.2
29	8.4	8.2	8.1	8.0	8.2	8.1	8.3	8.2	9.1	8.7	8.5	8.4
30	8.2	8.1	8.1	8.0	8.2	8.0	8.4	8.2	9.0	8.5	8.7	8.3
31	---	---	8.0	7.9	---	---	8.6	8.2	8.8	8.4	---	---
MONTH	9.0	7.8	8.6	7.9	8.2	7.5	9.0	7.9	9.1	7.6	8.9	7.8
YEAR	9.1	7.5										

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	---	---	12.5	10.5	8.5	6.5	4.5	4.5	5.0	4.0	7.5	7.0
2	---	---	12.5	10.5	9.0	7.5	4.5	3.5	4.0	2.0	7.0	6.5
3	---	---	13.5	11.0	7.5	7.0	4.0	3.0	2.0	.0	7.5	5.5
4	---	---	14.0	13.0	8.5	6.5	3.0	1.5	1.0	.0	7.0	6.5
5	---	---	13.5	12.0	10.0	8.5	1.0	.0	2.0	.0	7.0	5.5
6	---	---	12.5	11.0	12.0	10.0	1.5	1.0	3.0	1.5	6.0	4.5
7	18.0	17.0	14.0	12.0	13.0	11.5	2.5	1.5	4.5	2.5	6.0	4.5
8	18.5	16.5	15.0	13.5	13.0	12.5	2.0	.5	4.5	3.5	6.0	5.0
9	20.0	18.0	16.5	14.5	13.0	11.0	2.0	1.0	4.0	2.0	6.5	4.5
10	20.0	18.0	15.0	13.0	10.0	9.5	2.0	.5	4.5	3.5	7.5	5.5
11	19.5	17.0	13.0	11.5	9.5	8.5	2.0	1.0	3.5	.0	7.0	6.5
12	17.5	16.0	11.5	10.5	9.0	8.0	1.5	.0	.5	.0	8.0	5.5
13	16.5	14.5	11.5	10.0	8.5	8.0	2.5	1.0	1.5	.0	9.5	7.0
14	16.5	15.0	12.0	11.5	7.5	6.5	3.0	2.5	3.0	1.0	10.0	7.5
15	18.0	16.0	12.5	11.5	6.5	6.0	4.0	3.0	4.0	2.0	9.5	8.0
16	18.5	17.0	11.5	10.5	6.5	6.0	4.0	3.0	4.5	3.0	9.5	8.5
17	18.5	18.0	11.0	8.0	6.0	4.5	3.5	2.5	4.0	3.5	8.5	7.0
18	18.5	18.0	9.5	8.5	7.0	5.5	4.0	2.5	5.0	4.5	10.0	7.5
19	18.5	17.0	9.0	8.0	7.0	5.0	4.5	3.0	6.0	5.0	9.0	7.5
20	16.5	15.0	8.5	7.5	4.5	3.0	5.5	4.5	7.0	5.5	7.5	7.0
21	16.0	15.0	9.0	8.0	3.0	2.0	6.0	5.5	7.0	6.5	9.5	6.0
22	16.5	15.0	9.5	7.5	4.5	2.5	6.0	5.5	7.5	6.5	9.0	8.0
23	16.5	15.0	10.0	9.0	5.0	4.5	6.5	5.5	7.5	6.5	10.5	7.5
24	16.0	14.5	10.5	10.0	5.0	3.5	7.0	5.0	6.5	6.0	11.5	8.5
25	15.0	12.5	10.0	9.0	3.5	2.0	7.5	6.0	7.5	5.5	12.5	9.5
26	12.5	11.0	9.0	8.0	3.0	2.5	---	---	7.5	6.0	13.5	11.0
27	11.0	10.0	8.5	7.0	3.5	2.5	---	---	7.5	6.0	15.5	12.5
28	11.0	10.0	7.0	6.5	3.5	2.0	8.0	7.5	8.0	7.0	16.0	12.5
29	11.0	9.0	6.5	5.5	4.5	3.5	8.0	6.0	---	---	16.0	14.0
30	11.5	9.5	6.5	5.0	4.5	4.0	7.0	5.0	---	---	16.5	15.0
31	12.0	10.0	---	---	4.5	4.0	5.0	3.0	---	---	18.0	14.5
MONTH	20.0	9.0	16.5	5.0	13.0	2.0	8.0	.0	8.0	.0	18.0	4.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	18.0	16.0	17.5	16.0	19.5	18.0	26.5	24.5	27.0	24.0	27.5	26.0
2	18.5	15.0	16.0	14.0	20.0	17.5	26.0	24.5	28.0	25.0	26.0	24.0
3	17.5	16.0	15.5	13.0	20.5	19.0	24.5	24.0	28.0	25.5	25.0	23.5
4	17.5	15.5	17.0	14.0	22.5	20.5	24.0	23.5	29.0	26.0	24.0	23.5
5	15.5	13.0	17.0	16.0	23.5	21.5	23.5	22.5	29.0	26.5	25.0	22.5
6	14.5	12.0	17.0	16.0	23.0	20.5	---	---	28.0	26.5	25.5	23.0
7	15.0	12.0	16.0	14.5	21.5	20.0	27.0	26.5	27.5	25.0	25.0	23.0
8	16.0	13.5	16.0	14.0	22.0	20.5	28.5	25.5	25.5	24.0	25.0	23.5
9	18.0	15.0	16.0	15.0	23.5	21.5	29.5	27.0	26.0	23.5	24.5	22.0
10	17.5	15.5	16.0	15.5	23.0	22.0	30.5	28.0	26.5	24.0	24.0	21.0
11	19.0	17.0	16.0	15.0	22.5	21.5	30.0	26.5	26.5	24.5	25.0	22.0
12	19.0	17.5	16.0	14.5	22.5	21.0	29.0	26.5	27.0	24.0	25.5	23.0
13	17.0	16.0	15.5	14.5	24.0	21.0	29.5	27.0	27.0	24.5	26.5	23.5
14	16.0	15.0	15.5	15.0	24.0	22.5	29.5	28.0	27.0	25.0	25.5	24.0
15	15.5	13.5	15.5	14.0	24.5	23.0	29.0	27.0	26.5	25.0	25.0	22.0
16	15.0	13.5	14.5	13.0	24.5	24.0	28.5	26.0	26.5	25.0	22.5	20.5
17	16.5	14.5	15.5	14.0	24.5	23.0	29.0	26.0	25.5	23.0	20.5	19.0
18	17.5	16.0	15.5	14.5	24.5	22.0	29.5	26.0	25.0	22.5	19.0	18.0
19	17.5	16.0	12.5	12.0	23.5	22.5	28.5	27.0	25.5	22.5	19.0	17.0
20	16.0	14.5	14.5	12.0	24.5	22.0	27.5	26.0	25.5	23.0	20.0	17.0
21	15.5	13.0	17.0	14.0	24.0	23.5	26.5	25.0	24.5	23.0	21.0	18.5
22	15.0	14.0	19.0	16.0	25.0	23.5	26.0	24.0	26.0	22.5	20.5	18.5
23	15.5	14.5	20.5	18.0	24.0	22.5	25.0	23.5	26.0	23.5	19.5	17.0
24	15.5	13.0	22.0	19.5	24.0	22.0	26.5	23.5	26.5	24.0	20.0	17.0
25	14.5	12.0	23.0	20.5	25.0	23.5	26.5	24.5	27.0	24.5	19.5	18.0
26	15.5	13.5	22.0	21.0	25.0	23.5	27.5	25.0	27.0	25.0	21.5	18.5
27	18.0	14.5	21.0	20.5	24.0	22.0	27.5	26.0	26.5	25.5	22.0	20.5
28	19.5	16.5	20.0	19.0	24.0	21.5	27.0	25.5	26.5	25.0	21.0	19.5
29	19.5	18.5	20.0	18.0	25.0	22.5	26.0	24.0	26.5	25.5	18.5	18.0
30	18.5	17.5	20.0	18.5	26.5	24.0	25.5	22.5	27.0	25.0	21.0	18.5
31	---	---	20.0	19.0	---	---	25.5	22.5	28.0	25.5	---	---
MONTH	19.5	12.0	23.0	12.0	26.5	17.5	30.5	22.5	29.0	22.5	27.5	17.0
YEAR	30.5	.0										

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	---	---	10.6	8.7	11.3	10.4	11.3	9.9	13.6	11.5	11.3	10.9
2	---	---	11.0	8.6	10.2	9.7	13.1	10.4	12.4	11.8	11.6	10.9
3	---	---	10.8	8.7	11.0	9.6	12.6	10.5	13.2	12.4	11.9	11.4
4	---	---	10.4	7.9	11.7	9.9	13.4	10.7	13.7	13.2	11.3	10.7
5	---	---	11.2	7.9	10.3	8.9	13.6	11.7	13.7	12.8	11.7	10.7
6	---	---	11.7	8.0	10.4	8.5	13.0	11.6	13.0	12.3	12.1	11.7
7	13.8	11.6	10.6	8.1	9.8	8.2	12.6	11.2	12.8	11.7	12.4	11.9
8	12.3	8.7	10.7	7.5	9.3	7.7	14.2	11.8	13.2	11.4	12.4	12.0
9	12.4	7.9	10.8	7.3	8.7	7.5	14.1	12.0	13.4	11.9	12.4	12.0
10	11.0	7.7	10.9	7.5	9.6	8.1	14.3	11.8	12.3	10.9	12.1	11.5
11	11.4	7.5	12.3	8.3	10.2	9.2	14.4	12.1	12.8	11.1	11.7	11.3
12	12.2	8.3	12.7	9.2	11.2	9.7	14.3	12.5	13.9	12.9	12.0	11.3
13	13.0	9.0	13.1	9.4	10.7	9.6	13.9	12.1	14.0	13.4	11.4	10.8
14	13.5	9.4	11.5	9.1	11.4	9.7	13.3	12.2	13.5	12.9	11.6	10.4
15	13.9	9.3	9.8	8.2	11.0	10.3	13.0	11.3	13.0	12.6	11.3	10.3
16	13.2	8.9	11.4	8.0	11.1	9.9	12.9	10.9	13.0	12.3	11.8	10.0
17	10.4	8.0	9.6	8.2	11.8	10.2	13.0	10.9	13.1	12.7	12.9	10.4
18	8.7	6.4	10.7	8.4	11.3	9.8	13.3	11.7	12.7	12.5	13.7	11.9
19	9.6	7.0	11.6	8.7	11.5	9.5	13.2	11.8	12.5	12.0	12.7	11.2
20	9.7	7.5	12.0	9.3	12.4	10.3	12.2	10.8	12.1	11.8	12.7	11.2
21	---	---	11.8	9.1	12.6	10.9	11.3	10.2	12.0	11.8	13.6	11.4
22	11.1	8.3	11.7	9.0	12.6	11.2	12.5	10.1	11.9	11.5	13.9	11.3
23	11.3	8.3	10.1	8.7	12.6	10.6	12.3	9.7	11.8	11.4	15.1	11.2
24	9.7	8.3	9.4	8.2	11.8	10.2	13.0	9.6	12.0	11.8	15.4	11.1
25	9.0	7.5	10.5	8.4	12.7	10.7	12.8	9.9	12.3	11.9	15.9	9.9
26	9.8	8.1	11.2	8.9	12.8	11.3	---	---	12.3	11.8	14.9	9.7
27	9.6	8.7	10.4	9.2	13.0	11.3	---	---	12.2	11.7	16.2	8.5
28	9.7	8.5	10.2	9.7	13.4	11.5	12.5	9.5	11.6	11.3	17.9	8.5
29	10.4	9.0	10.7	10.2	13.4	11.2	11.8	9.5	---	---	18.1	8.5
30	10.6	8.9	11.4	10.4	11.8	10.5	13.6	10.5	---	---	13.9	7.9
31	10.6	8.8	---	---	11.4	10.1	14.5	11.3	---	---	14.1	6.6
MONTH	13.9	6.4	13.1	7.3	13.4	7.5	14.5	9.5	14.0	10.9	18.1	6.6

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	12.9	7.2	---	---	8.8	8.2	8.3	7.5	13.9	7.8	---	---
2	14.5	7.0	---	---	9.0	8.4	7.6	7.0	15.2	7.6	6.5	5.8
3	14.7	7.1	---	---	9.2	8.2	8.0	7.4	13.6	7.7	7.2	5.5
4	9.6	6.4	---	---	9.0	8.4	8.3	7.8	16.4	7.1	6.5	5.9
5	8.4	6.8	9.8	9.3	9.2	7.8	8.1	7.8	15.3	7.3	7.3	6.2
6	11.0	7.8	10.6	9.2	8.4	7.6	---	---	11.5	5.8	7.0	6.2
7	13.3	8.3	11.1	10.4	9.3	5.7	7.8	7.4	8.9	5.9	8.3	5.9
8	15.0	8.5	11.2	10.8	---	---	7.7	7.2	7.8	6.2	9.4	5.8
9	17.1	8.0	10.8	10.2	---	---	7.2	6.9	9.2	6.5	12.2	6.4
10	16.7	7.9	10.5	10.1	---	---	6.8	6.2	11.2	6.7	13.1	6.6
11	15.7	8.1	10.5	9.8	---	---	9.0	6.3	12.6	7.3	14.6	6.4
12	10.6	6.1	10.8	10.3	---	---	13.5	7.6	18.0	7.5	15.3	6.8
13	8.0	6.8	11.1	10.6	---	---	16.5	7.4	20.0	7.7	15.7	6.6
14	9.0	7.9	11.0	10.3	---	---	17.1	7.6	18.8	8.3	12.4	6.0
15	10.0	8.9	10.9	10.4	---	---	15.6	7.1	---	---	7.8	4.8
16	9.9	8.9	11.1	10.7	8.7	7.2	16.1	7.6	---	---	6.8	5.6
17	8.8	7.7	11.0	10.3	8.7	8.3	17.8	7.6	---	---	7.1	6.6
18	8.1	7.2	10.2	9.9	8.6	8.0	20.0	8.0	20.0	13.0	7.4	6.7
19	9.0	7.8	10.9	10.6	8.5	7.9	15.5	7.8	20.0	8.7	7.9	6.7
20	10.0	8.3	10.9	10.3	8.4	7.1	10.5	6.1	20.0	8.9	8.9	6.7
21	10.2	8.9	10.3	9.6	7.5	7.0	7.8	6.7	19.5	8.3	8.5	6.7
22	9.6	8.3	9.9	9.0	8.0	7.0	8.0	6.9	20.0	8.5	8.4	6.2
23	8.6	7.3	10.1	8.5	8.5	6.7	8.1	7.6	20.0	8.5	10.0	6.6
24	7.5	7.1	11.2	8.2	8.5	7.9	8.3	7.7	20.0	7.9	9.9	6.6
25	7.9	7.6	13.0	8.1	8.1	7.8	8.2	7.1	18.9	7.4	9.8	6.2
26	8.0	7.3	11.2	8.0	8.3	7.8	8.6	7.2	18.5	6.4	9.9	6.2
27	8.3	7.1	8.5	7.6	8.9	8.3	9.7	6.2	14.4	6.0	9.9	5.5
28	8.8	6.4	8.2	7.5	8.9	8.4	8.8	7.6	15.2	5.2	8.0	6.1
29	---	---	8.7	8.2	8.6	8.2	9.7	7.7	14.0	5.4	9.7	7.1
30	---	---	8.5	8.0	8.3	7.8	11.0	8.4	13.3	4.2	11.5	6.7
31	---	---	8.7	8.2	---	---	11.5	8.1	11.0	4.6	---	---
MONTH	17.1	6.1	13.0	7.5	9.3	5.7	20.0	6.1	20.0	4.2	15.7	4.8

YEAR	20.0	4.2
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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 1981

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis charge (ft ³ /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	1970-81	2-19-81 6- 9-81	11.92 11.92	385 385
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	1980-81	6- 9-81	14.94	181
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	1959-81	6- 9-81	5.31	490
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	1980-81	6- 9-81	14.28	106
Little Beaver Creek basin							
03109000	Lisbon Creek at Lisbon, OH	Lat 40°46'55", long 80°45'53", Columbiana County, Hydrologic Unit 05030101, at city water works of Lisbon, 800 feet (244 m) upstream from bridge on State Highway 164.	6.19	1947-62, 1963-81 (Discontinued)	6- 9-81	5.55	790
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	1978-81	6-25-81 8- 3-81	100.19	6.5 6.5
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	1978-81	4-12-81	95.79	69
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	1978-81	4-12-81	86.85	242
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	1978-81	4-12-81	94.34	44
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	1978-81	4-12-81	97.78	24
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	1978-81	4-12-81	102.97	159

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

						Annual maximum	
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis- charge (ft ³ /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	1978-81	6-13-81	101.21	240
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	1978-81	6-13-81	97.82	2,020
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	1978-81	6-13-81	98.77	39
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	1978-81	2- 2-81	89.97	155
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	1978-81	6- -81	96.74	46
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	1980-81	7-28-81	12.51	44
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	1980-81	6- 6-81 7 -9-81	12.88 12.88	74 74
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	1980-81	7-28-81	12.71	104
03119700	Conotton Creek at Jewett, OH	Lat 40°21'59", long 81°00'13", Harrison County, Hydrologic Unit 05040001, at bridge on State Highway 9 in Jewett.	14.3	1947-81 (Discontinued)	4-12-81	13.16	435
03123400	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	1966-81	No valid peak this year		
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	1978-81	4-12-81	100.39	125
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	1978-81	9-12-81	96.74	210
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	1978-81	6- 9-81	102.59	38

CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis- charge (ft ³ /s)
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, 1966-81	4-12-81	20.54	198
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	1966-81	6-15-81	12.68	170
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	1964-81	6-15-81	11.54	2,000
Hocking River basin							
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	1978-81	6- 6-81	98.02	250
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	1978-81	6- 6-81	95.85	210
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	1980-81	7-13-81	15.44	178
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	1978-81	6- 7-81	98.30	94
Charlie Creek basin							
03205995	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	1978-81	5-19-81	96.47	48
Scioto River basin							
03221450 (c)	Fishinger Creek on Kioka Avenue at Upper Arlington, OH	Lat 40°01'48", long 83°05'12", Franklin County, Hydrologic Unit 05060001, at culvert on Kioka Avenue, 100 ft (30 m) north of Fishinger Road at Upper Arlington.	0.71	1980-81	6-13-81	12.99	165
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	1965-81	12- 9-80	22.44	590
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	1980-81	6-13-81	---	100
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	1972-81	6-13-81	17.50	300

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis- charge (ft ³ /s)
03228950 (c)	Dawnlight Ditch on Dawnlight Avenue at Columbus, OH	Lat 40°00'51", long 82°56'46", Franklin County, Hydrologic Unit 05060001, at upstream side of culvert on Dawnlight Avenue, north of Mock Road at Columbus.	0.18	1980-81	6-13-81	13.50	75
03231600	East Fork Paint Creek near Sedalia, OH	Lat 39°42'36", long 83°27'48", Madison County, Hydrologic Unit 05060003, at culvert on State Highway 38, 1.8 mi (2.9 km) southeast of Sedalia.	3.82	1947-81 (Discontinued)	6- 6-81	14.04	410
03235080	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	1978-81	6- 7-81	73.18	655
03235200	Little Blackjack Branch near South Bloomingville, 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 Bloomingville.	0.89	1966-81	6- 6-81	23.40	350
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	1980-81	7- 5-81	12.69	49
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	1978-81	No valid peak this year		
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	1978-81	5-27-81	94.19	171
03237210	Rose Run near Portsmouth, OH	Lat 38°48'20", long 82°59'03", Scioto County, Hydrologic Unit 05060002, at culvert on U.S. Highway 23, 2.9 mi (4.7 km) north of Portsmouth city limits.	1.04	1966-81	2- 2-81	15.02	72
Ray Run basin							
03238700	Ray Run near Moscow, Oh	Lat 38°51'15", long 84°12'00", Clermont County Hydrologic Unit 05090201, at culvert on State Highway 743, 1.5 mi (2.4 km) east of Moscow.	0.86	1966-81 (Discontinued)	8- 7-81	23.07	440
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	1980-81	8- 7-81	12.13	29
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	1980-81	8- 7-81	12.89	70
03242100	Wayne Creek at Waynesville, OH	Lat 39°31'08", long 84°04'47", Warren County, Hydrologic Unit 05090202, at culvert on State Highway 73, 0.8 mi (1.3 km) southeast of intersection of State Highway 73 and U.S. Highway 42 at Waynesville.	1.01	1966-81 (Discontinued)	6- 6-81	20.69	180
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	1980-81	6-12-81	17.50	371

CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis- charge (ft ³ /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	1980-81	5-26-81	14.08	144
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	1980-81	6-12-81	14.00	59
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	1980-81	7-19-81	14.40	127
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	1966-81	6- 5-81	18.02	625
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	1980-81	5-30-81	17.01	552
03272695	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	1978-81	4-23-81	99.91	120
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	1966-81	4-23-81	19.31	124

c operated as an urban hydrology site where additional data may be available.

≠ operated as a continuous-record gaging station.

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow and chemical quality data is 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.

SHENANGO RIVER BASIN

03104070 LITTLE YANKEE RUN AT MASURY, OH

LOCATION.--41°11'36", long 80°32'03", Trumbull County, Hydrologic Unit 05030102, 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.

DRAINAGE AREA.--41.0 mi² (106.2 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CAR- BONATE FET-FLO (MG/L AS C03)	
AUG 14...	1630	8.7	500	8.1	22.5	150	42	11	23	4.1	123	0	
DATE	TIME	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 14...	59	36	.4	6.1	1.6	.070	.59	.66	.760	.750	160	70	

03104030 YANKEE RUN NEAR MASURY, OH

LOCATION.--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.

DRAINAGE AREA.--38.9 mi² (100.8 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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)	SULFATE DIS-SOLVED (MG/L AS S04)
JUL 14...	1530	1.7	--	--	--	--	--	--	--	--	--	--
AUG 14...	1500	1.8	590	8.3	23.0	170	50	12	36	3.7	108	64
DATE	TIME	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 14...	67	.3	3.2	.66	.040	.63	.67	.630	.590	70	60	

LITTLE BEAVER CREEK BASIN

359

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 mi² (92.5 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 17...	1300	8.5	--	--	--	--	--	--	--	--	--	--
AUG 03...	1045	9.2	--	--	--	--	--	--	--	--	--	--
24...	1100	6.1	900	7.7	17.0	380	110	25	50	5.7	188	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)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--
24...	200	66	.5	8.1	2.6	.060	.45	.51	.110	.050	50	820

03108985 CHERRY VALLEY RUN AT LEETONIA, OH

LOCATION.--Lat 40°52'33", long 80°45'24", Columbiana County, Hydrologic Unit 05030101, at bridge on Madison Street in Leetonia.

DRAINAGE AREA.--11.9 mi² (30.8 km²)

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years, 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 17...	1030	3.5	--	--	--	--	--	--	--	--	--	--
AUG 03...	1130	2.9	--	--	--	--	--	--	--	--	--	--
24...	1245	2.0	800	8.0	19.0	330	96	22	37	4.7	194	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)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--
24...	200	34	.5	9.7	.45	.040	.36	.40	.140	.110	30	640

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 mi² (72.5 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	
OCT 17...	1100	4.9	--	--	--	--	--	--	--	--	--	--	
AUG 03...	1245	3.0	--	--	--	--	--	--	--	--	--	--	
24...	1430	1.8	800	8.4	20.5	350	98	26	30	3.4	224	8	
DATE	AS S04)	SULFATE DIS- SOLVED (MG/L AS CL)	CHLO- RIDE, DIS- SOLVED (MG/L AS F)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	150	50	.3	8.1	.35	.010	.44	.45	.030	.010	20	180	

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 mi² (29.8 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 17...	1030	3.2	--	--	--	--	--	--	--	--	--	--
AUG 03...	1345	7.1	--	--	--	--	--	--	--	--	--	--
24...	1015	1.9	320	7.6	20.5	130	38	9.6	8.3	2.2	126	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--
24...	34	13	.2	6.4	.15	.180	.67	.85	.060	.030	80	220

LITTLE BEAVER CREEK BASIN

03109395 BULL CREEK AT NEGLEY, OH

LOCATION.--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.

DRAINAGE AREA.--55.4 mi² (143.5 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 17...	1145	14	--	--	--	--	--	--	--	--	--	--
AUG 03...	1400	13	--	--	--	--	--	--	--	--	--	--
24...	1130	7.0	675	8.0	18.0	280	80	19	26	3.0	190	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 SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--
24...	120	36	.3	7.8	.70	<.010	.42	.310	.300	40	10

YELLOW CREEK BASIN

03109860 ELKHORN CREEK AT BERGHOLZ, OH

LOCATION.--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.

DRAINAGE AREA.--33.5 mi² (86.8 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
AUG 04...	1400	5.2	--	--	--	--	--	--	--	--	--	--
21...	1445	3.0	390	7.7	19.5	160	49	10	11	2.5	122	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--
21...	60	11	.2	5.0	.19	.040	.22	.26	.030	<.010	80	90

CROSS CREEK BASIN

03110950 CROSS CREEK AT BROADACRE, OH

LOCATION.--Lat 40°21'56", long 80°47'05", Jefferson County, Hydrologic Unit 05030101, at bridge on State Route 152, at Broadacre.

DRAINAGE AREA.--53.5 mi² (138.6 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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)
AUG 12...	0830	12	--	--	--	--	--	--	--	--	--	--
21...	1045	6.3	922	8.1	18.0	520	140	41	19	2.8	184	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)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
AUG 12...	--	--	--	--	--	--	--	--	--	--	--	--
21...	330	19	.2	4.1	.07	.030	.20	.23	.020	<.010	40	40

SHORT CREEK BASIN

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 mi² (165.5 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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)
AUG 12...	1515	43	--	--	--	--	--	--	--	--	--	--
21...	1415	33	2850	8.2	18.5	1600	340	190	120	7.0	292	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)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
AUG 12...	--	--	--	--	--	--	--	--	--	--	--	--
21...	1500	21	.2	5.7	.04	.080	.09	.17	.010	<.010	50	80

MCMAHON CREEK BASIN

03112820 MCMAHON CREEK AT GLENCOE, OH

LOCATION.--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.

DRAINAGE AREA.--50.7 mi² (131.3 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
AUG												
13...	0830	9.3	--	--	--	--	--	--	--	--	--	--
26...	1400	3.4	630	8.2	24.5	280	79	20	28	2.8	218	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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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)
AUG											
13...	--	--	--	--	--	--	--	--	--	--	--
26...	150	14	.3	3.6	.01	<.010	.37	.020	<.010	50	20

03113550 MCMAHON CREEK AT BELLAIRE, OH

LOCATION.--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.

DRAINAGE AREA.--90.2 mi² (233.6 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
AUG												
13...	1000	21	--	--	--	--	--	--	--	--	--	--
26...	1200	9.1	1200	7.9	19.5	490	140	35	71	3.7	182	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG												
13...	--	--	--	--	--	--	--	--	--	--	--	--
26...	460	29	.3	4.0	.12	.010	.21	.22	<.010	<.010	40	70

CAPTINA CREEK BASIN

03113840 NORTH FORK CAPTINA CREEK NEAR BARNESVILLE, OH

LOCATION.--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.

DRAINAGE AREA.--32.6 mi² (84.4 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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 HCO3)	CARBONATE FET-FLD (MG/L AS CO3)
AUG 13...	1345	3.9	--	--	--	--	--	--	--	--	--	--
25...	1330	1.7	540	8.5	19.5	240	69	16	20	3.3	198	4

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	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)
AUG 13...	--	--	--	--	--	--	--	--	--	--	--
25...	80	23	.2	1.6	<.01	<.010	.43	.170	.160	30	10

MUSKINGUM RIVER BASIN

03124705 STONE CREEK NEAR NEW PHILADELPHIA

LOCATION.--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.

DRAINAGE AREA.--26.9 mi² (69.7 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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 HCO3)	CARBONATE FET-FLD (MG/L AS CO3)
AUG 21...	0930	4.5	710	7.5	15.0	270	67	24	15	2.8	96	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	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)
AUG 21...	190	20	.3	6.9	.12	.030	.19	.22	.010	<.010	40 1500

03126170 SKULL FORK AT FREEPORT, OH

LOCATION.--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.

DRAINAGE AREA.--45.9 mi² (118.9 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHQS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	
AUG 20...	1430	3.0	1180	7.6	18.5	510	120	51	13	2.4	65	0	
DATE	TIME	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 20...	500	11	.2	5.5	.04	.030	.30	.33	.010	<.010	40	290	

03129175 CEDAR FORK NEAR BELLVILLE, OH

LOCATION.--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.

DRAINAGE AREA.--46.5 mi² (120.4 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	
OCT 17...	1300	7.6	--	--	--	--	--	--	--	--	--	--	
AUG 18...	1330	9.0	595	8.1	17.5	260	69	22	8.5	1.7	278	0	
DATE	TIME	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)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	36	17	.2	8.4	.73	.020	.16	.18	.010	<.010	40	20	

MUSKINGUM RIVER BASIN

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 mi² (259 km²).

PERIOD OF RECORD.--Discharge, Water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)
OCT 17...	1445	15	--	--	--	--	--	--	--	--	--
AUG 19...	1230	15	690	8.3	19.5	310	76	29	8.6	1.9	320

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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 17...	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	44	19	.2	8.8	.43	<.010	.39	.040	<.010	40	20

03138820 APPLE CREEK AT WOOSTER, OH

LOCATION.--Lat 40°48'13", long 81°54'20", Wayne County, Hydrologic Unit 05040003, at bridge on Hillcrest Road, 0.5 mi (0.8 km) upstream from Little Apple Creek, at Wooster.

DRAINAGE AREA.--33.7 mi² (87.3 km²).

PERIOD OF RECORD.--Discharge, water years 1959, 1976 to current year (discontinued); chemical analyses, water years 1976 to 1977, 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 17...	1000	7.6	--	--	--	--	--	--	--	--	--	--
AUG 19...	1000	6.1	570	8.1	16.0	230	61	18	14	3.3	248	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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 17...	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	36	24	.2	5.6	1.0	<.010	.49	.120	.110	30	20

MUSKINGUM RIVER BASIN

367

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 mi² (110.3 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 17...	--	4.7	--	--	--	--	--	--	--	--	--	--
AUG 18...	1030	11	500	8.1	15.0	210	56	16	11	3.4	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)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	37	12	.2	3.9	.94	.010	.41	.42	.010	<.010	10	<10

03142085 CROOKED CREEK AT CAMBRIDGE, OH

LOCATION.--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.

DRAINAGE AREA.--58.3 mi² (151.0 km²)

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)
AUG 20...	1245	1.4	414	7.8	19.0	160	48	10	24	2.7	198	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 20...	39	36	.2	8.5	.33	.080	.33	.41	.100	.030	60	50

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 Millersport.

DRAINAGE AREA.--62.9 mi² (162.9 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 17...	1130	4.0	--	--	--	--	--	--	--	--	--	--
AUG 11...	0900	9.3	600	7.3	22.0	240	63	21	25	3.0	256	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)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	53	40	.3	6.2	2.0	.080	.50	.58	.040	.020	20	50	

03145185 SOUTH FORK LICKING RIVER AT NEWARK, OH

LOCATION.--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.

DRAINAGE AREA.--183 mi² (474 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)
AUG 26...	1445	34	660	8.0	22.0	300	81	23	33	3.5	285	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 26...	45	42	.3	5.3	2.6	.040	.89	.93	.330	.210	20	30	

MUSKINGUM RIVER BASIN

03150200 MEIGS CREEK NEAR REINERSVILLE, OH

LOCATION.--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.

DRAINAGE AREA.--73.0 mi² (189.1 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)	
AUG 26...	1115	2.0	1300	7.6	20.0	630	160	57	48	2.7	253	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 26...	470	70	.2	3.8	.03	.030	.38	.41	.020	<.010	20	10	

03150365 OLIVE GREEN CREEK NEAR BEVERLY, OH

LOCATION.--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.

DRAINAGE AREA.--80.7 mi² (209.0 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)	
AUG 25...	0930	.98	1100	7.2	18.5	360	100	27	97	2.9	266	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 25...	73	240	.2	4.1	.04	.020	.33	.35	.040	<.010	50	20	

HOCKING RIVER BASIN

03155895 HOCKING RIVER AT UNION STREET, LANCASTER, OH

LOCATION.--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 (1.3 km) upstream from Hunters Run.

DRAINAGE AREA.--36.2 mi² (93.8 km²).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1100	8.9	--	--	--	--	--	--	--	--	--	--
JUL 27...	0920	14	--	--	--	--	--	--	--	--	--	--
AUG 10...	1030	9.5	610	8.5	21.5	290	72	27	48	2.5	304	28

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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	86	23	.3	9.5	.87	.030	.29	.32	.890	.560	40	40

03156549 CENTER BRANCH RUSH CREEK NEAR JUNCTION CITY, OH

LOCATION.--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.

DRAINAGE AREA.--24.9 mi² (64.5 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1400	1.6	--	--	--	--	--	--	--	--	--	--
JUL 28...	1545	9.6	--	--	--	--	--	--	--	--	--	--
AUG 10...	1500	3.2	420	7.5	23.0	150	39	13	24	3.5	112	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	39	49	.2	4.5	.43	.030	.39	.42	.060	<.010	30	160

HOCKING RIVER BASIN

371

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 mi² (183.9 km²).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 16...	1500	10	--	--	--	--	--	--	--	--	--	--
JUL 28...	1415	32	--	--	--	--	--	--	--	--	--	--
AUG 10...	1400	13	1500	3.2	22.5	570	98	80	49	4.9	0	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	630	100	.6	20	.48	1.20	.40	1.60	.080	<.010	8000	14000

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 mi² (122.5 km²).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 15...	1700	9.8	--	--	--	--	--	--	--	--	--	--
JUL 30...	1217	9.8	551	8.2	19.0	290	74	26	6.8	1.8	300	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 SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--
JUL 30...	47	13	.3	7.0	1.0	<.010	.15	.060	.020	10	60

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 mi² (184.2 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 15...	1145	2.8	--	--	--	--	--	--	--	--	--	--
JUL 27...	1920	7.3	--	--	--	--	--	--	--	--	--	--
AUG 11...	1030	6.3	430	7.4	22.0	170	50	12	12	3.5	46	0

DATE	TIME	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	150	7.7	.2	8.9	.24	.050	.17	.22	.020	.010		40	1500

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 mi² (148.9 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 15...	1230	3.1	--	--	--	--	--	--	--	--	--	--
JUL 27...	2020	7.4	--	--	--	--	--	--	--	--	--	--
AUG 11...	1115	5.4	450	7.7	22.5	190	56	12	15	3.3	144	0

DATE	TIME	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	89	11	.2	4.7	.11	.030	.18	.21	.220	.160		20	220

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 mi² (121.5 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 17...	1330	.88	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	3.1	--	--	--	--	--	--	--	--	--	--
AUG 14...	1230	.87	720	8.2	22.0	340	79	35	20	3.3	296	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)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 14...	110	32	.6	2.5	.20	.080	1.8	1.90	.130	.100	10	20

03219590 BOKES CREEK NEAR WARRENSBURG, OH

LOCATION.--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.

DRAINAGE AREA.--83.2 mi² (215.5 km²).

PERIOD OF RECORD.--Discharge, water years 1956, 1960, 1979 to current year; chemical analyses, waters 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 16...	1245	.61	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	3.3	--	--	--	--	--	--	--	--	--	--
AUG 14...	1400	.60	780	8.5	28.0	330	72	37	26	3.9	220	16

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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 14...	150	43	.5	1.0	.05	.060	.72	.78	.090	.040	10	10

SCIOTO RIVER BASIN

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 mi² (171.2 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1630	2.9	--	--	--	--	--	--	--	--	--	--
JUL 16...	1600	5.3	--	--	--	--	--	--	--	--	--	--
AUG 14...	0930	2.4	750	8.2	23.0	380	74	47	14	2.6	296	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 14...	170	16	.6	2.0	.11	.070	.74	.81	.060	.020	10	30

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 mi² (41.7 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1215	.62	--	--	--	--	--	--	--	--	--	--
JUL 16...	1100	1.4	--	--	--	--	--	--	--	--	--	--
AUG 11...	1051	3.3	930	7.7	22.5	390	100	35	23	4.9	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	190	31	.6	6.7	.66	.070	.61	.68	.060	.030	30	50

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 mi² (77.4 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1130	1.4	--	--	--	--	--	--	--	--	--	--
JUL 16...	0940	2.3	--	--	--	--	--	--	--	--	--	--
AUG 18...	1120	1.3	705	8.1	19.0	320	81	28	17	3.8	292	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 18...	80	24	.3	6.2	.40	.030	.82	.85	.090	.040	60	40

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 mi² (133.6 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	0900	8.3	--	--	--	--	--	--	--	--	--	--
AUG 11...	1330	9.8	700	7.5	24.0	280	74	24	36	4.2	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 SI02)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	66	47	.3	8.2	2.2	.140	.48	.62	1.00	.910	10	80

SCIOTO RIVER BASIN

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 mi² (179.2 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 17...	1400	4.6	--	--	--	--	--	--	--	--	--	--
AUG 10...	0900	6.9	630	8.6	21.0	280	70	26	35	4.8	200	59

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)	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)	NITRO- GEN+AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	84	25	.5	8.7	1.8	.040	.54	.58	.260	.190	200	50

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 mi² (513 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
OCT 17...	1530	27	--	--	--	--	--	--	--	--	--	--
AUG 11...	1430	45	670	7.5	24.0	310	79	27	25	3.2	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 SiO2)	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)	NITRO- GEN+AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	62	30	.4	8.4	.92	.060	.38	.44	.220	.200	10	40

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 mi² (360.0 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 17...	1500	9.8	--	--	--	--	--	--	--	--	--	--
JUL 17...	1000	19	--	--	--	--	--	--	--	--	--	--
AUG 11...	1515	13	695	8.6	25.5	340	72	40	16	2.4	310	16

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)	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)	NITRO- GEN,AM- MONIA + 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 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	79	25	.6	5.2	1.0	.010	.34	.35	.050	.020	10	10

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 mi² (619 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1350	22	--	--	--	--	--	--	--	--	--	--
JUL 15...	0930	43	--	--	--	--	--	--	--	--	--	--
AUG 11...	1800	25	720	8.6	24.0	330	69	39	27	2.7	308	12

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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	87	40	.7	4.7	.59	.020	.71	.73	.080	.020	30	7

SCIOTO RIVER BASIN

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 mi² (76.2 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1020	10	--	--	--	--	--	--	--	--	--	--
JUL 15...	1215	16	--	--	--	--	--	--	--	--	--	--
AUG 11...	1315	12	740	8.5	23.0	380	88	39	14	2.5	368	20

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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	65	26	.5	8.1	1.6	<.010	.34	.070	.060	20	50

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 mi² (420 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1200	25	--	--	--	--	--	--	--	--	--	--
JUL 15...	1030	47	--	--	--	--	--	--	--	--	--	--
AUG 11...	1630	30	665	8.5	24.5	340	75	37	12	2.3	348	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	57	26	.5	6.7	.38	.130	.32	.45	.080	.030	10	10

SCIOTO RIVER BASIN

03230745 DEER CREEK AT U.S. 142 NEAR LONDON, OH

LOCATION.--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.

DRAINAGE AREA.--50.7 mi² (131.3 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
AUG 03...	0845	10	--	--	--	--	--	--	--	--	--	--
25...	1100	2.0	630	7.6	21.0	320	70	36	13	1.8	354	0

DATE	TIME	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	59	24	.6	5.2	.25	.030	.43	.46	.070	<.010	30	10	

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 mi² (155.9 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
AUG 14...	1420	3.8	498	8.5	26.0	250	54	28	9.4	2.0	264	8

DATE	TIME	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 14...	38	20	.5	5.6	.68	.080	.44	.52	.140	.020	20	10	

SCIOTO RIVER BASIN

03230770 OAK RUN NEAR BIG PLAIN, OH

LOCATION.--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.

DRAINAGE AREA.--41.1 mi² (106.4 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 AS HCO3)	CAR- BONATE FET-FLO AS CO3)
AUG 03...	1000	12	--	--	--	--	--	--	--	--	--	--
25...	1000	7.7	704	7.9	22.0	330	66	40	36	3.3	352	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	64	44	.6	3.6	.24	.050	.45	.50	.350	.220	60	10	

03230790 SUGAR RUN NEAR MT. STERLING, OH

LOCATION.--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.

DRAINAGE AREA.--51.7 mi² (133.9 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)
AUG 21...	1345	1.7	560	8.5	20.5	290	47	41	10	2.1	308	8

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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 21...	43	22	.7	3.9	.23	.060	.65	.71	.040	.010	50	10	

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 mi² (161.4 km²).

PERIOD OF RECORD.--Discharge, water years 1980 current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 13...	1145	7.3	--	--	--	--	--	--	--	--	--	--
AUG 12...	1130	5.0	598	8.5	22.0	320	65	38	12	1.7	302	12

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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	46	27	.4	5.1	2.2	<.010	.47	.070	.030	10	10

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 mi² (95.3 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 13...	1015	6.9	--	--	--	--	--	--	--	--	--	--
AUG 12...	1035	4.4	670	8.3	20.0	350	73	41	12	1.4	362	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)	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)	NITRO- GEN,AM- MONIA + 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 13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	44	32	.5	7.8	2.8	.150	.53	.68	.100	.030	10	30

SCIOTO RIVER BASIN

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 mi² (202.8 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
JUL 13...	--	11	--	--	--	--	--	--	--	--	--	--
AUG 12...	1300	7.1	598	8.4	21.5	320	70	36	10	1.3	290	12

DATE	TIME	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 SiO2)	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTH0, 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)
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	42	30	.4	6.2	3.4	.020	.27	.29	.050	.040	10	9	

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 mi² (192.4 km²)

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
AUG 21...	1030	1.2	580	8.3	19.5	310	65	35	11	2.0	308	8

DATE	TIME	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 21...	43	22	.3	4.6	.87	.020	.39	.41	.080	.040	50	10	

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 mi² (91.7 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
JUL 13...	1430	7.8	--	--	--	--	--	--	--	--	--	--
AUG 12...	1615	6.3	550	8.1	22.5	260	62	26	15	3.9	298	0

DATE	TIME	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	35	25	.4	7.8	2.2	.460	.40	.86	.980	.920		20	40

03234442 WALNUT CREEK NEAR RICHMOND DALE, OH

LOCATION.--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.

DRAINAGE AREA.--57.9 mi² (150.0 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
AUG 04...	0930	3.0	--	--	--	--	--	--	--	--	--	--
25...	1245	1.2	440	8.4	24.0	220	55	21	8.7	2.4	230	14

DATE	TIME	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 SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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)
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--
25...	35	11	.1	7.8	.22	<.010	.52	.020	<.010	20	10	

SCIOTO RIVER BASIN

03235090 SALT CREEK AT ADELPHI, OH

LOCATION.--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.

DRAINAGE AREA.--47.8 mi² (123.8 km²).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	0815	6.2	--	--	--	--	--	--	--	--	--	--
JUL 27...	1015	7.2	--	--	--	--	--	--	--	--	--	--
AUG 10...	1045	4.7	575	7.9	23.5	300	73	28	8.7	2.1	319	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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	43	13	.2	7.5	.72	<.010	.18	.020	.020	30	60

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 mi² (282 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1030	6.5	--	--	--	--	--	--	--	--	--	--
JUL 27...	1130	8.2	--	--	--	--	--	--	--	--	--	--
AUG 10...	1230	9.1	234	7.6	22.5	82	19	8.3	13	3.9	146	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	30	13	<.1	8.2	.42	.050	.36	.41	.040	.010	160	250

03236200 LITTLE SALT CREEK AT JACKSON, OH

LOCATION.--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.

DRAINAGE AREA.--33.6 mi² (87.0 km²).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 14...	1345	1.2	--	--	--	--	--	--	--	--	--	--
JUL 27...	1500	1.8	--	--	--	--	--	--	--	--	--	--
AUG 10...	1600	3.8	385	7.3	23.5	130	31	13	25	4.6	70	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	78	27	.2	11	.35	.070	.58	.65	.070	.030	80	680

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 mi² (344 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
OCT 14...	1245	13	--	--	--	--	--	--	--	--	--	--
JUL 27...	1330	15	--	--	--	--	--	--	--	--	--	--
AUG 10...	1445	26	235	7.2	22.5	82	20	7.9	13	4.4	62	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	37	13	.1	9.9	1.1	.060	.76	.82	.810	.730	150	470

SCIOTO RIVER BASIN

03236800 SALT CREEK AT RICHMOND DALE, OH

LOCATION.--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.

DRAINAGE AREA.--552 mi² (1,430 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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...	1145	60	--	--	--	--	--	--	--	--	--	--
JUL 27...	1230	71	--	--	--	--	--	--	--	--	--	--
AUG 10...	1345	79	321	7.7	24.5	140	33	13	11	3.6	135	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)	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)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 10...	35	11	.1	8.0	.80	.070	.35	.42	.070	.020	40	220

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 mi² (161.9 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 29...	1330	1.0	--	--	--	--	--	--	--	--	--	--
AUG 13...	1115	2.2	270	7.6	21.5	110	19	14	13	6.1	55	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)	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)	NITRO- GEN,AM- MONIA + 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 29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	65	10	.1	6.5	1.2	.060	.46	.52	.070	.040	80	120

WHITE OAK CREEK BASIN

387

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 mi² (155.7 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	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 HCO3)	CARBONATE FET-FLD (MG/L AS CO3)
JUL 30...	1345	4.6	--	--	--	--	--	--	--	--	--	--
AUG 13...	1530	3.7	450	8.2	22.0	230	56	21	8.0	3.9	248	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	37	13	.2	3.9	.94	.060	.27	.33	.070	.020	20	30

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 mi² (138.6 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	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 HCO3)	CARBONATE FET-FLD (MG/L AS CO3)
JUL 30...	1530	1.6	--	--	--	--	--	--	--	--	--	--
AUG 13...	1715	2.2	320	8.2	23.0	150	42	12	7.3	4.5	150	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	34	11	.2	3.2	1.4	.060	.42	.48	.090	.050	60	40

WHITE OAK CREEK BASIN

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 mi² (31.6 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS CO3)
JUL 30...	1445	.13	--	--	--	--	--	--	--	--	--	--
AUG 13...	1630	.28	385	8.4	22.5	170	47	13	8.7	6.2	164	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)	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)	NITRO- GEN,AM- MONIA + 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 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	41	13	.2	3.2	.53	.040	.40	.44	.090	.030	50	50

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 mi² (25.28 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 17...	1045	2.0	--	--	--	--	--	--	--	--	--	--
JUL 13...	1015	1.9	--	--	--	--	--	--	--	--	--	--
AUG 13...	0840	.55	795	8.0	16.5	390	90	41	9.1	1.9	432	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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	81	27	.6	7.8	1.6	<.010	.19	.040	.030	20	160

03239800 LITTLE MIAMI RIVER AT JOHN BRYANT STATE PARK NEAR CLIFTON, OH

LOCATION.--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.

DRAINAGE AREA.--103 mi² (267 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 17...	1500	45	--	--	--	--	--	--	--	--	--	--
JUL 13...	1130	50	--	--	--	--	--	--	--	--	--	--
AUG 13...	0945	34	680	7.8	18.5	350	79	36	7.5	1.7	360	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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	54	23	.3	6.2	1.7	<.010	.33	.060	.060	<10	20

03241700 LITTLE MIAMI RIVER NEAR XENIA, OH

LOCATION.--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.

DRAINAGE AREA.--238 mi² (616 km²).

PERIOD OF RECORD.--Discharge, water years 1948, 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 18...	1345	91	--	--	--	--	--	--	--	--	--	--
JUL 13...	1345	127	--	--	--	--	--	--	--	--	--	--
AUG 13...	1145	113	735	7.7	19.0	360	85	36	13	2.3	384	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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + 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 18...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	43	29	.2	7.6	2.4	<.010	.34	.170	.110	10	30

LITTLE MIAMI RIVER BASIN

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 mi² (68.4 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
JUL 13...	1445	38	--	--	--	--	--	--	--	--	--	--
AUG 13...	1340	36	1100	7.7	21.0	370	92	34	69	5.4	432	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)	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)	NITRO- GEN,AM- MONIA + 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 13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	72	100	.3	12	.33	.110	.99	1.10	1.60	<.010	80	80

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 mi² (32.1 km²).

PERIOD OF RECORD.--Discharge, water years 1978 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
NOV 18...	1630	3.9	--	--	--	--	--	--	--	--	--	--
JUL 13...	1545	3.2	--	--	--	--	--	--	--	--	--	--
AUG 13...	1430	3.0	600	8.1	24.5	280	60	32	26	2.0	292	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)	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)	NITRO- GEN,AM- MONIA + 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 18...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	39	43	.2	6.9	.82	.030	.32	.35	.010	.010	<10	7

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 mi² (86.8 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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)
NOV 18...	1515	6.7	--	--	--	--	--	--	--	--	--	--
JUL 13...	1630	7.3	--	--	--	--	--	--	--	--	--	--
AUG 13...	1530	6.8	680	7.9	21.5	300	72	28	25	2.3	328	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)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
NOV 18...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 13...	34	43	.2	6.6	.96	.030	.25	.28	.040	.030	20	50

03243150 TODD FORK NEAR CLARKSVILLE, OH

LOCATION.--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.

DRAINAGE AREA.--56.6 mi² (146.6 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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)
AUG 21...	1530	1.4	650	7.8	20.5	350	84	34	11	1.7	356	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)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
AUG 21...	39	27	.2	5.2	2.7	.070	.46	.53	.030	.010	10	10

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 mi² (363 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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 HCO3)	CARBONATE FET-FLD (MG/L AS CO3)
NOV 21...	1300	118	--	--	--	--	--	--	--	--	--	--
JUL 30...	1020	24	--	--	--	--	--	--	--	--	--	--
AUG 12...	1410	9.2	690	8.1	23.0	300	70	30	24	3.9	304	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
NOV 21...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	45	42	.7	3.4	2.6	.040	.33	.37	.690	.670	20	30

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 mi² (47.4 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	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 HCO3)	CARBONATE FET-FLD (MG/L AS CO3)
NOV 19...	1600	1.5	--	--	--	--	--	--	--	--	--	--
JUL 30...	1430	1.6	--	--	--	--	--	--	--	--	--	--
AUG 12...	0900	.25	1020	8.0	18.5	290	75	25	120	3.5	280	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + 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)
NOV 19...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	38	210	.3	5.5	.31	.130	.48	.61	.210	.150	20	280

LITTLE MIAMI RIVER BASIN

393

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 mi² (150.7 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 19...	1420	11	--	--	--	--	--	--	--	--	--	--
JUL 30...	1345	8.8	--	--	--	--	--	--	--	--	--	--
AUG 12...	1010	7.8	645	8.0	20.0	240	66	18	32	3.7	264	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)	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)	NITRO- GEN,AM- MONIA + 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 19...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	39	48	.2	6.8	1.7	.100	.53	.63	.670	.600	30	90

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 mi² (153 km²).

PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CAR- BONATE FET-FLD (MG/L AS CO3)
NOV 19...	1300	7.3	--	--	--	--	--	--	--	--	--	--
JUL 30...	1230	2.8	--	--	--	--	--	--	--	--	--	--
AUG 12...	1115	2.1	520	8.2	22.5	170	49	12	43	4.4	208	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)	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)	NITRO- GEN,AM- MONIA + 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 19...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	38	32	.3	2.9	.24	.040	.23	.27	.050	.010	30	20

LITTLE MIAMI RIVER BASIN

03245775 EAST FORK LITTLE MIAMI RIVER AT LYNCHBURG, OH

LOCATION.--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.

DRAINAGE AREA.--48.1 mi² (124.6 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
JUL 31...	1000	2.3	--	--	--	--	--	--	--	--	--	--
AUG 26...	0937	.96	595	8.3	18.0	290	69	28	12	2.0	300	0

DATE	TIME	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 SiO2)	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)	NITRO- GEN,AM- MONIA + 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 31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 26...	45	26	.2	4.5	.44	.080	.37	.45	.040	.020		90	40

03247300 STONELICK CREEK NEAR PERINTOWN, OH

LOCATION.--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.

DRAINAGE AREA.--76.0 mi² (196.8 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)
JUL 31...	0820	1.9	--	--	--	--	--	--	--	--	--	--
AUG 21...	1345	1.8	498	7.8	20.0	210	61	15	15	3.7	232	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)	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)	NITRO- GEN,AM- MONIA + 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 31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	53	24	.3	8.2	.45	.040	.63	.67	.040	.010	30	20	

03260450 SOUTH FORK GREAT MIAMI RIVER NEAR HUNTSVILLE, OH

LOCATION.--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.

DRAINAGE AREA.--47.5 mi² (123.0 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS CO3)
JUL 30...	1330	7.4	--	--	--	--	--	--	--	--	--	--
AUG 21...	1000	2.9	860	8.0	17.5	460	110	46	11	2.7	376	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)	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)	NITRO- GEN,AM- MONIA + 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 30...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 21...	150	21	.5	5.5	.48	.070	.48	.55	.070	.050	40	40	

03261495 TAWAWA CREEK AT SIDNEY, OH

LOCATION.--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.

DRAINAGE AREA.--54.2 mi² (140.4 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS CO3)
AUG 25...	1800	2.0	510	7.6	24.0	270	60	28	10	2.3	300	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)	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)	NITRO- GEN,AM- MONIA + 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)
AUG 25...	34	14	.4	4.4	.26	.030	.43	.46	.040	.010	30	20	

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 mi² (53.4 km²).

PERIOD OF RECORD.--Discharge, water years 1979 to current year, chemical analyses, waters 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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)
JUL 14...	1215	2.0	--	--	--	--	--	--	--	--	--	--
AUG 11...	1445	1.0	1600	7.7	25.0	410	97	41	230	6.4	416	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)	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	120	300	.8	4.6	.98	.140	.37	.51	.110	.050	150	70

03263195 SWAMP CREEK AT VERSAILLES, OH

LOCATION.--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.

DRAINAGE AREA.--58.8 mi² (152.3 km²).

PERIOD OF RECORD.--Discharge, water years 1971, 1975, 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	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 20...	1700	1.6	--	--	--	--	--	--	--	--	--	--
JUL 14...	1345	9.1	--	--	--	--	--	--	--	--	--	--
AUG 11...	1200	8.1	775	7.6	21.5	380	91	36	22	4.2	356	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)	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)	NITRO- GEN,AM- MONIA + 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 20...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	100	34	.4	4.6	1.6	.600	.60	1.20	.800	.680	20	120

GREAT MIAMI RIVER BASIN

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03263390 GREENVILLE CREEK NEAR COLETOWN, OH

LOCATION.--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.

DRAINAGE AREA.--69.2 mi² (179.2 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CAR- BONATE FET-FLO (MG/L AS C03)	
AUG 25...	1530	9.9	620	7.3	20.5	320	74	32	10	1.8	370	0	
DATE	TIME	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)	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTH0, 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)
AUG 25...	39	17	.5	7.7	.80	.020	.27	.29	.130	.110	50	20	

03264900 PAINTER CREEK NEAR SUGAR GROVE, OH

LOCATION.--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.

DRAINAGE AREA.--34.9 mi² (90.4 km²).

PERIOD OF RECORD.--Discharge, water year 1981; chemical analyses, water year 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	
AUG 25...	1400	2.9	620	7.2	22.5	300	64	35	22	2.1	296	0	
DATE	TIME	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)	NITRO- GEN, NO2+N03 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHO, 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)
AUG 25...	44	40	.3	1.7	.31	.040	.40	.44	.070	.040	60	20	

GREAT MIAMI RIVER BASIN

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 mi² (162.9 km²).

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 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	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)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)
NOV 21....	1720	3.4	--	--	--	--	--	--	--	--	--	--
JUL 14....	1600	44	--	--	--	--	--	--	--	--	--	--
AUG 11....	1645	17	680	8.4	22.0	330	78	34	14	1.8	328	12

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)	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)	NITRO- GEN,AM- MONIA + 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 21....	--	--	--	--	--	--	--	--	--	--	--	--
JUL 14....	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11....	44	31	.2	6.9	5.8	.020	.23	.25	.070	.050	20	8

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, 29.75 ft (9.068 m); Feb. 11; minimum daily low, 15.42 ft (4.700 m) July 12.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.24	27.44	27.88	27.80	29.49	29.03	29.38	27.10	24.37	16.54	18.14	20.42
2	26.30	27.44	27.90	27.81	29.56	28.95	29.42	27.08	24.29	16.06	18.17	20.49
3	26.33	27.42	27.90	27.79	29.59	28.90	29.48	26.98	24.22	15.80	18.27	20.34
4	26.39	27.42	27.88	27.81	29.63	28.81	29.53	26.87	24.16	15.77	18.38	20.16
5	26.46	27.42	27.85	27.79	29.66	28.73	29.59	26.80	24.10	15.86	18.47	20.10
6	26.50	27.41	27.85	27.74	29.68	28.70	29.63	26.77	23.98	15.85	18.50	19.89
7	26.51	27.37	27.84	27.82	29.69	28.65	29.65	26.75	23.94	15.79	18.52	19.65
8	26.49	27.39	27.85	27.85	29.71	28.59	29.68	26.72	23.86	15.70	18.61	19.33
9	26.50	27.35	27.85	27.87	29.71	28.54	29.71	26.71	23.86	15.57	18.68	19.24
10	26.50	27.38	27.87	27.91	29.70	28.48	29.68	26.61	23.82	15.56	18.69	19.15
11	26.53	27.37	27.87	27.93	29.75	28.43	29.64	26.49	23.80	15.51	18.71	19.12
12	26.59	27.36	27.85	28.04	29.74	28.39	29.63	26.43	23.70	15.42	18.83	19.11
13	26.66	27.32	27.89	28.13	29.70	28.34	29.58	26.31	23.63	16.06	18.98	19.08
14	26.72	27.35	27.88	28.20	29.67	28.31	29.47	26.17	23.18	16.62	19.07	19.18
15	26.76	27.35	27.88	28.28	29.63	28.24	29.43	26.04	21.70	16.78	19.17	19.40
16	26.82	27.36	27.90	28.37	29.60	28.23	29.26	25.95	21.15	17.12	19.29	19.58
17	26.87	27.33	27.90	28.43	29.61	28.28	29.07	25.84	20.59	17.42	19.31	19.78
18	26.93	27.43	27.90	28.51	29.59	28.32	28.91	25.72	20.06	17.63	19.31	19.89
19	26.94	27.47	27.94	28.59	29.54	28.39	28.77	25.57	19.55	17.95	19.29	19.96
20	26.93	27.50	27.93	28.67	29.49	28.48	28.59	25.45	19.15	17.96	19.29	20.16
21	27.00	27.56	27.94	28.76	29.48	28.58	28.44	25.31	18.79	---	19.32	20.24
22	27.08	27.60	27.94	28.83	29.42	28.65	28.25	25.19	18.42	---	19.31	20.48
23	27.11	27.63	27.92	28.93	29.35	28.73	28.06	25.08	18.29	17.96	19.31	20.54
24	27.15	27.69	27.96	29.02	29.31	28.82	27.92	24.95	18.08	17.90	19.36	20.52
25	27.16	27.75	27.96	29.10	29.27	28.89	27.79	24.82	17.82	17.95	19.43	20.48
26	27.17	27.77	27.93	29.22	29.24	28.97	27.63	24.70	17.58	17.93	19.64	20.38
27	27.21	27.82	27.93	29.26	29.17	29.06	27.47	24.59	17.26	17.94	20.09	20.42
28	27.26	27.86	27.90	29.33	29.05	29.10	27.33	24.52	17.00	17.80	20.28	20.62
29	27.30	27.88	27.85	29.41	---	29.17	27.25	24.45	16.81	17.97	20.28	20.59
30	27.34	27.88	27.83	29.45	---	29.27	27.20	24.45	16.65	18.04	20.21	20.57
31	27.38	---	27.81	29.47	---	29.29	---	24.41	---	18.10	20.22	---
MAX	27.38	27.88	27.96	29.47	29.75	29.29	29.71	27.10	24.37	18.10	20.28	20.62
WTR YR 1981	MEAN	25.07	HIGH	15.42	LOW	29.75						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 27...	1615	870	7.2	26.0	12.0	.3	390	62	110	29	18	9
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	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)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
AUG 27...	.4	2.0	400	0	328	40	140	25	.2	13	588	538
DATE	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)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 27...	.03	.400	.11	.51	.54	2.4	.030	.09	3600	60	1.9	

GROUND-WATER RECORDS

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, 32.05 ft (9.769 m) Oct. 22; minimum daily low, 10.48 ft (3.194 m) Aug. 4.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.26	27.82	29.01	27.51	25.87	22.21	22.59	17.55	25.45	15.36	12.24	20.47
2	27.36	26.97	29.32	30.48	29.54	24.39	22.90	17.36	25.95	13.62	11.45	20.54
3	27.93	26.45	29.51	30.71	30.11	20.78	23.11	16.87	26.33	12.36	10.82	20.41
4	28.16	26.25	29.87	30.72	30.41	17.13	23.35	17.35	26.62	11.34	10.48	20.59
5	26.80	26.14	29.74	30.72	30.37	15.62	19.13	17.15	26.75	16.10	14.61	20.70
6	27.70	26.07	29.77	30.80	30.37	15.38	22.26	16.78	26.75	21.60	18.60	19.76
7	28.06	29.77	29.75	31.09	30.16	15.49	22.75	16.40	22.15	23.54	18.95	18.98
8	28.79	30.10	29.28	31.12	30.12	14.38	22.94	16.07	22.83	24.41	12.10	24.03
9	29.45	30.22	29.58	31.24	29.62	13.55	22.03	16.59	19.08	24.99	10.95	24.17
10	29.89	30.23	29.81	27.32	29.84	13.85	23.82	17.39	17.41	25.42	18.58	24.40
11	29.89	30.22	30.02	26.23	30.20	14.43	20.43	22.69	20.85	25.80	19.91	24.83
12	21.83	30.23	30.25	29.37	30.21	14.44	17.96	24.22	23.16	25.86	20.68	25.05
13	27.84	30.27	30.44	29.62	30.02	13.01	17.43	24.69	23.82	21.01	21.19	25.03
14	28.82	30.38	27.38	29.70	29.92	12.34	16.58	24.92	19.01	25.12	21.47	25.09
15	29.72	30.22	29.70	29.75	29.79	11.64	15.64	25.23	20.06	25.46	21.77	25.07
16	30.32	30.26	30.14	29.97	28.89	12.65	15.09	25.46	22.50	25.33	16.18	25.42
17	30.88	30.25	30.38	30.00	29.02	13.36	14.69	25.80	23.79	19.84	13.99	25.80
18	31.63	30.27	30.65	30.01	24.78	13.70	15.00	25.89	24.59	24.47	20.82	26.00
19	31.75	30.26	30.87	29.99	23.73	14.06	14.97	26.10	25.11	24.80	22.65	26.20
20	31.33	30.14	31.06	30.11	22.56	14.34	15.95	26.30	25.31	25.00	23.61	22.17
21	32.02	30.10	27.70	30.35	21.48	13.87	16.83	26.49	20.61	25.16	24.17	25.40
22	32.05	30.05	30.44	30.62	20.24	12.81	17.36	26.53	23.75	20.21	24.35	26.52
23	29.75	30.02	30.84	30.63	23.60	11.81	23.44	26.89	23.72	18.25	19.16	27.37
24	30.14	29.00	30.89	30.92	24.09	19.74	24.51	27.13	23.59	16.85	23.96	28.07
25	30.54	29.17	31.20	31.07	18.99	21.11	20.77	27.35	19.24	19.69	24.53	28.68
26	30.76	29.23	31.42	31.10	24.23	21.76	18.21	27.48	19.16	21.83	24.94	29.23
27	30.90	29.26	31.58	30.74	19.36	22.52	17.21	27.17	18.64	22.27	25.32	29.49
28	31.12	28.04	31.70	30.49	18.02	22.59	15.57	27.25	18.89	16.85	25.64	28.14
29	31.30	28.61	31.78	26.63	---	18.54	16.38	27.31	19.20	15.53	25.67	28.82
30	31.43	28.70	31.39	26.20	---	21.34	16.97	23.43	17.58	14.26	20.83	29.23
31	31.56	---	31.56	26.03	---	22.07	---	22.12	---	13.13	19.98	---
MAX	32.05	30.38	31.78	31.24	30.41	24.39	24.51	27.48	26.75	25.86	25.67	29.49
WTR YR 1981	MEAN	24.24		HIGH	10.48		LOW	32.05				

GROUND-WATER RECORDS

401

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 daily low, 21.48 ft (6.547 m) Feb. 1, 2; minimum daily low, 18.04 ft (5.499 m) June 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20.39	20.92	21.06	21.48	20.06	20.28	19.53	19.14	18.40	19.87	21.05
2	---	20.42	20.90	21.26	21.48	20.03	20.28	19.53	19.13	18.47	19.92	21.06
3	---	20.44	20.87	21.30	21.46	20.01	20.27	19.52	19.13	18.51	19.97	21.09
4	---	20.46	20.86	---	21.40	20.02	20.27	19.51	19.13	18.58	20.02	21.10
5	---	20.48	20.85	---	21.32	20.02	20.28	19.50	19.13	18.67	20.07	21.11
6	---	20.50	20.84	---	21.23	20.01	20.28	19.50	19.09	18.74	20.10	21.13
7	19.53	20.52	20.83	---	21.17	19.99	20.20	19.49	19.05	18.81	20.17	21.17
8	19.57	20.54	20.80	---	21.14	19.99	20.09	19.49	18.93	18.87	20.20	21.18
9	19.62	20.56	20.78	---	21.10	19.99	20.00	19.48	18.81	18.93	20.27	21.19
10	19.65	20.58	20.77	---	21.06	20.01	19.93	19.51	18.72	18.98	20.32	21.20
11	19.69	20.60	20.76	---	21.03	20.04	19.89	19.53	18.66	19.04	20.36	21.23
12	19.73	20.61	20.74	---	21.01	20.06	19.87	19.53	18.62	19.11	20.41	21.26
13	19.78	20.63	20.73	---	20.99	20.09	19.85	19.49	18.59	19.16	20.46	21.27
14	19.81	20.64	20.73	---	20.99	20.11	19.80	19.42	18.58	19.20	20.50	21.28
15	19.86	20.66	20.73	---	20.97	20.14	19.74	19.36	18.52	19.23	20.52	21.29
16	19.90	20.68	20.72	---	20.98	20.16	19.70	19.28	18.42	19.26	20.55	21.31
17	19.94	20.70	20.71	---	20.99	20.18	19.66	19.22	18.32	19.30	20.58	21.31
18	19.98	20.71	20.71	---	20.99	20.20	19.66	19.16	18.21	19.31	20.62	21.31
19	20.02	20.72	20.71	---	20.94	20.20	19.66	19.13	18.11	19.33	20.65	21.31
20	20.05	20.75	20.71	---	20.88	20.21	19.66	19.09	18.07	19.35	20.69	21.34
21	20.08	20.79	20.71	---	20.79	20.21	19.66	19.05	18.05	19.39	20.74	21.35
22	20.11	20.81	20.71	21.30	20.63	20.21	19.66	19.03	18.04	19.43	20.78	21.37
23	20.13	20.87	20.71	21.34	20.49	20.21	19.66	19.02	18.05	19.46	20.81	21.39
24	20.18	20.89	20.70	21.36	20.38	20.22	19.66	19.06	18.08	19.49	20.84	21.42
25	20.21	20.91	20.71	21.37	20.27	20.25	19.62	19.11	18.11	19.55	20.88	21.44
26	20.23	20.94	20.71	21.38	20.18	20.26	19.58	19.14	18.17	19.63	20.90	21.45
27	20.26	20.95	20.71	21.40	20.12	20.28	19.55	19.17	18.19	19.69	20.91	21.45
28	20.29	20.95	20.71	21.41	20.08	20.29	19.53	19.18	18.26	19.76	20.94	21.45
29	20.32	20.95	20.71	21.41	---	20.29	19.51	19.18	18.30	19.80	20.95	21.46
30	20.35	20.94	20.72	21.42	---	20.28	19.53	19.16	18.35	19.82	20.97	21.46
31	20.37	---	20.83	21.44	---	20.28	---	19.14	---	19.86	21.03	---
MAX	20.37	20.95	20.92	21.44	21.48	20.29	20.28	19.53	19.14	19.86	21.03	21.46
WTR YR 1981	MEAN	20.15		HIGH	18.04		LOW	21.48				

GROUND-WATER RECORDS
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, 20.00 ft (6.096 m) Oct. 4, 1955; minimum daily low, 1.05 ft (0.320 m) May 25, 28, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily low 19.43 ft (5.922 m) Sept. 30; minimum daily low, 12.92 ft (3.938 m) June 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.59	18.56	18.44				---	16.27	15.47	15.42	17.16	18.65
2	17.67	18.62	18.34				---	16.19	15.38	15.50	17.22	18.67
3	17.74	18.65	18.30				---	15.95	15.45	15.63	17.28	18.69
4	17.82	18.72	18.25				---	15.84	15.47	15.75	17.34	18.68
5	17.88	18.76	18.21				---	15.87	15.36	15.85	17.39	18.63
6	17.93	18.79	18.20				---	15.99	15.22	15.98	17.42	18.59
7	17.98	18.83	18.20				16.30	16.00	14.51	16.13	17.49	18.57
8	18.04	18.87	18.19				16.22	16.01	13.95	16.26	17.59	18.57
9	18.10	18.91	18.17				16.25	16.05	13.96	16.36	17.68	18.58
10	18.14	18.95	18.14				16.27	16.11	13.94	16.46	17.72	18.60
11	18.21	18.98	18.07				16.36	16.11	13.92	16.53	17.81	18.65
12	18.26	19.00	17.99				16.41	15.93	13.97	16.60	17.90	18.73
13	18.31	19.03	---				16.33	15.59	14.07	16.65	17.99	18.76
14	18.36	19.06	---				16.13	15.43	13.71	15.93	18.06	18.80
15	18.41	19.08	---				16.15	15.43	13.41	15.80	18.14	18.84
16	18.44	19.10	---				16.20	15.28	13.01	15.83	18.22	18.89
17	18.48	19.11	---				16.21	15.28	12.92	15.93	18.30	18.95
18	18.52	19.12	---				16.21	15.37	13.10	16.04	18.36	18.99
19	18.54	19.07	---				16.15	15.46	13.32	16.11	18.38	19.04
20	18.54	19.00	---				16.18	15.50	13.60	16.21	18.38	19.09
21	18.58	19.03	---				16.23	15.57	13.78	16.33	18.39	19.14
22	18.62	19.06	---				16.29	15.64	14.00	16.42	18.39	19.19
23	18.63	19.08	---				16.28	15.70	14.16	16.49	18.39	19.23
24	18.60	19.08	---				16.10	15.78	14.31	16.61	18.41	19.27
25	18.55	19.04	---				15.91	15.88	14.53	16.74	18.42	19.30
26	18.51	18.98	---				15.90	15.99	14.72	16.84	18.43	19.34
27	18.44	18.88	---				15.98	16.07	14.88	16.90	18.48	19.38
28	18.37	18.80	---				16.10	16.05	15.03	16.96	18.55	19.41
29	18.37	18.67	---				16.20	15.87	15.19	17.02	18.62	19.43
30	18.42	18.56	---				16.21	15.75	15.35	17.07	18.66	---
31	18.49	---	---				---	15.66	---	17.12	18.66	---
MAX	18.63	19.12	18.44				16.41	16.27	15.47	17.12	18.66	19.43
WTR YR 1981	MEAN	17.16		HIGH	12.92		LOW	19.43				

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

GROUND-WATER RECORDS

403

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, 9.99 ft (3.045 m) Feb. 14; minimum daily low, 6.30 ft (1.920 m) July 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.05	8.66	---	9.30	9.56	9.41	8.43	7.76	6.94	6.40	7.13	7.70
2	8.05	8.70	---	9.35	9.66	9.43	8.47	7.81	6.89	6.41	7.12	7.74
3	8.07	8.64	---	9.43	9.65	9.40	8.38	7.78	6.86	6.39	7.12	7.75
4	8.15	8.65	---	9.47	9.70	9.31	8.31	7.75	6.88	6.33	7.14	7.74
5	8.24	8.69	---	9.45	9.70	9.25	8.38	7.71	6.85	6.30	7.16	7.76
6	8.26	8.68	---	9.36	9.59	9.29	8.47	7.68	6.78	6.37	7.13	7.79
7	8.20	8.63	---	9.34	9.59	9.32	8.43	7.65	6.80	6.41	7.08	7.78
8	8.16	8.69	---	9.36	9.52	9.33	8.34	7.58	6.73	6.45	7.13	7.78
9	8.27	8.71	9.11	9.38	9.59	9.31	8.41	7.51	6.71	6.46	7.20	7.85
10	8.23	8.87	9.18	9.44	9.57	9.16	8.38	7.44	6.73	6.51	7.28	7.86
11	8.28	8.91	9.20	9.44	9.77	8.97	8.30	7.35	6.77	6.56	7.28	7.93
12	8.33	---	9.13	9.43	9.94	8.82	8.30	7.38	6.77	6.58	7.30	7.96
13	8.37	---	9.18	9.34	9.98	8.71	8.28	7.38	6.73	6.59	7.35	7.96
14	8.40	---	9.17	9.39	9.99	8.70	8.39	7.25	6.63	6.67	7.38	7.95
15	8.35	---	9.13	9.46	9.93	8.58	8.41	7.17	6.64	6.72	7.32	7.91
16	8.40	---	9.17	9.54	9.90	8.55	8.30	7.24	6.58	6.71	7.34	7.91
17	8.38	---	9.16	9.52	9.86	8.48	8.14	7.22	6.58	6.79	7.40	7.93
18	8.38	---	9.19	9.50	9.83	8.44	8.22	7.17	6.51	6.85	7.41	7.95
19	8.43	---	9.37	9.51	9.76	8.41	8.18	7.08	6.45	6.85	7.41	7.90
20	8.46	---	9.43	9.52	9.71	8.44	8.18	7.09	6.42	6.73	7.46	7.92
21	8.53	---	9.43	9.52	9.73	8.51	8.14	7.07	6.36	6.78	7.51	7.93
22	8.63	---	9.40	9.52	9.68	8.51	8.05	7.07	6.39	6.85	7.54	8.01
23	8.64	---	9.29	9.50	9.53	8.49	7.87	7.03	6.44	6.90	7.58	8.07
24	8.61	---	9.38	9.51	9.57	8.47	7.88	7.01	6.42	6.90	7.61	8.08
25	8.49	---	9.41	9.52	9.61	8.49	7.95	7.01	6.35	6.97	7.66	8.06
26	8.56	---	9.35	9.52	9.64	8.45	7.94	7.02	6.42	6.97	7.66	7.99
27	8.60	---	9.41	9.56	9.59	8.51	7.93	6.94	6.44	7.07	7.70	8.05
28	8.56	---	9.39	9.61	9.44	8.47	7.88	6.87	6.42	6.96	7.75	8.09
29	8.61	---	9.34	9.74	---	8.39	7.83	6.90	6.40	7.03	7.75	8.08
30	8.64	---	9.34	9.79	---	8.37	7.78	6.88	6.37	7.09	7.72	8.07
31	8.60	---	9.24	9.75	---	8.39	---	6.93	---	7.13	7.72	---
MAX	8.64	8.91	9.43	9.79	9.99	9.43	8.47	7.81	6.94	7.13	7.75	8.09
WTR YR 1981	MEAN	8.14		HIGH	6.30		LOW	9.99				

GROUND-WATER RECORDS

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 recorded daily low, 35.42 ft (10.786 m) Jan. 22; minimum daily low, 16.11 ft (4.910 m) Feb. 22.

WATER LEVEL. IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.88	32.21	---	---	---	20.92	33.43	26.92	33.08	31.55	33.39	34.16
2	33.97	33.46	---	---	---	23.17	33.52	27.58	33.79	31.54	32.46	33.97
3	34.08	32.71	---	---	---	24.32	33.88	26.00	33.75	32.93	33.95	33.50
4	33.00	33.67	---	---	---	25.94	32.78	27.99	33.57	32.15	34.64	32.76
5	32.47	34.62	---	---	---	26.08	31.27	30.25	33.14	32.72	34.74	31.74
6	34.52	34.75	---	---	---	26.73	33.02	30.85	29.81	33.18	35.11	30.19
7	34.79	34.92	---	---	---	24.08	33.85	31.69	27.33	33.83	35.22	32.12
8	35.02	34.55	---	---	---	24.15	34.40	32.43	29.13	33.84	33.83	32.55
9	35.09	33.42	33.67	---	---	27.99	34.65	32.48	29.31	33.96	32.97	32.15
10	35.09	34.46	33.24	---	---	29.62	34.83	30.90	26.20	34.44	34.08	31.26
11	33.85	34.53	30.64	---	32.62	30.12	34.84	33.41	26.65	33.98	34.60	32.38
12	33.01	34.89	---	---	32.50	30.84	31.55	33.32	28.51	33.37	34.95	32.03
13	34.43	34.88	---	---	32.72	31.31	25.26	33.24	29.70	34.10	34.93	31.01
14	35.11	35.30	---	---	32.57	29.83	25.31	33.59	26.78	34.40	35.28	33.67
15	35.35	35.36	---	---	29.93	28.97	26.94	33.31	28.32	34.66	35.19	34.02
16	35.18	33.62	---	---	30.01	31.22	27.29	31.89	28.87	34.45	33.01	33.75
17	35.28	34.90	---	---	30.51	31.54	26.22	29.12	28.88	34.94	33.94	33.67
18	33.90	35.01	---	---	29.59	31.88	25.38	32.17	30.36	34.15	34.29	34.14
19	33.75	34.35	---	---	28.33	32.12	24.57	32.42	31.83	33.71	34.56	33.49
20	34.39	34.22	---	---	25.31	32.55	29.91	32.52	32.07	33.99	35.27	32.94
21	34.93	34.85	---	35.28	17.69	31.29	30.17	31.85	30.89	34.72	35.28	33.77
22	35.21	34.91	---	35.42	16.11	29.75	31.70	32.84	31.81	34.72	34.50	34.03
23	35.31	33.35	---	---	20.37	32.09	31.89	31.77	31.89	34.59	33.17	34.02
24	35.31	34.90	---	---	20.01	32.43	32.18	31.49	32.88	34.54	34.40	34.10
25	33.79	34.66	---	---	20.82	32.57	31.63	33.10	32.83	34.89	34.44	34.37
26	32.70	---	---	---	22.58	35.25	29.95	33.95	31.76	33.07	34.80	34.20
27	33.09	---	---	---	23.85	35.30	31.52	34.20	31.86	34.08	35.00	31.58
28	33.73	---	---	---	21.41	35.10	32.10	34.52	31.56	33.85	35.02	33.73
29	33.80	---	---	---	---	30.51	31.93	34.46	31.77	33.78	34.04	33.86
30	34.28	---	---	---	---	33.02	29.48	33.58	32.37	33.82	33.07	34.33
31	33.90	---	---	---	---	33.28	---	32.50	---	33.91	33.87	---
MAX	35.35	35.36	33.67	35.42	32.72	35.30	34.84	34.52	33.79	34.94	35.28	34.37
WTR YR 1981	MEAN	32.14		HIGH	16.11		LOW	35.42				

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, 13.31 ft (4.057 m) Sept. 30; minimum daily low, 7.30 ft (2.225 m) Apr. 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.85	11.49		---		---	10.46	7.52	7.88	9.36	11.29	12.84
2	11.94	11.55		---		---	10.53	7.63	7.86	9.51	11.29	12.88
3	12.02	11.55		---		---	10.54	7.72	7.84	9.54	11.30	12.88
4	12.14	11.51		---		---	10.54	7.82	7.89	9.75	11.38	12.85
5	12.28	11.61		---		---	10.52	7.91	7.96	9.78	11.48	12.78
6	12.32	11.69		---		---	10.43	7.99	8.01	9.79	11.54	12.69
7	12.29	11.68		---		---	10.41	8.08	8.09	9.82	11.56	12.59
8	12.24	11.66		---		---	10.31	8.16	8.15	9.37	11.57	12.45
9	12.28	11.69		---		---	10.25	8.23	8.24	9.94	11.61	12.35
10	12.32	11.91		---		---	10.27	8.27	8.36	10.02	11.66	12.33
11	12.35	12.13		---		---	10.26	8.31	8.55	10.11	11.68	12.36
12	12.46	12.21		---		---	10.21	8.40	8.67	10.18	11.71	12.40
13	12.58	12.21		---		---	10.16	8.49	8.67	10.24	11.77	12.41
14	12.60	12.15		---		---	10.21	8.52	8.42	10.32	11.83	12.41
15	12.56	12.18		---		---	10.32	8.52	8.09	10.43	11.84	12.42
16	12.67	12.25		---		---	10.34	8.56	7.87	10.54	11.84	12.46
17	12.67	12.25		---		9.90	10.34	8.58	7.76	10.67	11.89	12.54
18	12.55	12.16		---		9.94	10.15	8.59	7.79	10.80	11.96	12.61
19	12.25	12.25		---		10.01	9.84	8.57	7.85	10.89	12.04	12.63
20	12.02	12.26		---		10.10	9.37	8.46	7.94	10.93	12.12	12.64
21	11.98	12.23		---		10.21	9.02	8.35	8.01	10.95	12.22	12.66
22	12.14	12.27		12.41		10.27	8.76	8.27	8.06	11.01	12.31	12.74
23	12.23	12.23		12.41		10.35	8.51	8.22	8.17	11.07	12.36	12.86
24	12.23	12.08		---		10.44	8.11	8.17	8.31	11.11	12.43	12.97
25	11.96	12.04		---		10.58	7.67	8.15	8.47	11.15	12.52	13.07
26	11.49	12.04		---		10.65	7.45	8.16	8.63	11.17	12.61	13.12
27	11.32	---		---		10.72	7.31	8.16	8.80	11.21	12.69	13.16
28	11.12	---		---		10.74	7.30	8.12	8.94	11.22	12.75	13.22
29	11.32	---		---		10.71	7.36	8.05	9.07	11.22	12.78	13.27
30	11.43	---		---		10.58	7.43	7.98	9.22	11.24	12.79	13.31
31	11.46	---		---		10.45	---	7.91	---	11.26	12.80	---
MAX	12.67	12.27		12.41		10.74	10.54	8.59	9.22	11.26	12.80	13.31

WTR YR 1981 MEAN 10.63 HIGH 7.30 LOW 13.31

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

GROUND-WATER RECORDS

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, 21.80 ft (6.645 m) Jan. 20, 1981; (0.610 m) above land surface, May 24, 25, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 21.80 ft (6.645 m) Jan. 20; minimum recorded daily low, 12.70 ft (3.871 m) June 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.85	19.20	18.90	20.25	18.75	18.65	---	18.15	16.05	---	18.75	20.25
2	18.50	19.70	19.95	20.45	19.85	---	19.10	17.65	16.95	---	18.80	19.90
3	19.05	19.80	20.45	19.55	20.20	18.25	19.05	16.20	17.20	---	18.85	19.45
4	19.35	19.80	---	---	19.75	18.30	18.95	16.50	17.75	---	18.40	18.75
5	19.50	19.80	19.70	---	19.05	18.20	18.55	16.80	18.35	---	18.45	18.90
6	19.85	19.85	19.75	20.00	19.20	17.55	18.80	16.85	17.20	---	18.40	19.05
7	19.95	19.80	19.80	18.90	19.40	17.65	---	16.45	14.80	---	18.55	19.25
8	20.00	19.95	20.35	20.05	19.55	17.80	---	16.30	14.80	18.15	18.75	19.50
9	20.00	20.00	20.35	20.15	19.60	18.50	19.00	16.75	15.25	18.45	18.90	19.60
10	19.60	20.00	19.15	19.10	20.20	18.60	18.95	16.90	15.75	18.85	19.25	20.05
11	19.55	19.55	19.15	20.20	19.25	18.75	18.95	16.85	15.35	18.80	19.15	20.15
12	19.55	20.75	19.25	21.00	17.65	18.95	18.85	17.25	15.45	18.85	19.35	20.10
13	20.10	19.90	18.85	21.50	17.75	19.00	17.00	16.55	15.65	18.90	19.55	20.05
14	20.20	19.80	18.90	21.60	18.00	18.55	16.05	16.40	15.65	18.85	19.55	20.05
15	20.25	19.65	18.80	20.65	18.35	18.55	16.75	15.40	13.80	18.95	19.45	19.65
16	20.25	19.50	---	20.80	18.40	19.05	18.10	15.15	12.70	19.05	19.55	19.00
17	19.85	20.10	20.30	20.80	18.05	19.10	18.50	14.75	---	19.45	19.95	19.50
18	19.50	20.20	19.75	20.75	17.35	19.15	18.45	15.30	---	19.50	20.30	19.60
19	19.05	20.25	19.50	20.95	17.05	19.10	17.20	15.45	---	19.55	20.10	19.75
20	19.65	19.95	19.60	21.80	16.50	18.80	17.70	15.50	---	19.35	20.10	19.85
21	19.75	19.90	19.75	21.60	15.65	18.90	18.00	17.25	---	18.10	19.90	19.85
22	19.90	19.90	20.15	21.40	15.95	19.35	18.05	17.55	---	18.00	20.00	19.35
23	19.55	19.95	19.45	---	---	19.50	17.35	17.85	---	18.15	20.05	18.50
24	19.55	20.05	19.50	---	---	19.55	15.45	17.50	---	18.40	20.40	19.85
25	19.50	19.95	19.55	---	16.90	19.60	15.25	18.30	---	18.85	20.40	20.05
26	19.45	19.85	19.60	---	17.20	19.20	16.20	18.75	---	19.00	20.45	20.15
27	19.55	19.70	19.60	21.20	17.25	19.15	17.00	17.85	---	19.00	20.40	20.20
28	19.40	19.20	20.00	20.25	17.10	20.35	17.35	17.70	---	18.75	20.20	20.25
29	19.50	19.10	20.05	20.50	---	20.45	18.55	16.35	---	18.65	20.25	20.15
30	19.10	19.20	19.90	19.25	---	19.70	17.80	15.85	---	18.80	20.25	20.25
31	19.20	---	19.95	19.75	---	---	---	15.30	---	18.70	20.45	---
MAX	20.25	20.75	20.45	21.80	20.20	20.45	19.10	18.75	18.35	19.55	20.45	20.25
WTR YR 1981	MEAN	18.86		HIGH	12.70		LOW	21.80				

GROUND-WATER RECORDS

407

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, diamter 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, 29.48 ft (8.986 m) Sept. 30; minimum daily low, 24.84 ft (7.571 m) June 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.32	28.48	28.77	28.84	29.39	28.33	28.39	27.03	25.84	25.64	27.47	29.05
2	27.35	28.49	28.74	28.85	29.38	28.33	28.40	27.00	25.80	25.76	27.52	29.07
3	27.40	28.51	28.68	28.86	29.36	28.33	28.42	26.93	25.77	25.85	27.58	28.99
4	27.44	28.53	28.66	28.87	29.33	28.33	28.43	26.86	25.78	25.94	27.63	28.93
5	27.49	28.54	28.66	28.88	29.30	28.33	28.44	26.81	25.80	26.02	27.69	28.90
6	27.54	28.56	28.66	28.89	29.29	28.33	28.44	26.79	25.81	26.07	27.74	28.92
7	27.60	28.59	28.66	28.90	29.28	28.32	28.44	26.79	25.81	26.10	27.79	28.94
8	27.65	28.60	28.66	28.92	29.28	28.31	28.42	26.77	25.66	---	27.83	28.98
9	27.72	28.63	28.64	28.94	29.27	28.31	28.40	26.70	25.53	---	27.87	28.99
10	27.76	28.66	28.63	28.96	29.27	28.30	28.38	26.66	25.50	---	27.90	29.00
11	27.82	28.66	28.62	28.98	29.27	28.29	28.38	26.62	25.50	---	27.94	29.02
12	27.87	28.66	28.61	29.00	29.09	28.27	28.37	26.61	25.51	---	27.98	29.05
13	27.93	28.69	28.59	29.02	28.80	28.27	28.36	26.61	25.54	---	28.01	29.08
14	27.98	28.72	28.59	29.05	28.61	28.24	28.36	26.59	25.55	---	28.06	29.11
15	28.03	28.77	28.59	29.08	28.46	28.20	28.19	26.51	25.55	---	28.09	29.12
16	28.08	28.80	28.59	29.12	28.36	28.18	28.07	26.44	25.47	---	28.14	29.11
17	28.13	28.84	28.60	29.15	28.37	28.16	27.97	26.33	25.32	---	28.18	29.12
18	28.17	28.88	28.61	29.17	28.37	28.15	27.93	26.05	25.26	---	28.23	29.14
19	28.19	28.91	28.63	29.20	28.35	28.15	27.90	25.86	25.27	---	28.27	29.16
20	28.20	28.94	28.66	29.22	28.25	28.15	27.86	25.82	25.23	---	28.32	29.18
21	28.22	28.97	28.68	29.25	28.28	28.11	27.83	25.80	25.17	---	28.38	29.20
22	28.25	29.00	28.70	29.27	28.31	28.10	27.80	25.82	25.00	---	28.43	29.24
23	28.27	29.02	28.72	29.29	28.33	28.12	27.78	25.85	24.91	---	28.47	29.27
24	28.30	29.04	28.74	29.31	28.34	28.15	27.73	25.88	24.85	---	28.52	29.30
25	28.33	29.06	28.75	29.32	28.35	28.17	27.49	25.89	24.84	---	28.58	29.32
26	28.35	29.08	28.77	29.34	28.35	28.21	27.38	25.90	24.98	---	28.63	29.35
27	28.37	29.09	28.79	29.36	28.35	28.25	27.35	25.93	25.13	---	28.70	29.38
28	28.39	29.09	28.81	29.37	28.33	28.28	27.28	25.94	25.27	---	28.77	29.41
29	28.44	29.04	28.82	29.39	---	28.30	27.22	25.94	25.37	---	28.85	29.45
30	28.45	28.92	28.82	29.39	---	28.34	27.18	25.93	25.51	27.37	28.83	29.48
31	28.46	---	28.83	29.39	---	28.38	---	25.90	---	27.42	29.04	---
MAX	28.46	29.09	28.83	29.39	29.39	28.38	28.44	27.03	25.84	27.42	29.04	29.48
WTR YR 1981	MEAN	28.01	HIGH	24.84	LOW	29.48						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)
AUG 31...	1930	615	7.6	23.0	13.0	.0	330	54	86
DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)
AUG 31...	27	4.9	3	.1	1.9	336	0	276	14
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)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 31...	52	11	.2	12	471	362	680	600	.8

GROUND-WATER RECORDS
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, 36.41 ft (11.098 m) Feb. 12; minimum daily low, 32.37 ft (9.866 m) June 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	34.15	35.20	35.63	36.27	35.39	35.33	34.07	32.74	32.49	33.58	34.90
2	---	34.18	35.22	35.64	36.26	35.36	35.35	34.02	32.69	32.49	33.63	34.91
3	---	34.22	35.29	35.62	36.26	35.33	35.31	33.95	32.65	32.48	33.69	34.91
4	---	34.26	35.31	35.69	36.24	35.30	35.28	33.89	32.65	32.45	33.75	34.91
5	---	34.30	35.35	35.72	36.28	35.26	35.27	33.86	32.64	32.43	33.81	34.89
6	---	34.32	35.37	35.73	36.31	35.25	35.26	33.85	32.62	32.42	33.86	34.89
7	---	34.33	35.41	35.74	36.33	35.23	35.24	33.82	32.61	32.44	33.87	34.89
8	33.20	34.36	35.43	35.77	36.36	35.21	35.19	33.76	32.58	32.49	33.87	34.89
9	33.30	34.40	35.47	35.83	36.37	35.18	35.15	33.71	32.61	32.53	33.89	34.89
10	33.35	34.46	35.50	35.85	36.38	35.15	35.14	33.66	32.63	32.57	33.91	34.89
11	33.44	34.54	35.51	35.89	36.40	35.13	35.18	33.60	32.64	32.61	33.91	34.91
12	33.53	34.63	35.51	35.91	36.41	35.11	35.18	33.58	32.63	32.67	33.93	35.00
13	33.60	34.69	35.54	35.93	36.39	35.08	34.95	33.55	32.64	32.74	33.95	35.03
14	33.64	34.72	35.55	35.98	36.27	35.08	34.74	33.50	32.66	32.82	33.96	35.07
15	33.74	34.74	35.57	36.00	36.24	35.07	34.84	33.46	32.66	32.89	33.96	35.09
16	33.80	34.75	35.61	36.00	36.22	35.09	34.93	33.43	32.68	32.94	33.99	35.09
17	33.84	34.77	35.63	36.03	36.16	35.06	34.95	33.43	32.70	33.00	34.02	35.11
18	33.86	34.81	35.64	36.06	35.89	35.04	34.95	33.45	32.69	33.08	34.07	35.12
19	33.87	34.83	35.64	36.09	35.65	35.03	34.92	33.41	32.63	33.14	34.13	35.12
20	33.88	34.85	35.60	36.14	35.62	35.06	34.87	33.32	32.59	33.19	34.17	35.13
21	33.90	34.88	35.56	36.17	35.63	35.07	34.85	33.23	32.58	33.24	34.25	35.15
22	33.93	34.89	35.51	36.17	35.61	35.07	34.78	33.15	32.56	33.28	34.30	35.21
23	33.95	34.92	35.53	36.20	35.58	35.08	34.72	33.07	32.56	33.31	34.38	35.22
24	33.96	34.95	35.56	36.22	35.56	35.16	34.64	33.00	32.54	33.33	34.49	35.24
25	33.98	34.98	35.61	36.23	35.54	35.24	34.55	32.98	32.50	33.36	34.57	35.26
26	34.01	35.02	35.62	36.25	35.51	35.31	34.46	32.93	32.47	33.41	34.63	35.31
27	34.02	35.05	35.60	36.30	35.48	35.34	34.37	32.89	32.45	33.45	34.69	35.36
28	34.06	35.05	35.62	36.34	35.42	35.34	34.28	32.86	32.40	33.48	34.74	35.40
29	34.08	35.11	35.65	36.35	---	35.29	34.20	32.82	32.37	33.51	34.79	35.45
30	34.10	35.15	35.66	36.34	---	---	34.14	32.76	32.44	33.52	34.82	35.49
31	34.11	---	35.65	36.32	---	---	---	32.76	---	33.55	34.85	---
MAX	34.11	35.15	35.66	36.35	36.41	35.39	35.35	34.07	32.74	33.55	34.85	35.49
WTR YR 1981	MEAN	34.52		HIGH	32.37		LOW	36.41				

GROUND-WATER RECORDS

409

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, 53.87 ft (16.420 m) Feb. 12; minimum daily low, 45.41 ft (13.841 m) Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45.41	48.24	50.00	51.30	53.00	---	52.38	49.97	48.76	49.60	51.16	52.96
2	45.50	48.40	50.34	51.51	53.22	---	52.48	50.00	48.74	49.70	51.07	52.98
3	45.55	48.37	50.51	51.48	53.34	---	---	49.93	48.74	49.70	51.15	53.00
4	45.78	48.43	---	51.78	53.35	---	---	49.90	48.84	49.64	51.32	53.03
5	46.02	48.62	---	51.79	53.37	---	52.41	49.93	48.84	49.58	51.39	---
6	46.15	48.73	---	51.57	53.23	---	52.53	50.03	48.73	49.65	51.39	---
7	46.14	48.73	---	51.80	53.15	---	52.47	50.08	48.79	49.73	51.36	---
8	46.22	48.83	---	51.90	53.08	---	52.20	50.01	48.76	49.75	51.47	---
9	46.48	48.83	---	51.94	53.28	---	52.39	49.94	48.95	49.68	51.59	---
10	46.58	49.18	50.55	52.17	53.31	---	52.39	49.81	49.28	49.70	51.70	---
11	46.60	49.41	50.61	52.11	53.66	---	52.26	50.04	49.42	49.75	51.76	---
12	46.93	49.43	50.58	52.03	53.87	---	52.18	50.13	49.44	49.77	51.82	---
13	47.18	49.43	50.64	51.91	53.78	---	52.26	50.10	49.36	49.76	51.89	---
14	47.30	49.33	50.68	52.02	53.41	---	52.68	49.80	49.13	49.87	51.90	---
15	47.41	49.45	50.57	52.30	53.14	---	52.74	49.84	49.02	49.92	51.79	---
16	47.60	49.60	50.64	52.51	52.93	---	52.51	49.81	49.01	50.00	51.82	---
17	47.63	49.60	50.81	52.51	52.93	---	52.25	49.63	49.10	50.11	52.00	---
18	47.57	49.67	50.77	52.53	52.84	---	52.25	49.42	49.09	50.17	52.07	---
19	47.52	49.92	51.26	52.42	52.78	---	52.18	49.12	49.07	50.16	52.12	---
20	47.40	49.96	51.29	52.40	52.53	---	52.02	49.05	49.08	50.10	52.23	---
21	47.55	49.96	51.23	52.50	52.52	---	52.01	48.94	49.00	50.43	52.33	---
22	47.82	50.10	51.08	52.63	52.39	---	51.67	48.80	49.01	50.62	52.33	---
23	47.98	50.11	50.90	52.64	51.98	---	51.28	48.62	49.25	50.65	52.30	---
24	48.01	49.97	51.10	52.66	52.16	---	51.01	48.50	49.25	50.68	52.42	---
25	47.86	50.37	51.31	52.68	52.20	---	50.87	48.48	49.25	50.71	52.51	---
26	47.87	50.43	51.21	52.80	52.28	---	50.61	48.58	49.38	50.73	52.52	---
27	47.95	50.38	51.26	52.93	52.26	---	50.23	48.58	49.49	50.84	52.63	---
28	47.95	49.90	51.26	53.07	51.85	---	50.15	48.66	49.50	50.86	52.72	---
29	48.31	49.84	51.12	53.29	---	---	49.97	48.68	49.46	51.04	52.70	---
30	48.32	50.09	51.25	53.34	---	---	49.97	48.66	49.54	51.09	52.66	---
31	48.29	---	51.18	53.34	---	52.27	---	48.73	---	51.16	52.78	---
MAX WTR YR 1981	48.32	50.43	51.31	53.34	53.87	52.27	52.74	50.13	49.54	51.16	52.78	53.03
	MEAN	50.52		HIGH	45.41	LOW	53.87					

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 31...	1630	1290	7.6	25.0	14.5	.2	340	0	90	27	140	47
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLO AS HCO3)	CAR- BONATE FET-FLO (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)	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)
AUG 31...	3.3	5.1	510	0	418	21	3.2	270	.3	9.5	794	800
DATE	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)	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 P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 31...	.06	1.00	.90	1.90	2.0	8.7	.960	2.9	3700	260	1.1	

GROUND-WATER RECORDS
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 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS 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)
NOV 05...	0925	835	7.4	15.0	380	100	31	366	0	300
FEB 09...	1245	855	7.5	15.0	420	110	35	392	0	322
MAY 14...	1200	860	7.0	15.5	440	120	34	400	0	328
AUG 04...	1430	870	7.2	16.5	380	100	32	404	--	331

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 05...	24	91	44	.0	569	1.5	.000	30	10	20
FEB 09...	19	100	47	.2	559	--	<.010	--	--	--
MAY 14...	59	110	46	.1	575	--	<.010	--	--	--
AUG 04...	41	99	47	.1	--	--	<.010	110	10	20

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL 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, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 05...	10	--	4	80	--	0	4	50	10
FEB 09...	--	--	--	180	--	--	20	--	--
MAY 14...	--	--	--	50	--	--	10	--	--
AUG 04...	10	3	3	60	6	5	10	30	<4

GROUND-WATER RECORDS

411

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, 27.16 ft (8,278 m) Feb. 19; minimum daily low, 15.07 ft (4,593 m) June 8.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.05				---	17.78	19.18	17.11	15.43	17.86	---	
2	22.38				---	17.70	22.07	16.93	15.45	16.40	---	
3	16.73				---	17.71	19.13	16.70	15.57	16.23	---	
4	16.53				18.96	17.68	19.07	16.74	17.86	16.22	---	
5	16.49				18.90	17.79	18.92	16.80	15.69	16.15	17.86	
6	16.46				18.85	17.79	18.88	17.79	15.47	16.20	---	
7	16.41				18.79	17.79	18.78	17.79	15.10	16.14	---	
8	16.48				18.87	17.66	23.27	16.79	15.07	16.13	---	
9	17.79				23.57	17.58	24.95	16.75	15.15	17.86	---	
10	16.75				19.08	17.78	19.32	16.69	17.86	16.43	---	
11	16.78				18.89	17.65	19.09	16.68	15.47	16.45	---	
12	16.99				18.66	17.79	19.04	16.68	15.51	16.47	---	
13	16.99				18.71	---	18.67	16.55	15.54	16.50	---	
14	17.14				18.40	---	18.33	17.79	15.53	16.54	---	
15	17.16				18.32	---	23.72	16.43	15.31	16.55	---	
16	17.79				18.34	---	18.39	16.03	17.86	17.86	---	
17	17.42				23.68	---	18.18	15.88	17.86	16.80	---	
18	17.29				26.24	---	18.10	15.80	15.28	16.79	---	
19	17.28				27.16	---	17.97	15.59	15.37	16.79	---	
20	17.34				24.23	---	17.96	15.44	15.36	16.77	---	
21	17.43				19.11	---	17.99	15.58	15.47	16.64	---	
22	17.48				18.49	---	17.79	15.75	15.71	16.35	---	
23	17.79				18.27	---	17.79	15.74	15.57	16.21	---	
24	17.61				17.95	---	17.27	15.74	15.75	16.25	---	
25	17.58				17.79	---	17.06	17.79	15.85	16.29	---	
26	17.53				17.75	---	17.00	16.08	17.86	16.35	---	
27	17.79				17.79	---	16.89	15.94	15.97	16.47	---	
28	17.79				17.79	---	16.90	17.79	15.90	16.61	---	
29	17.77				---	---	16.98	15.97	15.91	---	---	
30	17.78				---	---	17.79	15.78	16.01	---	---	
31	17.79				---	---	---	15.52	---	---	---	
MAX	22.38				27.16	17.79	24.95	17.79	17.86	17.86	17.86	
WTR YR 1981	MEAN	17.49		HIGH	15.07		LOW	27.16				

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: Armo 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 daily low, 53.13 ft (16.194 m) Sept. 16, 17; minimum daily low, 47.21 ft (14.389 m) Dec. 23..

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.58	47.49	47.86	47.34	47.79	49.95	50.83	49.96	50.23	51.21	51.46	51.20
2	47.73	47.53	48.16	47.46	48.24	50.00	50.86	49.97	50.25	51.22	51.40	51.26
3	47.73	47.39	48.18	47.40	48.26	50.06	50.70	49.90	50.41	51.21	---	51.32
4	47.35	47.42	48.05	47.51	48.33	50.01	50.75	49.82	50.46	51.09	---	51.87
5	47.41	47.47	48.07	47.51	48.34	50.11	50.93	49.81	50.48	51.03	---	52.57
6	47.39	47.48	48.00	47.32	48.27	50.33	51.03	49.83	50.47	51.22	---	52.84
7	47.25	47.51	47.99	47.56	48.22	50.31	50.95	49.83	50.50	51.31	---	52.90
8	47.23	47.52	47.97	47.56	48.28	50.30	50.98	49.78	50.46	51.34	---	52.30
9	47.31	47.70	47.42	47.60	48.35	50.29	50.87	49.69	50.65	51.33	---	52.07
10	47.31	47.70	47.51	47.76	48.24	50.24	50.75	49.65	50.83	---	---	52.01
11	47.34	47.69	47.51	47.60	48.90	50.30	50.41	49.69	50.90	---	---	51.80
12	47.37	47.63	47.46	47.55	48.94	50.30	50.28	49.75	50.90	---	---	51.76
13	47.42	47.62	47.45	47.45	49.12	50.33	50.26	49.72	50.88	---	---	51.68
14	47.37	47.65	47.45	47.57	49.25	50.44	50.49	49.58	50.90	---	---	51.98
15	47.39	47.74	47.32	47.67	49.32	50.30	50.48	49.67	50.91	---	---	52.85
16	47.46	47.68	47.33	47.82	49.41	50.42	50.19	49.69	50.96	---	---	53.13
17	47.39	47.79	47.37	47.80	49.51	50.34	50.06	49.67	50.96	---	---	53.13
18	47.44	47.82	47.33	47.55	49.51	50.32	50.20	49.58	50.84	---	---	52.91
19	47.42	49.33	47.63	47.69	49.55	50.39	50.12	49.55	50.86	---	---	52.77
20	47.41	48.18	47.63	47.79	49.76	50.44	50.19	49.61	50.89	---	---	52.61
21	47.57	48.03	47.53	47.88	49.77	50.54	50.19	49.62	50.97	---	---	52.70
22	47.62	47.82	47.34	47.88	49.58	50.54	50.00	49.62	51.10	---	---	52.97
23	47.63	47.89	47.21	47.88	49.79	50.61	49.88	49.58	51.11	---	---	53.02
24	47.46	47.98	47.52	47.88	49.93	50.61	50.04	49.51	52.03	---	---	52.98
25	47.27	47.97	47.52	47.87	50.03	50.66	50.07	49.51	52.00	---	---	52.96
26	47.42	47.63	47.32	47.92	50.09	50.63	50.06	49.50	51.32	---	---	52.62
27	47.43	47.64	47.40	47.98	50.07	50.76	50.05	49.81	51.22	---	---	52.33
28	47.55	47.90	47.35	48.08	49.91	50.73	49.99	50.05	51.18	---	---	52.39
29	47.54	---	47.28	48.22	---	50.54	50.01	50.11	51.21	---	---	52.36
30	47.50	---	47.38	48.50	---	50.53	49.96	50.11	51.24	51.41	---	52.16
31	47.41	---	47.30	48.23	---	50.71	---	50.25	---	51.46	51.18	---
MAX	47.73	49.33	48.18	48.50	50.09	50.76	51.03	50.25	52.03	51.46	51.46	53.13
WTR YR 1981	MEAN	49.43		HIGH	47.21		LOW	53.13				

GROUND-WATER RECORDS

413

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, 36.30 ft (11.064 m) Sept. 12; minimum daily low, 29.85 ft (9.098 m) July 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.10	32.60	33.95	32.75	35.45	33.35	34.35	33.90	32.20	30.85	31.85	35.40
2	33.50	32.45	34.20	33.40	35.45	33.40	34.65	33.80	32.45	31.00	32.05	35.60
3	33.20	33.85	34.45	33.10	35.30	34.30	35.55	33.50	32.95	30.75	32.15	35.35
4	32.80	34.00	34.55	33.20	35.45	34.50	35.55	33.75	32.50	30.00	31.80	35.80
5	32.20	34.25	35.30	33.35	35.35	34.80	33.70	34.40	32.55	29.85	32.30	35.60
6	33.50	34.00	34.65	33.70	34.85	34.75	35.35	34.45	32.55	31.00	32.30	35.60
7	32.80	34.40	34.95	33.90	34.50	34.55	35.25	32.70	32.10	32.80	31.60	35.05
8	32.90	34.00	35.00	33.90	34.70	34.50	35.60	32.75	32.30	33.05	31.35	35.75
9	33.35	33.70	34.90	33.25	34.85	34.40	35.20	32.65	31.95	31.65	31.10	35.90
10	33.05	33.55	34.65	33.00	35.40	33.45	34.80	32.40	30.55	30.85	32.85	35.90
11	33.35	33.65	33.65	32.70	35.50	33.35	34.90	32.15	30.50	30.90	32.70	36.25
12	32.75	33.85	33.45	34.60	35.10	33.65	34.95	32.55	30.70	30.90	31.75	36.30
13	33.75	33.75	33.60	33.55	35.15	33.55	34.80	32.75	30.25	30.75	31.85	36.25
14	34.15	33.55	32.35	33.50	35.05	33.55	34.65	32.80	30.00	31.50	31.70	36.25
15	33.80	33.45	35.15	34.35	35.00	32.95	34.75	32.40	30.30	30.85	31.65	34.35
16	33.80	33.20	35.25	34.00	34.55	34.55	35.15	32.25	30.50	30.80	31.50	34.15
17	34.00	34.45	33.50	34.10	34.05	34.65	34.75	32.15	30.25	30.90	31.70	34.90
18	32.80	34.85	33.85	34.20	35.00	34.90	33.75	32.05	30.15	30.85	31.85	36.15
19	32.50	34.30	33.80	35.65	34.90	34.95	33.90	31.95	30.05	30.50	33.85	36.20
20	33.25	33.10	33.85	36.05	35.05	35.15	34.50	32.40	30.15	31.60	34.20	36.15
21	32.70	33.60	33.40	36.15	34.80	35.05	34.80	32.45	30.15	31.50	34.75	36.20
22	33.75	33.00	33.10	34.15	34.65	35.10	34.50	32.05	30.45	31.10	34.40	35.30
23	34.50	32.80	34.05	33.40	34.35	34.95	34.20	31.75	30.25	31.05	34.55	35.05
24	34.40	33.15	33.95	34.15	34.30	34.65	33.95	31.40	30.40	31.20	35.10	35.60
25	32.85	33.40	32.30	34.30	34.80	34.60	32.95	31.60	30.25	31.05	35.10	35.55
26	32.60	34.40	34.10	35.35	34.85	34.70	33.20	31.75	30.40	30.70	35.05	35.60
27	33.35	33.90	34.20	35.65	34.50	35.00	33.20	31.65	30.45	31.15	35.35	35.75
28	33.00	32.35	34.30	35.80	34.45	34.95	33.10	31.55	30.60	31.85	35.50	35.85
29	32.75	32.10	33.95	35.60	---	34.55	32.85	32.55	30.30	31.50	35.25	35.35
30	32.50	31.75	33.05	35.45	---	34.90	33.80	32.65	30.30	32.05	35.40	35.50
31	32.80	---	33.15	35.60	---	34.55	---	32.45	---	32.00	35.40	---
MAX	34.50	34.85	35.30	36.15	35.50	35.15	35.60	34.45	32.95	33.05	35.50	36.30
WTR YR 1981	MEAN	33.50		HIGH	29.85		LOW	36.30				

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, 14.60 ft (4.450 m) Jan. 26; minimum daily low, 6.67 ft (2.033 m) June 7.

REVISIONS.--The maximum value for some days of WY 1979 have been revised as shown in the following table. They supersede figures published in WDR-OH-79-1.

Date	Depth	Date	Depth	Date	Depth	Date	Depth
Dec. 9	9.77	Aug. 10	9.60	Aug. 20	9.65	Sept. 28	9.70
May 29	9.92	Aug. 11	9.62	Sept. 9	9.77	Sept. 30	9.59

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13.01	13.15	13.32	13.20	11.62	12.86	10.07	8.63	---	---	12.34
2	---	13.03	13.18	13.32	13.09	11.76	12.79	9.78	8.74	---	---	12.19
3	---	12.95	13.18	12.89	12.93	11.80	12.84	9.23	8.96	---	---	11.63
4	---	12.70	13.18	12.94	12.88	11.59	12.45	9.34	9.16	---	11.23	11.44
5	---	12.69	13.19	13.05	12.81	11.52	12.41	9.53	9.78	---	11.20	11.14
6	---	12.58	13.19	13.12	13.12	11.37	12.15	9.24	9.78	---	11.23	11.07
7	---	12.51	13.20	13.12	13.13	11.26	12.01	8.99	6.67	---	10.93	11.15
8	---	12.48	13.20	13.10	13.23	11.22	12.08	8.95	6.90	---	10.83	11.22
9	---	12.47	12.75	13.18	13.28	11.69	12.17	8.92	7.01	---	10.84	11.25
10	---	12.28	12.84	13.22	12.92	11.84	12.29	9.05	7.27	---	10.78	11.38
11	---	12.31	12.89	13.28	12.89	11.94	12.34	9.67	7.52	---	11.26	11.49
12	---	12.82	12.92	13.66	12.27	12.00	12.23	9.67	7.64	---	11.47	11.50
13	---	12.89	12.95	13.97	12.05	12.07	11.26	9.57	---	---	11.60	11.41
14	---	12.93	12.67	14.16	12.04	12.15	10.47	9.42	---	---	11.72	12.02
15	---	12.96	12.69	14.29	12.10	12.22	10.36	9.29	---	---	11.85	12.02
16	---	13.01	12.92	14.39	12.65	12.22	10.34	8.71	---	---	11.68	11.73
17	---	13.01	13.11	14.44	12.64	11.65	10.36	8.43	---	---	11.88	11.50
18	---	12.86	13.19	14.44	12.44	11.60	10.13	8.78	---	---	12.02	11.62
19	---	13.19	13.25	14.42	11.75	11.90	10.25	8.66	---	---	12.07	11.44
20	---	13.24	13.33	13.85	11.37	12.03	9.99	8.76	---	---	12.10	11.31
21	12.75	13.26	13.41	13.69	10.84	12.04	10.37	8.99	---	---	12.24	11.62
22	12.73	13.30	13.48	14.05	10.59	12.23	10.61	9.23	---	---	12.33	11.96
23	12.81	13.33	13.50	14.30	10.85	12.36	10.62	9.49	---	---	12.42	12.44
24	12.83	13.34	12.89	14.45	10.97	12.49	10.29	9.74	---	---	12.50	12.55
25	12.46	13.05	12.80	14.57	11.06	12.60	10.33	9.94	---	---	12.58	12.65
26	12.54	13.05	12.63	14.60	11.19	12.70	10.45	10.12	---	---	12.66	12.69
27	12.58	13.06	12.93	14.04	11.32	12.70	10.62	10.15	---	---	12.69	12.18
28	12.61	12.95	13.03	13.75	11.49	12.46	10.76	9.74	---	---	12.91	12.32
29	12.90	12.81	13.27	13.58	---	12.39	10.80	9.29	---	---	12.91	12.52
30	12.92	12.82	13.30	13.48	---	12.89	10.75	9.02	---	---	12.28	12.63
31	12.96	---	13.31	13.31	---	12.96	---	8.85	---	---	12.32	---
MAX	12.96	13.34	13.50	14.60	13.28	12.96	12.86	10.15	9.78	---	12.91	12.69
WTR YR 1981	MEAN	11.89		HIGH	6.67		LOW	14.60				

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 daily low, 32.04 ft (9.766 m) Nov. 7; minimum daily low, 19.96 ft (6.084 m) May 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.67	31.83	31.20	28.07	30.60	24.42	23.04	20.14	21.24	20.97	26.32	29.39
2	27.92	31.86	30.97	27.86	30.67	24.27	23.09	20.13	21.25	21.12	26.47	29.34
3	28.09	31.82	31.04	28.01	30.57	24.31	23.02	20.02	21.27	21.25	26.65	29.65
4	28.39	31.92	30.59	28.25	30.21	24.08	23.19	19.97	21.36	21.34	26.82	29.95
5	28.60	32.00	30.40	28.22	29.94	24.03	23.16	19.96	21.33	21.57	26.97	30.08
6	28.70	31.97	30.23	28.21	29.51	23.99	23.08	20.07	21.25	21.78	27.08	30.16
7	28.89	32.04	30.09	28.55	29.39	23.80	22.88	20.05	21.32	21.94	27.24	30.19
8	29.10	32.03	29.90	28.58	29.21	23.59	22.66	20.03	21.25	22.08	27.46	30.33
9	29.29	31.35	29.80	28.74	29.04	23.40	22.66	20.15	21.31	22.26	27.66	30.36
10	29.36	31.05	29.65	28.93	28.72	23.17	22.52	20.15	21.13	22.48	27.78	30.37
11	29.50	31.21	29.44	29.03	28.60	23.05	22.29	20.27	21.13	22.69	27.94	30.39
12	29.69	31.27	29.10	29.11	28.39	22.91	22.13	20.39	20.95	22.88	28.09	30.41
13	29.84	31.32	28.98	29.17	27.48	22.84	22.01	20.31	20.87	23.08	28.27	30.43
14	29.95	31.49	28.73	29.31	27.18	22.84	21.85	20.21	20.67	23.32	28.32	30.44
15	30.12	31.51	28.51	29.47	27.11	22.66	21.74	20.35	20.45	23.50	28.39	30.51
16	30.25	31.56	28.41	29.58	27.05	22.74	21.26	20.42	20.27	23.76	28.64	30.50
17	30.33	31.48	28.37	29.67	26.97	22.67	21.02	20.33	20.28	23.97	28.81	30.27
18	30.55	31.51	28.18	29.81	26.89	22.59	21.04	20.31	20.17	24.18	28.98	30.33
19	30.73	31.57	28.27	29.87	26.59	22.65	20.87	20.32	20.12	24.36	29.13	30.40
20	30.81	31.63	28.11	29.99	26.31	22.68	20.82	20.35	20.12	24.59	29.32	30.57
21	30.98	31.74	28.02	30.07	26.28	22.83	20.72	20.41	20.18	24.79	29.51	30.58
22	31.08	31.77	27.94	30.13	25.96	22.77	20.59	20.49	20.31	24.88	29.67	30.71
23	31.12	31.79	27.91	30.28	25.60	22.76	20.47	20.60	20.34	24.98	29.73	30.72
24	31.19	31.87	28.11	30.45	25.52	22.78	20.59	20.75	20.33	25.08	29.86	30.76
25	31.36	31.94	28.14	30.53	25.24	22.87	20.59	20.92	20.42	25.27	29.84	30.78
26	31.51	31.86	28.16	30.67	24.97	22.87	20.48	21.06	20.51	25.46	29.96	30.81
27	31.50	31.69	28.27	30.79	24.79	23.10	20.42	21.13	20.56	25.63	30.13	30.87
28	31.63	31.64	28.28	30.86	24.44	23.03	20.34	21.25	20.61	25.77	30.30	30.96
29	31.67	31.67	28.50	30.97	---	22.90	20.35	21.26	20.68	25.99	30.39	30.93
30	31.67	31.52	28.63	30.87	---	23.03	20.27	21.26	20.82	26.14	30.27	30.98
31	31.70	---	28.40	30.76	---	23.09	---	21.45	---	26.23	29.66	---
MAX	31.70	32.04	31.20	30.97	30.67	24.42	23.19	21.45	21.36	26.23	30.39	30.98
WTR YR 1981	MEAN	26.38		HIGH	19.96		LOW	32.04				

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, 18.89 ft (5.758 m) Feb. 10; minimum daily low, 14.20 ft (4.328 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.96	16.84	17.54	18.14	18.76	18.54	18.56	17.91	16.04	14.74	15.48	16.43
2	15.99	16.85	17.59	18.16	18.67	18.56	18.57	17.78	16.02	14.78	15.51	16.44
3	16.01	16.86	17.62	18.20	18.69	18.54	18.57	17.59	16.01	14.79	15.56	16.44
4	16.05	16.88	17.66	18.21	18.75	18.50	18.57	17.55	16.03	14.80	15.60	16.16
5	16.04	16.95	17.70	18.23	18.79	18.51	18.39	17.56	15.98	14.73	15.64	16.19
6	16.07	16.96	17.72	18.27	18.81	18.51	18.43	17.55	15.92	14.74	15.66	16.20
7	16.10	17.00	17.72	18.28	18.84	18.49	18.47	17.52	15.88	14.85	15.71	16.23
8	16.12	17.04	17.74	18.29	18.86	18.40	18.50	17.49	15.83	14.96	15.75	16.38
9	16.12	17.06	17.74	18.37	18.88	18.44	18.54	17.47	15.80	14.97	15.73	16.41
10	16.18	17.08	17.75	18.41	18.89	18.48	18.62	17.34	15.78	15.01	15.81	16.46
11	16.18	17.10	17.78	18.44	18.79	18.51	18.63	17.27	15.76	15.06	15.86	16.58
12	16.22	17.12	17.81	18.47	18.67	18.53	18.47	17.21	15.75	14.94	15.91	16.65
13	16.30	17.16	17.82	18.52	18.69	18.56	18.12	17.14	15.74	15.03	15.97	16.70
14	16.37	17.20	17.83	18.53	18.70	18.57	17.96	17.11	14.32	15.08	16.03	16.73
15	16.42	17.22	17.84	18.55	18.58	18.59	17.87	16.94	14.20	15.13	16.07	16.75
16	16.47	17.22	17.87	18.57	18.62	18.60	17.83	16.79	14.26	15.16	16.01	16.81
17	16.51	17.26	17.90	18.59	18.64	18.62	17.80	16.66	14.32	15.21	16.11	16.84
18	16.41	17.29	17.94	18.62	18.63	18.63	17.67	16.58	14.33	15.25	16.17	16.89
19	16.35	17.32	17.99	18.63	18.64	18.65	17.61	16.49	14.36	15.23	16.23	16.93
20	16.44	17.36	18.00	18.62	18.61	18.67	17.70	16.43	14.37	15.16	16.28	16.83
21	16.49	17.40	17.94	18.64	18.61	18.69	17.75	16.42	14.35	14.98	16.31	16.89
22	16.53	17.44	17.84	18.66	18.57	18.57	17.78	16.40	14.45	15.03	16.32	16.89
23	16.59	17.48	17.82	18.67	18.54	18.59	17.79	16.38	14.53	15.07	16.27	16.89
24	16.66	17.49	17.83	18.72	18.53	18.63	17.81	16.27	14.53	15.11	16.29	16.94
25	16.66	17.53	17.83	18.72	18.51	18.62	17.85	16.18	14.54	15.15	16.28	16.98
26	16.72	17.55	17.89	18.72	18.53	18.63	17.90	16.27	14.61	15.15	16.32	16.99
27	16.76	17.57	17.94	18.73	18.52	18.63	17.94	16.28	14.63	15.23	16.36	17.01
28	16.76	17.45	17.99	18.74	18.54	18.64	17.98	16.21	14.64	15.27	16.40	17.07
29	16.78	17.43	18.02	18.73	---	18.54	17.96	16.25	14.66	15.35	16.41	17.10
30	16.80	17.41	18.05	18.74	---	18.54	17.92	16.26	14.71	15.41	16.41	17.13
31	16.81	---	18.08	18.77	---	18.55	---	16.06	---	15.44	16.39	---
MAX	16.81	17.57	18.08	18.77	18.89	18.69	18.63	17.91	16.04	15.44	16.41	17.13
WTR YR 1981	MEAN	17.08		HIGH	14.20		LOW	18.89				

GROUND-WATER RECORDS

417

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, 28.16 ft (8.583 m) Feb. 8; minimum daily low, 20.59 ft (6.276 m) June 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.25	25.19	25.78	27.27	27.87	26.62	---	25.58	24.22	22.29	22.19	24.33
2	24.10	25.04	25.77	27.31	27.80	26.60	---	25.77	24.42	22.12	23.46	24.15
3	24.28	25.19	25.69	27.25	27.65	26.64	---	25.68	24.42	22.59	23.89	24.05
4	24.36	25.10	25.94	27.36	27.85	26.52	---	25.68	24.46	22.27	24.04	23.52
5	24.40	25.05	25.96	27.22	27.77	26.48	---	25.55	24.11	22.19	23.42	23.45
6	24.35	24.99	25.98	27.34	27.63	26.60	---	25.65	22.57	22.71	22.91	23.24
7	24.41	25.06	26.54	27.30	27.72	26.57	27.11	25.60	21.64	22.19	22.19	23.45
8	24.47	25.27	26.52	27.34	28.16	26.64	26.83	25.94	21.61	22.71	22.19	23.40
9	24.63	25.42	26.65	27.49	27.45	26.52	26.94	25.51	21.66	---	23.22	23.45
10	24.72	25.41	26.65	27.43	27.39	26.49	26.87	25.47	21.60	---	22.19	23.39
11	24.37	25.24	26.53	27.42	27.56	26.59	26.81	25.44	21.59	---	23.58	23.39
12	24.53	25.25	26.59	27.44	27.31	26.25	26.52	25.28	21.82	---	23.90	23.50
13	24.91	25.34	26.73	27.35	27.24	26.82	26.07	25.38	21.64	---	23.98	23.43
14	24.61	25.27	26.64	27.37	27.20	---	26.24	25.07	20.59	---	24.06	23.42
15	24.71	25.52	26.81	27.43	27.01	---	26.16	24.76	21.20	---	24.17	22.92
16	24.88	25.22	26.72	27.53	27.08	---	25.97	24.96	20.71	---	22.19	23.02
17	24.63	25.34	26.69	27.48	27.15	---	26.23	24.80	21.84	23.51	24.03	23.06
18	24.66	25.47	26.74	27.57	26.97	---	25.99	24.69	21.23	23.56	24.13	23.25
19	24.73	25.34	26.78	27.54	26.96	---	26.07	24.57	21.06	23.33	24.18	23.02
20	24.57	25.32	26.90	27.61	27.46	---	26.12	24.85	21.32	23.55	24.23	23.14
21	24.65	25.59	26.88	27.56	27.15	---	25.97	24.59	21.29	23.41	24.11	23.10
22	24.91	25.52	26.92	27.68	26.70	---	25.94	24.73	22.04	23.20	24.35	23.32
23	24.76	25.60	26.89	27.59	26.76	---	25.99	24.86	21.77	23.31	24.49	23.24
24	24.86	25.58	27.12	27.66	26.62	---	25.92	24.82	21.79	23.32	24.63	23.52
25	24.89	25.76	26.94	27.72	27.17	---	25.64	24.99	21.56	23.47	24.44	23.32
26	24.80	25.66	27.09	27.75	26.69	---	25.56	25.06	21.50	23.35	24.68	23.14
27	24.98	25.77	27.16	27.79	26.61	---	25.87	24.94	21.95	23.31	24.81	23.19
28	25.23	25.73	27.01	27.78	27.10	---	25.85	24.24	21.92	23.43	24.61	23.40
29	24.90	25.82	27.14	27.94	---	---	25.75	24.44	22.17	23.23	24.70	23.17
30	24.84	25.82	27.17	27.81	---	---	25.79	24.12	22.24	23.21	24.58	23.38
31	24.91	---	27.22	27.78	---	---	---	24.06	---	22.19	24.53	---
MAX	25.23	25.82	27.22	27.94	28.16	26.82	27.11	25.94	24.46	23.56	24.81	24.33
WTR YR 1981	MEAN	25.07	HIGH	20.59	LOW	28.16						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
AUG 19...	1105	675	7.3	21.5	12.5	.0	380	52	91	36	4.5
DATE	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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
AUG 19...	3	.1	.7	400	0	328	32	63	9.9	.4	13
DATE	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)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 19...	459	416	4.01	.070	.17	.24	.050	.15	550	150	1.8

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, 17.43 ft (5.313 m) Apr. 11; minimum daily low, 10.04 ft (3.060 m) June 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.91	14.66	15.36	15.77	17.05	16.44	17.18	16.12	11.31	11.87	13.35	14.52
2	13.97	14.69	15.39	15.78	17.03	16.43	17.23	16.01	11.32	12.01	13.37	14.54
3	13.99	14.69	15.42	15.82	17.04	16.41	17.27	15.79	11.38	12.06	13.39	14.54
4	14.03	14.71	15.43	15.86	17.06	16.41	17.29	15.56	11.51	12.10	13.43	14.21
5	14.03	14.75	15.45	15.87	17.09	16.46	17.30	15.40	11.56	12.15	13.48	14.12
6	14.04	14.77	15.47	15.91	17.13	16.49	17.31	15.30	11.13	12.23	13.49	14.10
7	14.06	14.80	15.47	16.00	17.15	16.52	17.33	15.18	10.72	12.34	13.51	14.05
8	14.09	14.84	15.47	16.06	17.18	16.53	17.35	15.10	10.66	12.43	13.56	13.98
9	14.14	14.86	15.45	16.13	17.20	16.53	17.40	15.02	10.77	12.52	13.60	13.98
10	14.18	14.89	15.44	16.19	17.23	16.54	17.42	14.93	10.83	12.63	13.62	14.02
11	14.23	14.90	15.44	16.23	17.22	16.56	17.43	14.82	10.95	12.73	13.67	14.04
12	14.26	14.93	15.43	16.26	17.12	16.56	17.40	14.71	11.05	12.81	13.74	14.09
13	14.26	14.95	15.39	16.32	17.13	16.59	17.28	14.57	11.10	12.88	13.79	14.10
14	14.30	14.98	15.39	16.37	17.17	16.63	17.10	14.38	10.63	12.98	13.82	14.11
15	14.35	14.99	15.37	16.43	17.17	16.64	16.95	14.14	10.21	13.05	13.89	14.04
16	14.40	15.03	15.40	16.49	17.17	16.64	16.82	13.73	10.04	13.14	13.95	14.01
17	14.44	15.03	15.42	16.53	17.11	16.67	16.72	13.41	10.14	13.21	13.96	14.03
18	14.43	15.07	15.46	16.58	17.06	16.71	16.64	13.22	10.26	13.27	13.99	14.06
19	14.43	15.11	15.50	16.64	17.04	16.75	16.58	13.06	10.39	13.31	14.04	14.06
20	14.42	15.14	15.52	16.69	16.98	16.80	16.52	13.01	10.53	13.29	14.11	14.08
21	14.46	15.18	15.53	16.74	16.92	16.85	16.47	12.99	10.63	13.20	14.18	14.09
22	14.49	15.20	15.54	16.77	16.83	16.89	16.43	13.00	10.76	13.21	14.24	14.15
23	14.51	15.23	15.59	16.84	16.71	16.91	16.41	13.01	10.89	13.23	14.26	14.19
24	14.52	15.27	15.66	16.86	16.61	16.94	16.36	13.02	11.02	13.25	14.30	14.24
25	14.52	15.31	15.67	16.88	16.54	16.98	16.35	13.04	11.15	13.27	14.36	14.26
26	14.57	15.33	15.67	16.89	16.51	17.02	16.33	13.05	11.27	13.29	14.42	14.31
27	14.57	15.34	15.70	16.93	16.50	17.06	16.28	13.05	11.39	13.29	14.49	14.33
28	14.57	15.35	15.72	16.95	16.45	17.09	16.22	11.89	11.49	13.26	14.53	14.36
29	14.59	15.37	15.74	16.98	---	17.11	16.18	11.57	11.59	13.29	14.57	14.41
30	14.60	15.37	15.76	17.03	---	17.13	16.16	11.48	11.74	13.31	14.58	14.45
31	14.62	---	15.77	17.05	---	17.14	---	11.36	---	13.33	14.55	---
MAX	14.62	15.37	15.77	17.05	17.23	17.14	17.43	16.12	11.74	13.33	14.58	14.54
WTR YR 1981	MEAN	14.80		HIGH	10.04	LOW	17.43					

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)
AUG 19...	1440	693	7.2	23.0	12.0	.0	370	19	95	33	6.6
DATE	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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
AUG 19...	4	.1	2.0	428	0	351	43	38	10	.2	9.6
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA 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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 19...	455	405	4.1	<.010	.40	4.5	20	<.010	70	3	1.8

GROUND-WATER RECORDS

419

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, 41.77 ft (12.731 m) Jan. 29-31; minimum daily low, 29.14 ft (8.882 m) June 20-21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.27	40.67	41.38	40.89	41.66	37.88	35.78	33.42	32.80	30.49	35.87	39.51
2	38.39	40.72	41.33	40.95	41.65	37.55	35.83	33.40	32.77	30.64	36.00	39.60
3	38.50	40.73	41.34	40.98	41.66	37.28	35.83	33.37	32.69	30.79	36.14	39.66
4	38.65	40.78	41.29	41.07	41.56	37.00	35.80	33.28	32.62	30.93	36.27	39.64
5	38.77	40.84	41.23	41.09	41.50	36.62	35.89	33.19	32.54	31.09	36.39	39.75
6	38.83	40.87	41.14	41.05	41.37	36.49	35.94	33.08	32.44	31.27	36.51	39.84
7	38.90	40.87	41.09	41.12	41.30	36.35	35.94	33.04	32.31	31.47	36.64	39.90
8	38.95	40.94	41.05	41.16	41.18	36.18	35.84	33.00	32.18	31.63	36.77	39.97
9	39.02	40.98	41.00	41.20	41.15	35.96	35.77	32.97	31.95	31.79	36.93	40.05
10	39.09	41.06	40.99	41.26	41.03	35.72	35.76	32.95	31.71	31.95	37.06	40.10
11	39.22	41.08	40.99	41.26	41.03	35.52	35.73	32.99	31.40	32.13	37.19	40.15
12	39.34	41.10	40.91	41.27	41.05	35.41	35.68	33.12	31.08	32.31	37.32	40.20
13	39.42	41.10	40.84	41.27	40.94	35.25	35.69	33.16	30.75	32.48	37.46	40.24
14	39.49	41.14	40.84	41.30	40.77	35.22	35.70	33.16	30.42	32.67	37.57	40.28
15	39.61	41.20	40.78	41.37	40.64	35.18	35.71	33.23	30.13	32.87	37.68	40.34
16	39.70	41.25	40.68	41.42	40.53	35.13	35.65	33.28	29.87	33.06	37.82	40.39
17	39.75	41.25	40.68	41.45	40.46	35.13	35.46	33.28	29.63	33.27	37.96	40.45
18	39.84	41.33	40.63	41.45	40.39	35.12	35.27	33.27	29.44	33.47	38.09	40.48
19	39.93	41.35	40.67	41.46	40.27	35.17	35.17	33.20	29.24	33.65	38.23	40.51
20	39.99	41.35	40.67	41.50	40.08	35.22	34.94	33.13	29.14	33.83	38.36	40.56
21	40.07	41.38	40.66	41.56	40.04	35.28	34.79	33.08	29.14	34.04	38.48	40.60
22	40.17	41.41	40.61	41.57	39.89	35.31	34.57	33.00	29.24	34.24	38.58	40.66
23	40.23	41.41	40.55	41.60	39.63	35.37	34.31	32.86	29.43	34.43	38.67	40.71
24	40.25	41.45	40.63	41.64	39.45	35.42	34.07	32.71	29.55	34.60	38.78	40.76
25	40.33	41.51	40.68	41.65	39.30	35.48	33.97	32.60	29.68	34.77	38.87	40.79
26	40.43	41.51	40.67	41.67	39.02	35.52	33.87	32.52	29.83	34.94	38.96	40.82
27	40.45	41.45	40.71	41.72	38.70	35.64	33.74	32.50	29.96	35.12	39.06	40.87
28	40.52	41.36	40.72	41.74	38.23	35.68	33.63	32.61	30.09	35.27	39.16	40.92
29	40.59	41.40	40.74	41.77	---	35.68	33.50	32.67	30.20	35.45	39.25	40.96
30	40.61	41.42	40.80	41.77	---	35.69	33.46	32.72	30.34	35.59	39.34	40.99
31	40.62	---	40.81	41.77	---	35.76	---	32.79	---	35.73	39.43	---
MAX	40.62	41.51	41.38	41.77	41.66	37.88	35.94	33.42	32.80	35.73	39.43	40.99
WTR YR 1981	MEAN	37.43		HIGH	29.14		LOW	41.77				

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, 32.68 ft (9.961 m) Aug. 28; minimum recorded daily low, 24.04 ft (7.327 m) Mar. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	30.46	26.58	28.35	25.29	30.50	32.32
2						---	30.50	26.50	28.47	25.64	30.48	32.09
3						24.04	30.61	26.29	28.65	26.03	30.66	31.93
4						24.20	30.70	26.49	28.67	26.42	30.66	31.82
5						24.45	30.65	26.77	28.72	26.75	30.71	31.46
6						24.83	30.15	27.04	28.67	27.01	30.81	30.96
7						25.15	29.79	27.14	28.30	27.15	30.93	30.56
8						25.28	29.52	27.28	27.96	27.30	30.95	30.52
9						25.69	29.32	27.30	28.00	27.52	30.95	30.62
10						26.07	29.27	27.26	27.87	27.74	31.09	30.65
11						26.42	29.43	27.51	27.32	27.95	31.28	30.73
12						26.70	29.34	27.60	26.83	28.27	31.39	30.69
13						27.08	28.75	27.63	26.27	28.62	31.52	30.57
14						27.31	28.06	27.55	25.57	29.11	31.64	30.91
15						27.54	27.50	27.35	25.10	29.30	31.59	31.12
16						27.96	26.74	27.11	25.08	29.46	31.59	31.24
17						28.33	26.00	26.71	24.89	29.64	31.74	31.32
18						28.60	25.32	26.59	24.69	29.84	31.84	31.39
19						28.89	24.85	26.88	24.53	30.03	31.93	31.35
20						29.13	24.65	27.09	24.35	30.19	31.99	31.10
21						29.29	24.75	27.32	24.20	30.23	32.10	31.33
22						29.46	24.92	27.58	24.52	30.23	32.08	31.51
23						29.68	25.20	27.82	24.61	30.40	32.03	31.54
24						29.83	25.42	28.03	24.49	30.51	32.21	31.64
25						30.01	25.52	28.28	24.48	30.63	32.46	31.71
26						30.17	25.61	28.48	24.41	30.64	32.58	31.68
27						30.26	26.07	28.67	24.36	30.58	32.66	31.66
28						30.27	26.43	28.83	24.17	30.31	32.68	31.88
29						30.20	26.74	28.76	24.33	30.41	32.47	31.92
30						30.47	26.74	28.53	24.82	30.44	32.27	31.83
31						30.53	---	28.35	---	30.50	32.28	---
MAX						30.53	30.70	28.83	28.72	30.64	32.68	32.32

WTR YR 1981 MEAN 28.70 HIGH 24.04 LOW 32.68

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

GROUND-WATER RECORDS

421

COSHOCKTON 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 Coshockton.

Owner: City of Coshockton.

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 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, 18.56 ft (5.657 m) Aug. 29, 1981; minimum daily low, 0.43 ft (0.131 m) Feb. 21, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 18.56 ft (5.657 m) Aug. 29; minimum daily low, 7.72 ft (2.353 m) June 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.13	15.86	15.47			---	15.64	12.62	13.31	11.65	15.93	17.08
2	16.36	15.75	16.03			---	15.73	12.64	13.97	11.95	16.05	16.96
3	16.39	15.82	15.63			---	16.03	11.87	14.26	11.59	16.12	16.49
4	16.35	15.96	15.50			---	15.95	12.77	14.38	12.22	16.12	16.11
5	15.70	15.96	15.93			---	15.11	12.96	13.97	12.31	16.24	15.16
6	16.33	16.05	16.13			---	14.55	13.02	13.74	13.15	16.36	14.82
7	16.61	15.99	15.85			---	14.66	12.87	13.43	13.71	16.48	14.38
8	16.61	16.08	15.68			---	14.47	13.06	13.47	14.23	16.57	14.77
9	16.53	16.09	15.84			---	14.77	13.09	13.65	14.46	16.51	15.62
10	16.53	16.03	15.54			---	14.93	12.68	12.34	14.35	16.49	16.12
11	16.55	16.13	14.95			---	14.50	13.32	10.57	14.71	17.02	16.46
12	16.13	16.10	14.77			---	13.96	13.30	9.06	14.75	17.32	16.71
13	16.57	16.20	15.01			---	12.02	12.75	8.27	15.27	17.47	16.22
14	16.88	17.27	15.00			---	12.20	12.45	7.72	15.57	17.55	16.71
15	16.96	17.56	14.81			---	12.06	12.14	9.72	15.71	17.00	17.02
16	16.87	17.03	15.04			---	10.45	10.95	9.83	15.91	17.19	17.16
17	16.81	17.24	15.22			---	9.92	10.07	9.58	15.97	17.12	17.28
18	16.74	17.31	15.37			---	9.19	10.87	8.65	15.77	17.28	17.38
19	16.50	17.43	15.51			---	8.63	11.24	8.83	15.85	17.40	17.20
20	16.23	17.52	15.54			---	9.46	11.64	8.80	15.75	17.77	16.84
21	16.41	17.33	---			---	9.53	12.41	8.76	15.43	18.01	17.01
22	16.45	17.58	---			---	10.65	13.04	9.05	15.56	18.15	17.24
23	16.49	16.77	---			---	11.64	13.12	9.38	14.87	18.24	17.41
24	16.54	16.97	---			---	11.71	13.36	9.45	15.68	18.31	17.58
25	16.55	17.36	---			15.93	11.81	13.62	8.98	16.44	18.40	17.72
26	16.49	17.48	---			16.17	12.18	13.86	9.24	16.49	18.47	17.87
27	15.54	17.41	---			16.22	12.54	14.23	9.31	15.77	18.51	17.87
28	15.71	16.14	---			15.74	13.45	14.11	8.95	15.09	18.55	17.83
29	15.74	16.12	---			15.41	13.55	13.62	9.32	15.72	18.56	18.01
30	15.70	15.43	---			15.50	12.65	13.56	10.87	15.75	17.72	18.13
31	15.80	---	---			15.85	---	12.61	---	15.63	17.46	---
MAX	16.96	17.58	16.13			16.22	16.03	14.23	14.38	16.49	18.56	18.13

WTR YR 1981 MEAN 14.84 HIGH 7.72 LOW 18.56

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

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. 18, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.19 ft (6.154 m), Feb. 12; minimum daily low, 17.86 ft (5.444 m) Aug. 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.20	18.77	19.10	19.37	19.29	19.51	19.66	19.13	18.54	18.17	18.15	18.03
2	18.31	18.82	19.39	19.48	19.73	19.56	19.75	19.20	18.38	18.20	18.04	18.14
3	18.30	18.68	19.41	19.45	19.74	19.62	19.46	19.12	18.35	18.19	18.08	18.15
4	18.50	18.73	19.15	19.63	19.71	19.44	19.52	19.05	18.44	18.11	18.14	18.20
5	18.58	18.76	19.04	19.49	19.71	19.59	19.76	18.98	18.41	18.10	18.15	18.24
6	18.52	18.76	19.09	19.13	19.52	19.66	19.85	19.07	18.26	18.23	18.02	18.26
7	18.31	18.63	19.09	19.47	19.50	19.76	19.66	19.05	18.30	18.34	17.90	18.19
8	18.29	18.92	19.09	19.47	19.67	19.70	19.45	18.94	18.16	18.31	17.96	18.23
9	18.44	18.87	19.14	19.54	19.67	19.64	19.74	18.88	18.19	18.22	18.05	18.29
10	18.44	19.09	19.20	19.62	19.66	19.49	19.73	18.82	18.31	18.26	18.04	18.22
11	18.51	19.05	19.20	19.42	20.18	19.49	19.46	18.97	18.38	18.29	18.00	18.30
12	18.59	18.95	19.10	19.40	20.19	19.45	19.47	19.02	18.29	18.25	17.99	18.29
13	18.60	18.78	19.31	19.23	19.82	19.51	19.48	18.91	18.22	18.23	18.04	18.26
14	18.51	18.86	19.21	19.37	19.64	19.66	19.73	18.72	18.21	18.24	17.99	18.24
15	18.50	18.93	19.10	19.47	19.52	19.42	19.73	18.83	18.20	18.26	17.86	18.33
16	18.55	19.01	19.27	19.55	19.48	19.61	19.36	18.87	18.17	18.25	18.01	18.37
17	18.43	18.90	19.27	19.55	19.51	19.41	19.09	18.83	18.26	18.31	18.05	18.44
18	18.53	19.02	19.24	19.37	19.51	19.43	19.37	18.74	18.15	18.30	18.00	18.40
19	18.57	19.02	19.56	19.37	19.45	19.46	19.33	18.61	18.09	18.24	17.97	18.32
20	18.56	18.94	19.47	19.42	19.60	19.56	19.35	18.67	18.08	18.12	18.00	18.37
21	18.65	19.02	19.36	19.47	19.64	19.69	19.33	18.66	18.05	18.27	18.04	18.39
22	18.73	19.04	19.18	19.44	19.50	19.69	19.10	18.59	18.20	18.31	18.04	18.63
23	18.76	18.90	19.10	19.43	19.45	19.60	18.97	18.56	18.30	18.31	18.02	18.65
24	18.58	19.08	19.51	19.44	19.72	19.60	19.25	18.51	18.22	18.19	18.06	18.54
25	18.56	19.17	19.51	19.43	19.75	19.66	19.31	18.56	18.18	18.20	18.10	18.47
26	18.77	19.10	19.31	19.49	19.77	19.54	19.28	18.53	18.24	18.22	18.02	18.35
27	18.75	18.78	19.40	19.53	19.67	19.73	19.22	18.46	18.29	18.25	18.05	18.50
28	18.80	18.85	19.28	19.60	19.37	19.70	19.09	18.52	18.23	18.11	18.14	18.64
29	18.82	19.17	19.25	19.78	---	19.37	19.14	18.49	18.20	18.23	18.09	18.56
30	18.76	19.18	19.30	19.75	---	19.59	19.09	18.48	18.16	18.22	18.08	18.46
31	18.63	---	19.20	19.64	---	19.67	---	18.61	---	18.21	18.11	---
MAX	18.82	19.18	19.56	19.78	20.19	19.76	19.85	19.20	18.54	18.34	18.15	18.65
WTR YR 1981	MEAN	18.87		HIGH	17.86		LOW	20.19				

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 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, 32.05 ft (9.769 m) Jan. 17; minimum daily low, 26.10 ft (7.955 m) June 10.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.12	31.42	31.78	31.78	31.78	30.87	31.95	30.45	30.82	30.40	31.23	31.42
2	31.12	31.52	31.69	31.87	31.57	31.14	31.98	30.50	30.80	30.46	31.20	30.86
3	31.13	31.52	31.65	31.90	31.18	31.19	31.92	30.66	30.80	30.52	31.24	30.66
4	31.19	31.52	31.64	31.95	31.42	31.17	31.91	30.70	30.87	30.53	31.26	30.50
5	31.27	31.58	31.64	31.95	31.49	31.12	31.95	30.69	30.92	30.56	31.26	30.45
6	31.28	31.59	31.67	31.86	31.56	31.27	31.90	30.60	30.90	30.70	31.25	30.85
7	31.25	31.55	31.68	31.90	31.56	31.34	31.82	30.34	30.92	30.81	31.21	30.92
8	31.20	31.63	31.61	31.95	31.64	31.38	31.72	30.31	30.88	30.86	31.26	30.95
9	31.24	31.61	31.58	31.99	31.68	31.38	31.74	30.33	30.64	30.88	31.32	31.00
10	31.26	31.73	31.48	32.02	31.66	31.37	31.73	30.31	30.52	30.94	31.34	31.00
11	31.23	31.74	31.29	32.00	31.48	31.38	31.61	30.10	30.27	30.98	31.33	31.01
12	31.31	31.74	31.41	31.99	31.37	31.38	31.41	30.02	29.55	30.99	31.34	31.03
13	31.35	31.69	31.52	31.93	31.42	---	30.92	30.05	29.77	31.00	31.37	31.04
14	31.35	31.67	31.53	31.95	31.42	---	30.01	28.90	29.80	31.02	31.37	31.11
15	31.32	31.70	31.51	32.00	31.39	---	30.00	29.67	29.60	31.08	31.33	31.09
16	31.33	31.73	31.54	32.03	31.49	---	30.55	29.82	28.88	31.12	31.37	31.23
17	31.29	31.70	31.56	32.05	31.37	---	30.58	29.43	27.25	31.15	31.40	31.09
18	31.26	31.41	31.58	32.01	30.74	---	30.69	29.00	26.43	31.18	31.40	31.03
19	31.27	31.40	31.82	32.01	30.30	---	30.41	29.17	26.10	31.18	31.40	31.01
20	31.29	31.39	31.90	32.00	29.63	---	30.25	29.60	26.37	31.13	31.42	30.99
21	31.30	31.40	31.92	32.01	29.44	---	30.48	30.12	27.04	31.18	31.46	31.19
22	31.45	31.47	31.90	32.01	29.24	---	30.50	30.35	28.13	31.23	31.47	31.35
23	31.79	31.46	31.78	31.99	29.32	---	30.39	30.46	28.77	31.24	31.47	31.65
24	31.68	31.66	31.83	32.00	29.74	---	30.31	30.53	29.07	31.18	31.49	---
25	31.46	31.85	31.90	32.00	30.28	31.88	30.41	30.63	29.13	31.20	31.49	---
26	31.52	31.90	31.86	31.93	30.52	31.86	30.53	30.66	29.27	31.19	31.48	---
27	31.53	31.89	31.89	31.85	30.69	31.91	30.57	30.61	29.77	31.23	31.49	---
28	31.41	31.76	31.89	31.46	30.83	31.90	30.56	30.39	29.98	31.17	31.51	---
29	31.45	31.70	31.84	31.84	---	31.69	30.57	30.66	30.19	31.19	31.50	---
30	31.44	31.82	31.84	31.89	---	31.85	30.55	30.75	30.34	31.20	31.50	---
31	31.42	---	31.75	31.90	---	31.89	---	30.83	---	31.24	31.49	---
MAX	31.79	31.90	31.92	32.05	31.78	31.91	31.98	30.83	30.92	31.24	31.51	31.65
WTR YR 1981	MEAN	31.08	HIGH	26.10	Low	32.05						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 24...	1345	866	7.6	27.0	12.5	.0	420	140	120	30	16	8
	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)	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)
AUG 24...	.3	2.3	346	0	284	14	160	31	1.4	11	636	544
	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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 24...	.11	.100	.17	.27	.38	1.7	.010	.03	1600	180	1.9	

GROUND-WATER RECORDS

FAIRFIELD COUNTY

394257082362900. Local number, P-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, 23.85 ft (7.269 m) Nov. 24, 1978; minimum daily low, 16.40 ft (4.999 m) June 25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 22.35 ft (6.812 m) Feb. 13; minimum daily low, 16.40 ft (4.999 m) June 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.45	19.35	19.55	21.10	21.55	21.10	21.75	21.70	---	18.30	19.80	21.20
2	19.45	19.30	19.70	21.25	21.80	21.60	21.65	20.80	---	18.35	19.30	21.20
3	19.50	19.20	19.80	21.25	21.45	20.95	21.65	20.80	---	18.30	19.85	21.20
4	19.35	19.40	20.20	21.05	---	21.70	21.45	20.95	---	17.90	19.90	21.25
5	19.00	19.50	20.45	20.80	22.00	21.60	21.20	21.00	---	17.75	20.15	21.20
6	19.30	19.60	20.65	20.15	21.60	21.65	21.30	21.05	---	18.20	19.70	20.95
7	19.30	19.60	20.30	21.45	21.55	20.95	21.40	21.00	---	18.05	19.65	20.55
8	19.40	19.55	20.35	21.55	21.30	20.80	21.75	21.00	---	18.70	19.65	21.15
9	19.50	19.40	20.60	21.60	21.65	---	---	20.85	---	18.15	19.60	21.00
10	19.50	19.25	20.65	21.25	21.65	21.60	---	20.60	21.05	18.30	19.60	21.15
11	19.05	19.60	20.80	20.75	21.70	21.65	---	20.70	19.05	19.20	20.10	21.25
12	19.10	19.65	20.65	21.45	21.70	21.50	---	20.80	18.45	19.25	20.25	21.10
13	19.15	19.65	20.65	21.45	22.35	21.65	---	20.65	18.55	18.95	20.25	20.75
14	19.20	19.65	20.50	21.50	22.30	21.65	---	20.50	16.40	18.85	20.35	21.30
15	19.25	19.55	20.50	21.50	22.20	21.55	---	20.45	18.20	19.25	19.95	21.25
16	19.25	19.45	20.75	21.55	22.05	21.55	---	20.40	18.60	19.00	19.75	21.00
17	19.25	19.55	20.65	21.60	21.70	21.25	---	20.00	18.75	19.20	20.25	21.40
18	19.20	19.75	20.40	21.50	21.95	21.45	---	20.15	18.25	19.35	20.40	21.35
19	19.10	19.75	21.00	21.45	21.85	21.55	---	20.15	18.40	18.95	20.40	21.05
20	19.30	20.30	20.90	21.60	22.00	21.65	21.10	20.15	18.40	18.75	20.65	20.75
21	19.45	20.25	---	21.55	21.35	21.65	21.00	20.50	18.00	19.00	20.75	21.20
22	19.35	20.25	21.05	21.80	21.50	21.05	21.75	20.55	18.25	19.45	20.55	21.15
23	19.25	20.20	21.05	21.75	21.80	21.08	21.80	20.45	18.15	19.35	20.25	21.25
24	19.25	20.40	21.10	21.85	21.95	21.75	21.05	20.15	17.90	19.40	20.80	21.10
25	19.15	20.30	21.20	21.55	21.70	---	21.00	20.85	17.35	19.20	21.00	21.15
26	19.20	20.25	20.85	21.70	21.75	---	20.85	---	18.75	19.20	21.00	21.25
27	19.20	19.40	21.20	21.65	21.75	21.95	20.80	---	18.20	19.15	21.05	21.10
28	19.25	19.50	21.00	21.85	20.85	21.15	20.90	---	17.40	19.30	21.10	21.30
29	19.30	19.35	21.05	21.90	---	21.25	21.60	---	18.35	19.30	21.00	21.20
30	19.35	19.30	21.25	21.70	---	21.50	21.80	---	18.40	19.35	20.75	21.20
31	19.35	---	21.10	21.60	---	21.65	---	---	---	19.35	21.00	---
MAX	19.50	20.40	21.25	21.90	22.35	21.95	21.80	21.70	21.05	19.45	21.10	21.40
WTR YR 1981	MEAN	20.40	HIGH	16.40	LOW	22.35						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	
MAR 27...	1100	840	7.3	11.0	13.5	.2	430	51	120	32	24	11	
DATE	TIME	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HCO3)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	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)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
MAR 27...	.5	2.3	462	0	379	37	130	23	.1	16	564	575	
DATE	TIME	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)	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 P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
MAR 27...	.01	.270	.12	.39	.40	1.8	.020	.06	10	1	1.1		

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, 18.49 ft (5.636 m) Sept. 28; minimum daily low, 11.69 ft (3.563 m) June 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.63	17.27	18.02	17.39	17.74	14.23	14.26	12.66	12.58	13.15	16.25	17.87
2	15.68	17.37	17.98	17.45	17.60	14.18	14.32	12.66	12.58	13.26	16.21	17.95
3	15.76	17.42	18.01	17.47	17.59	14.11	14.33	12.66	12.56	13.39	16.27	17.94
4	15.91	17.43	18.00	17.52	17.56	14.05	14.34	12.66	12.52	13.50	16.25	17.92
5	16.03	17.43	17.97	17.56	17.51	13.90	14.27	12.62	12.52	13.58	16.34	17.95
6	16.14	17.45	17.96	17.54	17.37	13.92	14.32	12.57	12.41	13.74	16.34	17.93
7	16.12	17.47	17.95	17.50	17.23	13.93	14.17	12.55	12.41	13.87	16.38	17.95
8	16.17	17.49	17.93	17.51	17.12	13.90	13.94	12.60	12.34	14.00	16.51	17.93
9	16.23	17.56	17.92	17.56	17.11	13.86	13.75	12.64	12.24	14.07	16.59	17.97
10	16.26	17.75	17.91	17.65	17.02	13.77	13.71	12.63	12.08	14.28	16.69	17.99
11	16.35	17.73	17.86	17.63	16.91	13.72	13.60	12.63	12.05	14.33	16.70	18.07
12	16.42	17.78	17.85	17.68	16.95	13.64	13.47	12.60	11.97	14.41	16.78	18.06
13	16.52	17.71	17.78	17.56	16.95	13.62	13.47	12.51	11.94	14.50	16.93	18.04
14	16.54	17.75	17.74	17.58	16.84	13.70	13.27	12.34	11.78	14.59	16.94	18.03
15	16.61	17.82	17.73	17.61	16.75	13.66	13.17	12.10	11.80	14.68	16.96	18.02
16	16.73	17.84	17.60	17.65	16.63	13.63	13.04	12.02	11.73	14.77	16.97	18.07
17	16.72	17.88	17.65	17.70	16.59	13.71	12.92	11.89	11.69	14.87	17.07	18.08
18	16.68	17.89	17.55	17.68	16.49	13.72	12.82	11.80	11.70	14.97	17.07	18.12
19	16.85	17.92	17.62	17.74	16.34	13.71	12.82	11.72	11.74	15.09	17.12	18.12
20	16.92	17.93	17.67	17.75	16.11	13.73	12.75	11.74	11.89	15.16	17.17	18.10
21	16.92	17.97	17.64	17.75	15.89	13.81	12.75	11.76	11.91	15.22	17.27	18.15
22	17.04	18.01	17.62	17.74	15.58	13.84	12.75	11.82	11.99	15.35	17.31	18.28
23	17.04	18.03	17.55	17.77	15.27	13.92	12.64	11.98	12.11	15.39	17.37	18.30
24	17.05	18.02	17.49	17.79	15.03	13.91	12.60	12.02	12.26	15.47	17.42	18.28
25	17.01	18.08	17.51	17.80	14.84	13.99	12.60	12.19	12.41	15.60	17.45	18.32
26	17.05	18.12	17.52	17.82	14.64	13.99	12.59	12.28	12.54	15.62	17.57	18.35
27	17.13	18.01	17.51	17.85	14.51	14.12	12.57	12.28	12.65	15.74	17.56	18.33
28	17.18	17.94	17.48	17.86	14.34	14.14	12.55	12.35	12.74	15.77	17.64	18.49
29	17.25	17.94	17.47	17.89	---	14.15	12.58	12.46	13.00	15.91	17.65	18.42
30	17.23	17.97	17.47	17.91	---	14.18	12.63	12.50	13.03	15.96	17.72	18.44
31	17.27	---	17.46	17.90	---	14.19	---	12.54	---	16.16	17.91	---
MAX	17.27	18.12	18.02	17.91	17.74	14.23	14.34	12.66	13.03	16.16	17.91	18.49
WTR YR 1981	MEAN	15.64		HIGH	11.69		LOW	18.49				

GROUND-WATER RECORDS

FAIRFIELD COUNTY--Continued

395053082361900. Local number, P-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, 28.20 ft (8.595 m) Sept. 14, 1981; minimum daily low, 0.98 ft (0.299 m) above land surface Nov. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 28.20 ft (8.595 m) Sept. 14; minimum daily low, 3.00 ft (0.914 m) July 4.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.30	15.20	11.50	5.50	6.80	7.90	10.30	9.50	10.80	5.60	6.10	25.40
2	15.50	13.30	10.00	10.10	8.50	7.90	9.20	9.90	11.10	4.90	5.60	26.60
3	16.00	12.70	11.10	8.20	8.40	8.80	10.40	9.70	11.40	4.40	7.50	24.40
4	13.00	10.60	11.60	7.80	8.50	8.70	10.00	10.50	8.10	3.00	7.80	21.60
5	11.70	10.70	8.60	8.30	8.70	8.30	10.60	9.00	7.80	12.50	7.00	17.20
6	12.00	9.70	8.80	8.10	8.70	9.10	9.60	7.70	7.30	9.70	12.30	13.90
7	11.20	9.30	9.60	8.00	8.30	9.30	8.40	7.10	6.30	10.80	12.70	11.70
8	12.30	9.80	10.90	8.10	8.10	9.30	8.00	7.50	8.30	8.60	16.80	16.00
9	12.60	9.20	11.40	8.10	8.60	9.20	7.80	7.50	9.10	10.30	17.90	17.40
10	12.30	10.60	11.60	8.00	7.30	7.80	8.00	6.40	10.60	6.80	18.90	12.00
11	9.10	9.90	11.40	8.20	7.00	6.80	7.00	7.10	7.70	7.00	18.60	18.70
12	8.80	9.60	11.90	8.00	7.40	6.60	6.80	8.50	7.20	6.50	11.90	23.50
13	10.00	10.50	12.20	7.40	7.60	6.70	7.90	8.70	6.70	6.90	10.20	26.40
14	10.10	9.65	12.60	7.40	7.40	6.50	7.70	8.50	6.40	6.30	10.60	28.20
15	9.60	9.10	11.30	7.20	7.50	6.50	7.90	8.50	6.20	5.30	9.20	25.00
16	11.00	9.30	10.20	7.70	8.50	8.40	8.00	8.00	5.50	7.70	9.60	25.00
17	11.20	9.00	9.50	8.20	8.30	10.00	8.00	7.30	5.50	6.20	11.50	26.50
18	13.70	7.40	10.00	8.10	8.00	10.30	14.90	7.80	6.30	6.10	14.00	16.80
19	16.00	6.80	9.30	9.20	9.40	10.60	---	7.50	5.90	5.40	11.70	14.20
20	18.00	7.30	8.50	9.40	9.10	10.60	6.80	7.00	5.30	6.00	10.20	13.50
21	19.10	10.70	8.40	9.30	10.00	11.30	7.80	7.20	5.10	6.50	10.00	13.30
22	20.80	12.30	9.80	9.50	9.50	11.00	7.40	6.40	6.70	7.10	15.70	12.60
23	22.20	8.20	9.30	9.60	8.30	10.00	7.20	5.90	7.50	7.30	18.10	11.90
24	22.50	9.30	11.60	8.70	7.50	9.30	8.80	5.70	8.50	10.90	19.20	14.60
25	23.00	10.40	7.70	8.00	8.00	9.70	10.10	8.80	6.90	8.50	20.50	16.10
26	23.90	9.20	10.80	7.70	7.30	9.30	10.80	7.00	6.90	9.70	21.00	15.70
27	27.30	8.70	9.00	7.20	7.40	9.60	11.20	7.30	6.10	10.90	22.60	17.10
28	26.70	8.50	9.30	7.40	7.50	9.10	12.10	8.90	7.20	6.10	20.50	18.60
29	26.80	13.00	9.50	7.10	---	9.10	9.20	10.20	7.60	5.80	20.90	18.30
30	26.90	12.10	8.10	7.40	---	11.60	11.90	11.20	5.20	7.90	23.90	16.60
31	18.90	---	8.00	7.20	---	9.60	---	11.50	---	6.40	23.70	---
MAX	27.30	15.20	12.60	10.10	10.00	11.60	14.90	11.50	11.40	12.50	23.90	28.20
WTR YR 1981	MEAN	10.58	HIGH	3.00	LOW	28.20						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
MAR 27...	1600	645	7.6	12.0	13.0	.2	220	0	52	23	56	35
DATE	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)	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)
MAR 27...	1.6	2.2	424	0	348	17	15	30	1.5	12	384	401
DATE	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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
MAR 27...	.01	.800	.02	.82	.83	3.7	.270	.83	1	1	1.1	

GROUND-WATER RECORDS

427

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, 12.85 ft (3.917 m) Jan. 17, 19, 1954; minimum daily low, 3.26 ft (0.994 m) Apr. 28, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.15 ft (2.789 m) Sept. 2; minimum daily low, 6.00 ft (1.829 m) June 8.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.60	7.15	7.35	7.40	7.55	6.60	7.10	6.60	6.10	8.05	8.30	7.60
2	6.70	7.50	7.15	7.50	7.65	6.85	7.00	6.60	6.10	7.60	8.60	9.15
3	6.70	7.00	7.00	7.45	7.75	6.50	6.90	6.55	6.25	7.10	7.85	8.35
4	6.85	7.30	7.25	7.55	7.65	6.70	6.95	6.60	6.25	7.15	7.95	7.95
5	6.90	7.20	7.00	7.50	7.65	6.45	6.85	6.60	6.15	7.15	7.65	8.10
6	6.80	7.30	7.15	7.15	7.65	6.70	7.25	6.60	6.20	7.15	7.40	8.00
7	6.75	7.20	7.55	7.40	7.65	6.50	6.85	6.55	6.10	7.65	7.20	7.95
8	6.85	7.35	7.35	7.50	7.60	6.80	7.00	6.50	6.00	7.55	7.65	7.85
9	6.75	7.55	7.30	7.45	7.65	6.40	6.85	6.40	6.20	7.45	7.80	8.00
10	7.00	7.50	7.25	7.60	7.65	6.70	6.90	6.40	6.15	7.50	7.65	7.95
11	6.95	7.45	6.95	7.65	7.75	6.55	6.80	6.40	6.30	8.80	7.50	8.00
12	7.00	7.70	7.20	7.25	7.85	6.65	6.95	6.55	6.20	8.75	7.70	7.95
13	7.00	7.45	7.35	7.45	7.45	6.30	6.80	6.60	6.35	8.10	8.65	8.05
14	7.05	7.55	7.35	7.45	7.50	6.70	6.95	6.25	6.40	7.45	7.75	8.15
15	7.10	8.45	7.00	7.60	7.30	6.25	6.90	6.40	6.50	7.15	7.75	8.25
16	7.00	8.05	7.10	7.25	7.35	6.55	6.70	6.50	6.40	7.45	7.65	8.45
17	7.05	7.50	7.05	7.75	7.25	6.40	6.70	6.70	6.50	7.70	8.60	8.20
18	7.20	7.50	7.05	7.35	7.35	6.65	6.75	6.20	6.35	7.85	8.55	8.00
19	7.20	7.50	7.30	7.95	7.05	6.75	6.90	6.30	6.60	7.40	8.20	8.30
20	6.75	7.30	7.30	7.90	7.15	6.80	6.65	6.05	6.70	7.40	7.60	8.10
21	7.00	7.45	7.40	7.70	6.90	6.80	6.80	6.40	6.60	7.05	7.90	8.30
22	6.90	7.45	7.15	7.55	7.10	6.70	6.50	6.50	6.80	7.50	8.30	8.20
23	7.20	7.50	7.25	7.75	6.70	6.90	6.65	6.60	6.90	7.20	8.15	8.50
24	6.95	7.40	7.10	7.45	7.00	6.85	6.60	6.30	6.80	7.40	8.20	8.55
25	7.05	7.50	7.80	7.80	6.60	7.05	6.60	6.40	7.00	7.60	8.35	8.40
26	7.00	7.30	7.35	7.40	6.95	6.90	6.75	6.50	6.80	7.60	8.20	8.40
27	7.20	7.40	7.50	7.70	6.60	7.00	6.40	6.50	7.10	7.20	8.05	8.45
28	6.90	7.30	7.25	7.60	6.65	6.80	6.85	6.35	7.00	7.30	7.75	8.85
29	7.20	7.75	7.35	7.85	---	6.75	6.60	6.40	7.70	7.15	7.90	8.55
30	6.90	7.70	7.25	7.60	---	6.70	6.70	6.45	7.45	7.40	7.75	8.60
31	7.20	---	7.05	7.80	---	7.00	---	6.45	---	8.20	7.80	---
MAX	7.20	8.45	7.80	7.95	7.85	7.05	7.25	6.70	7.70	8.80	8.65	9.15
WTR YR 1981	MEAN	7.23	HIGH	6.00	LOW	9.15						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)
AUG 18...	1330	780	7.4	21.0	13.0	.0	370	0	89	37	31
DATE	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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
AUG 18...	15	.7	1.7	452	0	371	29	94	9.8	1.4	11
DATE	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)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + 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)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 18...	516	499	4.01	.620	.00	.62	<.010	1900	30	2.5	

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, 12.86 ft (3.920 m) Jan. 20; minimum daily low, 6.63 ft (2.021 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.65	12.31	---	12.56	12.47	10.96	12.46	10.94	10.43	10.79	12.09	12.44
2	11.77	12.34	---	12.59	12.02	11.18	12.49	10.42	10.69	10.96	12.11	12.45
3	11.87	12.32	---	12.62	11.83	11.34	12.50	10.69	10.76	11.05	12.12	12.45
4	11.97	12.35	---	12.68	11.98	11.47	12.52	10.93	10.86	11.14	12.12	12.30
5	12.04	12.37	---	12.69	12.08	11.47	12.07	11.13	10.96	11.14	12.07	12.36
6	12.07	12.38	---	12.68	12.20	11.31	11.66	11.11	10.64	11.26	12.01	12.46
7	12.12	12.40	---	12.74	12.26	11.42	11.79	10.62	10.33	11.37	12.05	12.50
8	12.16	12.44	---	12.74	12.35	11.50	11.92	10.66	10.56	11.46	12.15	12.51
9	12.22	12.44	---	12.76	12.43	11.58	12.05	10.92	10.60	11.54	12.21	12.44
10	12.25	12.50	---	12.79	12.42	11.56	12.08	11.07	10.44	11.63	12.24	12.52
11	12.29	12.50	---	12.80	12.37	11.75	12.09	10.88	9.69	11.68	12.28	12.57
12	12.34	12.51	---	12.80	12.21	11.79	11.30	9.54	10.01	11.73	12.31	12.59
13	12.34	12.51	---	12.81	12.27	11.90	8.95	8.80	10.10	11.76	12.35	12.62
14	12.35	12.56	---	12.82	12.34	11.95	9.06	8.91	8.74	11.66	12.37	12.63
15	12.38	12.62	---	12.84	12.36	11.97	9.65	8.52	6.63	11.76	12.37	12.45
16	12.38	12.63	---	12.85	12.37	12.05	10.11	9.11	7.64	11.84	12.41	12.34
17	12.39	12.51	---	12.85	11.87	12.02	10.31	9.59	8.25	11.89	12.43	12.43
18	12.39	12.57	---	12.85	11.49	12.07	10.37	9.62	8.76	11.93	12.46	12.44
19	12.05	12.54	---	12.85	11.30	12.14	10.49	9.75	9.17	11.95	12.49	12.38
20	12.13	12.56	---	12.86	9.45	12.21	10.86	10.04	9.56	11.94	12.52	12.46
21	12.21	12.61	---	12.85	9.53	12.26	11.09	10.41	9.97	11.54	12.54	12.49
22	12.26	12.63	---	12.80	9.76	12.26	11.25	10.77	10.07	11.60	12.55	12.56
23	12.31	12.64	---	12.78	9.76	12.30	11.20	10.98	10.15	11.73	12.55	12.59
24	12.33	12.63	---	12.80	9.68	12.33	10.60	11.16	10.25	11.82	12.55	12.60
25	12.21	12.47	---	12.80	9.99	12.37	10.87	11.30	10.47	11.90	12.57	12.60
26	12.07	12.30	---	12.71	10.30	12.41	11.04	11.40	10.53	11.92	12.58	12.57
27	12.09	12.20	---	12.44	10.53	12.43	11.20	11.22	10.69	11.86	12.60	12.62
28	12.11	---	---	12.23	10.77	12.42	11.31	10.92	10.85	11.90	12.56	12.64
29	12.13	---	---	12.36	---	12.43	11.34	10.59	10.99	11.82	12.49	12.64
30	12.18	---	12.50	12.45	---	12.41	11.13	10.72	11.12	11.95	12.50	12.64
31	12.24	---	12.50	12.50	---	12.39	---	10.20	---	12.03	12.45	---
MAX	12.39	12.64	12.50	12.86	12.47	12.43	12.52	11.40	11.12	12.03	12.60	12.64
WTR YR 1981	MEAN	11.71		HIGH	6.63		LOW	12.86				

GROUND-WATER RECORDS

429

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, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 19.62 ft (5.980 m) Jan. 30-Feb. 1; minimum daily low, 12.98 ft (3.956 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.52	17.86	18.62	19.10	19.62	16.06	16.76	15.16	14.40	13.88	16.00	17.79
2	16.58	17.88	18.68	19.12	19.56	15.99	16.80	15.09	14.43	13.96	16.05	17.84
3	16.64	17.89	18.69	19.15	19.56	15.95	16.83	15.10	14.47	14.01	16.12	17.87
4	16.71	17.92	18.69	19.18	19.57	15.93	16.87	15.11	14.52	14.05	16.18	17.91
5	16.76	17.97	18.71	19.19	19.57	15.86	16.83	15.12	14.55	14.11	16.24	17.97
6	16.78	17.99	18.74	19.18	19.57	15.84	16.87	15.11	14.45	14.20	16.28	18.01
7	16.83	18.02	18.75	19.23	19.56	15.85	16.89	15.10	14.34	14.29	16.34	18.04
8	16.89	18.07	18.76	19.24	19.56	15.85	16.92	15.10	14.34	14.35	16.41	18.09
9	16.95	18.11	18.76	19.26	19.57	15.85	16.99	15.13	14.38	14.42	16.48	18.13
10	16.98	18.17	18.77	19.28	19.57	15.86	17.01	15.13	14.35	14.51	16.54	18.18
11	17.04	18.19	18.78	19.29	19.60	15.87	17.02	15.06	14.32	14.58	16.60	18.22
12	17.09	18.21	18.79	19.29	19.60	15.87	16.92	14.86	14.33	14.65	16.67	18.25
13	17.13	18.23	18.83	19.31	19.60	15.92	16.45	14.54	14.33	14.71	16.72	18.28
14	17.17	18.27	18.83	19.33	19.58	15.97	15.98	14.53	13.84	14.80	16.76	18.30
15	17.21	18.30	18.83	19.36	19.56	15.97	15.93	14.34	12.98	14.87	16.81	18.32
16	17.25	18.33	18.86	19.38	19.54	16.03	15.82	14.33	12.99	14.96	16.89	18.36
17	17.27	18.34	18.87	19.40	19.50	16.07	15.70	14.35	13.01	15.03	16.95	18.40
18	17.30	18.40	18.88	19.42	19.46	16.10	15.61	14.35	13.02	15.11	16.99	18.42
19	17.35	18.42	18.92	19.44	19.39	16.16	15.60	14.30	13.15	15.15	17.06	18.45
20	17.38	18.44	18.94	19.46	18.69	16.22	15.55	14.32	13.27	15.17	17.12	18.49
21	17.46	18.48	18.94	19.47	17.71	16.30	15.55	14.34	13.32	15.28	17.18	18.50
22	17.52	18.49	18.94	19.48	17.25	16.32	15.51	14.34	13.40	15.37	17.24	18.55
23	17.55	18.50	18.96	19.50	16.92	16.36	15.44	14.37	13.49	15.43	17.30	18.57
24	17.55	18.51	19.01	19.52	16.59	16.39	15.14	14.40	13.54	15.49	17.37	18.59
25	17.56	18.53	19.01	19.52	16.45	16.44	15.15	14.46	13.62	15.56	17.42	18.61
26	17.62	18.55	19.02	19.54	16.36	16.47	15.16	14.47	13.71	15.63	17.47	18.64
27	17.64	18.55	19.04	19.55	16.26	16.55	15.16	14.44	13.76	15.68	17.53	18.68
28	17.71	18.54	19.04	19.58	16.10	16.56	15.15	14.36	13.81	15.72	17.59	18.71
29	17.74	18.59	19.05	19.61	---	16.58	15.17	14.38	13.87	15.81	17.64	18.73
30	17.77	18.60	19.06	19.62	---	16.66	15.18	14.40	13.90	15.89	17.69	18.75
31	17.81	---	19.07	19.62	---	16.69	---	14.39	---	15.94	17.73	---
MAX	17.81	18.60	19.07	19.62	19.62	16.69	17.02	15.16	14.55	15.94	17.73	18.75
WTR YR 1981	MEAN	16.93		HIGH	12.98		LOW	19.62				

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, 41.60 ft (12.680 m) Feb. 12, 13; minimum daily low, 39.36 ft (11.997 m) July 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.61	40.83	40.88	40.84	41.18	---	40.80	40.28	39.86	39.54	40.73	40.66
2	40.42	40.96	41.02	40.97	41.17	---	40.70	40.36	39.79	39.68	40.23	40.65
3	40.42	40.91	41.21	40.99	41.23	---	40.74	40.36	39.73	39.52	40.24	40.66
4	40.61	40.71	41.17	41.25	41.29	---	40.68	40.31	39.71	39.76	40.19	---
5	40.75	40.75	40.99	41.24	41.34	---	40.89	40.22	39.70	39.36	40.40	---
6	40.80	40.77	40.97	41.01	41.19	---	40.93	40.25	39.70	39.73	40.20	---
7	40.63	40.71	41.00	40.98	41.11	---	40.88	40.30	39.68	39.65	40.05	---
8	40.57	40.72	40.95	41.00	41.01	---	40.88	40.25	39.68	40.25	40.29	---
9	40.67	40.83	40.88	41.08	41.13	---	40.71	40.19	39.69	39.90	40.38	---
10	40.64	40.93	40.97	41.23	41.15	---	40.70	40.07	39.45	40.13	40.38	---
11	40.60	40.98	40.97	41.19	41.38	---	40.68	40.01	39.56	40.17	40.48	---
12	40.73	41.02	40.94	41.12	41.60	---	40.74	40.12	39.64	40.28	40.54	---
13	40.88	40.98	40.96	40.93	41.60	---	40.77	40.13	39.61	40.19	40.39	---
14	40.79	40.87	40.95	40.86	41.55	---	41.04	40.06	39.57	39.81	40.40	---
15	41.15	40.93	40.91	41.00	41.43	---	41.01	39.97	39.46	40.09	40.73	---
16	40.88	41.01	40.88	41.19	41.26	---	40.87	40.06	---	40.08	40.28	---
17	40.74	41.01	40.92	41.21	41.18	---	40.57	40.09	---	40.21	40.42	---
18	40.61	40.98	40.86	41.05	41.11	---	40.65	40.05	---	40.37	40.65	---
19	40.63	41.02	41.26	41.02	40.99	---	40.63	39.93	---	40.27	40.68	---
20	40.64	41.01	41.34	40.98	40.84	---	40.63	39.98	---	39.88	40.82	---
21	40.74	41.02	41.34	41.04	40.90	---	40.64	39.99	---	39.89	41.16	---
22	40.90	41.08	41.25	41.03	40.86	---	40.58	39.97	---	39.93	40.70	---
23	40.93	41.03	40.99	40.96	40.59	---	40.19	39.96	---	40.06	40.63	---
24	40.82	40.99	41.16	40.96	40.76	40.82	40.23	39.93	---	40.38	40.58	---
25	40.63	41.12	41.20	40.96	40.85	40.84	40.37	39.85	---	40.35	40.92	---
26	40.82	41.19	41.07	40.89	40.96	40.80	40.43	39.88	---	40.13	41.16	---
27	40.82	41.00	41.13	40.95	40.96	41.05	40.38	39.82	---	40.09	41.22	---
28	40.83	40.72	41.12	41.05	---	40.89	40.50	39.80	---	39.96	41.30	---
29	40.88	40.85	40.97	41.34	---	40.64	40.31	39.82	---	40.07	40.84	---
30	40.89	40.91	40.95	41.43	---	40.68	40.30	39.75	---	40.47	40.72	---
31	40.84	---	40.87	41.42	---	40.68	---	39.86	---	40.31	40.68	---
MAX	41.15	41.19	41.34	41.43	41.60	41.05	41.04	40.36	39.86	40.47	41.30	40.66
WTR YR 1981	MEAN	40.63	HIGH	39.36	LOW	41.60						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
MAR 24...	1400	910	6.8	12.0	.3	430	23	92	48	17	8	
DATE	AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, 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)	
MAR 24...	3.5	496	0	407	126	110	5.5	1.4	19	546	544	
DATE	AS N)	NITROGEN, AMMONIA (MG/L AS N)	NITROGEN, ORGANIC (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N03)	NITROGEN, TOTAL (MG/L AS N03)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P04)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	
MAR 24...	.01	.410	.00	.41	.42	1.9	.010	.03	2900	20	1.2	

GROUND-WATER RECORDS

431

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 daily low, 32.60 ft (9.936 m) Sept. 30; minimum daily low, 21.86 ft (6.663 m) June 8.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.63	31.58	30.26	31.91	31.52	23.92	28.76	25.74	26.46	28.54	31.07	32.26
2	31.57	31.59	30.64	31.91	31.06	23.74	28.63	24.95	26.09	28.25	31.20	32.29
3	31.68	31.62	30.56	31.95	29.08	23.97	28.65	25.01	26.18	28.91	31.30	32.02
4	31.77	31.84	30.24	31.91	28.86	24.22	29.00	25.45	26.17	29.14	31.50	31.82
5	31.66	31.86	29.99	32.06	29.24	24.72	29.01	26.14	25.86	29.29	31.59	31.37
6	31.73	31.82	30.28	32.14	29.74	24.63	28.61	26.55	24.81	29.50	31.45	31.24
7	31.71	31.94	30.49	32.36	29.90	24.51	28.20	26.73	23.27	29.53	31.62	31.12
8	31.70	32.00	30.50	32.17	30.18	24.94	28.42	27.14	21.86	29.56	31.66	31.51
9	31.88	31.93	30.44	32.18	30.25	25.61	28.86	27.74	22.24	29.75	31.55	31.52
10	31.87	32.02	29.95	32.17	30.39	26.21	28.87	28.28	23.10	30.07	31.41	31.58
11	31.82	32.06	29.55	32.23	30.59	26.92	29.14	28.60	22.74	30.30	31.68	31.59
12	31.90	32.04	29.21	32.18	30.07	26.92	29.24	28.68	22.09	30.40	31.73	31.76
13	31.95	32.06	29.60	32.25	29.34	27.79	28.06	27.86	23.13	30.61	31.72	31.84
14	31.99	32.09	29.58	32.27	29.11	28.08	26.20	27.55	23.09	30.74	31.74	31.97
15	31.99	32.09	29.85	32.28	29.20	28.27	25.59	27.56	22.03	30.64	31.83	31.99
16	31.97	32.12	30.27	32.22	29.19	28.73	25.55	27.33	23.19	30.89	31.94	32.05
17	31.91	32.12	30.44	32.16	29.07	28.52	25.53	26.63	23.76	30.93	31.93	32.02
18	32.03	31.96	30.74	32.23	28.32	28.45	25.08	26.62	24.25	31.05	31.90	31.82
19	31.99	31.66	30.89	32.33	27.57	28.57	24.57	26.70	25.25	31.14	31.85	31.84
20	31.96	31.44	31.16	32.43	26.80	28.87	24.82	26.35	25.96	31.25	31.97	32.01
21	32.03	31.80	31.32	32.52	26.00	29.07	25.08	24.84	26.40	31.28	32.06	32.10
22	32.10	31.73	31.52	32.36	24.69	29.40	25.35	24.94	26.21	30.96	32.08	32.22
23	32.12	31.80	31.67	32.31	23.54	29.69	25.87	26.13	26.05	31.00	32.07	32.20
24	32.12	31.82	31.84	31.99	22.73	29.72	26.10	26.97	26.48	31.40	32.11	32.24
25	32.06	31.64	31.75	32.02	22.38	29.63	25.99	28.44	27.04	31.50	32.15	32.23
26	31.70	30.82	31.91	32.17	22.61	29.53	25.98	28.59	26.95	31.61	32.16	32.44
27	31.51	30.43	31.98	32.19	23.06	29.58	26.20	28.79	26.95	31.46	32.19	32.46
28	31.22	30.20	32.00	31.59	23.75	29.24	26.59	28.89	27.47	31.31	32.25	32.41
29	31.31	30.19	32.07	31.31	---	28.70	26.88	28.70	28.04	30.94	32.31	32.52
30	31.43	30.11	32.00	31.46	---	28.49	26.79	27.67	28.46	30.85	32.35	32.60
31	31.46	---	32.07	31.46	---	28.54	---	26.53	---	30.89	32.22	---
MAX	32.12	32.12	32.07	32.52	31.52	29.72	29.24	28.89	28.46	31.61	32.35	32.60
WTR YR 1981	MEAN	29.59		HIGH	21.86		LOW	32.60				

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, 20.61 ft (6.282 m) Jan. 20; minimum daily low, 1.87 ft (0.570 m) June 6.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.95	17.68	17.39	19.54	18.66	18.22	18.93	17.05	15.53	14.05	11.91	9.41
2	14.81	17.73	17.71	19.54	18.40	18.71	18.87	16.50	15.89	14.00	11.21	9.49
3	14.90	17.61	18.00	19.73	18.84	19.25	18.73	16.64	16.02	13.96	10.50	9.38
4	15.05	17.54	18.20	19.76	18.87	19.44	18.72	17.23	16.22	14.25	10.20	9.07
5	15.42	17.49	18.05	19.26	18.83	19.47	18.42	17.36	16.43	14.33	10.14	9.23
6	15.60	17.42	17.93	19.25	19.10	19.14	18.46	17.52	1.87	14.50	8.97	9.40
7	15.76	17.20	17.98	19.27	19.20	19.22	18.58	17.62	4.49	14.61	9.09	9.79
8	15.95	17.06	18.05	19.29	19.78	19.10	18.77	17.79	6.90	14.59	9.16	9.74
9	15.94	16.85	18.28	19.21	19.90	18.56	18.62	17.89	8.43	14.59	9.15	9.79
10	16.06	17.07	18.14	19.25	20.01	18.40	18.40	17.86	8.88	14.63	9.19	9.77
11	15.95	17.43	18.05	19.46	19.69	18.45	18.33	17.21	9.56	14.71	9.09	9.89
12	15.91	17.66	18.15	19.44	19.56	18.40	17.98	16.35	10.07	14.58	9.01	9.96
13	15.59	17.70	18.05	19.42	19.79	18.52	17.64	16.20	10.31	14.28	9.19	9.96
14	15.77	17.57	18.00	19.14	20.22	18.46	17.88	16.33	11.18	13.91	9.13	9.44
15	15.96	17.31	18.02	19.38	20.30	18.70	18.00	15.68	12.23	13.83	9.02	9.47
16	16.12	17.67	18.20	19.52	19.71	18.79	18.29	15.42	12.77	12.91	9.50	9.54
17	16.08	18.07	18.27	19.68	19.37	18.90	18.41	15.79	12.89	12.80	9.67	9.40
18	15.90	18.26	18.26	19.79	18.51	18.96	17.97	15.95	13.14	12.77	9.88	9.38
19	15.78	18.28	18.13	20.26	17.77	18.99	17.71	16.22	13.24	12.83	9.93	9.39
20	16.00	18.45	18.49	20.61	16.98	19.05	17.58	16.44	13.32	13.25	10.07	9.43
21	16.12	18.70	18.52	20.47	16.80	19.24	17.58	16.66	13.24	13.69	10.13	9.64
22	16.39	18.92	18.58	20.25	17.11	19.64	17.55	16.94	13.11	13.97	10.09	9.73
23	16.70	18.83	18.87	20.27	17.37	19.91	17.25	17.01	13.14	13.44	10.16	9.78
24	16.73	18.30	19.01	19.94	17.48	19.92	15.93	17.17	13.19	13.26	9.85	9.78
25	16.66	17.87	18.93	19.52	17.72	20.05	16.19	17.60	13.18	13.14	10.00	9.75
26	16.79	17.79	18.97	18.75	18.09	20.07	16.60	17.78	13.29	13.27	9.89	9.86
27	17.18	17.75	19.06	18.45	18.12	20.04	16.79	17.77	13.33	13.29	9.83	9.91
28	17.18	17.34	19.13	18.03	17.82	20.04	16.94	16.35	13.37	13.33	9.65	10.11
29	17.31	16.98	19.20	18.20	---	19.95	16.94	16.12	13.41	13.37	9.50	10.19
30	17.88	16.98	19.45	18.39	---	19.06	17.06	16.17	13.41	13.39	9.40	10.19
31	17.87	---	19.65	18.53	---	18.92	---	15.49	---	13.30	9.41	---
MAX WTR YR 1981	17.88	18.92	19.65	20.61	20.30	20.07	18.93	17.89	16.43	14.71	11.91	10.19
		MEAN	15.77	HIGH	1.87	LOW	20.61					

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM
AUG 21...	1015	700	7.6	21.0	21.0	.0	340	50	82	33	12	7
DATE		SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	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)	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 SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
AUG 21...	.3	1.7	354	0	290	14	44	29	.3	7.8	465	
DATE		SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P04)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
AUG 21...	384	3.1	4.010	.24	3.3	15	.090	.28	40	3	1.3	

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, 3.88 ft (1.183 m) Sept. 15, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.60 ft (3.231 m) Jan. 20; minimum recorded daily low, 6.32 ft (1.926 m) May 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.79	8.46	7.56	9.50	10.21	8.75	9.61	7.26			---	9.66
2	6.77	8.47	7.57	9.53	8.65	8.77	9.69	7.41			---	9.65
3	6.78	8.41	7.64	9.52	8.50	8.95	9.73	8.77			---	9.62
4	6.83	8.53	7.77	9.50	8.42	8.79	9.77	8.82			---	9.55
5	8.32	8.61	7.72	9.54	8.36	8.73	9.75	8.82			---	9.54
6	8.33	8.67	7.75	9.66	8.35	8.61	8.26	8.88			---	9.54
7	8.31	8.73	9.21	9.82	8.37	8.47	8.78	8.77			---	9.01
8	8.28	8.76	9.28	9.91	9.90	8.43	8.59	8.72			---	8.86
9	8.29	8.76	9.14	10.01	9.92	8.50	8.16	8.71			---	8.78
10	8.26	7.55	9.01	10.09	9.92	8.69	8.16	8.70			---	8.76
11	8.27	7.54	8.88	10.10	9.70	8.84	8.17	8.23			---	9.66
12	8.27	7.57	8.83	8.77	9.53	8.92	9.44	8.16			---	8.86
13	8.19	7.65	8.79	8.66	9.45	9.09	9.35	8.16			---	8.81
14	8.26	7.64	8.78	8.68	9.40	9.19	9.21	8.22			---	8.52
15	8.36	7.69	8.83	8.71	9.38	9.19	9.40	7.91			---	8.56
16	8.39	9.17	9.03	8.77	9.36	7.84	9.40	7.65			---	8.64
17	8.39	9.17	9.16	8.80	9.26	7.84	9.40	7.67			---	8.75
18	8.34	9.12	9.27	10.29	9.18	7.87	9.36	6.36			---	8.80
19	8.09	9.12	9.39	10.29	9.06	7.94	9.36	6.32			---	8.84
20	6.91	9.10	9.39	10.60	8.39	8.17	9.09	6.48			---	9.75
21	6.96	9.09	9.38	10.29	8.12	8.13	9.22	6.61			8.62	9.80
22	7.07	9.11	8.12	10.23	8.13	9.59	9.31	6.72			8.62	7.73
23	7.35	9.08	8.07	10.16	6.74	9.61	9.31	6.82			8.60	7.68
24	7.13	8.95	8.17	10.11	6.81	9.60	8.40	8.68			8.37	7.68
25	7.03	9.04	8.17	10.09	6.94	9.57	8.38	8.70			8.47	7.68
26	8.37	8.99	8.06	9.98	7.07	9.51	8.40	8.90			8.57	7.70
27	8.43	8.99	8.11	9.98	7.08	9.46	7.07	8.74			8.64	9.37
28	8.44	8.79	9.62	10.02	7.17	9.43	7.15	6.81			10.15	9.37
29	8.45	8.79	9.64	10.14	---	9.33	7.19	6.96			8.74	9.33
30	8.46	8.85	9.63	10.19	---	9.40	7.26	7.07			9.62	9.33
31	8.45	---	9.59	10.21	---	9.51	---	8.62			9.65	---

MAX 8.46 9.17 9.64 10.60 10.21 9.61 9.77 8.90 10.15 9.80

WTR YR 1981 MEAN 8.68 HIGH 6.32 LOW 10.60

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 21...	1340	780	7.5	25.4	12.5	.0	380	58	92	37	9.0	5
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD 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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
AUG 21...	.2	1.4	392	0	322	20	58	22	.2	8.6	513	421
DATE	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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 21...	3.8	.010	.30	.31	4.1	18	.030	.09	40	4	6.8	

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, 54.29 ft (16.548 m) Aug. 29; minimum daily low, 40.31 ft (12.286 m) June 10.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.20		---	52.96	52.85	---	51.78	51.19	50.20	52.85	53.21	53.54
2	52.32		---	52.89	52.68	---	51.86	50.57	47.67	52.73	53.26	53.46
3	52.04		---	52.88	51.95	---	51.75	49.60	47.60	52.69	53.26	53.36
4	51.96		---	52.93	50.46	---	51.69	49.62	47.64	52.59	53.35	53.16
5	51.89		---	52.94	49.92	---	51.24	50.39	47.43	52.60	53.38	53.25
6	51.82		---	53.00	50.87	---	51.84	50.93	46.84	52.52	53.34	53.13
7	51.83		---	53.11	51.44	---	51.93	51.10	44.55	52.60	53.25	53.02
8	---		---	53.09	51.67	---	51.30	51.33	42.98	52.55	53.41	53.04
9	---		---	52.99	51.81	---	51.59	51.60	41.46	52.93	53.31	53.07
10	---		53.25	52.99	51.86	---	51.66	51.95	40.31	52.96	53.29	53.04
11	---		53.09	53.05	51.92	---	51.79	52.27	42.19	53.10	53.25	52.94
12	---		52.86	53.03	---	---	51.68	52.22	42.58	53.17	53.28	---
13	---		52.80	53.05	---	---	51.43	52.05	41.96	53.21	53.30	---
14	---		52.85	53.22	---	---	50.65	51.86	43.17	53.39	53.24	---
15	---		52.91	53.23	---	---	49.14	51.33	43.33	53.44	53.22	---
16	---		52.85	53.30	---	---	47.89	50.45	43.10	53.59	53.31	---
17	---		52.93	53.32	---	51.25	48.09	50.20	44.33	53.72	53.32	---
18	---		53.01	53.23	---	51.33	48.18	50.03	46.49	53.78	53.75	---
19	---		52.91	53.32	---	51.35	47.51	49.40	48.91	53.80	53.94	---
20	---		52.96	53.42	---	51.35	46.70	49.60	49.95	53.74	54.00	---
21	---		53.08	53.48	---	51.62	47.02	49.26	50.73	53.87	54.04	---
22	---		53.23	53.44	---	51.69	47.56	48.07	51.27	53.75	54.01	---
23	---		53.34	53.43	---	51.83	47.61	48.52	51.37	53.66	54.00	---
24	---		53.08	52.96	---	51.85	47.77	50.44	51.57	53.72	53.97	---
25	---		53.04	52.89	---	51.91	48.55	51.32	52.00	53.81	54.04	---
26	---		53.07	52.86	---	51.80	48.87	52.05	52.23	53.82	54.13	---
27	---		53.10	52.83	---	52.17	49.30	52.12	52.36	53.52	54.06	---
28	---		53.08	52.75	---	52.18	50.13	51.96	52.37	53.46	54.12	---
29	---		53.07	52.73	---	51.99	50.38	51.85	52.59	53.39	54.29	---
30	---		53.17	52.74	---	51.61	51.26	51.74	52.72	53.13	53.65	---
31	---		52.96	52.79	---	51.56	---	51.17	---	53.22	53.62	---
MAX	53.20		53.34	53.48	52.85	52.18	51.93	52.27	52.72	53.87	54.29	53.54

WTR YR 1981 MEAN 51.65 HIGH 40.31 LOW 54.29

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

GROUND-WATER RECORDS

435

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, 77.73 ft (23.692 m) Feb. 12; minimum daily low, 75.42 ft (22.988 m) Sept. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	77.26	77.09	76.87	76.66	76.69	76.69	76.48	76.20	76.59	75.98	75.42
2	---	77.42	77.51	77.06	76.96	76.74	76.86	76.57	76.06	76.80	75.82	75.50
3	---	77.31	77.71	77.04	77.09	76.86	76.58	76.56	75.96	76.50	75.65	75.55
4	---	77.06	77.54	77.41	77.14	76.72	76.45	76.45	76.03	76.13	75.73	75.65
5	---	77.13	77.22	77.40	77.18	76.66	76.83	76.34	76.07	75.86	75.79	75.72
6	---	77.17	77.21	76.89	76.87	76.86	77.02	76.43	75.91	75.89	75.65	75.76
7	77.20	76.94	77.19	76.95	76.86	77.08	76.91	76.50	75.99	76.00	75.54	75.66
8	77.15	77.09	77.08	77.00	76.79	77.12	76.60	76.42	75.88	76.07	75.65	75.56
9	77.08	77.08	77.03	77.11	76.87	77.12	76.79	76.34	75.77	75.97	75.83	75.61
10	77.14	77.52	77.23	77.37	76.81	76.98	76.81	76.15	76.03	75.90	75.87	75.59
11	77.15	77.65	77.24	77.19	77.53	76.86	76.56	76.28	76.18	75.93	75.84	75.66
12	77.38	77.61	77.11	77.13	77.73	76.85	76.53	76.43	76.15	75.87	75.82	75.65
13	77.49	77.43	77.25	76.76	77.60	76.68	76.60	76.41	76.12	75.78	75.86	75.58
14	77.36	77.18	77.23	76.65	77.39	76.89	77.01	76.15	76.11	75.74	75.84	75.45
15	77.23	77.28	76.99	76.90	77.17	76.72	77.15	76.29	76.10	75.80	75.60	75.54
16	77.29	77.46	76.99	77.14	76.88	76.59	76.86	76.43	76.04	75.76	75.64	75.66
17	77.18	77.40	77.08	77.22	76.80	76.51	76.43	76.47	76.15	75.83	75.73	75.77
18	77.09	77.36	76.94	76.93	76.78	76.40	76.57	76.38	76.06	75.88	75.70	75.78
19	77.13	77.46	77.57	76.81	76.65	76.52	76.54	76.21	75.96	75.83	75.65	75.66
20	77.17	77.42	77.71	76.68	76.64	76.65	76.58	76.31	75.91	75.70	75.69	75.48
21	77.14	77.41	77.63	76.78	76.76	76.88	76.62	76.39	75.85	75.78	75.79	75.54
22	77.35	77.51	77.37	76.78	76.65	76.88	76.30	76.35	75.90	75.94	75.79	75.82
23	77.51	77.33	76.90	76.67	76.40	76.88	75.96	76.27	76.06	75.99	75.71	75.93
24	77.35	77.19	77.27	76.67	76.78	76.93	76.30	76.19	76.05	75.92	75.68	75.89
25	77.01	77.51	77.39	76.67	76.92	76.97	76.49	76.15	75.99	75.94	75.74	75.81
26	77.33	77.51	77.06	76.60	77.10	76.88	76.50	76.11	76.07	75.92	75.63	75.56
27	77.35	76.91	77.18	76.69	77.10	77.04	76.43	75.97	76.15	75.98	75.59	75.59
28	77.27	76.77	77.13	76.90	76.68	77.01	76.35	76.07	76.09	75.76	75.67	75.76
29	77.49	77.11	76.83	77.24	---	76.64	76.31	76.10	76.02	75.91	75.62	75.72
30	77.48	77.18	76.89	77.36	---	76.50	76.28	76.02	76.14	75.98	75.56	75.55
31	77.34	---	76.75	77.36	---	76.66	---	76.20	---	75.99	75.51	---
MAX	77.51	77.65	77.71	77.41	77.73	77.12	77.15	76.57	76.20	76.80	75.98	75.93
WTR YR 1981	MEAN	76.55		HIGH	75.42		LOW	77.73				

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, 31.20 ft (9.510 m) Jan. 27; minimum daily low, 21.00 ft (6.401 m) June 7.

WATER LEVEL. IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.45	28.35	28.20	29.20	30.55	27.75	29.20	24.50	24.45	27.55	26.50	26.90
2	29.35	28.50	28.30	29.55	30.15	28.25	29.15	24.70	24.15	25.60	26.65	26.55
3	29.25	28.55	27.80	29.45	29.95	28.30	29.45	24.75	23.10	25.25	26.15	26.30
4	29.00	28.75	28.30	29.80	29.90	29.05	29.45	26.50	22.90	24.85	26.55	---
5	29.05	28.70	28.45	29.70	30.00	29.05	28.10	26.90	23.60	25.95	26.55	---
6	29.15	28.85	27.90	29.85	30.05	27.75	27.85	25.75	23.50	24.80	26.05	---
7	29.45	28.95	28.15	30.10	29.85	27.90	28.35	24.35	21.00	26.70	25.05	---
8	29.50	29.05	28.15	30.10	29.90	28.05	28.30	25.85	23.45	27.45	25.20	---
9	29.70	29.05	28.25	30.05	30.05	28.55	28.75	26.10	23.20	27.80	25.10	---
10	29.80	29.20	28.15	30.70	30.40	28.35	28.50	26.25	23.50	26.90	25.55	---
11	29.45	29.10	27.90	30.75	30.05	28.80	28.70	25.00	23.50	26.00	25.45	---
12	28.75	29.20	28.00	30.40	29.15	28.65	28.45	24.90	24.80	26.15	25.60	---
13	29.15	29.30	27.95	30.60	29.55	29.05	28.00	25.20	22.95	27.35	26.35	---
14	29.35	29.40	28.15	30.40	29.65	28.85	28.10	25.70	24.70	27.70	26.45	---
15	30.00	29.40	28.35	30.40	29.50	29.25	28.40	23.80	25.70	26.95	26.75	---
16	30.00	29.35	28.50	30.95	29.50	29.05	28.60	---	26.00	26.95	26.20	---
17	28.90	29.45	28.45	30.90	28.95	28.25	28.65	---	24.15	27.45	26.30	---
18	28.45	29.40	28.55	30.95	28.10	29.05	27.45	---	26.40	27.90	27.00	---
19	28.25	29.15	28.95	30.90	28.05	29.50	27.60	---	27.30	27.90	27.25	---
20	27.85	29.20	28.95	30.90	27.40	29.45	27.45	---	27.05	26.60	27.50	---
21	27.85	29.15	29.05	30.90	26.55	29.50	25.45	23.50	27.10	27.65	28.05	---
22	27.90	29.20	29.35	30.85	27.30	29.55	25.00	25.35	26.50	25.15	27.90	---
23	27.95	29.25	29.45	31.00	27.00	29.45	23.80	25.45	26.70	25.05	28.00	---
24	28.70	29.15	29.55	30.85	27.50	29.95	22.60	26.50	27.05	26.10	28.50	---
25	28.45	28.50	29.30	30.90	27.50	30.05	23.35	26.65	27.60	26.35	29.65	---
26	28.00	28.80	29.30	31.05	28.00	30.20	24.00	27.05	27.30	26.15	29.90	---
27	28.25	28.70	29.55	31.20	27.40	30.15	24.30	26.40	26.00	26.80	29.10	---
28	28.55	28.15	29.50	31.00	27.65	29.80	24.55	23.50	26.70	25.85	28.10	---
29	28.60	26.25	29.50	30.60	---	29.60	24.45	23.45	27.40	25.60	27.30	---
30	28.45	27.85	29.75	30.50	---	29.35	24.50	24.25	27.50	26.35	27.45	---
31	28.30	---	28.05	30.50	---	29.15	---	22.15	---	26.10	27.20	---
MAX	30.00	29.45	29.75	31.20	30.55	30.20	29.45	27.05	27.60	27.90	29.90	26.90
WTR YR 1981	MEAN	27.80		HIGH	21.00		LOW	31.20				

GROUND-WATER RECORDS

437

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, 67.27 ft (20.504 m) Sept. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 71.75 ft (21.869 m) Nov. 18; minimum recorded daily low, 67.27 ft (20.504 m) Sept. 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69.10	69.25	69.15							67.78	67.65	67.31
2	69.15	69.35	69.40							67.79	67.53	67.36
3	69.15	69.20	69.45							67.79	67.50	67.37
4	69.30	69.10	69.35							67.71	67.53	67.42
5	69.45	69.15	69.20							67.64	67.54	67.45
6	69.45	69.15	69.20							67.74	67.47	67.47
7	69.25	69.00	69.15							67.80	67.42	67.40
8	69.15	69.15	69.05							67.83	67.50	67.36
9	69.20	69.15	69.10							67.75	67.58	67.39
10	69.20	69.40	---							67.71	67.61	67.37
11	69.25	69.45	---							67.73	67.57	67.40
12	69.35	69.45	---							67.68	67.54	67.38
13	69.40	69.30	---							67.63	67.57	67.34
14	69.30	69.20	---							67.62	67.55	67.27
15	69.25	69.30	---							67.64	67.42	67.33
16	70.70	69.35	---							67.59	67.46	67.40
17	69.25	69.25	---							67.64	67.51	67.45
18	69.20	71.75	---							67.64	67.49	67.46
19	69.25	69.45	---							67.59	67.45	67.39
20	69.20	69.40	---							67.50	67.47	67.28
21	69.25	69.35	---							67.59	67.51	67.32
22	69.40	69.40	---							67.69	67.51	68.56
23	69.45	69.25	---							67.73	67.47	67.59
24	69.25	69.30	---							67.63	67.47	67.55
25	69.15	69.45	---							67.65	67.49	67.50
26	69.30	69.40	---							67.63	67.43	67.32
27	69.30	69.00	---							67.68	67.43	67.35
28	69.35	69.00	---							67.56	67.47	67.47
29	69.40	69.25	---							67.63	67.43	67.44
30	69.40	69.25	---							67.67	67.42	67.33
31	69.25	---	---							67.67	67.36	---
MAX	70.70	71.75	69.45							67.83	67.65	68.56

WTR YR 1981 MEAN 68.31 HIGH 67.27 LOW 71.75

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

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, 23.74 ft (7.236 m) Sept. 30; minimum daily low, 19.76 ft (6.023 m) May 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.65	22.90	23.01	---	23.40	22.01	22.27	21.36	20.20	21.93	22.09	23.04
2	22.68	22.92	23.06	---	23.08	22.06	22.33	21.33	20.34	21.93	22.05	23.05
3	22.70	22.93	23.07	---	23.11	22.10	22.36	21.45	20.55	---	22.07	23.04
4	22.74	22.96	23.09	---	23.15	22.12	22.39	21.52	20.67	---	22.10	23.05
5	22.77	22.98	23.12	---	23.13	22.11	21.96	21.55	20.91	21.86	22.27	23.06
6	22.80	23.01	23.13	---	23.14	21.69	22.10	21.55	20.92	20.97	22.29	23.10
7	22.81	23.04	23.14	---	23.15	21.81	22.18	21.12	20.85	20.95	22.12	23.13
8	22.80	23.07	23.14	---	23.15	21.89	22.24	21.21	20.80	21.34	22.02	23.16
9	22.82	23.09	23.13	---	23.15	21.93	22.29	21.29	20.83	21.55	22.08	23.20
10	22.85	23.12	23.00	---	23.15	21.98	22.30	21.38	21.07	---	22.13	23.25
11	22.87	23.14	22.95	---	22.99	22.02	22.25	21.42	21.14	---	22.14	23.27
12	22.90	23.15	22.93	---	22.32	22.05	21.50	21.43	20.65	---	22.20	23.30
13	22.92	23.17	22.96	---	22.37	22.10	21.67	21.45	20.94	---	22.25	23.34
14	22.94	23.18	22.97	---	22.41	22.12	21.78	21.41	21.10	---	22.30	23.35
15	22.97	23.20	22.97	---	22.45	22.14	21.92	21.08	21.23	---	22.33	23.36
16	23.00	23.22	22.98	---	22.44	22.16	21.93	20.44	21.31	---	22.37	23.41
17	23.01	23.27	22.98	---	21.82	22.17	21.76	20.65	21.38	---	22.40	23.44
18	22.95	23.28	22.98	---	21.76	22.20	21.80	20.71	21.44	---	22.45	23.46
19	22.91	23.26	22.99	---	21.77	22.22	21.80	19.76	21.49	---	22.55	23.49
20	22.93	23.28	23.00	---	21.60	22.25	21.90	19.97	21.50	---	22.61	23.52
21	22.95	23.28	23.05	---	21.63	22.27	21.95	20.13	21.53	---	22.66	23.54
22	22.98	23.29	23.05	---	21.51	22.29	21.88	20.50	21.61	---	22.70	23.57
23	23.01	23.30	23.05	---	21.54	22.32	20.83	20.77	21.68	---	22.74	23.59
24	23.02	23.30	23.05	---	21.62	22.36	21.15	20.91	21.23	---	22.78	23.62
25	23.00	23.28	23.05	---	21.64	22.40	21.33	20.96	21.24	---	22.82	23.63
26	22.97	23.23	23.07	---	21.73	22.44	21.45	20.75	21.81	---	22.84	23.66
27	22.92	23.20	23.09	---	21.88	22.44	21.54	20.76	21.84	---	22.88	23.69
28	22.90	22.96	23.10	---	21.96	22.43	21.57	20.15	21.91	---	22.92	23.72
29	22.88	22.95	23.10	23.40	---	22.42	21.41	20.37	21.88	---	22.94	23.73
30	22.86	22.95	23.09	23.39	---	22.00	21.38	20.49	21.88	21.98	22.98	23.74
31	22.87	---	---	23.40	---	22.17	---	20.00	---	22.05	23.00	---
MAX	23.02	23.30	23.14	23.40	23.40	22.44	22.39	21.55	21.91	22.05	23.00	23.74
WTR YR 1981	MEAN	22.32		HIGH	19.76		LOW	23.74				

GROUND-WATER RECORDS

439

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 recorded daily low, 72.23 ft (22.016 m) Oct. 7; minimum daily low, 69.68 ft (21.238 m) Sept. 20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	70.83	70.76	70.77	70.49	70.32	70.36
2	---	---	---	---	---	---	70.93	70.45	70.81	70.24	70.02	70.35
3	---	---	---	---	---	---	70.62	70.26	70.84	70.08	70.18	70.51
4	---	---	---	---	---	---	70.22	70.63	70.82	69.91	70.41	70.67
5	---	---	---	---	---	---	70.44	70.61	70.85	69.72	70.53	70.36
6	---	---	---	---	---	---	71.00	70.80	70.35	70.28	70.38	70.16
7	72.23	---	---	---	---	---	70.86	70.91	70.16	70.53	70.36	70.00
8	72.13	---	---	---	---	---	70.73	70.81	70.37	70.64	69.99	70.40
9	72.07	---	---	---	---	---	71.05	70.70	70.44	70.57	70.09	70.54
10	72.07	---	---	---	---	---	70.98	70.22	70.71	70.03	70.62	70.60
11	71.89	---	---	---	---	---	70.77	70.57	70.96	69.98	70.19	70.71
12	---	---	---	---	---	---	70.44	70.58	70.91	69.89	70.42	70.19
13	---	---	---	---	---	---	70.72	70.51	70.54	70.17	70.49	70.00
14	---	---	---	---	---	---	71.32	70.28	70.24	70.41	70.38	70.25
15	---	---	---	---	---	---	71.41	70.66	70.67	70.51	69.82	70.25
16	---	---	---	---	---	---	70.99	70.91	70.69	70.44	69.83	70.20
17	---	---	---	---	---	---	70.34	70.76	70.92	70.57	70.36	70.23
18	---	---	---	---	---	70.49	70.27	70.85	70.82	70.29	70.42	70.06
19	---	---	---	---	---	70.63	70.22	70.85	70.76	70.08	70.42	69.88
20	---	---	---	---	---	70.75	70.68	70.96	70.38	70.21	70.58	69.68
21	---	---	---	71.45	---	70.90	70.70	71.15	70.06	70.35	70.67	70.21
22	---	---	---	71.43	---	70.85	70.43	71.08	70.56	70.63	70.34	70.64
23	---	---	---	71.42	---	70.84	70.15	70.88	70.84	70.07	70.03	70.84
24	---	---	---	71.36	---	70.97	70.46	70.25	70.77	70.39	70.45	70.83
25	---	71.25	---	70.87	---	71.03	70.16	70.60	70.77	70.19	70.53	70.70
26	---	---	---	71.14	---	70.82	70.16	70.69	70.83	70.08	70.49	70.44
27	---	---	---	71.33	---	71.17	70.58	70.55	70.57	70.42	70.55	70.14
28	---	---	---	---	---	70.83	70.54	70.78	70.31	70.37	70.67	70.65
29	---	---	---	---	---	70.23	70.61	70.70	70.53	70.59	70.32	70.76
30	---	---	---	---	---	70.50	70.57	70.65	70.48	70.64	69.97	70.53
31	---	---	---	---	---	70.66	---	70.41	---	70.66	70.33	---
MAX	72.23	71.25	---	71.45	---	71.17	71.41	71.15	70.96	70.67	70.67	70.84
WTR YR 1981	MEAN	70.58	---	HIGH	69.68	---	LOW	72.23	---	---	---	---

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

GROUND-WATER RECORDS
HAMILTON COUNTY--Continued

391341084275300. Local number, H-8.

LOCATION.--Lat 39°13'41"N, long 84°27'53"W, 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, 97.80 ft (29.809 m) Apr. 23, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 105.20 ft (32.065 m) Nov. 21; minimum daily low, 97.80 ft (29.809 m) Apr. 23.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101.00	---	---	103.00	99.15	98.45	98.40	98.25	98.80	98.95	99.10	98.85
2	100.90	---	100.30	99.70	100.55	98.35	98.45	98.40	98.55	98.95	101.25	98.90
3	104.15	---	100.45	99.65	99.45	98.45	98.30	98.30	98.55	98.95	102.05	98.90
4	104.65	100.15	100.15	100.10	102.90	98.10	102.50	98.40	98.75	98.90	102.65	99.05
5	101.25	100.30	100.00	99.85	102.55	100.15	100.85	98.20	98.65	98.80	99.70	99.10
6	101.20	100.05	100.05	102.65	99.45	101.50	98.50	98.30	98.45	98.65	98.80	98.90
7	100.85	99.65	100.00	103.05	98.75	98.70	98.45	100.60	101.70	102.80	98.55	102.00
8	103.70	101.95	99.70	99.50	99.00	101.65	98.45	98.30	100.90	99.40	98.65	101.80
9	104.25	101.05	99.75	103.25	99.15	101.25	98.90	98.30	98.25	98.95	101.75	98.90
10	100.65	103.95	102.90	99.90	98.80	98.45	98.45	98.05	101.90	98.95	102.30	98.90
11	103.90	100.65	99.90	99.80	99.90	98.45	98.40	98.10	---	99.10	98.85	99.00
12	104.65	100.45	99.55	99.50	103.20	98.20	98.40	101.45	---	99.25	98.80	99.05
13	101.10	103.60	100.00	102.85	99.85	98.30	100.95	98.30	---	99.25	98.85	102.35
14	104.55	104.05	99.95	101.85	99.65	98.50	98.80	98.00	---	101.20	101.65	99.00
15	101.05	100.35	99.45	101.95	99.30	98.15	99.05	98.15	---	102.70	98.45	98.45
16	101.05	100.25	101.95	99.65	99.05	98.35	98.70	101.50	---	98.95	98.50	98.40
17	104.20	99.95	99.70	99.50	102.30	97.85	98.25	101.80	---	99.25	101.70	98.35
18	100.55	104.00	99.50	99.15	98.70	97.95	98.65	98.65	---	103.25	98.70	98.25
19	104.25	100.70	100.30	102.75	98.35	98.25	98.40	98.45	---	99.30	99.05	98.05
20	100.55	105.00	103.05	99.15	98.45	101.35	98.65	101.70	---	102.25	99.10	98.30
21	---	105.20	104.00	102.75	101.05	98.45	98.45	98.70	---	99.15	99.15	98.25
22	100.70	100.70	99.95	99.65	101.60	98.65	98.20	98.75	---	102.70	102.45	98.55
23	104.55	104.55	99.50	99.05	98.20	101.60	97.80	98.65	---	98.95	99.45	98.55
24	100.45	100.80	99.85	102.25	98.35	98.70	97.90	98.55	---	99.10	103.45	98.50
25	102.45	101.00	99.90	98.75	100.05	98.65	99.95	98.65	---	98.85	102.95	98.45
26	104.20	104.05	99.65	100.15	98.95	98.35	101.75	99.30	---	---	99.50	98.55
27	100.45	100.20	99.85	101.95	98.65	102.65	98.30	98.50	---	99.10	99.45	101.50
28	102.60	103.65	99.60	98.90	101.65	102.35	101.05	98.60	---	98.80	99.30	102.05
29	103.25	100.00	102.75	99.60	---	98.15	98.05	98.60	---	102.10	102.45	98.60
30	99.85	103.65	99.60	99.55	---	98.35	98.05	98.65	---	102.00	102.25	98.30
31	---	---	99.35	102.90	---	101.65	---	101.85	---	99.40	99.00	---
MAX	104.65	105.20	104.00	103.25	103.20	102.65	102.50	101.85	101.90	103.25	103.45	102.35
WTR YR 1981	MEAN	100.12		HIGH	97.80		LOW	105.20				

GROUND-WATER RECORDS

441

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, 53.45 ft (16.292 m) June 2; minimum daily low, 46.88 ft (14.289 m) Feb. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.65	48.73	48.05	47.55	47.79	48.12	49.51	50.09	51.68	49.47	49.77	49.85
2	50.69	48.72	48.55	47.78	47.68	48.32	50.44	50.17	53.45	49.56	49.55	50.05
3	50.03	48.64	49.06	47.75	48.40	48.42	50.42	50.15	51.74	49.67	49.34	50.12
4	50.12	48.36	48.86	48.11	48.12	48.21	50.00	50.46	50.50	49.53	49.38	50.21
5	49.13	48.36	48.98	48.10	49.43	48.33	49.64	50.96	51.86	49.30	49.34	50.21
6	49.05	48.35	49.08	47.65	49.81	48.63	49.86	50.93	49.95	49.26	49.27	50.10
7	50.70	47.87	48.75	49.35	47.84	48.83	49.80	50.51	49.77	49.38	49.15	49.92
8	50.82	47.85	48.52	48.20	47.71	48.89	49.53	50.27	49.70	49.47	49.27	49.83
9	50.30	47.73	48.57	48.25	47.90	48.89	50.63	50.14	50.81	49.36	49.46	49.99
10	50.44	48.14	48.80	48.44	47.80	49.14	50.42	50.00	50.03	49.50	49.50	50.00
11	50.67	48.47	48.79	48.28	48.09	48.73	49.90	50.00	50.07	49.51	49.45	50.11
12	50.50	48.35	48.53	47.99	48.85	48.67	49.70	50.14	50.00	49.35	49.43	50.02
13	49.19	47.98	49.12	47.58	48.25	48.83	51.51	50.62	49.90	49.24	49.53	49.85
14	48.99	47.65	49.05	47.43	47.94	48.88	52.78	50.33	50.28	49.25	49.53	50.17
15	48.65	48.11	48.84	47.67	47.64	48.60	52.95	51.84	50.14	49.16	49.52	51.00
16	48.75	48.16	48.11	48.30	47.29	49.23	52.37	52.11	49.97	49.18	49.38	---
17	48.65	48.21	47.87	48.33	47.15	49.64	50.70	51.30	---	49.21	49.48	---
18	48.63	48.37	47.75	47.84	47.10	48.63	50.14	51.00	---	49.21	49.53	---
19	48.31	48.82	48.49	47.67	46.88	48.77	50.07	52.61	---	49.13	49.58	---
20	48.27	48.64	48.77	47.89	47.25	49.05	52.15	51.50	---	48.75	49.66	---
21	48.17	48.11	48.70	47.83	47.40	49.16	51.33	51.40	---	48.72	50.04	---
22	48.58	47.91	48.49	48.83	47.35	49.16	50.35	51.27	---	49.00	49.91	---
23	48.74	47.53	48.01	48.25	47.50	49.29	49.62	50.64	---	49.43	49.83	---
24	48.82	48.55	48.20	47.47	47.98	49.38	49.80	50.20	---	49.35	50.06	---
25	48.45	48.37	48.26	47.39	48.13	49.38	49.95	50.08	---	49.49	50.26	---
26	48.60	48.47	48.01	47.39	48.34	49.43	49.96	50.01	---	49.48	50.08	---
27	48.60	47.83	48.07	47.42	48.49	49.80	50.35	49.78	---	49.48	50.20	---
28	48.62	48.27	47.96	48.19	48.06	50.21	50.35	49.83	---	49.53	50.22	---
29	49.05	48.24	47.68	48.31	---	49.12	50.07	51.27	---	49.56	50.11	---
30	48.87	48.18	47.70	48.34	---	49.26	50.84	51.63	---	49.70	49.82	---
31	48.73	---	47.39	48.35	---	49.86	---	51.99	---	50.08	49.96	---
MAX	50.82	48.82	49.12	49.35	49.81	50.21	52.95	52.61	53.45	50.08	50.26	51.00
WTR YR 1981	MEAN	49.24		HIGH	46.88		LOW	53.45				

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, 46.30 ft (14.112 m) July 16; minimum daily low, 34.50 ft (10.516 m) Oct. 18, 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.10	35.90	39.00	40.40	41.00	41.60	42.90	43.80	---	41.90	43.80	43.90
2	35.00	35.50	40.20	40.60	42.10	43.30	43.10	43.00	---	41.90	41.90	43.90
3	35.20	35.50	40.90	40.90	43.20	43.80	43.00	42.10	---	41.70	42.40	43.60
4	35.10	36.50	40.70	40.00	42.90	43.40	42.90	42.90	---	40.90	43.30	42.60
5	35.20	36.20	40.70	41.70	43.50	44.00	42.10	43.40	---	39.30	43.50	---
6	35.20	37.20	40.80	41.60	42.50	44.00	42.50	43.90	---	40.70	---	41.30
7	35.10	37.10	40.50	42.00	42.10	43.40	42.70	44.10	---	41.70	---	40.80
8	35.20	37.60	39.50	41.80	42.30	42.60	42.70	43.70	---	41.80	---	42.70
9	35.50	37.00	40.40	41.90	43.20	42.10	44.00	42.20	---	41.70	---	43.40
10	35.50	36.50	41.00	42.30	43.70	43.00	43.20	41.20	---	41.10	---	43.10
11	35.50	36.40	41.20	40.60	44.40	44.10	43.20	42.30	---	40.60	---	43.00
12	35.50	37.00	41.20	40.70	44.50	43.50	41.80	42.70	---	39.90	---	42.70
13	35.60	37.40	41.50	41.50	43.40	43.50	42.20	42.80	---	40.70	---	42.10
14	35.50	39.10	40.90	42.10	43.10	42.40	43.30	42.50	---	41.40	---	42.70
15	35.50	39.30	39.50	42.50	42.10	41.60	44.30	43.10	---	45.90	---	43.60
16	35.70	38.50	40.30	42.20	41.90	43.20	43.20	42.90	41.50	46.30	---	43.70
17	35.40	39.10	41.60	41.70	42.50	43.60	42.50	41.50	41.70	42.70	---	43.80
18	34.50	40.30	41.20	40.50	42.70	44.10	41.60	42.00	41.70	42.10	---	43.90
19	34.50	40.50	41.80	41.40	42.60	44.20	40.70	43.00	41.20	40.70	---	43.00
20	35.00	40.60	42.80	42.10	42.40	44.00	42.00	42.90	40.90	41.10	---	42.30
21	35.20	40.60	39.90	43.20	43.00	42.15	42.30	43.10	39.90	41.50	---	43.00
22	35.30	40.80	41.00	42.60	41.10	41.50	43.20	42.60	40.60	41.90	---	43.80
23	35.30	39.20	41.70	43.10	41.30	42.10	43.10	42.50	41.20	42.10	---	43.80
24	35.30	39.60	41.00	43.40	42.30	43.10	43.20	41.00	41.30	42.20	---	43.50
25	35.40	40.50	40.20	43.40	42.90	42.40	43.70	40.70	41.60	42.10	---	43.10
26	35.30	41.10	40.10	40.90	43.30	42.50	42.00	41.70	41.80	40.10	---	42.00
27	35.10	40.30	41.00	41.60	43.40	43.00	42.40	42.20	41.30	42.00	---	41.40
28	35.50	39.40	40.00	42.60	42.30	42.60	43.10	42.30	---	42.60	---	---
29	36.10	40.00	40.20	43.90	---	42.00	44.70	---	---	43.40	---	43.00
30	36.60	39.00	41.20	44.60	---	42.20	43.40	---	---	43.70	---	44.30
31	36.00	---	41.30	43.30	---	43.20	---	---	---	43.60	---	---
MAX	36.60	41.10	42.80	44.60	44.50	44.20	44.70	44.10	41.80	46.30	43.80	44.30
WTR YR 1981		MEAN	41.24		HIGH	34.50		LOW	46.30			

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	
SEP 01...	0930	575	7.6	23.0	14.0	.0	280	0	78	21	12	8	
		SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	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)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
SEP 01...	.3	.9	378	0	310	15	6.1	9.8	.3	13	322	332	
		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)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
SEP 01...	.02	.240	.13	.37	.39	1.7	.100	.31	4500	90	.5		

GROUND-WATER RECORDS

443

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 Boss.

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, 21.58 ft (7.577 m) Feb. 11; minimum daily low, 13.52 ft (4.121 m) June 18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.04	19.04	18.93	19.51	21.41	18.82	18.62	16.81	14.42	15.41	16.76	18.12
2	18.11	19.04	18.94	19.46	21.37	18.72	18.66	16.84	14.24	15.52	16.80	18.13
3	18.16	18.98	19.04	19.50	21.27	18.63	18.71	16.77	14.44	15.54	16.89	18.13
4	18.18	18.90	19.15	19.53	21.24	18.56	18.74	16.55	14.67	15.54	17.00	18.11
5	18.18	18.93	19.25	19.56	21.31	18.49	18.74	16.46	14.90	15.52	17.10	18.08
6	18.13	18.98	19.33	19.64	21.37	18.46	18.68	16.39	15.00	15.37	17.18	---
7	18.12	19.06	19.38	19.80	21.42	18.38	18.59	16.35	14.92	15.25	17.22	---
8	18.18	19.12	19.41	19.94	21.48	18.33	18.53	16.26	14.34	15.33	17.25	---
9	18.24	19.13	19.47	20.09	21.52	18.28	18.62	16.13	13.86	15.48	17.25	---
10	18.29	19.12	19.52	20.21	21.56	18.26	18.66	16.09	13.90	15.68	17.23	---
11	18.31	19.16	19.56	20.33	21.58	18.26	18.67	16.12	14.05	15.91	17.19	---
12	18.31	19.21	19.61	20.43	21.49	18.26	18.66	16.13	14.20	16.03	17.26	---
13	18.26	19.26	19.64	20.53	21.33	18.23	18.53	16.06	14.32	16.08	17.31	---
14	18.19	19.30	19.65	20.63	21.24	18.21	18.26	15.93	14.39	16.18	17.35	---
15	18.25	19.35	19.63	20.73	21.21	18.19	17.98	15.80	14.33	16.22	17.42	---
16	18.32	19.36	19.67	20.82	21.18	18.18	17.71	15.62	13.95	16.24	17.49	---
17	18.40	19.34	19.73	20.92	21.10	18.17	17.56	15.33	13.55	16.26	17.50	---
18	18.42	19.36	19.82	20.99	20.91	18.20	17.50	15.02	13.52	16.28	17.51	---
19	18.42	19.40	19.91	21.04	20.68	18.27	17.44	14.82	13.71	16.31	17.54	---
20	18.40	19.44	19.98	21.10	20.49	18.36	17.36	14.64	13.87	16.36	17.61	---
21	18.47	19.52	20.05	21.17	20.32	18.39	17.29	14.62	13.99	16.40	17.67	---
22	18.55	19.56	20.09	21.23	20.07	18.40	17.21	14.72	14.11	16.41	17.68	---
23	18.64	19.56	20.09	21.28	19.84	18.44	17.19	14.81	14.21	16.43	17.68	---
24	18.72	19.53	20.08	21.35	19.60	18.47	17.01	14.89	14.33	16.47	17.69	---
25	18.76	19.49	20.03	21.40	19.40	18.50	16.72	14.90	14.53	16.47	17.75	---
26	18.77	19.46	19.93	21.41	19.21	18.53	16.55	14.90	14.74	16.46	17.83	---
27	18.80	19.45	19.82	21.42	19.03	18.60	16.47	14.89	14.87	16.49	17.93	---
28	18.86	19.33	19.76	21.43	18.91	18.61	16.49	14.90	14.91	16.58	18.04	---
29	18.88	19.12	19.75	21.45	---	18.60	16.58	14.90	15.04	16.71	18.07	---
30	18.93	19.02	19.69	21.45	---	18.59	16.67	14.78	15.21	16.71	18.08	---
31	18.99	---	19.61	21.44	---	18.59	---	14.63	---	16.75	18.08	---
MAX	18.99	19.56	20.09	21.45	21.58	18.82	18.74	16.84	15.21	16.75	18.08	18.13
TR YR 1981	MEAN	18.02		HIGH	13.52		LOW	21.58				

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 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS 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)
NOV 04...	1145	670	7.8	15.5	300	77	25	306	0	251
FEB 09...	1350	730	7.7	15.0	330	84	29	320	0	262
MAY 05...	1300	760	7.2	16.0	330	87	28	352	0	289
AUG 05...	0915	700	7.3	15.0	310	82	26	336	0	276

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE DIS-SOLVED (MG/L AS CL)	FLUORIDE TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 04...	7.4	57	42	.0	435	1.3	.020	60	20	20
FEB 09...	10	70	48	.3	460	1.2	.010	--	--	--
MAY 05...	33	74	48	.2	487	2.1	.020	--	--	--
AUG 05...	24	63	40	--	--	2.6	.020	10	10	20

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL 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, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 04...	10	--	5	230	--	2	340	80	40
FEB 09...	--	--	--	250	--	--	300	--	--
MAY 05...	--	--	--	90	--	--	310	--	--
AUG 05...	20	4	4	90	7	4	290	40	6

GROUND-WATER RECORDS

445

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 daily low, 27.02 ft (8.236 m) Feb. 2; minimum daily low, 19.32 ft (5.889 m) June 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.14	24.38	24.92	25.70	26.99	25.04	24.95	22.17	20.62	20.79	22.57	24.14
2	23.24	24.52	24.97	25.44	27.02	24.77	24.98	21.90	20.56	20.94	22.56	24.15
3	23.30	24.59	25.00	25.25	26.96	24.85	25.01	21.77	20.61	20.99	22.65	24.14
4	23.39	24.61	25.04	25.42	26.84	24.89	25.06	21.59	20.71	20.82	22.70	24.11
5	23.35	24.64	25.14	25.54	26.80	24.95	24.94	21.74	20.80	20.59	22.79	24.11
6	23.41	24.66	25.24	25.60	26.83	24.95	24.72	21.93	20.83	20.65	22.86	24.09
7	23.47	24.66	25.25	25.68	26.85	24.92	24.72	21.98	20.52	20.83	22.89	23.80
8	23.51	24.71	25.28	25.74	26.89	24.74	24.74	21.98	20.00	20.97	22.94	23.73
9	23.59	24.83	25.28	25.81	26.92	24.42	24.81	21.97	19.95	21.12	22.96	23.88
10	23.65	24.85	25.27	25.88	26.95	24.48	24.85	21.75	20.03	21.15	22.83	23.97
11	23.75	24.81	25.25	25.95	26.96	24.59	24.91	21.55	20.12	20.89	22.92	24.07
12	23.79	24.85	25.28	26.04	26.92	24.67	24.83	21.69	20.14	20.95	22.99	24.15
13	23.81	24.91	25.35	26.11	26.83	24.74	24.52	21.76	19.95	21.23	23.08	24.10
14	23.83	24.97	25.45	26.20	26.77	24.78	24.51	21.79	19.98	21.44	23.15	24.02
15	23.87	25.02	25.48	26.27	26.79	24.79	24.38	21.75	19.75	21.62	23.17	24.11
16	23.92	25.05	25.46	26.33	26.75	24.62	24.26	21.60	19.53	21.77	23.01	24.17
17	23.93	25.05	25.45	26.40	26.76	24.71	24.15	21.21	19.32	21.91	23.00	24.23
18	23.92	25.10	25.48	26.46	26.70	24.72	23.83	20.98	19.34	22.00	23.16	24.26
19	24.00	25.10	25.52	26.45	26.55	24.77	23.51	20.90	19.56	22.02	23.27	24.27
20	24.02	25.10	25.56	26.49	26.36	24.83	23.32	20.75	19.69	21.99	23.38	24.02
21	23.99	25.13	25.63	26.54	26.18	24.90	23.39	20.68	19.63	22.00	23.46	23.90
22	23.98	25.21	25.63	26.58	25.98	24.84	23.41	20.71	19.77	22.01	23.59	24.08
23	24.01	25.21	25.75	26.61	25.68	24.55	23.42	20.66	19.90	22.04	23.62	24.11
24	24.04	25.27	25.72	26.65	25.55	24.69	23.26	20.41	20.00	22.14	23.64	23.95
25	24.12	25.31	25.60	26.70	25.44	24.79	23.04	20.26	20.15	22.25	23.71	24.13
26	24.18	25.29	25.41	26.77	25.31	24.87	22.65	20.47	20.28	22.26	23.77	24.13
27	24.21	25.36	25.25	26.79	25.17	24.91	22.34	20.71	20.38	22.09	23.83	23.93
28	24.21	25.38	25.21	26.81	25.17	24.96	22.47	20.78	20.44	22.21	23.91	23.82
29	24.23	24.93	25.50	26.82	---	24.84	22.55	20.82	20.49	22.34	24.01	---
30	24.26	24.86	25.71	26.85	---	24.74	22.53	20.83	20.64	22.46	24.10	---
31	24.29	---	25.79	26.91	---	24.81	---	20.83	---	22.54	24.11	---
MAX	24.29	25.38	25.79	26.91	27.02	25.04	25.06	22.17	20.83	22.54	24.11	24.27
WTR YR 1981	MEAN	23.81		HIGH	19.32		LOW	27.02				

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, 19.45 ft (5.928 m) Feb. 5; minimum daily low, 12.95 ft (3.947 m) July 7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.10	15.90	16.35	---	16.20	14.65	14.45	13.45	14.15	13.60	14.55	15.25
2	15.05	16.15	16.25	15.75	16.55	14.60	14.90	14.05	13.95	13.60	14.15	15.25
3	14.75	16.05	16.70	16.20	16.45	14.85	14.85	14.05	14.30	14.00	14.05	15.10
4	16.40	15.70	16.55	16.45	18.20	14.60	14.55	14.40	14.55	13.60	14.40	15.05
5	15.25	16.15	16.45	16.70	19.45	14.50	14.55	13.65	14.55	13.00	14.50	15.10
6	15.60	16.00	16.65	16.85	16.40	14.70	15.30	13.55	14.45	13.85	14.15	15.05
7	15.40	15.75	16.40	16.90	16.55	15.05	15.05	14.00	14.30	12.95	14.35	15.45
8	15.25	15.95	16.30	17.15	16.40	15.15	14.60	13.95	14.60	13.25	14.40	14.90
9	15.60	15.90	16.20	17.30	16.35	15.25	14.65	14.95	13.55	13.75	14.70	14.55
10	15.75	16.40	16.50	17.45	16.30	15.10	14.35	14.95	13.50	13.60	14.90	14.45
11	15.95	16.45	16.45	17.45	16.45	14.95	14.50	14.30	14.00	14.15	14.45	14.45
12	16.05	16.40	16.10	17.55	16.80	14.95	14.40	14.35	14.10	14.70	14.70	14.65
13	16.30	16.35	15.95	---	16.75	14.70	14.60	13.75	13.35	14.40	14.65	14.65
14	15.95	16.20	16.15	---	16.40	15.00	14.15	13.60	13.65	15.00	14.55	14.50
15	16.05	16.55	15.85	17.30	15.90	14.80	14.55	13.50	14.00	14.85	13.90	14.50
16	15.95	16.50	15.70	17.60	16.45	15.10	14.25	13.85	13.55	14.95	13.80	14.60
17	15.95	16.65	16.15	17.15	16.30	14.65	14.40	13.70	13.85	14.95	14.55	14.45
18	15.90	16.45	15.85	16.90	16.15	14.85	14.40	13.75	14.10	15.70	14.75	14.30
19	15.65	16.45	16.00	17.35	15.70	14.90	14.30	13.75	14.00	14.55	14.85	14.20
20	15.85	16.50	16.50	17.15	15.55	14.75	14.25	13.75	13.95	13.85	14.90	14.20
21	15.60	16.40	16.35	16.95	15.40	14.95	14.20	14.10	13.85	14.85	14.95	14.15
22	15.85	16.60	16.70	17.35	15.00	15.20	14.10	14.15	14.10	14.40	15.55	14.15
23	17.65	16.60	16.35	16.85	14.85	15.55	13.55	13.95	14.60	14.40	15.80	13.90
24	17.75	16.50	16.05	17.20	14.85	15.30	13.65	14.00	14.15	14.05	15.80	14.15
25	16.85	16.75	16.50	17.50	14.80	15.35	14.10	14.15	14.65	14.15	15.85	13.90
26	16.80	16.85	16.75	17.75	14.95	14.90	13.70	14.05	14.25	13.75	15.25	14.20
27	16.90	16.85	16.75	17.90	15.00	15.15	14.00	13.90	14.30	14.20	15.15	14.05
28	16.60	16.80	16.45	17.10	14.70	15.25	13.50	13.65	14.20	14.35	15.50	13.80
29	16.75	16.70	16.35	17.10	---	14.85	13.60	13.85	14.40	14.10	15.55	14.10
30	16.40	16.50	16.55	16.90	---	14.90	13.50	13.70	14.20	14.45	15.25	13.70
31	15.90	---	15.95	16.75	---	15.05	---	13.75	---	14.45	15.45	---
MAX	17.75	16.85	16.75	17.90	19.45	15.55	15.30	14.95	14.65	15.70	15.85	15.45
WTR YR 1981	MEAN	15.21		HIGH	12.95		LOW	19.45				

GROUND-WATER RECORDS

447

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, 17.32 ft (5.279 m) Sept. 30; minimum daily low, 11.88 ft (3.621 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.00	16.59	16.48	16.65	16.70	14.92	15.74	14.94	14.15	15.02	16.32	16.96
2	16.04	16.62	16.52	16.68	16.49	15.01	15.80	14.73	14.32	15.08	16.35	17.00
3	16.07	16.63	16.55	16.71	15.82	15.10	15.83	14.49	14.45	15.16	16.39	17.00
4	16.12	16.65	16.57	16.73	15.62	15.17	15.87	14.57	14.49	15.24	16.43	16.90
5	16.15	16.66	16.60	16.73	15.70	15.17	15.68	14.71	14.38	15.29	16.45	16.84
6	16.17	16.66	16.62	16.72	15.79	15.03	14.27	14.75	14.36	15.37	16.44	16.89
7	16.19	16.67	16.63	16.75	15.84	14.91	13.90	14.74	12.73	15.45	16.46	16.93
8	16.21	16.70	16.63	16.76	15.87	14.99	14.09	14.81	12.68	15.53	16.49	16.97
9	16.24	16.71	16.63	16.78	15.95	15.07	14.34	14.99	13.00	15.59	16.52	17.00
10	16.28	16.74	16.54	16.80	15.98	15.14	14.51	14.99	13.07	15.66	16.55	17.02
11	16.30	16.75	16.41	16.81	15.95	15.23	14.66	14.99	13.05	15.73	16.57	17.04
12	16.31	16.77	16.36	16.80	15.86	15.27	14.69	14.47	13.19	15.79	16.62	17.06
13	16.34	16.78	16.40	16.82	15.91	15.36	14.43	13.92	13.44	15.82	16.64	17.08
14	16.37	16.80	16.42	16.83	15.95	15.43	14.23	13.80	12.58	15.72	16.67	17.10
15	16.41	16.82	16.44	16.85	15.97	15.48	14.37	13.77	11.88	15.51	16.68	17.10
16	16.43	16.83	16.47	16.86	15.98	15.50	14.50	13.40	11.89	15.62	16.72	17.09
17	16.45	16.83	16.48	16.87	15.85	15.38	14.60	13.58	12.18	15.71	16.74	17.11
18	16.46	16.82	16.51	16.88	15.49	15.33	14.66	13.79	12.59	15.79	16.76	17.12
19	16.43	16.81	16.55	16.88	15.30	15.41	14.70	13.91	13.00	15.84	16.79	17.13
20	16.43	16.81	16.57	16.90	14.97	15.47	14.80	14.06	13.34	15.89	16.82	17.15
21	16.47	16.84	16.57	16.91	14.58	15.54	14.89	14.23	13.59	15.93	16.84	17.16
22	16.51	16.84	16.55	16.91	14.39	15.59	14.97	14.40	13.68	15.97	16.86	17.19
23	16.53	16.84	16.52	16.91	14.43	15.63	14.97	14.54	13.87	16.01	16.88	17.21
24	16.54	16.83	16.54	16.92	14.39	15.69	14.54	14.68	14.07	16.06	16.91	17.23
25	16.54	16.83	16.54	16.92	14.48	15.75	14.38	14.82	14.27	16.10	16.93	17.24
26	16.51	16.81	16.52	16.90	14.63	15.80	14.49	14.93	14.43	16.15	16.94	17.25
27	16.45	16.79	16.53	16.82	14.75	15.80	14.62	14.97	14.59	16.17	16.97	17.27
28	16.50	16.68	16.53	16.66	14.86	15.76	14.73	14.79	14.73	16.18	16.99	17.29
29	16.53	16.52	16.58	16.63	---	15.72	14.84	14.38	14.85	16.21	17.00	17.31
30	16.55	16.48	16.61	16.68	---	15.72	14.91	14.41	14.96	16.24	17.01	17.32
31	16.56	---	16.62	16.71	---	15.72	---	14.35	---	16.29	16.96	---
MAX	16.56	16.84	16.63	16.92	16.70	15.80	15.87	14.99	14.96	16.29	17.01	17.32
WTR YR 1981	MEAN	15.81		HIGH	11.88		LOW	17.32				

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, 15.69 ft (4.782 m) Nov. 26; minimum daily low, 7.81 ft (2.380 m) Jan. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.84	12.09	10.91	7.81	10.06	9.00	13.20	12.31	13.27	11.98	10.91	14.18
2	10.82	10.89	12.95	10.47	11.74	10.48	13.03	12.71	13.87	12.07	9.94	14.10
3	11.55	12.14	12.39	10.27	13.02	10.74	13.10	11.07	14.01	12.12	12.16	14.10
4	11.26	12.58	12.05	10.81	13.86	10.64	11.88	12.85	14.14	9.74	12.66	13.82
5	9.66	12.55	12.63	10.91	12.33	10.89	11.52	11.92	13.76	9.40	13.12	10.77
6	11.52	11.47	11.67	11.71	12.59	10.92	12.57	11.65	10.58	11.90	13.09	10.09
7	11.60	12.81	10.78	11.81	11.65	11.13	12.99	12.06	10.07	12.16	12.91	9.91
8	12.10	11.96	11.79	12.28	11.08	8.87	12.72	11.90	10.85	12.71	10.60	11.56
9	12.54	10.72	12.17	10.85	12.13	10.52	12.02	11.04	10.88	12.84	9.83	13.28
10	11.88	11.56	11.99	10.64	14.13	10.41	12.01	10.45	12.24	14.41	12.70	13.53
11	10.18	11.75	12.07	11.41	12.59	10.86	12.77	11.03	13.11	12.41	13.00	13.31
12	12.00	12.70	12.12	12.25	11.91	11.52	10.66	11.23	11.80	12.19	13.42	12.32
13	12.52	12.61	12.03	12.00	12.27	10.96	10.96	12.37	10.75	11.71	13.39	12.07
14	12.17	12.98	10.53	13.12	12.49	10.21	11.31	11.24	11.10	13.38	13.13	12.36
15	11.85	11.95	11.10	12.20	10.70	9.33	11.18	12.27	12.14	12.52	12.69	13.05
16	12.52	11.50	11.50	12.53	11.71	10.39	11.60	11.99	12.44	13.80	10.45	13.38
17	12.58	10.74	12.61	11.65	13.64	10.54	10.80	10.55	12.40	13.01	12.29	13.10
18	11.04	11.39	11.79	10.37	12.79	10.51	10.18	13.47	13.47	12.21	12.51	13.09
19	10.76	12.64	12.74	12.05	12.81	10.72	9.19	12.91	13.24	10.45	12.57	11.95
20	11.70	11.96	10.30	12.56	11.11	10.90	10.59	13.12	11.87	12.50	12.64	9.91
21	11.21	13.74	10.31	11.51	10.45	9.98	11.75	14.60	9.79	13.37	12.31	12.02
22	12.62	13.93	11.51	12.74	10.04	10.11	10.95	14.30	11.66	14.82	13.18	12.25
23	12.09	12.61	11.91	11.92	10.32	11.87	11.60	12.86	12.11	13.81	11.18	12.58
24	12.58	14.19	10.76	10.63	11.89	11.96	12.41	10.30	12.70	13.35	12.48	12.74
25	10.85	14.59	8.91	11.13	11.10	12.16	11.52	10.18	12.02	11.28	13.49	12.50
26	10.91	15.69	9.28	12.26	11.10	12.51	9.51	12.35	11.98	10.69	14.23	11.66
27	11.46	13.11	10.26	12.38	11.06	11.82	11.52	12.52	11.09	12.50	13.09	10.73
28	10.38	9.69	9.18	12.39	10.13	12.27	12.87	12.41	10.63	11.72	13.08	13.01
29	12.37	10.88	10.62	12.00	---	11.04	11.61	13.39	11.94	11.78	12.32	13.62
30	12.63	10.28	9.86	12.54	---	11.72	11.64	11.40	12.79	12.25	10.38	13.56
31	11.88	---	9.08	11.77	---	12.70	---	11.85	---	12.48	13.58	---
MAX	12.63	15.69	12.95	13.12	14.13	12.70	13.20	14.60	14.14	14.82	14.23	14.18
WTR YR 1981	MEAN	11.86	HIGH	7.81	LOW	15.69						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L CAC03)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 24...	1015	600	7.6	22.0	11.5	.0	270	0	71	23	17	12
DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, FET-FLD AS (MG/L AS HC03)	CARBONATE, FET-FLD AS (MG/L AS C03)	ALKALINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DISSOLVED (MG/L AS C02)	SULFATE DISSOLVED (MG/L AS S04)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS Si02)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
AUG 24...	.4	2.6	378	0	310	15	39	9.9	.5	13	355	364
DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N03)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P04)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	
AUG 24...	.02	.190	.03	.22	.24	1.1	.010	.03	1700	100	1.7	

GROUND-WATER RECORDS

449

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, 3.85 ft (1.173 m) Jan. 24, 25; minimum daily low, 0.29 ft (0.088 m) above land surface June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.39	3.08	2.20	2.93	3.08	.52	1.46	.62	.87	.99	1.27	2.56
2	2.42	3.16	2.30	2.99	1.83	.60	1.50	.60	.94	1.08	1.32	2.57
3	2.44	3.20	2.40	3.04	1.38	.63	1.51	---	.94	1.02	1.32	2.58
4	2.48	3.23	2.45	3.12	1.54	.63	1.51	---	.67	1.06	1.30	1.99
5	2.53	3.27	2.52	3.15	1.63	.62	.18	---	.77	1.09	1.39	2.13
6	2.55	3.31	2.53	3.16	1.72	.45	.37	---	.70	1.19	1.41	2.24
7	2.60	3.34	2.54	3.24	1.73	.60	.57	.64	.85	1.28	1.38	2.32
8	2.64	3.40	2.35	3.30	1.73	.70	.72	.78	.98	1.33	1.39	2.33
9	2.70	3.43	2.30	3.35	1.84	.76	.74	.88	1.00	1.37	1.13	2.41
10	2.71	3.49	1.71	3.38	1.87	.80	.74	.93	.79	1.43	1.29	2.49
11	2.74	3.54	1.82	3.42	1.78	.84	.78	.93	.17	1.49	1.39	2.58
12	2.78	3.58	1.85	3.46	1.69	.88	-0.08	.25	.37	1.51	1.48	2.66
13	2.83	3.61	1.95	3.51	1.76	.95	-0.07	.42	.48	1.51	1.56	2.72
14	2.85	3.65	2.00	3.55	1.81	1.03	-0.05	.55	-0.18	.14	1.64	2.77
15	2.89	3.69	2.05	3.59	1.81	1.03	.04	.23	-0.29	.34	1.68	2.82
16	2.92	3.73	2.11	3.66	1.73	.99	.14	.25	-0.26	.55	1.71	2.87
17	2.94	3.74	2.18	3.68	.94	.99	.16	.43	-0.22	.74	1.80	2.92
18	2.81	3.76	2.22	3.70	.82	1.03	.28	.55	-0.19	.96	1.87	2.97
19	2.86	3.78	2.27	3.75	.73	1.03	.40	.58	-0.16	1.09	1.93	3.01
20	2.99	3.80	2.37	3.78	.06	1.03	.57	.72	-0.14	.99	2.00	3.07
21	3.09	3.82	2.45	3.80	.01	1.04	.59	.85	-0.11	.10	2.06	3.12
22	3.20	3.83	2.48	3.81	.01	1.04	.60	.96	-0.09	.30	2.11	3.17
23	3.25	3.84	2.51	3.83	.02	1.04	.24	1.05	-0.07	.57	2.18	3.21
24	3.27	3.84	2.57	3.85	.12	1.04	.32	1.10	-0.03	.82	2.23	3.26
25	2.88	3.37	2.66	3.85	.22	1.08	.46	1.14	.08	.97	2.30	3.32
26	2.96	3.34	2.70	3.78	.32	1.10	.59	1.15	.26	.97	2.35	3.37
27	2.99	3.35	2.77	2.88	.42	1.18	.72	1.16	.58	.83	2.40	3.41
28	2.91	2.35	2.83	2.91	.44	1.27	.78	.31	.73	.83	2.43	3.46
29	2.94	2.30	2.84	3.00	---	1.42	.59	.55	.75	.94	2.41	3.51
30	2.93	2.31	2.82	3.06	---	1.42	.61	.58	.78	1.11	2.44	3.54
31	3.00	---	2.86	3.08	---	1.35	---	.72	---	1.21	2.54	---
MAX	3.27	3.84	2.86	3.85	3.08	1.42	1.51	1.16	1.00	1.51	2.54	3.54
WTR YR 1981	MEAN	1.80	HIGH	-0.29	LOW	3.85						

GROUND-WATER RECORDS

MADISON COUNTY

395301083272200. Local number, M-2.

LOCATION.--Lat 39°53'01"N, long 83°27'22"W, 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, 30.78 ft (9.386 m) Sept. 12, minimum recorded daily low, 8.24 ft (2.512 m) July 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.65	11.40	11.80	12.93	11.25	14.97	17.54	15.20	12.00	19.30	9.06	21.73
2	12.02	8.84	11.61	13.61	13.94	15.48	18.37	15.45	13.03	16.51	8.53	21.37
3	11.07	8.40	11.30	12.70	13.09	14.44	18.37	18.40	11.59	14.28	8.76	19.97
4	10.96	9.75	10.83	14.55	12.32	13.25	17.17	20.20	11.41	12.24	13.10	19.53
5	10.68	11.16	12.25	15.74	12.24	13.59	16.19	20.40	12.48	14.43	16.59	17.65
6	15.88	11.66	12.52	15.17	12.44	16.98	17.29	19.18	13.76	17.87	16.52	16.37
7	---	11.16	12.97	14.67	12.40	15.93	17.38	20.34	12.44	17.52	17.23	17.17
8	15.38	10.33	13.12	15.76	18.98	15.08	18.07	18.42	11.66	14.21	14.36	18.31
9	15.20	9.70	10.01	16.23	20.34	16.98	19.00	18.05	12.49	14.63	18.02	18.43
10	14.87	11.27	9.07	14.17	16.52	16.18	19.73	16.69	11.78	14.91	21.12	24.24
11	13.98	11.05	9.81	13.44	15.13	16.67	18.19	15.66	9.59	17.24	20.38	30.74
12	12.07	10.54	9.98	14.51	14.87	11.63	17.59	15.17	10.65	17.30	20.45	30.78
13	13.19	10.92	9.59	14.49	14.45	8.56	17.47	14.05	9.77	15.09	21.62	24.24
14	13.54	10.34	11.37	13.80	17.67	8.64	21.42	14.33	13.39	18.17	21.49	23.04
15	12.68	10.03	12.48	15.07	14.27	10.34	20.48	12.89	13.35	18.68	20.63	22.69
16	12.16	8.25	10.67	14.51	14.58	13.47	19.70	11.35	16.85	18.77	20.44	22.84
17	11.66	10.23	10.57	13.66	15.73	13.79	19.60	12.57	16.68	18.61	20.26	24.20
18	11.37	10.56	10.28	12.28	16.25	14.63	18.27	10.90	16.10	21.79	19.67	24.09
19	11.15	10.07	10.42	12.86	17.01	13.55	18.15	13.06	17.94	21.62	20.29	20.17
20	13.81	9.77	10.44	12.87	17.33	14.96	20.75	16.10	16.00	15.25	26.05	18.99
21	12.84	10.29	8.50	12.34	17.69	15.24	21.04	19.96	17.12	16.09	26.47	20.76
22	11.84	10.85	10.18	11.91	16.92	14.12	20.87	19.61	15.88	14.71	24.74	20.27
23	11.12	9.82	9.51	11.73	17.85	15.82	21.45	17.01	18.03	12.01	24.34	18.89
24	10.99	11.11	9.89	12.50	17.35	16.36	20.82	15.52	15.30	12.85	25.01	17.63
25	10.45	10.10	13.16	13.04	17.05	16.40	20.43	12.55	15.06	13.40	23.28	16.16
26	9.49	9.69	14.93	14.29	17.74	16.99	19.09	15.02	16.49	10.32	30.27	14.77
27	10.57	8.48	14.00	13.71	17.08	17.69	19.92	13.42	14.63	10.53	30.30	15.20
28	10.82	8.80	13.12	12.12	15.69	17.39	19.43	14.37	13.46	10.90	29.96	16.75
29	10.63	9.40	13.04	12.34	---	16.62	16.33	12.91	17.66	8.24	24.18	18.10
30	11.14	9.23	15.40	12.83	---	16.33	14.97	13.29	18.29	8.82	21.83	16.18
31	11.36	---	14.88	13.58	---	17.58	---	11.90	---	8.52	22.38	---
MAX	15.88	11.66	15.40	16.23	20.34	17.69	21.45	20.40	18.29	21.79	30.30	30.78
WTR YR 1981	MEAN	15.21	HIGH	8.24	LOW	30.78						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 25...	1045	800	7.5	23.0	12.5	.3	340	0	80	35	38	19
DATE	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)	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)
AUG 25...	.9	2.8	430	0	353	22	95	16	2.0	12	506	493
DATE	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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 25...	.07	.630	.21	.84	.91	4.0	.310	.95	410	20	2.3	

GROUND-WATER RECORDS

451

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, 8.41 ft (2.563 m) Sept. 29; minimum daily low, 4.63 ft (1.411 m) June 6.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.82	7.37	7.32	7.05	7.52	6.10	6.99	5.56	4.79	5.96	6.81	7.73
2	6.85	7.42	7.30	7.16	7.49	6.18	7.04	5.50	4.73	6.03	6.79	7.83
3	6.87	7.37	7.42	7.24	7.48	6.25	6.98	5.44	4.69	6.04	6.76	7.84
4	6.97	7.33	7.41	7.44	7.44	6.21	6.94	5.39	4.72	5.99	6.82	7.88
5	7.07	7.37	7.30	7.40	7.46	6.23	7.02	5.36	4.75	6.04	6.90	7.92
6	7.08	7.36	7.25	7.32	7.31	6.29	7.16	5.30	4.63	6.25	6.92	7.92
7	7.00	7.33	7.26	7.33	7.28	6.35	7.14	5.23	4.71	6.41	6.93	7.83
8	6.95	7.34	7.19	7.37	7.18	6.39	7.07	5.18	4.68	6.50	6.97	7.71
9	7.02	7.34	7.11	7.42	7.23	6.38	7.10	5.18	4.81	6.54	7.07	7.76
10	7.03	7.49	7.06	7.52	7.22	6.33	7.11	5.13	4.87	6.78	7.23	7.75
11	7.04	7.58	6.99	7.51	7.29	6.27	7.03	5.02	4.94	6.84	7.25	7.79
12	7.14	7.62	6.84	7.50	7.37	6.21	6.88	4.97	5.01	6.74	7.28	7.83
13	7.17	7.57	6.79	7.40	7.33	6.21	6.57	4.91	5.09	6.73	7.31	7.88
14	7.19	7.50	6.75	7.46	7.25	6.32	6.34	4.82	5.03	6.78	7.33	7.90
15	7.15	7.52	6.69	7.56	7.17	6.28	6.37	4.72	5.01	6.83	7.24	7.93
16	7.20	7.61	6.65	7.66	7.07	6.43	6.26	4.79	5.03	6.74	7.32	7.93
17	7.17	7.62	6.66	7.64	7.01	6.44	6.11	4.81	5.01	6.75	7.34	7.95
18	7.11	7.53	6.63	7.62	6.92	6.48	6.13	4.80	5.21	6.87	7.31	7.97
19	7.17	7.64	6.86	7.61	6.74	6.55	6.12	4.76	5.08	6.89	7.26	7.92
20	7.19	7.66	6.89	7.61	6.42	6.70	6.18	4.87	5.09	6.76	7.25	7.92
21	7.26	7.65	6.93	7.65	6.29	6.84	6.22	4.92	5.30	6.55	7.28	7.97
22	7.37	7.71	6.90	7.64	6.16	6.87	6.18	5.16	5.32	6.53	7.30	8.08
23	7.39	7.71	6.75	7.61	5.95	6.90	6.04	5.03	5.86	6.51	7.32	8.16
24	7.36	7.62	6.79	7.63	6.02	6.94	5.96	5.04	5.75	6.44	7.35	8.20
25	7.18	7.71	6.87	7.63	6.05	7.02	6.06	5.29	5.73	6.44	7.47	8.20
26	7.30	7.75	6.83	7.55	6.15	6.97	6.09	5.23	5.83	6.52	7.51	8.13
27	7.33	7.60	6.95	7.54	6.16	7.08	6.10	5.14	5.86	6.66	7.53	8.14
28	7.29	7.42	6.97	7.53	6.07	7.07	5.84	5.12	5.86	6.00	7.62	8.32
29	7.35	7.34	6.95	7.70	---	6.96	5.88	5.10	5.90	6.66	7.66	8.41
30	7.38	7.37	7.00	7.75	---	6.89	5.73	5.00	5.95	6.75	7.66	8.40
31	7.34	---	6.94	7.71	---	6.94	---	4.90	---	6.78	7.70	---
MAX	7.39	7.75	7.42	7.75	7.52	7.08	7.16	5.56	5.95	6.89	7.70	8.41
WTR YR 1981	MEAN	6.76		HIGH	4.63		LOW	8.41				

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 m), 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 daily low, 37.01 ft (11.281 m) Sept. 30; minimum daily low, 34.61 ft (10.549 m) May 11.

WATER LEVEL: IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.11	36.53	36.01	35.54	35.68	35.22	35.05	34.74	35.36	34.95	35.86	36.41
2	36.19	36.52	36.01	35.55	35.55	35.18	35.07	34.75	35.46	34.97	35.83	36.42
3	36.22	36.44	36.11	35.53	35.58	35.19	35.05	34.72	35.50	34.96	35.80	36.43
4	36.27	36.48	36.10	35.54	35.60	35.17	35.05	34.67	35.76	34.91	35.85	36.41
5	36.28	36.53	36.09	35.53	35.60	35.14	34.90	34.69	35.95	34.84	35.91	36.43
6	36.27	36.53	36.08	35.50	35.59	35.16	34.99	34.70	36.04	34.84	36.00	36.43
7	36.31	36.49	36.02	35.56	35.69	35.17	35.02	34.73	36.14	34.91	36.01	36.38
8	36.36	36.49	35.86	35.58	35.69	35.16	35.02	34.74	35.98	34.96	36.01	36.37
9	36.43	36.49	35.77	35.61	35.67	35.13	35.06	34.74	35.60	35.00	36.02	36.43
10	36.43	36.52	35.82	35.64	35.66	35.11	35.07	34.70	35.48	35.05	36.02	36.45
11	36.45	36.55	35.84	35.62	35.53	35.12	35.04	34.61	35.41	35.07	36.03	36.49
12	36.56	36.55	35.82	35.58	35.60	35.12	34.89	34.66	35.37	35.07	36.08	36.49
13	36.67	36.50	35.75	35.57	35.59	35.15	34.87	34.70	35.32	35.09	36.12	36.46
14	36.69	36.49	35.77	35.60	35.55	35.15	34.89	34.69	35.18	35.19	36.14	36.40
15	36.69	36.51	35.76	35.65	35.47	35.12	34.94	34.70	35.10	35.26	36.13	36.45
16	36.71	36.50	35.74	35.67	35.39	35.11	34.93	34.72	35.09	35.34	36.04	36.46
17	36.71	36.43	35.74	35.65	35.30	35.08	34.86	34.71	35.10	35.41	36.05	36.49
18	36.68	36.32	35.72	35.60	35.29	35.08	34.79	34.67	35.03	35.45	36.10	36.50
19	36.64	36.32	35.77	35.59	35.28	35.08	34.78	34.69	35.08	35.45	36.14	36.48
20	36.65	36.32	35.75	35.62	35.29	35.07	34.79	34.73	35.06	35.42	36.18	36.44
21	36.70	36.33	35.72	35.64	35.31	35.11	34.82	34.75	35.01	35.45	36.23	36.44
22	36.77	36.33	35.69	35.64	35.32	35.12	34.89	34.77	34.89	35.53	36.24	36.58
23	36.79	36.30	35.65	35.65	35.29	35.11	34.83	34.77	34.91	35.59	36.23	36.73
24	36.80	36.20	35.62	35.73	35.23	35.12	34.79	34.78	35.02	35.64	36.22	36.85
25	36.75	36.18	35.73	35.75	35.31	35.18	34.81	34.82	35.01	35.67	36.28	36.90
26	36.58	36.25	35.65	35.72	35.36	35.18	34.80	34.96	35.00	35.65	36.34	36.92
27	36.57	36.26	35.60	35.65	35.35	35.05	34.75	35.00	35.01	35.67	36.39	36.93
28	36.49	36.07	35.57	35.72	35.26	35.06	34.72	35.12	34.97	35.67	36.44	36.97
29	36.53	36.00	35.51	35.79	---	35.02	34.71	35.20	34.92	35.73	36.45	37.00
30	36.53	36.01	35.51	35.80	---	34.99	34.72	35.24	34.92	35.79	36.41	37.01
31	36.51	---	35.53	35.79	---	35.03	---	35.29	---	35.83	36.38	---
MAX	36.80	36.55	36.11	35.80	35.69	35.22	35.07	35.29	36.14	35.83	36.45	37.01
WTR YR 1981	MEAN	35.66		HIGH	34.61		LOW	37.01				

GROUND-WATER RECORDS

453

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, 25.60 ft (7.803 m) Aug. 28; minimum daily low, 5.03 ft (1.533 m) June 17-18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.78	---	8.30	8.05	---	6.34	7.25	6.46	5.92	5.42	6.99	21.94
2	18.59	---	8.43	8.13	---	6.40	7.29	6.51	5.88	5.45	6.94	21.36
3	20.64	---	8.52	8.16	---	6.43	7.21	6.51	5.85	5.51	6.93	21.24
4	21.44	---	8.49	8.22	8.04	6.40	7.12	6.50	5.91	5.50	14.03	21.15
5	21.85	---	8.43	---	8.04	6.42	7.21	6.48	5.93	5.54	12.69	21.12
6	22.04	---	8.40	---	7.91	6.53	7.33	6.49	5.92	5.70	8.83	21.13
7	21.02	---	8.38	---	7.89	6.63	7.27	6.48	5.99	5.83	7.52	21.10
8	21.83	---	8.33	---	7.83	6.67	7.15	6.41	5.96	5.89	7.14	19.07
9	22.30	---	8.28	---	7.88	6.67	7.23	6.37	5.99	5.93	7.12	20.07
10	22.36	---	8.30	---	7.88	6.61	7.24	6.32	5.99	6.05	7.12	20.57
11	17.22	---	8.32	---	7.96	6.62	7.13	6.16	6.06	6.11	7.09	20.85
12	21.38	8.82	8.24	---	8.01	6.60	7.10	6.11	6.06	6.17	7.10	21.00
13	22.21	8.73	8.25	---	7.94	6.63	7.07	6.00	6.06	6.20	7.15	21.09
14	22.54	8.61	8.22	---	7.80	6.71	7.03	5.90	5.80	6.29	7.19	21.17
15	22.82	8.61	8.16	---	7.69	6.66	7.06	5.72	5.43	6.35	7.11	21.31
16	22.99	8.66	8.16	---	7.54	6.69	6.92	5.65	5.06	6.38	7.20	21.40
17	23.05	8.60	8.16	---	7.44	6.69	6.70	5.52	5.03	6.46	7.25	21.51
18	23.16	8.57	8.15	---	7.32	6.70	6.66	5.51	5.03	6.53	7.27	21.54
19	13.99	8.57	8.38	---	7.12	6.73	6.63	5.49	5.05	6.57	7.28	21.46
20	11.74	8.56	8.42	---	6.86	6.83	6.60	5.57	5.06	6.43	7.32	21.49
21	10.75	8.58	8.41	---	6.85	7.00	6.58	5.62	5.09	6.53	7.41	13.71
22	10.20	8.58	8.35	---	6.72	7.01	6.47	5.67	5.16	6.61	7.48	11.21
23	9.81	8.54	8.16	---	6.47	7.03	6.31	5.73	5.30	6.64	7.50	10.32
24	9.43	8.49	8.26	---	6.46	7.09	6.38	5.79	5.32	6.65	16.71	9.65
25	18.65	8.56	8.28	---	6.47	7.16	6.51	5.88	5.34	6.70	23.36	9.20
26	21.14	8.58	8.20	---	6.52	7.13	6.52	5.94	5.35	6.72	23.93	8.81
27	21.99	8.40	8.23	---	6.50	7.27	6.53	5.89	5.25	6.81	24.81	8.53
28	22.67	8.23	8.22	---	6.34	7.27	6.51	5.88	5.25	6.72	25.60	8.43
29	23.05	8.29	8.11	---	---	7.14	6.48	5.86	5.33	6.83	---	8.34
30	23.17	8.34	8.10	---	---	7.14	6.45	5.80	5.38	6.88	---	8.21
31	---	---	8.03	---	---	7.20	---	5.91	---	6.93	---	---
MAX	23.17	8.82	8.52	8.22	8.04	7.27	7.33	6.51	6.06	6.93	25.60	21.94
WTR YR 1981	MEAN	9.36		HIGH	5.03		LOW	25.60				

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, 13.27 ft (4.045 m) Sept. 9; minimum daily low, 7.93 ft (2.417 m) June 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.77	12.16	11.66	11.50	11.35	9.60	10.83	10.09	10.07	9.50	11.43	12.78
2	11.77	12.16	11.67	11.59	11.34	9.92	10.95	10.13	10.11	9.40	11.45	12.74
3	---	12.35	11.71	11.61	11.22	9.93	10.81	10.16	10.04	9.55	11.45	12.75
4	---	12.03	12.05	11.71	11.37	9.87	10.89	10.23	10.06	9.63	11.50	12.64
5	---	12.01	12.07	11.73	11.30	10.01	10.82	10.18	10.04	9.76	11.66	12.65
6	---	11.93	11.70	11.66	11.24	9.96	10.88	10.30	10.37	9.80	11.66	12.62
7	---	11.84	11.60	11.70	11.24	10.18	10.99	10.07	10.42	10.39	11.43	12.75
8	---	11.97	11.61	11.60	11.31	10.22	10.82	9.92	10.45	10.51	11.87	13.21
9	---	11.89	11.61	11.59	11.36	10.11	10.95	10.15	10.36	10.52	11.83	13.27
10	---	11.93	11.99	11.73	11.25	10.33	10.88	10.08	10.15	10.65	11.83	13.25
11	---	12.06	11.70	11.80	10.99	10.35	10.85	9.86	10.26	10.80	11.86	13.08
12	---	11.89	11.64	11.77	10.55	10.12	10.95	9.24	10.36	10.84	11.89	13.05
13	---	11.80	11.65	11.75	10.38	10.18	11.01	8.98	10.30	10.90	11.91	13.00
14	---	11.76	11.63	11.74	10.65	10.27	10.26	9.01	9.50	11.04	11.93	12.91
15	---	11.91	11.53	11.74	10.57	10.23	10.41	8.80	8.13	11.19	11.85	12.80
16	12.27	11.84	11.48	11.74	10.50	10.47	10.16	8.40	7.93	10.96	11.81	12.65
17	12.24	11.71	11.50	11.86	10.23	10.49	10.01	8.55	8.40	11.21	11.76	12.70
18	12.15	11.76	11.52	11.78	9.85	10.43	10.13	8.74	8.55	11.28	12.00	12.55
19	12.30	11.75	11.68	11.82	9.52	10.38	10.17	8.89	8.83	11.25	12.23	12.40
20	12.15	11.69	12.16	11.75	9.34	10.41	10.09	8.91	9.09	11.44	---	12.43
21	12.09	11.73	12.05	11.78	9.31	10.74	10.09	9.43	9.18	11.21	---	12.50
22	12.16	11.84	11.74	11.75	9.22	10.63	10.17	9.70	9.35	10.76	---	12.46
23	12.13	11.70	11.74	11.70	9.06	10.63	10.21	9.81	9.63	11.13	---	12.59
24	12.28	11.95	11.81	11.74	9.38	10.66	10.11	10.10	9.78	11.13	---	12.58
25	12.00	11.78	11.79	11.70	9.42	10.78	10.28	10.23	9.68	11.14	---	12.38
26	12.11	11.75	11.80	11.74	9.50	10.77	10.21	10.07	9.10	11.11	---	12.43
27	12.08	11.60	11.75	11.58	9.51	10.79	10.24	10.16	8.57	11.16	---	12.34
28	12.04	11.50	11.43	11.35	9.65	11.05	10.28	10.02	8.73	11.17	---	12.43
29	12.14	11.60	11.84	11.41	---	11.08	10.43	10.15	9.03	11.08	13.09	12.30
30	12.14	11.61	12.03	11.43	---	10.83	10.33	10.30	9.61	11.11	13.11	12.42
31	12.16	---	11.65	11.34	---	10.81	---	9.91	---	11.18	12.77	---
MAX	12.30	12.35	12.16	11.86	11.37	11.08	11.01	10.30	10.45	11.44	13.11	13.27
WTR YR 1981	MEAN	11.05	HIGH	7.93	LOW	13.27						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 20...	1130	1100	7.3	24.0	13.0	.2	540	220	130	53	30	11
DATE	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)	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)
AUG 20...	.6	3.5	394	0	323	32	72	8.2	1.8	15	851	509
DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 20...	.01	.490	.10	.59	.60	2.7	.010	.03	1500	7	6.6	

GROUND-WATER RECORDS

455

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, 22.82 ft (6.956 m) Mar. 23; minimum daily low, 11.21 ft (3.417 m) Oct. 2, 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.24	14.28	13.78	13.58	15.23	18.76	20.88	20.42	18.79	15.55	14.32	14.40
2	11.21	14.27	13.83	13.66	15.31	19.01	20.80	20.41	18.66	15.53	14.28	14.75
3	11.21	14.18	13.91	13.66	15.33	19.25	20.84	20.28	18.52	15.51	14.23	14.76
4	11.32	14.04	13.89	13.74	15.39	19.39	21.05	20.20	18.40	15.42	14.19	14.51
5	11.41	13.99	13.80	13.75	15.40	19.64	21.27	20.15	18.30	15.28	14.15	14.30
6	11.41	13.93	13.77	13.68	15.35	19.90	21.48	20.13	18.17	15.21	14.07	14.16
7	11.46	13.82	13.76	13.66	15.35	20.14	21.73	20.10	18.07	15.16	13.97	14.09
8	11.67	13.79	13.72	13.70	15.39	20.35	21.87	20.07	17.98	15.14	13.88	14.00
9	11.93	13.66	13.70	13.74	15.43	20.53	21.98	20.05	17.85	15.03	13.86	14.03
10	12.09	13.74	13.74	13.82	15.43	20.69	21.75	20.02	17.94	14.93	13.84	14.02
11	12.32	13.83	13.75	13.87	15.52	20.87	21.69	20.02	18.00	14.85	13.78	14.00
12	12.59	13.89	13.72	13.93	15.63	21.02	21.26	20.02	17.99	14.63	13.74	13.99
13	12.80	13.88	13.73	14.10	15.68	21.22	21.27	20.00	18.05	14.34	13.68	13.93
14	12.94	13.96	13.72	14.75	15.67	21.40	21.15	19.98	18.12	14.95	13.64	13.88
15	13.13	14.03	13.68	14.62	15.64	21.54	21.12	19.95	17.42	13.94	13.53	13.94
16	13.25	14.12	13.66	14.68	15.59	21.71	21.04	19.97	16.89	14.09	13.48	14.28
17	14.05	14.13	13.69	14.71	15.56	21.88	20.92	19.94	16.71	14.10	13.46	14.12
18	14.75	14.18	13.61	14.73	15.54	22.04	20.86	19.90	16.55	14.08	13.43	14.28
19	14.61	14.18	13.80	14.74	15.47	22.21	20.82	19.85	16.23	14.03	13.46	14.50
20	14.42	14.16	13.84	14.79	15.35	22.40	20.77	19.85	16.03	13.94	13.52	14.61
21	14.42	14.11	13.86	14.84	15.33	22.59	20.75	19.84	15.96	13.95	13.60	14.32
22	14.49	14.11	13.84	14.84	15.22	22.75	20.68	19.84	15.98	14.12	13.69	14.06
23	14.53	14.06	13.69	15.46	15.90	22.82	20.56	19.77	16.03	14.16	13.73	13.99
24	14.50	13.99	13.76	15.57	16.92	22.35	20.57	19.66	16.03	14.15	13.78	13.89
25	14.42	14.04	13.80	15.28	17.66	22.01	20.57	19.56	15.91	14.15	13.91	13.82
26	14.56	14.04	13.75	15.21	18.21	21.84	20.54	19.45	15.86	14.13	14.02	13.70
27	14.57	13.94	13.78	15.21	18.40	21.65	20.53	19.34	15.82	14.16	14.16	13.60
28	14.59	13.82	13.77	15.26	18.55	21.55	20.56	19.21	15.75	14.11	14.24	13.56
29	14.58	13.83	13.70	15.34	---	21.32	20.46	19.10	15.67	14.27	14.28	13.53
30	14.52	13.85	13.64	15.38	---	21.13	20.42	18.99	15.58	14.31	14.26	13.49
31	14.40	---	13.59	15.38	---	21.02	---	18.87	---	14.32	14.21	---
MAX	14.75	14.28	13.91	15.57	18.55	22.82	21.98	20.42	18.79	15.55	14.32	14.76
WTR YR 1981	MEAN	16.08	HIGH	11.21	LOW	22.82						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 20...	1515	2220	7.0	24.0	12.5	.2	1400	1000	460	52	39	6
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS CO3)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	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)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
AUG 20...	.5	5.1	428	0	351	68	1000	21	.6	11	4240	1810
DATE	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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 20...	.05	.600	.20	.80	.85	3.8	.010	.03	11000	1100	1.9	

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, 175.00 ft (53.340 m) July 1; minimum recorded daily low, 146.60 ft (44.684 m) Jan. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165.20		159.70	146.60	---				---	175.00	169.50	155.11
2	165.30		163.10	---	---				---	173.50	169.70	152.70
3	164.80		---	---	---				---	---	169.90	155.40
4	165.30		---	---	---				---	---	170.20	152.90
5	---		162.80	---	---				---	---	171.80	152.20
6	---		163.10	163.00	---				---	---	172.50	165.00
7	---		---	---	---				---	---	172.00	---
8	---		---	---	---				---	---	---	164.20
9	---		---	159.30	---				---	---	171.80	164.40
10	---		---	---	---				---	---	171.70	---
11	---		---	---	---				---	---	171.90	165.40
12	---		---	---	---				---	---	---	162.50
13	---		---	---	162.90				---	---	171.80	163.50
14	---		---	---	---				---	---	171.80	151.20
15	---		---	---	---				---	---	---	151.00
16	---		---	---	---				---	---	---	163.60
17	---		---	---	---				---	---	171.80	151.80
18	---		---	---	---				---	---	172.00	151.00
19	---		---	---	---				---	---	172.20	150.76
20	---		---	---	---				---	---	173.30	150.30
21	---		---	---	---				---	---	173.40	---
22	165.10		---	---	---				---	---	172.30	150.50
23	165.40		---	---	---				---	---	172.50	150.40
24	164.60		---	---	---				---	---	---	150.40
25	164.60		---	---	---				---	---	173.00	150.20
26	164.60		---	---	---				---	---	---	---
27	161.50		---	---	162.30				---	---	---	---
28	163.00		---	---	---				---	---	---	---
29	---		---	---	---				---	---	---	---
30	---		148.40	---	---				174.50	169.80	---	---
31	---		148.30	---	---				---	169.20	---	---
MAX	165.40		163.10	163.00	162.90				174.50	175.00	173.40	165.40
WTR YR 1981	MEAN	163.49		HIGH	146.60		LOW	175.00				

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	
AUG 27...	1250	355	6.7	27.0	13.0	.0	150	27	39	12	3.2	4	
		SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	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)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, 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)
AUG 27...	.1	1.7	150	0	123	48	56	6.8	.1	10	237	211	
		NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	
AUG 27...	.04	.070	.10	.17	.21	.93	.400	1.2	7300	900	1.1		

GROUND-WATER RECORDS

457

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, 74.29 ft (22.644 m) Sept. 13; minimum daily low, 67.93 ft (20.705 m) Jan. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71.04	70.09	69.94	68.55	69.46	70.53	71.82	73.24	72.50	73.49	73.72	73.90
2	71.04	69.75	70.69	68.44	70.63	71.09	71.68	73.44	72.63	73.54	71.87	74.13
3	71.07	69.72	70.77	68.65	70.87	70.68	71.14	73.53	73.32	73.64	72.92	74.09
4	71.07	70.05	70.65	68.71	71.12	70.32	71.57	73.10	73.47	71.70	73.03	74.24
5	70.11	70.04	70.50	68.74	70.96	70.76	70.45	72.88	73.20	70.26	73.07	74.17
6	70.78	70.07	69.78	68.72	71.05	70.87	71.90	72.90	73.15	72.56	73.32	72.98
7	70.82	69.43	70.49	68.92	71.10	70.87	71.36	73.18	70.97	72.73	73.26	72.16
8	70.81	68.18	70.56	69.13	70.26	70.33	71.75	73.28	72.37	72.40	72.82	73.42
9	70.94	68.02	70.57	69.23	70.93	70.36	72.20	73.37	72.74	70.91	72.09	73.43
10	70.95	70.15	70.75	69.16	71.04	69.80	72.11	70.83	73.04	72.83	72.78	73.95
11	69.81	70.12	70.83	68.65	71.78	70.94	72.37	72.98	73.22	72.58	73.03	74.15
12	69.78	69.93	70.75	68.45	71.86	70.35	71.18	73.25	73.22	71.99	72.92	74.24
13	70.56	69.86	70.86	68.48	71.46	70.41	72.17	73.32	72.48	72.63	73.51	74.29
14	70.77	70.24	70.26	68.58	71.35	70.44	73.11	73.04	71.81	72.98	73.45	73.75
15	71.11	69.92	69.52	68.97	70.68	69.39	73.15	73.24	72.61	73.01	72.63	73.93
16	71.22	69.68	69.93	69.56	70.77	70.47	72.96	73.15	72.86	73.05	72.13	74.23
17	70.55	69.45	69.94	69.57	70.77	70.63	72.66	73.16	72.91	73.33	72.52	74.10
18	70.77	69.66	69.77	68.86	70.64	70.73	71.54	72.83	73.07	73.10	72.66	74.15
19	70.20	69.63	70.35	67.93	70.70	70.65	71.53	72.97	73.14	73.08	73.38	73.90
20	70.33	69.50	70.44	70.11	70.72	70.96	72.55	73.50	72.40	72.97	73.54	72.68
21	70.47	69.76	70.41	70.32	70.28	70.42	72.66	73.59	71.92	73.35	73.62	73.50
22	70.61	69.69	69.55	69.97	69.26	69.76	72.38	73.56	71.84	73.04	73.69	73.57
23	70.56	68.49	69.68	69.77	70.66	71.37	72.48	73.03	73.34	73.35	73.41	73.34
24	70.11	69.92	69.68	69.79	71.03	71.63	72.77	72.82	73.10	72.11	73.53	73.33
25	69.50	69.92	68.57	70.43	71.48	71.77	72.36	72.31	73.51	73.34	73.76	72.71
26	69.77	69.92	68.31	70.62	71.29	71.49	71.86	73.22	73.62	73.40	73.83	71.15
27	69.94	69.60	68.75	70.14	70.97	71.37	72.06	72.98	73.49	73.11	73.93	70.84
28	70.36	69.11	68.77	70.54	71.03	71.00	72.00	73.15	72.60	73.19	74.07	72.16
29	70.37	69.57	68.77	70.96	---	70.67	72.98	72.49	73.02	73.51	74.14	72.15
30	70.33	69.61	68.73	71.13	---	71.17	72.87	71.63	73.39	73.53	73.63	71.97
31	69.94	---	68.53	70.60	---	71.32	---	70.89	---	73.59	73.95	---
MAX	71.22	70.24	70.86	71.13	71.86	71.77	73.15	73.59	73.62	73.64	74.14	74.29
WTR YR 1981	MEAN	71.53		HIGH	67.93		LOW	74.29				

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 recorded daily low, 12.13 ft (3.697 m) Aug. 25; minimum recorded daily low, 7.80 ft (2.377 m) June 6-7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	11.90	11.88	11.90	10.72	11.56	10.36	9.72		---	11.01
2		---	11.92	11.89	11.83	10.75	11.64	10.20	9.75		---	10.97
3		---	11.92	11.89	11.80	10.76	11.34	10.28	9.80		---	10.94
4		---	11.91	11.91	11.78	10.76	11.34	10.25	9.86		---	10.72
5		11.89	11.90	11.91	11.78	10.78	11.34	10.19	9.88		---	10.68
6		11.89	11.91	11.90	11.77	10.79	11.35	10.18	7.80		---	10.68
7		11.89	11.91	11.92	11.77	10.81	11.34	10.11	7.80		---	10.69
8		11.90	11.90	11.92	11.79	10.83	11.34	10.28	7.95		---	10.72
9		11.91	11.89	11.93	11.79	10.84	11.35	10.09	8.15		---	10.76
10		11.92	11.87	11.93	11.79	10.84	11.35	10.09	8.28		---	10.80
11		11.94	11.84	11.94	11.38	10.86	11.35	10.07	---		---	10.83
12		11.98	11.82	11.94	11.11	10.86	10.86	9.94	---		---	10.87
13		12.01	11.81	11.95	11.13	10.89	10.58	9.91	---		---	10.97
14		11.96	11.81	11.95	11.15	10.91	10.48	9.88	---		---	11.03
15		11.96	11.80	11.96	11.15	10.91	10.49	9.80	---		---	10.63
16		11.96	11.79	11.97	11.16	10.94	10.43	9.75	---		---	10.62
17		11.96	11.80	11.97	10.86	10.96	10.46	9.74	---		---	10.64
18		11.97	11.81	11.98	10.85	10.97	10.50	9.74	---		---	10.67
19		11.97	11.83	11.98	10.82	10.99	10.45	9.65	---		---	10.68
20		11.97	11.83	11.98	10.71	11.03	10.83	9.91	---		---	10.72
21		11.97	11.83	11.99	10.68	11.05	10.87	9.77	---		---	10.76
22		11.97	11.83	11.99	10.66	11.07	10.49	9.82	---		---	10.81
23		11.97	11.83	11.99	10.65	11.09	10.45	9.81	---		---	10.84
24		11.97	11.85	11.99	10.67	11.11	10.33	9.84	---		---	10.89
25		12.01	11.85	11.99	10.68	11.13	10.34	10.14	---		12.13	10.90
26		11.99	11.85	11.95	10.69	11.14	10.36	10.20	---		11.87	10.92
27		11.96	11.86	11.93	10.69	11.17	10.38	10.00	---		11.80	10.97
28		11.92	11.86	11.91	10.70	11.26	10.42	10.01	---		11.78	11.00
29		11.91	11.87	11.93	---	11.21	10.34	10.04	---		11.77	11.02
30		11.91	11.87	11.93	---	11.23	10.32	10.06	---		11.77	11.03
31		---	11.87	11.93	---	11.26	---	9.69	---		11.76	---
MAX		12.01	11.92	11.99	11.90	11.26	11.64	10.36	9.88		12.13	11.03
WTR YR 1981	MEAN	11.11										
				HIGH	7.80		LOW	12.13				

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

GROUND-WATER RECORDS

459

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 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS 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)
NOV 05...	1245	715	7.9	14.0	320	75	31	354	0	290
FEB 10...	1415	675	7.2	11.5	350	79	36	368	0	302
MAY 14...	0900	690	7.4	12.5	330	81	32	384	0	315
AUG 04...	1015	690	7.4	13.0	320	74	32	376	0	308

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE DIS-SOLVED (MG/L AS CL)	FLUORIDE TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 05...	7.4	55	30	.3	466	.00	.000	60	10	20
FEB 10...	36	59	24	.6	432	.03	.000	--	--	--
MAY 14...	23	66	23	.4	440	--	<.010	--	--	--
AUG 04...	23	60	24	--	--	--	<.010	130	10	20

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL 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, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 05...	10	--	2	1600	--	2	50	30	30
FEB 10...	--	--	--	1600	--	--	40	--	--
MAY 14...	--	--	--	1500	--	--	40	--	--
AUG 04...	20	1	<1	1600	7	7	40	40	<4

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 1980 TO SEPTEMBER 1981

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS 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)
DEC 11...	1330	920	7.1	12.0	350	89	31	488	--	400
MAR 11...	1315	850	7.6	12.0	430	110	37	468	0	384
MAY 18...	1100	920	7.4	13.0	390	100	33	454	0	372
AUG 04...	1145	900	7.0	14.5	380	96	33	444	0	364

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
DEC 11...	62	78	63	.1	561	--	40	30	10
MAR 11...	19	86	39	--	560	<.010	--	--	--
MAY 18...	25	75	60	.6	580	<.010	--	--	--
AUG 04...	66	76	59	.3	--	<.010	120	50	10

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL 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, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 11...	<10	7	0	2600	4	0	160	50	0
MAR 11...	--	--	--	3100	--	--	230	--	--
MAY 18...	--	--	--	2900	--	--	170	--	--
AUG 04...	10	2	2	3100	5	5	170	40	<4

GROUND-WATER RECORDS

461

MONTGOMERY COUNTY--Continued

394012084151700. Local number, MT-55.

LOCATION.--Lat 39°40'12"N, long 84°15'17"W, 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, 26.57 ft (8.099 m) June 8, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 34.32 ft (10.461 m) Feb. 9; minimum daily low, 27.84 ft (8.486 m) June 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.21	32.20	32.93	33.25	33.95	33.02	34.11	32.41	29.98	29.10	31.49	33.63
2	32.12	32.23	32.81	33.46	33.90	33.15	34.15	32.34	30.07	29.21	31.41	33.58
3	32.24	32.19	32.86	33.48	34.14	33.27	34.11	31.97	30.21	29.30	31.64	33.47
4	32.26	32.18	32.97	33.49	34.21	33.29	33.98	31.97	30.23	29.34	31.81	33.45
5	32.19	32.18	32.86	33.60	34.22	33.40	33.94	32.01	30.25	29.33	31.95	33.40
6	32.34	32.16	33.02	33.50	34.22	33.50	33.95	32.04	30.15	29.70	31.95	33.40
7	32.37	32.20	33.15	33.50	34.17	33.42	33.94	32.04	29.75	29.80	31.91	33.25
8	32.30	32.27	33.14	33.60	34.11	33.20	33.97	32.03	29.13	29.97	31.82	33.28
9	32.43	32.37	33.20	33.61	34.32	33.30	33.97	31.94	28.92	30.13	31.86	33.57
10	32.53	32.46	33.03	33.61	34.26	33.35	34.04	31.65	29.00	30.27	31.97	33.64
11	32.37	32.58	32.97	33.60	34.32	33.39	33.99	31.75	28.87	30.39	32.12	33.57
12	32.37	32.68	32.87	33.63	34.28	33.50	33.84	31.80	28.93	30.55	32.24	33.52
13	32.55	32.76	32.76	33.77	34.13	33.45	33.59	31.66	28.86	30.75	32.40	33.31
14	32.62	32.84	32.82	33.68	33.90	33.47	33.43	31.74	28.86	30.83	32.46	33.55
15	32.73	32.88	33.00	33.74	33.79	33.31	33.31	31.48	28.55	31.00	32.49	33.63
16	32.71	32.70	33.00	33.70	33.98	33.38	33.12	31.46	28.29	31.07	32.47	33.60
17	32.53	32.72	33.04	33.78	33.97	33.44	33.07	31.07	27.84	31.08	32.55	33.63
18	32.48	32.74	32.89	33.81	33.92	33.61	33.07	30.89	27.92	31.09	32.67	33.67
19	32.36	32.80	33.07	33.85	33.67	33.63	33.07	30.80	27.95	31.23	32.74	33.60
20	32.37	32.77	33.21	33.81	33.48	33.61	32.99	30.68	28.16	31.19	32.85	33.52
21	32.38	32.79	33.28	33.74	33.36	33.55	33.17	30.83	28.17	31.18	32.98	33.67
22	32.47	32.87	33.36	33.75	33.07	33.43	33.23	30.86	28.40	31.14	32.99	33.84
23	32.50	32.87	33.36	33.86	32.93	33.60	33.08	30.74	28.50	31.24	32.89	33.93
24	32.45	33.04	33.18	34.01	33.14	33.69	32.96	30.65	28.53	31.35	33.02	33.94
25	32.26	33.05	33.01	34.04	33.28	33.71	32.73	30.67	28.58	31.36	33.20	33.90
26	32.27	33.08	33.09	34.08	33.25	33.75	32.41	30.79	28.63	31.38	33.45	33.97
27	32.20	33.07	33.25	34.08	33.17	33.82	32.43	30.84	28.63	31.50	33.48	33.91
28	32.15	32.97	33.28	34.02	33.06	33.86	32.46	30.82	28.68	31.56	33.58	34.01
29	32.14	33.04	33.31	34.03	---	33.87	32.43	30.74	28.79	31.69	33.63	34.14
30	32.08	32.99	33.31	34.05	---	33.78	32.36	30.51	28.97	31.73	33.34	34.16
31	32.16	---	33.24	33.96	---	33.86	---	30.24	---	31.69	33.52	---
MAX	32.73	33.08	33.36	34.08	34.32	33.87	34.15	32.41	30.25	31.73	33.63	34.16
WTR YR 1981	MEAN	32.46		HIGH	27.84		LOW	34.32				

GROUND-WATER RECORDS

MONTGOMERY COUNTY--Continued

394025084162800. Local number, MT-49.

LOCATION.--Lat 39°40'25"N, long 84°16'28"W, 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, 22.75 ft (6.934 m) Apr. 8; minimum daily low, 17.43 ft (5.313 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.23	21.06	21.90	22.14	22.50	21.61	22.70	21.14	18.73	18.70	19.86	21.46
2	20.29	21.02	22.02	22.18	22.52	21.67	22.74	20.82	18.69	18.77	19.77	21.47
3	20.36	21.26	22.04	22.20	22.53	21.70	22.72	20.59	18.70	18.56	20.01	21.50
4	20.13	21.36	22.01	22.24	22.58	21.67	22.49	20.88	18.71	18.45	20.20	21.50
5	20.13	21.42	22.07	22.24	22.58	21.70	22.44	20.94	18.74	18.42	20.34	21.27
6	20.41	21.44	21.82	22.18	22.55	21.71	22.72	20.96	18.45	18.75	20.27	21.19
7	20.48	21.48	21.77	22.28	22.53	21.73	22.71	20.62	17.86	18.90	20.26	21.14
8	20.56	21.30	22.00	22.30	22.60	21.75	22.75	20.71	17.99	19.01	20.04	21.48
9	20.65	21.21	22.10	22.35	22.63	21.75	22.70	20.47	18.11	19.10	20.05	21.59
10	20.64	21.58	22.12	22.38	22.61	21.77	22.56	20.40	18.19	19.22	20.36	21.67
11	20.44	21.63	22.14	22.38	22.50	21.79	22.46	20.68	18.27	19.01	20.49	21.69
12	20.44	21.65	22.04	22.38	22.35	21.77	22.31	20.67	18.28	18.99	20.59	21.47
13	20.76	21.67	21.87	22.39	22.26	21.84	22.03	20.62	18.09	19.34	20.67	21.40
14	20.82	21.69	21.81	22.42	22.24	21.88	21.97	20.56	17.93	19.43	20.50	21.70
15	20.86	21.46	21.76	22.48	22.21	21.81	21.96	20.29	17.43	19.50	20.33	21.71
16	20.95	21.47	21.90	22.53	22.20	21.92	21.93	19.84	17.50	19.63	20.39	21.73
17	20.97	21.71	21.87	22.52	22.07	21.90	21.92	19.64	17.60	19.68	20.43	21.82
18	20.67	21.84	21.88	22.51	21.94	21.93	21.69	19.80	17.72	19.47	20.78	21.88
19	20.59	21.84	21.99	22.58	21.83	21.97	21.60	19.61	17.82	19.45	20.85	21.64
20	20.93	21.84	21.98	22.56	21.72	22.03	21.92	19.66	17.64	19.45	20.98	21.54
21	20.98	21.91	21.98	22.58	21.66	22.09	21.99	19.68	17.69	19.39	21.02	21.85
22	21.09	21.68	21.95	22.58	21.58	22.08	22.04	19.71	18.01	19.40	20.82	22.02
23	21.11	21.58	22.19	22.60	21.54	22.25	21.74	19.48	18.07	19.58	20.75	22.06
24	21.07	21.92	22.12	22.61	21.58	22.37	21.57	19.40	18.16	19.71	21.15	21.95
25	20.80	22.00	22.09	22.60	21.57	22.50	21.28	19.38	18.29	19.48	21.22	22.01
26	20.77	21.97	22.07	22.64	21.60	22.54	21.12	19.68	18.35	19.48	21.31	21.82
27	21.02	21.69	22.10	22.65	21.58	22.63	21.34	19.43	18.14	19.54	21.42	21.82
28	21.17	21.88	22.10	22.63	21.60	22.39	21.36	19.34	18.14	19.81	21.49	22.17
29	21.21	21.66	22.10	22.66	---	22.30	21.34	19.16	18.52	19.94	21.25	22.23
30	21.24	21.64	22.12	22.64	---	22.58	21.25	19.07	18.65	20.02	21.18	22.31
31	21.30	---	22.10	22.62	---	22.66	---	18.83	---	20.08	21.49	---
MAX	21.30	22.00	22.19	22.66	22.63	22.66	22.75	21.14	18.74	20.08	21.49	22.31
WTR YR 1981	MEAN	21.06		HIGH	17.43		LOW	22.75				

GROUND-WATER RECORDS

463

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, 30.76 ft (9.376 m) Apr. 28, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low 39.61 ft (12.073 m) Sept. 14; minimum daily low, 30.76 ft (9.376 m) Apr. 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.21	37.22	36.13	36.38	36.70	33.72	32.24	33.14	32.48	34.89	37.61	39.26
2	37.28	37.63	36.40	36.46	36.89	34.49	32.24	33.15	32.45	35.44	37.64	39.37
3	35.79	37.96	36.44	36.43	36.89	34.64	32.05	33.20	32.52	35.71	37.81	39.37
4	34.97	38.34	35.49	36.53	36.73	34.18	32.04	33.44	32.60	35.88	37.92	39.29
5	34.57	38.58	35.88	36.50	36.72	34.68	32.00	33.60	32.60	35.99	37.98	39.17
6	34.25	38.64	36.07	36.22	36.56	34.85	32.07	33.69	32.45	36.17	37.99	39.22
7	33.94	38.69	36.16	36.18	36.53	34.95	32.37	32.86	31.18	36.35	37.96	39.21
8	33.80	37.17	36.27	36.18	36.62	34.96	31.89	33.27	31.30	36.45	37.93	39.34
9	33.68	35.49	36.36	36.15	36.73	34.99	31.98	33.46	31.46	36.52	37.96	39.38
10	33.62	34.76	36.38	36.22	36.73	34.99	31.96	33.50	32.96	36.59	38.17	39.43
11	33.47	34.40	36.38	36.11	36.92	35.03	31.77	33.76	33.70	36.58	38.26	39.48
12	33.35	34.01	36.33	36.08	36.91	35.02	31.70	33.78	34.13	36.64	38.30	39.52
13	33.29	33.69	36.45	36.00	36.70	35.07	31.28	33.75	34.34	36.78	38.35	39.52
14	33.18	33.46	36.42	36.06	36.65	35.11	31.00	34.52	34.34	36.81	38.37	39.61
15	33.08	33.37	36.35	36.13	36.59	34.95	32.19	34.86	33.95	36.90	38.38	39.59
16	33.91	33.27	36.45	36.19	36.60	35.07	32.39	34.48	33.62	36.99	38.41	39.50
17	34.20	33.10	36.46	36.19	36.56	34.97	31.69	34.97	34.00	37.11	38.54	39.54
18	34.34	33.00	36.45	36.04	36.47	33.83	31.27	35.24	34.41	37.14	38.59	39.53
19	34.53	34.24	36.64	36.08	36.36	33.25	31.15	35.37	34.65	37.17	38.69	38.68
20	34.67	34.85	36.63	36.19	36.26	32.98	31.13	34.51	34.81	37.13	38.78	36.83
21	34.87	35.31	36.57	36.30	36.20	32.87	31.10	33.68	34.92	37.18	38.83	35.95
22	34.94	35.48	36.47	36.29	36.09	32.75	30.97	33.36	35.19	37.22	38.83	36.03
23	35.78	35.60	36.39	36.49	36.27	32.53	30.85	33.19	35.32	37.28	38.84	36.77
24	36.41	35.88	36.60	36.62	36.08	32.51	30.87	33.01	35.46	37.35	38.99	37.89
25	34.66	36.01	36.60	36.65	35.80	33.47	30.87	32.93	35.67	37.32	39.09	38.39
26	33.87	36.01	36.45	36.78	35.68	33.79	30.81	32.96	35.77	37.22	39.11	38.62
27	33.94	35.92	36.50	36.84	35.68	32.94	30.79	32.94	35.79	37.35	39.19	38.79
28	33.33	35.95	36.46	36.87	34.30	32.64	30.76	32.91	35.84	37.43	39.23	38.92
29	33.28	36.11	36.35	36.95	---	32.28	32.23	32.76	35.64	37.55	39.23	38.96
30	35.32	36.12	36.36	36.94	---	32.29	32.76	32.63	34.60	37.57	39.15	39.04
31	36.48	---	36.31	36.92	---	32.29	---	32.58	---	37.64	39.23	---
MAX	37.28	38.69	36.64	36.95	36.92	35.11	32.76	35.37	35.84	37.64	39.23	39.61
WTR YR 1981	MEAN	35.54		HIGH	30.76		LOW	39.61				

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
AUG 07...	1410	1300	6.7	31.5	18.0	610	160	150	56	56	17	1.0
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	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)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	
AUG 07...	6.5	548	0	449	175	140	110	.3	13	877	803	
DATE	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 07...	.01	.290	.00	.29	.30	1.3	.360	1.1	870	590	2.2	

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, 22.20 ft (5.767 m) Mar. 10, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 30.64 ft (9.339 m) Sept. 4; minimum daily low, 23.04 ft (7.023 m) May 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.17	26.94	26.50	26.65	26.90	25.83	26.53	26.14	24.27	27.31	28.50	30.34
2	29.61	26.93	26.57	26.77	27.00	25.78	26.60	25.72	25.05	27.25	28.17	30.35
3	29.14	27.19	26.59	26.66	27.01	25.81	27.46	25.68	25.56	27.61	28.85	30.38
4	28.75	27.33	26.73	26.74	27.09	25.77	27.60	26.47	25.89	26.73	29.13	30.64
5	28.49	27.37	26.79	26.70	27.06	25.87	27.02	26.36	26.12	26.23	28.92	30.01
6	28.27	27.22	26.87	27.07	26.95	25.94	26.95	25.68	25.99	27.21	29.40	29.72
7	28.28	27.39	26.82	27.27	26.83	25.86	26.57	25.02	24.92	27.19	29.28	29.28
8	28.49	27.48	26.99	27.09	26.87	25.83	26.64	25.24	25.66	27.61	29.26	30.02
9	28.69	27.49	26.82	27.10	26.88	25.84	26.86	25.14	25.71	27.99	29.04	29.80
10	28.71	27.56	26.61	27.15	26.97	25.73	26.86	24.50	25.91	28.12	29.32	29.88
11	28.49	27.26	26.57	27.12	27.08	25.68	27.00	24.74	26.23	27.99	29.40	30.42
12	28.21	27.01	26.78	27.12	27.05	25.86	26.75	24.26	26.26	27.18	29.30	30.26
13	28.10	26.88	26.93	27.06	27.22	25.72	26.86	24.57	26.22	27.94	29.53	29.54
14	28.10	26.86	26.59	27.00	26.84	25.74	26.81	24.66	25.43	28.08	29.63	30.44
15	28.33	26.84	26.45	27.09	26.80	25.75	26.46	24.11	26.08	28.17	29.65	30.44
16	28.52	26.81	26.78	27.14	27.04	25.88	26.25	24.27	26.09	28.43	28.99	30.02
17	28.64	26.75	26.86	27.17	26.94	25.69	26.56	23.63	26.04	28.67	29.37	29.70
18	28.18	26.73	26.82	27.15	26.90	25.66	26.75	23.32	26.15	28.80	29.49	29.52
19	27.87	26.72	26.68	27.11	26.81	25.69	26.20	23.04	26.21	28.20	29.64	29.12
20	27.73	26.66	26.67	27.02	26.73	25.67	25.81	23.62	25.99	28.28	29.70	28.78
21	28.01	26.66	26.65	27.08	26.40	25.71	25.71	24.04	25.45	28.54	29.89	29.61
22	27.96	26.65	26.58	27.04	26.25	25.69	25.73	24.49	26.29	28.55	29.77	29.28
23	27.67	26.58	26.90	27.08	26.25	25.77	26.19	24.18	26.45	28.58	29.67	28.55
24	27.72	26.57	26.74	27.09	26.19	26.01	25.74	23.52	26.76	28.74	29.74	28.31
25	27.45	26.59	26.73	27.06	26.23	26.05	25.55	23.44	26.90	28.82	29.77	28.70
26	27.35	26.56	26.64	27.30	26.06	26.04	25.43	24.79	26.99	27.96	29.92	28.83
27	27.28	26.44	26.68	27.38	26.09	26.14	26.66	24.64	26.90	28.50	30.07	28.59
28	27.15	26.41	26.66	27.39	25.86	25.86	26.67	24.92	26.14	28.63	30.30	28.67
29	27.11	26.44	26.66	27.20	---	25.68	26.58	24.97	26.82	28.82	30.30	28.23
30	27.03	26.43	26.66	27.17	---	26.17	26.25	24.82	27.23	28.97	29.88	28.40
31	26.97	---	26.64	27.06	---	26.79	---	24.46	---	28.89	30.12	---
MAX	30.17	27.56	26.99	27.39	27.22	26.79	27.60	26.47	27.23	28.97	30.30	30.64
WTR YR 1981	MEAN	27.14		HIGH	23.04		LOW	30.64				

GROUND-WATER RECORDS

465

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 daily low, 17.83 ft (5.435 m) Nov. 25; minimum daily low, 5.85 ft (1.783 m) June 26.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.66	15.54	17.36	14.14	15.23	---	13.93	8.17	9.86	7.89	10.77	
2	15.70	16.27	17.35	13.62	15.58	8.23	13.67	9.18	10.58	8.03	11.07	
3	16.32	16.27	16.64	13.58	15.79	8.58	13.27	8.61	10.26	8.67	11.73	
4	16.15	15.93	16.60	14.15	15.57	9.17	13.45	8.70	10.06	8.24	11.47	
5	16.63	16.07	16.90	14.09	15.54	10.07	13.15	8.47	9.66	8.84	11.79	
6	16.53	16.37	16.57	13.55	16.24	9.46	12.79	8.46	9.12	8.17	11.55	
7	16.50	16.14	16.79	14.18	15.63	11.33	12.04	9.57	10.25	9.32	11.49	
8	17.04	16.11	16.66	14.20	15.43	11.01	11.64	9.26	10.65	9.49	11.36	
9	17.31	16.34	16.84	14.18	15.24	10.72	11.57	8.30	9.38	10.28	11.68	
10	17.27	16.50	16.83	14.40	15.25	10.86	11.56	9.70	8.45	10.79	11.76	
11	17.51	16.48	16.44	14.42	15.34	11.40	11.66	8.88	8.71	11.37	12.30	
12	17.79	16.54	16.22	14.30	15.41	11.75	11.11	9.22	8.17	11.44	13.00	
13	17.51	16.18	16.41	14.34	15.30	11.46	9.56	8.48	7.89	11.21	13.47	
14	17.28	16.00	16.54	---	15.78	11.43	8.82	8.79	6.01	10.70	13.40	
15	17.08	16.55	16.76	---	16.17	11.95	8.88	8.25	7.00	11.41	14.02	
16	17.06	17.15	16.54	---	15.85	13.07	7.99	9.01	6.74	11.27	14.70	
17	17.44	17.12	16.40	14.90	15.58	12.45	7.57	8.98	6.36	10.77	14.64	
18	17.54	17.50	15.55	15.45	15.48	12.09	8.03	8.04	6.50	10.81	14.14	
19	17.54	17.49	14.96	15.16	15.21	12.48	7.07	8.22	6.89	10.72	14.69	
20	17.28	17.44	14.88	15.03	---	12.31	7.77	8.66	7.61	10.88	15.16	
21	17.54	17.54	14.93	15.14	---	12.52	7.38	10.09	6.98	12.20	15.26	
22	17.52	17.54	14.86	15.89	---	12.68	7.63	10.34	6.98	11.59	15.29	
23	17.54	17.54	14.15	15.76	---	12.64	7.66	10.97	7.74	10.74	15.54	
24	17.53	17.75	13.98	15.83	---	12.46	8.23	10.84	6.97	10.98	15.42	
25	16.98	17.83	14.14	16.04	---	13.02	7.88	10.86	6.75	10.99	15.19	
26	15.71	17.55	14.07	15.82	---	12.99	9.21	11.54	5.85	11.09	---	
27	15.97	17.22	14.14	15.84	---	12.65	8.77	10.96	6.12	10.97	---	
28	15.55	17.20	14.82	15.64	---	12.87	8.39	11.07	6.78	10.69	---	
29	15.95	17.54	14.50	16.03	---	12.73	9.78	10.38	7.51	11.21	---	
30	16.34	17.55	13.91	15.81	---	13.27	8.56	9.69	8.48	11.36	---	
31	15.82	---	14.15	15.53	---	13.51	---	9.52	---	11.09	---	
MAX	17.79	17.83	17.36	16.04	16.24	13.51	13.93	11.54	10.65	12.20	15.54	
WTR YR 1981	MEAN	12.86		HIGH	5.85		LOW	17.83				

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 (12.613 m) Dec. 25, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 44.58 ft (13.588 m) Apr. 2; minimum daily low, 40.49 ft (12.341 m) Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.49	40.71	40.96	41.91	42.79	43.33	44.57	44.27	43.47	41.42	41.34	41.79
2	40.72	40.53	41.17	42.01	42.79	43.41	44.58	44.27	43.48	41.42	41.26	41.92
3	40.81	40.50	41.34	42.05	42.85	43.54	44.20	44.12	43.36	41.36	41.28	41.88
4	40.85	40.51	41.33	42.18	42.95	43.53	44.21	44.16	43.39	40.94	41.33	41.89
5	40.80	40.70	41.33	42.18	42.96	43.57	44.14	44.23	43.39	40.70	41.37	41.90
6	40.82	40.74	41.32	42.12	42.93	43.70	44.31	44.26	43.19	40.75	41.44	41.85
7	40.81	40.72	41.07	42.24	42.93	43.76	44.32	44.31	42.98	40.91	41.39	41.56
8	40.74	40.70	41.01	42.33	42.91	43.80	44.32	44.33	42.71	40.95	41.37	41.75
9	40.65	40.57	41.20	42.36	43.05	43.93	44.43	44.30	42.75	40.91	41.37	42.03
10	40.70	40.93	41.40	42.39	43.05	43.97	44.47	43.99	42.85	40.83	41.46	42.25
11	40.70	41.01	41.44	42.24	43.22	43.90	44.36	43.91	42.96	40.83	41.53	42.47
12	40.80	41.11	41.47	42.26	43.34	43.88	44.09	44.04	42.90	40.72	41.57	42.50
13	40.99	41.11	41.53	42.26	43.32	43.90	44.27	44.02	42.78	40.59	41.71	42.47
14	41.07	41.03	41.37	42.20	43.28	43.91	44.47	43.92	42.42	40.71	41.75	42.52
15	41.24	40.95	41.32	42.48	43.20	43.51	44.49	44.02	42.49	40.70	41.60	42.69
16	41.33	40.75	41.66	42.61	43.20	43.82	44.43	44.04	42.40	40.69	41.34	42.77
17	41.21	40.63	41.76	42.61	43.34	43.91	44.30	43.89	42.45	40.73	41.57	42.86
18	41.01	40.92	41.77	42.39	43.37	43.97	44.26	43.80	42.47	40.75	41.65	42.88
19	40.95	41.04	42.02	42.51	43.33	44.06	44.19	43.83	42.33	40.70	41.75	42.86
20	41.12	41.07	42.04	42.73	43.34	44.08	44.09	43.94	42.25	40.82	41.79	42.79
21	41.39	41.17	42.03	42.90	43.36	44.19	44.16	43.94	42.08	40.96	41.86	42.96
22	41.45	41.17	41.71	42.90	43.30	44.19	44.13	43.82	42.10	41.12	41.81	43.20
23	41.41	40.91	41.81	42.87	43.21	43.93	43.98	43.81	42.18	41.14	41.61	43.35
24	41.29	41.04	41.92	42.73	43.41	44.08	44.15	43.41	42.18	41.11	41.85	43.38
25	41.02	41.31	41.91	42.54	43.64	44.28	44.18	43.21	41.95	41.07	42.03	43.37
26	40.78	41.32	41.76	42.63	43.67	44.30	44.09	43.36	41.78	40.78	41.90	43.33
27	40.80	41.15	42.00	42.89	43.67	44.54	44.04	43.45	41.73	40.95	41.77	43.24
28	40.70	40.68	42.01	42.94	43.44	44.54	44.06	43.62	41.51	41.11	41.84	43.32
29	40.82	40.74	41.91	43.12	---	44.29	44.12	43.63	41.36	41.38	41.84	43.43
30	40.82	40.78	42.08	43.15	---	44.31	44.18	43.62	41.41	41.34	41.73	43.48
31	40.77	---	42.06	43.15	---	44.52	---	43.49	---	41.35	41.75	---
MAX	41.45	41.32	42.08	43.15	43.67	44.54	44.58	44.33	43.48	41.42	42.03	43.48
WTR YR 1981	MEAN	42.41		HIGH	40.49		LOW	44.58				

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, 69.60 ft (21.214 m) Feb. 25; minimum daily low, 61.45 ft (18.730 m) May 31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	64.10	64.80	65.20	65.25	66.20	67.15	65.00	61.65	---	64.50	64.40
2	---	64.20	64.95	65.10	65.95	66.45	63.25	64.35	65.95	---	64.65	66.25
3	---	64.05	65.00	64.50	66.00	66.80	64.90	64.45	64.80	---	65.00	65.75
4	---	64.05	65.00	64.60	68.03	66.85	65.55	64.80	68.80	---	65.15	65.70
5	---	64.35	64.95	65.50	66.45	66.30	65.65	65.25	65.35	---	64.85	65.75
6	---	64.05	64.65	65.15	66.25	66.45	65.85	65.30	64.65	---	67.45	65.65
7	---	64.20	64.65	65.35	65.40	---	65.60	65.20	63.75	---	64.80	65.55
8	---	64.10	64.65	65.65	65.65	---	66.10	64.70	64.20	64.80	65.00	65.75
9	64.20	63.85	64.65	65.50	66.10	---	67.50	62.95	66.80	64.80	64.95	65.70
10	65.25	65.10	64.90	65.40	65.75	---	67.50	62.45	68.25	66.05	65.05	65.95
11	65.30	65.15	64.95	65.10	66.15	---	66.85	62.40	68.80	64.80	65.15	65.90
12	65.45	65.55	64.65	65.75	66.25	---	66.75	62.45	69.20	65.05	65.05	65.70
13	65.45	64.95	64.85	64.90	66.30	---	67.40	62.05	69.00	65.45	65.00	65.75
14	65.35	64.65	64.65	65.75	66.30	---	67.55	61.75	68.40	65.55	65.40	66.25
15	65.30	64.25	64.60	66.00	66.50	---	67.50	62.00	69.15	65.30	64.80	66.10
16	65.05	64.35	65.05	66.30	66.60	---	66.05	61.90	---	64.70	65.05	66.50
17	64.70	64.25	65.40	65.70	66.65	---	65.75	61.60	---	64.65	65.40	66.25
18	64.90	64.55	65.00	65.65	66.45	65.85	65.95	67.05	---	64.65	65.35	66.15
19	65.00	64.75	65.40	65.65	66.75	66.90	65.50	61.60	---	64.65	65.15	65.85
20	65.05	64.90	65.00	66.30	66.05	66.15	66.20	61.90	---	66.20	65.10	65.90
21	65.05	64.90	64.90	66.40	65.65	65.70	66.10	61.75	---	65.60	65.10	66.50
22	65.15	65.00	65.00	66.45	65.40	65.45	64.95	62.25	---	65.75	64.75	66.45
23	65.05	64.65	65.15	65.70	65.75	65.85	64.80	65.35	---	65.25	64.80	66.45
24	64.45	65.00	65.10	65.80	66.30	66.50	64.95	65.25	---	65.05	64.60	66.40
25	63.95	65.20	65.40	65.45	69.60	66.85	64.60	65.15	---	65.05	65.15	66.35
26	64.30	65.10	64.70	66.10	66.50	66.55	64.55	61.65	---	64.95	65.60	66.00
27	63.75	64.50	65.00	66.25	66.15	66.85	65.00	61.65	---	65.00	65.00	66.05
28	64.05	64.15	64.90	65.85	66.05	66.60	65.30	61.60	---	66.30	65.45	66.25
29	64.20	64.65	65.65	66.35	---	66.35	65.00	61.60	---	66.15	64.85	66.15
30	64.00	64.60	65.60	66.35	---	67.35	65.20	61.60	---	64.50	64.35	66.50
31	64.10	---	65.55	65.65	---	67.40	---	61.45	---	64.25	65.00	---
MAX	65.45	65.55	65.65	66.45	69.60	67.40	67.55	67.05	69.20	66.30	67.45	66.50
WTR YR 1981	MEAN	65.30	HIGH	61.45	LOW	69.60						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 17...	1040	710	7.6	20.0	13.5	.2	370	6	91	35	11	6
DATE	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)	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)
AUG 17...	.2	1.6	444	0	364	18	35	22	.5	17	484	434
DATE	AS N)	AMMONIA (MG/L AS N)	ORGANIC 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 P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 17...	.01	.210	.26	.47	.48	2.1	.020	.06	2600	40	2.1	

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) Jan. 7; minimum daily low, 21.60 ft (6.584 m) May 16-17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.30	29.35	33.45	32.45	32.35	29.85	32.70	30.55	23.75	---	32.00	---
2	32.10	32.35	31.05	33.45	32.75	30.35	33.05	28.80	28.90	---	31.55	---
3	32.85	33.45	29.00	31.20	32.10	30.45	33.00	24.70	27.85	---	30.80	32.10
4	33.05	29.85	32.80	31.85	33.55	30.65	33.05	25.35	24.35	---	32.10	29.80
5	32.70	29.20	33.05	33.45	33.75	30.90	32.20	30.30	28.00	---	32.30	29.25
6	33.00	29.35	32.15	33.10	33.50	31.00	32.30	30.55	27.00	---	31.85	32.30
7	32.45	29.45	28.95	34.80	33.75	---	32.35	26.40	22.95	---	31.05	32.65
8	31.10	29.40	29.30	34.00	33.75	---	32.35	28.85	25.55	29.10	32.00	32.75
9	32.15	33.50	31.35	33.85	34.00	---	32.45	28.90	28.55	29.55	28.80	32.45
10	32.45	33.40	28.85	33.40	33.90	---	32.25	26.00	28.00	30.25	32.00	32.80
11	32.40	32.50	28.70	31.35	33.90	---	---	27.50	25.05	29.35	32.00	33.65
12	32.70	32.55	28.70	---	32.90	---	---	29.30	---	30.25	29.15	32.80
13	33.00	28.60	28.75	33.75	33.70	---	---	26.75	---	28.20	---	30.20
14	31.95	29.30	31.20	34.15	33.55	---	---	26.65	---	29.85	29.10	29.50
15	31.10	29.35	32.70	34.75	33.55	---	---	22.05	---	30.60	29.35	29.75
16	32.40	29.25	33.40	33.30	33.80	---	---	21.60	---	30.85	29.00	29.50
17	29.65	33.50	31.85	34.45	33.40	---	---	21.60	---	30.85	29.15	29.65
18	29.05	31.50	29.25	34.40	32.90	32.00	---	26.70	---	29.55	29.30	29.35
19	29.30	32.20	33.35	34.60	31.85	32.00	---	27.60	---	30.70	29.40	29.55
20	31.75	33.65	33.85	34.70	31.80	32.05	29.75	27.65	---	27.45	29.45	29.25
21	33.50	33.65	33.95	34.05	29.80	31.85	29.90	28.30	---	29.50	30.75	29.40
22	33.50	33.60	34.15	34.35	27.15	32.20	30.00	28.40	---	31.05	33.50	30.95
23	33.30	33.60	33.60	33.95	27.25	32.45	30.25	28.65	---	30.20	31.05	29.95
24	29.55	30.80	32.70	34.75	27.60	32.55	29.85	27.85	---	30.50	31.40	30.50
25	29.05	32.40	30.90	34.45	28.60	32.65	29.90	24.50	---	31.05	29.65	32.65
26	29.00	33.80	32.50	34.55	28.85	32.75	30.10	27.70	---	31.25	---	32.80
27	33.05	33.40	33.65	34.50	28.30	32.65	30.15	28.10	---	30.45	---	29.60
28	33.45	33.40	34.00	34.35	29.60	32.70	30.65	28.45	---	31.25	---	29.60
29	32.80	33.40	33.40	34.25	---	32.60	30.65	24.80	---	31.35	---	29.85
30	33.45	32.45	33.90	34.00	---	32.60	30.60	28.95	---	31.40	---	29.75
31	28.95	---	33.55	33.85	---	32.20	---	25.35	---	31.75	---	---
MAX	33.50	33.80	34.15	34.80	34.00	32.75	33.05	30.55	28.90	31.75	33.50	33.65
WTR YR 1981	MEAN	31.01		HIGH	21.60		LOW	34.80				

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, 17.01 ft (5.185 m) Jan. 31; minimum daily low, 13.65 ft (4.161 m) June 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.09	15.85	16.11	16.53	17.00	15.95	16.35	15.64	14.62	14.54	15.66	16.52
2	15.13	15.87	16.12	16.56	16.88	15.96	16.37	15.63	14.65	14.59	15.69	16.54
3	15.17	15.89	16.15	16.58	16.80	15.97	16.38	15.61	14.66	14.61	15.72	16.55
4	15.23	15.91	16.15	16.62	16.76	15.97	16.40	15.61	14.67	14.64	15.75	16.55
5	15.27	15.92	16.18	16.63	16.75	15.97	16.40	15.64	14.67	14.68	15.80	16.56
6	15.30	15.93	16.18	16.64	16.75	15.95	16.11	15.64	14.04	14.72	15.81	16.58
7	15.32	15.94	16.19	16.67	16.76	15.91	16.01	15.59	13.89	14.77	15.84	16.59
8	15.34	15.96	16.20	16.70	16.79	15.90	15.99	15.54	13.93	14.82	15.86	16.61
9	15.38	15.99	16.20	16.73	16.82	15.90	15.98	15.53	13.98	14.86	15.90	16.62
10	15.40	16.01	16.19	16.74	16.82	15.91	15.99	15.53	14.01	14.92	15.93	16.64
11	15.44	16.00	16.18	16.76	16.85	15.92	15.99	15.53	14.05	14.95	15.96	16.68
12	15.49	16.00	16.17	16.78	16.86	15.94	16.00	15.32	14.08	14.99	15.98	16.69
13	15.52	15.98	16.19	16.79	16.87	15.95	15.87	15.18	14.11	15.01	16.01	16.71
14	15.56	16.00	16.20	16.82	16.88	15.99	15.79	15.07	14.01	15.05	16.03	16.72
15	15.58	16.03	16.21	16.85	16.89	16.00	15.71	14.94	13.92	15.09	16.05	16.73
16	15.60	16.05	16.23	16.86	16.89	16.01	15.68	14.74	13.65	15.13	16.08	16.75
17	15.60	16.05	16.24	16.89	16.86	16.02	15.66	14.68	13.70	15.18	16.12	16.78
18	15.61	16.05	16.26	16.91	16.78	16.05	15.66	14.68	13.78	15.21	16.14	16.79
19	15.63	16.06	16.29	16.93	16.73	16.07	15.67	14.69	13.86	15.24	16.17	16.80
20	15.66	16.08	16.32	16.95	16.56	16.10	15.69	14.71	13.95	15.26	16.20	16.81
21	15.69	16.11	16.34	16.95	16.36	16.14	15.70	14.75	13.98	15.28	16.24	16.82
22	15.71	16.13	16.35	16.94	16.23	16.16	15.70	14.79	14.05	15.33	16.27	16.82
23	15.72	16.14	16.37	16.96	16.15	16.19	15.68	14.81	14.13	15.36	16.29	16.81
24	15.71	16.14	16.40	16.98	16.08	16.22	15.58	14.83	14.18	15.39	16.31	16.81
25	15.71	16.16	16.40	16.99	16.02	16.26	15.54	14.87	14.24	15.42	16.35	16.85
26	15.74	16.17	16.41	16.98	15.99	16.27	15.54	14.90	14.30	15.45	16.38	16.86
27	15.75	16.16	16.44	16.94	15.98	16.28	15.55	14.88	14.35	15.48	16.40	16.87
28	15.78	16.10	16.46	16.97	15.96	16.29	15.57	14.83	14.41	15.50	16.42	16.90
29	15.80	16.08	16.48	16.99	---	16.30	15.60	14.81	14.46	15.57	16.45	16.91
30	15.82	16.09	16.50	17.00	---	16.32	15.62	14.82	14.51	15.60	16.48	16.92
31	15.83	---	16.52	17.01	---	16.34	---	14.68	---	15.63	16.51	---
MAX	15.83	16.17	16.52	17.01	17.00	16.34	16.40	15.64	14.67	15.63	16.51	16.92
WTR YR 1981	MEAN	15.86	HIGH	13.65	LOW	17.01						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
AUG 17...	1355	661	7.6	23.0	14.0	.2	350	0	85	33	13
DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	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)
AUG 17...	7	.3	1.8	466	0	382	19	23	10	.6	18
DATE	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)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 17...	402	416	4.01	.310	.16	.47	.020	.06	2300	40	1.1

GROUND-WATER RECORDS
PICKAWAY COUNTY--Continued

393438083072200. 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 9.05 ft (2.758 m) Sept. 28, 1981; minimum daily low, 0.43 ft (0.131 m) June 1, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.05 ft (2.758 m) Sept. 28; minimum recorded daily low, 0.43 ft (0.131 m) June 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.94	5.80	5.41	5.93	6.34	3.02	5.31	3.70	.43	4.09	5.63	8.28
2	5.97	5.92	5.39	5.96	5.88	3.18	5.35	3.59	.73	3.10	5.71	8.29
3	6.13	5.96	5.34	6.11	5.09	3.39	5.39	3.58	1.02	3.21	5.79	8.27
4	6.10	6.03	5.33	6.19	5.19	3.51	5.48	3.65	1.22	3.36	5.89	8.28
5	6.03	6.03	5.35	6.25	5.42	3.48	3.80	3.68	1.44	3.50	6.03	8.34
6	6.02	6.07	5.45	6.24	5.46	3.46	2.82	3.65	1.08	3.73	6.07	8.33
7	5.98	6.11	5.53	6.25	5.55	3.08	2.98	3.35	.60	3.97	6.14	8.24
8	5.95	6.11	5.54	6.28	5.55	3.11	3.40	3.26	.90	4.16	6.14	8.31
9	5.80	5.99	5.49	6.32	5.65	3.20	3.68	3.26	1.11	4.36	6.16	8.34
10	5.78	6.00	5.41	6.33	5.73	3.28	3.76	3.23	1.16	4.47	6.25	8.38
11	5.78	6.04	5.37	6.34	5.70	3.42	3.98	3.20	1.32	4.61	6.30	8.45
12	5.75	6.03	5.38	6.47	5.56	3.53	3.69	2.38	1.48	4.62	6.45	8.50
13	5.76	5.96	5.40	6.54	5.53	3.61	3.02	1.87	1.55	4.67	6.52	8.49
14	5.80	5.89	5.39	6.58	5.65	3.79	3.23	1.88	1.49	4.20	6.54	8.46
15	5.70	5.98	5.33	6.56	5.70	3.88	3.44	1.56	1.75	3.46	6.64	8.52
16	5.68	5.98	5.39	6.60	5.62	3.93	3.59	---	2.22	3.65	6.67	8.46
17	5.68	5.94	5.43	6.60	5.54	4.00	3.82	---	2.59	3.86	6.67	8.51
18	5.60	5.91	5.43	6.64	5.15	4.15	4.00	---	2.60	4.10	7.35	8.53
19	5.63	5.91	5.50	6.66	4.90	4.15	4.05	---	2.56	4.20	7.40	8.60
20	5.65	5.92	5.57	6.69	4.23	4.36	4.18	---	2.54	4.39	7.49	8.69
21	5.60	5.93	5.58	6.70	3.31	4.36	4.28	---	2.55	4.56	7.54	8.71
22	5.64	5.93	5.53	6.80	2.88	4.44	4.29	---	2.49	4.60	7.61	8.68
23	5.65	5.96	5.62	6.79	2.78	4.60	4.27	---	2.99	4.65	7.71	8.74
24	5.62	5.99	5.63	6.85	2.77	4.82	4.03	---	3.50	4.75	7.91	8.77
25	5.55	5.92	5.71	6.78	2.71	4.96	3.67	---	3.73	4.91	7.93	8.83
26	5.58	5.90	5.74	6.55	2.77	4.95	3.45	---	3.98	4.91	8.12	9.04
27	5.63	5.79	5.78	6.26	2.84	5.01	3.87	---	4.06	5.01	8.16	9.00
28	5.68	5.66	5.79	6.27	2.89	5.09	3.82	---	4.07	5.17	8.15	9.05
29	5.82	5.40	5.84	6.27	---	5.17	3.74	---	4.19	5.27	8.17	8.92
30	5.88	5.39	5.88	6.24	---	5.16	3.75	---	4.28	5.43	8.21	8.95
31	5.91	---	5.94	6.31	---	5.23	---	.78	---	5.53	8.25	---
MAX	6.13	6.11	5.94	6.85	6.34	5.23	5.48	3.70	4.28	5.53	8.25	9.05
WTR YR 1981	MEAN	5.21	HIGH	.43	LOW	9.05						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 18...	1620	872	7.4	23.0	19.0	.0	470	34	110	47	14	
DATE	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)	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)
AUG 18...	.3	1.7	532	0	436	34	72	25	.2	11	595	545
DATE	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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 18...	.44	.150	.35	.50	.94	4.2	.030	.09	2300	60	2.0	

GROUND-WATER RECORDS

471

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 daily low, 25.52 ft (7.778 m) Jan. 29-31; minimum daily low, 18.00 ft (5.486 m) June 21.

WATER LFVFL. IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.78	24.40	24.93	24.90	25.46	22.34	23.46	22.18	19.82	19.16	22.89	24.61
2	22.87	24.42	24.89	24.93	25.35	22.22	23.51	22.20	19.74	19.31	22.95	24.64
3	22.94	24.43	24.87	24.95	25.30	22.17	23.55	22.20	19.66	19.45	23.03	24.69
4	23.03	24.45	24.86	24.98	25.26	22.13	23.59	22.17	19.62	19.60	23.10	24.73
5	23.11	24.47	24.82	24.99	25.19	22.11	23.64	22.14	19.61	19.74	23.17	24.75
6	23.17	24.49	24.79	25.01	25.10	22.13	23.65	22.11	19.59	19.90	23.20	24.76
7	23.23	24.53	24.79	25.04	25.01	22.15	23.65	22.08	19.58	20.05	23.25	24.76
8	23.30	24.55	24.77	25.06	24.93	22.16	23.56	22.07	19.45	20.17	23.32	24.76
9	23.38	24.57	24.76	25.09	24.88	22.16	23.46	22.06	19.04	20.33	23.39	24.76
10	23.44	24.60	24.74	25.12	24.83	22.16	23.44	22.02	18.80	20.46	23.43	24.76
11	23.50	24.63	24.74	25.14	24.80	22.19	23.37	21.96	18.71	20.61	23.49	24.78
12	23.57	24.65	24.74	25.16	24.79	22.21	23.34	21.88	18.66	20.75	23.54	24.79
13	23.63	24.67	24.72	25.17	24.78	22.27	23.33	21.83	18.60	20.87	23.60	24.81
14	23.68	24.70	24.71	25.21	24.77	22.32	23.33	21.70	18.56	21.02	23.65	24.84
15	23.74	24.73	24.67	25.23	24.74	22.36	23.32	21.46	18.56	21.15	23.71	24.86
16	23.80	24.76	24.63	25.25	24.71	22.43	23.25	21.22	18.54	21.29	23.78	24.89
17	23.85	24.77	24.61	25.27	24.67	22.48	23.10	20.96	18.47	21.42	23.83	24.92
18	23.89	24.81	24.59	25.29	24.63	22.53	22.96	20.69	18.34	21.54	23.89	24.95
19	23.96	24.83	24.61	25.32	24.58	22.60	22.85	20.33	18.16	21.66	23.95	24.97
20	24.00	24.85	24.62	25.33	24.43	22.66	22.74	20.10	18.05	21.77	24.01	24.99
21	24.04	24.87	24.63	25.36	24.35	22.74	22.67	19.91	18.00	21.90	24.06	25.00
22	24.08	24.89	24.64	25.38	24.20	22.80	22.59	19.75	18.05	22.03	24.12	25.03
23	24.12	24.91	24.66	25.40	23.96	22.87	22.53	19.65	18.14	22.14	24.17	25.04
24	24.15	24.93	24.71	25.43	23.65	22.94	22.45	19.60	18.21	22.23	24.24	25.06
25	24.20	24.95	24.73	25.44	23.33	23.02	22.43	19.64	18.33	22.33	24.28	25.07
26	24.23	24.95	24.75	25.47	23.02	23.11	22.37	19.70	18.46	22.41	24.33	25.08
27	24.25	24.95	24.78	25.48	22.75	23.18	22.29	19.73	18.60	22.49	24.38	25.11
28	24.29	24.95	24.80	25.51	22.50	23.23	22.23	19.75	18.74	22.57	24.43	25.14
29	24.33	24.95	24.82	25.52	---	23.27	22.17	19.80	18.86	22.66	24.47	25.15
30	24.35	24.95	24.85	25.52	---	23.35	22.17	19.81	19.00	22.74	24.52	25.17
31	24.37	---	24.87	25.52	---	23.40	---	19.82	---	22.82	24.57	---
MAX	24.37	24.95	24.93	25.52	25.46	23.40	23.65	22.20	19.82	22.82	24.57	25.17
WTR YR 1981	MEAN	23.17		HIGH	18.00		LOW	25.52				

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, 25.45 ft (7.757 m) Dec. 21; minimum daily low, 20.44 ft (6.230 m) July 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.44	23.50	24.65	24.48	24.55	22.39	22.84	20.98	22.65	20.75	22.41	22.73
2	23.32	24.55	24.81	24.78	23.66	23.21	22.38	21.03	22.79	20.79	22.28	22.77
3	22.42	23.96	24.43	23.94	24.89	22.51	22.88	22.03	21.76	20.75	22.30	22.86
4	23.23	24.21	25.26	25.13	23.95	22.32	21.96	21.07	21.60	20.62	22.36	22.83
5	23.69	23.54	24.36	24.37	24.83	22.82	22.74	21.79	21.60	20.44	22.55	22.85
6	23.38	24.23	24.96	24.45	23.98	22.30	23.03	20.99	21.32	20.57	22.66	22.96
7	23.59	23.25	24.26	24.52	23.69	22.48	22.37	21.86	21.38	20.68	22.70	22.82
8	22.53	24.27	24.65	24.86	24.09	23.20	22.86	22.02	21.30	20.72	22.68	22.66
9	23.63	23.86	23.98	24.95	23.66	23.54	22.20	20.92	21.08	20.61	22.49	22.50
10	23.18	24.64	24.85	24.43	24.36	22.45	22.95	20.77	21.19	20.66	22.35	---
11	23.35	24.50	24.05	25.01	23.88	22.16	22.07	21.45	21.37	20.72	22.61	---
12	22.75	24.85	24.62	24.93	25.21	22.96	21.86	20.81	21.36	20.68	22.64	---
13	23.83	23.96	23.89	24.15	24.50	22.00	22.95	20.81	21.30	20.56	22.63	---
14	23.03	24.66	24.81	24.78	24.09	22.16	22.20	21.66	21.19	20.64	22.30	---
15	23.90	24.31	24.40	24.92	24.77	22.60	22.35	20.53	21.18	21.92	22.44	---
16	22.98	24.53	24.53	24.14	23.61	21.91	23.15	21.60	21.03	22.03	22.60	---
17	23.91	24.98	24.42	24.12	24.42	21.71	21.64	21.78	21.12	22.05	22.61	---
18	22.74	24.65	24.50	24.85	24.23	22.63	22.66	20.91	21.09	22.08	22.50	---
19	23.74	24.82	25.26	24.67	23.20	21.72	21.74	21.71	21.19	22.20	22.40	---
20	22.91	24.09	24.96	24.80	22.78	22.23	22.53	20.83	20.89	22.25	22.48	---
21	23.88	24.77	25.45	24.59	23.99	22.22	21.77	20.76	20.74	22.21	22.65	---
22	23.36	24.10	24.46	24.72	22.99	22.23	21.36	21.76	20.72	22.02	22.73	---
23	24.52	24.97	24.84	24.74	23.42	23.13	21.71	21.94	20.91	22.13	22.71	---
24	23.57	23.88	23.93	24.01	22.64	22.29	20.81	20.92	20.92	22.12	22.83	---
25	23.62	24.90	25.08	24.18	23.78	23.22	22.00	20.76	20.73	22.18	22.91	---
26	23.22	24.82	24.49	24.45	23.03	23.23	22.15	21.93	20.88	22.22	23.01	---
27	24.24	25.07	25.05	24.82	23.85	22.60	21.18	21.96	20.96	22.22	22.94	---
28	23.22	24.10	24.08	24.00	22.52	22.58	21.78	22.07	20.95	22.12	22.75	---
29	24.43	24.27	24.71	25.34	---	22.84	20.90	22.05	20.85	22.22	22.72	---
30	23.65	24.49	24.51	24.55	---	22.86	21.84	22.10	20.72	22.24	22.72	---
31	24.16	---	24.60	24.36	---	22.29	---	22.48	---	22.40	22.35	---
MAX	24.52	25.07	25.45	25.34	25.21	23.54	23.15	22.48	22.79	22.40	23.01	22.96

WTR YR 1981 MEAN 22.93 HIGH 20.44 LOW 25.45

GROUND-WATER RECORDS

473

PORTAGE COUNTY--Continued

411401081025000. Local number, PO-1.

LOCATION.--Lat 41°14'01"N, long 81°02'50"W 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 RECORD.--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, 21.61 ft (6.587 m) Feb. 12; minimum daily low, 19.53 ft (5.953 m) June 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.21	20.58	20.90	21.17	21.32	21.30	21.24	20.21	19.64	19.60	19.96	20.14
2	20.23	20.61	20.93	21.23	21.34	21.31	21.26	20.20	19.65	19.63	19.94	20.11
3	20.23	20.59	20.99	21.23	21.35	21.34	21.23	20.19	19.63	19.63	19.94	20.06
4	20.31	20.58	20.96	21.28	21.43	21.32	21.22	20.14	19.65	19.60	19.96	19.96
5	20.33	20.60	20.93	21.28	21.46	21.31	21.20	20.11	19.65	19.60	19.98	19.98
6	20.32	20.60	20.94	21.22	21.49	21.34	21.24	20.08	19.64	19.63	19.98	20.00
7	20.28	20.60	20.94	21.29	21.49	21.36	21.23	20.07	19.67	19.66	19.95	19.98
8	20.28	20.67	20.94	21.30	21.54	21.36	21.16	20.04	19.66	19.67	19.93	19.96
9	20.34	20.65	20.93	21.32	21.57	21.35	21.21	20.00	19.68	19.67	19.99	19.99
10	20.34	20.72	20.96	21.35	21.56	21.32	21.21	19.97	19.67	19.70	20.00	19.98
11	20.33	20.73	20.98	21.33	21.60	21.30	21.13	19.90	19.69	19.73	19.99	20.00
12	20.38	20.74	20.96	21.33	21.61	21.30	21.01	19.91	19.68	19.73	20.01	20.03
13	20.40	20.73	21.01	21.31	21.59	21.29	21.03	19.90	19.73	19.72	20.02	20.03
14	20.40	20.76	21.01	21.33	21.58	21.33	20.97	19.87	19.69	19.75	20.05	20.04
15	20.37	20.78	21.00	21.37	21.57	21.27	20.99	19.80	19.65	19.76	20.03	20.09
16	20.39	20.80	21.02	21.39	21.56	21.27	20.94	19.83	19.58	19.76	20.05	20.11
17	20.39	20.78	21.03	21.40	21.50	21.26	20.88	19.83	19.58	19.79	20.08	20.15
18	20.38	20.82	21.02	21.37	21.49	21.25	20.79	19.80	19.56	19.81	20.08	20.15
19	20.42	20.83	21.12	21.37	21.42	21.27	20.73	19.74	19.56	19.83	20.09	20.14
20	20.42	20.83	21.12	21.40	21.33	21.32	20.67	19.75	19.54	19.80	20.11	20.20
21	20.47	20.87	21.12	21.40	21.36	21.37	20.66	19.73	19.53	19.85	20.13	20.22
22	20.52	20.88	21.11	21.39	21.33	21.37	20.58	19.71	19.59	19.87	20.12	20.29
23	20.54	20.87	21.06	21.40	21.28	21.34	20.47	19.71	19.67	19.89	20.08	20.30
24	20.50	20.88	21.16	21.42	21.30	21.35	20.47	19.69	19.67	19.88	20.08	20.32
25	20.42	20.92	21.16	21.42	21.36	21.37	20.48	19.68	19.59	19.91	20.11	20.32
26	20.52	20.92	21.17	21.39	21.36	21.36	20.47	19.68	19.58	19.93	20.10	20.29
27	20.53	20.83	21.19	21.38	21.35	21.29	20.42	19.66	19.62	19.95	20.12	20.35
28	20.53	20.81	21.17	21.39	21.29	21.28	20.35	19.64	19.61	19.92	20.15	20.38
29	20.56	20.87	21.14	21.43	---	21.21	20.26	19.65	19.59	19.95	20.14	20.38
30	20.56	20.92	21.18	21.42	---	21.21	20.23	19.65	19.60	19.97	20.11	20.38
31	20.53	---	21.17	21.41	---	21.24	---	19.69	---	19.97	20.14	---
MAX	20.56	20.92	21.19	21.43	21.61	21.37	21.26	20.21	19.73	19.97	20.15	20.38
WTR YR 1981	MEAN	20.55		HIGH	19.53		LOW	21.61				

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, 14.92 ft (4.548 m) Oct. 17; minimum daily low, 11.38 ft (3.469 m) June 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.12	14.26	13.71	13.73	14.57	13.21	13.18	12.16	11.41	12.12	12.75	13.79
2	14.25	14.10	13.88	13.67	14.41	13.16	13.22	12.28	11.44	12.29	12.78	13.85
3	14.32	13.93	13.91	13.75	14.45	13.23	13.30	12.17	11.74	12.39	12.72	13.86
4	14.43	13.76	13.94	13.88	14.46	13.23	13.30	12.13	12.03	12.27	12.84	13.97
5	14.45	14.03	14.04	14.04	14.47	13.16	13.11	12.16	12.08	12.23	13.07	14.03
6	14.44	14.08	14.09	14.13	14.43	13.37	13.15	12.12	11.91	12.21	13.07	14.05
7	14.33	14.05	14.10	14.24	14.40	13.33	13.12	12.15	11.69	12.06	13.06	14.02
8	14.29	14.10	14.10	14.26	14.26	13.33	13.05	12.15	11.80	12.48	13.03	13.98
9	14.41	14.25	14.00	14.34	14.29	13.27	13.20	12.13	11.86	12.50	13.06	13.98
10	14.48	14.55	14.02	14.47	14.38	13.33	13.26	12.02	11.81	12.51	13.22	14.01
11	14.65	14.68	14.06	14.43	14.36	13.20	13.29	11.86	11.86	12.69	13.14	14.05
12	14.74	14.71	14.11	14.51	14.53	13.12	13.03	11.78	12.02	12.67	13.26	14.06
13	14.84	14.70	14.21	14.48	14.42	13.07	12.83	12.04	11.72	12.66	13.31	14.07
14	14.86	14.74	14.21	14.74	14.36	13.15	12.78	12.03	11.51	12.50	13.35	14.05
15	14.86	14.74	14.10	14.71	14.22	13.06	12.83	12.07	11.57	12.55	13.34	14.06
16	14.91	14.70	14.01	14.80	14.00	12.84	12.82	12.09	12.00	12.70	13.27	14.06
17	14.92	14.56	14.07	14.86	13.88	12.73	12.77	12.11	11.84	13.00	13.33	13.95
18	14.72	14.49	13.92	14.79	13.93	12.89	12.65	12.00	11.63	13.21	13.39	14.02
19	14.67	14.54	13.97	14.66	13.93	13.04	12.61	11.88	11.67	13.37	13.38	13.97
20	14.47	14.52	14.12	14.52	13.85	13.04	12.43	11.85	11.56	12.84	13.42	13.91
21	14.32	14.46	13.99	14.49	13.82	13.08	12.41	11.85	11.38	12.98	13.67	13.85
22	14.43	14.46	13.84	14.56	13.71	13.08	12.31	11.86	11.42	12.58	13.74	13.95
23	14.48	14.35	13.77	14.57	13.42	13.08	12.17	11.72	11.57	12.58	13.76	13.95
24	14.47	14.16	13.89	14.54	13.30	13.08	12.13	11.62	11.55	12.60	13.76	13.95
25	14.22	14.09	13.97	14.46	13.29	13.08	12.11	11.66	11.56	12.61	13.73	13.87
26	14.12	14.11	13.97	14.33	13.31	13.04	12.04	11.78	11.55	12.56	13.82	13.79
27	14.11	13.92	13.97	14.31	13.31	13.21	11.98	11.67	11.67	12.52	13.99	13.64
28	13.96	13.81	13.84	14.33	13.21	13.25	12.00	11.63	11.81	12.33	14.05	13.76
29	14.20	13.73	13.76	14.59	---	13.22	11.97	11.69	11.95	12.49	14.10	13.63
30	14.25	13.82	13.80	14.69	---	13.08	12.01	11.65	12.27	12.54	13.95	13.74
31	14.29	---	13.80	14.70	---	13.18	---	11.48	---	12.56	13.84	---
MAX	14.92	14.74	14.21	14.86	14.57	13.37	13.30	12.28	12.27	13.37	14.10	14.07
WTR YR 1981	MEAN	13.37		HIGH	11.38		LOW	14.92				

GROUND-WATER RECORDS

475

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, 8.82 ft (2.688 m) Oct. 24, 25; minimum daily low, 6.88 ft (2.097 m) June 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	8.60	8.27	8.12	8.27	7.74	7.58	7.28	7.41	7.28	7.77	8.31
2	---	8.59	8.25	8.06	8.16	7.68	7.56	7.29	7.44	7.32	7.77	8.28
3	---	8.59	8.29	8.04	8.07	7.67	7.56	7.30	7.46	7.33	7.76	8.27
4	---	8.54	8.37	8.05	8.08	7.68	7.56	7.30	7.49	7.33	7.75	8.30
5	---	8.49	8.39	8.12	8.13	7.68	7.54	7.30	7.51	7.30	7.78	8.34
6	8.47	8.49	8.41	8.12	8.13	7.70	7.56	7.30	7.51	7.24	7.81	8.34
7	8.50	8.49	8.41	8.12	8.14	7.75	7.61	7.30	7.51	7.21	7.84	8.34
8	8.53	8.47	8.37	8.17	8.12	7.78	7.62	7.31	7.50	7.22	7.84	8.26
9	8.55	8.45	8.31	8.23	8.05	7.80	7.62	7.31	7.41	7.22	7.84	8.19
10	8.57	8.39	8.28	8.27	8.05	7.80	7.66	7.31	7.27	7.22	7.87	8.20
11	8.57	8.47	8.29	8.28	8.04	7.80	7.66	7.25	7.18	7.22	7.89	8.23
12	8.56	8.55	8.30	8.28	8.17	7.80	7.64	7.18	7.17	7.22	7.94	8.28
13	8.55	8.59	8.30	8.28	8.26	7.79	7.59	7.22	7.17	7.22	8.01	8.28
14	8.58	8.59	8.30	8.27	8.29	7.77	7.57	7.23	7.11	7.22	8.09	8.28
15	8.61	8.59	8.28	8.26	8.29	7.77	7.57	7.22	7.03	7.26	8.10	8.28
16	8.66	8.58	8.25	8.30	8.25	7.72	7.70	7.17	6.96	7.29	8.10	8.26
17	8.68	8.58	8.24	8.37	8.18	7.68	7.70	7.17	6.89	7.31	8.10	8.31
18	8.68	8.53	8.24	8.37	8.14	7.64	7.62	7.19	6.89	7.31	8.13	8.34
19	8.67	8.55	8.27	8.37	8.09	7.64	7.56	7.21	6.89	7.32	8.17	8.37
20	8.60	8.59	8.40	8.33	7.97	7.62	7.51	7.23	6.89	7.32	8.18	8.37
21	8.57	8.59	8.46	8.33	7.88	7.66	7.46	7.27	6.89	7.32	8.23	8.33
22	8.69	8.60	8.47	8.33	7.81	7.70	7.46	7.31	6.88	7.40	8.27	8.36
23	8.79	8.60	8.47	8.33	7.72	7.72	7.43	7.34	6.89	7.45	8.27	8.42
24	8.82	8.60	8.43	8.33	7.60	7.75	7.34	7.34	6.96	7.51	8.26	8.51
25	8.82	8.60	8.37	8.33	7.61	7.77	7.29	7.34	7.00	7.54	8.26	8.56
26	8.72	8.66	8.37	8.29	7.70	7.78	7.31	7.32	7.08	7.55	8.29	8.59
27	8.64	8.66	8.35	8.23	7.77	7.78	7.31	7.32	7.15	7.58	8.32	8.59
28	8.62	8.60	8.33	8.13	7.77	7.79	7.31	7.34	7.18	7.58	8.36	8.55
29	8.60	8.44	8.29	8.16	---	7.79	7.31	7.37	7.22	7.58	8.38	8.53
30	8.60	8.31	8.23	8.22	---	7.73	7.28	7.37	7.26	7.64	8.38	8.53
31	8.60	---	8.19	8.27	---	7.60	---	7.38	---	7.73	8.35	---
MAX	8.82	8.66	8.47	8.37	8.29	7.80	7.70	7.38	7.51	7.73	8.38	8.59

WTR YR 1981 MEAN 7.93 HIGH 6.88 LOW 8.82

GROUND-WATER RECORDS

ROSS COUNTY

391341083172200. Local number, RO-7.

LOCATION.--Lat 39°13'41"N, long 83°17'22"W, 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, 40.31 ft (12.286 m) Jan. 27, 28, 1981; minimum daily low, 20.93 ft (6.379 m) Feb. 28, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 40.31 ft (12.286 m) Jan. 27, 28; minimum daily low, 32.78 ft (9.991 m) June 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.11	38.47	37.14	37.65	39.34	36.78	37.07	34.75	33.03	36.25	38.41	39.47
2	36.90	38.44	36.83	37.66	38.88	36.78	37.09	34.69	33.07	36.45	38.39	39.35
3	37.07	38.33	36.63	37.79	38.29	36.80	37.19	34.77	33.01	36.43	38.47	39.12
4	37.22	38.16	36.52	37.84	38.41	36.69	37.36	34.70	32.82	36.79	38.79	39.29
5	37.31	38.21	36.56	37.85	38.45	36.85	37.36	34.74	32.78	36.84	38.84	39.67
6	37.37	38.28	36.56	38.16	38.59	36.99	37.30	34.50	32.99	36.68	38.85	39.72
7	37.47	38.03	36.53	38.53	38.98	36.90	37.23	34.94	32.99	36.82	38.59	39.71
8	37.80	38.05	36.80	38.77	38.99	36.91	37.27	34.77	33.03	36.87	38.90	39.91
9	38.01	38.02	36.91	38.87	39.22	36.90	37.75	34.79	33.09	36.79	39.10	39.85
10	38.03	38.10	36.67	39.12	39.30	36.98	37.33	34.86	33.06	36.99	38.96	39.22
11	38.25	38.16	36.59	39.43	39.24	36.96	37.31	34.87	33.04	37.04	39.03	39.40
12	38.22	38.08	36.58	39.49	39.11	37.08	37.25	34.59	33.14	37.28	38.92	39.31
13	38.22	37.78	36.63	39.51	39.29	37.05	37.27	34.70	33.15	37.39	38.33	39.40
14	38.22	37.70	36.59	39.58	39.43	37.13	37.26	34.71	33.38	37.56	38.66	39.43
15	38.32	37.77	36.60	39.55	39.45	37.21	37.14	34.50	33.58	37.36	38.94	39.21
16	38.41	38.03	36.63	39.60	39.17	37.19	37.17	34.33	33.89	37.45	39.05	39.00
17	38.54	37.94	36.70	39.82	38.93	37.19	37.04	34.65	33.95	37.61	38.93	38.96
18	38.47	37.95	36.75	39.75	38.68	37.31	37.08	34.46	34.21	37.79	39.14	38.97
19	38.59	37.86	36.80	39.84	38.50	37.37	37.25	34.41	34.45	38.04	39.33	39.24
20	38.69	37.96	36.87	40.00	38.23	37.42	36.94	34.38	34.68	37.61	39.37	39.54
21	38.71	37.87	36.94	40.02	38.27	37.55	36.81	34.08	34.86	37.89	39.46	39.67
22	38.71	37.94	37.23	40.06	38.20	37.66	36.72	34.28	34.87	37.89	39.56	39.82
23	38.25	37.85	37.30	39.92	37.78	37.42	36.63	34.44	35.25	37.91	39.61	39.81
24	38.08	37.95	37.44	40.01	37.61	37.44	36.21	34.42	35.45	37.73	39.85	39.47
25	38.41	37.99	37.60	40.16	37.55	37.34	35.98	34.36	35.45	37.99	39.94	39.41
26	38.67	37.54	37.44	40.22	37.24	37.16	36.07	34.19	35.61	38.17	40.08	39.19
27	38.78	37.37	37.48	40.31	36.97	37.17	35.75	33.88	35.76	37.94	40.27	39.57
28	38.87	37.18	37.59	40.31	36.81	37.18	35.77	33.58	36.00	38.07	40.28	39.60
29	38.60	37.25	37.58	39.85	---	37.31	35.78	33.69	36.26	38.19	39.96	39.53
30	38.59	37.01	37.67	39.56	---	37.12	35.19	33.49	36.38	38.00	39.69	39.53
31	38.36	---	37.64	39.38	---	37.08	---	33.31	---	38.10	39.35	---
MAX	38.87	38.47	37.67	40.31	39.45	37.66	37.75	34.94	36.38	38.19	40.28	39.91
WTR YR 1981	MEAN	37.45	HIGH	32.78	LOW	40.31						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (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)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
APR 09...	1300	770	7.2	20.0	13.0	440	71	120	35	5.4	3	.1
DATE	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 CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	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 CONSTI- TUENTS, DIS- SOLVED (MG/L)	
APR 09...	1.1	450	0	369	45	31	21	.2	7.3	440	443	
DATE	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)	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 P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
APR 09...	5.4	.020	.12	.14	5.5	25	<.010	.03	<10	30	.5	

GROUND-WATER RECORDS

477

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, 28.19 ft (8.592 m) Dec. 3-5; minimum daily low, 22.62 ft (6.895 m) June 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.64	27.28	28.12	---	27.75	26.93	26.29	25.29	23.61	22.93	24.51	26.25
2	25.72	27.32	28.16	---	27.68	26.89	26.26	25.28	23.50	22.95	24.54	26.34
3	25.79	27.38	28.19	---	27.66	26.89	26.16	25.24	23.43	22.96	24.59	26.40
4	25.86	27.43	28.19	---	27.61	26.85	26.20	25.19	23.36	22.98	24.63	26.45
5	25.93	27.47	28.19	---	27.63	26.82	26.20	25.16	23.27	23.01	24.67	26.50
6	25.96	27.49	28.15	---	27.58	26.81	26.14	25.12	23.15	23.06	24.68	26.55
7	26.01	27.52	28.08	---	27.58	26.79	26.06	25.10	23.07	23.10	24.71	26.56
8	26.08	27.56	28.01	---	27.59	26.77	25.99	25.06	22.94	23.13	24.79	26.46
9	26.15	27.60	27.95	---	27.61	26.74	25.92	25.02	22.83	23.16	24.87	26.43
10	26.21	27.66	27.90	---	27.59	26.70	25.91	24.98	22.78	23.23	24.93	26.41
11	26.29	27.69	27.86	---	27.66	26.67	25.84	24.94	22.74	23.29	24.98	26.41
12	26.37	27.70	27.79	---	27.67	26.65	25.81	24.86	22.68	23.35	25.02	26.45
13	26.43	27.70	27.75	---	27.64	26.60	25.81	24.77	22.63	23.41	25.07	26.58
14	26.49	27.70	27.72	---	27.58	26.62	25.82	24.68	22.62	23.46	25.10	26.70
15	26.57	27.73	27.67	---	27.55	26.58	25.82	24.59	22.64	23.51	25.15	26.82
16	26.62	27.76	27.62	---	27.53	26.57	25.77	24.49	22.67	23.61	25.22	26.93
17	26.67	27.76	27.61	---	27.53	26.51	25.72	24.43	22.68	23.69	25.29	27.03
18	26.72	27.80	27.58	---	27.52	26.48	25.71	24.37	22.70	23.78	25.36	27.12
19	26.79	27.82	27.61	---	27.49	26.46	25.70	24.29	22.71	23.85	25.42	27.20
20	26.84	27.84	27.64	---	27.42	26.44	25.69	24.23	22.72	23.92	25.49	27.30
21	26.92	27.88	27.65	---	27.36	26.44	25.69	24.17	22.72	24.00	25.56	27.38
22	26.99	27.91	27.64	---	27.26	26.43	25.64	24.09	22.76	24.07	25.62	27.48
23	27.02	27.93	27.57	---	27.17	26.42	25.60	24.02	22.79	24.12	25.68	27.56
24	27.03	27.97	27.58	---	27.11	26.42	25.56	23.96	22.80	24.19	25.75	27.62
25	27.06	28.01	---	---	27.08	26.41	25.53	23.91	22.78	24.23	25.81	27.68
26	27.10	28.02	---	---	27.05	26.40	25.49	23.90	22.80	24.29	25.85	27.75
27	27.11	28.03	---	---	27.01	26.40	25.44	23.86	22.83	24.33	25.92	27.81
28	27.13	28.04	---	---	26.95	26.40	25.40	23.82	22.86	24.37	25.98	27.85
29	27.17	28.08	---	27.79	---	26.35	25.36	23.77	22.88	24.43	26.03	27.85
30	27.19	28.10	---	27.80	---	26.33	25.34	23.71	22.90	24.45	26.10	27.85
31	27.22	---	---	27.80	---	26.34	---	23.66	---	24.48	26.17	---
MAX	27.22	28.10	28.19	27.80	27.75	26.93	26.29	25.29	23.61	24.48	26.17	27.86
WTR YR 1981	MEAN	25.90		HIGH	22.62		LOW	28.19				

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, 89.89 ft (27.398 m) June 18, 1981; minimum daily low, 63.45 ft (19.340 m) Jan. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 89.89 ft (27.398 m) June 18; minimum daily low, 63.45 ft (19.340 m) Jan. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85.32	75.25	86.16	67.33	78.72	79.77	85.50	85.40	87.05	83.95	86.06	84.98
2	85.81	81.20	86.96	63.45	85.54	86.31	86.07	85.49	87.57	83.63	76.97	81.42
3	82.06	85.99	85.95	77.61	82.71	86.65	86.40	76.29	88.11	87.47	83.63	84.84
4	80.35	86.75	85.97	76.35	86.10	86.11	84.73	84.92	87.01	81.24	85.04	81.29
5	78.05	86.00	87.21	83.80	85.70	86.48	76.75	86.78	83.30	76.34	87.17	84.92
6	85.91	85.75	85.52	84.23	86.94	86.33	85.93	86.63	85.10	86.44	86.54	70.25
7	85.84	83.91	85.38	84.53	72.86	85.86	85.81	86.88	75.53	86.27	85.19	73.39
8	86.03	84.77	86.77	82.69	68.90	79.44	86.20	86.01	86.66	86.84	85.16	85.40
9	81.73	83.04	86.51	84.66	84.40	87.68	86.70	84.87	88.14	86.63	73.56	85.56
10	86.18	86.54	86.52	78.80	84.37	86.79	87.68	77.28	88.12	86.49	84.40	85.77
11	79.63	86.01	86.64	78.77	85.45	86.17	86.41	85.47	86.57	87.20	84.94	86.62
12	78.06	85.54	86.73	82.99	81.44	85.83	79.02	86.30	85.21	77.59	84.61	84.81
13	86.71	86.34	79.11	83.49	85.74	86.25	86.90	87.43	84.56	86.58	84.57	73.96
14	86.95	86.15	78.76	80.14	79.92	79.12	86.42	87.27	73.94	87.97	84.60	85.58
15	87.07	79.24	87.33	85.02	77.41	77.26	87.72	85.85	89.07	88.47	80.87	86.04
16	87.17	79.12	86.10	81.03	84.75	86.52	86.67	83.81	88.91	88.50	76.56	85.84
17	86.76	85.48	87.48	79.56	85.93	86.24	75.02	75.90	89.04	88.68	86.20	85.02
18	80.02	81.24	81.33	75.96	86.10	85.27	82.81	85.27	89.89	86.99	84.90	86.51
19	77.03	81.59	86.16	86.38	85.25	84.60	74.80	86.62	88.69	79.67	87.42	84.53
20	84.51	86.18	80.66	85.47	85.51	84.68	85.15	87.61	87.90	85.54	87.19	75.22
21	86.05	84.37	80.86	85.52	79.56	85.00	86.08	87.73	75.61	88.24	87.32	85.50
22	86.98	80.82	85.40	85.63	77.50	78.48	85.71	87.30	87.90	86.53	85.55	86.29
23	87.07	80.25	85.32	85.64	86.07	87.00	84.52	84.37	88.41	87.13	77.93	86.36
24	86.43	86.44	78.05	79.31	85.42	86.49	85.26	71.10	89.66	87.32	86.76	86.39
25	79.98	87.20	65.05	76.98	85.89	87.14	85.05	73.45	88.20	85.64	86.58	83.90
26	79.22	86.74	65.51	86.33	86.59	86.13	77.79	85.65	83.54	75.76	85.63	82.95
27	85.16	78.62	64.53	86.19	85.99	86.74	85.32	86.73	88.69	87.91	86.41	73.39
28	86.76	69.69	72.62	86.22	85.31	84.31	85.19	87.28	78.77	88.44	86.88	85.93
29	86.79	77.78	84.91	86.20	---	77.68	85.64	86.41	87.35	88.16	83.92	85.70
30	84.15	78.12	83.53	86.49	---	84.81	85.65	85.79	88.00	87.42	77.23	86.08
31	85.05	---	84.64	84.77	---	85.55	---	74.90	---	86.82	83.35	---
MAX	87.17	87.20	87.48	86.49	86.94	87.68	87.72	87.73	89.89	88.68	87.42	86.62
WTR YR 1981	MEAN	83.79		HIGH	63.45		LOW	89.89				

GROUND-WATER RECORDS

479

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 recorded daily low, 38.92 ft (11.863 m) Mar. 30; minimum daily low, 33.61 ft (10.244 m) Oct. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.73	34.81	35.95	36.68	37.70	37.41	38.80	36.22	35.99	36.41	36.73	37.08
2	33.84	35.00	35.58	36.72	38.00	37.66	38.12	35.90	36.15	36.59	36.41	37.12
3	33.61	34.99	35.64	36.66	37.90	37.83	38.21	35.84	36.27	36.08	36.52	37.21
4	33.79	34.82	35.65	36.79	38.08	37.81	37.93	35.74	36.37	36.14	36.50	37.31
5	33.72	35.08	35.68	36.76	37.81	37.82	37.81	35.86	36.49	35.79	36.33	37.16
6	33.83	35.11	35.88	36.76	37.73	37.62	37.76	36.13	36.31	35.44	36.49	37.34
7	33.99	34.93	35.89	37.25	37.73	37.42	37.71	35.71	35.81	36.28	36.29	37.37
8	34.12	34.99	35.78	37.06	37.61	37.29	37.65	35.73	36.18	36.50	36.23	37.05
9	34.21	35.24	35.63	36.95	38.17	37.20	37.60	35.67	36.25	36.62	36.18	36.64
10	34.30	35.29	35.85	36.98	38.50	37.56	37.58	35.70	36.26	36.71	36.16	37.18
11	34.08	35.16	35.86	36.99	38.57	37.66	37.54	35.73	36.57	36.86	36.55	37.05
12	34.37	35.44	36.13	37.03	38.24	37.25	37.51	35.71	36.16	36.92	36.23	37.23
13	34.51	35.40	36.02	37.05	37.89	37.60	37.50	35.69	35.81	36.77	36.32	37.40
14	34.45	35.30	36.02	37.09	38.04	37.39	37.62	35.92	35.83	36.99	36.42	37.50
15	34.50	35.30	36.03	37.12	37.83	37.21	37.63	35.69	36.25	37.11	36.45	37.48
16	34.63	35.15	36.06	37.15	38.70	37.51	37.22	35.73	35.88	37.14	36.51	37.53
17	34.34	35.31	36.08	37.16	38.80	37.29	37.06	35.64	36.19	37.25	36.82	37.46
18	34.70	35.47	36.08	37.21	38.00	37.10	37.07	35.54	36.22	37.36	36.70	37.42
19	34.43	35.52	36.18	37.25	38.84	37.38	36.76	35.49	36.46	37.17	36.73	37.60
20	34.79	35.36	36.22	37.12	38.54	37.60	36.82	36.03	36.12	37.30	36.86	37.52
21	34.61	35.35	36.30	37.75	38.27	37.57	36.70	35.83	36.07	37.49	36.98	37.46
22	34.62	35.38	36.56	37.58	38.02	37.58	36.50	36.10	36.23	37.50	36.84	37.61
23	34.90	35.38	36.47	37.40	37.78	37.88	36.22	35.95	36.32	37.32	37.01	37.63
24	34.54	35.44	36.42	37.50	37.90	38.23	36.76	35.59	36.38	37.36	37.37	37.73
25	34.10	35.48	36.51	37.45	37.95	38.23	36.71	35.37	36.52	37.38	37.16	37.65
26	33.63	35.49	36.50	37.59	37.63	38.28	36.30	36.18	36.33	36.93	37.14	37.78
27	33.97	35.92	36.47	37.87	37.70	38.36	36.09	36.40	36.11	37.14	37.18	37.73
28	34.43	35.76	36.43	37.58	37.57	38.15	36.68	36.47	36.13	37.05	37.33	37.70
29	34.70	35.65	36.81	37.69	---	38.12	36.98	36.67	36.25	37.06	37.21	37.86
30	34.78	35.80	36.64	37.67	---	38.92	36.40	36.27	36.35	36.78	37.11	37.88
31	34.86	---	36.78	---	---	38.62	---	35.81	---	36.68	37.13	---
MAX	34.90	35.92	36.81	37.87	38.84	38.92	38.80	36.67	36.57	37.50	37.37	37.88
WTR YR 1981	MEAN	36.57		HIGH	33.61		LOW	38.92				

GROUND-WATER RECORDS
STARK COUNTY--Continued

405051081244200. Local number, ST-28.

LOCATION.--Lat 40°50'51"N, long 81°24'42"W, 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, 14.30 ft (4.359 m) Apr. 5; minimum daily low, 10.70 ft (3.261 m) Oct. 1.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.70	11.39	12.16	12.88	13.64	13.90	14.18	13.63		11.16	10.92	11.48
2	10.73	11.40	12.17	12.89	13.65	13.89	14.21	13.54		11.17	10.94	11.49
3	10.75	11.44	12.21	12.92	13.66	13.87	14.24	13.50		11.20	10.96	11.51
4	10.76	11.44	12.22	12.95	13.71	13.86	14.27	13.48		11.24	10.98	11.53
5	10.79	11.48	12.26	12.98	13.74	13.83	14.30	13.41		11.28	11.00	11.55
6	10.81	11.50	12.29	13.00	13.76	13.82	---	13.33		11.30	11.01	11.59
7	10.82	11.54	12.31	13.03	13.79	13.81	---	13.25		11.30	11.03	11.62
8	10.86	11.57	12.34	13.05	13.80	13.79	---	13.16		11.27	11.05	11.64
9	10.87	11.61	12.36	13.08	13.81	13.76	---	13.09		11.23	11.06	11.65
10	10.93	11.64	12.39	13.10	13.83	13.74	---	13.04		11.19	11.08	11.67
11	10.96	11.67	12.41	13.13	13.86	13.71	---	12.97		11.16	11.10	11.69
12	10.97	11.68	12.43	13.15	13.88	13.69	---	12.92		11.12	11.12	11.72
13	11.01	11.71	12.45	13.17	13.91	13.68	---	12.83		11.08	11.13	11.75
14	11.02	11.74	12.47	13.20	13.95	13.68	---	12.72		11.05	11.16	11.76
15	11.04	11.76	12.48	13.22	13.99	13.68	---	12.69		11.00	11.17	11.78
16	11.07	11.78	12.51	13.25	14.02	13.69	---	12.64		10.97	11.19	11.81
17	11.09	11.80	12.53	13.27	14.04	13.71	---	12.59		10.95	11.21	11.83
18	11.11	11.83	12.54	13.29	14.04	13.74	---	12.54		10.92	11.23	11.86
19	11.11	11.86	12.57	13.32	14.03	13.76	---	12.49		10.91	11.25	11.88
20	11.11	11.88	12.60	13.34	14.04	13.79	---	12.47		10.90	11.27	11.90
21	11.12	11.91	12.63	13.37	14.03	13.83	---	12.43		10.88	11.28	11.92
22	11.14	11.94	12.65	13.39	14.03	13.87	---	12.42		10.88	11.30	11.94
23	11.16	11.97	12.67	13.42	14.03	13.90	---	12.41		10.88	11.32	11.97
24	11.18	12.01	12.69	13.43	14.01	13.92	---	12.40		10.88	11.34	12.01
25	11.23	12.02	12.71	13.46	14.00	13.97	---	12.38		10.87	11.36	12.02
26	11.23	12.08	12.73	13.49	13.98	14.00	---	12.37		10.86	11.37	12.06
27	11.26	12.11	12.75	13.51	13.97	14.04	---	12.37		10.87	11.39	12.10
28	11.29	12.13	12.77	13.53	13.93	14.08	---	12.36		10.88	11.41	12.12
29	11.32	12.15	12.79	13.56	---	14.11	13.74	12.35		10.90	11.42	12.13
30	11.34	12.15	12.81	13.59	---	14.13	13.71	---		10.90	11.44	12.15
31	11.36	---	12.83	13.61	---	14.16	---	---		10.91	11.46	---
MAX	11.36	12.15	12.83	13.61	14.04	14.16	14.30	13.63		11.30	11.46	12.15
WTR YR 1981	MEAN	12.34		HIGH	10.70		LOW	14.30				

GROUND-WATER RECORDS

481

STARK COUNTY--Continued

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 recorded daily low, 14.77 ft (4.502 m) Jan. 26-28; minimum daily low, 12.06 ft (3.676 m) June 17-18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.00	13.52	13.95	14.37	14.71	12.71	14.16	12.82	13.03	12.52	13.40	14.22
2	13.01	13.54	13.95	14.39	14.71	12.75	14.18	12.76	13.01	12.56	13.42	14.23
3	13.02	13.56	13.96	14.41	14.67	12.80	14.21	12.74	13.01	12.59	13.43	14.25
4	13.03	13.58	13.96	14.42	14.64	12.85	14.22	12.73	13.02	12.62	13.45	14.27
5	13.04	13.59	13.97	14.44	14.60	12.91	14.22	12.74	13.04	12.64	13.50	14.29
6	13.05	13.61	13.99	14.45	14.58	12.98	14.22	12.75	13.05	12.64	13.54	14.30
7	13.07	13.63	14.00	14.46	14.57	13.04	14.19	12.76	13.08	12.64	13.56	14.33
8	13.09	13.65	14.02	14.48	14.56	13.11	14.16	12.78	13.10	12.64	13.58	14.34
9	13.11	13.67	14.02	14.50	14.57	13.18	14.15	12.80	13.11	12.68	13.60	14.36
10	13.14	13.67	14.02	14.52	14.58	13.24	14.15	12.83	13.01	12.74	13.62	14.37
11	13.16	13.71	14.01	14.54	14.58	13.30	14.15	12.86	12.75	12.77	13.65	14.39
12	13.18	13.73	14.00	14.55	14.56	13.37	14.15	12.87	12.52	12.80	13.71	14.40
13	13.20	13.75	14.00	14.58	14.48	13.43	14.09	12.89	12.38	12.83	13.75	14.41
14	13.22	13.77	14.01	14.60	14.41	13.49	13.96	12.92	12.29	12.86	13.77	14.42
15	13.24	13.79	14.02	14.61	14.36	13.55	13.67	12.92	12.18	12.94	13.79	14.43
16	13.26	13.80	14.04	14.63	14.33	13.60	13.35	12.94	12.10	12.97	13.81	14.44
17	13.28	13.82	14.05	14.64	14.31	13.65	13.13	12.96	12.06	13.00	13.83	14.46
18	13.30	13.83	14.06	14.65	14.24	13.71	12.98	12.98	12.06	13.04	13.85	---
19	13.31	13.85	14.08	14.66	14.12	13.76	12.89	13.00	12.06	13.13	13.91	---
20	13.32	13.86	14.11	14.68	13.96	13.81	12.83	13.03	12.13	13.14	13.94	---
21	13.35	13.87	14.14	14.70	13.68	13.85	12.80	13.05	12.17	13.16	13.97	---
22	13.36	13.89	14.15	14.72	13.35	13.89	12.80	13.08	12.19	13.18	13.99	---
23	13.39	13.91	14.18	14.74	13.13	13.94	12.82	13.11	12.19	13.20	14.01	---
24	13.41	13.92	14.20	14.75	12.95	13.98	12.84	13.16	12.20	13.22	14.03	---
25	13.42	13.93	14.22	14.76	12.80	14.02	12.86	13.20	12.23	13.25	14.04	---
26	13.43	13.94	14.24	14.77	12.73	14.05	12.89	13.23	12.25	13.30	14.09	---
27	13.44	13.95	14.26	14.77	12.69	14.07	12.93	13.25	12.34	13.35	14.13	---
28	13.46	13.95	14.29	14.77	12.68	14.08	12.96	13.26	12.37	13.36	14.16	---
29	13.47	13.95	14.31	14.75	---	14.10	12.97	13.24	12.41	13.37	14.18	---
30	13.48	13.95	14.34	14.73	---	14.12	12.92	13.14	12.44	13.37	14.19	---
31	13.50	---	14.36	14.72	---	14.14	---	13.06	---	13.38	14.21	---
MAX	13.50	13.95	14.36	14.77	14.71	14.14	14.22	13.26	13.11	13.38	14.21	14.46
WTR YR 1981	MEAN	13.59		HIGH	12.06		LOW	14.77				

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, 33.10 ft (10.089 m) Dec. 15, 1978; minimum daily low, 7.10 ft (2.164 m) June 15, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 27.45 ft (8.367 m) Sept. 2; minimum daily low, 7.10 ft (2.164 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.30	15.65	10.45	11.25	11.65	9.85	10.70	9.45	7.75	8.40	8.95	26.55
2	26.15	11.85	10.75	11.30	11.45	9.95	10.75	9.40	7.85	8.45	8.95	27.45
3	27.20	11.30	10.80	11.35	11.35	10.05	10.70	9.35	7.95	8.45	9.00	18.35
4	20.10	11.10	10.85	11.45	11.25	9.95	10.70	9.30	8.15	---	9.10	16.20
5	17.05	11.05	10.85	11.45	11.25	9.90	10.65	9.30	8.25	---	9.15	14.50
6	15.65	11.00	10.75	11.45	11.20	10.00	10.50	9.40	8.35	---	9.15	13.85
7	20.05	10.95	10.65	11.60	11.20	10.05	10.50	9.50	8.35	---	9.20	13.25
8	15.90	11.00	10.60	11.70	11.15	10.05	10.40	9.45	8.40	---	9.25	12.75
9	14.15	10.95	10.50	11.70	11.40	10.05	10.55	9.50	8.45	---	9.35	12.50
10	13.65	11.00	10.55	11.70	11.40	10.15	10.55	9.45	7.95	---	9.35	12.25
11	13.20	11.05	10.60	11.80	11.05	10.25	10.50	9.45	7.40	7.80	9.40	12.10
12	12.90	10.95	10.55	11.80	11.00	10.20	10.45	9.45	7.20	7.85	9.50	11.90
13	12.65	10.85	10.75	11.70	10.95	10.35	10.30	9.40	7.20	7.95	9.55	11.75
14	19.60	10.85	10.70	11.65	10.95	10.40	10.10	9.35	7.15	8.10	9.60	11.60
15	16.00	10.85	10.75	11.70	10.90	10.30	9.85	9.35	7.10	8.15	9.60	11.50
16	15.00	10.80	10.75	11.80	10.85	10.40	9.65	9.40	7.25	8.25	9.60	11.45
17	12.65	10.75	10.85	11.95	10.70	10.45	9.55	9.35	7.45	8.25	9.60	11.40
18	12.30	10.80	10.85	11.95	10.55	10.50	9.55	9.10	7.50	8.40	9.70	11.35
19	12.05	10.80	11.00	11.95	10.40	10.55	9.55	8.40	7.60	8.65	12.60	11.25
20	11.85	10.75	11.05	12.00	10.00	10.65	9.60	8.05	7.75	8.80	10.00	11.15
21	11.70	10.80	11.05	12.05	9.80	10.75	9.60	7.95	7.80	8.75	17.55	11.15
22	11.65	10.80	11.05	12.05	9.65	10.75	9.60	7.75	7.90	8.80	11.60	11.05
23	11.55	10.75	11.05	11.95	9.60	10.75	9.60	7.75	8.05	8.85	10.45	11.05
24	16.00	10.70	11.15	12.00	9.65	10.70	9.70	7.85	8.05	8.85	15.75	11.05
25	12.00	10.70	11.15	12.00	9.75	10.75	9.75	8.10	8.15	8.90	11.50	11.05
26	11.45	10.65	11.15	11.95	9.80	10.75	9.80	8.40	8.15	8.95	10.60	11.00
27	17.55	10.55	11.20	11.85	9.75	10.75	9.75	8.55	8.15	9.05	18.55	10.95
28	13.40	10.35	11.20	11.75	9.85	10.80	9.80	8.50	8.20	9.05	22.95	11.00
29	11.75	10.45	11.20	11.75	---	10.70	9.70	7.75	8.25	8.95	25.60	12.00
30	11.55	10.40	11.25	11.80	---	10.65	9.60	7.50	8.30	8.95	25.75	11.00
31	11.35	---	11.20	11.80	---	10.70	---	7.70	---	8.95	25.25	---
MAX	27.20	15.65	11.25	12.05	11.65	10.80	10.75	9.50	8.45	9.05	25.75	27.45
WTR YR 1981	MEAN	10.96		HIGH	7.10		LOW	27.45				

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, 21.51 ft (6.556 m) Sept. 30; minimum daily low, 7.46 ft (2.274 m) Apr. 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.65	14.77	12.66	11.90	11.76	9.24	8.96	9.13	11.82	13.26	16.53	19.67
2	15.79	14.63	12.62	11.88	11.73	9.21	8.94	9.19	11.90	13.40	16.62	19.79
3	15.93	14.52	12.58	11.88	11.67	9.19	8.93	9.28	11.97	13.53	16.74	19.88
4	15.99	14.39	12.56	11.87	11.61	9.18	8.90	9.38	12.18	13.65	16.85	19.94
5	15.99	14.28	12.52	11.88	11.56	9.17	8.88	9.48	12.42	13.72	16.98	19.94
6	16.03	14.19	12.48	11.88	11.49	9.17	8.85	9.52	12.63	13.80	17.10	19.92
7	16.16	14.09	12.44	11.86	11.44	9.20	8.82	9.54	12.89	13.91	17.22	19.87
8	16.29	13.99	12.40	11.85	11.39	9.22	8.79	9.60	13.12	14.01	17.32	19.83
9	16.44	13.92	12.35	11.85	11.36	9.23	8.74	9.67	13.16	14.12	17.40	19.91
10	16.58	13.84	12.30	11.86	11.36	9.23	8.71	9.76	13.13	14.22	17.49	20.01
11	16.66	13.79	12.25	11.86	11.33	9.23	8.71	9.85	12.90	14.27	17.55	20.11
12	16.66	13.73	12.20	11.86	11.30	9.21	8.65	9.94	12.75	14.35	17.58	20.20
13	16.75	13.67	12.14	11.86	11.27	9.19	8.18	10.03	12.68	14.46	17.64	20.21
14	16.90	13.61	12.10	11.84	11.22	9.18	7.79	10.11	12.65	14.58	17.71	20.25
15	17.06	13.56	12.07	11.83	11.18	9.18	7.50	10.13	12.59	14.68	17.79	20.34
16	17.21	13.50	12.03	11.83	11.13	9.17	7.46	10.19	12.63	14.80	17.86	20.44
17	17.31	13.46	12.00	11.83	11.09	9.17	7.55	10.26	12.67	14.93	17.94	20.53
18	17.31	13.40	11.99	11.83	11.03	9.19	7.71	10.34	12.70	15.05	18.04	20.61
19	17.26	13.35	11.97	11.83	10.97	9.21	7.86	10.44	12.81	15.17	18.14	20.66
20	17.13	13.31	11.98	11.83	10.74	9.23	8.02	10.56	12.89	15.31	18.24	20.72
21	17.04	13.27	11.99	11.83	10.25	9.27	8.19	10.70	12.98	15.43	18.36	20.80
22	16.96	13.22	11.99	11.83	9.92	9.30	8.36	10.83	13.06	15.51	18.46	20.88
23	16.90	13.19	11.98	11.82	9.72	9.32	8.49	10.96	13.07	15.66	18.57	20.96
24	16.84	13.15	11.96	11.82	9.58	9.33	8.61	11.10	13.11	15.81	18.69	21.04
25	16.65	13.10	11.95	11.82	9.45	9.33	8.76	11.24	13.19	15.93	18.82	21.12
26	16.20	13.04	11.95	11.81	9.37	9.33	8.91	11.37	13.26	16.05	18.95	21.20
27	15.84	12.98	11.95	11.80	9.33	9.32	9.03	11.50	13.28	16.18	19.08	21.28
28	15.55	12.88	11.95	11.79	9.28	9.22	9.12	11.60	13.27	16.30	19.21	21.35
29	15.29	12.80	11.95	11.77	---	9.12	9.13	11.63	13.23	16.33	19.33	21.43
30	15.10	12.72	11.93	11.77	---	9.04	9.11	11.66	13.22	16.38	19.45	21.51
31	14.93	---	11.92	11.77	---	8.99	---	11.73	---	16.45	19.55	---
MAX	17.31	14.77	12.66	11.90	11.76	9.33	9.13	11.73	13.28	16.45	19.55	21.51
WTR YR 1981	MEAN	13.27		HIGH	7.46		LOW	21.51				

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, 27.52 ft (8.388 m) Sept. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 51.12 ft (15.581 m) June 15; minimum daily low, 27.52 ft (8.388 m) Sept. 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.97	43.00	42.07	42.17			47.67	46.37	48.62	49.86	37.78	32.08
2	42.39	42.54	42.45	42.34			47.59	46.46	48.93	49.49	37.66	32.88
3	42.75	41.95	43.86	42.20			47.65	45.84	48.77	49.92	37.87	35.75
4	42.68	42.61	44.35	41.55			47.47	46.52	49.09	49.72	37.22	39.53
5	42.42	44.33	45.66	41.64			46.84	46.94	48.79	50.12	37.45	40.90
6	42.21	44.30	45.77	41.97			46.86	46.91	48.76	49.42	38.70	37.16
7	42.43	44.34	45.41	43.22			46.89	46.93	48.45	48.60	39.06	35.05
8	42.61	44.64	44.80	45.44			46.97	47.09	48.20	48.38	35.81	32.72
9	43.19	44.01	44.92	46.12			47.37	47.59	48.07	47.96	33.21	31.62
10	44.44	44.97	45.20	45.49			47.25	47.89	48.58	48.73	31.53	30.82
11	44.75	45.05	45.12	44.83			47.04	48.11	49.37	47.38	30.92	29.89
12	44.04	45.02	45.14	44.89			47.39	48.21	49.78	47.22	31.07	28.90
13	43.64	44.93	43.96	44.53			47.14	47.81	50.78	47.29	31.09	28.16
14	43.93	44.53	43.45	44.03			46.25	47.33	50.78	46.82	31.10	27.52
15	43.70	44.27	42.52	43.90			45.63	47.39	51.12	46.89	30.00	27.69
16	44.16	43.73	42.14	47.54			45.47	47.19	---	46.54	30.76	28.51
17	44.94	42.87	41.88	---			45.64	47.22	---	46.46	30.78	28.78
18	45.40	42.47	41.75	---			45.63	47.12	---	46.93	31.46	28.82
19	44.59	42.91	42.07	---			45.24	47.29	---	47.07	31.48	28.42
20	46.08	42.92	42.05	---			45.36	46.98	---	47.13	31.77	27.89
21	46.15	43.09	41.72	---			45.57	47.29	---	47.78	30.29	29.32
22	45.33	43.06	41.23	---			45.77	47.84	---	47.91	30.08	29.63
23	44.32	42.96	41.53	---			46.64	48.24	---	43.03	29.04	29.57
24	43.37	43.19	41.75	---			46.41	48.71	---	40.81	28.44	29.58
25	42.70	43.40	41.76	---			47.21	49.63	---	39.64	29.57	29.84
26	42.26	43.61	41.72	---			47.07	50.23	---	37.96	31.24	29.54
27	43.53	43.29	41.91	---			47.09	50.11	---	38.65	31.76	29.52
28	43.51	41.35	42.05	---			46.67	49.41	---	37.52	30.64	30.09
29	44.09	40.46	42.21	---			46.09	49.29	---	37.97	29.67	29.68
30	44.07	40.92	42.72	---			46.14	49.33	---	38.21	29.03	29.70
31	43.45	---	42.53	---			---	48.72	---	---	30.70	---
MAX	46.15	45.05	45.77	47.54			47.67	50.23	51.12	50.12	39.06	40.90
WTR YR 1981	MEAN	42.25		HIGH	27.52		LOW	51.12				

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

GROUND-WATER RECORDS

485

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 recorded daily low, 9.90 ft (3.018 m) Jan. 3; minimum daily low, 5.37 ft (1.637 m) June 18-19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.09	9.10	9.56	9.72	---	7.06	8.46	7.15	7.46	5.49	7.45	8.95
2	8.14	9.09	9.59	9.87	9.38	7.21	8.66	7.24	7.49	5.54	7.49	8.98
3	8.18	9.12	9.63	9.90	9.27	7.35	8.60	7.32	7.47	5.37	7.56	9.07
4	8.27	9.13	9.66	9.45	8.80	7.22	8.58	7.41	7.41	5.93	7.82	8.78
5	8.23	9.17	9.67	---	9.04	7.45	8.27	7.48	7.21	5.97	7.86	8.67
6	8.32	9.19	9.68	---	9.14	7.28	8.18	7.35	6.60	6.06	7.87	8.67
7	8.36	9.19	9.61	---	9.17	7.28	8.18	7.40	6.55	6.09	7.71	8.65
8	8.41	9.14	9.61	---	9.06	7.35	8.20	7.45	6.49	6.29	7.81	8.84
9	8.53	9.10	9.59	---	9.38	7.68	8.33	7.63	6.31	6.42	7.90	8.96
10	8.50	9.28	9.55	---	9.29	7.77	8.20	7.66	5.77	6.35	7.83	9.00
11	8.44	9.33	9.47	---	9.16	7.79	8.33	7.70	5.72	6.65	8.11	9.02
12	8.46	9.37	9.42	---	8.96	7.68	8.06	7.55	5.64	6.76	7.95	9.07
13	8.57	9.36	9.48	---	8.75	7.59	7.60	7.61	5.55	6.52	8.02	9.07
14	8.58	9.47	9.48	---	8.88	7.95	7.36	7.62	5.42	6.00	8.46	9.08
15	8.64	9.51	9.37	---	8.99	7.96	7.32	7.52	5.62	6.53	8.29	9.11
16	8.69	9.54	9.29	---	9.02	8.03	7.16	7.45	5.58	6.72	8.46	9.16
17	8.66	9.58	9.57	---	8.76	7.89	6.79	7.38	5.49	6.77	8.53	9.21
18	8.67	9.61	9.55	---	8.51	7.83	6.88	7.25	5.37	6.78	8.61	9.18
19	8.69	9.65	9.75	---	7.96	8.11	6.88	7.51	5.37	6.78	8.62	9.10
20	8.72	9.66	9.80	---	7.40	8.14	7.17	7.56	5.40	6.78	8.75	9.12
21	8.74	9.68	9.81	---	7.23	8.20	7.50	7.59	5.49	6.78	8.71	9.26
22	8.85	9.74	9.71	---	7.19	8.26	7.56	7.56	5.43	6.78	8.75	9.31
23	8.87	9.73	9.55	---	7.07	8.35	7.60	7.59	5.53	7.27	8.82	9.37
24	8.89	9.76	9.69	---	7.04	8.34	7.63	7.59	5.73	7.26	8.87	9.42
25	8.77	9.79	9.65	---	7.00	8.18	7.62	7.66	5.57	7.31	8.99	9.45
26	8.78	9.75	9.69	---	6.94	8.35	7.62	7.83	5.51	7.34	8.87	9.50
27	8.89	9.57	9.82	---	6.76	8.40	7.73	7.84	5.46	7.27	9.07	9.53
28	8.96	9.48	9.84	---	6.87	8.54	7.74	7.75	5.48	7.36	8.94	9.57
29	8.99	9.44	9.72	---	---	8.54	7.76	7.50	5.57	7.40	9.02	9.57
30	9.02	9.41	9.80	---	---	8.61	7.42	7.46	5.66	7.46	9.08	9.59
31	9.03	---	9.75	---	---	8.60	---	7.44	---	7.46	9.09	---
MAX	9.03	9.79	9.84	9.90	9.38	8.61	8.66	7.84	7.49	7.46	9.09	9.59

WTR YR 1981 MEAN 8.14 HIGH 5.37 LOW 9.90

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, 9.67 ft (2.947 m) Jan. 23; minimum daily low, 6.03 ft (1.838 m) June. 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.25	8.94	9.27	9.40	9.42	7.36	8.41	7.47	7.62	6.41	7.95	9.10
2	8.23	8.96	9.22	9.43	9.25	7.46	8.43	7.45	7.61	6.57	7.95	9.06
3	8.29	9.00	9.27	9.43	9.08	7.45	8.46	7.47	7.56	6.56	8.00	9.09
4	8.39	9.00	9.30	9.44	9.01	7.50	8.49	7.52	7.40	6.60	8.00	9.02
5	8.38	9.00	9.24	9.46	9.05	7.50	8.31	7.52	7.45	6.68	8.04	9.06
6	8.38	9.05	9.34	9.42	9.10	7.57	8.18	7.58	7.49	6.75	---	9.12
7	8.42	9.10	9.30	9.51	9.04	7.57	8.11	7.56	7.35	6.89	---	9.08
8	8.45	9.09	9.26	9.42	9.05	7.60	8.11	7.62	7.34	6.93	---	9.09
9	8.56	9.10	9.18	9.51	9.10	7.63	8.16	7.65	7.13	6.99	---	9.18
10	8.54	9.14	9.19	9.49	9.11	7.69	8.15	7.67	6.60	7.05	---	9.11
11	8.58	9.14	9.06	9.50	8.89	7.70	8.19	7.67	6.61	7.08	---	9.21
12	8.61	9.17	9.11	9.51	8.75	7.75	7.93	7.58	6.53	7.14	---	9.20
13	8.66	9.18	9.06	9.55	8.68	7.76	7.80	7.58	6.60	7.17	---	9.22
14	8.69	9.27	9.07	9.58	8.77	7.81	7.68	7.55	6.03	7.28	---	9.36
15	8.71	9.24	9.14	9.54	8.70	7.85	7.64	7.49	6.14	7.34	---	9.32
16	8.80	9.29	9.10	9.65	8.72	7.86	7.56	7.46	6.06	7.37	---	9.31
17	8.78	9.28	9.17	9.56	8.50	7.86	7.52	7.44	6.16	7.41	---	9.35
18	8.76	9.32	9.16	9.56	8.51	7.93	7.54	7.47	6.08	7.50	---	9.34
19	8.78	9.33	9.23	9.60	8.24	7.99	7.55	7.48	6.10	7.51	---	9.37
20	8.85	9.30	9.19	9.63	8.00	7.97	7.61	7.51	6.05	---	---	9.37
21	8.86	9.43	9.22	9.64	7.76	8.04	7.60	7.58	6.08	---	---	9.40
22	8.85	9.36	9.24	9.61	7.70	8.02	7.66	7.66	6.19	---	---	9.41
23	9.04	9.36	9.27	9.67	7.65	8.09	7.68	7.70	6.25	---	---	9.50
24	8.93	9.39	9.29	9.62	7.59	8.16	7.68	7.70	6.21	---	---	9.48
25	8.88	9.37	9.31	9.63	7.51	8.22	7.72	7.75	6.25	---	---	9.49
26	8.86	9.38	9.39	9.66	7.53	8.18	7.73	7.78	6.27	---	9.00	9.54
27	8.94	9.38	9.37	9.59	7.46	8.24	7.78	7.83	6.27	---	9.04	9.50
28	8.91	9.31	9.42	9.53	7.41	8.34	7.73	7.73	6.45	---	9.00	9.56
29	8.92	9.30	9.37	9.46	---	8.39	7.64	7.66	6.40	---	9.11	9.64
30	8.93	9.26	9.39	9.52	---	8.41	7.50	7.65	6.42	---	9.08	9.63
31	8.93	---	9.43	9.42	---	8.34	---	7.60	---	7.91	9.05	---
MAX	9.04	9.43	9.43	9.67	9.42	8.41	8.49	7.83	7.62	7.91	9.11	9.64
WTR YR 1981	MEAN	8.37	HIGH	6.03	LOW	9.61						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 26...	1310	770	7.6	27.0	11.5	.0	360	150	100	27	19	10
DATE		SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD 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)	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)
AUG 26...	.4	4.4	256	0	210	10	170	47	<.1	10	598	
DATE		SOLIDS, SUM OF CONSTI- TUENTS, 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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
AUG 26...	504	2.5	.020	.21	.23	2.7	12	<.010	100	80	.4	

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, 15.10 ft (4.602 m) Oct. 31, Nov. 1, 1966; minimum daily low, 6.64 ft (2.024 m) July 14, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.28 ft (4.353 m) Jan. 26; minimum daily low, 9.96 ft (3.036 m) June 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.51	13.50	13.84	13.98	14.05	11.18	12.55	11.31	11.59	10.61	12.35	13.56
2	12.56	13.53	13.83	14.00	13.96	11.22	12.58	11.26	11.64	10.68	12.41	13.54
3	12.62	13.56	13.83	14.01	13.76	11.25	12.62	11.26	11.66	10.75	12.44	13.55
4	12.68	13.58	13.82	14.01	13.62	11.26	12.56	11.28	11.63	10.82	12.43	13.47
5	12.74	13.61	13.82	14.00	13.59	11.33	12.55	11.32	11.63	10.90	12.44	13.47
6	12.77	13.63	13.83	13.98	13.59	11.39	12.42	11.36	11.61	10.98	12.48	13.51
7	12.81	13.67	13.83	14.00	13.60	11.44	12.31	11.37	11.57	11.06	12.53	13.55
8	12.85	13.68	13.83	14.01	13.62	11.49	12.24	11.40	11.50	11.13	12.59	13.60
9	12.92	13.72	13.81	14.02	13.64	11.52	12.23	11.45	11.17	11.21	12.65	13.62
10	12.95	13.75	13.76	14.04	13.64	11.55	12.24	11.49	10.71	11.28	12.69	13.65
11	13.00	13.77	13.69	14.06	13.48	11.59	12.22	11.50	10.57	11.37	12.74	13.67
12	13.04	13.79	13.64	14.07	13.21	11.63	12.17	11.50	10.45	11.43	12.80	13.70
13	13.08	13.81	13.63	14.08	13.08	11.70	12.02	11.46	10.38	11.49	12.85	13.72
14	13.12	13.83	13.62	14.10	13.06	11.73	11.88	11.43	10.17	11.55	12.89	13.75
15	13.15	13.85	13.65	14.12	13.06	11.79	11.77	11.40	10.16	11.61	12.93	13.78
16	13.19	13.86	13.64	14.14	13.06	11.82	11.60	11.36	10.06	11.69	12.98	13.81
17	13.22	13.88	13.65	14.15	12.89	11.89	11.46	11.33	10.04	11.76	13.03	13.83
18	13.22	13.91	13.67	14.17	12.71	11.92	11.40	11.33	9.99	11.83	13.07	13.86
19	13.25	13.92	13.71	14.18	12.57	11.99	11.39	11.36	9.96	11.88	13.12	13.88
20	13.28	13.94	13.74	14.20	12.34	12.05	11.42	11.40	9.98	11.89	13.16	13.91
21	13.32	13.96	13.76	14.21	12.13	12.11	11.43	11.45	10.03	11.75	13.20	13.93
22	13.37	13.98	13.78	14.22	11.93	12.16	11.45	11.51	10.12	11.80	13.24	13.96
23	13.39	13.99	13.81	14.24	11.77	12.21	11.46	11.57	10.18	11.86	13.28	13.99
24	13.41	14.00	13.84	14.26	11.63	12.25	11.48	11.63	10.23	11.93	13.33	14.01
25	13.41	13.99	13.85	14.27	11.53	12.29	11.53	11.70	10.30	11.99	13.36	14.04
26	13.40	13.98	13.87	14.28	11.42	12.36	11.55	11.75	10.36	12.05	13.40	14.07
27	13.40	13.97	13.90	14.23	11.32	12.38	11.59	11.77	10.41	12.10	13.44	14.09
28	13.43	13.91	13.92	14.16	11.20	12.40	11.59	11.75	10.47	12.13	13.47	14.12
29	13.43	13.88	13.94	14.08	---	12.41	11.54	11.70	10.52	12.18	13.50	14.15
30	13.44	13.86	13.95	14.05	---	12.45	11.44	11.59	10.56	12.23	13.52	14.18
31	13.46	---	13.96	14.05	---	12.50	---	11.58	---	12.30	13.55	---
MAX	13.46	14.00	13.96	14.28	14.05	12.50	12.66	11.77	11.66	12.30	13.55	14.18
WTR YR 1981	MEAN	12.65		HIGH	9.96		LOW	14.28				

GROUND-WATER RECORDS

TUSCARAWAS COUNTY--Continued.

403823081324200. Local number, TU-5.

LOCATION.--Lat 40°38'23"N, long 81°32'42"W, 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 m). 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, 9.38 ft (2.859 m) Jan. 23; minimum daily low, 2.26 ft (0.689 m) June 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.34	6.60	6.87	8.20	8.59	3.59	6.58	4.39	4.72	4.68	6.71	---
2	6.65	6.91	7.02	8.40	8.47	4.04	6.74	4.28	5.19	4.45	6.45	---
3	6.37	6.90	7.29	8.34	8.17	4.33	6.58	4.32	5.27	4.76	6.91	---
4	5.83	6.47	6.92	---	7.93	4.44	6.59	4.80	5.40	4.52	6.63	---
5	6.15	6.80	7.59	---	8.15	4.42	6.00	5.10	5.30	4.44	6.75	---
6	6.48	7.01	7.07	8.79	8.22	4.79	5.80	5.12	5.39	5.42	6.47	---
7	6.50	6.69	6.98	8.60	8.05	4.50	6.02	5.38	4.45	5.14	6.78	---
8	6.37	6.75	7.20	---	8.06	4.51	5.98	4.83	4.36	5.45	6.75	---
9	6.93	6.82	7.27	---	8.24	5.16	6.21	5.14	3.89	5.48	6.55	---
10	6.81	6.99	6.97	---	8.39	5.11	5.80	4.33	3.51	5.37	6.78	---
11	6.73	7.06	6.78	---	8.30	5.80	5.91	5.01	3.11	5.17	6.97	---
12	6.48	7.04	6.84	---	7.67	5.43	5.08	5.29	2.55	5.34	7.13	---
13	6.69	6.90	6.62	---	7.23	5.93	5.00	5.25	2.49	5.73	7.27	---
14	6.78	6.91	6.79	---	7.19	5.43	4.91	5.21	2.26	5.62	7.58	---
15	6.48	6.89	6.94	---	7.02	5.00	4.65	5.25	2.53	5.76	7.53	---
16	6.68	6.83	7.36	---	7.23	5.35	4.65	5.20	3.03	6.24	7.11	---
17	6.85	7.11	7.49	---	7.30	5.15	4.10	4.78	3.10	6.11	7.33	---
18	6.78	7.35	7.66	---	6.77	5.85	4.07	4.31	2.80	6.00	7.58	---
19	6.97	7.55	7.69	---	6.70	6.07	4.07	4.80	2.59	6.03	7.65	---
20	7.41	7.48	7.48	9.12	6.15	6.10	4.32	5.04	2.57	5.96	7.72	---
21	6.93	7.50	7.53	9.17	5.13	5.94	4.78	5.32	2.80	5.52	7.80	---
22	7.16	6.72	8.19	9.29	4.30	5.68	5.01	5.30	3.21	6.04	7.94	---
23	6.91	6.99	7.59	9.38	4.59	5.84	5.21	5.38	3.40	5.92	7.84	---
24	6.88	7.37	7.56	9.26	4.26	6.14	4.94	5.12	3.39	6.05	8.11	---
25	6.50	7.34	7.85	9.18	4.02	6.15	4.85	5.09	3.15	5.79	8.29	---
26	6.48	6.99	7.88	9.33	3.68	6.57	4.75	5.31	3.40	5.84	8.15	---
27	6.88	6.78	8.14	9.18	3.65	6.71	5.24	5.45	3.20	6.03	8.29	---
28	6.70	7.07	7.84	8.79	3.74	6.25	5.22	5.33	3.92	6.06	8.27	---
29	6.87	6.66	8.14	8.97	---	6.72	5.22	5.11	3.92	6.34	8.22	---
30	6.58	6.83	8.53	8.97	---	6.50	4.22	4.86	4.30	6.60	7.43	8.54
31	7.10	---	8.38	8.97	---	6.19	---	4.73	---	6.63	7.75	---
MAX	7.41	7.55	8.53	9.38	8.59	6.72	6.74	5.45	5.40	6.63	8.29	8.54
WTR YR 1981	MEAN	6.18	HIGH	2.26	LOW	9.38						

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
AUG 26...	1310	768	7.4	25.0	11.5	.0	360	84	100	26	15	8
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CAR- BONATE FET-FLD (MG/L AS C03)	ALKA- LINITY FIELD (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	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 SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	
AUG 26...	.3	2.2	336	0	276	21	110	38	.1	11	568	
DATE	SOLIDS, SUM OF CONSTITU- ENTS, 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)	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
AUG 26...	469	.02	.030	.15	.18	.20	.89	<.010	870	340	.9	

GROUND-WATER RECORDS

489

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 (106.7 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, 23.15 ft (7.056 m) Sept. 29; minimum recorded daily low, 19.74 ft (6.017 m) June 14.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.02	22.31	22.09	22.18	22.06	21.24	22.01	21.16	21.16	20.92	22.17	22.79
2	22.04	22.41	22.18	22.32	21.91	21.36	22.11	21.14	21.16	21.02	22.14	22.80
3	22.05	22.31	22.26	22.24	21.96	21.44	21.97	21.17	21.14	21.11	22.11	22.84
4	22.20	22.28	22.18	22.50	22.10	21.38	21.98	21.17	21.23	20.96	22.15	22.78
5	22.33	22.33	22.14	22.46	22.13	21.41	21.90	21.17	21.27	20.99	22.19	22.83
6	22.33	22.31	22.14	22.30	22.07	21.49	22.05	21.12	21.18	21.14	22.19	22.85
7	22.24	22.22	22.08	22.35	22.10	21.60	21.99	20.97	21.28	21.26	22.11	22.85
8	22.18	22.34	21.90	22.38	22.11	21.63	21.92	20.98	21.24	21.32	22.19	22.82
9	22.30	22.36	21.80	22.42	22.20	21.64	22.00	21.03	21.14	21.37	22.33	22.86
10	22.30	22.57	21.70	22.51	22.20	21.53	22.03	20.99	20.81	21.44	22.40	22.85
11	22.32	22.59	21.74	22.51	21.80	21.50	21.90	20.50	20.76	21.53	22.38	22.92
12	22.42	22.58	21.68	22.45	22.05	21.47	21.79	20.16	20.82	21.57	22.42	22.96
13	22.44	22.50	21.78	22.30	22.05	21.50	21.04	20.27	20.88	21.56	22.48	22.96
14	22.47	22.48	21.80	22.38	22.05	21.60	21.12	20.26	19.74	21.05	22.50	22.92
15	22.41	22.55	21.77	22.46	22.02	21.54	21.25	19.76	19.95	21.71	22.40	22.98
16	22.45	22.61	21.84	22.57	21.89	21.57	21.19	20.00	20.19	21.74	22.49	22.97
17	22.42	22.55	21.86	22.55	21.58	21.54	21.03	20.20	20.38	21.84	22.55	23.03
18	22.30	22.61	21.88	22.50	21.44	21.56	21.02	20.30	20.48	21.89	22.60	23.03
19	22.32	22.65	22.17	22.47	21.27	21.59	21.07	20.36	20.59	21.88	22.57	22.94
20	22.33	22.62	22.23	22.50	21.03	21.71	21.14	20.49	20.68	21.78	22.63	22.88
21	22.42	22.68	22.22	22.51	21.12	21.88	21.22	20.61	20.72	21.70	22.68	22.92
22	22.56	22.68	22.17	22.52	21.10	21.88	21.17	20.70	20.26	21.81	22.72	23.05
23	22.57	22.61	22.04	22.46	20.91	21.88	21.02	20.78	20.53	21.87	22.71	23.11
24	22.50	22.60	22.19	22.50	20.94	21.91	21.08	20.84	20.62	21.86	22.74	23.11
25	22.28	22.64	22.24	22.49	21.12	21.98	21.26	20.96	20.34	21.91	22.81	23.08
26	22.33	22.64	22.18	22.36	21.29	21.94	21.31	21.00	20.33	21.94	22.80	23.00
27	22.35	22.37	22.25	22.10	21.28	22.06	21.34	21.01	20.51	22.03	22.79	23.05
28	22.28	22.11	22.24	22.08	21.19	22.05	21.31	20.98	20.62	21.92	22.86	23.13
29	22.33	22.15	22.17	22.28	---	21.92	21.23	20.95	20.74	22.05	22.87	23.15
30	22.33	22.19	22.18	22.33	---	21.89	21.17	20.98	20.84	22.11	22.82	23.07
31	22.24	---	22.12	22.29	---	21.99	---	21.13	---	22.18	22.81	---
MAX	22.57	22.68	22.26	22.57	22.20	22.06	22.11	21.17	21.28	22.18	22.87	23.15
WTR YR 1981	MEAN	21.88		HIGH	19.74		LOW	23.15				

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 daily low, 86.97 ft (26.508 m) July 21; minimum daily low, 84.56 ft (25.774 m), Feb. 2..

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86.45	85.83	85.68	85.16	84.77	85.59	85.30	85.48	85.54	85.99	86.92	86.59
2	86.34	85.91	85.64	85.16	84.56	85.56	85.30	85.59	85.44	86.10	86.52	86.61
3	86.48	85.93	85.80	85.22	84.78	85.64	85.17	85.54	85.22	86.21	86.52	86.62
4	86.48	85.85	85.82	85.30	84.90	85.64	85.15	85.60	85.16	86.06	86.80	86.55
5	86.50	85.92	85.52	85.34	84.96	85.35	85.15	85.49	85.34	85.98	86.73	86.63
6	86.47	86.11	85.52	85.11	85.11	85.54	85.51	85.44	85.05	85.83	86.57	86.63
7	86.50	85.96	85.52	84.83	85.10	85.50	85.42	85.46	84.96	86.08	86.50	86.51
8	86.45	85.95	85.44	84.94	85.09	85.56	85.32	85.56	85.14	85.91	86.39	86.64
9	86.33	85.95	85.36	84.98	85.44	85.50	85.36	85.55	85.00	85.97	86.54	86.69
10	86.33	86.11	85.38	85.23	85.35	85.53	85.37	85.47	85.08	85.87	86.45	86.79
11	86.27	86.14	85.37	85.11	85.55	85.49	85.42	85.32	85.31	85.94	86.59	86.82
12	86.30	86.14	85.41	84.97	85.61	85.46	85.30	85.50	85.33	85.92	86.45	86.83
13	86.28	86.04	85.35	84.89	85.89	85.17	85.31	85.54	85.24	85.99	86.52	86.76
14	86.28	85.90	85.36	84.75	86.38	85.43	85.55	85.46	85.15	85.99	86.43	86.70
15	86.21	85.86	85.07	84.82	86.49	85.33	85.56	85.34	85.32	86.03	86.43	86.65
16	86.25	85.97	85.09	84.98	86.36	85.10	85.67	85.44	85.30	86.00	86.25	86.68
17	86.07	85.82	85.09	85.00	86.30	85.10	85.48	85.45	85.50	86.11	86.29	86.66
18	85.87	85.87	84.97	84.93	86.12	85.05	85.54	85.32	85.32	86.29	86.22	86.70
19	85.76	85.92	85.28	84.83	86.03	85.03	85.42	85.16	85.51	86.44	86.22	86.62
20	85.89	85.96	85.38	84.71	85.78	85.12	85.33	85.34	85.58	86.57	86.16	86.39
21	85.89	85.88	85.42	84.74	85.86	85.51	85.51	85.35	85.53	86.97	86.27	86.47
22	85.86	85.97	85.35	84.71	85.82	85.37	85.35	85.50	85.61	86.68	86.21	86.40
23	85.90	85.90	85.09	84.74	85.57	85.19	85.15	85.35	85.84	86.63	86.19	86.46
24	85.92	85.82	85.11	84.74	85.66	85.35	85.05	85.29	85.85	86.58	86.21	86.45
25	85.68	86.01	85.18	84.75	85.76	85.31	85.38	85.27	85.84	86.58	86.51	86.47
26	85.68	86.10	85.10	84.58	85.78	85.30	85.33	85.39	86.03	86.58	86.47	86.29
27	85.71	85.94	85.10	84.67	85.92	85.48	85.23	85.15	86.30	86.64	86.45	86.24
28	85.64	85.77	85.11	84.78	85.70	85.41	85.25	85.08	86.17	86.64	86.60	86.29
29	85.85	85.72	85.00	84.90	---	85.28	85.51	85.13	86.21	86.64	86.70	86.33
30	85.78	85.78	85.20	85.11	---	85.12	85.48	85.18	85.91	86.71	86.56	86.33
31	85.81	---	85.23	85.05	---	85.34	---	85.54	---	86.71	86.66	---
MAX	86.50	86.14	85.82	85.34	86.49	85.64	85.67	85.60	86.30	86.97	86.92	86.83
WTR YR 1981	MEAN	85.73		HIGH	84.56		LOW	86.97				

GROUND-WATER RECORDS

491

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 daily low, 14.02 ft (4.273 m) Sept. 28 minimum daily low, 9.77 ft (2.978 m) May 31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.42	11.32	10.90	11.51	11.91	10.80	11.56	10.50	9.83	11.90	12.60	13.99
2	11.45	11.34	11.26	11.51	11.87	10.84	11.57	10.62	9.82	11.90	12.55	14.02
3	11.44	11.31	11.25	11.56	11.86	10.89	11.48	10.76	9.88	11.86	12.61	13.96
4	11.53	11.36	11.15	11.67	11.82	10.86	11.44	10.86	10.06	11.75	12.68	13.57
5	11.60	11.33	11.07	11.63	11.80	10.70	11.40	10.83	10.08	11.66	12.74	13.44
6	11.59	11.41	11.07	11.49	11.71	10.55	11.32	10.93	10.06	11.21	12.69	13.38
7	11.50	11.37	11.05	11.65	11.70	10.62	11.28	10.90	10.09	11.33	12.68	13.37
8	11.56	11.43	11.09	11.69	11.79	10.61	11.23	10.94	10.09	11.38	12.72	13.55
9	11.68	11.43	11.08	11.74	11.87	10.61	11.38	10.93	10.29	11.51	12.77	13.56
10	11.68	11.63	11.01	11.75	11.84	10.72	11.36	10.87	10.48	11.70	12.82	13.57
11	11.75	11.61	11.19	11.78	11.86	10.83	11.36	10.90	10.61	11.78	12.83	13.66
12	11.73	11.56	11.22	11.76	11.86	10.83	11.40	10.89	10.59	11.93	12.90	13.71
13	11.75	11.50	11.24	11.79	11.68	10.88	11.45	10.92	10.68	12.06	12.93	13.73
14	11.79	11.45	11.23	11.80	11.63	10.89	11.62	10.83	10.69	12.21	12.96	13.75
15	11.86	11.48	11.11	11.87	11.62	10.86	11.61	10.50	10.76	12.19	12.90	13.73
16	11.91	11.51	11.26	11.91	11.51	10.90	11.52	10.45	10.86	12.24	12.93	13.73
17	11.91	11.49	11.24	11.93	11.44	10.93	11.43	10.42	10.94	12.37	13.03	13.71
18	11.72	11.58	11.21	11.90	11.29	11.01	11.44	10.42	10.99	12.34	13.07	13.68
19	11.35	11.57	11.39	11.95	11.11	11.02	11.39	9.96	11.06	12.33	13.16	13.63
20	11.29	11.53	11.42	11.94	10.80	11.07	11.37	10.06	11.08	12.34	13.27	13.63
21	11.34	11.62	11.40	11.99	10.69	11.17	11.37	10.17	11.08	12.32	13.35	13.73
22	11.49	11.61	11.31	11.97	10.60	11.18	11.28	10.29	11.15	12.37	13.40	13.85
23	11.50	11.50	11.28	11.96	10.54	11.25	11.10	10.46	11.21	12.37	13.51	13.89
24	11.41	11.57	11.42	11.95	10.65	11.31	9.80	10.51	11.24	12.41	13.63	13.89
25	11.32	11.57	11.42	11.94	10.69	11.35	9.92	10.59	11.39	12.45	13.72	13.87
26	11.30	11.51	11.31	12.00	10.66	11.31	9.96	10.66	11.44	12.48	13.79	13.87
27	11.29	11.30	11.44	12.00	10.52	11.41	10.14	10.51	11.56	12.46	13.85	13.93
28	11.34	10.96	11.43	12.08	10.80	11.38	10.23	10.34	11.53	12.47	13.89	14.02
29	11.36	10.92	11.36	12.12	---	11.34	10.37	10.40	11.67	12.52	13.87	13.99
30	11.36	10.91	11.40	12.15	---	11.47	10.38	10.35	11.84	12.53	13.86	13.97
31	11.32	---	11.40	12.12	---	11.45	---	9.77	---	12.54	13.92	---
MAX	11.91	11.63	11.44	12.15	11.91	11.47	11.62	10.94	11.84	12.54	13.92	14.02
WTR YR 1981	MEAN	11.65		HIGH	9.77		LOW	14.02				

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, 40.07 ft (12.213 m) Oct. 19, 1977; minimum daily low, 17.70 ft (5.395 m) Apr. 30, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 38.25 ft (11.659 m) Sept. 28; minimum daily low, 30.45 ft (9.281 m) Oct. 1

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.45	31.90	32.50	33.05	33.85	34.85	35.40	36.00	36.40	---	37.30	37.85
2	30.75	31.90	33.50	33.35	34.40	34.65	35.25	35.95	35.80	---	36.75	37.65
3	30.55	31.70	33.45	33.40	34.45	34.95	35.25	35.70	35.85	---	37.10	37.80
4	31.00	32.20	33.20	33.60	34.45	34.65	35.10	36.00	36.10	---	37.80	37.80
5	30.75	31.95	32.50	33.35	34.55	34.85	35.60	35.80	36.15	---	37.70	37.95
6	30.90	32.10	32.80	33.05	34.50	34.70	35.45	35.75	35.90	---	37.85	37.65
7	30.55	31.60	32.75	33.40	34.20	35.20	35.25	36.05	35.95	---	38.10	37.55
8	30.60	32.20	32.45	33.55	34.70	34.90	35.30	35.70	35.95	---	37.30	37.55
9	31.25	32.35	32.80	33.65	34.45	35.15	35.55	36.00	35.80	---	37.15	37.65
10	31.20	32.35	32.55	33.60	34.40	34.70	35.50	35.75	36.20	---	---	37.95
11	30.85	32.60	32.90	33.50	34.95	34.95	35.25	35.75	36.10	---	---	37.65
12	31.25	32.15	32.35	33.55	35.10	34.80	35.60	36.20	36.15	---	---	37.65
13	31.05	32.15	32.70	33.35	34.90	34.65	35.25	35.85	36.20	---	---	37.60
14	31.05	32.25	32.85	33.80	34.70	35.05	35.70	35.95	36.10	---	---	37.80
15	31.60	32.75	32.30	33.65	34.70	34.70	35.60	36.25	36.25	---	---	37.90
16	31.55	33.15	33.00	33.85	34.50	34.85	35.50	36.40	36.35	---	---	38.10
17	31.40	32.65	32.65	34.00	34.70	34.70	35.30	36.30	36.05	---	---	37.75
18	31.50	33.25	32.80	33.65	34.85	34.80	35.45	36.10	36.35	---	---	38.10
19	31.50	33.25	33.25	34.00	34.35	34.95	35.45	36.05	36.20	---	---	37.55
20	31.65	32.50	33.10	33.70	34.85	34.95	35.95	36.10	36.25	---	---	37.85
21	31.40	32.55	33.15	33.85	34.70	35.25	35.55	36.20	36.00	---	---	37.75
22	31.95	32.40	32.75	33.95	34.60	34.90	36.25	36.45	36.35	---	---	37.85
23	31.65	32.30	32.75	33.80	34.45	35.20	35.40	36.45	36.20	---	---	37.95
24	31.65	32.70	33.45	33.95	35.00	35.25	35.80	36.20	36.40	---	---	37.85
25	31.40	32.45	33.00	34.00	34.95	35.15	35.85	36.20	36.40	---	---	38.00
26	32.00	32.65	32.90	33.90	35.20	35.25	35.55	36.25	36.35	---	---	37.75
27	31.50	32.80	33.45	34.20	34.90	35.15	35.85	36.25	36.75	---	---	38.05
28	32.10	32.90	33.05	34.10	34.55	35.20	36.00	36.05	36.50	---	---	38.25
29	31.95	32.80	33.00	34.60	---	35.00	35.75	36.20	36.45	---	---	38.00
30	31.85	32.45	33.20	34.25	---	35.20	35.80	36.00	36.30	37.35	---	37.70
31	31.95	---	33.15	34.30	---	35.15	---	36.30	---	36.85	37.75	---
MAX	32.10	33.25	33.50	34.60	35.20	35.25	36.25	36.45	36.75	37.35	38.10	38.25
WTR YR 1981	MEAN	34.66		HIGH	30.45		LOW	38.25				

GROUND-WATER RECORDS

493

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, 27.14 ft (8.272 m) Jan. 21; minimum daily low, 22.39 ft (6.824 m) June 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.12	26.68	26.44	26.77	27.05	23.11	25.16	23.47	24.88	24.03	26.09	---
2	26.14	26.69	26.51	26.80	27.00	23.01	25.16	23.26	24.85	24.09	26.14	---
3	26.23	26.69	26.52	26.82	26.68	23.05	25.22	23.26	24.92	24.27	26.26	---
4	26.27	26.72	26.42	26.85	26.49	23.04	25.30	23.43	24.89	24.36	26.30	---
5	26.30	26.72	26.33	26.87	26.54	23.07	25.31	23.55	24.78	24.47	26.28	---
6	26.30	26.73	26.36	26.86	26.56	23.03	25.22	23.69	24.62	24.61	26.24	26.37
7	26.27	26.75	26.37	26.93	26.58	23.14	25.16	23.72	24.11	24.69	26.28	26.37
8	26.30	26.81	26.35	26.92	26.64	23.29	25.18	23.84	23.44	24.83	26.24	26.38
9	26.40	26.77	26.32	26.94	26.63	23.43	25.30	24.05	23.66	24.93	26.22	26.37
10	26.42	26.82	26.27	26.97	26.63	23.58	25.31	24.28	23.56	25.08	26.29	26.38
11	26.44	26.82	26.17	26.98	26.65	23.68	25.37	24.45	22.83	25.16	26.34	26.38
12	26.47	26.81	26.06	26.97	26.62	23.76	25.44	24.45	22.86	25.20	26.35	26.37
13	26.50	26.80	26.04	26.99	26.47	24.03	24.95	24.39	22.99	25.31	26.35	---
14	26.52	26.79	26.05	26.99	26.44	24.15	24.22	24.41	22.91	25.34	26.36	---
15	26.53	26.78	26.06	26.99	26.42	24.23	23.97	24.38	22.39	25.37	26.34	---
16	26.56	26.82	26.18	26.99	26.35	24.37	23.89	24.30	22.58	---	26.36	---
17	26.56	26.83	26.22	27.02	26.32	24.39	23.82	24.18	22.62	---	26.37	---
18	26.60	26.85	26.25	27.04	26.13	24.46	23.77	24.16	22.75	---	26.37	---
19	26.63	26.85	26.32	27.08	25.89	24.59	23.69	24.23	22.94	---	26.37	---
20	26.64	26.78	26.41	27.12	25.54	24.73	23.77	24.22	23.16	---	26.37	---
21	26.69	26.83	26.42	27.14	25.03	24.90	23.82	24.08	23.27	---	---	---
22	26.72	26.85	26.43	27.13	24.28	24.98	23.84	24.19	23.20	---	---	---
23	26.72	26.85	26.48	27.08	23.61	25.03	23.91	24.36	23.16	---	---	26.79
24	26.74	26.90	26.57	27.08	23.40	25.05	23.93	24.56	23.30	---	---	26.82
25	26.69	26.89	26.57	27.11	23.20	25.13	23.93	24.73	23.34	---	---	26.85
26	26.68	26.78	26.61	27.13	23.12	25.19	23.93	24.84	23.32	---	---	26.89
27	26.62	26.62	26.64	27.13	23.12	25.24	23.94	24.86	23.43	---	---	26.91
28	26.58	26.54	26.67	27.03	23.13	25.23	23.99	24.89	23.54	---	---	26.89
29	26.62	26.51	26.65	26.97	---	25.11	24.06	24.92	23.83	---	---	26.90
30	26.64	26.47	26.68	26.99	---	25.09	23.97	24.90	24.04	26.09	---	26.90
31	26.66	---	26.73	27.01	---	25.16	---	24.91	---	26.09	---	---
MAX	26.74	26.90	26.73	27.14	27.05	25.24	25.44	24.92	24.92	26.09	26.37	26.91
WTR YR 1981	MEAN	25.50		HIGH	22.39		LOW	27.14				

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, 32.82 ft (10.004 m) Jan. 20; minimum daily low, 23.26 ft (7.090 m) Feb. 14.

NO, 23.35 (6/14)
 WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.82	30.07	30.90	30.94	31.95	24.48	31.00	27.61	28.30	28.30	30.48	30.05
2	30.00	29.97	31.16	30.85	31.04	25.56	31.31	26.70	28.44	28.88	31.10	29.93
3	30.11	30.23	29.83	30.85	30.70	26.04	31.40	26.69	28.55	28.54	31.07	29.75
4	29.98	30.33	29.60	30.92	30.50	26.19	31.49	27.67	28.12	28.20	30.82	29.60
5	30.02	30.33	29.87	31.07	30.89	26.48	30.45	27.50	27.96	28.15	30.87	29.35
6	29.86	30.45	31.59	31.25	30.97	26.50	30.22	27.84	27.81	30.08	28.61	29.44
7	30.17	30.57	31.53	31.59	31.04	26.36	30.22	27.89	24.97	30.02	30.56	28.73
8	30.14	30.50	29.82	31.45	31.49	28.95	30.43	27.46	24.54	30.21	28.51	29.02
9	30.56	30.31	29.69	31.58	31.58	27.82	30.59	27.84	25.38	30.35	28.34	29.03
10	30.14	30.46	29.30	32.00	31.24	27.70	30.99	27.76	25.90	30.47	30.34	29.00
11	30.01	30.31	28.91	31.41	31.11	27.91	31.62	28.98	24.90	29.69	30.77	30.23
12	29.82	30.51	28.93	32.35	31.35	28.24	31.28	28.67	26.21	28.57	30.66	29.53
13	29.96	30.50	29.06	32.57	30.88	29.23	29.69	29.30	24.90	28.62	30.67	29.65
14	29.86	30.93	29.44	31.82	30.98	29.28	28.35	29.00	23.35	28.43	30.82	30.38
15	29.95	30.35	29.73	31.83	30.65	28.89	27.38	28.88	24.03	30.02	30.80	30.40
16	30.27	31.98	29.67	31.87	31.43	29.14	27.33	28.05	24.82	30.05	29.65	30.49
17	30.37	32.04	29.91	32.30	31.45	30.02	26.81	27.11	26.41	30.12	30.81	29.78
18	30.43	30.31	30.10	31.95	30.48	29.54	26.65	27.51	26.95	28.86	30.91	29.66
19	30.27	30.09	30.76	32.62	30.06	30.33	26.33	27.67	26.15	28.90	30.85	29.76
20	30.30	30.11	30.57	32.82	29.04	30.75	26.23	27.84	26.45	30.88	30.87	29.89
21	30.25	30.63	30.75	32.29	27.30	30.32	27.02	27.53	27.45	30.61	31.04	30.29
22	30.69	30.58	31.25	32.16	25.27	30.25	28.17	27.89	24.82	30.73	30.95	30.43
23	30.32	30.22	32.16	32.07	24.17	31.67	28.08	28.01	25.00	31.08	30.98	30.52
24	30.33	30.72	31.45	32.06	23.26	31.78	27.36	27.74	28.14	31.22	31.06	30.55
25	30.30	30.41	30.44	32.04	24.25	31.86	27.43	28.80	25.80	31.27	31.13	30.88
26	29.95	30.15	30.93	32.13	24.98	30.83	28.05	28.56	28.15	31.17	31.16	30.70
27	30.20	29.68	30.95	32.48	24.43	30.83	28.06	28.58	26.56	31.03	31.31	30.73
28	29.84	29.08	30.95	32.26	24.51	30.76	28.49	28.54	25.97	31.10	31.34	30.54
29	29.94	28.84	30.58	31.75	---	30.45	28.60	28.79	26.52	30.83	31.41	30.53
30	30.02	28.80	30.84	32.41	---	30.82	28.65	28.75	29.09	30.95	31.36	31.88
31	30.59	---	30.96	32.06	---	30.95	---	28.48	---	30.98	31.33	---
MAX	30.82	32.04	32.16	32.82	31.95	31.86	31.62	29.30	29.09	31.27	31.41	31.88
WTR YR 1981	MEAN	29.59		HIGH	23.26		LOW	32.82				

low for yr!

GROUND-WATER RECORDS

495

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 recorded daily low, 14.63 ft (4.459 m) Oct. 18; minimum daily low, 10.51 ft (3.203 m) Feb. 12.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.24				---	13.09	14.22	11.96	12.75	13.17	13.97	14.14
2	14.26				---	13.19	14.20	12.11	12.92	13.25	14.02	13.97
3	14.26				---	13.28	12.01	12.25	13.06	13.33	14.04	11.68
4	14.27				12.07	13.37	12.23	12.40	13.18	13.40	14.04	11.60
5	14.30				12.21	13.45	12.43	12.41	13.21	13.46	13.96	11.91
6	14.33				12.38	13.52	12.61	11.85	13.27	13.55	13.90	12.12
7	14.35				12.54	13.60	12.81	12.05	13.36	13.64	13.93	12.32
8	14.38				12.60	13.68	13.00	12.20	13.36	13.70	13.96	12.48
9	14.40				11.44	13.74	13.08	12.34	11.09	13.77	14.00	12.59
10	14.43				11.63	13.80	13.08	12.42	11.63	13.84	14.06	12.74
11	14.45				11.67	13.86	12.22	12.41	11.96	13.89	14.11	12.90
12	14.48				10.51	13.90	12.24	11.99	12.06	13.93	14.14	13.05
13	14.51				10.89	13.94	11.36	12.10	11.13	13.91	14.18	13.19
14	14.54				11.12	13.99	11.67	11.15	11.55	13.45	14.21	13.31
15	14.57				11.16	14.02	11.95	11.58	11.89	13.46	14.21	13.41
16	14.60				11.12	14.08	12.05	11.96	12.00	13.52	14.21	13.51
17	14.62				11.29	14.12	12.13	12.08	12.09	13.60	14.19	13.52
18	14.63				11.65	14.17	12.26	12.20	12.20	13.68	14.18	13.52
19	14.61				11.93	14.21	12.42	12.32	12.31	13.70	14.18	13.56
20	14.58				12.04	14.25	12.57	12.46	12.42	13.70	14.17	13.61
21	14.55				12.13	14.29	12.69	12.59	12.43	13.68	14.15	13.68
22	14.55				12.23	14.32	12.75	12.71	12.33	13.69	14.16	13.74
23	---				12.33	14.32	12.75	12.82	---	13.73	14.17	13.82
24	---				12.45	14.24	12.83	12.89	12.40	13.79	14.19	13.90
25	---				12.67	14.19	12.96	12.97	12.47	13.85	14.21	13.97
26	---				12.77	14.18	13.06	12.98	12.61	13.91	14.23	14.02
27	---				12.87	14.16	13.09	12.69	12.76	13.96	14.24	14.08
28	---				12.99	14.15	13.07	12.00	12.92	13.99	14.25	14.14
29	---				---	14.17	11.24	12.19	13.05	13.99	14.24	14.20
30	---				---	14.20	11.71	12.38	13.11	13.92	14.23	14.25
31	---				---	14.22	---	12.58	---	13.94	14.22	---
MAX	14.63				12.99	14.32	14.22	12.98	13.36	13.99	14.25	14.25

WTR YR 1981 MEAN 13.19 HIGH 10.51 LOW 14.63

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

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.

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, 20.40 ft (6.218 m) Feb. 19, 20; minimum daily low, 14.85 ft (4.526 m) Oct. 1

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.85	16.24	17.71	19.23	20.07	18.71	17.52	16.89	16.40	16.04	16.22	16.88
2	14.88	16.29	17.75	19.28	20.07	18.57	17.52	16.85	16.40	16.04	16.25	16.91
3	14.92	16.34	17.80	19.33	20.08	18.40	17.53	16.83	16.39	16.04	16.26	16.94
4	14.96	16.39	17.84	19.38	20.09	18.26	17.54	16.80	16.38	16.04	16.28	16.96
5	14.99	16.44	17.90	19.41	20.11	18.15	17.54	16.75	16.37	16.04	16.30	16.98
6	15.03	16.49	17.94	19.46	20.13	18.05	17.55	16.70	16.37	16.04	16.31	17.00
7	15.07	16.54	17.98	19.50	20.15	17.97	17.56	16.66	16.38	16.03	16.34	17.03
8	15.11	16.59	18.04	19.54	20.18	17.91	17.57	16.64	16.39	16.03	16.36	17.05
9	15.16	16.63	18.08	19.59	20.20	17.83	17.58	16.61	16.39	16.03	16.38	17.08
10	15.21	16.67	18.14	19.64	20.22	17.77	17.59	16.61	16.39	16.03	16.41	17.11
11	15.25	16.72	18.19	19.68	20.23	17.73	17.60	16.59	16.40	16.03	16.42	17.14
12	15.29	16.77	18.24	19.71	20.25	17.68	17.61	16.56	16.41	16.03	16.44	17.17
13	15.33	16.82	18.28	19.75	20.27	17.64	17.62	16.55	16.41	16.03	16.45	17.21
14	15.37	16.88	18.32	19.79	20.30	17.61	17.63	16.53	16.41	16.04	16.46	17.24
15	15.42	16.93	18.37	19.84	20.32	17.59	17.63	16.52	16.41	16.03	16.48	17.27
16	15.47	16.97	18.43	19.87	20.35	17.56	17.61	16.49	16.37	16.03	16.50	17.29
17	15.52	17.02	18.49	19.91	20.36	17.54	17.56	16.48	16.31	16.04	16.52	17.32
18	15.57	17.07	18.55	19.95	20.38	17.52	17.50	16.47	16.25	16.05	16.55	17.36
19	15.61	17.12	18.61	19.98	20.40	17.51	17.43	16.46	16.21	16.06	16.57	17.39
20	15.66	17.18	18.66	20.00	20.40	17.50	17.38	16.44	16.17	16.07	16.60	17.42
21	15.73	17.23	18.70	20.01	20.37	17.49	17.31	16.43	16.15	16.08	16.61	17.45
22	15.75	17.28	18.75	20.02	20.25	17.49	17.26	16.41	16.14	16.09	16.62	17.49
23	15.78	17.33	18.81	20.03	20.02	17.49	17.21	16.40	16.11	16.14	16.64	17.51
24	15.85	17.39	18.86	20.04	19.74	17.48	17.16	16.40	16.09	16.15	16.66	17.55
25	15.90	17.44	18.90	20.05	19.50	17.48	17.10	16.40	16.07	16.15	16.69	17.58
26	15.95	17.49	18.94	20.05	19.25	17.49	17.03	16.40	16.05	16.16	16.71	17.62
27	15.99	17.54	18.99	20.06	19.05	17.50	17.01	16.40	16.04	16.16	16.74	17.65
28	16.04	17.58	19.04	20.06	18.87	17.50	16.98	16.40	16.04	16.16	16.76	17.68
29	16.09	17.62	19.09	20.06	---	17.51	16.94	16.39	16.05	16.17	16.79	17.72
30	16.14	17.66	19.15	20.07	---	17.51	16.91	16.39	16.05	16.18	16.82	17.75
31	16.19	---	19.20	20.07	---	17.51	---	16.39	---	16.20	16.84	---
MAX	16.19	17.66	19.20	20.07	20.40	18.71	17.63	16.89	16.41	16.20	16.84	17.75
WTR YR 1981	MEAN	17.36		HIGH	14.85		LOW	20.40				

GROUND-WATER RECORDS

497

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, 22.05 ft (6.721 m) Dec. 16, 1980; minimum daily low, 5.38 ft (1.640 m) Jan. 17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 22.05 ft (6.721 m) Dec. 16; minimum daily low, 14.70 ft (4.481 m) May 3, 5, 12.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.45	15.85	16.85	17.45	16.55	18.60	16.45	14.90	15.95	16.45	17.65	16.70
2	17.15	15.90	16.85	17.55	18.25	18.30	16.15	14.95	16.00	---	15.60	16.05
3	16.55	16.35	16.75	17.55	18.35	15.65	16.25	14.70	---	---	18.05	16.00
4	17.00	18.25	16.75	19.05	18.95	17.75	16.15	14.80	---	---	16.65	18.60
5	17.00	16.05	16.75	19.15	18.35	17.20	16.15	14.70	---	---	18.95	18.60
6	17.05	15.80	16.85	17.00	19.25	15.45	16.50	14.80	---	---	17.10	18.00
7	15.60	15.65	16.80	16.85	17.15	17.55	17.80	16.80	---	---	16.80	18.35
8	17.55	17.25	18.10	18.30	16.95	17.40	16.40	15.05	---	---	16.90	18.05
9	17.95	17.40	16.65	18.05	17.00	17.50	17.85	14.95	---	---	16.00	18.35
10	17.60	18.50	16.75	18.30	17.15	15.60	16.45	14.80	---	---	16.85	18.45
11	18.35	21.10	17.20	17.65	16.95	15.10	16.30	14.75	---	---	16.20	18.45
12	18.15	17.55	16.90	19.30	17.00	15.00	16.30	14.70	---	---	17.65	18.65
13	18.50	17.20	17.20	20.30	16.85	15.05	16.10	14.95	---	---	17.75	18.35
14	16.30	16.20	17.00	19.55	17.20	15.00	15.05	15.05	---	---	17.95	18.45
15	17.80	16.10	20.70	18.85	17.10	15.20	15.15	14.85	---	---	16.75	18.25
16	17.70	17.45	22.05	17.85	18.45	15.05	17.75	14.80	---	---	16.30	18.15
17	17.50	17.00	18.00	18.25	18.15	15.25	15.00	17.45	---	---	16.10	18.55
18	17.45	17.35	16.30	18.00	18.50	14.95	15.10	14.75	---	---	16.50	19.25
19	15.80	17.65	17.35	18.05	17.00	15.20	15.05	14.80	---	---	16.65	18.35
20	15.95	16.85	16.40	17.50	17.05	15.25	14.85	14.75	---	---	16.50	18.45
21	16.20	16.35	15.95	17.95	18.75	15.35	18.30	14.80	---	---	17.70	18.90
22	18.80	16.35	16.00	16.65	18.25	15.20	19.00	15.00	---	---	16.60	17.00
23	18.60	16.60	16.15	16.70	17.25	17.10	17.95	16.20	---	---	16.55	17.15
24	16.40	18.10	18.35	16.85	17.20	16.85	15.75	15.05	---	---	16.45	17.15
25	16.00	18.15	21.00	18.80	16.65	16.25	15.30	14.90	---	---	16.85	17.10
26	15.85	18.35	18.30	18.85	18.15	17.20	15.20	15.00	---	---	16.65	17.35
27	15.95	18.25	18.10	18.60	18.30	17.00	15.00	15.75	---	---	18.30	18.45
28	15.80	19.60	15.80	16.85	18.20	17.55	15.15	15.50	---	---	16.85	18.70
29	15.80	16.55	16.30	19.55	---	16.20	15.20	15.50	---	---	16.85	17.30
30	15.70	16.65	18.15	16.90	---	---	15.10	15.55	16.65	15.70	18.75	17.20
31	15.80	---	17.65	16.90	---	---	---	17.25	---	15.75	16.60	---
MAX	18.80	21.10	22.05	20.30	19.25	18.60	19.00	17.45	16.65	16.45	18.95	19.25
WTR YR 1981	MEAN	16.96		HIGH	14.70		LOW	22.05				

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, 83.30 ft (25.390 m) June 29; minimum daily low, 74.28 ft (22.641 m) Mar. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.00	77.89	76.99	77.09	75.01	78.59	79.60	80.48	80.85	80.35	80.80	80.54
2	78.95	78.04	77.17	77.42	74.81	78.60	79.87	80.59	80.71	80.42	80.64	80.58
3	78.95	77.92	79.06	76.87	75.02	78.80	78.98	80.67	80.61	80.36	80.47	80.58
4	79.30	77.60	78.63	77.19	75.15	78.71	78.80	80.58	80.68	79.58	80.48	80.62
5	79.50	77.68	78.90	77.20	75.21	79.27	79.07	80.43	80.71	79.27	80.56	80.67
6	79.45	77.67	77.19	76.75	74.91	79.64	79.37	80.60	80.55	79.95	80.47	76.35
7	78.15	77.40	77.10	76.66	74.88	79.94	79.37	80.67	80.68	80.11	80.31	76.15
8	77.75	77.57	78.34	76.80	74.52	79.96	79.09	80.25	80.62	80.17	80.39	79.48
9	78.00	77.42	78.76	76.76	74.73	79.96	79.30	80.11	80.52	80.08	80.63	79.66
10	77.90	77.88	79.03	76.95	74.73	79.86	79.35	79.99	80.48	80.12	80.66	79.67
11	77.75	77.99	78.88	76.88	75.54	79.12	79.05	79.87	80.26	80.16	80.58	79.74
12	78.05	78.01	78.51	76.79	76.03	79.12	79.10	80.09	80.24	80.10	80.60	79.81
13	78.10	77.83	77.04	76.63	76.07	78.89	80.74	80.17	80.22	79.96	80.64	79.82
14	78.10	77.72	77.00	76.71	75.88	79.08	80.35	80.01	80.14	80.04	80.67	79.71
15	78.00	77.79	76.96	76.82	75.35	78.90	80.57	79.95	80.16	80.28	80.47	79.82
16	78.00	77.91	78.27	76.95	74.99	78.75	80.35	80.71	80.07	80.43	80.59	79.86
17	77.85	77.88	77.95	77.03	74.82	78.64	79.87	80.82	80.20	80.49	80.68	80.03
18	77.70	77.73	77.63	76.79	75.04	74.48	80.39	80.82	80.17	80.55	80.71	80.08
19	77.70	77.79	77.28	76.26	74.97	74.28	80.39	80.71	80.03	80.51	80.65	79.97
20	77.70	77.74	77.77	76.61	74.33	74.87	80.57	80.83	79.97	80.31	80.70	79.95
21	78.05	77.71	77.78	76.61	74.54	75.22	80.61	80.86	79.87	80.45	80.81	79.99
22	78.20	77.78	77.88	75.73	74.50	75.07	80.34	80.85	80.04	80.67	80.79	80.21
23	78.30	77.66	78.16	74.71	74.50	74.95	79.97	80.84	80.21	80.71	80.70	80.29
24	77.87	77.50	77.83	74.98	74.66	78.29	80.15	80.76	80.21	80.64	80.78	80.26
25	77.66	77.78	77.60	75.03	74.89	75.26	80.53	80.64	80.10	80.65	80.86	80.25
26	77.92	77.82	78.20	74.82	79.27	75.26	80.56	80.58	80.24	80.65	80.78	80.05
27	77.96	77.52	78.43	74.56	79.62	75.41	80.55	80.48	80.31	80.77	80.70	79.91
28	77.88	76.86	78.41	74.64	78.57	75.43	80.40	80.47	80.27	80.61	80.75	80.14
29	78.03	76.85	78.21	75.47	---	76.33	80.37	80.52	83.30	80.70	80.71	80.13
30	78.05	77.05	78.24	75.56	---	79.16	80.37	80.55	80.07	80.78	80.64	80.15
31	77.82	---	78.13	75.55	---	78.00	---	80.85	---	80.82	80.61	---
MAX	79.50	78.04	79.06	77.42	79.62	79.96	80.74	80.86	83.30	80.82	80.86	80.67
WTR YR 1981	MEAN	78.76		HIGH	74.28		LOW	83.30				

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		Youngstown, Mahoning River at	37

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)	2.54×10^1 2.54×10^{-2}	millimeters (mm) meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3 4.047×10^{-1}	square meters (m ²) square hectometers (hm ²)
square miles (mi ²)	4.047×10^{-3} 2.590×10^0	square kilometers (km ²) square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0 3.785×10^0	liters (L) cubic decimeters (dm ³)
million gallons	3.785×10^{-3} 3.785×10^3	cubic meters (m ³) cubic meters (m ³)
cubic feet (ft ³)	3.785×10^{-3} 2.832×10^1	cubic hectometers (hm ³) cubic decimeters (dm ³)
cfs-days	2.832×10^{-2} 2.447×10^3	cubic meters (m ³) cubic meters (m ³)
acre-feet (acre-ft)	2.447×10^{-3} 1.233×10^3	cubic hectometers (hm ³) cubic meters (m ³)
	1.233×10^{-3} 1.233×10^{-6}	cubic hectometers (hm ³) cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1 2.832×10^1	liters per second (L/s) cubic decimeters per second (dm ³ /s)
gallons per minute (gal/min)	2.832×10^{-2} 6.309×10^{-2}	cubic meters per second (m ³ /s) liters per second (L/s)
million gallons per day	6.309×10^{-2} 6.309×10^{-5}	cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
	4.381×10^1 4.381×10^{-2}	cubic decimeters per second (dm ³ /s) cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons



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